

glossaries-extra.sty v1.48: documented code

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Abstract

This is the documented code for the glossaries-extra package. See glossaries-extra-manual.pdf for the user manual.

This package is experimental and not stable. It's provided for testing purposes only. Future versions may not be compatible with this version. Once it has stabilised I'll add it to CTAN, at which point compatibility with the first stable version will be maintained.

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1 Main Package Code (`glossaries-extra.sty`)

1.1 Package Initialisation and Options

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{glossaries-extra}[2021/11/22 v1.48 (NLCT)]
```

Requires `xkeyval` to define package options.

```
3 \RequirePackage{xkeyval}
```

Requires `etoolbox` package.

```
4 \RequirePackage{etoolbox}
```

Has `glossaries` already been loaded?

```
5 \@ifpackageloaded{glossaries}
6 {%
```

Already loaded so pass any options to `\setupglossaries`. This means that the options that can only be set when `glossaries` is loaded can't be used.

```
7   \newcommand{\glsxtr@dooption}[1]{\setupglossaries{#1}}%
8   \let\@glsxtr@declareoption\@gls@declareoption
9 }
10 {%
```

Not already loaded, so pass options to `glossaries`.

```
11  \newcommand{\glsxtr@dooption}[1]{%
12    \PassOptionsToPackage{#1}{glossaries}%
13  }%
```

Set the defaults.

```
14  \PassOptionsToPackage{toc}{glossaries}
15  \PassOptionsToPackage{nopostdot}{glossaries}
16  \PassOptionsToPackage{noredefwarn}{glossaries}
17  \@ifpackageloaded{polyglossia}%
18  {}%
19  {%
20    \@ifpackageloaded{babel}%
21    {\PassOptionsToPackage{translate=babel}{glossaries}}%
22    {}%
23  }%
24  \newcommand*{\@glsxtr@declareoption}[2]{%
25    \DeclareOptionX{#1}{#2}%
26    \DeclareOption{#1}{#2}%
27  }
28 }
```

sxtrundefaction Declare package options.
 Determines what to do if an entry hasn't been defined. The two arguments are the error or warning message and the help message if an error should be produced.

```

29 \newcommand*{\glsxtrundefaction}[2]{%
30   \@glsxtrundeftag\PackageError{glossaries-extra}{#1}{#2}%
31 }
```

arnonexistsordo If user wants undefaction=warn, then glossaries v4.19 is required.

```

32 \newcommand*{\glsxtr@warnonexistsordo}[1]{}
```

\glsxtrundeftag Text to display when an entry doesn't exist.

```

33 \newcommand*{\glsxtrundeftag}{??}
34 \newcommand*{\@glsxtrundeftag}{}%
```

This text is switched on at the start of the document to prevent unwanted text inserted into the preamble if any tests are made before the start of the document.

arn@undefaction This is how \glsxtrundefaction should behave if undefaction=warn is set.

```

35 \newcommand*{\@glsxtr@warn@undefaction}[2]{%
36   \@glsxtrundeftag\GlossariesExtraWarning{#1}%
37 }
```

err@undefaction This is how \glsxtrundefaction should behave if undefaction=error is set.

```

38 \newcommand*{\@glsxtr@err@undefaction}[2]{%
39   \@glsxtrundeftag\PackageError{glossaries-extra}{#1}{#2}%
40 }
```

rn@onexistsordo This is how \glsxtr@warnonexistsordo should behave if undefaction=warn is set.

```

41 \newcommand*{\@glsxtr@warn@onexistsordo}[1]{%
42   \GlossariesExtraWarning{\string#1\space hasn't been defined, so
43   some errors won't be converted to warnings.
44   (This most likely means your version of
45   glossaries.sty is below version 4.19.)}%
46 }
```

f@forglsentries

```

47 \newcommand*{\@glsxtr@redef@forglsentries}{}%
```

f@forglsentries

```

48 \newcommand*{\@glsxtr@do@redef@forglsentries}{}%
49 \renewcommand*{\forglsentries}[3][\glsdefaulttype]{%
50   \protected@edef\@glo@list{\csname glo@list\endcsname}%
51   \ifdefstring{\@glo@list}{,}%
52   {%
53     \GlossariesExtraWarning{No entries defined in glossary '##1'}%
54   }%
55   {%
56     \glo@list\do
```

```

57      {%
58      \ifdefempty{##2}{}{##3}%
59    }%
60  }%
61 }%
62 }%



undefaction
63 \define@choicekey{glossaries-extra.sty}{undefaction}%
64 [\glsxtr@undefaction@val\glsxtr@undefaction@nr]%
65 {warn,error}%
66 {%
67   \ifcase\glsxtr@undefaction@nr\relax
68     \let\glsxtrundefaction@\glsxtr@warn@undefaction
69     \let\glsxtr@warnnonexistsordo@\glsxtr@warn@onexistsordo
70     \let@\glsxtr@redef@forglsentries@\glsxtr@do@redef@forglsentries
71   \or
72     \let\glsxtrundefaction@\glsxtr@err@undefaction
73     \let\glsxtr@warnnonexistsordo@\gobble
74     \let@\glsxtr@redef@forglsentries\relax
75   \fi
76 }

```

To assist bib2gls, v1.08 introduces the record option, which will write information to the aux file whenever an entry needs to be indexed.

```

@glsxtr@record Does nothing by default.
77 \newcommand*{\glsxtr@record}[3]{}

lsxtr@recordsee Does nothing by default.
78 \newcommand*{\glsxtr@recordsee}[2]{}

ultnumberformat
79 \newcommand*{\glsxtr@defaultnumberformat}{\glsnumberformat}%

ultNumberFormat
80 \newcommand*{\GlsXtrSetDefaultNumberFormat}[1]{%
81   \renewcommand*{\glsxtr@defaultnumberformat}{#1}%
82 }%

```

The record option is somewhat problematic. On the first L^AT_EX run the entries aren't defined. This isn't as straight-forward as commands like \cite since attributes associated with the entry's category may switch off the indexing or the entry's glossary type might require a particular counter. This kind of information can't be determined until the entry has been defined. So there are two different commands here. One that's used if the entry hasn't been defined, which tries to use sensible defaults, and one which is used when the entry has been defined.

cord@wrglossary The record=only option sets \@@do@wrglossary to this command, which means it's done within \glsadd and \gls@link, and so is only done if the entry exists.

```

83 \newcommand*{\glsxtr@do@record@wrglossary}[1]{%
84   \begingroup
85   \ifKV@glslink@noindex
86   \else
87     \protected@edef\gls@label{\glsdetoklabel{#1}}%
88     \let\glslabel\gls@label
89     \glswriteentry{#1}%
90   \%
91   \ifdefempty{\glsxtr@thevalue}{%
92   \%
93     \ifx\glsxtr@org@theHvalue\glsxtr@theHvalue
94     \else
95       \let\theHglsentrycounter\glsxtr@theHvalue
96     \fi
97     \glsxtr@saveentrycounter
98     \let\@@do@wrglossary\glsxtr@dorecord
99   \%
100 \%
101   \let\theHglsentrycounter\glsxtr@thevalue
102   \let\theHglsentrycounter\glsxtr@theHvalue
103   \let\@@do@wrglossary\glsxtr@dorecordnodefer
104 \%
105   \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
106     \glsxtr@do@wrglossary{#1}%
107   \else
108     \@@glsxtrwrglossmark

```

Increment associated counter.

```

109   \glsxtr@inc@wrglossaryctr{#1}%
110   \@@do@wrglossary
111   \fi
112 \%
113 \fi
114 \endgroup
115 }

```

ndex@wrglossary The record=alsoindex option needs to both record and index.

```

116 \newcommand*{\glsxtr@do@alsoindex@wrglossary}[1]{%
117   \glsxtr@do@wrglossary{#1}%
118   \glsxtr@do@record@wrglossary{#1}%
119 }

```

@@glsxtr@record The record=only option sets \glsxtr@record to this. This performs the recording if the entry *doesn't exist* and is done at the start of \gls@field@link and commands like \gls@ (before the existence test). This means that it disregards the wrgloss key.

The first argument is the option list (as passed in the first optional argument to commands like `\gls`). This allows the `noindex` setting to be picked up. The second argument is the entry's label. The third argument is the key family (`glslink` in most cases, `glossadd` for `\glsadd`).

```
120 \newcommand*{\@glsxtr@record}[3]{%
```

Save the label in case it's needed. This needs to be outside the existence check to allow the post-link hook to reference it.

```
121 \protected@edef\gls@label{\glsdetoklabel{#2}}%
122 \let\glslabel\gls@label
123 \ifglsentryexists{#2}{}%
124 {%
125   \glsxtrwrglossmark
126   \begingroup
127     \let\@glsnumberformat\glsxtr@defaultnumberformat
128     \def\@glsxtr@thevalue{}%
129     \def\@glsxtr@theHvalue{\glsxtr@thevalue}%
130     \let\@glsxtr@org@theHvalue\glsxtr@theHvalue
```

Entry hasn't been defined, so we'll have to assume it's `\glscounter` by default.

```
131 \let\gls@counter\glscounter
```

Unless the `equations` option is on and this is inside a numbered maths environment.

```
132 \if@glsxtr@equations
133   \glsxtr@use@equation@counter
134 \fi
```

Check for default options (which may switch off indexing).

```
135 \gls@setdefault@glslink@opts
```

Implement any pre-key settings.

```
136 \csuse{@glsxtr@#3@prekeys}%
```

Assign keys.

```
137 \setkeys{#3}{#1}%
```

Implement any post-key settings. Is the auto-add on?

```
138 \glsxtr@do@autoadd{#3}%
```

Check post-key hook.

```
139 \csuse{@glsxtr@#3@postkeys}%
```

Increment associated counter.

```
140 \glsxtr@inc@wrglossaryctr{#2}%
```

Check if `noindex` option has been used.

```
141 \ifKV@glslink@noindex
142 \else
143   \glswriteentry{#2}%
144 {%
```

Check if `thevalue` has been set.

```
145 \ifdefempty{\glsxtr@thevalue}%
146 {%
```

Key thevalue hasn't been set, but check if theHvalue has been set. (Not particularly likely, but allow for it.)

```
147          \ifx\@glsxtr@org@theHvalue\@glsxtr@theHvalue
148          \else
149              \let\theHglsentrycounter\@glsxtr@theHvalue
150          \fi
```

Save the entry counter.

```
151          \glsxtr@saveentrycounter
```

Temporarily redefine \@@do@@wrglossary for use with \glsxtr@do@wrglossary.

```
152          \let\@@do@@wrglossary\@glsxtr@dorecord
153          }%
154          {%
```

thevalue has been set, so there's no need to defer writing the location value. (If it's dependent on the page counter, the counter key should be set instead.)

```
155          \let\theglsentrycounter\@glsxtr@thevalue
156          \let\theHglsentrycounter\@glsxtr@theHvalue
157          \let\@@do@@wrglossary\@glsxtr@dorecordnodefer
158          }%
159          \ifx\@glsxtr@record@setting\@glsxtr@record@setting@alsoindex
160              \glsxtr@do@wrglossary{#2}%
161          \else
```

No need to escape special characters.

```
162          \@@do@@wrglossary
163          \fi
164          }%
165          \fi
166      \endgroup
167  }%
168 }
```

glslink@prekeys

```
169 \newcommand{\@glsxtr@glslink@prekeys}{\glslinkpresetkeys}
```

glslink@postkeys

```
170 \newcommand{\@glsxtr@glslink@postkeys}{\glslinkpostsetkeys}
```

glossadd@prekeys

```
171 \newcommand{\@glsxtr@glossadd@prekeys}{\glsaddpresetkeys}
```

glossadd@postkeys

```
172 \newcommand{\@glsxtr@glossadd@postkeys}{\glsaddpostsetkeys}
```

glsxtr@dorecord If record=alsoindex or record=hybrid is used, then \glslocref may have been escaped, but this isn't appropriate here.

```
173 \newcommand*\@glsxtr@dorecord{%
```

```

174 \global\let\@glsrecordlocref\the\glstentrycounter
175 \let\@glsxtr@orgprefix\@glo@counterprefix
176 \ifx\the\glstentrycounter\the\glstentrycounter
177   \def\@glo@counterprefix{}%
178 \else

```

Protect against non-expandable commands occurring in the location.

```

179   \protected@edef\@glsxtr@theentrycounter{\the\glstentrycounter}%
180   \protected@edef\@glsxtr@theHentrycounter{\the\glstentrycounter}%
181   \onelevel@sanitize\@glsxtr@theentrycounter
182   \onelevel@sanitize\@glsxtr@theHentrycounter
183   \protected@edef\@do@gls@getcounterprefix{\noexpand\@gls@getcounterprefix
184     {\@glsxtr@theentrycounter}{\@glsxtr@theHentrycounter}}%
185   }%
186   \@do@gls@getcounterprefix
187 \fi

```

Don't protect the \@glsrecordlocref from premature expansion. If the counter isn't

page then it needs expanding. If the location includes \thepage then \protected@write will automatically deal with it.

```

188 \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
189   \@glsxtr@do@nameref@record
190   {\@gls@label}{\@glo@counterprefix}{\@gls@counter}{\@glsnumberformat}%
191   {\@glsrecordlocref}%
192 \else
193   \protected@write\@auxout{}{\string\glsxtr@record
194     {\@gls@label}{\@glo@counterprefix}{\@gls@counter}{\@glsnumberformat}%
195     {\@glsrecordlocref}}%
196 \fi
197 \@glsxtr@counterrecordhook
198 \let\@glo@counterprefix\@glsxtr@orgprefix
199 }

```

dorecordnodefer As above, but don't defer expansion of location. This uses \the\glstentrycounter directly for the location rather than \@glslocref since there's no need to guard against premature expansion of the page counter.

```

200 \newcommand*\@glsxtr@dorecordnodefer{%
201   \ifx\the\glstentrycounter\the\glstentrycounter
202     \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
203       \@glsxtr@do@nameref@record
204       {\@gls@label}{}{\@gls@counter}{\@glsnumberformat}%
205       {\the\glstentrycounter}%
206     \else
207       \protected@write\@auxout{}{\string\glsxtr@record
208         {\@gls@label}{}{\@gls@counter}{\@glsnumberformat}%
209         {\the\glstentrycounter}}%
210     \fi
211   \else
212     \edef\@do@gls@getcounterprefix{\noexpand\@gls@getcounterprefix

```

```

213     {\theglsentrycounter}{\theHglsentrycounter}%
214   }%
215   \do@gls@getcounterprefix
216   \ifx\glsxtr@record@setting\glsxtr@record@setting@nameref
217     \glsxtr@do@nameref@record
218     {\gls@label}{\glo@counterprefix}{\gls@counter}%
219     {\glsnumberformat}{\theglsentrycounter}%
220   \else
221     \protected@write\auxout{}{\string\glsxtr@record
222       {\gls@label}{\glo@counterprefix}{\gls@counter}{\glsnumberformat}%
223       {\theglsentrycounter}}%
224   \fi
225 \fi
226 \glsxtr@counterrecordhook
227 }

```

xtr@ifnum@mmode Check if in a numbered maths environment. The amsmath package is automatically loaded by datatool-base, which is required by glossaries, so `\ifst@rred` and `\if@display` should both be defined.

```

228 \newcommand{\glsxtr@ifnum@mmode}[2]{%
229   \ifmmode
230     \ifst@rred
231       #2%
232     \else

```

Non-amsmath environments and regular inline math mode isn't flagged as starred by amsmath, but we can't use `\mathchoice` in this case as it's not the current style that's relevant. Instead we can use amsmath's `\if@display`. This may not work for environments that aren't provided by amsmath.

```

233     \if@display #1\else #2\fi
234   \fi
235 \else
236   #2%
237 \fi
238 }

```

`@nameref@record` With `record=nameref`, the current label information is included in the record, but this may not have been defined, so `\csuse` will prevent an undefined control sequence error and just leave the last two arguments blank if there's no information. In the event that a record is in amsmath's align environment `\@currentHref` will be out. There may be other instances where `\@currentHref` is out, so this also saves `\theHglsentrycounter`, which is useful if it can't be obtained by prefixing `\theglsentrycounter`.

```

239 \newcommand*{\glsxtr@do@nameref@record}[5]{%
240   \gls@ifnotmeasuring
241   {%
242     \protected@write\auxout{}{\string\glsxtr@record@nameref
243       {#1}{#2}{#3}{#4}{#5}%
244       {\csuse{@currentlabelname}}{\csuse{@currentHref}}%

```

```

245      {\theHglsentrycounter}}%
246  }%
247 }

r@recordcounter

248 \newcommand*{\@glsxtr@recordcounter}{%
249   \glsxtr@noop@recordcounter
250 }

p@recordcounter

251 \newcommand*{\@glsxtr@noop@recordcounter}[1]{%
252   \PackageError{glossaries-extra}{\string\GlsXtrRecordCounter\space
253   requires record=only or record=hybrid package option}{}%
254 }

p@recordcounter

255 \newcommand*{\@glsxtr@op@recordcounter}[1]{%
256   \protected@eappto\@glsxtr@counterrecordhook{\noexpand\@glsxtr@docounterrecord{#1}}%
257 }

lsxtr@recordsee Deal with \glssee in record mode. (This doesn't increment the associated counter.)
258 \newcommand*{\@glsxtr@recordsee}[2]{%
259   \glsxtrwrglossmark
260   \def\gls@xref{#2}%
261   \onelevel@sanitize\gls@xref
262   \protected@write\auxout{\string\glsxtr@recordsee{#1}\{@gls@xref}}%
263 }

srtglossaryunit

264 \newcommand{\printunsrtglossaryunit}{%
265   \print@noop@unsrtglossaryunit
266 }

tr@setup@record Initialise.
267 \newcommand*{\glsxtr@setup@record}{\let\@do@wrglossary\glsxtr@do@wrglossary}

aveentrycounter Only store the entry counter information if the indexing is on.
268 \newcommand*{\glsxtr@indexonly@saveentrycounter}{%
269   \ifKV@glslink@noindex
270   \else
271     \glsxtr@saveentrycounter
272   \fi
273 }

addloclistfield

274 \newcommand*{\glsxtr@addloclistfield}{%
275   \key@ifundefined{glossentry}{loclist}%
276   {%

```

```

277 \define@key{glossentry}{loclist}{\def\@glo@loclist{##1}%
278 \appto\@gls@keymap{,{loclist}{loclist}}%
279 \appto\@newglossaryentryprehook{\def\@glo@loclist{} }%
280 \appto\@newglossaryentryposthook{%
281   \gls@assign@field{}{\@glo@label}{loclist}{\@glo@loclist}%
282 }%
283 \glssetnoexpandfield{loclist}%
284 }%
285 {}%

```

The loclist field is just a comma-separated list. The location field is the formatted list.

```

286 \key@ifundefined{glossentry}{location}%
287 {}%
288 \define@key{glossentry}{location}{\def\@glo@location{##1}%
289 \appto\@gls@keymap{,{location}{location}}%
290 \appto\@newglossaryentryprehook{\def\@glo@location{} }%
291 \appto\@newglossaryentryposthook{%
292   \gls@assign@field{}{\@glo@label}{location}{\@glo@location}%
293 }%
294 \glssetnoexpandfield{location}%
295 }%
296 {}%

```

Add a key to store the group heading.

```

297 \key@ifundefined{glossentry}{group}%
298 {}%
299 \define@key{glossentry}{group}{\def\@glo@group{##1}%
300 \appto\@gls@keymap{,{group}{group}}%
301 \appto\@newglossaryentryprehook{\def\@glo@group{} }%
302 \appto\@newglossaryentryposthook{%
303   \gls@assign@field{}{\@glo@label}{group}{\@glo@group}%
304 }%
305 \glssetnoexpandfield{group}%
306 }%
307 {}%
308 }%

```

`@record@setting` Keep track of the record package option.

```
309 \newcommand*{\@glsxtr@record@setting}{off}
```

`etting@alsoindex` As from v1.46, the `record=alsoindex` is renamed to `record=hybrid` with `record=alsoindex` as a deprecated synonym to avoid confusion. The internal commands that include `alsoindex` in the name will remain unchanged to avoid breaking things, but this command will need to be redefined by `record=hybrid`.

```
310 \newcommand*{\@glsxtr@record@setting@alsoindex}{alsoindex}
```

`rd@setting@only`

```
311 \newcommand*{\@glsxtr@record@setting@only}{only}
```

```

setting@nameref
312 \newcommand*{\@glsxtr@record@setting@nameref}{nameref}

@if@record@only
313 \newcommand*{\@glsxtr@if@record@only}[2]{%
314   \ifx\@glsxtr@record@setting\@glsxtr@record@setting@only
315     #1%
316   \else
317     \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
318       #1%
319     \else
320       #2%
321     \fi
322   \fi
323 }

ord@setting@off
324 \newcommand*{\@glsxtr@record@setting@off}{off}

id@noprintgloss Used by hybrid method if \printglossary isn't used.
325 \newcommand\@glsxtr@warn@hybrid@noprintgloss{%
326   \ifdefstring{\@glo@types}{,}{}
327   {%
328     \GlossariesExtraWarningNoLine{No glossaries have been defined}%
329   }%
330   {%
331     \GlossariesExtraWarningNoLine{No \string\printglossary\space
332       or \string\printglossaries\space
333       found. ^^JYou have requested the hybrid setting
334       record=\@glsxtr@record@setting\space which requires a
335       combination of bib2gls (to fetch entries) and makeindex/xindy
336       (to sort and collate the entries). If you only want to use
337       bib2gls then change the option to record=only or record=nameref}%
338   }%
339 }

cord@only@setup Initialisation code for record=only and record=nameref
340 \newcommand*{\@glsxtr@record@only@setup}{%
341   \def\glsxtr@setup@record{%
342     \glsxtr@autoseeindexfalse
343     \let\@do@seeglossary\glsxtr@recordsee
344     \let\@glsxtr@record\@glsxtr@record
345     \let\@do@wrglossary\glsxtr@do@record@wrglossary
346     \let\@gls@saveentrycounter\relax
347     \let\glsxtrundefaction\glsxtr@warn@undefaction
348     \let\glsxtr@warnnonexistsordo\glsxtr@warn@onexistsordo
349     \glsxtr@addloclistfield
350     \renewcommand*{\@glsxtr@autoindexcrossrefs}{}%
351     \let\@glsxtr@recordcounter\glsxtr@op@recordcounter

```

```

352 \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}%
Switch off the index suppression for aliased entries. (bib2gls will deal with them.)
353 \def\glsxtrsetaliasnoindex{}%
 \@gls@setupsort@none was only introduced to glossaries v4.30, so it may not be available.
If it's defined, use it to remove the unnecessary overhead of escaping and sanitizing the sort
value.
354 \ifdef\gls@setupsort@none{\@gls@setupsort@none}{}%
Warn about using \printglossary:
355 \def\glsxtrNoGlossaryWarning{\@glsxtr@record@noglossarywarning}%
Load glossaries-extra-bib2gls:
356 \RequirePackage{glossaries-extra-bib2gls}%
357 }%
358 }

```

record Now define the record package option. As from v1.46, record=alsoindex is a deprecated synonym of record=hybrid to avoid confusion.

```

359 \define@choicekey{glossaries-extra.sty}{record}%
360 [\@glsxtr@record@setting\glsxtr@record@nr]%
361 {off,only,alsoindex,nameref,hybrid}%
362 [only]%
363 {%
364 \ifcase\glsxtr@record@nr\relax
Don't record.
365 \def\glsxtr@setup@record{%
366 \renewcommand*\{@do@seeglossary}{\@glsxtr@doseeglossary}%
367 \renewcommand*\{@glsxtr@record}[3]{}%
368 \let\@do@wrglossary\glsxtr@do@wrglossary
369 \let\@gls@saveentrycounter\glsxtr@indexonly@saveentrycounter
370 \let\glsxtrundefaction@\glsxtr@err@undefaction
371 \let\glsxtr@warnnonexistsordo@\gobble
372 \let\@glsxtr@recordcounter\glsxtr@noop@recordcounter
373 \def\printunsrtglossaryunit{\print@noop@unsrtglossaryunit}%
374 \undef\glsxtrsetaliasnoindex
375 }%
376 \or

```

Only record (don't index).

```

377 \@glsxtr@record@only@setup
378 \or

```

Record and index. This option doesn't load glossaries-extra-bib2gls as the sorting is performed by xindy or makeindex. Index in this sense refers to the indexing mechanism used with indexing applications such as makeindex and xindy, but this could be confused with recording locations so "alsoindex" is now deprecated in favour of "hybrid", which is more obvious.

```

379 \def\glsxtr@setup@record{%
380 \renewcommand*\{@glsxtr@record@setting@alsoindex}{alsoindex}%

```

```

381      \renewcommand*{\@do@seeglossary}{\glsxtr@dosee@alsoindex@glossary}%
382      \let\glsxtr@record\glsxtr@record
383      \let\@do@wrglossary\glsxtr@do@alsoindex@wrglossary
384      \let\gls@saveentrycounter\glsxtr@indexonly@saveentrycounter
385      \let\glsxtrundefaction\glsxtr@warn@undefaction
386      \let\glsxtr@warnonexistsordo\glsxtr@warn@onexistsordo
387      \glsxtr@addloclistfield
388      \let\@glsxtr@recordcounter\glsxtr@op@recordcounter
389      \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}%
390      \undef\glsxtrsetaliasnoindex
391  }%
392 \or

```

Only record (don't index) but also include nameref information.

```

393  \@glsxtr@record@only@setup
394  \ifundefined\hyperlink
395  {\GlossariesExtraWarning{You have requested record=nameref but
396  the document doesn't support hyperlinks}}%
397  {}%
398 \or

```

Hybrid record (use bib2gls to fetch definitions) and index (use makeindex/xindy to sort and collate).

```

399  \def\glsxtr@setup@record{%
400      \renewcommand*{\glsxtr@record@setting@alsoindex}{hybrid}%
401      \renewcommand*{\@do@seeglossary}{\glsxtr@dosee@alsoindex@glossary}%
402      \let\glsxtr@record\glsxtr@record
403      \let\@do@wrglossary\glsxtr@do@alsoindex@wrglossary
404      \let\gls@saveentrycounter\glsxtr@indexonly@saveentrycounter
405      \let\glsxtrundefaction\glsxtr@warn@undefaction
406      \let\glsxtr@warnonexistsordo\glsxtr@warn@onexistsordo
407      \glsxtr@addloclistfield
408      \let\@glsxtr@recordcounter\glsxtr@op@recordcounter
409      \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}%
410      \undef\glsxtrsetaliasnoindex
411  }%
412 \fi
413 }

```

Version 1.06 changes the docdef option to a choice rather than boolean setting. The available values are: false, true or restricted. The restricted option permits document definitions as long as they occur before the first glossary is displayed.

`lsxtr@docdefval` The docdef value is stored as an integer: 0 (false), 1 (true) and 2 (restricted).
 414 `\newcommand*{\glsxtr@docdefval}{0}`

Need to provide conditional commands that are backward compatible:

`if@glsxtrdocdef`
 415 `\newcommand*{\if@glsxtrdocdef}{\ifnum\glsxtr@docdefval>0 }`

```

lsxtrdocdeftrue
416 \newcommand*{\@glsxtrdocdeftrue}{\def\@glsxtr@docdefval{1}}


sxtrdocdeffalse
417 \newcommand*{\@glsxtrdocdeffalse}{\def\@glsxtr@docdefval{0}}


docdef By default don't allow entries to be defined in the document to encourage the user to define them in the preamble, but if the user is really determined to define them in the document allow them to request this.
418 \define@choicekey{glossaries-extra.sty}{docdef}
419 [\@glsxtr@docdefsetting\@glsxtr@docdefval]%
420 {false,true,restricted,atom}[true]%
421 {%
422 \ifnum\@glsxtr@docdefval>1\relax
423 \renewcommand*{\@glsdoifexistsorwarn}{\glsdoifexists}%
424 \else
425 \renewcommand*{\@glsdoifexistsorwarn}{\glsdoifexistsorwarn}%
426 \fi
427 }

ocdefrestricted
428 \newcommand*{\if@glsxtrdocdefrestricted}{\ifnum\@glsxtr@docdefval>1 }

oifexistsorwarn Need an error to notify user if an undefined entry is being referenced in the glossary for the docdef=restricted option. This is used by \glossentryname (but not by \glossentrydesc etc as one error per entry is sufficient).
429 \newcommand*{\@glsdoifexistsorwarn}{\glsdoifexistsorwarn}

indexcrossrefs Automatically index cross references at the end of the document
430 \define@boolkey{glossaries-extra.sty}[@glsxtr]{indexcrossrefs}[true]{%
431 \if@glsxtrindexcrossrefs
432 \else
433 \renewcommand*{\@glsxtr@autoindexcrossrefs}{}%
434 \fi
435 }

    Switch off since this can increase the build time.
436 \@glsxtrindexcrossreffalse

    But allow see key to switch it on automatically.

oindexcrossrefs
437 \newcommand*{\@glsxtr@autoindexcrossrefs}{\@glsxtrindexcrossreftrue}

autoseeindex Provide a boolean option to allow the user to prevent the automatic indexing of the cross-referencing keys see, seealso and alias.
438 \define@boolkey{glossaries-extra.sty}[@glsxtr@]{autoseeindex}[true]{%
439 }
440 \@glsxtr@autoseeindextrue

```

```

equations Provide a boolean option to automatically switch to the equation counter when in a numbered maths environment.
441 \define@boolkey{glossaries-extra.sty}[@glsxtr@]{equations}[true]{%
442 }
443 @glsxtr@equationsfalse

\glsxtr@float
444 \let\glsxtr@float\@float

glsxtr@dblfloat
445 \let\glsxtr@dblfloat\@dblfloat

floats Provide a boolean option to automatically switch to the the corresponding counter when in a float.
446 \define@boolkey{glossaries-extra.sty}[@glsxtr@]{floats}[true]{%
447   \if@glsxtr@floats
448     \renewcommand*{\@float}[1]{\renewcommand{\glscounter}{##1}\glsxtr@float{##1}}%
449     \renewcommand*{\@dblfloat}[1]{\renewcommand{\glscounter}{##1}\glsxtr@dblfloat{##1}}%
450   \else
451     \let\@float\glsxtr@float
452     \let\@dblfloat\glsxtr@dblfloat
453   \fi
454 }
455 @glsxtr@floatsfalse

iesExtraWarning Allow users to suppress warnings.
456 \newcommand*{\GlossariesExtraWarning}[1]{\PackageWarning{glossaries-extra}{#1}}


raWarningNoLine Allow users to suppress warnings.
457 \newcommand*{\GlossariesExtraWarningNoLine}[1]{%
458   \PackageWarningNoLine{glossaries-extra}{#1}%
459   @glsxtr@declareoption{nowarn}{%
460     \let\GlossariesExtraWarning\@gobble
461     \let\GlossariesExtraWarningNoLine\@gobble
462     \glsxtr@dooption{nowarn}%
463   }%
464 \newcommand*{\@glsxtr@defpostpunc}{}}

xtr@defpostpunc Redefines \glspostdescription. The postdot and nopostdot options will have to redefine this.
464 \newcommand*{\@glsxtr@defpostpunc}{}}

postdot Shortcut for nopostdot=false
465 @glsxtr@declareoption{postdot}{%
466   \glsxtr@dooption{nopostdot=false}%
467   \renewcommand*{\@glsxtr@defpostpunc}{%
468     \renewcommand*{\glspostdescription}{%
469       \ifglsnopostdot\else.\spacefactor\sfcode`\.\fi}%

```

```

470  }%
471 }

nopostdot Needs to redefine \@glsxtr@defpostpunc
472 \define@choicekey{glossaries-extra.sty}{nopostdot}{true, false}[true]{%
473   \glsxtr@dooption{nopostdot=#1}%
474   \renewcommand*{\@glsxtr@defpostpunc}{%
475     \renewcommand*{\glspostdescription}{%
476       \ifglsnopostdot\else.\spacefactor\sfcodespace\fi}%
477   }%
478 }

postpunc Set the post-description punctuation. This also sets the \ifglsnopostdot conditional,
which now indicates if the post-description punctuation has been suppressed.
479 \define@key{glossaries-extra.sty}{postpunc}{%
480   \glsxtr@dooption{nopostdot=false}%
481   \ifstrequal{#1}{dot}%
482   {%
483     \renewcommand*{\@glsxtr@defpostpunc}{%
484       \renewcommand*{\glspostdescription}{.\spacefactor\sfcodespace\space}%
485     }%
486   }%
487   {%
488     \ifstrequal{#1}{comma}%
489     {%
490       \renewcommand*{\@glsxtr@defpostpunc}{%
491         \renewcommand*{\glspostdescription}{,}%
492       }%
493     }%
494     {%
495       \ifstrequal{#1}{none}%
496       {%
497         \glsxtr@dooption{nopostdot=true}%
498         \renewcommand*{\@glsxtr@defpostpunc}{%
499           \renewcommand*{\glspostdescription}{}}%
500       }%
501     }%
502     {%
503       \renewcommand*{\@glsxtr@defpostpunc}{%
504         \renewcommand*{\glspostdescription}{#1}%
505       }%
506     }%
507   }%
508 }%
509 }

glsxtrabbrvtype Glossary type for abbreviations.
510 \newcommand*{\glsxtrabbrvtype}{\glsdefaulttype}

```

```

bbrevisionsdef Set by abbreviations option.
511 \newcommand*{\@glsxtr@abbreviationsdef}{}}

bbrevisionsdef
512 \newcommand*{\@glsxtr@doabbreviationsdef}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
513   \@ifpackageloaded{babel}{%
514     \providecommand{\abbreviationsname}{\acronymname}%
515     \providecommand{\abbreviationsname}{Abbreviations}%
516     \newglossary[glg-abr]{abbreviations}{gls-abr}{glo-abr}{\abbreviationsname}%
517     \renewcommand*{\glsxtrabbrvtype}{abbreviations}%
518     \newcommand*{\printabbreviations}[1][]{%
519       \printglossary[type=\glsxtrabbrvtype,##1]%
520     }%
521     \DisableAtkeys{glossaries-extra.sty}{abbreviations}%
522   If the acronym option hasn't been used, change \acronymtype to \glsxtrabbrvtype.
523   \ifglsacronym
524     \else
525       \renewcommand*{\acronymtype}{\glsxtrabbrvtype}%
526     \fi
526 }%

abbreviations If abbreviations, create a new glossary type for abbreviations.
527 \@glsxtr@declareoption{abbreviations}%
528   \let\@glsxtr@abbreviationsdef\@glsxtr@doabbreviationsdef
529 }

iationShortcuts Enable shortcut commands for the abbreviations. Unlike the analogous command provided
by glossaries, this uses \newcommand instead of \let as a safety feature (except for \newabbr
which is also provided with \GlsXtrDefineAcShortcuts).
530 \newcommand*{\GlsXtrDefineAbbreviationShortcuts}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
531   \newcommand*{\ab}{\c{gls}}%
532   \newcommand*{\abp}{\c{glspl}}%
533   \newcommand*{\as}{\glsxtrshort}%
534   \newcommand*{\asp}{\glsxtrshortpl}%
535   \newcommand*{\al}{\glsxtrlong}%
536   \newcommand*{\alp}{\glsxtrlongpl}%
537   \newcommand*{\af}{\glsxtrfull}%
538   \newcommand*{\afp}{\glsxtrfullpl}%
539   \newcommand*{\Ab}{\c{Gls}}%
540   \newcommand*{\Afp}{\c{GLS}}%
541   \newcommand*{\As}{\Glsxtrshort}%
542   \newcommand*{\Asp}{\Glsxtrshortpl}%
543   \newcommand*{\Al}{\Glsxtrlong}%
544   \newcommand*{\Alp}{\Glsxtrlongpl}%
545   \newcommand*{\Af}{\Glsxtrfull}%
546   \newcommand*{\Afp}{\Glsxtrfullpl}%
547   \newcommand*{\AB}{\c{GLS}}%
548   \newcommand*{\ABP}{\c{GLSPl}}%

```

```

549 \newcommand*{\AS}{\GLSxtrshort}%
550 \newcommand*{\ASP}{\GLSxtrshortpl}%
551 \newcommand*{\AL}{\GLSxtrlong}%
552 \newcommand*{\ALP}{\GLSxtrlongpl}%
553 \newcommand*{\AF}{\GLSxtrfull}%
554 \newcommand*{\AFP}{\GLSxtrfullpl}%

555 \providecommand*{\newabbr}{\newabbreviation}%

```

Disable this command after it's been used.

```

556 \let\GlsXtrDefineAbbreviationShortcuts\relax
557 }

```

`fineAcShortcuts` Enable shortcut commands for the abbreviations, but uses the analogous commands provided by glossaries.

```

558 \newcommand*{\GlsXtrDefineAcShortcuts}{%
559 \newcommand*{\ac}{\cgls}%
560 \newcommand*{\ACP}{\cglsp}%
561 \newcommand*{\acs}{\glsxtrshort}%
562 \newcommand*{\ACSP}{\glsxtrshortpl}%
563 \newcommand*{\acl}{\glsxtrlong}%
564 \newcommand*{\ACLP}{\glsxtrlongpl}%
565 \newcommand*{\acf}{\glsxtrfull}%
566 \newcommand*{\ACFP}{\glsxtrfullpl}%
567 \newcommand*{\Ac}{\cGls}%
568 \newcommand*{\ACP}{\cGlp}%
569 \newcommand*{\Acs}{\Glsxtrshort}%
570 \newcommand*{\ACSp}{\Glsxtrshortpl}%
571 \newcommand*{\Acl}{\Glsxtrlong}%
572 \newcommand*{\ACLP}{\Glsxtrlongpl}%
573 \newcommand*{\Acf}{\Glsxtrfull}%
574 \newcommand*{\ACFP}{\Glsxtrfullpl}%
575 \newcommand*{\AC}{\cGLS}%
576 \newcommand*{\ACP}{\cGLSp}%
577 \newcommand*{\ACS}{\GLSxtrshort}%
578 \newcommand*{\ACSP}{\GLSxtrshortpl}%
579 \newcommand*{\ACL}{\GLSxtrlong}%
580 \newcommand*{\ACLP}{\GLSxtrlongpl}%
581 \newcommand*{\ACF}{\GLSxtrfull}%
582 \newcommand*{\ACFP}{\GLSxtrfullpl}%

583 \providecommand*{\newabbr}{\newabbreviation}%

```

Disable this command after it's been used.

```

584 \let\GlsXtrDefineAcShortcuts\relax
585 }

```

`oOtherShortcuts` Similarly provide shortcut versions for the commands provided by the symbols and numbers options.

```

586 \newcommand*{\GlsXtrDefineOtherShortcuts}{%

```

```

587 \newcommand*{\newentry}{\newglossaryentry}%
588 \ifdef\printsymbols
589 {%
590   \newcommand*{\newsym}{\glsxtrnewsymbol}%
591 }{%
592 \ifdef\printnumbers
593 {%
594   \newcommand*{\newnum}{\glsxtrnewnumber}%
595 }{%
596 \let\GlsXtrDefineOtherShortcuts\relax
597 }

```

Always use the long forms, not the shortcuts, where portability is an issue. (For example, when defining entries in a file that may be input by multiple documents.)

`@setupshortcuts` Command used to set the `shortcuts` option.

```
598 \newcommand*{\@glsxtr@setupshortcuts}{}%
```

`tr@shortcutsval` Store the value of the `shortcuts` option. (Needed by `bib2gls`.)

```
599 \newcommand*{\@glsxtr@shortcutsval}{\ifglsacrshortcuts acro\else none\fi}%
```

`shortcuts` Provide `shortcuts` option. Unlike the glossaries version, this is a choice rather than a boolean key but it also provides `shortcuts=true` and `shortcuts=false`, which are equivalent to `shortcuts=all` and `shortcuts=none`. Multiple use of this option in the *same* option list will override each other. New to v1.17: `shortcuts=ac` which implements `\GlsXtrDefineAcShortcuts` (not included in `shortcuts=all` as it conflicts with other `shortcuts`).

```

600 \define@choicekey{glossaries-extra.sty}{shortcuts}%
601 [ \@glsxtr@shortcutsval \@glsxtr@shortcutsnr ] %
602 {acronyms,acro,abbreviations,abbr,other,all,true,ac,none,false}[true]{%
603   \ifcase\@glsxtr@shortcutsnr\relax % acronyms
604     \renewcommand*{\@glsxtr@setupshortcuts}%
605       \glsacrshortcutstrue
606       \DefineAcronymSynonyms
607   }%
608   \or % acro
609     \renewcommand*{\@glsxtr@setupshortcuts}%
610       \glsacrshortcutstrue
611       \DefineAcronymSynonyms
612   }%
613   \or % abbreviations
614     \renewcommand*{\@glsxtr@setupshortcuts}%
615       \GlsXtrDefineAbbreviationShortcuts
616   }%
617   \or % abbr
618     \renewcommand*{\@glsxtr@setupshortcuts}%
619       \GlsXtrDefineAbbreviationShortcuts
620   }%
621   \or % other

```

```

622     \renewcommand*{\@glsxtr@setupshortcuts}{%
623         \GlsXtrDefineOtherShortcuts
624     }%
625     \or % all
626     \renewcommand*{\@glsxtr@setupshortcuts}{%
627         \glsacrshortcutstrue
628         \GlsXtrDefineAcShortcuts
629         \GlsXtrDefineAbbreviationShortcuts
630         \GlsXtrDefineOtherShortcuts
631     }%
632     \or % true
633     \renewcommand*{\@glsxtr@setupshortcuts}{%
634         \glsacrshortcutstrue
635         \GlsXtrDefineAcShortcuts
636         \GlsXtrDefineAbbreviationShortcuts
637         \GlsXtrDefineOtherShortcuts
638     }%
639     \or % ac
640     \renewcommand*{\@glsxtr@setupshortcuts}{%
641         \glsacrshortcutstrue
642         \GlsXtrDefineAcShortcuts
643     }%

```

Leave none and false as last option.

```

644     \else % none, false
645     \renewcommand*{\@glsxtr@setupshortcuts}{}%
646     \fi
647 }

```

lsxtr@doaccsupp

```
648 \newcommand*{\@glsxtr@doaccsupp}{}%
```

glossaries-accsupp can't be loaded after glossaries-extra. glossaries-accsupp v4.29+ checks \@glsxtr@doaccsupp to determine if it's been loaded too late.

accsupp If accsupp, load glossaries-accsupp package.

```
649 \@glsxtr@declareoption{accsupp}{%
650     \renewcommand*{\@glsxtr@doaccsupp}{\RequirePackage{glossaries-accsupp}}}
```

tr@doloadprefix

```
651 \newcommand*{\@glsxtr@doloadprefix}{}%
```

prefix If prefix, load glossaries-prefix package.

```
652 \@glsxtr@declareoption{prefix}{%
653     \renewcommand*{\@glsxtr@doloadprefix}{\RequirePackage{glossaries-prefix}}}
```

GlossaryWarning Warning text displayed in document if the external glossary file given by the argument is missing.

```
654 \newcommand{\glsxtrNoGlossaryWarning}[1]{%
655   \GlossariesExtraWarning{Glossary '#1' is missing}%
656   \@glsxtr@defaultnoglossarywarning{#1}%
657 }
```

omissingglstext If true, suppress the text and warning produced if the external glossary file is missing.

```
658 \define@choicekey{glossaries-extra.sty}{nomissingglstext}%
659 [ \@glsxtr@nomissingglstextval \@glsxtr@nomissingglstextnr ]%
660 {true, false} [true] {%
661   \ifcase \@glsxtr@nomissingglstextnr \relax % true
662     \renewcommand{\glsxtrNoGlossaryWarning}[1]{\null}%
663   \else % false
664     \renewcommand{\glsxtrNoGlossaryWarning}[1]{%
665       \@glsxtr@defaultnoglossarywarning{#1}%
666     }%
667   \fi
668 }
```

Provide option to load `glossaries-extra-stylemods` (Deferred to the end.)

xtr@redefstyles

```
669 \newcommand*{\@glsxtr@redefstyles}{}%
```

stylemods

```
670 \define@key{glossaries-extra.sty}{stylemods}[default]{%
671   \ifstreq{\#1}{default}%
672   {%
673     \renewcommand*{\@glsxtr@redefstyles}{}%
674     \RequirePackage{glossaries-extra-stylemods}%
675   }%
676   {%
677     \ifstreq{\#1}{all}%
678     {%
679       \renewcommand*{\@glsxtr@redefstyles}{}%
680       \PassOptionsToPackage{all}{glossaries-extra-stylemods}%
681       \RequirePackage{glossaries-extra-stylemods}%
682     }%
683   }%
684   {%
685     \renewcommand*{\@glsxtr@redefstyles}{}%
686     \@for \@glsxtr@tmp := #1 \do{%
687       \IfFileExists{glossary-\@glsxtr@tmp.sty}%
688       {%
689         \eappto{\@glsxtr@redefstyles}{%
690           \noexpand\RequirePackage{glossary-\@glsxtr@tmp}}%
691       }%
692     }%
693   }%
```

```

693     \PackageError{glossaries-extra}{%
694         {Glossaries style package `glossary-\@glsxtr@tmp.sty'%
695          doesn't exist (did you mean to use the `style' key?)}}{%
696         {The list of values (#1) in the `stylemods' key should%
697          match the glossary-xxx.sty files provided with%
698          glossaries.sty}}{%
699     }%
700   }%
701   \appto{\glsxtr@redefstyles}{\RequirePackage{glossaries-extra-stylemods}}{%
702 }
703 }%
704 }

```

`glsxtr@do@style`

```
705 \newcommand*{\@glsxtr@do@style}{}{}
```

`style` Since the `stylemods` option can automatically load extra style packages, deal with the `style` option after those packages have been loaded.

```
706 \define@key{glossaries-extra.sty}{style}{}{%
```

Defer actual style change:

```
707 \renewcommand*{\@glsxtr@do@style}{}{%
```

Set this as the default style:

```
708 \setkeys{glossaries.sty}{style={#1}}{%
```

Set this style:

```
709 \setglossarystyle{#1}{%
```

```
710 }{%
```

```
711 }
```

`c@wrglossaryctr` Increments the associated counter if enabled. Does nothing by default. The optional argument is the entry label in case it's required, but the `wrglossary` counter is globally used by all entries.

```
712 \newcommand*{\glsxtr@inc@wrglossaryctr}[1]{}{}
```

`cationHyperlink`

```
\glsxtrinternallocationhyperlink{<counter>}{<prefix>}{<location>}
```

The first two arguments are always control sequences.

```
713 \newcommand*{\GlsXtrInternalLocationHyperlink}[3]{}{%
```

```
714   \glsxtrhyperlink{#1#2#3}{#3}{%
```

```
715 }
```

`cationhyperlink`

```
716 \newcommand*{\@glsxtr@wrglossary@locationhyperlink}[3]{}{%
```

```
717   \pageref{wrglossary.#3}{%
```

```
718 }
```

`indexcounter` Define the `wrglossary` counter that's incremented every time an entry is indexed, except for cross-references. This is designed for use with `bib2gls v1.4+`. It can work with the other indexing methods but it will interfere with the number list collation. This option automatically implements `counter=wrglossary`.

Since glossaries automatically loads `amsmath`, there may be a problem if the indexing occurs in the equation environment, because only one `\label` is allowed in each instance of that environment. It's best to change the counter when in maths mode.

```
719 \@glsxtr@declareoption{indexcounter}{%
720   \glsxtr@dooption{counter=wrglossary}%
721   \ifundef\c@wrglossary
722   {%
723     \newcounter{wrglossary}%
724     \renewcommand{\thewrglossary}{\arabic{wrglossary}}%
725   }%
726   {}%
727 \renewcommand*{\glsxtr@inc@wrglossaryctr}[1]{%
```

Only increment if the current counter is `wrglossary`.

```
728   \ifdefstring@gls@counter{wrglossary}%
729   {%
730     \refstepcounter{wrglossary}%
731     \label{wrglossary.\thewrglossary}%
732   }%
733   {}%
734 }%
735 \renewcommand*{\GlsXtrInternalLocationHyperlink}[3]{%
736   \ifdefstring\glsentrycounter{wrglossary}%
737   {%
738     \glsxtr@wrglossary@locationhyperlink{##1}{##2}{##3}%
739   }%
740   {\glsxtrhyperlink{##1##2##3}{##3}}%
741 }%
742 }
```

`sxtrwrglossmark` Marks the place where indexing occurs. Does nothing by default.

```
743 \newcommand*{\@glsxtrwrglossmark}{}%
```

`sxtrwrglossmark` Since `\glsadd` can be used in the preamble, this action needs to be disabled until the start of the document.

```
744 \newcommand*{\@@glsxtrwrglossmark}{}%
745 \AtBeginDocument{\renewcommand*{\@@glsxtrwrglossmark}{\@glsxtrwrglossmark}}
```

`sxtrwrglossmark` Does nothing by default.

```
746 \newcommand*{\glsxtrwrglossmark}{\ensuremath{\cdot}}
```

`tr@doshowtarget`

```
747 \newcommand{\glsxtr@doshowtarget}[2]{#2}
```

```

debug Provide extra debug options.

748 \define@choicekey{glossaries-extra.sty}{debug}
749   [\\@glsxtr@debugval\\@glsxtr@debugnr]%
750   {true,false,showtargets,showrgloss,all,showaccsupp}[true]{%
751     \\ifcase\\@glsxtr@debugnr\\relax % true
752       \\glsxtr@dooption{debug=true}%
753       \\renewcommand*{\\@glsxtrwrglossmark}{\%}
754     \\or % false
755       \\glsxtr@dooption{debug=false}%
756       \\renewcommand*{\\@glsxtrwrglossmark}{\%}
757       \\let\\@glsxtr@doshowtarget\\@secondoftwo
758     \\or % showtargets
759       \\glsxtr@dooption{debug=showtargets}%
760       \\def\\@glsxtr@doshowtarget{\\@glsxtrshowtargetleft}%
761     \\or % showrgloss
762       \\glsxtr@dooption{debug=true}%
763       \\renewcommand*{\\@glsxtrwrglossmark}{\\glsxtrwrglossmark}%
764     \\or % all
765       \\glsxtr@dooption{debug=showtargets,debug=showaccsupp}%
766       \\renewcommand*{\\@glsxtrwrglossmark}{\\glsxtrwrglossmark}%
767       \\def\\@glsxtr@doshowtarget{\\@glsxtrshowtargetleft}%
768     \\or % showaccsupp
769       \\glsxtr@dooption{debug=showaccsupp}%
770     \\fi
771 }

showtargetouter
772 \\newcommand*{\\glsxtrshowtargetouter}{\\glsshowtargetouter}

showtargetinner
773 \\newcommand*{\\glsxtrshowtargetinner}[1]{\\glsshowtargetinner{\#1}}

    Debugging show targets.

rshowtargetleft
774 \\newcommand{\\@glsxtrshowtargetleft}[2]{\\@glsshowtarget{\#1}\#2\\@glsxtrshowtargetmark}%

showtargetright
775 \\newcommand{\\@glsxtrshowtargetright}[2]{\\@glsxtrshowtargetmark\#2\\@glsshowtarget{\#1}}%

rshowtargetmark
776 \\newcommand{\\@glsxtrshowtargetmark}{\%}

showtargets Implements debug=showtargets and provides extra adjustments.
777 \\define@choicekey{glossaries-extra.sty}{showtargets}
778   [\\@glsxtr@showtargetsval\\@glsxtr@showtargetsnnr]%
779   {left,right,innerleft,innerright,annoteleft,annoteright}%
780   {\%}

```

```

781 \glsxtr@dooption{debug=showtargets}%
782 \ifcase\@glsxtr@showtargets\relax
783   \def\@glsxtr@doshowtarget{\@glsxtrshowtargetleft}%
784   \def\glsxtrshowtargetouter{\glsshowtargetouter}%
785   \def\glsxtrshowtargetinner{\glsshowtargetinner}%
786   \let\@glsxtrshowtargetmark\empty
787 \or
788   \def\@glsxtr@doshowtarget{\@glsxtrshowtargetright}%
789   \def\glsxtrshowtargetouter{\glsshowtargetouter}%
790   \def\glsxtrshowtargetinner{\glsshowtargetinner}%
791   \let\@glsxtrshowtargetmark\empty
792 \or
793   \def\@glsxtr@doshowtarget{\@glsxtrshowtargetleft}%
794   \def\glsxtrshowtargetouter{\glsxtrshowtargetinner}%
795   \def\glsxtrshowtargetinner{\glsshowtargetinnersymleft}%
796   \let\@glsxtrshowtargetmark\empty
797 \or
798   \def\@glsxtr@doshowtarget{\@glsxtrshowtargetright}%
799   \def\glsxtrshowtargetouter{\glsxtrshowtargetinner}%
800   \def\glsxtrshowtargetinner{\glsshowtargetinnersymright}%
801   \let\@glsxtrshowtargetmark\empty
802 \or
803   \def\@glsxtr@doshowtarget{\@glsxtrshowtargetleft}%
804   \def\glsxtrshowtargetouter{\glsxtrshowtargetinner}%
805   \def\glsxtrshowtargetinner{\glsshowtargetinnersymleft}%
806   \def\@glsxtrshowtargetmark{\@glsshowtargetmarkfmt\glsxtrshowtargetsymbolsymright}%
807 \or
808   \def\@glsxtr@doshowtarget{\@glsxtrshowtargetright}%
809   \def\glsxtrshowtargetouter{\glsxtrshowtargetinner}%
810   \def\glsxtrshowtargetinner{\glsshowtargetinnersymright}%
811   \def\@glsxtrshowtargetmark{\@glsshowtargetmarkfmt\glsxtrshowtargetsymbolsymleft}%
812 \fi
813 }

```

Pass all other options to glossaries.

```

814 \DeclareOptionX*{%
815   \expandafter\glsxtr@dooption\expandafter{\CurrentOption}}

```

Process options.

```
816 \ProcessOptionsX
```

Load glossaries if not already loaded.

```
817 \RequirePackage{glossaries}
```

Load the glossaries-accsupp package if required.

```
818 \@glsxtr@doaccsupp
```

Load the glossaries-prefix package if required.

```
819 \@glsxtr@doloadprefix
```

Redefine \glspostdescription if required.

```
820 \@glsxtr@defpostpunc
```

```

glsdoshowtarget Added to glossaries v4.50 so many not be defined. Need to redefine it so use \def.
821 \def\glsdoshowtarget{\@glsxtr@doshowtarget}

rgetsymbolright
822 \newcommand{\glsxtrshowtargetsymbolsright}{\tiny$\triangleleft$}%

argetsymbolleft
823 \newcommand{\glsxtrshowtargetsymbolsleft}{\tiny$\triangleright$}%

showtargetinner Only added to glossaries in v4.50 so may not be defined.
824 \providecommand*{\glsshowtargetinner}[1]{\glsshowtargetfont [#1]}

sshowtargetfont Only added to glossaries in v4.45 so may not be defined.
825 \providecommand*{\glsshowtargetfont}{\ttfamily\footnotesize}

rcontentsymleft
826 \newcommand*{\glsshowtargetinnersymleft}[1]{%
827 \glsshowtargetinner{#1}\allowbreak\glsxtrshowtargetsymbolsleft}

contentsymright
828 \newcommand*{\glsshowtargetinnersymright}[1]{%
829 \glsxtrshowtargetsymbolsright\allowbreak\glsshowtargetinner{#1}%

showtargetouter Only added to glossaries in v4.45 so may not be defined.
830 \providecommand*{\glsshowtargetouter}[1]{%
831 \glsshowtargetsymbols\marginpar{\glsshowtargetsymbols\glsshowtargetfont #1}%

\@glsshowtarget Only added to glossaries in v4.32 so may not be defined.
832 \providecommand*{\@glsshowtarget}[1]{}

\glsshowtarget This command was introduced to glossaries v4.32 so it may not be defined. Therefore it's
defined here using \def. \glsshowtargetouter was introduced in glossaries v4.45, so that
also may not be defined.
833 \def\glsshowtarget#1{%
834 \glsxtrtitleorpdforheading
835 {%
836 \ifmmode
837 \nfss@text{\glsxtrshowtargetinner{#1}}%
838 \else
839 \ifinner
840 \glsxtrshowtargetinner{#1}%
841 \else
842 \glsxtrshowtargetouter{#1}%
843 \fi
844 \fi
845 }%
846 {[#1]}%
847 {{\protect\glsshowtargetinner{#1}}}%
848 }

```

```

owttargetmarkfmt
849 \newcommand*{\@glsshowtargetmarkfmt}[1]{%
850   \glsxtrtitleorpdforheading
851   {%
852     \ifmmode \nfss@text{\#1}\else #1\fi
853   }%
854   {}%
855   {\ifmmode \nfss@text{\#1}\else #1\fi}%
856 }

@doseeglossary Save original definition of \do@seeglossary
857 \let\@glsxtr@org@doseeglossary\do@seeglossary

r@doseeglossary This doesn't increment the associated counter.
858 \newcommand*{\@glsxtr@doseeglossary}[2]{%
859   \glsdoifexists{\#1}%
860   {%
861     \@@glsxtrwrglossmark
862     \glsxtr@org@doseeglossary{\#1}{\#2}%
863   }%
864 }

oindex@glossary
865 \newcommand*{\@glsxtr@dosee@alsoindex@glossary}[2]{%
866   \glsxtr@recordsee{\#1}{\#2}%
867   \glsxtr@doseeglossary{\#1}{\#2}%
868 }

@org@gloautosee Save and restore original definition of \glo@autosee. (That command may not be defined
as it was only introduced to glossaries v4.30, in which case the synonym won't be defined
either.)
869 \let\@glsxtr@org@gloautosee\glo@autosee

Check if user tried autoseeindex=false when it can't be supported.
870 \if@glsxtr@autoseeindex
871 \else
872   \ifdef\@glsxtr@org@gloautosee
873   {}%
874   {\PackageError{glossaries-extra}{`autoseeindex=false' package
875     option requires at least v4.30 of glossaries.sty}%
876     {You need to update the glossaries.sty package}%
877   }
878 \fi

\glo@autosee If \glo@autosee has been defined (glossaries v4.30 onwards), redefine it to test the au-
toseeindex option.
879 \ifdef\glo@autosee
880 {}%

```

```

881 \renewcommand*{\@glo@autosee}{%
882   \if@glsxtr@autosee@index\@glsxtr@org@gloautosee\fi}%
883 }%
884 {}
```

`checkseeallowed` Don't prohibit the use of the see key before the indexing files have been opened if the automatic see indexing has been disabled, since it's no longer an issue.

```

885 \renewcommand*{\gls@checkseeallowed}{%
886   \if@glsxtr@autosee@index\@gls@see@noindex\fi
887 }
```

Define abbreviations glossaries if required.

```

888 \@glsxtr@abbreviationsdef
889 \let\@glsxtr@abbreviationsdef\relax
```

Setup shortcuts if required.

```
890 \@glsxtr@setupshortcuts
```

Redefine `\@glsxtr@redef@forglsentries` if required.

```
891 \@glsxtr@redef@forglsentries
```

`ariesextrasetup` Allow user to set options after the package has been loaded. First modify `\glsxtr@dooption` so that it now uses `\setupglossaries`:

```
892 \renewcommand{\glsxtr@dooption}[1]{\setupglossaries{#1}}%
```

Disable options that can only be used when the package is loaded:

```
893 \disable@keys{glossaries-extra.sty}{accsupp}
```

Now define the user command:

```

894 \newcommand*{\glossariesextrasetup}[1]{%
895   \let\glsxtr@setup@record\relax
896   \let\@glsxtr@setupshortcuts\relax
897   \let\@glsxtr@redef@forglsentries\relax
898   \let\@glsxtr@doloadprefix\relax
899   \setkeys{glossaries-extra.sty}{#1}%
900   \@glsxtr@abbreviationsdef
901   \let\@glsxtr@abbreviationsdef\relax
902   \@glsxtr@setupshortcuts
903   \glsxtr@setup@record
904   \@glsxtr@redef@forglsentries
905   \@glsxtr@doloadprefix
906 }
```

`@@do@wrglossary` Save original definition of `\@@do@wrglossary`.

```
907 \let\glsxtr@org@@do@wrglossary\@@do@wrglossary
```

`@@do@wrglossary` The new version adds code that can show a marker for debugging and increments the associated counter if enabled.

```

908 \newcommand*{\glsxtr@@do@wrglossary}[1]{%
909   \@@glsxtrwrglossmark
```

```

910 \glsxtr@inc@wrglossaryctr{#1}%
911 \glsxtr@org@do@wrglossary{#1}%
912 }

aveentrycounter Save original definition of \@gls@saveentrycounter.
913 \let\glsxtr@saveentrycounter@gls@saveentrycounter

aveentrycounter Change \@gls@saveentrycounter so that it only stores the entry counter information if the
indexing is on.
914 \let@\gls@saveentrycounter\glsxtr@indexonly@saveentrycounter

etcOUNTERPREFIX This command is provided by the base glossaries package, but is redefined here. The stan-
dard indexing methods don't directly store the hypertarget but instead need to split it into
the counter, prefix and location parts, which can be reconstituted in the location list. Unfor-
tunately, not all targets are in this form, so the links fail. With record=nameref, the complete
target name can be saved, so this modification adjusts the warning.
915 \renewcommand*\@gls@getcounterprefix[2]{%
916   \protected@edef{\gls@thisloc{#1}\protected@edef{\gls@thisHloc{#2}}{%
917     \ifx{\gls@thisloc}{\gls@thisHloc}%
918       \def{\glo@counterprefix{}}{%
919     \else%
920       \def{\gls@get@counterprefix##1.#1##2\end@getprefix}{%
921         \def{\glo@tmp{##2}}{%
922           \ifx{\glo@tmp}{\empty}%
923             \def{\glo@counterprefix{}}{%
924           \else%
925             \def{\glo@counterprefix{##1}}{%
926               \fi%
927             }%
928           \gls@get@counterprefix#2.#1\end@getprefix%
929           Warn if no prefix can be formed, unless record=nameref.
930           \ifx{\glo@counterprefix}{\empty}%
931             \ifx{\glsxtr@record@setting}{\glsxtr@record@setting@nameref}%
932               \GlossariesExtraWarning{Hyper target ‘#2’ can’t be formed by
933                 prefixing^\Jlocation ‘#1’. You need to modify the
934                 definition of \string\theH\@gls@counter^\Jotherwise you
935                 will get the warning: “name{\@gls@counter.#1}” has been^\J
936                 referenced but does not exist}%
937               \ifx{\glsxtr@record@setting}{\glsxtr@record@setting@only}%
938                 . You may want to consider using record=nameref instead}%
939               \fi}%
940             \fi%
941           \fi%
942         \fi%
943   }%

```

Provide script dialect hook (does nothing unless redefined by glossaries-extra-bib2gls).

```
sxtrdialecthook
944 \newcommand*{\@glsxtrdialecthook}{}}

    Set up record option if required.

945 \glsxtr@setup@record

    Disable preamble-only options and switch on the undefined tag at the start of the document.

946 \AtBeginDocument{%
947   \disable@keys{glossaries-extra.sty}{abbreviations,docdef,record}%
948   \def\@glsxtrundeftag{\glsxtrundeftag}%
949 }
```

1.2 Extra Utilities

usedOrUndefined

`\GlsXtrIfUnusedOrUndefined{<label>}{<true>}{<false>}`

Does `<true>` if the entry given by `<label>` is either undefined or hasn't been used (or has had the first use flag reset).

```
950 \newcommand*{\GlsXtrIfUnusedOrUndefined}[3]{%
951   \ifglsentryexists{#1}%
952   { \ifbool{glo@\glsdetoklabel{#1}@flag}{#3}{#2} }%
953   {#2}%
954 }
```

Starred form of `\ifglossaryexists` was only introduced to `glossaries` v4.46 so provide it if it hasn't been defined.

```
955 \ifdef\s@ifglossaryexists
956 {}
957 {
```

`fglossaryexists`

```
958 \renewcommand{\ifglossaryexists}{%
959   \@ifstar\s@ifglossaryexists\@ifglossaryexists
960 }
```

`fglossaryexists`

```
961 \newcommand{\@ifglossaryexists}[3]{%
962   \ifcsundef{glotype@\#1@out}{#3}{#2}%
963 }
```

`fglossaryexists`

```
964 \newcommand{\s@ifglossaryexists}[3]{%
965   \ifcsundef{glolist@\#1}{#3}{#2}%
966 }
```

```
967 }
```

ifemptyglossary

```
\glsxtrifemptyglossary{\langle type \rangle}{\langle true \rangle}{\langle false \rangle}
```

Provide command to determine if any entries have been added to the glossary (where the glossary label is provided in the first argument). The entries are stored in the comma-separated list `\glolist@{type}`. If this hasn't been defined, the glossary doesn't exist. If it has been defined and is simply a comma, the glossary exists and is empty. (It's initialised to a comma.)

```
968 \newcommand{\glsxtrifemptyglossary}[3]{%
969   \ifcsdef{glolist@#1}%
970   {%
971     \ifcsstring{glolist@#1}{,}{#2}{#3}%
972   }%
973   {%
974     \glsxtrunedefaction{Glossary type '#1' doesn't exist}{}%
975   #2%
976 }%
977 }
```

xtrifkeydefined Tests if the key given in the first argument has been defined.

```
978 \newcommand*\glsxtrifkeydefined[3]{%
979   \key@ifundefined{glossentry}{#1}{#3}{#2}%
980 }
```

ovidestoragekey Like `\glsaddstoragekey` but does nothing if the key has already been defined.

```
981 \newcommand*\glsxtrprovidestoragekey{%
982   \@ifstar\sglsxtr@provide@storagekey\glsxtr@provide@storagekey
983 }
```

vide@storagekey Unstarred version.

```
984 \newcommand*\@glsxtr@provide@storagekey[3]{%
985   \key@ifundefined{glossentry}{#1}%
986   {%
987     \define@key{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
988     \appto{\gls@keymap}{, #1}{#1}%
989     \appto{\newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
990     \appto{\newglossaryentryposthook}{%
991       \letcs{\@glo@tmp}{@glo@#1}%
992       \gls@assign@field{#2}{\glo@label}{#1}{\@glo@tmp}%
993     }%
994 }
```

Allow the user to omit the user level command if they only intended fetching the value with `\glsxtrusefield`

```
994   \ifblank{#3}
```

```

995     {}%
996     {%
997         \newcommand*{\#3}[1]{\@gls@entry@field{##1}{#1}}%
998     }%
999 }%
1000 {%

```

Provide the no-link command if not already defined.

```

1001     \ifblank{\#3}%
1002     {}%
1003     {%
1004         \providecommand*{\#3}[1]{\@gls@entry@field{##1}{#1}}%
1005     }%
1006 }%
1007 }

```

`\vide@storagekey` Starred version.

```

1008 \newcommand*{\s@glsxtr@provide@storagekey}[1]{%
1009     \key@ifundefined{glossentry}{#1}{%
1010     {}%
1011         \expandafter\newcommand\expandafter*\expandafter
1012         {\csname gls@assign@#1@field\endcsname}[2]{%
1013             \@@gls@expand@field{##1}{#1}{##2}}%
1014     }%
1015 }%
1016 {}%
1017 \glsxtr@provide@addstoragekey{#1}%
1018 }

```

The name of a text-block control sequence can be stored in a field (given by `\GlsXtrFmtField`). This command can then be used with `\glsxtrfmt[<options>]{<label>}{<text>}` which effectively does `\glslink[<options>]{<label>}{{<cs>}{<text>}}`. If the field hasn't been set for that entry just `<text>` is done.

`\GlsXtrFmtField`

```
1019 \newcommand{\GlsXtrFmtField}{useri}
```

`tDefaultOptions`

```
1020 \newcommand{\GlsXtrFmtDefaultOptions}{noindex}
```

`\glsxtrfmt` The post-link hook isn't done. This now has a starred form that checks for a final optional argument.

```
1021 \newrobustcmd*{\glsxtrfmt}{\@ifstar\s@glsxtrfmt\glsxtrfmt}
```

`\@glsxtrfmt` Unstarred form.

```
1022 \newcommand*{\@glsxtrfmt}[3][]{\@@glsxtrfmt{#1}{#2}{#3}{}}
```

```

\s@glsxtrfmt Starred form.
1023 \newcommand*{\s@glsxtrfmt}[3] []{%
1024   \new@ifnextchar[{\s@glsxtrfmt[#1]{#2}{#3}}{%
1025     {\@glsxtrfmt[#1]{#2}{#3}{}}{}}%
1026 }

\s@glsxtrfmt Pick up final optional argument.
1027 \def\s@glsxtrfmt#1#2#3[#4]{\@glsxtrfmt[#1]{#2}{#3}{#4}#}

\@glsxtrfmt Actual inner working.
1028 \newcommand*{\@glsxtrfmt}[4]{%
  Since there's no post-link hook to worry about, grouping can be added to provide some protection against nesting (but in general nested link text should be avoided).
1029 \begingroup
1030   \def\glslabel[#2]{%
1031     \glsdoifexistsordo[#2]{%
1032       {%
1033         \ifglshasfield{\GlsXtrFmtField}{#2}{%
1034           {%
1035             \let\do@gls@link@checkfirsthyper\relax
1036             \expandafter\gls@link\expandafter[\GlsXtrFmtDefaultOptions,#1]{#2}{%
1037               {\glsxtrfmtdisplay{\glscurrentfieldvalue}{#3}{#4}}{}}%
1038             }{%
1039               {\glsxtrfmtdisplay{@firstofone}{#3}{#4}}{}}%
1040           }{%
1041             {%
1042               \begingroup
1043                 \gls@setdefault@glslink@opts
1044                   \setkeys{glslink}{\GlsXtrFmtDefaultOptions,#1}{%
1045                     \ifKV@glslink@noindex\else\glsadd{#2}\fi
1046                   \endgroup
1047                     {\glsxtrfmtdisplay{@firstofone}{#3}{#4}}{}}%
1048             }{%
1049             \endgroup
1050           }{%
1051             \newcommand{\glsxtrfmtdisplay}[3]{\csuse{#1}{#2}{#3}}{%
1052 \ifdef\texorpdfstring
1053 {
1054   \newcommand*{\glsxtentryfmt}[2]{%
```

```

1055     \texorpdfstring{@glsxtrentryfmt{#1}{#2}}{\glsxtrpdfentryfmt{#1}{#2}}%
1056 }
1057 }
1058 {
1059 \newcommand*{\glsxtrentryfmt}{\glsxtrentryfmt}
1060 }

```

`sxtrpdfentryfmt` Use for the PDF bookmarks.

```
1061 \newcommand*{\glsxtrpdfentryfmt}[2]{#2}
```

`@glsxtrentryfmt`

```
1062 \newrobustcmd*{\glsxtrentryfmt}[2]{%
```

Locally define `\glslabel` in case the helper command needs to access the label.

```

1063 {%
1064     \protected@edef\glslabel{#1}%
1065     \glsdoifexistsordo{#1}%
1066     {%
1067         \ifglshasfield{\GlsXtrFmtField}{#1}%
1068         {%
1069             \csuse{\glscurrentfieldvalue}{#2}%
1070         }%
1071         {#2}%
1072     }%
1073     {#2}%
1074 }%
1075 }
```

`xtrfieldlistadd` If a field stores an etoolbox internal list (e.g. `loclist`) then this macro provides a convenient way of adding to the list via etoolbox's `\listcsadd`. The first argument is the entry's label, the second is the field label and the third is the element to add to the list.

```
1076 \newcommand*{\glsxtrfieldlistadd}[3]{%
1077     \listcsadd{glo@\glsdetoklabel{#1}@#2}{#3}%
1078 }
```

`trfieldlistgadd` Similarly but uses `\listcsgadd`.

```
1079 \newcommand*{\glsxtrfieldlistgadd}[3]{%
1080     \listcsgadd{glo@\glsdetoklabel{#1}@#2}{#3}%
1081 }
```

`trfieldliststeadd` Similarly but uses `\listcseadd`.

```
1082 \newcommand*{\glsxtrfieldliststeadd}[3]{%
1083     \listcseadd{glo@\glsdetoklabel{#1}@#2}{#3}%
1084 }
```

`trfieldlistxadd` Similarly but uses `\listcsxadd`.

```
1085 \newcommand*{\glsxtrfieldlistxadd}[3]{%
1086     \listcsxadd{glo@\glsdetoklabel{#1}@#2}{#3}%
1087 }
```

Now provide commands to iterate over these lists.

```
fielddolistloop
1088 \newcommand*{\glsxtrfielddolistloop}[2]{%
1089   \dolistcsloop{glo@\glsdetoklabel{#1}@#2}%
1090 }

fieldforlistloop
1091 \newcommand*{\glsxtrfieldforlistloop}[3]{%
1092   \forlistcsloop{#3}{glo@\glsdetoklabel{#1}@#2}%
1093 }

fieldformatlist
1094 \newrobustcmd*{\glsxtrfieldformatlist}[2]{%
1095   \begingroup
1096   \def\@dtl@formatlist@itemsep{}%
1097   \def\@dtl@formatlist@lastitem{}%
1098   \def\@dtl@formatlist@prelastitem{}%
1099   \def\@dtl@formatlist@prelastitemsep{}%
1100   \forlistcsloop{\@dtl@formatlist@handler}{glo@\glsdetoklabel{#1}@#2}%
1101   \@dtl@formatlist@prelastitem\@dtl@formatlist@lastitem
1102   \endgroup
1103 }

List element tests:
trfieldifinlist First argument label, second argument field, third argument item, fourth true part and fifth false part.
1104 \newcommand*{\glsxtrfieldifinlist}[5]{%
1105   \ifinlistcs{#3}{glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
1106 }

rfieldxifinlist Expands item.
1107 \newcommand*{\glsxtrfieldxifinlist}[5]{%
1108   \xifinlistcs{#3}{glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
1109 }

sxtrforcsvfield


\glsxtrforcsvfield{\langle label \rangle}{\langle field \rangle}{\langle cs handler \rangle}


1110 \newcommand*{\glsxtrforcsvfield}{}%
1111   \@ifstar\s@glsxtrforcsvfield@glsxtrforcsvfield
1112 }

sxtrforcsvfield Unstarred version.
1113 \newcommand*{\@glsxtrforcsvfield}[3]{%
```

```

1114 \@glsxtrifhasfield{#2}{#1}%
1115 {%
1116   \let\glsxtrrendfor\@endfortrue
1117   \cfor\@glsxtr@label:=\glscurrentfieldvalue\do
1118     {\expandafter#3\expandafter{\@glsxtr@label}}}}%
1119 {}%
1120 }

```

`sxtrforcsvfield` Starred version.

```

1121 \newcommand*{\s@glsxtrforcsvfield}[3]{%
1122   \s@glsxtrifhasfield{#2}{#1}%
1123 {%
1124   \let\glsxtrrendfor\@endfortrue
1125   \cfor\@glsxtr@label:=\glscurrentfieldvalue\do
1126     {\expandafter#3\expandafter{\@glsxtr@label}}}}%
1127 {}%
1128 }

```

`ldformatcsvlist`

```

1129 \newrobustcmd*{\glsxtrfieldformatcsvlist}[2]{%
1130   \@glsxtrifhasfield{#2}{#1}%
1131   {\@dtlformatlist\glscurrentfieldvalue}%
1132 {}%
1133 }

```

`dValueInCsvList`

`\GlsXtrIfFieldValueInCsvList{\label}{\field}{\list}{\true}{\false}`

```

1134 \newcommand*{\GlsXtrIfFieldValueInCsvList}{%
1135   \@ifstar\s@glsxtrIfFieldValueInCsvList\@GlsXtrIfFieldValueInCsvList
1136 }

```

Note `\DTLifinlist` performs one level on the list but not the element.

`dValueInCsvList` Unstarred version.

```

1137 \newcommand*{\@GlsXtrIfFieldValueInCsvList}[5]{%
1138   \@glsxtrifhasfield{#2}{#1}%
1139 {%
1140   \expandafter\DTLifinlist\expandafter{\glscurrentfieldvalue}%
1141   {#3}{#4}{#5}%
1142 }%
1143 {#5}%
1144 }

```

`dValueInCsvList` Starred version.

```

1145 \newcommand*{\s@glsxtrIfFieldValueInCsvList}[5]{%

```

```

1146 \s@glsxtrifhasfield{#2}{#1}%
1147 {%
1148   \expandafter\DTLifinlist\expandafter{\glscurrentfieldvalue}%
1149   {#3}{#4}{#5}%
1150 }%
1151 {#5}%
1152 }

```

eInFieldCsvList

`\GlsXtrIfValueInFieldCsvList{\label}{\field}{\value}{\true}{\false}`

Essentially the reverse. Tests if the given value is in the given field which should contain a comma-separated list.

```

1153 \newcommand*{\GlsXtrIfValueInFieldCsvList}{%
1154   \@ifstar\s@glsxtrifvalueinfieldcsvlist\@GlsXtrIfValueInFieldCsvList
1155 }

```

eInFieldCsvList Unstarred version.

```

1156 \newcommand*{\@GlsXtrIfValueInFieldCsvList}[5]{%
1157   \s@glsxtrifhasfield{#2}{#1}%
1158 {%
1159   \DTLifinlist{#3}{\glscurrentfieldvalue}{#4}{#5}%
1160 }%
1161 {#5}%
1162 }

```

eInFieldCsvList Unstarred version.

```

1163 \newcommand*{\s@GlsXtrIfValueInFieldCsvList}[5]{%
1164   \s@glsxtrifhasfield{#2}{#1}%
1165 {%
1166   \DTLifinlist{#3}{\glscurrentfieldvalue}{#4}{#5}%
1167 }%
1168 {#5}%
1169 }

```

eInFieldCsvList

`\xGlsXtrIfValueInFieldCsvList{\label}{\field}{\value}{\true}{\false}`

As above but fully expand $\langle value \rangle$.

```

1170 \newcommand*{\xGlsXtrIfValueInFieldCsvList}{%
1171   \@ifstar\s@xGlsXtrIfValueInFieldCsvList\@xGlsXtrIfValueInFieldCsvList
1172 }

```

```

eInFieldCsvList Unstarred version.

1173 \newcommand*{\@xGlsXtrIfValueInFieldCsvList}[5]{%
1174   \@glsxtrifhasfield{#2}{#1}%
1175   {%
1176     \protected@edef\gls@tmp{#3}%
1177     \expandafter\DTLifinlist\expandafter{\@gls@tmp}{\glscurrentfieldvalue}{#4}{#5}%
1178   }%
1179   {#5}%
1180 }

```

```

eInFieldCsvList Unstarred version.

1181 \newcommand*{\s@xGlsXtrIfValueInFieldCsvList}[5]{%
1182   \s@glsxtrifhasfield{#2}{#1}%
1183   {%
1184     \protected@edef\gls@tmp{#3}%
1185     \expandafter\DTLifinlist\expandafter{\@gls@tmp}{\glscurrentfieldvalue}{#4}{#5}%
1186   }%
1187   {#5}%
1188 }

```

`lсхtrifhasfield`

`\glsxtrifhasfield{<field>}{<label>}{<true>}{<false>}`

A simpler alternative to `\ifglshasfield` that doesn't complain if the entry or the field doesn't exist. (No mapping is used.) Grouping is added to the unstarred version allow for nested use.

```

1189 \newrobustcmd{\glsxtrifhasfield}{%
1190   \@ifstar{\s@glsxtrifhasfield}{\@glsxtrifhasfield}%
1191 }

```

`lсхtrifhasfield` Unstarred version adds grouping.

```

1192 \newcommand{\@glsxtrifhasfield}[4]{%
1193   {\s@glsxtrifhasfield{#1}{#2}{#3}{#4}}%
1194 }

```

`lсхtrifhasfield` Starred version omits grouping.

```

1195 \newcommand{\s@glsxtrifhasfield}[4]{%
1196   \letcs{\glscurrentfieldvalue}{\glo@\glsdetoklabel{#2}@#1}%
1197   \ifundef\glscurrentfieldvalue
1198   {#4}%
1199   {%
1200     \ifdefempty\glscurrentfieldvalue{#4}{#3}%
1201   }%
1202 }

```

`rIfFieldNonZero` Designed for numeric fields.

```
1203 \newcommand{\GlsXtrIfFieldNonZero}{%
1204   \@ifstar{s@GlsXtrIfFieldNonZero}{\GlsXtrIfFieldNonZero}%
1205 }
```

`rIfFieldNonZero`

```
1206 \newcommand{\@GlsXtrIfFieldNonZero}[4]{%
1207   \@GlsXtrIfFieldCmpNum{#1}{#2}{=}{0}{#4}{#3}%
1208 }
```

`rIfFieldNonZero`

```
1209 \newcommand{\s@GlsXtrIfFieldNonZero}[4]{%
1210   \s@GlsXtrIfFieldCmpNum{#1}{#2}{=}{0}{#4}{#3}%
1211 }
```

`XtrIfFieldEqNum`

```
\GlsXtrIfFieldEqNum{\langle field \rangle}{\langle label \rangle}{\langle value \rangle}{\langle true \rangle}{\langle false \rangle}
```

Designed for numeric fields.

```
1212 \newcommand{\GlsXtrIfFieldEqNum}{%
1213   \@ifstar{s@GlsXtrIfFieldEqNum}{\GlsXtrIfFieldEqNum}%
1214 }
```

`XtrIfFieldEqNum`

```
1215 \newcommand{\@GlsXtrIfFieldEqNum}[5]{%
1216   \@GlsXtrIfFieldCmpNum{#1}{#2}{=}{#3}{#4}{#5}%
1217 }
```

`XtrIfFieldEqNum`

```
1218 \newcommand{\s@GlsXtrIfFieldEqNum}[5]{%
1219   \s@GlsXtrIfFieldCmpNum{#1}{#2}{=}{#3}{#4}{#5}%
1220 }
```

`trIfFieldCmpNum`

```
\GlsXtrIfFieldCmpNum{\langle field \rangle}{\langle label \rangle}{\langle comparison \rangle}{\langle value \rangle}{\langle true \rangle}%
{\langle false \rangle}
```

Designed for numeric fields.

```
1221 \newcommand{\GlsXtrIfFieldCmpNum}{%
1222   \@ifstar{s@GlsXtrIfFieldCmpNum}{\GlsXtrIfFieldCmpNum}%
1223 }
```

```

trIfFieldCmpNum
1224 \newcommand{\@GlsXtrIfFieldCmpNum}[6]{%
1225   {%
1226     \letcs{\glscurrentfieldvalue}{\glo@\glsdetoklabel{#2}@#1}%
1227     \ifundefined\glscurrentfieldvalue
1228       {\def\glscurrentfieldvalue{0}}%
1229     {%
1230       \ifdefempty\glscurrentfieldvalue
1231         {\def\glscurrentfieldvalue{0}}%
1232       {}%
1233     }%
1234     \ifnum\glscurrentfieldvalue#3#4\relax #5\else #6\fi
1235   }%
1236 }

trIfFieldCmpNum
1237 \newcommand{\s@GlsXtrIfFieldCmpNum}[6]{%
1238   \letcs{\glscurrentfieldvalue}{\glo@\glsdetoklabel{#2}@#1}%
1239   \ifundefined\glscurrentfieldvalue
1240     {\def\glscurrentfieldvalue{0}}%
1241   {%
1242     \ifdefempty\glscurrentfieldvalue
1243       {\def\glscurrentfieldvalue{0}}%
1244     {}%
1245   }%
1246   \ifnum\glscurrentfieldvalue#3#4\relax #5\else #6\fi
1247 }

```

XtrIfFieldUndef

`\GlsXtrIfFieldUdef{\langle field \rangle}{\langle label \rangle}{\langle true \rangle}{\langle false \rangle}`

Just uses \ifcsundef.

```

1248 \newcommand{\GlsXtrIfFieldUdef}[2]{%
1249   \ifcsundef{\glo@\glsdetoklabel{#2}@#1}%
1250 }

```

`\glsxtrusefield` Provide a user-level alternative to `\@gls@entry@field`. The first argument is the entry label. The second argument is the field label.

```

1251 \newcommand*{\glsxtrusefield}[2]{%
1252   \gls@entry@field{\#1}{\#2}%
1253 }

```

`\Glsxtrusefield` Provide a user-level alternative to `\@Gls@entry@field`.

```

1254 \ifdef\texorpdfstring
1255 {
1256   \newcommand*{\Glsxtrusefield}[2]{%

```

```

1257     \texorpdfstring
1258     {\@Gls@entry@field{#1}{#2}}
1259     {\@gls@entry@field{#1}{#2}}%
1260 }
1261 }
1262 {
1263 \newcommand*{\GLSxtrusefield}[2]{%
1264     \@Gls@entry@field{#1}{#2}%
1265 }
1266 }

\GLSxtrusefield As above but convert to all caps.
1267 \ifdef\texorpdfstring
1268 {
1269 \newcommand*{\GLSxtrusefield}[2]{%
1270     \texorpdfstring
1271     {\glsdoifexists{#1}{\mfirstucMakeUppercase{\@gls@entry@field{#1}{#2}}}}%
1272     {\@gls@entry@field{#1}{#2}}%
1273 }
1274 }
1275 {
1276 \newcommand*{\GLSxtrusefield}[2]{%
1277     \glsdoifexists{#1}{\mfirstucMakeUppercase{\@gls@entry@field{#1}{#2}}}}%
1278 }
1279 }

entryparentname
1280 \newcommand*{\glsxtreentryparentname}[1]{%
1281     \ifcsdef{glo@\glsdetoklabel{#1}@parent}%
1282     {\csuse{glo@\csuse{glo@\glsdetoklabel{#1}@parent}{\name}}}%
1283     {}%
1284 }

\glsxtrdeffield Just use \csdef to provide a field value for the given entry.
1285 \newcommand*{\glsxtrdeffield}[2]{\csdef{glo@\glsdetoklabel{#1}@#2}{}}

\glsxtredeffield Just use \csedef to provide a field value for the given entry.
1286 \newcommand*{\glsxtredeffield}[2]{\protected\csedef{glo@\glsdetoklabel{#1}@#2}{}}

trapptocsvfield Similar to the above but will append value with a leading comma if the field is already defined.
This is used by bib2gls. There's no check if the entry has been defined. (Because of the way
that bib2gls's save-from-alias etc options are implemented, the entry may not have yet been
written to the glstex file when this command is used.)
1287 \newcommand*{\glsxtrapptocsvfield}[3]{%
1288     \ifcsdef{glo@\glsdetoklabel{#1}@#2}%
1289     {\csappto{glo@\glsdetoklabel{#1}@#2}{,#3}}%
1290     {\csdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1291 }

```

```

etfieldifexists
1292 \newcommand*{\glsxtrsetfieldifexists}[3]{\glsdoifexists{#1}{#3}{}}

\GlsXtrSetField Allow the user to set a field. First argument entry label, second argument field label, third argument value.
1293 \newrobustcmd*{\GlsXtrSetField}[3]{%
1294   \glsxtrsetfieldifexists{#1}{#2}%
1295   {\csdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1296 }

\GlsXtrLetField Uses \cslet instead. Third argument should be a macro.
1297 \newrobustcmd*{\GlstrLetField}[3]{%
1298   \glsxtrsetfieldifexists{#1}{#2}%
1299   {\cslet{glo@\glsdetoklabel{#1}@#2}{#3}}%
1300 }

\GlsXtrLetField Uses \csletcs instead. Third argument should be a control sequence name.
1301 \newrobustcmd*{\csGlsXtrLetField}[3]{%
1302   \glsxtrsetfieldifexists{#1}{#2}%
1303   {\csletcs{glo@\glsdetoklabel{#1}@#2}{#3}}%
1304 }

LetFieldToField Sets the field for one entry to the field for another entry. Third argument should be the other entry and the fourth argument that other field label.
1305 \newrobustcmd*{\GlsXtrLetFieldToField}[4]{%
1306   \glsxtrsetfieldifexists{#1}{#2}%
1307   {\csletcs{glo@\glsdetoklabel{#1}@#2}{glo@\glsdetoklabel{#3}@#4}}%
1308 }

gGlsXtrSetField Allow the user to set a field. First argument entry label, second argument field label, third argument value.
1309 \newrobustcmd*{\gGlsXtrSetField}[3]{%
1310   \glsxtrsetfieldifexists{#1}{#2}%
1311   {\csgdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1312 }

xGlsXtrSetField
1313 \newrobustcmd*{\xGlsXtrSetField}[3]{%
1314   \glsxtrsetfieldifexists{#1}{#2}%
1315   {\protected@csxdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1316 }

eGlsXtrSetField
1317 \newrobustcmd*{\eGlsXtrSetField}[3]{%
1318   \glsxtrsetfieldifexists{#1}{#2}%
1319   {\protected@csedef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1320 }

```

XtrIfFieldEqStr Starred version uses starred version of \glsxtrifhasfield (that is, no grouping).

```
1321 \newcommand*{\GlsXtrIfFieldEqStr}{%
1322   \@ifstar{s@\GlsXtrIfFieldEqStr@\GlsXtrIfFieldEqStr
1323 }
```

XtrIfFieldEqStr

```
1324 \newrobustcmd*{\@GlsXtrIfFieldEqStr}[5]{%
1325   \@glsxtrifhasfield{#1}{#2}%
1326   {%
1327     \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}%
1328   }%
1329   {#5}%
1330 }
```

XtrIfFieldEqStr

```
1331 \newrobustcmd*{\s@\GlsXtrIfFieldEqStr}[5]{%
1332   \s@glsxtrifhasfield{#1}{#2}%
1333   {%
1334     \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}%
1335   }%
1336   {#5}%
1337 }
```

rIfFieldEqXpStr Like the above but first expands the string. Starred version uses starred version of \glsxtrifhasfield (that is, no grouping).

```
1338 \newcommand*{\GlsXtrIfFieldEqXpStr}{%
1339   \@ifstar{s@\GlsXtrIfFieldEqXpStr@\GlsXtrIfFieldEqXpStr
1340 }
```

rIfFieldEqXpStr

```
1341 \newrobustcmd*{\@GlsXtrIfFieldEqXpStr}[5]{%
1342   \@glsxtrifhasfield{#1}{#2}%
1343   {%
1344     \protected\edef\gls@tmp{#3}%
1345     \ifdefequal{\glscurrentfieldvalue}{\gls@tmp}{#4}{#5}%
1346   }%
1347   {#5}%
1348 }
```

rIfFieldEqXpStr

```
1349 \newrobustcmd*{\s@\GlsXtrIfFieldEqXpStr}[5]{%
1350   \s@glsxtrifhasfield{#1}{#2}%
1351   {%
1352     \protected\edef\gls@tmp{#3}%
1353     \ifdefequal{\glscurrentfieldvalue}{\gls@tmp}{#4}{#5}%
1354   }%
1355   {#5}%
1356 }
```

`fXpFieldEqXpStr` Like the above but also expands the field value. Starred version uses starred version of `\glsxtrifhasfield` (that is, no grouping).

```
1357 \newcommand*{\GlsXtrIfXpFieldEqXpStr}{%
1358   \@ifstar\s@GlsXtrIfXpFieldEqXpStr\@GlsXtrIfXpFieldEqXpStr
1359 }
```

`fXpFieldEqXpStr`

```
1360 \newrobustcmd*{\@GlsXtrIfXpFieldEqXpStr}[5]{%
1361   \@glsxtrifhasfield{#1}{#2}%
1362   {%
1363     \protected@edef\@gls@tmp{\glscurrentfieldvalue}%
1364     \let\glscurrentfieldvalue\@gls@tmp
1365     \protected@edef\@gls@tmp{#3}%
1366     \ifdefequal{\glscurrentfieldvalue}{\@gls@tmp}{#4}{#5}%
1367   }%
1368   {#5}%
1369 }
```

`fXpFieldEqXpStr`

```
1370 \newrobustcmd*{\s@GlsXtrIfXpFieldEqXpStr}[5]{%
1371   \s@glsxtrifhasfield{#1}{#2}%
1372   {%
1373     \protected@edef\@gls@tmp{\glscurrentfieldvalue}%
1374     \let\glscurrentfieldvalue\@gls@tmp
1375     \protected@edef\@gls@tmp{#3}%
1376     \ifdefequal{\glscurrentfieldvalue}{\@gls@tmp}{#4}{#5}%
1377   }%
1378   {#5}%
1379 }
```

`sXtrForeignText`

```
\GlsXtrForeignText{\<entry label>}{\<text>}
```

If a field is used to store a language tag (such as `en-GB` or `de-CH-1996`) then this command uses `tracklang`'s interface to encapsulate `<text>`. The field identifying the locale is given by `\GlsXtrForeignTextField`.

```
1380 \ifdef\foreignlanguage
1381 {
1382   \ifdef\GetTrackedDialectFromLanguageTag
1383   {
1384     \newcommand{\GlsXtrForeignText}[2]{%
```

In case this is used inside the argument of `\glsxtrifhasfield`, save and restore `\glscurrentfieldvalue`.

```
1385   \let\@glsxtr@org@currentfieldvalue\glscurrentfieldvalue
1386   \glsxtrifhasfield{\GlsXtrForeignTextField}{#1}%
1387   {%
```

```

1388     \expandafter\GetTrackedDialectFromLanguageTag\expandafter
1389         {\glscurrentfieldvalue}{\@glsxtr@dialect}%
1390     \let\@glsxtr@locale\glscurrentfieldvalue
1391     \let\glscurrentfieldvalue\@glsxtr@org@currentfieldvalue
1392     \ifdefempty{\@glsxtr@dialect}
1393     {%

```

An exact match hasn't been found. A partial match can only be obtained with at least track-lang v1.3.6.

```

1394     \ifundef\TrackedDialectClosestSubMatch
1395     {%
1396         \GlossariesExtraWarning{Can't obtain dialect label
1397             (tracklang v1.3.6+ required)}%
1398     }%
1399     {\let\@glsxtr@dialect\TrackedDialectClosestSubMatch}%
1400 }%
1401 {}%
1402 \ifdefempty{\@glsxtr@dialect}
1403 {%

```

No tracked dialect found for the root language.

```

1404 }%
1405 {}%

```

Check if there's a caption hook for the given dialect label.

```

1406 \ifcsundef{captions\@glsxtr@dialect}{}%
1407 {}%

```

Dialect label not recognised. Check if there's a known mapping.

```

1408 \IfTrackedDialectHasMapping{\@glsxtr@dialect}%
1409 {}%
1410 \edef\@glsxtr@dialect{%
1411     \GetTrackedDialectToMapping{\@glsxtr@dialect}}%

```

Does a caption hook exist for this?

```

1412 \ifcsundef{captions\@glsxtr@dialect}{}%
1413 {}%

```

No mapping. Try root language label instead.

```

1414 \ifcsundef{captions\@tracklang@lang}{}%
1415 {}%
1416     \let\@glsxtr@dialect\@tracklang@lang
1417 }%
1418 }%
1419 }%
1420 {}%

```

No mapping. Try root language label instead.

```

1421 \ifcsundef{captions\@tracklang@lang}{}%
1422 {}%
1423     \let\@glsxtr@dialect\@tracklang@lang
1424 }%

```

```

1425      }%
1426      }%
1427      }%
1428      \ifdefempty{\glsxstr@dialect}%
1429      {%
1430          \GlsXtrUnknownDialectWarning{\glsxstr@locale}{\tracklang@lang}%
1431          #2%
1432      }%
1433      {\foreignlanguage{\glsxstr@dialect}{#2}}%
1434  }%
1435  {#2}%
1436  key not set
1437 }
1438 {
1439 \newcommand{\GlsXtrForeignText}[2]{%
1440     \GlossariesExtraWarning{Can't encapsulate foreign text:}
1441     tracklang v1.3.6+ required}%
1442     #2%
1443 }
1444 }
1445 }
1446 {
    \foreignlanguage isn't defined so just do text.
1447 \newcommand{\GlsXtrForeignText}[2]{#2}
1448 }

```

`\foreignTextField` This is the user2 field by default but may be redefined as required.

```
1449 \newcommand*{\GlsXtrTextField}{userii}
```

`\nDialectWarning`

```

1450 \newcommand*{\GlsXtrUnknownDialectWarning}[2]{%
1451     \GlossariesExtraWarning{Can't determine valid dialect label}
1452     for locale '#1' (root language: #2)}%
1453 }
```

`\glsxtrpageref` Like `\glsrefentry` but references the page number instead (if entry counting is on). The base glossaries package only introduced `\GlsEntryCounterLabelPrefix` in version 4.38, so it may not be defined.

```

1454 \ifdef{\GlsEntryCounterLabelPrefix}
1455 {%
1456     \newcommand*{\glsxtrpageref}[1]{%
1457         \ifglsentrycounter
1458             \pageref{\GlsEntryCounterLabelPrefix\glsdetoklabel{#1}}%
1459         \else
1460             \ifglssubentrycounter
1461                 \pageref{\GlsEntryCounterLabelPrefix\glsdetoklabel{#1}}%
1462             \else
1463                 \gls{#1}%
1464             
```

```

1464     \fi
1465     \fi
1466 }
1467 }%
1468 {%
1469 \newcommand*{\glsxtrpageref}[1]{%
1470   \ifglsentrycounter
1471     \pageref{glsentry-\glsdetoklabel{#1}}%
1472   \else
1473     \ifglssubentrycounter
1474       \pageref{glsentry-\glsdetoklabel{#1}}%
1475     \else
1476       \gls{#1}%
1477     \fi
1478   \fi
1479 }
1480 }%

```

lossarypreamble

```

1481 \newcommand{\apptoglossarypreamble}[2][\glsdefaulttype]{%
1482   \ifcsdef{glolist@#1}{%
1483     {%
1484       \ifcsundef{@glossarypreamble@#1}{%
1485         {\csdef{@glossarypreamble@#1}{}{}}%
1486       {}}%
1487       \csappto{@glossarypreamble@#1}{#2}%
1488     }%
1489     {%
1490       \GlossariesExtraWarning{Glossary '#1' is not defined}%
1491     }%
1492   }%

```

lossarypreamble

```

1493 \newcommand{\preglossarypreamble}[2][\glsdefaulttype]{%
1494   \ifcsdef{glolist@#1}{%
1495     {%
1496       \ifcsundef{@glossarypreamble@#1}{%
1497         {\csdef{@glossarypreamble@#1}{}{}}%
1498       {}}%
1499       \cspreto{@glossarypreamble@#1}{#2}%
1500     }%
1501     {%
1502       \GlossariesExtraWarning{Glossary '#1' is not defined}%
1503     }%
1504   }%

```

1.3 Modifications to Commands Provided by glossaries

Some of the commands provided by glossaries are modified to take into account new options or to change default behaviour.

The original `\@gls@entry@field` causes a problem for undefined entries when used in section headings or captions. Since entries must be defined with just the base package this isn't a significant issue, but it will cause a problem with `bib2gls` where no entries are defined on the first L^AT_EX call, so redefine `\@gls@entry@field` to use `\csuse` instead of `\csname`.

`gls@entry@field`

```
\@gls@entry@field{\<label>}{\<field>}
```

This command was introduced to glossaries version 4.03 but older versions are likely to be incompatible with `glossaries-extra`.

```
1505 \ifdef\@gls@entry@field
1506 {
1507   \renewcommand*\@gls@entry@field[2]{\csuse{glo@\glsdetoklabel{#1}@#2}}
1508 }
1509 {}
```

`\ifglsused`

```
\ifglsused{\<label>}{\<true part>}{\<false part>}
```

In the event that undefined entries should trigger a warning rather than an error, `\ifglsused` needs to be modified to check for existence. If the boolean variable is undefined, then its state is indeterminate and is neither true nor false, so neither `\<true part>` nor `\<false part>` will be performed if `\<label>` is undefined. See also `\GlsXtrIfUnusedOrUndefined`.

```
1510 \renewcommand*\ifglsused[3]{%
1511   \glsdoifexists{#1}{\ifbool{glo@\glsdetoklabel{#1}@flag}{#2}{#3}}%
1512 }
```

Provide a starred version of `\longnewglossaryentry` that doesn't automatically insert `\leavevmode\unskip\nopostdesc` at the end of the description. The unstarred version is modified to use `\glsxtrpostlongdescription` instead.

`ewglossaryentry`

```
1513 \renewcommand*\longnewglossaryentry{%
1514   \@ifstar\glsxtr@s@longnewglossaryentry\glsxtr@longnewglossaryentry
1515 }
```

`ewglossaryentry` Starred version.

```
1516 \newcommand{\glsxtr@s@longnewglossaryentry}[3]{%
```

```

1517 \glsdoifnoexists{#1}%
1518 {%
1519   \bgroup
1520     \let\@org@newglossaryentryprehook\@newglossaryentryprehook
1521     \long\def\@newglossaryentryprehook{%
1522       \long\def\@glo@desc{#3}%
1523       \@org@newglossaryentryprehook
1524     }%
1525     \renewcommand*{\gls@assign@desc}[1]{%
1526       \global\cslet{\glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%
1527       \global\cslet{\glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
1528     }%
1529     \gls@defglossaryentry{#1}{#2}%
1530   \egroup
1531 }%
1532 }

```

`ewglossaryentry` Unstarred version.

```

1533 \newcommand{\@glsxtr@longnewglossaryentry}[3]{%
1534   \glsdoifnoexists{#1}%
1535 {%
1536   \bgroup
1537     \let\@org@newglossaryentryprehook\@newglossaryentryprehook
1538     \long\def\@newglossaryentryprehook{%
1539       \long\def\@glo@desc{#3\glsxtrpostlongdescription}%
1540       \@org@newglossaryentryprehook
1541     }%
1542     \renewcommand*{\gls@assign@desc}[1]{%
1543       \global\cslet{\glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%

```

The following is different from the base `glossaries.sty`:

```

1544   \global\cslet{\glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
1545   }%
1546   \gls@defglossaryentry{#1}{#2}%
1547   \egroup
1548 }%
1549 }

```

`longdescription` Hook at the end of the description when using the unstarred `\longnewglossaryentry`.

```
1550 \newcommand*{\glsxtrpostlongdescription}{\leavevmode\unskip\nopostdesc}
```

Provide a starred version of `\newignoredglossary` that doesn't add the glossary to the `nohyperlist` list.

`ignoredglossary` Redefine to check for star.

```

1551 \renewcommand{\newignoredglossary}{%
1552   \@ifstar\glsxtr@s@newignoredglossary\glsxtr@org@newignoredglossary
1553 }

```

`ignoredglossary` The original definition is patched to check for existence.

```
1554 \newcommand*{\glsxtr@org@newignoredglossary}[1]{%
1555   \ifcsdef{glolist@#1}{%
1556     {%
1557       \glsxtrundefaction{Glossary type '#1' already exists}{}}%
1558   }%
1559   {%
1560     \ifdefempty{\@ignored@glossaries}{%
1561       {%
1562         \protected@edef{\@ignored@glossaries{#1}}{%
1563           }%
1564           {%
1565             \protected@eappto{\@ignored@glossaries{,#1}}{%
1566               }%
1567             \csgdef{glolist@#1}{,}%
1568             \ifcsundef{gls@#1@entryfmt}{%
1569               {%
1570                 \defglsentryfmt[#1]{\glsentryfmt}%
1571               }%
1572               {}%
1573             \ifdefempty{\gls@nohyperlist}{%
1574               {%
1575                 \renewcommand*{\gls@nohyperlist}{#1}%
1576               }%
1577               {}%
1578                 \protected@eappto{\gls@nohyperlist{,#1}}{%
1579                   }%
1580               }%
1581 }
```

`ignoredglossary` Starred form.

```
1582 \newcommand*{\glsxtr@s@newignoredglossary}[1]{%
1583   \ifcsdef{glolist@#1}{%
1584     {%
1585       \glsxtrundefaction{Glossary type '#1' already exists}{}}%
1586   }%
1587   {%
1588     \ifdefempty{\@ignored@glossaries}{%
1589       {%
1590         \protected@edef{\@ignored@glossaries{#1}}{%
1591           }%
1592           {%
1593             \protected@eappto{\@ignored@glossaries{,#1}}{%
1594               }%
1595             \csgdef{glolist@#1}{,}%
1596             \ifcsundef{gls@#1@entryfmt}{%
1597               {%
```

```

1598     \def\glsentryfmt[#1]{\glsentryfmt}%
1599     }%
1600     {}%
1601     }%
1602 }

```

\glssettoctitle Ignored glossaries don't have an associated title, so modify \glssettoctitle to check for it to prevent an undefined command written to the toc file.

```

1603 \glsifusetranslator
1604 {%
1605     \renewcommand*{\glssettoctitle}[1]{%
1606         \ifcsdef{gls@tr@set@#1@toctitle}%
1607             {}%
1608             \csuse{gls@tr@set@#1@toctitle}%
1609             }%
1610             {}%
1611             \ifcsdef{@glotype@#1@title}%
1612                 {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1613                 {\def\glossarytoctitle{\glossarytitle}}%
1614             }%
1615         }%
1616     }%
1617     {%
1618         \renewcommand*{\glssettoctitle}[1]{%
1619             \ifcsdef{@glotype@#1@title}%
1620                 {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1621                 {\def\glossarytoctitle{\glossarytitle}}%
1622             }%
1623     }

```

ignoredglossary As above but won't do anything if the glossary already exists.

```

1624 \newcommand{\provideignoredglossary}{%
1625     @ifstar\glsxtr@s@provideignoredglossary\glsxtr@provideignoredglossary
1626 }

```

ignoredglossary Unstarred version.

```

1627 \newcommand*{\glsxtr@provideignoredglossary}[1]{%
1628     \ifcsdef{glolist@#1}%
1629         {}%
1630         {}%
1631         \ifdefempty{@ignoredglossaries}%
1632             {}%
1633             \protected@edef{@ignoredglossaries{#1}}%
1634             }%
1635             {}%
1636             \protected@eappto{@ignoredglossaries{,#1}}%
1637             }%
1638             \csgdef{glolist@#1}{,}%

```

```

1639 \ifcsundef{gls@#1@entryfmt}%
1640 {%
1641   \def\glsentryfmt[\#1]{\glsentryfmt}%
1642 }%
1643 {}%
1644 \ifdefempty{\gls@nohyperlist}
1645 {%
1646   \renewcommand*{\gls@nohyperlist}{#1}%
1647 }%
1648 {}%

1649   \protected@eappto{\gls@nohyperlist}{, #1}%
1650 }%
1651 }%
1652 }

```

`ignoredglossary` Starred form.

```

1653 \newcommand*{\glsxtr@s@provideignoredglossary}[1]{%
1654   \ifcsdef{glolist@#1}
1655   {}%
1656   {}%

1657   \ifdefempty{\ignored@glossaries}
1658   {}%
1659   \protected@edef{\ignored@glossaries}{#1}%
1660 }%
1661 {}%
1662   \protected@eappto{\ignored@glossaries}{, #1}%
1663 }%
1664 \csgdef{glolist@#1}{,}%
1665 \ifcsundef{gls@#1@entryfmt}%
1666 {}%
1667   \def\glsentryfmt[\#1]{\glsentryfmt}%
1668 }%
1669 {}%
1670 }%
1671 }

```

`rcopytogglossary` Adds an entry label to another glossary list. First argument is entry label. Second argument is glossary label.

```

1672 \newcommand*{\glsxtrrcopytogglossary}[2]{%
1673   \glsdoifexists{#1}%
1674   {}%
1675   \ifcsdef{glolist@#2}
1676   {}%

1677   \protected@cseappto{glolist@#2}{#1,}%
1678 }%
1679 {}%
1680   \glsxtrundefined{Glossary type '#2' doesn't exist}{}%

```

```
1681     }%
1682   }%
1683 }
```

1.3.1 Existence Checks

\glsdoifexists Modify \glsdoifexists to take account of the undefaction setting.

```
1684 \renewcommand{\glsdoifexists}[2]{%
1685   \ifglsentryexists{#1}{#2}%
1686   {%
```

Define \glslabel in case it's needed after this command (for example in the post-link hook).

```
1687   \protected@edef\glslabel{\glsdetoklabel{#1}}%
1688   \glsxtrundefaction{Glossary entry ‘\glslabel’%
1689   has not been defined}{You need to define a glossary entry before%
1690   you can reference it.}%
1691 }%
1692 }
```

\glsdoifnoexists Modify \glsdoifnoexists to take account of the undefaction setting.

```
1693 \renewcommand{\glsdoifnoexists}[2]{%
1694   \ifglsentryexists{#1}{%
1695     \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’%
1696     has already been defined}{}}{#2}%
1697 }
```

\sdoifexistsordo Modify \glsdoifexistsordo to take account of the undefaction setting. This command was introduced in glossaries version 4.19, so check if it has been defined first.

```
1698 \ifdef\glsdoifexistsordo
1699 {%
1700   \renewcommand{\glsdoifexistsordo}[3]{%
1701     \ifglsentryexists{#1}{#2}%
1702     {%
1703       \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’%
1704       has not been defined}{You need to define a glossary entry%
1705       before you can use it.}%
1706     #3%
1707   }%
1708 }%
1709 }
1710 {%
1711   \glsxtr@warnonexistsordo\glsdoifexistsordo
1712   \newcommand{\glsdoifexistsordo}[3]{%
1713     \ifglsentryexists{#1}{#2}%
1714     {%
1715       \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’%
1716       has not been defined}{You need to define a glossary entry%
1717       before you can use it.}%
1718 }
```

```

1718      #3%
1719  }%
1720 }%
1721 }

arynoexistsordo  Similarly for \doifglossarynoexistsordo.
1722 \ifdef\doifglossarynoexistsordo
1723 {%
1724   \renewcommand{\doifglossarynoexistsordo}[3]{%
1725     \ifglossaryexists*{#1}%
1726     {%
1727       \glsxtrundefaction{Glossary type '#1' already exists}{}}%
1728     #3%
1729   }%
1730   {#2}%
1731 }%
1732 }
1733 {%
1734 \glsxtr@warnonexistsordo\doifglossarynoexistsordo
1735 \newcommand{\doifglossarynoexistsordo}[3]{%
1736   \ifglossaryexists*{#1}%
1737   {%
1738     \glsxtrundefaction{Glossary type '#1' already exists}{}}%
1739     #3%
1740   }%
1741   {#2}%
1742 }%
1743 }
1744

```

There are now three types of cross-references: the see key (as original), the alias key (from glossaries-extra v1.12) and theseealso key (from glossaries-extra v1.16). The original see key needs to have a corresponding field (which it doesn't with the base glossaries package).

ryentryposthook Hook into end of \newglossaryentry to add “see” value as a field.

```

1745 \appto{@newglossaryentryposthook{%
1746   \ifdefvoid@glo@see
1747   {\csxdef{glo@\glo@label @see}{}{}}%
1748   {%
1749     \csxdef{glo@\glo@label @see}{\glo@see}%
1750     \if@glsxtr@autoseeindex
1751       \glsxtr@autoindexcrossrefs
1752     \fi
1753   }%
1754 }
1755 \appto@gls@keymap{, {see}{see}}}

```

\glsxtrusesee Apply \glsseeformat to the see key if not empty.

```

1756 \newcommand*{\glsxtrusesee}[1]{%

```

```

1757 \glsdoifexists{#1}%
1758 {%
1759   \letcs{\@glo@see}{\glsdetoklabel{#1}@see}%
1760   \ifdefempty{\glo@see}%
1761   {}%
1762   {}%
1763   \expandafter\glsxtr@usesee\@glo@see\@end@glsxtr@usesee%
1764 }%
1765 }%
1766 }

\glsxtr@usesee
1767 \newcommand*{\glsxtr@usesee}[1][\seename]{%
1768   \glsxtr@usesee[#1]%
1769 }

\@glsxtr@usesee
1770 \def\@glsxtr@usesee[#1]#2\@end@glsxtr@usesee{%
1771   \glsxtruseseeformat{#1}{#2}%
1772 }

```

`xtruseseeformat` The format used by `\glsxtrusesee`. The first argument is the tag (such as `\seename`). The second argument is the comma-separated list of cross-referenced labels.

```

1773 \newcommand*{\glsxtruseseeformat}[2]{%
1774   \glsseeformat[#1]{#2}{}%
1775 }

```

`lsseeitemformat` glossaries originally defined `\glsseeitemformat` to use `\glsentryname` but in v3.0 this was switched to use `\glsentrytext` due to problems occurring with the name field being sanitized. Since this is no longer a problem, `glossaries-extra` restored the original definition as it makes more sense to use the name in the cross-reference list. Unfortunately this doesn't take style changes into account, so as from v1.42, this now uses `\glsfmttext` and `\glsfmtname` instead. (The text field is chosen rather than the short field to allow for the "noshort" styles.)

```

1776 \renewcommand*{\glsseeitemformat}[1]{%
1777   \ifglshashshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1778 }

```

`\glsxtrhiername`

`\glsxtrhiername{<label>}`

Displays the hierarchical name for the given entry. The cross-reference format `\glsseeitemformat` may be redefined to use this command to show the hierarchy, if required. This now uses `\glsfmttext` and `\glsfmtname` instead of `\glsaccessshort` and `\glsaccessname` to allow for style formatting.

```

1779 \newcommand*{\glsxtrhiername}[1]{%

```

```

1780 \glsdoifexists{#1}%
1781 {%
1782   \glsxtrifhasfield{parent}{#1}%
1783   {\glsxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1784   {}%
1785   \ifglshasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1786 }%
1787 }

```

\Glsxtrhiername

\Glsxtrhiername{<*label*>}

As above but displays the top-level name with an initial capital.

```

1788 \newcommand*{\Glsxtrhiername}[1]{%
1789   \glsdoifexists{#1}%
1790   {%
1791     \glsxtrifhasfield{parent}{#1}%
1792     {}%
1793     \Glsxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep
1794     \ifglshasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1795   }%
1796   \ifglshasshort{#1}{\Glsfmttext{#1}}{\Glsfmtname{#1}}%
1797 }%
1798 }

```

\GlsXtrhiername

\GlsXtrhiername{<*label*>}

As above but converts the first letter of each name to a capital. (Note that this isn't applying title case, just capitalising the start of each hierarchical element.)

```

1799 \newcommand*{\GlsXtrhiername}[1]{%
1800   \glsdoifexists{#1}%
1801   {%
1802     \glsxtrifhasfield{parent}{#1}%
1803     {\GlsXtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1804     {}%
1805     \ifglshasshort{#1}{\Glsfmttext{#1}}{\Glsfmtname{#1}}%
1806   }%
1807 }

```

\GLSxtrhiername

```
\GLSxtrhiername{\label}
```

As above but displays the top-level name in all-caps.

```
1808 \newcommand*{\GLSxtrhiername}[1]{%
1809   \glsdoifexists{#1}%
1810   {%
1811     \glsxtrifhasfield{parent}{#1}%
1812     {%
1813       \GLSxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep
1814       \ifglshasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1815     }%
1816     {\ifglshasshort{#1}{\GMSfmttext{#1}}{\GMSfmtname{#1}}}%
1817   }%
1818 }
```

\GLSXTRhiername

```
\GLSXTRhiername{\label}
```

As above but displays all names in all-caps.

```
1819 \newcommand*{\GLSXTRhiername}[1]{%
1820   \glsdoifexists{#1}%
1821   {%
1822     \glsxtrifhasfield{parent}{#1}%
1823     {\GLSXTRhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1824     {}%
1825     \ifglshasshort{#1}{\GMSfmttext{#1}}{\GMSfmtname{#1}}%
1826   }%
1827 }
```

sxtrhiernamesep Separator used in \glsxtrhiername and variants.

```
1828 \newcommand*{\glsxtrhiernamesep}{\,,{\small\triangleright}\,,}
```

lsxtruseseealso Apply \glsseeformat to the seealso key if not empty. There's no optional tag to worry about here.

```
1829 \newcommand*{\glsxtruseseealso}[1]{%
1830   \glsdoifexists{#1}%
1831   {%
1832     \letcs{\@glo@see}{\glo@\glsdetoklabel{#1}@seealso}%
1833     \ifdefempty{\glo@see}{}{%
1834       {}%
1835       \expandafter\glsxtruseseealsoformat\expandafter{\@glo@see}%
1837     }%
1838   }%
1839 }
```

\glsxtruealias Apply \glsseeformat to the alias key if not empty. There's no optional tag to worry about here. The value also isn't a comma-separated list, but use the same interface.

```
1840 \newcommand*{\glsxtruealias}[1]{%
1841   \glsdoifexists{#1}%
1842   {%
1843     \letcs{\@glo@see}{\glo@\glsdetoklabel{#1}@alias}%
1844     \ifdefempty{\glo@see}%
1845     {}%
1846   }%
```

Expansion isn't necessary because the value is a single label not a list.

```
1847   \glsxtruseseformat{\seename}{\@glo@see}%
1848   }%
1849 }%
1850 }
```

\seseealsoformat The format used by \glsxtrusesealso. The argument is the comma-separated list of cross-referenced labels.

```
1851 \newcommand*{\glsxtrusesealsoformat}[1]{%
1852   \glsseeformat[\sealso]{#1}{}%
1853 }
```

\glsxtrseelist Fully expands argument before passing to \glsseelist. (The argument to \glsseelist must be a comma-separated list of entry labels.)

```
1854 \newrobustcmd{\glsxtrseelist}[1]{%
1855   \protected@edef{\glo@tmp}{\noexpand\glsseelist{#1}}\glo@tmp
1856 }
```

\glsseelist Redefine to make \glsseelist more flexible.

```
1857 \renewrobustcmd*{\glsseelist}[1]{%
1858   \let\gls@dolast\relax
1859   \let\gls@donext\relax
1860   \let\glsseeitem\glsxtr@seefirstitem
1861   \let\glsseelastsep\glsseelastsep
1862   \for{\gls@thislabel}{#1}{%
1863     \ifx\xfor\@nextelement\@nnil
1864       \gls@dolast
1865     \else
1866       \gls@donext
1867     \fi
1868     \expandafter\glsseeitem\expandafter{\gls@thislabel}%
1869     \let\gls@dolast\glsseelastsep
1870     \let\gls@donext\glsseesep
1871     \let\glsseeitem\glsxtr@seeitem
1872     \let\glsseelastsep\glsseelastoxfordsep
1873   }%
1874 }
```

```

@glsxtr@seeitem
1875 \newcommand*{\glsxtr@seeitem}[1]{%
1876   \glsxtrifmulti{#1}{\mglssseeeitem{#1}}{\glsseeeitem{#1}}%
1877 }

tr@seefirstitem
1878 \newcommand*{\glsxtr@seefirstitem}[1]{%
1879   \glsxtrifmulti{#1}{\mglsseefirstitem{#1}}{\glsseefirstitem{#1}}%
1880 }

\mglssseeeitem Multi-entry cross-reference
1881 \newcommand*{\mglssseeeitem}[1]{%
1882   \mglssname[all={noindex},setup={hyper=allmain}]{#1}%
1883 }

glsseefirstitem Multi-entry cross-reference
1884 \newcommand*{\glsseefirstitem}{\mglssseeeitem}

glsseefirstitem
1885 \newcommand*{\glsseefirstitem}{\glsseeeitem}

elastoxfordsep
1886 \newcommand*{\glsseelastoxfordsep}{\glsseelastsep}

\seealso{In case this command hasn't been defined. Languages packages actually provide \alsoname so use that if it's defined.}
1887 \ifdef{\alsoname}
1888 {\providecommand{\seealso}{\alsoname}}
1889 {\providecommand{\seealso}{see also}}


xtrindexseealso If \xdycrossrefhook is defined, provide a seealso crossref class. Otherwise this just does \glssee with \seealso as the tag. The hook is only defined if both xindy and glossaries v4.30+ are being used.
1890 \ifdef{\xdycrossrefhook}
1891 {

    Add the cross-reference class definition to the hook.
1892 \appto{\xdycrossrefhook}{%
1893   \write\glswrite{(define-crossref-class \string"seealso"\string"
1894     :unverified )}%
1895   \write\glswrite{(markup-crossref-list
1896     :class \string"seealso"\string"^\^J\space\space\space
1897     :open \string"\string\glsxtruseealsoformat\glsopenbrace\string"
1898     :close \string"\glsclosebrace\string")}%
1899 }

    Append to class list.
1900 \appto{\xdylocationclassorder}{\space\string"seealso"\string"}
```

This essentially works like `\@do@seeglossary` but uses the `seealso` class. This doesn't increment the associated counter.

```

1901 \newrobustcmd*{\glsxtrindexseealso}[2]{%
1902   \ifx\@glsxtr@record@setting\@glsxtr@record@setting@alsoindex
1903     \@glsxtr@recordsee{#1}{#2}%
1904   \fi
1905   \glsdoifexists{#1}%
1906   {%
1907     \@@glsxtrwrglossmark
1908     \def\@gls@xref{#2}%
1909     \onelevel@sanitize\@gls@xref
1910     \gls@checkmkidxchars\@gls@xref
1911     \gls@glossary{\csname glo@\#1@type\endcsname}{%
1912       (indexentry
1913         :tkey (\csname glo@\#1@index\endcsname)
1914         :xref (\string"\@gls@xref\string")
1915         :attr \string"seealso\string"
1916       )
1917     }%
1918   }%
1919 }
1920 }
1921 {
  xindy not in use or glossaries version too old to support this.
1922 \newrobustcmd*{\glsxtrindexseealso}{\glssee[\seealsoname]}
1923 }
```

The `alias` key should be set to the label of the synonymous entry. The `seealso` key essentially behaves like `see=[\seealsoname] {<xr-list>}`. Neither of these new keys has the optional tag part allowed with `see`.

If `\gls@set@xr@key` has been defined (glossaries v4.30), use that, otherwise just use `\glsaddstoragekey`.

```

1924 \ifdef\gls@set@xr@key
1925 {
```

We have at least glossaries v4.30. This means the new keys can be governed by the same settings as the `see` key.

```

1926 \define@key{glossentry}{alias}{%
1927   \gls@set@xr@key{alias}{\glo@alias}{#1}%
1928 }
1929 \define@key{glossentry}{seealso}{%
1930   \gls@set@xr@key{seealso}{\glo@seealso}{#1}%
1931 }
```

Add to the key mappings.

```
1932 \appto\gls@keymap{, {alias}{alias}, {seealso}{seealso}}
```

Set the default value.

```
1933 \appto\newglossaryentryprehook{\def\glo@alias{} \def\glo@seealso{}}
```

Assign the field values.

```
1934 \appto{@newglossaryentryposthook{%
1935   \ifdefvoid{@glo@seealso
1936     {\csxdef{glo@{@glo@label @seealso}{}{}}%
1937   {%
1938     \csxdef{glo@{@glo@label @seealso}{\glo@seealso}%
1939     \if@glsxtr@autoseealso
1940       \glsxtr@autoindexcrossrefs
1941     \fi
1942   }%
```

The alias field doesn't trigger the automatic cross-reference indexing performed at the end of the document.

```
1943 \ifdefvoid{\glo@alias}{%
1944     \csxdef{\glo@\glo@label}{\glo@alias}{}%
1945     {%
1946         \csxdef{\glo@\glo@label}{\glo@alias}{\glo@alias}%
1947     }%
1948 }
```

Provide user-level commands to access the values.

```
\glsxtralias  
1949 \newcommand*{\glsxtralias}[1]{\gls@entry@field{#1}{alias}}  
  
seealso labels  
1950 \newcommand*{\glsxtrseealso}[1]{\gls@entry@field{#1}{seealso}}
```

Add to the \glo@autosee hook.

```
1951 \appto{@glo@autoseehook{%
1952     \ifdefvoid{@glo@alias
1953     {%
1954         \ifdefvoid{@glo@seealso
1955             {}%
1956             {%
1957                 \protected@edef{\do@glssee{\noexpand\glsxtrindexseealso
1958                     {@glo@label}{@glo@seealso}}}%
1959                 \do@glssee
1960             }%
1961         }%
1962     }%
```

Add cross-reference if see key hasn't been used.

```
1963 \ifdefvoid\@glo@see
1964 {%
1965     \protected@edef\do@glssee{\noexpand\glssee{\@glo@label}{\@glo@alias}}%
1966     \do@glssee
1967 }%
1968 {}%
```

```
1969      }%
1970  }%
1971 }
1972 {
```

We have an older version of glossaries, so just use \glsaddstoragekey.

```
\glsxtralias
1973  \glsaddstoragekey*{alias}{}{\glsxtralias}
```

trseealsolabels

```
1974  \glsaddstoragekey*{seealso}{}{\glsxtrseealsolabels}
```

If \gls@set@xr@key isn't defined, then \glo@autosee won't be either, so use the post entry definition hook.

ryentryposthook Append to the hook to check for the alias and seealso keys.

```
1975  \appto{@newglossaryentryposthook}{%
1976    \ifcvoid{glo@}{\glo@label @alias}{%
1977      {%
1978        \ifcvoid{glo@}{\glo@label @seealso}{%
1979          {}%
1980          {%
1981            \protected@edef{\do@glssee{\noexpand\glsxtrindexseealso
1982              {\glo@label}{\csuse{glo@}{\glo@label @seealso}}}}{%
1983                \do@glssee
1984              }%
1985            }%
1986            {%
1987              \ifdefvoid{\glo@see}{%
1988                {%
1989                  \protected@edef{\do@glssee{\noexpand\glssee
1990                    {\glo@label}{\csuse{glo@}{\glo@label @alias}}}}{%
1991                      \do@glssee
1992                    }%
1993                    {}%
1994                    {%
1995                      }%
1996                }%
1997 \AtEndDocument{\if@glsxtrindexcrossrefs{\glsxtraddallcrossrefs\fi}}
```

Add cross-reference if see key hasn't been used.

```
1987              \ifdefvoid{\glo@see}{%
1988                {%
1989                  \protected@edef{\do@glssee{\noexpand\glssee
1990                    {\glo@label}{\csuse{glo@}{\glo@label @alias}}}}{%
1991                      \do@glssee
1992                    }%
1993                    {}%
1994                    {%
1995                      }%
1996                }%
1997 \AtEndDocument{\if@glsxtrindexcrossrefs{\glsxtraddallcrossrefs\fi}}
```

Add all unused cross-references at the end of the document.

```
1997 \AtEndDocument{\if@glsxtrindexcrossrefs{\glsxtraddallcrossrefs\fi}}
```

addallcrossrefs Iterate through all used entries and if they have a cross-reference, make sure the cross-reference has been added.

```

1998 \newcommand*{\glsxtraddallcrossrefs}{%
1999   \forallglossaries{@\glo@type}%
2000   {%
2001     \forglsentries[\@glo@type]{@\glo@label}%
2002     {%
2003       \ifglsused{@\glo@label}%
2004         {\expandafter\glsxtr@addunusedxrefs\expandafter{@\glo@label}}{}%
2005     }%
2006   }%
2007 }

```

`@addunusedxrefs` If the given entry has a `see` or `seealso` field add all unused cross-references. (The `alias` field isn't checked.)

```

2008 \newcommand*{\glsxtr@addunusedxrefs}[1]{%
2009   \letcs{@\glo@see}{\glsdetoklabel{#1}@see}%
2010   \ifdefvoid{@\glo@see}%
2011   {}%
2012   {%
2013     \expandafter\glsxtr@addunused@\glo@see\end@glsxtr@addunused
2014   }%
2015 \letcs{@\glo@see}{\glsdetoklabel{#1}@seealso}%
2016 \ifdefvoid{@\glo@see}%
2017 {}%
2018 {}%
2019   \expandafter\glsxtr@addunused@\glo@see\end@glsxtr@addunused
2020 }%
2021 }

```

`lsxtr@addunused` Adds all the entries if they haven't been used.

```

2022 \newcommand*{\glsxtr@addunused}[1][]{%
2023   \glsxtr@addunused
2024 }

```

`lsxtr@addunused` Adds all the entries if they haven't been used.

```

2025 \def\glsxtr@addunused#1\end@glsxtr@addunused{%
2026   @for\glsxtr@label:=#1\do
2027   {%
2028     \glsxtrifmulti\glsxtr@label
2029     {%
2030       \letcs{\glsxtr@labellist}{\gls@combined@\glsxtr@label @list}%
2031       @for\glsxtr@multilabel:=\glsxtr@labellist\do
2032         {@\glsxtr@addunused@\glsxtr@multilabel\end@glsxtr@addunused}%
2033     }%
2034     {%
2035       \ifglsused{@\glsxtr@label}{}%
2036       {%
2037         \glsadd[format=glsxtrunusedformat]{@\glsxtr@label}%
2038         \glsunset{@\glsxtr@label}%
2039         \expandafter\glsxtr@addunusedxrefs\expandafter{@\glsxtr@label}%

```

```

2040      }%
2041    }%
2042  }%
2043 }

xtrunusedformat
2044 \newcommand*{\glsxtrunusedformat}[1]{\unskip}

```

1.3.2 Document Definitions

ls@begindocdefs This command was only introduced to glossaries v4.37, so it may not be defined. If it has been defined, redefine it to check `\@glsxtr@docdefval` so that it only inputs the `.glsdefs` file if `docdef=true`.

```

2045 \ifdef\gls@begindocdefs
2046 {%
2047   \renewcommand*{\gls@begindocdefs}{%
2048     \ifnum\@glsxtr@docdefval=1\relax
2049       \@gls@enablesavenonumberlist
2050       \edef\@gls@restoreat{%
2051         \noexpand\catcode`\noexpand\@=\number\catcode`\@}%
2052       \makeatletter
2053       \InputIfFileExists{\jobname.glsdefs}{}{%
2054         \@gls@restoreat
2055         \undef\@gls@restoreat
2056         \gls@defdocnewglossaryentry
2057       }%
2058     \else
2059       \ifnum\@glsxtr@docdefval=3\relax

```

The `docdef=atom` package option has been set. Create the `.glsdefs` file for the autocomplete support but don't read it.

```

2059       \@gls@enablesavenonumberlist
2060       \let\gls@checkseeallowed\relax
2061       \let\newglossaryentry\new@atom@glossaryentry
2062       \global\newwrite\@gls@deffile
2063       \immediate\openout\@gls@deffile=\jobname.glsdefs

```

Write all currently defined entries.

```

2064   \forallglsentries{@glsentry}{\gls@writedef{@glsentry}}%
2065   \fi
2066 \fi
2067 }
2068 }
2069 {%
2070 \ifnum\@glsxtr@docdefval=3\relax
2071   \PackageError{glossaries-extra}{Package option
2072     'docdef=\@glsxtr@docdefsetting' requires at least version 4.37
2073     of the base glossaries.sty package}{}%
2074 \fi
2075 }

```

```
m@glossaryentry
2076 \newrobustcmd{\new@atom@glossaryentry}[2]{%
2077   \gls@defglossaryentry{#1}{#2}%
2078   \gls@writedef{#1}%
2079 }

noidxglossaries  Modify \makenoidxglossaries so that it automatically sets docdef=false (unless the restricted setting is on) and disables the docdef key. This command isn't allowed with the record option.
2080 \let\glsxtr@orgmakenoidxglossaries\makenoidxglossaries
2081 \renewcommand{\makenoidxglossaries}{%
2082   \domakeglossaries
2083   {%
2084     \ifdefequal\glsxtr@record@setting\glsxtr@record@setting@off
2085   {%
2086     \glsxtr@orgmakenoidxglossaries
2087     Add marker to \do@seeglossary but don't increment associated counter.
2088     \renewcommand{\do@seeglossary}[2]{%
2089       \protected@edef\gls@label{\glsdetoklabel{##1}}%
2090       \protected@write\auxout{}{%
2091         \string\gls@reference
2092         {\cscname glo@\gls@label \type\endcscname}%
2093         {\gls@label}%
2094         {%
2095           \string\glsseeformat##2{}%
2096         }%
2097       }%
2098     }%
2099     Check for docdefs=restricted:
2100     \if@glsxtrdocdefrestricted
2101       If restricted document definitions allowed, adjust \gls@reference so that it doesn't test for
2102       existence.
2103       \renewcommand*{\gls@reference}[3]{%
2104         \ifcsundef{glsref##1}{\csgdef{glsref##1}{}{}}{%
2105           \ifinlistcs##2{glsref##1}{%
2106             {\listcsgadd{glsref##1}{##2}}%
2107             \ifcsundef{glo@\glsdetoklabel{##2}@loclist}{%
2108               {\csgdef{glo@\glsdetoklabel{##2}@loclist}{}{}}%
2109             }%
2110             {\listcsgadd{glo@\glsdetoklabel{##2}@loclist}{##3}}%
2111           }%
2112         }%
2113       }%
2114       \else
2115         Disable document definitions.
```

```

2111     \@glsxtrdocdeffalse
2112     \fi
2113     \disable@keys{glossaries-extra.sty}{docdef}%
2114 }%
2115 {%
2116     \PackageError{glossaries-extra}{\string\makenoidxglossaries\space
2117         not permitted\MessageBreak
2118         with record=\@glsxtr@record@setting\space package option}%
2119     {You may only use \string\makenoidxglossaries\ space with the
2120         record=off option}%
2121 }%
2122 }%
2123 }

```

`ewglossaryentry` Modify `\gls@defdocnewglossaryentry` so that it checks the docdef value.

```

2124 \renewcommand*{\gls@defdocnewglossaryentry}{%
2125     \ifcase\@glsxtr@docdefval
2126         docdef=false:
2127             \renewcommand*{\newglossaryentry}[2]{%
2128                 \PackageError{glossaries-extra}{Glossary entries must
2129                     be \MessageBreak defined in the preamble with \MessageBreak
2130                     package option ‘docdef=false’}\MessageBreak(consider using
2131                     ‘docdef=restricted’)\{Move your glossary definitions to
2132                     the preamble. You can also put them in a \MessageBreak separate file
2133                     and load them with \string\loadglsentries.\}%
2134             }%
2135         \or

```

(`docdef=true` case.) Since the see value is now saved in a field, it can be used by entries that have been defined in the document.

```

2136             \let\gls@checkseeallowed\relax
2137             \let\newglossaryentry\new@glossaryentry
2138         \else

```

Restricted mode just needs to allow the see value.

```

2139             \let\gls@checkseeallowed\relax
2140         \fi
2141 }%

```

Permit a special form of document definition, but only allow it if the glossaries come at the end of the document. These commands behave a little like a combination of `\newterm` and `\gls`. This must be explicitly enabled with the following.

`rEnableOnTheFly`

```

2141 \newcommand*{\GlsXtrEnableOnTheFly}{%
2142     \@ifstar\@sGlsXtrEnableOnTheFly\@GlsXtrEnableOnTheFly
2143 }%

```

`rEnableOnTheFly` The starred version attempts to allow UTF8 characters in the label, but this may break! (Formatting commands mustn't be used in the label, but the label may be a command whose replacement text is the actual label. This doesn't take into account a command that's defined in terms of another command that may eventually expand to the label text.)

```

2144 \newcommand*{\@sGlsXtrEnableOnTheFly}{%
2145   \renewcommand*{\glsdetoklabel}[1]{%
2146     \expandafter\glsxtr@ifcsstart\string##1 \glsxtr@end@
2147   }%
2148   \expandafter\detokenize\expandafter{##1}%
2149 }%
2150 { \detokenize{##1} }%
2151 }%
2152 \GlsXtrEnableOnTheFly
2153 }%
2154 \def\glsxtr@ifcsstart#1#2\glsxtr@end@#3#4{%
2155   \expandafter\if\glsbackslash#1%
2156   #3%
2157 \else
2158   #4%
2159 \fi
2160 }

```

`sxtrstarflywarn`

```

2161 \newcommand*{\glsxtrstarflywarn}{%
2162   \GlossariesExtraWarning{Experimental starred version of
2163   \string\GlsXtrEnableOnTheFly\space in use (please ensure you have
2164   read the warnings in the glossaries-extra user manual)}%
2165 }

```

`rEnableOnTheFly`

```
2166 \newcommand*{\GlsXtrEnableOnTheFly}{%
```

Don't redefine `\glsdetoklabel` if LuaTeX or XeTeX is being used, since it's mainly to allow accented characters in the label.

These definitions are all assigned the category given by:

```
\glsxtrcat
2167 \newcommand*{\glsxtrcat}{general}
```

```
\glsxtr
2168 \newcommand*{\glsxtr}[1][]{%
2169   \def\glsxtr@keylist{##1}%
2170   \glsxtr
2171 }
```

```
\@glsxtr
2172 \newcommand*{\@glsxtr}[2][]{%
2173   \ifglsentryexists{##2}{}%
```

```

2174  {%
2175    \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2176  }%
2177  {%
2178    \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2179      description={\nopostdesc},##1}%
2180  }%
2181  \expandafter\gls\expandafter[\glsxtr@keylist]{##2}%
2182 }

\Glsxtr
2183 \newcommand*\Glsxtr}[1][]{%
2184   \def\glsxtr@keylist{##1}%
2185   \Glsxtr
2186 }

\@Glsxtr
2187 \newcommand*\@Glsxtr}[2][]{%
2188   \ifglsentryexists{##2}%
2189   {%
2190     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2191   }%
2192   {%
2193     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2194       description={\nopostdesc},##1}%
2195   }%
2196   \expandafter\Gls\expandafter[\glsxtr@keylist]{##2}%
2197 }

\glsxtrpl
2198 \newcommand*\glsxtrpl}[1][]{%
2199   \def\glsxtr@keylist{##1}%
2200   \glsxtrpl
2201 }

\@glsxtrpl
2202 \newcommand*\@glsxtrpl}[2][]{%
2203   \ifglsentryexists{##2}%
2204   {%
2205     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2206   }%
2207   {%
2208     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2209       description={\nopostdesc},##1}%
2210   }%
2211   \expandafter\glspl\expandafter[\glsxtr@keylist]{##2}%
2212 }

```

\Glsxtrpl

```

2213 \newcommand*{\Glsxtrpl}[1] []{%
2214   \def\glsxtr@keylist{##1}%
2215   \Glsxtrpl
2216 }

\Glsxtrpl

2217 \newcommand*{\@Glsxtrpl}[2] []{%
2218   \ifglsentryexists{##2}%
2219   {%
2220     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2221   }%
2222   {%
2223     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2224       description={\nopostdesc},##1}%
2225   }%
2226   \expandafter\Glspl\expandafter[\glsxtr@keylist]{##2}%
2227 }

```

```

\GlsXtrWarning

2228 \newcommand*{\GlsXtrWarning}[2]{%
2229   \def\@glsxtr@optlist{##1}%
2230   \onelevel@sanitize\@glsxtr@optlist
2231   \GlossariesExtraWarning{The options ‘\@glsxtr@optlist’ have
2232   been ignored for entry ‘##2’ as it has already been defined}%
2233 }

```

Disable commands after the glossary:

```

2234 \renewcommand{\printglossary}[2]{%
2235   \def\@glsxtr@printglossopts{##1}%
2236   \@glsxtr@orgprintglossary{##1}{##2}%
2237   \def\@glsxtr{\@glsxtr@disabledflycommand\glsxtr}%
2238   \def\@glsxtrpl{\@glsxtr@disabledflycommand\glsxtrpl}%
2239   \def\@Glsxtr{\@glsxtr@disabledflycommand\Glsxtr}%
2240   \def\@Glsxtrpl{\@glsxtr@disabledflycommand\Glsxtrpl}%
2241 }

```

```

abledflycommand

2242 \newcommand*{\@glsxtr@disabledflycommand}[1]{%
2243   \PackageError{glossaries-extra}%
2244   {\string##1\space can't be used after any of the \MessageBreak
2245   glossaries have been displayed}%
2246   {The on-the-fly commands enabled by
2247   \string\GlsXtrEnableOnTheFly\space may only be used \MessageBreak
2248   before the glossaries. If you want to use any entries \MessageBreak
2249   after any of the glossaries, you must use the standard \MessageBreak
2250   method of first defining the entry and then using the \MessageBreak
2251   entry with commands like \string\gls}%
2252   \@@glsxtr@disabledflycommand
2253 }

```

```

2254 \newcommand*{\@glsxtr@disabledflycommand}[2] []{##2}
      End of \GlsXtrEnableOnTheFly. Disable since it can only be used once.
2255 \let\GlsXtrEnableOnTheFly\relax
2256 }
2257 \@onlypreamble\GlsXtrEnableOnTheFly

```

1.3.3 Existing Glossary Style Modifications

Modify `\setglossarystyle` to keep track of the current style. This allows the `\glossaries-extra-stylemods` package to reset the current style after the required modifications have been made.

`r@current@style` Initialise the current style to the default style.

```
2258 \newcommand*{\@glsxtr@current@style}{\@glossary@default@style}
```

Modify `\setglossarystyle` to set `\@glsxtr@current@style`.

`etglossarystyle`

```

2259 \renewcommand*{\setglossarystyle}[1]{%
2260   \ifcsundef{@glsstyle@#1}%
2261   {%
2262     \PackageError{glossaries-extra}{Glossary style '#1' undefined}{}%
2263   }%
2264   {%
2265     \csname @glsstyle@#1\endcsname

```

Only set the current style if it exists.

```

2266   \protected@edef{\@glsxtr@current@style}{#1}%
2267 }%
2268 \ifx\@glossary@default@style\relax
2269   \protected@edef{\@glossary@default@style}{#1}%
2270 \fi
2271 }
```

In case we have an old version of glossaries:

```

2272 \ifdef{\glossary@default@style}
2273 {}
2274 {%
2275   \let{\glossary@default@style}\relax
2276 }
```

`listdottedwidth` If `\glslistdottedwidth` has been defined and is currently equal to `.5\hsize` then make the modification suggested in [bug report #92](#)

```

2277 \ifdef{\glslistdottedwidth}
2278 {%
2279   \ifdim\glslistdottedwidth=.5\hsize
2280     \setlength{\glslistdottedwidth}{-\dimexpr\maxdimen-1sp\relax}%
2281   \AtBeginDocument{%
2282     \ifdim\glslistdottedwidth=-\dimexpr\maxdimen-1sp\relax
```

```

2283      \setlength{\glslistdottedwidth}{.5\columnwidth}%
2284      \fi
2285  }%
2286 \fi
2287 }
2288 {}%

```

Similarly for `\glsdescwidth`:

```

\glsdescwidth
2289 \ifdef\glsdescwidth
2290 {%
2291   \ifdim\glsdescwidth=.6\hsize
2292     \setlength{\glsdescwidth}{-\dimexpr\maxdimen-1sp\relax}
2293   \AtBeginDocument{%
2294     \ifdim\glsdescwidth=-\dimexpr\maxdimen-1sp\relax
2295       \setlength{\glsdescwidth}{.6\columnwidth}%
2296     \fi
2297   }%
2298   \fi
2299 }
2300 {}%

```

and for `\glspagelistwidth`:

```

lspagelistwidth
2301 \ifdef\glspagelistwidth
2302 {%
2303   \ifdim\glspagelistwidth=.1\hsize
2304     \setlength{\glspagelistwidth}{-\dimexpr\maxdimen-1sp\relax}
2305   \AtBeginDocument{%
2306     \ifdim\glspagelistwidth=-\dimexpr\maxdimen-1sp\relax
2307       \setlength{\glspagelistwidth}{.1\columnwidth}%
2308     \fi
2309   }%
2310   \fi
2311 }
2312 {}%

```

`aryentrynumbers` Has the `nonumberlist` option been used?

```

2313 \def\org@glossaryentrynumbers#1{#1\gls@save@numberlist{#1}}%
2314 \ifx\org@glossaryentrynumbers\glossaryentrynumbers
2315   \glsnonumberlistfalse
2316   \renewcommand*\glossaryentrynumbers[1]{%
2317     \ifglsentryexists{\glscurrententrylabel}{%
2318       {}%
2319       \@glsxtrpreloctag
2320       \GlsXtrFormatLocationList{#1}%
2321       \@glsxtrpostloctag
2322       \gls@save@numberlist{#1}%

```

```

2323     }{}}%
2324   }%
2325 \else
2326   \glsnonumberlisttrue
2327   \renewcommand*\glossaryentrynumbers[1]{%
2328     \ifglsentryexists{\glscurrententrylabel}{%
2329       {%
2330         \gls@save@numberlist{#1}%
2331       }{}}%
2332     }%
2333 \fi

```

`matLocationList` Provide an easy interface to change the format of the location list without removing the save number list stuff.

```
2334 \newcommand*\GlsXtrFormatLocationList[1]{#1}
```

Sometimes users want to prefix the location list with “page”/“pages”. The simplest way to determine if the location list consists of a single location is to check for instances of `\delimN` or `\delimR`, but this isn’t so easy to do as they might be embedded inside the argument of formatting commands. With a bit of trickery we can find out by adjusting `\delimN` and `\delimR` to set a flag and then save information to the auxiliary file for the next run.

`ePreLocationTag`

```

2335 \newcommand*\GlsXtrEnablePreLocationTag[2]{%
2336   \let\glsxtrpreloctag\@glsxtrpreloctag
2337   \let\glsxtrpostloctag\@glsxtrpostloctag
2338   \renewcommand*\glsxtr@pagetag{#1}%
2339   \renewcommand*\glsxtr@pagestag{#2}%
2340   \renewcommand*\glsxtr@savepreloctag[2]{%
2341     \csgdef\glsxtr@preloctag##1##2}%
2342   }%
2343   \renewcommand*\glsxtr@doloctag{%
2344     \ifcsundef\glsxtr@preloctag\glscurrententrylabel}{%
2345       {%
2346         \GlossariesWarning{Missing pre-location tag for '\glscurrententrylabel'.}
2347         Rerun required}%
2348       }%
2349     {%
2350       \csuse\glsxtr@preloctag\glscurrententrylabel}%
2351     }%
2352   }%
2353 }
2354 \onlypreamble\GlsXtrEnablePreLocationTag

```

`glsxtrpreloctag`

```

2355 \newcommand*\glsxtrpreloctag{%
2356   \let\glsxtr@org\delimN\delimN
2357   \let\glsxtr@org\delimR\delimR
2358   \let\glsxtr@org\glsignore\glsignore

```

```

\gdef is required as the delimiters may occur inside a scope.

2359  \gdef\@glsxtr@thisloctag{\@glsxtr@pagetag}%
2360  \renewcommand*\{\delimN}{%
2361    \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
2362    \@glsxtr@org@delimN}%
2363  \renewcommand*\{\delimR}{%
2364    \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
2365    \@glsxtr@org@delimR}%
2366  \renewcommand*\{\glsignore}[1]{%
2367    \gdef\@glsxtr@thisloctag{\relax}%
2368    \@glsxtr@org@glsignore{##1}}%
2369  \@glsxtr@doloctag
2370 }

glsxtrpreloctag
2371 \newcommand*\{@glsxtrpreloctag}{}%

@glsxtr@pagetag
2372 \newcommand*\{@glsxtr@pagetag}{}%


glsxtr@pagestag
2373 \newcommand*\{@glsxtr@pagestag}{}%


lsxtrpostloctag
2374 \newcommand*\{@glsxtrpostloctag}{}%
2375   \let\delimN\@glsxtr@org@delimN
2376   \let\delimR\@glsxtr@org@delimR
2377   \let\glsignore\@glsxtr@org@glsignore
2378   \protected@write\@auxout{}{%
2379     {\string\@glsxtr@savepreloctag{\glscurrententrylabel}{\@glsxtr@thisloctag}}}%
2380 }

lsxtrpostloctag
2381 \newcommand*\{@glsxtrpostloctag}{}%


lsxtr@preloctag
2382 \newcommand*\{@glsxtr@savepreloctag}[2]{}%
2383 \protected@write\@auxout{}{%
2384   \string\providecommand\string\@glsxtr@savepreloctag[2]{}}

glsxtr@doloctag
2385 \newcommand*\{@glsxtr@doloctag}{}%


ss@nonumberlist  Modify the nonumberlist key to use \GlsXtrFormatLocationList (and also save the number
list):
2386 \renewcommand*\KV@printgloss@nonumberlist}[1]{%
2387   \XKV@plfalse
2388   \XKV@sttrue

```

```

2389 \XKV@checkchoice[\XKV@resa]{#1}{true,false}%
2390 {%
2391   \csname glsnonumberlist\XKV@resa\endcsname
2392   \ifglsnonumberlist
2393     \def\glossaryentrynumbers##1{\gls@save@numberlist{##1}}%
2394   \else
2395     \def\glossaryentrynumbers##1{%
2396       \@glsxtrpreloctag
2397       \GlsXtrFormatLocationList{##1}%
2398       \@glsxtrpostloctag
2399       \gls@save@numberlist{##1}}%
2400   \fi
2401 }%
2402 }

```

1.3.4 Entry Formatting, Hyperlinks and Indexing

\glsentryfmt Change default entry format. Use the generic format for regular terms (that is, entries that have a category with the regular attribute set) or non-regular terms without a short value and use the abbreviation format for non-regular terms that have a short value. If further attributes need to be checked, then \glsentryfmt will need redefining as appropriate (or use \defglsentryfmt). The abbreviation format is set here for entries that have a short form, even if they are regular entries to ensure the abbreviation fonts are correct.

```

2403 \renewcommand*\glsentryfmt{%
2404   \ifglshasshort{\glslabel}{\glssetabrvfmt{\glscategory{\glslabel}}}{}%
2405   \glsifregular{\glslabel}%
2406   {\glsxtrregularfont{\glsentryfmt}}%
2407 }%
2408   \ifglshasshort{\glslabel}%
2409   {\glsxtrabbreviationfont{\glsxtrgenabrvfmt}}%
2410   {\glsxtrregularfont{\glsentryfmt}}%
2411 }%
2412 }

```

sxtrregularfont Font used for regular entries.

```
2413 \newcommand*\glsxtrregularfont[1]{#1}
```

bbreviationfont Font used for abbreviation entries.

```
2414 \newcommand*\glsxtrabbreviationfont[1]{#1}
```

Commands like \glsifplural are only used by the \gls-like commands in the glossaries package, but it might be useful for the postlink hook to know if the user has used, say, \glsfirst or \glsplural. This can provide better consistency with the formatting of the \gls-like commands, even though they don't use \glsentryfmt.

@gls@field@link Redefine \@gls@field@link so that commands like \glsfirst can setup \glsxtrifwasfirstuse etc to allow the postlink hook to work better. This now has an optional argument that sets up the defaults.

```
2415 \renewcommand{\@gls@field@link}{[4]}[]{}%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
2416  \@glsxtr@record{#2}{#3}{glslink}%
2417  \glsdoifexists{#3}%
2418  {}%
```

Save and restore the hyper setting (\@gls@link also does this, but that's too late if the optional argument of \@gls@field@link modifies it).

```
2419  \let\glsxtrorg@ifKV@glslink@hyper\ifKV@glslink@hyper
```

Save local setting.

```
2420  \@gls@save@glslocal
2421  \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
2422  \def\glscustomtext{#4}%
2423  \@glsxtr@field@linkdefs
2424  #1%
2425  \@gls@link[#2]{#3}{#4}%
2426  \let\ifKV@glslink@hyper\glsxtrorg@ifKV@glslink@hyper
2427  \@gls@restore@glslocal
2428 }%
2429  \glspostlinkhook
2430 }
```

The commands \gls, \Gls etc don't use \@gls@field@link, so they need modifying as well to use \@glsxtr@record.

\@gls@ Save the original definition and redefine.

```
2431 \let\@glsxtr@org@gls@\@gls@
2432 \def\@gls@#1#2{%
2433  \@glsxtr@record{#1}{#2}{glslink}%
2434  \@glsxtr@org@gls@{#1}{#2}%
2435 }%
```

\@glspl@ Save the original definition and redefine.

```
2436 \let\@glsxtr@org@glspl@\@glspl@
2437 \def\@glspl@#1#2{%
2438  \@glsxtr@record{#1}{#2}{glslink}%
2439  \@glsxtr@org@glspl@{#1}{#2}%
2440 }%
```

\@Gls@ Save the original definition and redefine.

```
2441 \let\@glsxtr@org@Gls@\@Gls@
2442 \def\@Gls@#1#2{%
2443  \@glsxtr@record{#1}{#2}{glslink}%
2444  \@glsxtr@org@Gls@{#1}{#2}%
2445 }%
```

\@Glspl@ Save the original definition and redefine.

```
2446 \let\@glsxtr@org@Glspl@\@Glspl@
2447 \def\@Glspl@#1#2{%
2448   \glsxtr@record{#1}{#2}{glslink}%
2449   \glsxtr@org@Glspl@{#1}{#2}%
2450 }%
```

\@GLS@ Save the original definition and redefine.

```
2451 \let\@glsxtr@org@GLS@\@GLS@
2452 \def\@GLS@#1#2{%
2453   \glsxtr@record{#1}{#2}{glslink}%
2454   \glsxtr@org@GLS@{#1}{#2}%
2455 }%
```

\@GLSpl@ Save the original definition and redefine.

```
2456 \let\@glsxtr@org@GLSpl@\@GLSpl@
2457 \def\@GLSpl@#1#2{%
2458   \glsxtr@record{#1}{#2}{glslink}%
2459   \glsxtr@org@GLSpl@{#1}{#2}%
2460 }%
```

\@glsdisp This is redefined to allow the recording on the first run. Can't save and restore \@glsdisp since it has an optional argument.

```
2461 \renewcommand*{\@glsdisp}[3][]{%
2462   \glsxtr@record{#1}{#2}{glslink}%
2463   \glsdoifexists{#2}{%
2464     \let\do@gls@link@checkfirsthyper\gls@link@checkfirsthyper
2465     \let\glsifplural\secondoftwo
2466     \let\glscapscase\firstofthree
2467     \def\glscustomtext{#3}%
2468     \def\glsinsert{}%
2469     \def\@glo@text{\csname gls@\glstype @entryfmt\endcsname}%
2470     \gls@link[#1]{#2}{\@glo@text}%
2471     \gls@do@glsunset{#2}%
2472   }%
2473   \glspostlinkhook
2474 }
```

\@gls@@link@ Redefine to include \@glsxtr@record

```
2475 \renewcommand*{\@gls@@link}[3][]{%
2476   \glsxtr@record{#1}{#2}{glslink}%
2477   \glsdoifexistsord{#2}{%
2478   }%
2479   \let\do@gls@link@checkfirsthyper\relax
```

Post-link hook commands need initialising.

```
2480   \def\glscustomtext{#3}%
2481   \glsxtr@field@linkdefs
2482   \gls@link[#1]{#2}{#3}%
```

```

2483 }%
2484 {%
2485   \glstextformat{#3}%
2486 }%
2487 \glspostlinkhook
2488 }

```

sxtrinitwrgloss Set the default if the wrgloss is omitted.

```

2489 \newcommand*\glsxtrinitwrgloss}{%
2490   \glsifattribute{\glslabel}{wrgloss}{after}{%
2491     {%
2492       \glsxtrinitwrglossbeforefalse
2493     }%
2494   {%
2495     \glsxtrinitwrglossbeforetrue
2496   }%
2497 }

```

trwrglossbefore Conditional to determine if the indexing should be done before the link text.

```

2498 \newif\ifglsxtrinitwrglossbefore
2499 \glsxtrinitwrglossbeforetrue

```

Define a wrgloss key to determine whether to write the glossary information before or after the link text.

```

2500 \define@choicekey{glslink}{wrgloss}{%
2501   [\@glsxtr@wrglossval@\glsxtr@wrglossnr]{%
2502     {before,after}{%
2503   }%
2504   \ifcase\@glsxtr@wrglossnr\relax
2505     \glsxtrinitwrglossbeforetrue
2506   \or
2507     \glsxtrinitwrglossbeforefalse
2508   \fi
2509 }%
2510 \define@key{glslink}{thevalue}{\def\@glsxtr@thevalue{#1}}
2511 \define@key{glslink}{theHvalue}{\def\@glsxtr@theHvalue{#1}}

```

tr@hyperoutside Define a hyperoutside key to determine whether \hyperlink should be outside \glstextformat.

```

2512 \define@boolkey{glslink}{glsxtr@}{hyperoutside}[true]{}
2513 \glsxtr@hyperoutsidetrue

```

ocal@textformat Provide a key to locally change the text format.

```

2514 \define@key{glslink}{textformat}{%
2515   \ifcsdef{#1}{%
2516     {%
2517       \letcs{\@glsxtr@local@textformat}{#1}{}
2518     }%

```

```

2519  {%
2520    \PackageError{glossaries-extra}{Unknown control sequence name '#1'}{}%
2521  }%
2522 }

2523 \define@key{glslink}{prefix}{\def\glolinkprefix{\#1}{}}

nithyperoutside Set the default if the hyperoutside is omitted.
2524 \newcommand*{\glsxtrinithyperoutside}{%
2525   \glsifattribute{\glslabel}{hyperoutside}{false}{%
2526   {%
2527     \glsxtr@hyperoutsidefalse
2528   }%
2529   {%
2530     \glsxtr@hyperoutsidetrue
2531   }%
2532 }

r@inc@linkcount Does nothing by default.
2533 \newcommand*{\glsxtr@inc@linkcount}{}{}

slinkpresetkeys User hook performed immediately before options are set. Does nothing by default.
2534 \newcommand*{\glsxlinkpresetkeys}{}{}

sXtrExpandedFmt Helper command that (protected) fully expands second argument and then applies it to the first, which must be a command that takes a single argument.
2535 \newrobustcmd*{\GlsXtrExpandedFmt}[2]{%
2536   \protected@edef{\glsxtr@tmp}{\#2}%
2537   \expandafter\expandafter{\glsxtr@tmp}%
2538 }

tion@counter@or If in a numbered equation, change the counter to equation. This can be overridden by explicitly setting the counter in the optional argument of commands like \gls and \glslink.
2539 \newcommand*{\glsxtr@use@equation@counter}{%
2540   \glsxtr@ifnum@mmode{\def{\gls@counter}{equation}}{}%
2541 }

sxtr@do@autoadd If \GlsXtrAutoAddOnFormat is used, this will automatically use \glsadd. It's therefore only used with \gls@link not with \glsadd otherwise it could trigger an infinite loop. The argument indicates the key family (glslink or glossadd).
2542 \newcommand*{\glsxtr@do@autoadd}[1]{}{}
```

AutoAddOnFormat

```
\GlsXtrAutoAddOnFormat[<label>]{<format list>}{{glsadd options}}
```

If an entry is indexed with the format set to one identified in the comma-separated list, then automatically index it using \glsadd with the given options, which may override the current options. Scoping is needed to prevent leakage.

```
2543 \newcommand*{\GlsXtrAutoAddOnFormat}[3][\glslabel]{%
2544   \renewcommand*{\glsxtr@do@autoadd}[1]{%
2545     \begingroup
2546       \protected@edef{\glsxtr@do@autoadd}{%
2547         \noexpand\ifstreq{\##1}{\glslink}{%
2548           {%
2549             \noexpand\DTLifinlist{\@glsnumberformat}{\#2}{\noexpand\glsadd[format={\@glsnumberfor
2550           }{%
2551             {}}{%
2552           }{%
2553             \glsxtr@do@autoadd
2554           \endgroup
2555         }{%
2556       }}
```

`\glslinkwrcontent` This may resolve [issue #189](#) but it may have unexpected consequences. This is currently provided as a trial. If it causes a problem then redefine without the grouping. If no issues are reported it will be added to the base package.

```
2557 \providecommand*{\glslinkwrcontent}[1]{{\#1}}
```

`\@gls@link` Redefine to allow the indexing to be placed after the link text. By default this is done before the link text to prevent problems that can occur from the whatsit, but there may be times when the user would like the indexing done afterwards even though it causes a whatsit.

```
2558 \def\@gls@link[#1]#2#3{%
2559   \leavevmode
2560   \protected@edef{\glslabel}{\glsdetoklabel{\#2}}%
2561   \def\@gls@link@opts{\#1}%
2562   \let\@gls@link@label\glslabel
2563   \let\@glsnumberformat\glsxtr@defaultnumberformat
2564   \protected@edef{\gls@counter{\csname glo@\glslabel\@counter\endcsname}}{%
2565     \protected@edef{\glstype{\csname glo@\glslabel\@type\endcsname}}{%
2566       \let\org@ifKV@glslink@hyper\ifKV@glslink@hyper}}
```

Save local setting.

```
2567 \@gls@save@glslocal
```

Save current value of \glolinkprefix:

```
2568 \let\@glsxtr@org@glolinkprefix\glolinkprefix
```

Initialise \glsxtr@local@textformat

```
2569 \let\@glsxtr@local@textformat\relax
```

Initialise thevalue and theHvalue (v1.19).

```
2570 \def\@glsxtr@thevalue{}%
2571 \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
```

Initialise when indexing should occur (new to v1.14).

```
2572 \glsxtrinitwrgloss
```

Initialise whether \hyperlink should be outside \glstextformat (new to v1.21).

```
2573 \glsxtrinithyperoutside
```

Note that the default link options may override \glsxtrinitwrgloss.

```
2574 \gls@setdefault@glslink@opts
```

Increment link counter if enabled (new to v1.26).

```
2575 \glsxtr@inc@linkcount
```

Check if the equations option has been set (new to v1.37).

```
2576 \if@glsxtr@equations
2577   \@glsxtr@use@equation@counter
2578 \fi
```

As the original definition.

```
2579 \do@glsdisablehyperinlist
2580 \do@gls@link@checkfirsthyper
```

User hook before options are set (new to v1.26):

```
2581 \glslinkpresetkeys
```

Set options.

```
2582 \setkeys{glslink}{#1}%
```

Perform auto add if set (new to v1.37)

```
2583 \glsxtr@do@autoadd{glslink}%
```

User hook after options are set:

```
2584 \glslinkpostsetkeys
```

Check thevalue and theHvalue before saving (v1.19).

```
2585 \ifdefempty{\@glsxtr@thevalue}%
2586 {%
2587   \@gls@saveentrycounter
2588 }%
2589 {%
2590   \let\theglsentrycounter\@glsxtr@thevalue
2591   \def\theHglsentrycounter{\@glsxtr@theHvalue}%
2592 }%
2593 \gls@setsort{\glslabel}%

```

Check if the textformat key has been used.

```
2594 \ifx\@glsxtr@local@textformat\relax
```

Check textformat attribute (new to v1.21).

```
2595 \glshasattribute{\glslabel}{textformat}%
2596 {%
```

```

2597     \protected@edef\glsxtr@attrval{\glsgetattribute{\glslabel}{textformat}}%
2598     \ifcsdef{\glsxtr@attrval}%
2599     {%
2600         \letcs{\glsxtr@textformat}{\glsxtr@attrval}%
2601     }%
2602     {%
2603         \GlossariesExtraWarning{Unknown control sequence name
2604             '\glsxtr@attrval' supplied in textformat attribute
2605             for entry '\glslabel'. Reverting to default \string\glstextformat}%
2606         \let\glsxtr@textformat\glstextformat
2607     }%
2608 }%
2609 {%
2610     \let\glsxtr@textformat\glstextformat
2611 }%
2612 \else
2613     \let\glsxtr@textformat\glsxtr@local@textformat
2614 \fi

```

Encapsulate link text and indexing.

```

2615 \glslinkwrccontent
2616 {%

```

Do write if it should occur before the link text:

```

2617 \ifglsxtrinitwrglossbefore
2618     \do@wrglossary{#2}%
2619 \fi

```

Do the link text:

```

2620 \ifKV@glslink@hyper
2621     \ifglsxtr@hyperoutside
2622         \glslink{\glolinkprefix\glslabel}{\glsxtr@textformat{#3}}%
2623     \else
2624         \glsxtr@textformat{\glslink{\glolinkprefix\glslabel}{#3}}%
2625     \fi
2626 \else
2627     \ifglsxtr@hyperoutside
2628         \glsdonohyperlink{\glolinkprefix\glslabel}{\glsxtr@textformat{#3}}%
2629     \else
2630         \glsxtr@textformat{\glsdonohyperlink{\glolinkprefix\glslabel}{#3}}%
2631     \fi
2632 \fi

```

Do write if it should occur after the link text:

```

2633 \ifglsxtrinitwrglossbefore
2634 \else
2635     \do@wrglossary{#2}%
2636 \fi
2637 }%

```

Restore original value of \glolinkprefix:

```

2638 \let\glolinkprefix\glsxtr@org@glolinkprefix

```

As the original definition:

```
2639 \let\ifKV@glslink@hyper\org@ifKV@glslink@hyper
2640 \@gls@restore@glslocal
2641 }

2642 \define@key{glossadd}{thevalue}{\def\@glsxtr@thevalue{\#1}}
2643 \define@key{glossadd}{theHvalue}{\def\@glsxtr@theHvalue{\#1}}
```

lsaddpresetkeys

```
2644 \newcommand*{\glsaddpresetkeys}{}  
saddpostsetkeys
```

```
2645 \newcommand*{\glsaddpostsetkeys}{}  
\\glsadd Redefine to include \\@glsxtr@record and suppress in headings
```

```
2646 \renewrobustcmd*{\glsadd}[2][]{%
2647   \glsxtrifinmark
2648   {}%
2649   {}%
2650   \gls@adjustmode
2651   \begingroup
2652     \glsxtr@record{\#1}{\#2}{glossadd}%
2653     \glsdoifexists{\#2}%
2654   {}%
2655   \let\glsnumberformat\glsxtr@defaultnumberformat
2656   \protected@edef\gls@counter{\csname glo@\glsdetoklabel{\#2}@counter\endcsname}%
2657   \def\@glsxtr@thevalue{}%
2658   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
}
```

Implement any default settings (before options are set)

```
2659   \glsaddpresetkeys
2660   \setkeys{glossadd}{\#1}%
```

Implement any default settings (after options are set)

```
2661   \glsaddpostsetkeys
2662   \ifdefempty{\@glsxtr@thevalue}{%
2663   {}%
2664   \gls@saveentrycounter
2665   }%
2666   {}%
2667   \let\theglsentrycounter\@glsxtr@thevalue
2668   \def\theHglsentrycounter{\@glsxtr@theHvalue}%
2669   }%
```

Define sort key if necessary (in case of sort=use):

```
2670   \gls@setsort{\#2}%
```

Ensure that indexing occurs (since that's the point of \glsadd). If indexing has been switched off by default, don't want the setting to affect \glsadd. The ignored format \glsignore can be used for selection without location, but the indexing still needs to be performed.

```

2671      \KV@glslink@noindexfalse
2672      \@@do@wrglossary{#2}%
2673  }%
2674  \endgroup
2675 }%
2676 }
```

\glsaddeach Performs \glsadd for each entry listed in the mandatory argument.

```

2677 \newrobustcmd{\glsaddeach}[2][]{%
2678   \@for\@gls@thislabel:=#2\do{\glsadd[#1]{\@gls@thislabel}}%
2679 }
```

@field@linkdefs Default settings for \gls@field@link

```

2680 \newcommand*{\glsxtr@field@linkdefs}{%
2681   \let\glsxtrifwasfirstuse\@secondoftwo
2682   \let\glsifplural\@secondoftwo
2683   \let\glscapscase\@firstofthree
2684   \let\glsinsert\@empty
2685 }
```

Redefine the field link commands that need to modify the above. Also add accessibility support and set the abbreviation styles if required.

assignfieldfont

```

2686 \newcommand*{\glsxtrassignfieldfont}[1]{%
2687   \ifglsentryexists{#1}%
2688   {%
2689     \ifglshasshort{#1}%
2690     {%
2691       \glssetabbrvfmt{\glscategory{#1}}%
2692       \glsifregular{#1}%
2693       {\let\@gls@field@font\glsxtrregularfont}%
2694       {\let\@gls@field@font\@firstofone}%
2695     }%
2696     {%
2697       \glsifnotregular{#1}%
2698       {\let\@gls@field@font\@firstofone}%
2699       {\let\@gls@field@font\glsxtrregularfont}%
2700     }%
2701   }%
2702   {%
2703     \let\@gls@field@font\@gobble
2704   }%
2705 }
```

\@glstext@ The abbreviation format may also need setting.

```
2706 \def\@glstext@#1#2[#3]{%
2707   \glsxtrassignfieldfont{#2}%
2708   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccesstext{#2}#3}}%
2709 }
```

\@GLStext@ All uppercase version of \glstext. The abbreviation format may also need setting.

```
2710 \def\@GLStext@#1#2[#3]{%
2711   \glsxtrassignfieldfont{#2}%
2712   \gls@field@link[\let\glscapscase\@thirdofthree]{#1}{#2}%
2713   {\gls@field@font{\GLSaccesstext{#2}\mfirstucMakeUppercase{#3}}}%
2714 }
```

\@Glstext@ First letter uppercase version. The abbreviation format may also need setting.

```
2715 \def\@Glstext@#1#2[#3]{%
2716   \glsxtrassignfieldfont{#2}%
2717   \gls@field@link[\let\glscapscase\@secondofthree]{#1}{#2}%
2718   {\gls@field@font{\Glsaccesstext{#2}#3}}%
2719 }
```

Version 1.07 ensures that \glsfirst etc honours the nohyperfirst attribute. Allow a convenient way for the user to revert to ignoring this attribute for these commands.

ecknohyperfirst

```
2720 \newcommand*\glsxtrchecknohyperfirst[1]{%
2721   \glsifattribute{#1}{nohyperfirst}{true}{\KV@glslink@hyperfalse}{}%
2722 }
```

\@glsfirst@ No case changing version. The abbreviation format may also need setting.

```
2723 \def\@glsfirst@#1#2[#3]{%
2724   \glsxtrassignfieldfont{#2}%
}
```

Ensure that \glsfirst honours the nohyperfirst attribute.

```
2725 \gls@field@link
2726 [\let\glsxtrifwasfirstuse\@firstoftwo
2727   \glsxtrchecknohyperfirst{#2}%
2728 ]{#1}{#2}%
2729 {\gls@field@font{\glsaccessfirst{#2}#3}}%
2730 }
```

\@Glsfirst@ First letter uppercase version. The abbreviation format may also need setting.

```
2731 \def\@Glsfirst@#1#2[#3]{%
2732   \glsxtrassignfieldfont{#2}%
}
```

Ensure that \Glsfirst honours the nohyperfirst attribute.

```
2733 \gls@field@link
2734 [\let\glsxtrifwasfirstuse\@firstoftwo
2735   \let\glscapscase\@secondofthree
2736   \glsxtrchecknohyperfirst{#2}%

```

```
2737  ]%
2738  {#1}{#2}{\gls@field@font{\Glsaccessfirst{#2}#3}}%
2739 }
```

\@GLSfirst@ All uppercase version. The abbreviation format may also need setting.

```
2740 \def\@GLSfirst@#1#2[#3]{%
2741   \glsxtrassignfieldfont{#2}}%
```

Ensure that \GLSfirst honours the nohyperfirst attribute.

```
2742 \gls@field@link
2743 [\let\glsxtrifwasfirstuse\@firstoftwo
2744 \let\glscapscase\@thirdofthree
2745 \glsxtrchecknohyperfirst{#2}%
2746 ]%
2747 {#1}{#2}{\gls@field@font{\GLSaccessfirst{#2}\mfirstucMakeUppercase{#3}}}%
2748 }
```

\@glsplural@ No case changing version. The abbreviation format may also need setting.

```
2749 \def\@glsplural@#1#2[#3]{%
2750   \glsxtrassignfieldfont{#2}}%
2751 \gls@field@link[\let\glsifplural\@firstoftwo]{#1}{#2}%
2752 {\gls@field@font{\glsaccessplural{#2}#3}}%
2753 }
```

\@Glsplural@ First letter uppercase version. The abbreviation format may also need setting.

```
2754 \def\@Glsplural@#1#2[#3]{%
2755   \glsxtrassignfieldfont{#2}}%
2756 \gls@field@link
2757 [\let\glsifplural\@firstoftwo
2758 \let\glscapscase\@secondofthree
2759 ]%
2760 {#1}{#2}{\gls@field@font{\Glsaccessplural{#2}#3}}%
2761 }
```

\@GLSplural@ All uppercase version. The abbreviation format may also need setting.

```
2762 \def\@GLSplural@#1#2[#3]{%
2763   \glsxtrassignfieldfont{#2}}%
2764 \gls@field@link
2765 [\let\glsifplural\@firstoftwo
2766 \let\glscapscase\@thirdofthree
2767 ]%
2768 {#1}{#2}{\gls@field@font{\GLSaccessplural{#2}\mfirstucMakeUppercase{#3}}}%
2769 }
```

\glsfirstplural@ No case changing version. The abbreviation format may also need setting.

```
2770 \def\@glsfirstplural@#1#2[#3]{%
2771   \glsxtrassignfieldfont{#2}}%
```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2772  \@gls@field@link
2773  [\let\glsxtrifwasfirstuse\@firstoftwo
2774  \let\glsifplural\@firstoftwo
2775  \glsxtrchecknohyperfirst{#2}%
2776  ]%
2777  {#1}{#2}{\@gls@field@font{\glsaccessfirstplural{#2}#3}}%
2778 }
```

Glsfirstplural@ First letter uppercase version. The abbreviation format may also need setting.

```
2779 \def\@Glsfirstplural@#1#2[#3]{%
2780  \glsxtrassignfieldfont{#2}%


```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2781  \@gls@field@link
2782  [\let\glsxtrifwasfirstuse\@firstoftwo
2783  \let\glsifplural\@firstoftwo
2784  \let\glscapscase\@secondofthree
2785  \glsxtrchecknohyperfirst{#2}%
2786  ]%
2787  {#1}{#2}{\@gls@field@font{\Glsaccessfirstplural{#2}#3}}%
2788 }
```

GLSfirstplural@ All uppercase version. The abbreviation format may also need setting.

```
2789 \def\@GLSfirstplural@#1#2[#3]{%
2790  \glsxtrassignfieldfont{#2}%


```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2791  \@gls@field@link
2792  [\let\glsxtrifwasfirstuse\@firstoftwo
2793  \let\glsifplural\@firstoftwo
2794  \let\glscapscase\@thirdofthree
2795  \glsxtrchecknohyperfirst{#2}%
2796  ]%
2797  {#1}{#2}%
2798  {\@gls@field@font{\GLSaccessfirstplural{#2}\mfirstrucMakeUppercase{#3}}}%
2799 }
```

\@glsname@ Redefine to use accessibility support. The abbreviation format may also need setting.

```
2800 \def\@glsname@#1#2[#3]{%
2801  \glsxtrassignfieldfont{#2}%
2802  \@gls@field@link{#1}{#2}{\@gls@field@font{\glsaccessname{#2}#3}}%
2803 }
```

\@Glsname@ First letter uppercase version. The abbreviation format may also need setting.

```
2804 \def\@Glsname@#1#2[#3]{%
2805  \glsxtrassignfieldfont{#2}%
2806  \@gls@field@link
2807  [\let\glscapscase\@secondoftwo]{#1}{#2}%
```

```
2808 {\@gls@field@font{\Glsaccessname{#2}#3}}%
2809 }
```

\@GLSname@ All uppercase version. The abbreviation format may also need setting.

```
2810 \def\@GLSname@#1#2[#3]{%
2811   \glsxtrassignfieldfont{#2}%
2812   \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2813   {#1}{#2}%
2814   {\@gls@field@font{\GLSaccessname{#2}\mfirstucMakeUppercase{#3}}}%
2815 }
```

\@glsdesc@

```
2816 \def\@glsdesc@#1#2[#3]{%
2817   \glsxtrassignfieldfont{#2}%
2818   \@gls@field@link{#1}{#2}{\@gls@field@font{\glsaccessdesc{#2}#3}}%
2819 }
```

\@Glsdesc@ First letter uppercase version.

```
2820 \def\@Glsdesc@#1#2[#3]{%
2821   \glsxtrassignfieldfont{#2}%
2822   \@gls@field@link
2823   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2824   {\@gls@field@font{\Glsaccessdesc{#2}#3}}%
2825 }
```

\@GLSdesc@ All uppercase version.

```
2826 \def\@GLSdesc@#1#2[#3]{%
2827   \glsxtrassignfieldfont{#2}%
2828   \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2829   {#1}{#2}{\@gls@field@font{\GLSaccessdesc{#2}\mfirstucMakeUppercase{#3}}}%
2830 }
```

@glsdescplural@ No case-changing version.

```
2831 \def\@glsdescplural@#1#2[#3]{%
2832   \glsxtrassignfieldfont{#2}%
2833   \@gls@field@link
2834   [\let\glscapscase\@secondoftwo
2835   \let\glsifplural\@firstoftwo
2836   ]{#1}{#2}{\@gls@field@font{\glsaccessdescplural{#2}#3}}%
2837 }
```

\@Glsdescplural@ First letter uppercase version.

```
2838 \def\@Glsdescplural@#1#2[#3]{%
2839   \glsxtrassignfieldfont{#2}%
2840   \@gls@field@link
2841   [\let\glscapscase\@secondoftwo
2842   \let\glsifplural\@firstoftwo
2843   ]{#1}{#2}{\@gls@field@font{\Glsaccessdescplural{#2}#3}}%
2844 }
```

@GLSdescplural@ All uppercase version.

```
2845 \def\@GLSdesc@#1#2[#3]{%
2846   \glsxtrassignfieldfont{#2}%
2847   \gls@field@link
2848   [\let\glscapscase\@thirdoftwo
2849   \let\glsifplural\@firstoftwo
2850 ]%
2851   {#1}{#2}%
2852   {\@gls@field@font{\GLSaccessdescplural{#2}\mfirstucMakeUppercase{#3}}}}
2853 }
```

\@glssymbol@

```
2854 \def\@glssymbol@#1#2[#3]{%
2855   \glsxtrassignfieldfont{#2}%
2856   \gls@field@link{#1}{#2}{\@gls@field@font{\glsaccesssymbol{#2}#3}}%
2857 }
```

\@Glssymbol@ First letter uppercase version.

```
2858 \def\@Glssymbol@#1#2[#3]{%
2859   \glsxtrassignfieldfont{#2}%
2860   \gls@field@link
2861   [\let\glscapscase\@secondoftwo]%
2862   {#1}{#2}{\@gls@field@font{\Glsaccesssymbol{#2}#3}}%
2863 }
```

\@GLSsymbol@ All uppercase version.

```
2864 \def\@GLSsymbol@#1#2[#3]{%
2865   \glsxtrassignfieldfont{#2}%
2866   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2867   {#1}{#2}{\@gls@field@font{\GLSaccesssymbol{#2}\mfirstucMakeUppercase{#3}}}}
2868 }
```

lssymbolplural@ No case-changing version.

```
2869 \def\@glssymbolplural@#1#2[#3]{%
2870   \glsxtrassignfieldfont{#2}%
2871   \gls@field@link
2872   [\let\glscapscase\@secondoftwo
2873   \let\glsifplural\@firstoftwo
2874 ]{#1}{#2}{\@gls@field@font{\glsaccesssymbolplural{#2}#3}}%
2875 }
```

lssymbolplural@ First letter uppercase version.

```
2876 \def\@Glssymbolplural@#1#2[#3]{%
2877   \glsxtrassignfieldfont{#2}%
2878   \gls@field@link
2879   [\let\glscapscase\@secondoftwo
2880   \let\glsifplural\@firstoftwo
2881 ]{#1}{#2}{\@gls@field@font{\Glsaccesssymbolplural{#2}#3}}%
2882 }
```

```

LSSymbolplural@ All uppercase version.
2883 \def\@GLSsymbol@#1#2[#3]{%
2884   \glsxtrassignfieldfont{#2}%
2885   \gls@field@link
2886   [\let\glscapscase\@thirdoftwo
2887   \let\glsifplural\@firstoftwo
2888 ]%
2889   {#1}{#2}%
2890   {\gls@field@font{\GLSaccesssymbolplural{#2}\mfirstucMakeUppercase{#3}}}}
2891 }

\@Glsuseri@ First letter uppercase version.
2892 \def\@Glsuseri@#1#2[#3]{%
2893   \glsxtrassignfieldfont{#2}%
2894   \gls@field@link
2895   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2896   {\gls@field@font{\Glsentryuseri{#2}{#3}}}}
2897 }

\@GLSuseri@ All uppercase version.
2898 \def\@GLSuseri@#1#2[#3]{%
2899   \glsxtrassignfieldfont{#2}%
2900   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2901   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuseri{#2}{#3}}}}%
2902 }

\@Glsuserii@ First letter uppercase version.
2903 \def\@Glsuserii@#1#2[#3]{%
2904   \glsxtrassignfieldfont{#2}%
2905   \gls@field@link
2906   [\let\glscapscase\@secondoftwo]%
2907   {#1}{#2}{\gls@field@font{\Glsentryuserii{#2}{#3}}}}
2908 }

\@GLSuserii@ All uppercase version.
2909 \def\@GLSuserii@#1#2[#3]{%
2910   \glsxtrassignfieldfont{#2}%
2911   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2912   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuserii{#2}{#3}}}}%
2913 }

\@Glsuseriii@ First letter uppercase version.
2914 \def\@Glsuseriii@#1#2[#3]{%
2915   \glsxtrassignfieldfont{#2}%
2916   \gls@field@link
2917   [\let\glscapscase\@secondoftwo]%
2918   {#1}{#2}{\gls@field@font{\Glsentryuseriii{#2}{#3}}}}
2919 }

```

```

\@GLSuseriii@ All uppercase version.
2920 \def\@GLSuseriii@#1#2[#3]{%
2921   \glsxtrassignfieldfont{#2}%
2922   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2923   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuseriii{#2}#3}}}%
2924 }

\@Glsuseriv@ First letter uppercase version.
2925 \def\@Glsuseriv@#1#2[#3]{%
2926   \glsxtrassignfieldfont{#2}%
2927   \gls@field@link
2928   [\let\glscapscase\@secondoftwo]%
2929   {#1}{#2}{\gls@field@font{\Glsentryuseriv{#2}#3}}%
2930 }

\@GLSuseriv@ All uppercase version.
2931 \def\@GLSuseriv@#1#2[#3]{%
2932   \glsxtrassignfieldfont{#2}%
2933   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2934   {#1}{#2}%
2935   {\gls@field@font{\mfirstucMakeUppercase{\glsentryuseriv{#2}#3}}}%
2936 }

\@Glsuserv@ First letter uppercase version.
2937 \def\@Glsuserv@#1#2[#3]{%
2938   \glsxtrassignfieldfont{#2}%
2939   \gls@field@link
2940   [\let\glscapscase\@secondoftwo]%
2941   {#1}{#2}{\gls@field@font{\Glsentryuserv{#2}#3}}%
2942 }

\@GLSuserv@ All uppercase version.
2943 \def\@GLSuserv@#1#2[#3]{%
2944   \glsxtrassignfieldfont{#2}%
2945   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2946   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuserv{#2}#3}}}%
2947 }

\@Glsuservi@ First letter uppercase version.
2948 \def\@Glsuservi@#1#2[#3]{%
2949   \glsxtrassignfieldfont{#2}%
2950   \gls@field@link
2951   [\let\glscapscase\@secondoftwo]%
2952   {#1}{#2}{\gls@field@font{\Glsentryuservi{#2}#3}}%
2953 }

\@GLSuservi@ All uppercase version.
2954 \def\@GLSuservi@#1#2[#3]{%

```

```

2955 \glsxtrassignfieldfont{#2}%
2956 \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2957 {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuservi{#2}#3}}}%
2958 }

```

Commands like `\acrshort` already set `\glsifplural`, but they don't set `\glsxtrifwasfirstuse` so they need adjusting. These commands shouldn't be used with `\newabbreviation`, but the redefinitions below allow for users reverting `\newacronym` back to its base definition.

`ase@acrcmd@warn` Warn user that they need to use new abbreviation commands.

```

2959 \newcommand*{\@glsxtr@base@acrcmd@warn}[2]{%
2960   \GlossariesExtraWarning{Base acronym command \string#1\space%
2961   should not be used with new abbreviation definitions. Use%
2962   \string#2\space instead}%
2963 }

```

`xtr@base@acrcmd` Warn user that they need to use new abbreviation commands.

```
2964 \let\@glsxtr@base@acrcmd\@glsxtr@base@acrcmd@warn
```

`\acrshort` No case change.

```

2965 \def\@acrshort#1#2[#3]{%
2966   \@glsxtr@base@acrcmd\acrshort\glsxtrshort
2967   \glsdoifexists{#2}%
2968   {%
2969     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2970     \let\glsxtrifwasfirstuse\@secondoftwo
2971     \let\glsifplural\@secondoftwo
2972     \let\glscapscase\@firstofthree
2973     \let\glsinsert\@empty
2974     \def\glscustomtext{%
2975       \acronymfont{\glsaccessshort{#2}}#3%
2976     }%
2977     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2978   }%
2979   \glspostlinkhook
2980 }

```

`\@Acrshort` First letter uppercase.

```

2981 \def\@Acrshort#1#2[#3]{%
2982   \@glsxtr@base@acrcmd\Acrshort\Glsxtrshort
2983   \glsdoifexists{#2}%
2984   {%
2985     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2986     \let\glsxtrifwasfirstuse\@secondoftwo
2987     \let\glsifplural\@secondoftwo
2988     \let\glscapscase\@secondofthree
2989     \let\glsinsert\@empty
2990     \def\glscustomtext{%
2991       \acronymfont{\Glsaccessshort{#2}}#3%

```

```

2992    }%
2993    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2994  }%
2995  \glspostlinkhook
2996 }

```

\@ACRshort All uppercase.

```

2997 \def\@ACRshort#1#2[#3]{%
2998   \glsxtr@base@acrcmd\ACRshort\GLSxtrshort
2999   \glsdoifexists{#2}%
3000   {%
3001     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
3002     \let\glsxtrifwasfirstuse\@secondoftwo
3003     \let\glsifplural\@secondoftwo
3004     \let\glscapscase\@thirdofthree
3005     \let\glsinsert\@empty
3006     \def\glscustomtext{%
3007       \mfirstucMakeUppercase{\acronymfont{\glsaccessshort{#2}}#3}%
3008     }%
3009     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
3010   }%
3011   \glspostlinkhook
3012 }

```

\@acrshortpl No case change.

```

3013 \def\@acrshortpl#1#2[#3]{%
3014   \glsxtr@base@acrcmd\acrshortpl\glsxtrshortpl
3015   \glsdoifexists{#2}%
3016   {%
3017     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
3018     \let\glsxtrifwasfirstuse\@secondoftwo
3019     \let\glsifplural\@firstoftwo
3020     \let\glscapscase\@firstofthree
3021     \let\glsinsert\@empty
3022     \def\glscustomtext{%
3023       \acronymfont{\glsaccessshortpl{#2}}#3}%
3024     }%
3025     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
3026   }%
3027   \glspostlinkhook
3028 }

```

\@Acrshortpl First letter uppercase.

```

3029 \def\@Acrshortpl#1#2[#3]{%
3030   \glsxtr@base@acrcmd\Acrshortpl\Glsxtrshortpl
3031   \glsdoifexists{#2}%
3032   {%
3033     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
3034     \let\glsxtrifwasfirstuse\@secondoftwo

```

```

3035   \let\glsifplural\@firstoftwo
3036   \let\glscapscase\@secondofthree
3037   \let\glsinsert\@empty
3038   \def\glscustomtext{%
3039     \acronymfont{\Glsaccessshortpl{#2}}#3%
3040   }%
3041   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
3042 }%
3043 \glspostlinkhook
3044 }

```

\@ACRshortpl All uppercase.

```

3045 \def\@ACRshortpl#1#2[#3]{%
3046   \@glsxtr@base@acrcmd\ACRshortpl\GLSxtrshortpl
3047   \glsdoifexists{#2}%
3048 {%
3049   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
3050   \let\glsxtrifwasfirstuse\@secondoftwo
3051   \let\glsifplural\@firstoftwo
3052   \let\glscapscase\@thirdofthree
3053   \let\glsinsert\@empty
3054   \def\glscustomtext{%
3055     \mfirstucMakeUppercase{\acronymfont{\glsaccessshortpl{#2}}#3}%
3056   }%
3057   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
3058 }%
3059 \glspostlinkhook
3060 }

```

\@acrlong No case change.

```

3061 \def\@acrlong#1#2[#3]{%
3062   \@glsxtr@base@acrcmd\acrlong\glsxtrlong
3063   \glsdoifexists{#2}%
3064 {%
3065   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
3066   \let\glsxtrifwasfirstuse\@secondoftwo
3067   \let\glsifplural\@secondoftwo
3068   \let\glscapscase\@firstofthree
3069   \let\glsinsert\@empty
3070   \def\glscustomtext{%
3071     \acronymfont{\glsaccesslong{#2}}#3%
3072   }%
3073   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
3074 }%
3075 \glspostlinkhook
3076 }

```

\@Acrlong First letter uppercase.

```

3077 \def\@Acrlong#1#2[#3]{%

```

```

3078 \@glsxtr@base@acrcmd\Acrlong\Glsxtrlong
3079 \glsdoifexists{#2}%
3080 {%
3081   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
3082   \let\glsxtrifwasfirstuse\@secondoftwo
3083   \let\glsifplural\@secondoftwo
3084   \let\glscapscase\@secondofthree
3085   \let\glsinsert\@empty
3086   \def\glscustomtext{%
3087     \acronymfont{\Glsaccesslong{#2}}#3%
3088   }%
3089   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
3090 }%
3091 \glspostlinkhook
3092 }

```

\@ACRlong All uppercase.

```

3093 \def\@ACRlong#1#2[#3]{%
3094   \@glsxtr@base@acrcmd\ACRlong\GLSxtrlong
3095   \glsdoifexists{#2}%
3096 {%
3097   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
3098   \let\glsxtrifwasfirstuse\@secondoftwo
3099   \let\glsifplural\@secondoftwo
3100   \let\glscapscase\@thirdofthree
3101   \let\glsinsert\@empty
3102   \def\glscustomtext{%
3103     \mfirstrucMakeUppercase{\acronymfont{\glsaccesslong{#2}}#3}%
3104   }%
3105   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
3106 }%
3107 \glspostlinkhook
3108 }

```

\@acrlongpl No case change.

```

3109 \def\@acrlongpl#1#2[#3]{%
3110   \@glsxtr@base@acrcmd\acrlongpl\glsxtrlongpl
3111   \glsdoifexists{#2}%
3112 {%
3113   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
3114   \let\glsxtrifwasfirstuse\@secondoftwo
3115   \let\glsifplural\@firstoftwo
3116   \let\glscapscase\@firstofthree
3117   \let\glsinsert\@empty
3118   \def\glscustomtext{%
3119     \acronymfont{\glsaccesslongpl{#2}}#3%
3120   }%
3121   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
3122 }%

```

```

3123 \glspostlinkhook
3124 }

\@Acrlongpl First letter uppercase.
3125 \def\@Acrlongpl#1#2[#3]{%
3126 \@glsxtr@base@acrcmd\Acrlongpl\Glsxtrlongpl
3127 \glsdoifexists{#2}%
3128 {%
3129 \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
3130 \let\glsxtrifwasfirstuse@\secondoftwo
3131 \let\glsifplural@\firstoftwo
3132 \let\glscapscase@\secondofthree
3133 \let\glsinsert@\empty
3134 \def\glscustomtext{%
3135 \acronymfont{\Glsaccesslongpl{#2}}#3%
3136 }%
3137 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
3138 }%
3139 \glspostlinkhook
3140 }

```

\@ACRlongpl All uppercase.

```

3141 \def\@ACRlongpl#1#2[#3]{%
3142 \@glsxtr@base@acrcmd\ACRlongpl\GLSxtrlongpl
3143 \glsdoifexists{#2}%
3144 {%
3145 \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
3146 \let\glsxtrifwasfirstuse@\secondoftwo
3147 \let\glsifplural@\firstoftwo
3148 \let\glscapscase@\thirdofthree
3149 \let\glsinsert@\empty
3150 \def\glscustomtext{%
3151 \mfirstrucMakeUppercase{\acronymfont{\glsaccesslongpl{#2}}#3}%
3152 }%
3153 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
3154 }%
3155 \glspostlinkhook
3156 }

```

The full formats use the internal long and short commands (such as \acrshort and \acrlong). Therefore they don't need adjustments, but they do need clearer warnings. This means three warnings per use (once for the full command and once each for the short and long commands), but at least this way the most important warning (replace \acrfull with \glsxtrfull etc) is present.

```

\@acrfull
3157 \def\@acrfull#1#2[#3]{%
3158 \@glsxtr@base@acrcmd\acrfull\glsxtrfull

```

```

3159 \acrfullfmt{#1}{#2}{#3}%
3160 }

\@Acrfull
3161 \def\@Acrfull#1#2[#3]{%
3162   \@glsxtr@base@acrcmd\Acrfull\Glsxtrfull
3163   \Acrfullfmt{#1}{#2}{#3}%
3164 }

\@ACRfull
3165 \def\@ACRfull#1#2[#3]{%
3166   \@glsxtr@base@acrcmd\ACRfull\GLSxtrfull
3167   \ACRfullfmt{#1}{#2}{#3}%
3168 }

\@acrfullpl
3169 \def\@acrfullpl#1#2[#3]{%
3170   \@glsxtr@base@acrcmd\acrfullpl\glsxtrfullpl
3171   \acrfullplfmt{#1}{#2}{#3}%
3172 }

\@Acrfullpl
3173 \def\@Acrfullpl#1#2[#3]{%
3174   \@glsxtr@base@acrcmd\Acrfullpl\Glsxtrfullpl
3175   \Acrfullplfmt{#1}{#2}{#3}%
3176 }

\@ACRfullpl
3177 \def\@ACRfullpl#1#2[#3]{%
3178   \@glsxtr@base@acrcmd\ACRfullpl\GLSxtrfullpl
3179   \ACRfullplfmt{#1}{#2}{#3}%
3180 }

```

Modify \@glsaddkey so additional keys provided by the user can be treated in a similar way.

```

\@glsaddkey
3181 \renewcommand*\@glsaddkey}[7]{%
3182   \key@ifundefined{glossentry}{#1}%
3183   {%
3184     \define@key{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
3185     \appto{\gls@keymap}{, #1}{#1}}%
3186     \appto{\newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
3187     \appto{\newglossaryentryposthook}{%
3188       \letcs{\@glo@tmp}{@glo@#1}%
3189       \gls@assign@field{#2}{\glo@label}{#1}{\glo@tmp}}%
3190   }%
3191   \newcommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
3192   \newcommand*{#4}[1]{\Gls@entry@field{##1}{#1}}%

```

Now for the commands with links. First the version with no case change (same as before):

```
3193 \ifcsdef{@gls@user@#1@}{%
3194   {%
3195     \PackageError{glossaries}{%
3196       {Can't define '\string#5' as helper command
3197         '\expandafter\string\csname @gls@user@#1@\endcsname' already
3198         exists}%
3199     {}%
3200   }%
3201   {%
3202     \expandafter\newcommand\expandafter*\expandafter
3203       {\csname @gls@user@#1\endcsname}[2] []{%
3204         \new@ifnextchar[%
3205           {\csuse{@gls@user@#1@}{##1}{##2}}%
3206           {\csuse{@gls@user@#1@}{##1}{##2}[]}}%
3207     \csdef{@gls@user@#1@}##1##2[##3]{%
3208       \@gls@field@link{##1}{##2}{#3{##2}##3}%
3209     }%
3210     \newrobustcmd*{#5}{%
3211       \expandafter\@gls@hyp@opt\csname @gls@user@#1\endcsname}%
3212   }%
3213 }
```

Next the version with the first letter converted to upper case (modified):

```
3213 \ifcsdef{@Gls@user@#1@}{%
3214   {%
3215     \PackageError{glossaries}{%
3216       {Can't define '\string#6' as helper command
3217         '\expandafter\string\csname @Gls@user@#1@\endcsname' already
3218         exists}%
3219     {}%
3220   }%
3221   {%
3222     \expandafter\newcommand\expandafter*\expandafter
3223       {\csname @Gls@user@#1\endcsname}[2] []{%
3224         \new@ifnextchar[%
3225           {\csuse{@Gls@user@#1@}{##1}{##2}}%
3226           {\csuse{@Gls@user@#1@}{##1}{##2}[]}}%
3227     \csdef{@Gls@user@#1@}##1##2[##3]{%
3228       \@gls@field@link[\let\glscapscase\@secondofthree]%
3229         {##1}{##2}{#4{##2}##3}%
3230     }%
3231     \newrobustcmd*{#6}{%
3232       \expandafter\@gls@hyp@opt\csname @Gls@user@#1\endcsname}%
3233   }%
3234 }
```

Finally the all caps version (modified):

```
3234 \ifcsdef{@GLS@user@#1@}{%
3235   {%
3236     \PackageError{glossaries}{%
3237       {Can't define '\string#7' as helper command
```

```

3238     '\expandafter\string\csname @GLS@user@#1\endcsname' already
3239     exists}%
3240   {}%
3241 }%
3242 {%
3243   \expandafter\newcommand\expandafter*\expandafter
3244     {\csname @GLS@user@#1\endcsname}[2] [] {%
3245       \new@ifnextchar[%
3246         {\csuse{@GLS@user@#1@}{##1}{##2}}%
3247         {\csuse{@GLS@user@#1@}{##1}{##2}[]}}%
3248       \csdef{@GLS@user@#1@}{##1##2##3}{%
3249         \@gls@field@link[\let\glscapscase{@thirdofthree}%
3250           {##1}{##2}{\mfirstucMakeUppercase{##3{##2}##3}}]%
3251       }%
3252       \newrobustcmd*{#7}{%
3253         \expandafter\@gls@hyp@opt\csname @GLS@user@#1\endcsname}%
3254     }%
3255   }%
3256 {%
3257   \PackageError{glossaries-extra}{Key '#1' already exists}{}%
3258 }%
3259 }

```

`checkfirsthyper` Old versions of `glossaries` don't define this, so provide it just in case it hasn't been defined.

```
3260 \providecommand*{\@gls@link@nocheckfirsthyper}{}%
```

`checkfirsthyper` Modify `check` to determine if the hyperlink should be automatically suppressed, but save the original in case the acronyms are restored.

```
3261 \let\@glsxtr@org@checkfirsthyper\gls@link@checkfirsthyper
3262 \renewcommand*{\@gls@link@checkfirsthyper}{%
```

`\ifglsused` isn't useful in the post link hook as it's already been unset by then, so define a command that can be used in the post link hook. Since `\@gls@link@checkfirsthyper` is only used by commands like `\gls` but not by other commands, this seems the best place to put it to automatically set the value for the commands that change the first use flag. The other commands should set `\glsxtrifwasfirstuse` to `\@secondoftwo` (which is done in `\@glsxtr@field@linkdefs`). Note that if the entry is undefined (as with `bib2gls` on the first L^AT_EX run), `\ifglsused` does neither true nor false parts. However, in that case, this macro won't be called anyway (since it's used in the argument of `\glsdoifexistsordo`).

```
3263 \ifglsused{\glslabel}%
3264   {\let\glsxtrifwasfirstuse\@secondoftwo}%
3265   {\let\glsxtrifwasfirstuse\@firstoftwo}%
```

Store the category label for convenience.

```
3266 \protected@edef\glscategorylabel{\glscategory{\glslabel}}%
3267 \ifglsused{\glslabel}%
3268 {%
3269   \glsifcategoryattribute{\glscategorylabel}{nohypernext}{true}%
3270     {\KV@glslink@hyperfalse}{}%
```

```

3271  }%
3272  {%
3273   \glsifcategoryattribute{\glscategorylabel}{nohyperfirst}{true}%
3274   {\KV@glslink@hyperfalse}{}%
3275  }%
3276 \glslinkcheckfirsthyperhook
3277 }

```

`ablehyperinlist` This command was introduced in glossaries v4.19. If it hasn't been defined, we're using an earlier version, in which case the `nohyper` attribute can't be implemented.

```

3278 \ifdef\do@glsdisablehyperinlist
3279 {%
3280  \let\glsxtr@do@glsdisablehyperinlist\do@glsdisablehyperinlist
3281  \renewcommand*\do@glsdisablehyperinlist{%
3282   \glsxtr@do@glsdisablehyperinlist
3283   \glsifattribute{\glslabel}{nohyper}{true}{\KV@glslink@hyperfalse}{}%
3284  }
3285 }
3286 {}

```

Define a `noindex` key to prevent writing information to the external file.

```

3287 \define@boolkey{glslink}{noindex}[true]{}
3288 \KV@glslink@noindexfalse

```

`s@save@glslocal` Defined in glossaries v4.50 so may not be defined.

```

3289 \providecommand*\@gls@save@glslocal{%
3290  \let\if@org@KV@glslink@local\ifKV@glslink@local
3291 }

```

`estore@glslocal` Defined in glossaries v4.50 so may not be defined.

```

3292 \providecommand*\@gls@restore@glslocal{%
3293  \ifKV@glslink@local
3294   \let\@gls@do@glsunset\glslocalunset
3295  \else
3296   \let\@gls@do@glsunset\glsunset
3297  \fi
3298 }

```

`gls@do@glsunset` Defined in glossaries v4.50 so may not be defined.

```

3299 \providecommand*\@gls@do@glsunset[1]{\glsunset{#1}}

```

If `\@gls@setdefault@glslink@opts` has been defined (glossaries v4.20) use it to set the default keys in `\@glslink`.

`lt@glslink@opts`

```

3300 \ifdef\@gls@setdefault@glslink@opts
3301 {
3302  \renewcommand*\@gls@setdefault@glslink@opts{%

```

```

3303     \KV@glslink@noindexfalse
3304     \glsxtrsetaliasnoindex
3305 }
3306 }
3307 {

    Not defined so prepend it to \do@glsdisablehyperinlist to achieve the same effect.

3308 \newcommand*{\@gls@setdefault@glslink@opts}{%
3309     \KV@glslink@noindexfalse
3310     \glsxtrsetaliasnoindex
3311 }
3312 \preto\do@glsdisablehyperinlist{\@gls@setdefault@glslink@opts}
3313 }

```

setaliasnoindex Allow user to hook into the alias noindex setting. Default behaviour switches off indexing for aliases. If the record option is on, this will have been defined to do nothing. (bib2gls will deal with records for aliased entries.)

```

3314 \providecommand*{\glsxtrsetaliasnoindex}{%
3315     \KV@glslink@noindextrue
3316 }

```

setaliasnoindex The change made in v1.46 to remove the grouping has had the knock-on effect of redefining \glscurrentfieldvalue, which may be a problem, so v1.47 has changed this to use \ifcvoid.

```

3317 \newcommand*{\@glsxtrsetaliasnoindex}{%
3318     \ifcvoid{\glo@\glsdetoklabel{\glslabel}@alias}{%
3319     }%
3320 }%
3321     \let\glsxtrindexaliased\glsxtrindexaliased
3322     \glsxtrsetaliasnoindex
3323     \let\glsxtrindexaliased\@no@glsxtrindexaliased
3324 }%
3325 }

```

xtrindexaliased

```

3326 \newcommand{\@glsxtrindexaliased}{%
3327     \ifKV@glslink@noindex
3328     \else
3329         \begingroup
3330         \let\glsnumberformat\glsxtr@defaultnumberformat
3331         \protected@edef\gls@counter{\csname glo@\glsdetoklabel{\glslabel}@counter\endcsname}%
3332         \glsxtr@saveentrycounter
3333         \@@do@wrglossary{\glsxtralias{\glslabel}}%
3334         \endgroup
3335     \fi
3336 }

```

xtrindexaliased

```

3337 \newcommand{\@no@glsxtrindexaliased}{%
3338   \PackageError{glossaries-extra}{\string\glsxtrindexaliased\space
3339   not permitted outside definition of \string\glsxtrsetaliasnoindex}{%
3340   {}%
3341 }

xtrindexaliased Provide a command to redirect alias indexing, but only allow it to be used within \glsxtrsetaliasnoindex.
3342 \let\glsxtrindexaliased\@no@glsxtrindexaliased

tDefaultGlsOpts Set the default options for \glslink etc.
3343 \newcommand*\GlsXtrSetDefaultGlsOpts}[1]{%
3344   \renewcommand*\@gls@setdefault@glslink@opts}{%
3345   \setkeys{glslink}{#1}%
3346   \glsxtrsetaliasnoindex
3347 }%
3348 }

lsxtrifindexing Provide user level command to access it in \glswriteentry.
3349 \newcommand*\glsxtrifindexing}[2]{%
3350   \ifKV@glslink@noindex #2\else #1\fi
3351 }

\glswriteentry Redefine to test for indexonlyfirst category attribute. This needs to use \GlsXtrIfUnusedOrUndefined instead of \ifglsused to allow it to work with bib2gls.
3352 \renewcommand*\glswriteentry}[2]{%
3353   \glsxtrifindexing
3354   {}%
3355   \ifglsindexonlyfirst
3356     \GlsXtrIfUnusedOrUndefined{#1}
3357     {#2}%
3358     {\glsxtrdoautoindexname{#1}{dualindex}}%
3359   \else
3360     \glsifattribute{#1}{indexonlyfirst}{true}%
3361     {}%
3362     \GlsXtrIfUnusedOrUndefined{#1}%
3363     {#2}%
3364     {\glsxtrdoautoindexname{#1}{dualindex}}%
3365   }%
3366   {#2}%
3367 \fi
3368 }%
3369 {}%
3370 }

@do@@wrglossary Hook into glossary indexing command so that it can also use \index at the same time if required and add user hook.
3371 \appto{@do@@wrglossary}{\glsxtr@do@@wrindex
3372   \glsxtrdowrglossaryhook{\gls@label}%
3373 }

```

(The label can be obtained from `\@gls@label` at this point.)

Similarly for the “noidx” version:

`s@noidxglossary`

```
3374 \appto\gls@noidxglossary{\@glsxtr@do@@wrindex
3375   \glsxtrdowrglossaryhook{\@gls@label}%
3376 }
```

`xtr@do@@wrindex`

```
3377 \newcommand*{\@glsxtr@do@@wrindex}{%
3378   \glsxtrdoautoindexname{\@gls@label}{dualindex}%
3379 }
```

`owrglossaryhook` Allow user to hook into indexing code. (Always used by `\glsadd`. Used by `\gls` when indexing, which may or may not occur depending on the indexing settings.)
3380 `\newcommand*{\glsxtrdowrglossaryhook}[1]{}{}`

`gls@alt@hyp@opt` Commands like `\gls` have a star or plus version. Provide a third symbol that the user can adapt for convenience.

```
3381 \newcommand*{\@gls@alt@hyp@opt}[1]{%
3382   \let\glslinkvar\@firstofthree
3383   \let\@gls@hyp@opt@cs\relax
3384   \@ifstar{\s@gls@hyp@opt}{%
3385     \@ifnextchar+{%
3386       {\@firstoftwo{\p@gls@hyp@opt}}%
3387     {%
3388       \expandafter\@ifnextchar\@gls@alt@hyp@opt@char
3389         {\@firstoftwo{\@alt@gls@hyp@opt}}%
3390         {#1}%
3391     }%
3392   }%
3393 }
```

`alt@gls@hyp@opt` User version

```
3394 \newcommand*{\@alt@gls@hyp@opt}[1][]{%
3395   \let\glslinkvar\@firstofthree
3396   \expandafter\@gls@hyp@opt@cs\expandafter[\@gls@alt@hyp@opt@keys,#1]}
```

`lt@hyp@opt@char` Contains the character used as the command modifier.

```
3397 \newcommand*{\@gls@alt@hyp@opt@char}{}{}
```

`lt@hyp@opt@keys` Contains the option list used as the command modifier.

```
3398 \newcommand*{\@gls@alt@hyp@opt@keys}{}{}
```

`rSetAltModifier`

```
3399 \newcommand*{\GlsXtrSetAltModifier}[2]{%
3400   \let\@gls@hyp@opt\@gls@alt@hyp@opt
```

Check that the supplied character isn't + or *

```
3401 \ifstrequal{#1}{+}%
3402 {\PackageError{glossaries-extra}%
3403 {Can't use '#1' as modifier (it's already in use)}{}%
3404 {%
3405 \ifstrequal{#1}{*}%
3406 {\PackageError{glossaries-extra}%
3407 {Can't use '#1' as modifier (it's already in use)}{}%
3408 {}%
3409 }%
3410 \def\@gls@alt@hyp@opt@char{#1}%
3411 \def\@gls@alt@hyp@opt@keys{#2}%
3412 \ifdefequal\@glsxtr@record@setting\@glsxtr@record@setting@off
3413 {}%
3414 {%
```

Let **bib2gls** know the modifier.

```
3415 \protected@write\@auxout{}{\string\providetoggle{\glsxtr@altmodifier}[1]{}%
3416 \protected@write\@auxout{}{\string\glsxtr@altmodifier{#1}}%
3417 }%
3418 }
```

org@dohyperlink

```
3419 \let\glsxtr@org@dohyperlink\glsdohyperlink
```

glsnavhyperlink Since `\glsnavhyperlink` uses `\glslink`, it's necessary to patch it uses `\glsdohyperlink` instead of `\glsxtrdohyperlink`. The simplest way to achieve this is to locally let `\glsxtrdohyperlink` to `\glsdohyperlink`.

This command is provided by `glossary-hypernav` so it may not exist.

```
3420 \ifdef\glsnavhyperlink
3421 {
3422 \renewcommand*\glsnavhyperlink[3][\@glo@type]{%
3423 \protected@edef\gls@grplabel{#2}\protected@edef\gls@grptitle{#3}%

```

Scope:

```
3424 {%
3425 \let\glsxtrdohyperlink\glsxtr@org@dohyperlink
3426 \glslink{\glsnavhyperlinkname{#1}{#2}}{#3}%
3427 }%
3428 }%
3429 }
3430 {%
```

Patch if `glossaries` pre 4.50.

```
3431 \ifdef\@gls@navhypertarget
3432 {}
3433 {%
```

```
snavhypertarget
3434 \renewcommand*{\glsnavhypertarget}{\protect\@gls@navhypertarget}

@navhypertarget
3435 \newcommand*{\@gls@navhypertarget}[3][\@glo@type]{%
3436   \@glsnavhypertarget{#1}{#2}{#3}%
3437 }

3438 }%
```

snavhypertarget Similarly for \glsnavhypertarget

```
3439 \ifdef{\glsnavhypertarget}
3440 {%
3441   \renewcommand*{\@glsnavhypertarget}[3]{%
3442     \protected@write\auxout{}{\string@gls@hypergroup{#1}{#2}}%
3443     \@glsxtr@do@org@target{\glsnavhyperlinkname{#1}{#2}}{#3}%
3444     \ifcsdef@gls@hypergrouplist@#1{%
3445       {%
3446         \letcs@gls@list@gls@hypergrouplist@#1{%
3447           \protected@edef@gls@thishypernavlabel{#2}%
3448           \expandafter\DTLifinlist\expandafter{\gls@thishypernavlabel}\gls@list{}{%
3449             {%
3450               \GlossariesWarningNoLine{Navigation panel
3451                 for glossary type '#1' Jmissing group '#2'}%
3452               \gdef@gls@hypergrouprerun{%
3453                 \GlossariesWarningNoLine{Navigation panel
3454                   has changed. Rerun LaTeX}}%
3455             }%
3456           }%
3457           {%
3458             \GlossariesWarningNoLine{Navigation panel
3459               for glossary type '#1' Jmissing group '#2'}%
3460             \gdef@gls@hypergrouprerun{%
3461               \GlossariesWarningNoLine{Navigation panel
3462                 has changed. Rerun LaTeX}}%
3463           }%
3464         }%
3465       }%
3466     }{}}
```

The redefinition of \glsdohyperlink has been causing problems so introduce a new command instead.

sxtrdohyperlink Unpleasant complications can occur if the text or first key etc contains \gls, particularly if there are hyperlinks. To get around this problem, patch \glsdohyperlink so that it temporarily makes \gls behave like \glstext[*hyper=false,noindex*]. (This will be overridden if the user explicitly cancels either of those options in the optional argument of \gls or using the plus version.) This also patches the short form commands like \acrshort

and \glsxtrshort to use \glsentryshort and, similarly, the long form commands like \acrlong and \glsxtrlong to use \glsentrylong. Added attribute check.

```
3467 \newcommand*{\glsxtrdohyperlink}[2]{%
3468   \glshasattribute{\glslabel}{targeturl}%
3469   {%
3470     \glshasattribute{\glslabel}{targetname}%
3471     {%
3472       \glshasattribute{\glslabel}{targetcategory}%
3473       {%
3474         \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
3475           \glsgetattribute{\glslabel}{targetcategory}}%
3476           \glsgetattribute{\glslabel}{targetname}}%
3477           {{\glsxtrprotectlinks#2}}%
3478       }%
3479     {%
3480       \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
3481         {}%
3482           \glsgetattribute{\glslabel}{targetname}}%
3483           {{\glsxtrprotectlinks#2}}%
3484       }%
3485     }%
3486   {%
3487     \href{\glsgetattribute{\glslabel}{targeturl}}{%
3488       {{\glsxtrprotectlinks#2}}%
3489     }%
3490   }%
3491 }
```

Check for alias.

```
3492 \glsfieldfetch{\glslabel}{alias}{\gloaliaslabel}%
3493 \ifdefvoid\gloaliaslabel
3494 {%
3495   \glsxtrhyperlink{\gloaliaslabel}{\glsxtrprotectlinks#2}%
3496 }%
3497 {%
```

Is the alias a multi-entry?

```
3498   \glsxtrifmulti\gloaliaslabel
3499 }
```

Get the main target.

```
3500   \letcs{\gloaliaslabel}{\gls@combined@\gloaliaslabel}{\main}%
3501 }%
3502 {}}
```

Redirect link to the alias target.

```
3503   \glsxtrhyperlink
3504     {\glolinkprefix\glsdetoklabel{\gloaliaslabel}}{%
3505       {{\glsxtrprotectlinks#2}}%
3506     }%
3507 }
```

```

3508 }

glsxtrhyperlink Allows integration with the base glossaries package's debug=showtargets option.
3509 \newcommand{\glsxtrhyperlink}[2]{%
3510   \glsdoshowtarget{#1}{\hyperlink{#1}{#2}}%
3511 }%

glsdisablehyper Redefine to set \glslabel (to allow it to be picked up by \glsdohyperlink). Also made
it robust and added grouping to localise the definition of \glslabel. The original internal
command @glo@label could probably be simply replaced with \glslabel, but it's retained
in case its removal causes unexpected problems.
3512 \renewrobustcmd*\glshyperlink[2][\glsentrytext{@glo@label}]{%
3513   \glsdoifexists{#2}{%
3514     \def@glo@label{#2}{%
3515       {\protected@edef\glslabel{#2}{%
3516         \glslink{\glolinkprefix\glslabel}{#1}}}}%
3517     }%
3518   }%
3519 }%

glsdisablehyper Redefine in case we have an old version of glossaries. This now uses \def rather than \let to
allow for redefinitions of \glsdonohyperlink.
3520 \renewcommand{\glsdisablehyper}{%
3521   \KV@glslink@hyperfalse
3522   \def@glslink{\glsdonohyperlink}%
3523   \let@glstarget@\secondoftwo
3524 }%

\glsenablehyper This now uses \def rather than \let to allow for redefinitions of \glsdohypertarget and
\glsdohyperlink.
3525 \renewcommand{\glsenablehyper}{%
3526   \KV@glslink@hypertrue
3527   \def@glslink{\glsxtrdohyperlink}%
3528   \def@glstarget{\glsdohypertarget}%
3529 }%

lstdonohyperlink This command was only introduced in glossaries v4.20, so it may not be defined (therefore
use \def). For older glossaries versions, this won't be used if hyperref hasn't been loaded,
which means the indexing will still take place. The generated text is scoped (the link text in
\hyperlink is also scoped, so it's consistent).
3530 \def\glsdonohyperlink#1#2{\glsxtrprotectlinks #2}

@glslink Reset \glslink with patched versions:
3531 \ifcsundef{hyperlink}{%
3532 }{%
3533   \def@glslink{\glsdonohyperlink}%
3534 }%

```

```

3535 {%
3536   \def\@glslink{\glsxtrdohyperlink}
3537 }

```

xtrprotectlinks Make `\gls` (and variants) behave like the corresponding `\glstext` (and variants) with hyperlinking and indexing off.

```

3538 \newcommand*\glsxtrprotectlinks{%
3539   \KV@glslink@hyperfalse
3540   \KV@glslink@noindextrue
3541   \let\@gls@\glsxtr@p@text@
3542   \let\@Gls@\Glsxtr@p@text@
3543   \let\@GLS@\GLSxtr@p@text@
3544   \let\@glspl@\glsxtr@p@plural@
3545   \let\@Glspl@\Glsxtr@p@plural@
3546   \let\@GLSpl@\GLSxtr@p@plural@
3547   \let\@glsxtrshort@\glsxtr@p@short@
3548   \let\@Glsxtrshort@\Glsxtr@p@short@
3549   \let\@GLSxtrshort@\GLSxtr@p@short@
3550   \let\@glsxtrlong@\glsxtr@p@long@
3551   \let\@Glsxtrlong@\Glsxtr@p@long@
3552   \let\@GLSxtrlong@\GLSxtr@p@long@
3553   \let\@glsxtrshortpl@\glsxtr@p@shortpl@
3554   \let\@Glsxtrshortpl@\Glsxtr@p@shortpl@
3555   \let\@GLSxtrshortpl@\GLSxtr@p@shortpl@
3556   \let\@glsxtrlongpl@\glsxtr@p@longpl@
3557   \let\@Glsxtrlongpl@\Glsxtr@p@longpl@
3558   \let\@GLSxtrlongpl@\GLSxtr@p@longpl@
3559   \let\@acrshort@\glsxtr@p@acrshort@
3560   \let\@Acrshort@\Glsxtr@p@acrshort@
3561   \let\@ACRshort@\GLSxtr@p@acrshort@
3562   \let\@acrshortpl@\glsxtr@p@acrshortpl@
3563   \let\@Acrshortpl@\Glsxtr@p@acrshortpl@
3564   \let\@ACRshortpl@\GLSxtr@p@acrshortpl@
3565   \let\@acrlong@\glsxtr@p@acrlong@
3566   \let\@Acrlong@\Glsxtr@p@acrlong@
3567   \let\@ACRLong@\GLSxtr@p@acrlong@
3568   \let\@acrlongpl@\glsxtr@p@acrlongpl@
3569   \let\@Acrlongpl@\Glsxtr@p@acrlongpl@
3570   \let\@ACRLongpl@\GLSxtr@p@acrlongpl@
3571 }

```

These protected versions need grouping to prevent the label from getting confused.

```

@glsxtr@p@text@
3572 \def\glsxtr@p@text@#1#2[#3]{{\glstext@{#1}{#2}[#3]}}
@Glsxtr@p@text@
3573 \def\Glsxtr@p@text@#1#2[#3]{{\Glstext@{#1}{#2}[#3]}}

```

```

@GLSxtr@p@text@
 3574 \def\@GLSxtr@p@text@#1#2[#3]{{\@GLStext@{#1}{#2}[#3]}}
```

lsxtr@p@plural@

```
 3575 \def\@glsxtr@p@plural@#1#2[#3]{{\@glsplural@{#1}{#2}[#3]}}
```

lsxtr@p@plural@

```
 3576 \def\@Glsxtr@p@plural@#1#2[#3]{{\@Glsplural@{#1}{#2}[#3]}}
```

LSxtr@p@plural@

```
 3577 \def\@GLSxtr@p@plural@#1#2[#3]{{\@GLSplural@{#1}{#2}[#3]}}
```

glsxtr@p@short@

```

 3578 \def\@glsxtr@p@short@#1#2[#3]{%
 3579   {%
 3580     \glssetabbrvfmt{\glscategory{#2}}%
 3581     \glsabbrvfont{\glsentryshort{#2}}#3%
 3582   }%
 3583 }
```

Glsxtr@p@short@

```

 3584 \def\@Glsxtr@p@short@#1#2[#3]{%
 3585   {%
 3586     \glssetabbrvfmt{\glscategory{#2}}%
 3587     \glsabbrvfont{\Glsentryshort{#2}}#3%
 3588   }%
 3589 }
```

GLSxtr@p@short@

```

 3590 \def\@GLSxtr@p@short@#1#2[#3]{%
 3591   {%
 3592     \glssetabbrvfmt{\glscategory{#2}}%
 3593     \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshort{#2}}#3}%
 3594   }%
 3595 }
```

sxtr@p@shortpl@

```

 3596 \def\@glsxtr@p@shortpl@#1#2[#3]{%
 3597   {%
 3598     \glssetabbrvfmt{\glscategory{#2}}%
 3599     \glsabbrvfont{\glsentryshortpl{#2}}#3%
 3600   }%
 3601 }
```

sxtr@p@shortpl@

```

 3602 \def\@Glsxtr@p@shortpl@#1#2[#3]{%
 3603   {%
 3604     \glssetabbrvfmt{\glscategory{#2}}%
```

```

3605   \glsabbrvfont{\Glsentryshortpl{#2}}#3%
3606 }%
3607 }

Sxtr@p@shortpl@

3608 \def\@GLSxtr@p@shortpl@#1#2[#3] {%
3609   {%
3610     \glssetabbrvfmt{\glscategory{#2}}%
3611     \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshortpl{#2}}#3}%
3612   }%
3613 }

@glsxtr@p@long@

3614 \def\@glsxtr@p@long@#1#2[#3]{{\glsentrylong{#2}}#3}

@Glsxtr@p@long@

3615 \def\@Glsxtr@p@long@#1#2[#3]{{\Glsentrylong{#2}}#3}

@GLSxtr@p@long@

3616 \def\@GLSxtr@p@long@#1#2[#3] {%
3617   {\mfirstucMakeUppercase{\glslongfont{\glsentrylong{#2}}#3}}}

lsxtr@p@longpl@

3618 \def\@glsxtr@p@longpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}

lsxtr@p@longpl@

3619 \def\@Glsxtr@p@longpl@#1#2[#3]{{\glslongfont{\Glsentrylongpl{#2}}#3}>

LSxtr@p@longpl@

3620 \def\@GLSxtr@p@longpl@#1#2[#3] {%
3621   {\mfirstucMakeUppercase{\glslongfont{\glsentrylongpl{#2}}#3}}}

xtr@p@acrshort@

3622 \def\@glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\glsentryshort{#2}}#3}>

xtr@p@acrshort@

3623 \def\@Glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\Glsentryshort{#2}}#3}>

xtr@p@acrshort@

3624 \def\@GLSxtr@p@acrshort@#1#2[#3] {%
3625   {\mfirstucMakeUppercase{\acronymfont{\glsentryshort{#2}}#3}}}

r@p@acrshortpl@

3626 \def\@glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\glsentryshortpl{#2}}#3}>

r@p@acrshortpl@

3627 \def\@Glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\Glsentryshortpl{#2}}#3}}

```

```

r@p@acrshortpl@
 3628 \def\@GLSxtr@p@acrshortpl@#1#2[#3]{%
 3629   {\mfirstucMakeUppercase{\acronymfont{\glsentryshortpl{#2}}#3}}}

sxtr@p@acrlong@
 3630 \def\@glsxtr@p@acrlong@#1#2[#3]{{\glsentrylong{#2}}#3}

sxtr@p@acrlong@
 3631 \def\@Glsxtr@p@acrlong@#1#2[#3]{{\Glsentrylong{#2}}#3}

Sxtr@p@acrlong@
 3632 \def\@GLSxtr@p@acrlong@#1#2[#3]{%
 3633   {\mfirstucMakeUppercase{\glsentrylong{#2}}#3}}}

tr@p@acrlongpl@
 3634 \def\@glsxtr@p@acrlongpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}

tr@p@acrlongpl@
 3635 \def\@Glsxtr@p@acrlongpl@#1#2[#3]{{\Glsentrylongpl{#2}}#3}

tr@p@acrlongpl@
 3636 \def\@GLSxtr@p@acrlongpl@#1#2[#3]{%
 3637   {\mfirstucMakeUppercase{\glsentrylongpl{#2}}#3}}}

Commands to minimise conflict.

\@glsxtrp@opt
 3638 \newcommand*{\@glsxtrp@opt}{hyper=false,noindex}

\glsxtrsetpopts Used in glossary to switch hyperlinks on for the \glsxtrp type of commands.
 3639 \newcommand*{\glsxtrsetpopts}[1]{%
 3640   \renewcommand*{\@glsxtrp@opt}{#1}%
 3641 }

\lossxtrsetpopts Used in glossary to switch hyperlinks on for the \glossxtrp type of commands.
 3642 \newcommand*{\glossxtrsetpopts}{%
 3643   \glsxtrsetpopts{noindex}%
 3644 }

\@@glsxtrp
 3645 \newrobustcmd*{\@@glsxtrp}[2]{%
    Add scope.
 3646   {%
 3647     \let\glspostlinkhook\relax
 3648     \csname#1\expandafter\endcsname\expandafter[\@glsxtrp@opt]{#2}[]%
 3649   }%
 3650 }

```

```

\@glsxtrp
3651 \newrobustcmd*{\@glsxtrp}[2]{%
3652   \ifcsdef{gls#1}%
3653   {%
3654     \@@glsxtrp{gls#1}{#2}%
3655   }%
3656   {%
3657     \ifcsdef{glsxtr#1}%
3658     {%
3659       \@@glsxtrp{glsxtr#1}{#2}%
3660     }%
3661     {%
3662       \PackageError{glossaries-extra}{‘#1’ not recognised by
3663         \string\glsxtrp{}}%
3664     }%
3665   }%
3666 }

\@Glsxtrp
3667 \newrobustcmd*{\@Glsxtrp}[2]{%
3668   \ifcsdef{Gls#1}%
3669   {%
3670     \@@glsxtrp{Gls#1}{#2}%
3671   }%
3672   {%
3673     \ifcsdef{Glsxtr#1}%
3674     {%
3675       \@@glsxtrp{Glsxtr#1}{#2}%
3676     }%
3677     {%
3678       \PackageError{glossaries-extra}{‘#1’ not recognised by
3679         \string\Glsxtrp{}}%
3680     }%
3681   }%
3682 }

\@GLSxtrp
3683 \newrobustcmd*{\@GLSxtrp}[2]{%
3684   \ifcsdef{GLS#1}%
3685   {%
3686     \@@glsxtrp{GLS#1}{#2}%
3687   }%
3688   {%
3689     \ifcsdef{GLSxtr#1}%
3690     {%
3691       \@@glsxtrp{GLSxtr#1}{#2}%
3692     }%
3693     {%
3694       \PackageError{glossaries-extra}{‘#1’ not recognised by

```

```

3695      \string\GLSxtrp{}%
3696  }%
3697 }%
3698 }

\glsxtr@entry@p
3699 \newrobustcmd*\glsxtr@headentry@p[2]{%
3700   \glsifattribute{#1}{headuc}{true}%
3701   {%
3702     \mfirstucMakeUppercase{\gls@entry@field{#1}{#2}}%
3703   }%
3704   {%
3705     \gls@entry@field{#1}{#2}%
3706   }%
3707 }

\glsxtrp Not robust as it needs to expand somewhat.
3708 \ifdef\texorpdfstring
3709 {
3710   \newcommand{\glsxtrp}[2]{%
3711     \protect\NoCaseChange
3712     {%
3713       \protect\texorpdfstring
3714       {%
3715         \protect\glsxtrifinmark
3716         {%
3717           \ifcsdef{glsxtrhead#1}%
3718           {%
3719             \protect\csuse{glsxtrhead#1}{#2}}%
3720           }%
3721           {%
3722             \glsxtr@headentry@p{#2}{#1}}%
3723           }%
3724         }%
3725         {%
3726           \glsxtrp{#1}{#2}%
3727         }%
3728       }%
3729       {%
3730         \protect\gls@entry@field{#2}{#1}}%
3731       }%
3732     }%
3733   }
3734 }
3735 {
3736   \newcommand{\glsxtrp}[2]{%
3737     \protect\NoCaseChange
3738     {%
3739       \protect\glsxtrifinmark

```

```

3740     {%
3741         \ifcsdef{glsxtrhead#1}%
3742             {%
3743                 {\protect\csuse{glsxtrhead#1}}%
3744             }%
3745             {%
3746                 \glsxtr@headentry@p{#2}{#1}%
3747             }%
3748         }%
3749         {%
3750             {\glsxtrp{#1}{#2}}%
3751         }%
3752     }%
3753 }
3754 }
```

Provide short synonyms for the most common option.

```
\glsps
3755 \newcommand*{\glsps}{\glsxtrp{short}}
```

```
\glspt
3756 \newcommand*{\glspt}{\glsxtrp{text}}
```

\Glsxtrp As above but use first letter upper case (but not for the bookmarks, which can't process `\uppercase`).

```

3757 \ifdef\texorpdfstring
3758 {
3759     \newcommand{\Glsxtrp}[2]{%
3760         \protect\NoCaseChange
3761         {%
3762             \protect\texorpdfstring
3763             {%
3764                 \protect\glsxtrifinmark
3765             }%
3766             \ifcsdef{Glsxtrhead#1}%
3767                 {%
3768                     {\protect\csuse{Glsxtrhead#1}{#2}}%
3769                 }%
3770                 {%
3771                     \protect{@Gls@entry@field{#2}{#1}}%
3772                 }%
3773             }%
3774             {%
3775                 {\glsxtrp{#1}{#2}}%
3776             }%
3777         }%
3778         {%
3779             \protect{@gls@entry@field{#2}{#1}}%

```

```

3780      }%
3781    }%
3782  }
3783}%
3784{%
3785 \newcommand{\Glsxtrp}[2]{%
3786   \protect\NoCaseChange
3787   {%
3788     \protect\glsxtrifinmark
3789   {%
3790     \ifcsdef{Glsxtrhead#1}{%
3791       {%
3792         {\protect\csuse{Glsxtrhead#1}}%
3793       }%
3794       {%
3795         \protect{@Gls@entry@field{#2}{#1}}%
3796       }%
3797     }%
3798     {%
3799       {\@Glsxtrp{#1}{#2}}%
3800     }%
3801   }%
3802 }%
3803}%

```

\GLSxtrp As above but all upper case (but not for the bookmarks, which can't process \uppercase).

```

3804 \ifdef\texorpdfstring
3805 {%
3806   \newcommand{\GLSxtrp}[2]{%
3807     \protect\NoCaseChange
3808     {%
3809       \protect\texorpdfstring
3810     {%
3811       \protect\glsxtrifinmark
3812     {%
3813       \ifcsdef{GLSxtr#1}{%
3814         {%
3815           {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
3816         }%
3817         {%
3818           \protect\mfirstrucMakeUppercase
3819         {%
3820           \protect{@gls@entry@field{#2}{#1}}%
3821         }%
3822       }%
3823     }%
3824     {%
3825       {\@GLSxtrp{#1}{#2}}%
3826     }%

```

```

3827      }%
3828      {%
3829          \protect\@gls@entry@field{#2}{#1}%
3830      }%
3831  }%
3832 }
3833 }
3834 {
3835 \newcommand{\GLSxtrp}[2]{%
3836     \protect\NoCaseChange
3837     {%
3838         \protect\glsxtrifinmark
3839     {%
3840         \ifcsdef{GLSxtr#1}%
3841         {%
3842             {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
3843         }%
3844     {%
3845         \protect\mfirstucMakeUppercase
3846     {%
3847         \protect\@gls@entry@field{#2}{#1}%
3848     }%
3849 }%
3850 }%
3851 {%
3852     \@GLSxtrp{#1}{#2}%
3853 }%
3854 }%
3855 }
3856 }

```

1.3.5 Entry Counting

The (use) entry counting mechanism from glossaries is adjusted here to work with category attributes. Provide a convenient command to enable entry counting, set the `entrycount` attribute for given categories and redefine `\gls` etc to use `\cgls` instead. This form of entry counting is provided to adjust the formatting if the number of times an entry has been used (through commands that unset the first use flag) doesn't exceed the specified threshold. For link counting, see Section 1.4.

First adjust definitions of the unset and reset commands to provide a hook, but changing the flag can cause problems in certain situations, so to allow the normal unsetting to be temporarily disabled, `\@glsunset` is let to `\@glsxtr@unset`, which performs the actual unsetting through `\@glsunset` and then does the hook. This means that the unsetting (and the hook) can be switched off by redefining `\@glsunset` and then switched back on again by changing the definition back to `\@glsxtr@unset`.

```
\@glsxtr@unset Global unset.
3857 \newcommand*{\@glsxtr@unset}[1]{%
```

```
3858  \@@glsunset{#1}%
3859  \glsxtrpostunset{#1}%
3860 }%
```

\glsunset Global unset.

```
3861 \let\@glsunset\glsxtrunset
```

glsxtrpostunset

```
3862 \newcommand*\glsxtrpostunset[1]{}
```

Provide a command to store a list of labels that will need unsetting.

tUnsetBuffering

```
3863 \newcommand*\GlsXtrStartUnsetBuffering{%
3864  \@ifstar\s@GlsXtrStartUnsetBuffering\GlsXtrStartUnsetBuffering
3865 }
```

tUnsetBuffering Unstarred version doesn't check for duplicates.

```
3866 \newcommand*\@GlsXtrStartUnsetBuffering{%
3867  \let\@glsxtr@org@unset@buffer\glsxtrunset@buffer
3868  \def\@glsxtr@unset@buffer{}%
3869  \let\@glsunset\glsxtrbuffer@unset
3870 }
```

tUnsetBuffering Starred version checks for duplicates.

```
3871 \newcommand*\s@GlsXtrStartUnsetBuffering{%
3872  \let\@glsxtr@org@unset@buffer\glsxtrunset@buffer
3873  \def\@glsxtr@unset@buffer{}%
3874  \let\@glsunset\glsxtrbuffer@nodup@unset
3875 }
```

xtrbuffer@unset This must use a global change since \gls may have to be placed inside \mbox (for example, with soul commands).

```
3876 \newcommand*\@glsxtrbuffer@unset[1]{%
3877  \listxadd\glsxtrunset@buffer{#1}%
3878 }
```

fer@nodup@unset Alternative version that avoids duplicates. One level of expansion is performed on the argument in case it's a control sequence containing the label. (Not using \xifinlist as the added complexity might cause problems that the buffering is trying to overcome.)

```
3879 \newcommand*\@glsxtrbuffer@nodup@unset[1]{%
3880  \expandafter\ifinlist\expandafter{#1}{\glsxtrunset@buffer}{}%
3881  {\listxadd\glsxtrunset@buffer{#1}}%
3882 }
```

pUnsetBuffering

```
3883 \newcommand*\GlsXtrStopUnsetBuffering{%
3884  \@ifstar\s@GlsXtrStopUnsetBuffering\GlsXtrStopUnsetBuffering
3885 }
```

```

pUnsetBuffering Unstarred form (global unset).
3886 \newcommand*{\@GlsXtrStopUnsetBuffering}{%
3887   \let\glsunset@glsxtr@unset
3888   \forlistloop\glsunset@glsxtr@unset@buffer
3889   \let\glsxtr@unset@buffer\glsxtr@org@unset@buffer
3890 }

pUnsetBuffering Starred form (local unset).
3891 \newcommand*{\s@GlsXtrStopUnsetBuffering}{%
3892   \forlistloop\glslocalunset@glsxtr@unset@buffer
3893   \let\glsunset@glsxtr@unset
3894 }

dUnsetBuffering Discards pending buffer and restores \glsunset.
3895 \newcommand*{\GlsXtrDiscardUnsetBuffering}{%
3896   \let\glsunset@glsxtr@unset
3897   \let\glsxtr@unset@buffer\glsxtr@org@unset@buffer
3898 }

setBufferedList Iterate over labels stored in the current buffer. The argument is the handler macro.
3899 \newcommand*{\GlsXtrForUnsetBufferedList}[1]{%
3900   \forlistloop#1@glsxtr@unset@buffer
3901 }

\glslocalunset Local unset.
3902 \renewcommand*{\glslocalunset}[1]{%
3903   \@@glslocalunset{#1}%
3904   \glsxtrpostlocalunset{#1}%
3905 }%

rpostlocalunset
3906 \newcommand*{\glsxtrpostlocalunset}[1]{}}

\glsreset Global reset.
3907 \renewcommand*{\glsreset}[1]{%
3908   \@@glsreset{#1}%
3909   \glsxtrpostreset{#1}%
3910 }%

glsxtrpostreset
3911 \newcommand*{\glsxtrpostreset}[1]{}}

\glslocalreset Local reset.
3912 \renewcommand*{\glslocalreset}[1]{%
3913   \@@glslocalreset{#1}%
3914   \glsxtrpostlocalreset{#1}%
3915 }%

```

```
rpostlocalreset  
3916 \newcommand*{\glsxtrpostlocalreset}[1]{}
```

slocalreseteach Locally reset a list of entries.

```
3917 \newcommand*{\glslocalreseteach}[1]{%  
3918   \gls@ifnotmeasuring  
3919   {  
3920     \@for\@gls@thislabel:=#1\do{  
3921       \glsdoifexists{\@gls@thislabel}{%  
3922         {  
3923           \glslocalreset{\@gls@thislabel}{%  
3924         }%  
3925       }%  
3926     }%  
3927 }
```

slocalunseteach Locally unset a list of entries.

```
3928 \newcommand*{\glslocalunseteach}[1]{%  
3929   \gls@ifnotmeasuring  
3930   {  
3931     \@for\@gls@thislabel:=#1\do{  
3932       \glsdoifexists{\@gls@thislabel}{%  
3933         {  
3934           \glslocalunset{\@gls@thislabel}{%  
3935         }%  
3936       }%  
3937     }%  
3938 }
```

leEntryCounting The first argument is the list of categories and the second argument is the value of the entrycount attribute.

```
3939 \newcommand*{\GlsXtrEnableEntryCounting}[2]{%
```

 Enable entry counting:

```
3940   \glsenableentrycount
```

 Redefine \gls etc:

```
3941   \renewcommand*{\gls}{\cgls}{%  
3942   \renewcommand*{\Gls}{\cGls}{%  
3943   \renewcommand*{\glsp}{\cglspl}{%  
3944   \renewcommand*{\Glsp}{\cGlsp}{%  
3945   \renewcommand*{\GLS}{\cGLS}{%  
3946   \renewcommand*{\GLSp}{\cGLSp}{%
```

 Set the entrycount attribute:

```
3947   \@glsxtr@setentrycountunsetattr{#1}{#2}{%
```

 In case this command is used again:

```
3948   \let\GlsXtrEnableEntryCounting\@glsxtr@setentrycountunsetattr  
3949   \renewcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
```

```
3950  \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryUnitCounting\space
3951    can't be used with \string\GlsXtrEnableEntryCounting}%
3952  {Use one or other but not both commands}%
3953 }
```

ycountunsetattr

```
3954 \newcommand*{\@glsxtr@setentrycountunsetattr}[2]{%
3955   \@for\@glsxtr@cat:=#1\do
3956   {%
3957     \ifdefempty{\@glsxtr@cat}{%
3958     {%
3959       \glssetcategoryattribute{\@glsxtr@cat}{entrycount}{#2}%
3960     }%
3961   }%
3962 }
```

Redefine the entry counting commands to take into account the entrycount attribute.

enableentrycount

```
3963 \renewcommand*{\glsenableentrycount}{%
```

Enable new fields:

```
3964 \appto\@newglossaryentry@defcounters{\@newglossaryentry@defcounters}%
```

Just in case the user has switched on the docdef option.

```
3965 \renewcommand*{\gls@defdocnewglossaryentry}{%
3966   \renewcommand*\newglossaryentry[2]{%
3967     \PackageError{glossaries}{\string\newglossaryentry\space
3968       may only be used in the preamble when entry counting has
3969       been activated}{If you use \string\glsenableentrycount\space
3970       you must place all entry definitions in the preamble not in
3971       the document environment}%
3972   }%
3973 }
```

New commands to access new fields:

```
3974 \newcommand*{\glsentrycurrcount}[1]{%
3975   \ifcsundef{glo@\glsdetoklabel{##1}@currcount}%
3976   {0}{\@gls@entry@field{##1}{currcount}}%
3977 }%
3978 \newcommand*{\glsentryprevcount}[1]{%
3979   \ifcsundef{glo@\glsdetoklabel{##1}@prevcount}%
3980   {0}{\@gls@entry@field{##1}{prevcount}}%
3981 }
```

Adjust post unset and reset:

```
3982 \let\@glsxtr@entrycount@org@unset\glsxtrpostunset
3983 \renewcommand*{\glsxtrpostunset}[1]{%
3984   \@glsxtr@entrycount@org@unset{##1}%
3985   \@gls@increment@currcount{##1}%
3986 }
```

```

3987 \let\@glsxtr@entrycount@org@localunset\glsxtrpostlocalunset
3988 \renewcommand*{\glsxtrpostlocalunset}[1]{%
3989   \glsxtr@entrycount@org@localunset{##1}%
3990   \gls@local@increment@currcount{##1}%
3991 }%
3992 \let\@glsxtr@entrycount@org@reset\glsxtrpostreset
3993 \renewcommand*{\glsxtrpostreset}[1]{%
3994   \glsxtr@entrycount@org@reset{##1}%
3995   \csgdef{glo@\glsdetoklabel{##1}@currcount}{0}%
3996 }%
3997 \let\@glsxtr@entrycount@org@localreset\glsxtrpostlocalreset
3998 \renewcommand*{\glsxtrpostlocalreset}[1]{%
3999   \glsxtr@entrycount@org@localreset{##1}%
4000   \csdef{glo@\glsdetoklabel{##1}@currcount}{0}%
4001 }%

```

Modifications to take into account the attributes that govern whether the entry should be unset.

```

4002 \let\@cgls@\@@cgls@
4003 \let\@cglspl@\@@cglspl@
4004 \let\@cGls@\@@cGls@
4005 \let\@cGlspl@\@@cGlspl@
4006 \let\@cGLS@\@@cGLS@
4007 \let\@cGLSpl@\@@cGLSpl@

```

The rest is as the original definition.

```

4008 \AtEndDocument{\@gls@write@entrycounts}%
4009 \renewcommand*{\@gls@entry@count}[2]{%
4010   \csgdef{glo@\glsdetoklabel{##1}@prevcount}{##2}%
4011 }%
4012 \let\glseenableentrycount\relax
4013 \renewcommand*{\glseenableentryunitcount}{%
4014   \PackageError{glossaries-extra}{\string\glseenableentryunitcount\space
4015   can't be used with \string\glseenableentrycount}%
4016   {Use one or other but not both commands}%
4017 }%
4018 }

```

`ite@entrycounts` Modify this command so that it only writes the information for entries with the `entrycount` attribute and issue warning if no entries have this attribute set.

```

4019 \renewcommand*{\@gls@write@entrycounts}{%
4020   \immediate\write\auxout
4021   {\string\providetommand{\string\@gls@entry@count}[2]{}}
4022 \count@=0\relax
4023 \forallglsentries{\@glsentry}{%
4024   \glshasattribute{\@glsentry}{entrycount}%
4025   {%
4026     \ifglsused{\@glsentry}%
4027     {%

```

```

4028     \immediate\write\@auxout
4029     {\string\@gls@entry@count{\@glsentry}{\glsentrycurrcount{\@glsentry}}}%%
4030   }%
4031   {}%
4032   \advance\count@ by \cne
4033 }%
4034 {}%
4035 }%
4036 \ifnum\count@=0
4037   \GlossariesExtraWarning{Entry counting has been enabled
4038   \MessageBreak with \string\glsenableentrycount\space but the
4039   \MessageBreak attribute ‘entrycount’ hasn’t
4040   \MessageBreak been assigned to any of the defined
4041   \MessageBreak entries}%
4042 \fi
4043 }

```

rifcounttrigger

\glsxtrifcounttrigger{\label}{\triggerformat}{\normal}

```

4044 \newcommand*{\glsxtrifcounttrigger}[3]{%
4045   \glshasattribute{#1}{entrycount}%
4046   {%
4047     \ifnum\glsentryprevcount{#1}>\glsgetattribute{#1}{entrycount}\relax
4048       #3%
4049     \else
4050       #2%
4051     \fi
4052   }%
4053   {#3}%
4054 }

```

Actual internal definitions of \cglss used when entry counting is enabled.

```

\@@cglss@
4055 \def\@@cglss@#1#2[#3]{%
4056   \glsxtrifcounttrigger{#2}%
4057   {%
4058     \cglssformat{#2}{#3}%
4059     \glsunset{#2}%
4060   }%
4061   {%
4062     \cglss@{#1}{#2}{#3}%
4063   }%
4064 }%

```

```

\@@cglspl@
4065 \def\@@cglspl@#1#2[#3]{%
4066   \glsxtrifcounttrigger{#2}{%
4067     {%
4068       \cglsplformat{#2}{#3}{%
4069         \glsunset{#2}{%
4070       }{%
4071     {%
4072       \glspl@{#1}{#2}{#3}{%
4073     }{%
4074   }{%

```

```

\@@cGls@
4075 \def\@@cGls@#1#2[#3]{%
4076   \glsxtrifcounttrigger{#2}{%
4077     {%
4078       \cGlsformat{#2}{#3}{%
4079         \glsunset{#2}{%
4080       }{%
4081     {%
4082       \Gls@{#1}{#2}{#3}{%
4083     }{%
4084   }{%

```

```

\@@cGlsp@
4085 \def\@@cGlsp@#1#2[#3]{%
4086   \glsxtrifcounttrigger{#2}{%
4087     {%
4088       \cGlspformat{#2}{#3}{%
4089         \glsunset{#2}{%
4090       }{%
4091     {%
4092       \Glsp@{#1}{#2}{#3}{%
4093     }{%
4094   }{%

```

```

\@@cGLS@
4095 \def\@@cGLS@#1#2[#3]{%
4096   \glsxtrifcounttrigger{#2}{%
4097     {%
4098       \cGLSformat{#2}{#3}{%
4099         \glsunset{#2}{%
4100       }{%
4101     {%
4102       \GLS@{#1}{#2}{#3}{%
4103     }{%
4104   }{%

```

```
\@@cGLSp@
```

```

4105 \def\@cGLSpl@#1#2[#3]{%
4106   \glsxtrifcounttrigger{#2}%
4107   {%
4108     \cGLSplformat{#2}{#3}%
4109     \glsunset{#2}%
4110   }%
4111   {%
4112     \cGLSpl@{#1}{#2}[#3]%
4113   }%
4114 }%

```

Remove default warnings from `\cgl`s etc so that it can be used interchangeable with `\gls` etc.

```

\@cgl@
4115 \def\@cgl@#1#2[#3]{\@gls@{#1}{#2}[#3]}

\@cGls@
4116 \def\@cGls@#1#2[#3]{\@Gls@{#1}{#2}[#3]}

\@cglspl@
4117 \def\@cglspl@#1#2[#3]{\@glspl@{#1}{#2}[#3]}

\@cGlspl@
4118 \def\@cGlspl@#1#2[#3]{\@Glspl@{#1}{#2}[#3]}

```

Add all upper case versions not provided by glossaries.

```

\cGLS
4119 \newrobustcmd*\cGLS{\@gls@hyp@opt\@cGLS}

\@cGLS Defined the un-starred form. Need to determine if there is a final optional argument
4120 \newcommand*\@cGLS[2][]{%
4121   \new@ifnextchar[\@cGLS@{#1}{#2}]{\@cGLS@{#1}{#2}[]}{%
4122 }

\@cGLS@
4123 \def\@cGLS@#1#2[#3]{\@GLS@{#1}{#2}[#3]}

\cGLSformat Format used by \cGLS if entry only used once on previous run. The first argument is the label,
the second argument is the insert text.
4124 \newcommand*\cGLSformat[2]{%
4125   \expandafter\mfirstuc\expandafter{\cglformat{#1}{#2}}%
4126 }

\cGLSpl
4127 \newrobustcmd*\cGLSpl{\@gls@hyp@opt\@cGLSpl}

```

\@cGLSp1 Defined the un-starred form. Need to determine if there is a final optional argument

```
4128 \newcommand*\@cGLSp1[2] []{%
4129   \new@ifnextchar[\{\@cGLSp1@{\#1}{\#2}\}{\@cGLSp1@{\#1}{\#2}[] }%
4130 }
```

\@cGLSp1@

```
4131 \def\@cGLSp1@#1#2[#3]{\@cGLSp1@{\#1}{\#2} [#3]}
```

\cGLSp1format Format used by \cGLSp1 if entry only used once on previous run. The first argument is the label, the second argument is the insert text.

```
4132 \newcommand*\cGLSp1format[2] {%
4133   \expandafter\mfirstuc\expandafter{\cGLSp1format{\#1}{\#2}}%
4134 }
```

Modify the trigger formats to check for the regular attribute.

\cglspformat

```
4135 \renewcommand*\cglspformat[2] {%
4136   \glsifregular{\#1}
4137   {\glsentryfirst{\#1}}%
4138   {\ifglshaslong{\#1}{\glsentrylong{\#1}}{\glsentryfirst{\#1}}}#2%
4139 }
```

\cGlsformat

```
4140 \renewcommand*\cGlsformat[2] {%
4141   \glsifregular{\#1}
4142   {\Glsentryfirst{\#1}}%
4143   {\ifglshaslong{\#1}{\Glsentrylong{\#1}}{\Glsentryfirst{\#1}}}#2%
4144 }
```

\cglspformat

```
4145 \renewcommand*\cglspformat[2] {%
4146   \glsifregular{\#1}
4147   {\glsentryfirstplural{\#1}}%
4148   {\ifglshaslong{\#1}{\glsentrylongpl{\#1}}{\glsentryfirstplural{\#1}}}#2%
4149 }
```

\cGlsplformat

```
4150 \renewcommand*\cGlsplformat[2] {%
4151   \glsifregular{\#1}
4152   {\Glsentryfirstplural{\#1}}%
4153   {\ifglshaslong{\#1}{\Glsentrylongpl{\#1}}{\Glsentryfirstplural{\#1}}}#2%
4154 }
```

New code similar to above for unit counting.

defunitcounters

```
4155 \newcommand*\@newglossaryentry@defunitcounters{%
```

```

4156 \protected@edef{\glo@countunit{\csuse{\glsxtr@categoryattr@{\glo@category \unitcount}}}}
4157 \ifdefvoid{\glo@countunit}
4158 {}%
4159 {}%
4160 \glsxtr@ifunitcounter{\glo@countunit}%
4161 {}%
4162 {\expandafter\glsxtr@addunitcounter\expandafter{\glo@countunit}}%
4163 {}%
4164 }

r@unitcountlist List to keep track of which counters are being used by the entry unit count facility.
4165 \newcommand*{\glsxtr@unitcountlist}{}

@addunitcounter
4166 \newcommand*{\glsxtr@addunitcounter}[1]{%
4167 \listadd{\glsxtr@unitcountlist}{#1}%
4168 \ifcsundef{\glsxtr@theunit@#1}
4169 {}%
4170 \ifcsdef{\theH#1}%
4171 {\csdef{\glsxtr@theunit@#1}{\csuse{\theH#1}}}% 
4172 {\csdef{\glsxtr@theunit@#1}{\csuse{\the#1}}}% 
4173 }%
4174 {}%
4175 }

r@ifunitcounter
4176 \newcommand*{\glsxtr@ifunitcounter}[3]{%
4177 \xifinlist{#1}{\glsxtr@unitcountlist}{#2}{#3}}%
4178 }

urrentunitcount
4179 \newcommand*{\glsxtr@currentunitcount}[1]{%
4180 \glo@glstoklabel{#1}@currunit@\glsgetattribute{#1}{unitcount}.%
4181 \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
4182 }

eviousunitcount
4183 \newcommand*{\glsxtr@previousunitcount}[1]{%
4184 \glo@glstoklabel{#1}@prevunit@\glsgetattribute{#1}{unitcount}.%
4185 \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
4186 }

t@currunitcount
4187 \newcommand*{\gls@increment@currunitcount}[1]{%
4188 \glshasattribute{#1}{unitcount}}%
4189 {}%
4190 \protected@edef{\glsxtr@csname{\glsxtr@currentunitcount{#1}}}{%
4191 \ifcsundef{\glsxtr@csname}}%

```

```

4192  {%
4193    \csgdef{\@glsxtr@csname}{1}%
4194    \listcsxadd
4195    {\glo@\glsdetoklabel{#1}@unitlist}%
4196    {\glsgetattribute{#1}{unitcount}.%
4197     \csuse{glsxtr@theunit@glsgetattribute{#1}{unitcount}}%}
4198   }%
4199 }%
4200 {%
4201   \csxdef{\@glsxtr@csname}%
4202   {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
4203 }%
4204 }%
4205 {}%
4206 }

t@currunitcount
4207 \newcommand*{\@gls@local@increment@currunitcount}[1]{%
4208   \glshasattribute{#1}{unitcount}%
4209   {%
4210     \protected@edef{\glsxtr@currentunitcount{#1}}{%
4211       \ifcsundef{\@glsxtr@csname}%
4212       {%
4213         \csdef{\@glsxtr@csname}{1}%
4214         \listcseadd
4215         {\glo@\glsdetoklabel{#1}@unitlist}%
4216         {\glsgetattribute{#1}{unitcount}.%
4217          \csuse{glsxtr@theunit@glsgetattribute{#1}{unitcount}}%}
4218        }%
4219      }%
4220      {%
4221        \csedef{\@glsxtr@csname}%
4222        {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
4223      }%
4224    }%
4225  {}%
4226 }

r@currunitcount
4227 \newcommand*{\@glsxtr@currunitcount}[2]{%
4228   \ifcsundef
4229   {\glo@\glsdetoklabel{#1}@currunit@#2}%
4230   {0}%
4231   {\csuse{\glo@\glsdetoklabel{#1}@currunit@#2}}%
4232 }%

r@prevunitcount
4233 \newcommand*{\@glsxtr@prevunitcount}[2]{%
4234   \ifcsundef

```

```

4235 {glo@\glsdetoklabel{#1}@prevunit@#2}%
4236 {0}%
4237 {\csuse{glo@\glsdetoklabel{#1}@prevunit@#2}}%
4238 }%


entryunitcount
4239 \newcommand*{\glsenableentryunitcount}{%
    Enable new fields:
4240 \appto{@newglossaryentry@defcounters{\@newglossaryentry@defunitcounters}}%
    Just in case the user has switched on the docdef option.
4241 \renewcommand*{\gls@defdocnewglossaryentry}{%
4242     \renewcommand*\newglossaryentry[2]{%
4243         \PackageError{glossaries}{\string\newglossaryentry\space
4244             may only be used in the preamble when entry counting has
4245             been activated}{If you use \string\glsenableentryunitcount\space
4246             you must place all entry definitions in the preamble not in
4247             the document environment}%
4248 }%
4249 }%


New commands to access new fields:
4250 \newcommand*{\glsentrycurrcount}[1]{%
4251     \@glsxtr@currunitcount{##1}{\glsgetattribute{##1}{unitcount}.%
4252     \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
4253 }%
4254 \newcommand*{\glsentryprevcount}[1]{%
4255     \@glsxtr@prevunitcount{##1}{\glsgetattribute{##1}{unitcount}.%
4256     \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
4257 }%


Access total count:
4258 \newcommand*{\glsentryprevtotalcount}[1]{%
4259     \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
4260     {0}%
4261     {%
4262         \number\csuse{glo@\glsdetoklabel{##1}@prevunittotal}%
4263     }%
4264 }%


Access max value:
4265 \newcommand*{\glsentryprevmaxcount}[1]{%
4266     \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
4267     {0}%
4268     {%
4269         \number\csuse{glo@\glsdetoklabel{##1}@prevunitmax}%
4270     }%
4271 }%


Adjust post unset and reset:
4272 \let@glsxtr@entryunitcount@org@unset\glsxtrpostunset

```

```

4273 \renewcommand*{\glsxtrpostunset}[1]{%
4274   \@glsxtr@entryunitcount@org@unset{##1}%
4275   \@gls@increment@currunitcount{##1}%
4276 }%
4277 \let\@glsxtr@entryunitcount@org@localunset\glsxtrpostlocalunset
4278 \renewcommand*{\glsxtrpostlocalunset}[1]{%
4279   \@glsxtr@entryunitcount@org@localunset{##1}%
4280   \@gls@local@increment@currunitcount{##1}%
4281 }%
4282 \let\@glsxtr@entryunitcount@org@reset\glsxtrpostreset
4283 \renewcommand*{\glsxtrpostreset}[1]{%
4284   \glshasattribute{##1}{unitcount}%
4285 }%

4286   \protected@edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
4287   \ifcsundef{\@glsxtr@csname}%
4288   {}%
4289   {\csgdef{\@glsxtr@csname}{0}}%
4290 }%
4291 {}%
4292 }%
4293 \let\@glsxtr@entryunitcount@org@localreset\glsxtrpostlocalreset
4294 \renewcommand*{\glsxtrpostlocalreset}[1]{%
4295   \@glsxtr@entryunitcount@org@localreset{##1}%
4296   \glshasattribute{##1}{unitcount}%
4297 }%

4298   \protected@edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
4299   \ifcsundef{\@glsxtr@csname}%
4300   {}%
4301   {\csgdef{\@glsxtr@csname}{0}}%
4302 }%
4303 {}%
4304 }%

```

Modifications to take into account the attributes that govern whether the entry should be unset.

```

4305 \let\@cgls@\@@cgls@
4306 \let\@cglspl@\@@cglspl@

4307 \let\@cGls@\@@cGls@
4308 \let\@cGlspl@\@@cGlspl@
4309 \let\@cGLS@\@@cGLS@
4310 \let\@cGLSpl@\@@cGLSpl@

```

Write information to the aux file.

```

4311 \AtEndDocument{\@gls@write@entryunitcounts}%
4312 \renewcommand*{\@gls@entry@unitcount}[3]{%
4313   \csgdef{glo@\glsdetoklabel{##1}@prevunit@##3}{##2}%
4314   \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%

```

```

4315   {\csgdef{glo@\glsdetoklabel{##1}@prevunittotal}{##2}}%
4316   {%
4317     \csxdef{glo@\glsdetoklabel{##1}@prevunittotal}{%
4318       \number\numexpr\csuse{glo@\glsdetoklabel{##1}@prevunittotal}+##2}%
4319     }%
4320     \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
4321     {\csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}}%
4322     {%
4323       \ifnum\csuse{glo@\glsdetoklabel{##1}@prevunitmax}<##2
4324         \csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}%
4325       \fi
4326     }%
4327   }%
4328   \let\glsenableentryunitcount\relax
4329   \renewcommand*{\glsenableentrycount}{%
4330     \PackageError{glossaries-extra}{\string\glsenableentrycount\space
4331       can't be used with \string\glsenableentryunitcount}%
4332       {Use one or other but not both commands}%
4333   }%
4334 }
4335 @onlypreamble\glsenableentryunitcount

entry@unitcount
4336 \newcommand*{\@gls@entry@unitcount}[3]{}

entryunitcounts@do
4337 \newcommand*{\@gls@write@entryunitcounts@do}[1]{%
4338   \immediate\write\auxout
4339   {\string\@gls@entry@unitcount
4340     {\@glsentry}\%
4341     {\@glsxtr@currunitcount{\@glsentry}{#1}}%
4342   }%
4343   {#1}\}%
4344 }

entryunitcounts
4345 \newcommand*{\@gls@write@entryunitcounts}{%
4346   \immediate\write\auxout
4347   {\string\providecommand*{\string\@gls@entry@unitcount}[3]{} }%
4348   \count@=0\relax
4349   \forallglsentries{\@glsentry}{%
4350     \glshasattribute{\@glsentry}{unitcount}\%
4351     {%
4352       \ifglsused{\@glsentry}\%
4353       {%
4354         \forlistcsloop
4355           {\@gls@write@entryunitcounts@do}%
4356           {glo@\glsdetoklabel{\@glsentry}@unitlist}\%
4357       }%

```

```

4358     {}%
4359     \advance\count@ by \cne
4360   }%
4361   {}%
4362 }%
4363 \ifnum\count@=0
4364   \GlossariesExtraWarningNoLine{Entry counting has been enabled
4365     \MessageBreak with \string\glsenableentryunitcount\space but the
4366     \MessageBreak attribute ‘unitcount’ hasn’t
4367     \MessageBreak been assigned to any of the defined
4368     \MessageBreak entries}%
4369 \fi
4370 }

```

`tryUnitCounting` The first argument is the list of categories, the second argument is the value of the `entrycount` attribute and the third is the counter name.

```
4371 \newcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
```

Enable entry counting:

```
4372   \glsenableentryunitcount
```

Redefine `\gls` etc:

```

4373   \renewcommand*{\gls}{\cgls}%
4374   \renewcommand*{\Gls}{\cGls}%
4375   \renewcommand*{\glspol}{\cgglspol}%
4376   \renewcommand*{\Glspol}{\cGlspol}%
4377   \renewcommand*{\GLS}{\cGLS}%
4378   \renewcommand*{\GLSpol}{\cGLSpol}%

```

Set the `entrycount` attribute:

```
4379   \glsxtr@setentryunitcountunsetattr{#1}{#2}{#3}%
```

In case this command is used again:

```

4380   \let\GlsXtrEnableEntryUnitCounting\glsxtr@setentryunitcountunsetattr
4381   \renewcommand*{\GlsXtrEnableEntryCounting}[2]{%
4382     \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryCounting\space
4383       can’t be used with \string\GlsXtrEnableEntryUnitCounting}%
4384     {Use one or other but not both commands}}%
4385 }
```

`tcountunsetattr`

```

4386 \newcommand*{\glsxtr@setentryunitcountunsetattr}[3]{%
4387   @for\glsxtr@cat:=#1\do
4388   {}%
4389   \ifdefempty{\glsxtr@cat}{}%
4390   {}%
4391   \glssetcategoryattribute{\glsxtr@cat}{entrycount}{#2}%
4392   \glssetcategoryattribute{\glsxtr@cat}{unitcount}{#3}%
4393   {}%
4394 }%
4395 }
```

1.3.6 Acronym Modifications

It's more consistent to use the abbreviation code for acronyms, but make some adjustments to allow for continued use of the glossaries package's custom acronym format. (For example, user may already have defined some acronym styles with `\newacronymstyle` which they would like to continue to use.) The original glossaries acronym code can be restored with `\RestoreAcronyms`, but adjust `\SetGenericNewAcronym` so that `\newacronym` adds the category.

genericNewAcronym

```
4396 \renewcommand*{\SetGenericNewAcronym}{%
    Make sure \RestoreAcronyms has been used.
4397     \ifdefequal{\@addtoacronymlists}{\glsxtr@org}{\@addtoacronymlists}{}%
4398     {}%
4399     {}%
4400     \GlossariesWarning{\string\SetGenericNewAcronym\space used
4401         without restoring base acronym functions with
4402         \string\RestoreAcronyms}%
4403 }%
4404 \let\@Gls@entryname\@Gls@acrentryname

    Redefine \newacronym:
4405 \renewcommand{\newacronym}[4][]{%
4406     \ifdefempty{\@glsacronymlists}{%
4407         {}%
4408         \def\@glo@type{\acronymtype}%
4409         \setkeys{glossentry}{##1}%
4410         \DeclareAcronymList{\@glo@type}%
4411     }%
4412     {}%
4413     \glskeylisttok{##1}%
4414     \glslabeltok{##2}%
4415     \glsshorttok{##3}%
4416     \glslongtok{##4}%
4417     \newacronymhook
4418     \protected@edef\@do@newglossaryentry{%
4419         \noexpand\newglossaryentry{\the\glslabeltok}%
4420     }%
4421         type=\acronymtype,%
4422         name={\expandonce{\acronymentry{##2}}},%
4423         sort={\acronymsort{\the\glsshorttok}{\the\glslongtok}},%
4424         text={\the\glsshorttok},%
4425         short={\the\glsshorttok},%
4426         shortplural={\the\glsshorttok\noexpand\acrpluralsuffix},%
4427         long={\the\glslongtok},%
4428         longplural={\the\glslongtok\noexpand\acrpluralsuffix},%
4429         category=acronym,
4430         \GenericAcronymFields,%
4431         \the\glskeylisttok
```

```

4432      }%
4433      }%
4434      \do@newglossaryentry
4435      }%
4436      \renewcommand*{\acrfullfmt}[3]{%
4437          \glslink[##1]{##2}{\genacrfullformat{##2}{##3}}}%%
4438      \renewcommand*{\Acrfullfmt}[3]{%
4439          \glslink[##1]{##2}{\Genacrfullformat{##2}{##3}}}%%
4440      \renewcommand*{\ACRfullfmt}[3]{%
4441          \glslink[##1]{##2}{%
4442              \mfirstucMakeUppercase{\genacrfullformat{##2}{##3}}}}%
4443      \renewcommand*{\acrfullplfmt}[3]{%
4444          \glslink[##1]{##2}{\genplacrfullformat{##2}{##3}}}}%
4445      \renewcommand*{\Acrfullplfmt}[3]{%
4446          \glslink[##1]{##2}{\Genplacrfullformat{##2}{##3}}}}%
4447      \renewcommand*{\ACRfullplfmt}[3]{%
4448          \glslink[##1]{##2}{%
4449              \mfirstucMakeUppercase{\genplacrfullformat{##2}{##3}}}}}}%
4450      \renewcommand*{\glsentryfull}[1]{\genacrfullformat{##1}{}}}}%
4451      \renewcommand*{\Glsentryfull}[1]{\Genacrfullformat{##1}{}}}}%
4452      \renewcommand*{\glsentryfullpl}[1]{\genplacrfullformat{##1}{}}}}%
4453      \renewcommand*{\Glsentryfullpl}[1]{\Genplacrfullformat{##1}{}}}}%
4454 }

```

This will cause a problem for glossaries that contain a mixture of acronyms and abbreviations, so redefine `\newacronym` to use the new abbreviation interface.

First save the original definitions:

```

4455 \let\@glsxtr@org@setacronymstyle\setacronymstyle
4456 \let\@glsxtr@org@newacronymstyle\newacronymstyle

```

Save the list of acronyms in case they are required.

```

tr@acronymlists
4457 \let\@glsxtr@acronymlists\@glsacronymlists

dtoacronymlists
4458 \let\@glsxtr@org@addtoacronymlists\@addtoacronymlists

setacronymlists
4459 \let\@glsxtr@org@setacronymlists\SetAcronymLists

```

Need to provide a replacement for `\forallacronyms` since `\@glsacronymlists` isn't available.

```

lsxtr@abbrlists
4460 \newcommand{\@glsxtr@abbrlists}{}}

breviationlists
4461 \newcommand*{\forallabbreviationlists}[2]{%

```

```

4462  \@for#1:=\@glsxstr@abbrlists\do{\ifdefempty{#1}{}{#2}}%
4463 }

bbreivationlist
4464 \newcommand*\@glsxstr@addabbreviationlist}[1]{%
4465   \protected@edef\@glo@type{#1}%
4466   \ifdefempty\@glsxstr@abbrlists
4467   {\let\@glsxstr@abbrlists\@glo@type}%
4468   {%
4469     \ifdefequal\@glsxstr@abbrlists\@glo@type
4470     {}%
4471     {%
4472       \expandafter\DTLifinlist\expandafter{\@glo@type}{\@glsxstr@abbrlists}{}%
4473       {\protected@appto\@glsxstr@abbrlists{,\@glo@type}}%
4474     }%
4475   }%
4476 }

```

\forallacronyms Modify to add warning.

```

4477 \renewcommand*\forallacronyms}[2]{%
4478   \glsxstr@base@acrcmd\forallacronyms\forallabbreviationlists
4479   \@for#1:=\glsacronymlists\do{\ifx#1\empty\else#2\fi}%
4480 }

```

msAbbreviations Make acronyms use the same interface as abbreviations. Note that \newacronymstyle has a different implementation to \newabbreviationstyle so disable \newacronymstyle and \setacronymstyle.

```
4481 \newcommand*\MakeAcronymsAbbreviations}{%
```

Undo acronym display style:

```

4482  \@for\@gls@type:=\glsacronymlists\do{%
4483    \csgdef{\gls@\@gls@type}{\entryfmt}{\glsentryfmt}%
4484  }%

```

Save and clear acronym list.

```

4485  \let\@glsxstr@acronymlists\glsacronymlists
4486  \let\@glsacronymlists\empty
4487  \let\@addtoacronymlists\gobble
4488  \let\SetAcronymLists\gobble

```

Warn if \acrshort etc are used.

```
4489  \let\@glsxstr@base@acrcmd\@glsxstr@base@acrcmd@warn
```

Redefine \newacronym to use same interface as \newabbreviation.

```

4490  \renewcommand*\newacronym}[4][]{%
4491    \glsxstr@newabbreviation{type=\acronymtype,category=acronym,##1}{##2}{##3}{##4}%
4492  }%
4493  \renewcommand*\firstacronymfont}[1]{\glsfirstabbrvfont{##1}}%
4494  \renewcommand*\acronymfont}[1]{\glsabbrvfont{##1}}%

```

```

4495 \renewcommand*{\setacronymstyle}[1]{%
4496   \PackageError{glossaries-extra}{\string\setacronymstyle{##1}%
4497   unavailable.
4498   Use \string\setabbreviationstyle[acronym]\space instead.
4499   The original acronym interface can be restored with
4500   \string\RestoreAcronyms{}%
4501 }%
4502 \renewcommand*{\newacronymstyle}[1]{%
4503   \GlossariesExtraWarning{New acronym style ‘##1’ won’t be
4504   available unless you restore the original acronym interface with
4505   \string\RestoreAcronyms}%
4506   \@glsxtr@org@newacronymstyle{##1}%
4507 }%
4508 }

```

Switch acronyms to abbreviations:

```
4509 \MakeAcronymsAbbreviations
```

`RestoreAcronyms` Restore acronyms to glossaries interface.

```
4510 \newcommand*{\RestoreAcronyms}{%
```

Restore acronym list.

```

4511 \let@\glsacronymlists@glsxtr@acronymlists
4512 \let@\addtoacronymlists@glsxtr@org@addtoacronymlists
4513 \let\SetAcronymLists@glsxtr@org@setacronymlists

```

Suppress warnings if `\acrshort` etc are used.

```
4514 \let@\glsxtr@base@acrcmd@gobbletwo
```

Restore acronym display style:

```

4515 \cfor@\gls@type:=\glsacronymlists\do{%
4516   \SetDefaultAcronymDisplayStyle{\gls@type}%
4517 }%

```

Switch to the generic acronym mechanism.

```

4518 \SetGenericNewAcronym
4519 \renewcommand{\firstacronymfont}[1]{\acronymfont{##1}}%
4520 \renewcommand{\acronymfont}[1]{##1}%
4521 \let\setacronymstyle@glsxtr@org@setacronymstyle
4522 \let\newacronymstyle@glsxtr@org@newacronymstyle

```

Need to restore the original definition of `\gls@link@checkfirsthyper` but `\glsxtrifwasfirstuse` still needs setting for the benefit of the post-link hook.

```

4523 \renewcommand*{\gls@link@checkfirsthyper}{%
4524   \ifglsused{\glslabel}%
4525   {\let\glsxtrifwasfirstuse@secondoftwo}%
4526   {\let\glsxtrifwasfirstuse@firstoftwo}%
4527   \glsxtr@org@checkfirsthyper
4528 }%
4529 \glssetcategoryattribute{acronym}{regular}{false}%
4530 \setacronymstyle{long-short}%
4531 }

```

\glsacspace Allow the user to customise the maximum value.

```
4532 \renewcommand*{\glsacspace}[1]{%
4533   \settowidth{\dimen@}{(\firstacronymfont{\glsentryshort{#1}})}%
4534   \ifdim\dimen@<\glsacspacemax\else\space\fi
4535 }
```

\glsacspacemax Value used in the above.

```
4536 \newcommand*{\glsacspacemax}{3em}
```

1.3.7 Indexing and Displaying Glossaries

From time-to-time users ask if they can have one glossary sorted normally and another sorted by definition or usage. With the base glossaries package this can only be achieved with the “noidx” commands (Option 1). This is an attempt to mix and match.

First we need a list of the glossaries that require `makeindex/xindy`.

r@reg@glosslist

```
4537 \newcommand*{\@glsxtr@reg@glosslist}{}%
```

Save the original definition of `\makeglossaries`:

```
4538 \let\@glsxtr@org\makeglossaries\makeglossaries
```

`noprintglossary` This command was only introduced to glossaries v4.47 so it may not be defined.

```
4539 \providecommand{\makeglossaries@warn@noprintglossary}{%
4540   \ifdefstring{\@glo@types}{,}{%
4541     {%
4542       \GlossariesWarningNoLine{No glossaries have been defined}%
4543     }%
4544     {%
4545       \GlossariesWarningNoLine{No \string\printglossary\space
4546         or \string\printglossaries\space
4547         found. ^J(Remove \string\makeglossaries\space if you
4548         don't want any glossaries.) ^JThis document will not
4549         have a glossary}%
4550     }%
4551   }%
```

`omakeglossaries` glossaries v4.45 introduced `\@domakeglossaries` to provide a way of disabling `\makeglossaries`.

If it hasn't been defined, define here to do its argument:

```
4552 \providecommand{\@domakeglossaries}[1]{#1}
```

Redefine `\makeglossaries` to take an optional argument. This should be empty for the usual behaviour (all glossaries need processing with an indexing application) or a comma-separated list of glossary labels indicating those glossaries that should be processed with an indexing application. The optional argument version shouldn't be used with record.

```

\makeglossaries

4553 \renewcommand*\makeglossaries[1] []{%
4554   \odomakeglossaries
4555   {%
4556     \glsxtr@if@record@only
4557     {%
4558       \PackageError{glossaries-extra}{\string\makeglossaries\space
4559         not permitted\MessageBreak with record=\glsxtr@record@setting\space
4560         package option}%
4561       {You may only use \string\makeglossaries\space with
4562         record=off or record=hybrid options}%
4563     }%
4564     {%
4565       \ifblank{#1}%
4566       {%
4567         \glsxtr@org@makeglossaries
4568         \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
4569           \let\warn@noprintglossary\glsxtr@warn@hybrid@noprintgloss
4570           \fi
4571       }%
4572     }%
4573     \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
4574       \PackageError{glossaries-extra}{\string\makeglossaries[#1]\space
4575         not permitted\MessageBreak with record=\glsxtr@record@setting\space package option}%
4576       {You may only use the hybrid \string\makeglossaries[...]\space with
4577         record=off option}%
4578   \else
4579     \ifdef@\gls@automake@immediate{\gls@automake@immediate}{}%
4580     \protected@edef\glsxtr@reg@glosslist{#1}%
4581     \ifundef{\glswrite}{\newwrite\glswrite}{}%
4582     \protected@write\auxout{}{\string\providecommand
4583       \string@glsorder[1]{}}
4584     \protected@write\auxout{}{\string\providecommand
4585       \string@cistfilename[1]{}}
4586     \protected@write\auxout{}{\string\@cistfilename{\cistfilename}}%
4587     \protected@write\auxout{}{\string\@glsorder{\glsorder}}
4588     \protected@write\auxout{}{\string\glsxtr@makeglossaries{#1}}
4589     \write\auxout{\string\providecommand\string@gls@reference[3]}%
4590   \for@\glo@type:=#1\do{%
4591     \ifempty{@glo@type}{}{\makeglossary{@glo@type}}%
4592   }%
4593   \renewcommand*\newglossary[4] []{%
4594     \PackageError{glossaries}{New glossaries

```

Iterate through each supplied glossary type and activate it.

```

4590   \for@\glo@type:=#1\do{%
4591     \ifempty{@glo@type}{}{\makeglossary{@glo@type}}%
4592   }%
4593   \renewcommand*\newglossary[4] []{%
4594     \PackageError{glossaries}{New glossaries

```

New glossaries must be created before \makeglossaries:

```

4593   \renewcommand*\newglossary[4] []{%
4594     \PackageError{glossaries}{New glossaries

```

```

4595      must be created before \string\makeglossaries}{You need
4596      to move \string\makeglossaries\space after all your
4597      \string\newglossary\space commands}}%

```

Any subsequence instances of this command should have no effect.

```

4598      \let\@makeglossary\@gobble

```

Version 1.42 removed letting \makeglossary to \relax (no kernel redefs may be in effect).

```

4599      \renewcommand\makeglossaries[1] [] {}%

```

Disable all commands that have no effect after \makeglossaries

```

4600      \disable@onlypremakeg

```

Allow see key:

```

4601      \let\gls@checkseeallowed\relax

```

Adjust \do@seeglossary. This needs to check for the entry's existence but don't increment associated counter.

```

4602      \renewcommand*\@do@seeglossary}[2]{%
4603          \glsdoifexists{##1}%
4604          {%
4605              \protected@edef\@gls@label{\glsdetoklabel{##1}}%
4606              \protected@edef\@gls@type{\csname glo@\@gls@label @type\endcsname}%
4607              \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
4608              {\@glsxtr@org@doseeglossary{##1}{##2}}%
4609              {%
4610                  \@@glsxtrwrglossmark
4611                  \protected@write\@auxout{}{%
4612                      \string\@gls@reference
4613                      {\gls@type}{\@gls@label}{\string\glsseeformat##2{}}%
4614                  }%
4615              }%
4616          }%
4617      }%

```

Adjust \@@do@@wrglossary

```

4618      \let\@glsxtr@@do@@wrglossary\@@do@@wrglossary
4619      \def\@@do@@wrglossary{%
4620          \protected@edef\@gls@type{\csname glo@\@gls@label @type\endcsname}%
4621          \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
4622          {\@glsxtr@@do@@wrglossary}%
4623          {\gls@noidxglossary}%
4624      }%

```

Suppress warning about no \makeglossaries

```

4625      \let\warn@nomakeglossaries\relax
4626      \let\warn@noprintglossary\@makeglossaries@warn@noprintglossary

```

Only warn for glossaries not listed.

```

4627      \renewcommand{\@gls@noref@warn}[1]{%

```

```

4628 \protected@edef{\gls[type={##1}]{%
4629 \expandafter\DTLifinlist\expandafter{\gls[type]{\glsxtr@reg@glosslist}}{%
4630 {%
4631   \GlossariesExtraWarning{Can't use
4632     \string\printnoidxglossary[type={\gls[type]}]
4633     when '\gls[type]' is listed in the optional argument of
4634     \string\makeglossaries}{%
4635   }%
4636   {%
4637     \GlossariesWarning{Empty glossary for
4638       \string\printnoidxglossary[type={##1}].
4639       Rerun may be required (or you may have forgotten to use
4640       commands like \string\gls){%
4641     }%
4642   }%

```

Adjust display number list to check for type:

```

4643 \renewcommand*{\glsdisplaynumberlist}[1]{%
4644   \expandafter\DTLifinlist\expandafter{\##1}{\glsxtr@reg@glosslist}{%
4645     {\glsxtr@idx@displaynumberlist{##1}}{%
4646       {\glsxtr@noidx@displaynumberlist{##1}}{%
4647     }%

```

Adjust entry list:

```

4648 \renewcommand*{\glsentrynumberlist}[1]{%
4649   \expandafter\DTLifinlist\expandafter{\##1}{\glsxtr@reg@glosslist}{%
4650     {\glsxtr@idx@entrynumberlist{##1}}{%
4651       {\glsxtr@noidx@entrynumberlist{##1}}{%
4652     }%

```

Adjust number list loop

```

4653 \renewcommand*{\glsnumberlistloop}[2]{%
4654   \expandafter\DTLifinlist\expandafter{\##1}{\glsxtr@reg@glosslist}{%
4655   {%
4656     \PackageError{glossaries-extra}{\string\glsnumberlistloop\space
4657       not available for glossary '#1'}{}{%
4658   }%
4659   {\glsxtr@noidx@numberlistloop{##1}{##2}}{%
4660   }%

```

Only sanitize sort for normal indexing glossaries.

```

4661 \renewcommand*{\glsprestandardsort}[3]{%
4662   \expandafter\DTLifinlist\expandafter{\##2}{\glsxtr@reg@glosslist}{%
4663   {%
4664     \glsdosanitizesort
4665   }%
4666   {%
4667     \ifglssanitizesort
4668       \gls@noidx@sanitizesort
4669     \else
4670       \gls@noidx@nosanitizesort

```

```

4671           \fi
4672       }%
4673   }%

```

Unlike `\makenoidxglossaries` we can't automatically set `sanitizesort=false`. All entries must be defined in the preamble.

```

4674   \renewcommand*\new@glossaryentry[2]{%
4675     \PackageError{glossaries-extra}{Glossary entries must be defined
4676     in the preamble\MessageBreak when you use the optional argument
4677     of \string\makeglossaries}{Either move your definitions to the
4678     preamble or don't use the optional argument of
4679     \string\makeglossaries}%
4680   }%

```

Only activate sort key for glossaries that aren't listed in #1 (glossary label is stored in `\@glo@type` but this defaults to `\glsdefaulttype` so some expansion is required).

```

4681   \let\@glo@assign@sortkey\@glsxtr@mixed@assign@sortkey
4682   \renewcommand*{\@printgloss@setsort}{%

```

Need to extract just the type value.

```

4683   \expandafter\@glsxtr@gettype\expandafter,\@glsxtr@printglossopts,%
4684     type=\glsdefaulttype,\@end@glsxtr@gettype
4685   \def\@glo@sorttype{\@glo@default@sorttype}%
4686 }%

```

Check automake setting:

```

4687   \ifglsautomake
4688     \renewcommand*{\@gls@doautomake}{%
4689       \@for\@gls@type:=\@glsxtr@reg@glosslist\do{%
4690         \ifdefempty{\@gls@type}{}{\@gls@automake{\@gls@type}}%
4691       }%
4692     }%
4693   \fi

```

Check the sort setting (glossaries v4.30 onwards):

```

4694   \ifdef{\@glo@check@sortallowed}{\@glo@check@sortallowed\makeglossaries}{}%
4695   \fi
4696 }%
4697 }%
4698 }%
4699 }%

```

The optional argument version of `\makeglossaries` needs an adjustment to `\@printglossary` to allow `\@glo@assign@sortkey` to pick up the glossary type.

Earlier versions of `glossaries-extra` simply saved the original version of `\@printglossary` with `\let \glsxtr@orgprintglossary`. This was later changed to actually defining `\glsxtr@orgprintglossary` to something similar with some alterations to allow for ignored glossaries, which don't have an associated title and to by-pass the existence check with `\ifglossaryexists` which doesn't recognise ignored glossaries. (`bib2gls` writes `\provideignoredglossary` to the `glstex` file for some settings, so the glossary might not been defined on the first `LATEX` run and it needs to be allowed with `\printunsrtglossary` on subsequent runs.)

Unfortunately, removing the existence check will cause an error if \printglossary is used with an ignored glossary.

As from glossaries v4.46, some new commands have been included to allow the existence check to be varied depending on whether or not ignored glossaries should be allowed, so check for them:

oss@checkexists

```
4700 \ifdef\@printgloss@checkexists
4701 {\newcommand{\glsxtr@printgloss@checkexists}{\@printgloss@checkexists}}
4702 {\newcommand{\glsxtr@printgloss@checkexists}[2]{#2}}
```

rgprintglossary (This command is also used for on-the-fly setting.)

```
4703 \newcommand{\@glsxtr@orgprintglossary}[2]{%
4704   \def\@glo@type{\glsdefaulttype}%
}
```

Add check here.

```
4705 \def\glossarytitle{%
4706   \ifcsdef{@glotype@\@glo@type @title}%
4707     {\csuse{@glotype@\@glo@type @title}}%
4708     {\glossaryname}}%
4709 \def\glossarytoctitle{\glossarytitle}%
4710 \let\org@glossarytitle\glossarytitle
4711 \def@\glossarystyle{%
4712   \ifx\@glossary@default@style\relax
4713     \GlossariesWarning{No default glossary style provided \MessageBreak
4714       for the glossary '\@glo@type'. \MessageBreak
4715       Using deprecated fallback. \MessageBreak
4716       To fix this set the style with \MessageBreak
4717       \string\setglossarystyle\space or use the \MessageBreak
4718       style key=value option}%
4719   \fi
4720 }%
4721 \def\gls@dototitle{\glssettotitle{\@glo@type}}%
4722 \let\@org@glossaryentrynumbers\glossaryentrynumbers
4723 \bgroup
4724   \@printgloss@setsort
4725   \setkeys{printgloss}{#1}%
4726   \ifx\glossarytitle\org@glossarytitle
4727   \else
4728     \cslet{@glotype@\@glo@type @title}{\glossarytitle}%
4729   \fi
4730   \let\currentglossary\@glo@type
4731   \let\@org@glossaryentrynumbers\glossaryentrynumbers
4732   \let\glsnonextpages\glsnonextpages
4733   \let\glsnextpages\glsnextpages
4734 \glsxtractivenopost
4735 \gls@dototitle
4736 \glossarystyle
```

```

4737 \let\gls@org@glossaryentryfield\glossentry
4738 \let\gls@org@glossarysubentryfield\subglossentry
4739 \renewcommand{\glossentry}[1]{%
4740   \protected@xdef\glscurrententrylabel{\glsdetoklabel{##1}}%
4741   \gls@org@glossaryentryfield{##1}%
4742 }%
4743 \renewcommand{\subglossentry}[2]{%
4744   \protected@xdef\glscurrententrylabel{\glsdetoklabel{##2}}%
4745   \gls@org@glossarysubentryfield{##1}{##2}%
4746 }%
4747 \gls@preglossaryhook
4748 \glsxtr@printgloss@checkexists{\@glo@type}{#2}%
4749 \egroup
4750 \global\let\glossaryentrynumbers\@org@glossaryentrynumbers
4751 \global\let\warn@noprintglossary\relax
4752 }

```

`ractivatenopost` Change `\nopostdesc` and `\glsxtrnropostpunc` to behave as they do in the glossary.

```

4753 \newcommand*{\glsxtractivenopost}{%
4754   \let\nopostdesc\@nopostdesc
4755   \let\glsxtrnropostpunc\glsxtr@nopostpunc
4756 }

```

`lsxtrnropostpunc`

```
4757 \newrobustcmd*{\glsxtrnropostpunc}{}%
```

`sxtr@nopostpunc` Provide a command that works like `\nopostdesc` but only switches off the punctuation without suppressing the post-description hook.

```

4758 \newcommand{\@glsxtr@nopostpunc}{%
4759   \let\@glsxtr@org@postdescription\glspostdescription
4760   \ifglsnropostdot
4761     \renewcommand{\glspostdescription}{%
4762       \glsnropostdottrue
4763       \let\glspostdescription\@glsxtr@org@postdescription
4764       \let\glsxtrrestorepostpunc\glsxtr@restore@postpunc
4765       \glsxtrpostdescription
4766       \@glsxtr@nopostpunc@postdesc}%
4767   \else
4768     \renewcommand{\glspostdescription}{%
4769       \let\glspostdescription\@glsxtr@org@postdescription
4770       \let\glsxtrrestorepostpunc\glsxtr@restore@postpunc
4771       \glsxtrpostdescription
4772       \@glsxtr@nopostpunc@postdesc}%
4773   \fi
4774   \glsnropostdotfalse
4775 }

```

`stpunc@postdesc`

```
4776 \newcommand*{\@glsxtr@nopostpunc@postdesc}{}%
```

```

estore@postpunc
4777 \newcommand*{\@glsxtr@restore@postpunc}{%
4778   \def\@glsxtr@nopostpunc@postdesc{%
4779     \glsxtr@org@postdescription
4780     \let\@glsxtr@nopostpunc@postdesc\empty
4781     \let\glsxtrrestorepostpunc\empty
4782   }%
4783 }

```

`restorepostpunc` Does nothing outside of glossary.

```

4784 \newcommand*{\glsxtrrestorepostpunc}{}}

```

`\@printglossary` Redefine.

```

4785 \renewcommand{\@printglossary}[2]{%
4786   \def\@glsxtr@printglossopts{\#1}%
4787   \glsxtr@orgprintglossary{\#1}{\#2}%
4788 }

```

Add a key that switches off the entry targets:

```

4789 \define@choicekey{printgloss}{target}%
4790 [\@glsxtr@printglossval\@glsxtr@printglossnr]%
4791 {true,false}[true]%
4792 {%
4793   \ifcase\@glsxtr@printglossnr
4794     \def\@glstarget{\glsdohypertarget}%
4795   \else
4796     \let\@glstarget\@secondoftwo
4797   \fi
4798 }

```

`hypernameprefix`

```

4799 \newcommand{\@glsxtrhypernameprefix}{}}

```

New to v1.20:

```

4800 \define@key{printgloss}{targetnameprefix}{%
4801   \renewcommand{\@glsxtrhypernameprefix}{\#1}%
4802 }

4803 \define@key{printgloss}{prefix}{%
4804   \renewcommand{\glolinkprefix}{\#1}%
4805 }

4806 \define@key{printgloss}{label}{%
4807   \glsxtrsetglossarylabel{\#1}%
4808 }

```

`etglossarylabel` Set the label for subsequent glossaries. If the label is fixed (that is, doesn't change with each glossary) this will need to be scoped or changed again to prevent duplicate labels.

```
4809 \newcommand{\glsxtrsetglossarylabel}[1]{%
4810   \renewcommand*\@glossaryseclabel{%
4811     \protected@edef\@currentlabelname{\glossarytoctitle}%
4812     \label{#1}%
4813   }%
4814 }
```

`xtr@leveloffset`

```
4815 \newcount\@glsxtr@leveloffset
```

New to v1.44:

```
4816 \define@key{printgloss}{leveloffset}{%
4817   \glsxtr@assign@leveloffset#1\relax
4818 }
```

`ign@leveloffset`

```
4819 \newcommand*\@glsxtr@assign@leveloffset{%
4820   \@ifnextchar+{\p@glsxtr@assign@leveloffset}{\np@glsxtr@assign@leveloffset}%
4821 }
```

`ign@leveloffset` Discard initial + character.

```
4822 \newcommand*\p@glsxtr@assign@leveloffset[1]{%
4823   \@ifnextchar+{\pp@glsxtr@assign@leveloffset}{\np@glsxtr@assign@leveloffset}%
4824 }
```

`ign@leveloffset`

```
4825 \def\np@glsxtr@assign@leveloffset#1\relax{\@glsxtr@leveloffset=#1\relax}
```

`ign@leveloffset`

```
4826 \def\pp@glsxtr@assign@leveloffset#1\relax{\advance\@glsxtr@leveloffset by #1\relax}

4827 \define@boolkey{printgloss}{glsxtr@printgloss@}{groups}[true]{}
4828 \glsxtr@printgloss@groupstrue
```

`lsdohypertarget` Redefine to insert `\glsxtrhypernameprefix` before the target name.

```
4829 \let\@glsxtr@org@glsdohypertarget\glsdohypertarget
4830 \renewcommand{\glsdohypertarget}[2]{%
4831   \glsxtr@org@glsdohypertarget{\glsxtrhypernameprefix#1}{#2}%
4832 }
```

Update `\glstarget` to use `\def` instead being assigned with `\let` so that it can pick up the new definition and allow any further redefinitions:

```
4833 \ifx\@glstarget\@glsxtr@org@glsdohypertarget
4834   \def\@glstarget{\glsdohypertarget}%
4835 \fi
```

r@do@org@target Provide a way to locally do the original.

```
4836 \newcommand{\glsxtr@do@org@target}[2]{%
4837  {%
4838   \let\glsdohypertarget\glsxtr@org@glsdohypertarget
4839   \glostarget{#1}{#2}%
4840 }%
4841 }
```

@makeglossaries For the benefit of makeglossaries

```
4842 \newcommand*\glsxtr@makeglossaries[1]{}{}
```

@glsxtr@gettype Get just the type.

```
4843 \def\glsxtr@gettype#1,type=#2,#3@end@glsxtr@gettype{%
4844   \def\glo@type{#2}%
4845 }
```

@assign@sortkey Assign the sort key.

```
4846 \newcommand\glsxtr@mixed@assign@sortkey[1]{%
4847  \protected@edef\glo@type{\glo@type}%
4848  \expandafter\DTLifinlist\expandafter{\glo@type}{\glsxtr@reg@glosslist}%
4849  {%
4850    \glo@no@assign@sortkey{#1}%
4851  }%
4852  {%
4853    \glo@no@assign@sortkey{#1}%
4854  }%
4855 }
```

Display number list for the regular version:

splaynumberlist

```
4856 \let\glsxtr@idx@displaynumberlist\glsdisplaynumberlist
```

Display number list for the “noidx” version:

splaynumberlist

```
4857 \newcommand*\glsxtr@noidx@displaynumberlist[1]{%
4858  \letcs{\gls@loclist}{\glsdetoklabel{#1}@loclist}%
4859  \ifdef\gls@loclist
4860  {%
4861    \def\gls@noidxloclist@sep{%
4862      \def\gls@noidxloclist@sep{%
4863        \def\gls@noidxloclist@sep{%
4864          \glsnumlistsep
4865        }%
4866        \def\gls@noidxloclist@finalsep{\glsnumlistlastsep}%
4867      }%
4868    }}
```

```

4869   \def\@gls@noidxloclist@finalsep{}%
4870   \def\@gls@noidxloclist@prev{}%
4871   \forlistloop{\glsnoidxdisplayloclisthandler}{\@gls@loclist}%
4872   \@gls@noidxloclist@finalsep
4873   \@gls@noidxloclist@prev
4874 }%
4875 {%
4876   \glsxtrundeftag
4877   \glsdoifexists{#1}%
4878   {%
4879     \GlossariesWarning{Missing location list for ‘#1’. Either
4880       a rerun is required or you haven’t referenced the entry.}%
4881   }%
4882 }%
4883 }%
4884

```

And for the number list loop:

`@numberlistloop`

```

4885 \newcommand*{\@glsxtr@noidx@numberlistloop}[3]{%
4886   \letcs{\@gls@loclist}{\glsdetoklabel{#1}@loclist}%
4887   \let{\gls@org@glsnoidxdisplayloc}{\glsnoidxdisplayloc}
4888   \let{\gls@org@glsseefORMAT}{\glsseefORMAT}
4889   \let{\glsnoidxdisplayloc#2\relax}
4890   \let{\glsseefORMAT#3\relax}
4891   \ifdef{\gls@loclist}
4892   {%
4893     \forlistloop{\glsnoidxnumberlistloophandler}{\@gls@loclist}%
4894   }%
4895   {%
4896     \glsxtrundeftag
4897     \glsdoifexists{#1}%
4898     {%
4899       \GlossariesWarning{Missing location list for ‘##1’. Either
4900         a rerun is required or you haven’t referenced the entry.}%
4901     }%
4902   }%
4903   \let{\glsnoidxdisplayloc}{\gls@org@glsnoidxdisplayloc}
4904   \let{\glsseefORMAT}{\gls@org@glsseefORMAT}
4905 }%

```

Same for entry number list.

`entrynumberlist`

```

4906 \newcommand*{\@glsxtr@noidx@entrynumberlist}[1]{%
4907   \letcs{\@gls@loclist}{\glsdetoklabel{#1}@loclist}%
4908   \ifdef{\gls@loclist}
4909   {%

```

```

4910     \glsnoidxloclist{@gls@loclist}%
4911 }%
4912 {%
4913     \glsxtrundeftag
4914     \glsdoifexists{#1}%
4915     {%
4916         \GlossariesWarning{Missing location list for '#1'. Either
4917             a rerun is required or you haven't referenced the entry.}%
4918     }%
4919 }%
4920 }%


entrynumberlist
4921 \newcommand*{\@glsxtr@idx@entrynumberlist}[1]{\glsentrynumberlist{#1}}


x@grouptitle Patch.
4922 \renewcommand*{\@gls@noidx@grouptitle}[2]{%
4923     \protected@edef{\glsxtr@titlelabel}{%
4924         \ifdefvoid{\glsxtr@titlelabel}%
4925         {}%
4926     }%
4927     \protected@edef{\glsxtr@titlelabel}{\csuse{\glsxtr@grouptitle@#1}}%
4928 }%
4929 \ifdefvoid{\glsxtr@titlelabel}%
4930 {}%
4931     \DTLifint{#1}%
4932     {}%
4933     \ifnum#1<256\relax
4934         \edef#2{\char#1\relax}%
4935     \else
4936         \edef#2{#1}%
4937     \fi
4938 }%
4939 {}%
4940     \ifcsgundef{#1groupname}%
4941     {\def#2{#1}}%
4942     {\letcs#2{#1groupname}}%
4943 }%
4944 }%
4945 {}%
4946     \let#2\glsxtr@titlelabel
4947 }%
4948 }%


g@grouptitle Save original definition of \@gls@grouptitle
4949 \let\glsxtr@org@grouptitle\@gls@grouptitle

```

`trgetgroupitle` Provide a user-level command to fetch the group title. The first argument is the group label.
The second argument is a control sequence in which to store the title.

```
4950 \newrobustcmd{\glsxtrgetgroupitle}[2]{%
4951   \protected@edef{\glsxtr@titlelabel}{\glsxtr@groupitle@#1}%
4952   \onelevel@sanitize{\glsxtr@titlelabel}%
4953   \ifcsdef{\glsxtr@titlelabel}%
4954     {\letcs{\#2}{\glsxtr@titlelabel}}%
4955     {\glsxtr@org@getgroupitle{\#1}{\#2}}%
4956   }%
4957 \let{\gls@getgroupitle}{\glsxtrgetgroupitle}
```

`trsetgroupitle` Sets the title for the given group label.

```
4958 \newcommand{\glsxtrsetgroupitle}[2]{%
4959   \protected@edef{\glsxtr@titlelabel}{\glsxtr@groupitle@#1}%
4960   \onelevel@sanitize{\glsxtr@titlelabel}%
4961   \protected@csxdef{\glsxtr@titlelabel}{\#2}%
4962 }
```

`alsetgroupitle` As above put only locally defines the title.

```
4963 \newcommand{\glsxtrlocalsetgroupitle}[2]{%
4964   \protected@edef{\glsxtr@titlelabel}{\glsxtr@groupitle@#1}%
4965   \onelevel@sanitize{\glsxtr@titlelabel}%
4966   \protected@csedef{\glsxtr@titlelabel}{\#2}%
4967 }
```

`\glsnavigation` Redefine to use new user-level command.

```
4968 \renewcommand*{\glsnavigation}{%
4969   \def{\gls@between}{}%
4970   \ifcsundef{\gls@hypergrouplist@\glo@type}%
4971   {}%
4972   \def{\gls@list}{}%
4973 }%
4974 {}%
4975 \expandafter\let\expandafter\gls@list%
4976   \csname \gls@hypergrouplist@\glo@type\endcsname%
4977 }%
4978 \for{\gls@tmp:=\gls@list}{%
4979   \gls@between%
4980   \glsxtrgetgroupitle{\gls@tmp}{\gls@grptitle}%
4981   \glsnavhyperlink{\gls@tmp}{\gls@grptitle}%
4982   \let{\gls@between}{\glshypernavsep}%
4983 }%
4984 }
```

`@noidx@glossary`

```
4985 \renewcommand*{\printnoidx@glossary}{%
4986   \ifcsdef{\glsref@\glo@type}%
4987   {}%
```

```

4988 \ifcsdef{@glo@sortmacro@\glo@sorttype}%
4989 {%
4990   \csuse{@glo@sortmacro@\glo@sorttype}{\glo@type}%
4991 }%
4992 {%
4993   \PackageError{glossaries}{Unknown sort handler '\glo@sorttype'}{}%
4994 }%
4995 \glossarysection[\glossarytoctitle]{\glossarytitle}%
4996 \glossarypreamble

```

Moved this command definition outside of environment in case of scoping issues (e.g. in tabular-like styles).

```

4997 \def@gls@currentlettergroup{}%
4998 \begin{theglossary}%
4999 \glossaryheader
5000 \glsresetentrylist
5001 \forlistcsloop{\gls@noidx@do}{\glsref@\glo@type}%
5002 \end{theglossary}%
5003 \glossarypostamble
5004 }%
5005 {%

```

Add section header if there are actually entries defined in this glossary as the document is likely pending a re-run.

```

5006 \glsxtrifemptyglossary{\glo@type}%
5007 {%
5008 {\glossarysection[\glossarytoctitle]{\glossarytitle}}%
5009 \gls@noref@warn{\glo@type}%
5010 }%
5011 }

```

`noidxdisplayloc` Patch to check for range formations.

```

5012 \renewcommand*{\glsnoidxdisplayloc}[4]{%
5013   \setentrycounter[#1]{#2}%
5014   \glsxtr@display@loc#3\empty\end@glsxtr@display@loc{#4}%
5015 }

```

`xtr@display@loc` Patch to check for range formations.

```

5016 \def\glsxtr@display@loc#1#2\end@glsxtr@display@loc#3{%
5017   \ifx#1\relax
5018     \glsxtrdisplaystartloc{#2}{#3}%
5019   \else
5020     \ifx#1\relax
5021       \glsxtrdisplayendloc{#2}{#3}%
5022     \else
5023       \glsxtrdisplaysingleloc{#1#2}{#3}%
5024     \fi
5025   \fi
5026 }

```

`isplaysingleloc` Single location.

```
5027 \newcommand*{\glsxtrdisplaysingleloc}[2]{%
5028   \csuse{#1}{#2}%
5029 }
```

By default the range identifiers are simply ignored. A custom list loop handler can be defined by the user to test for ranges by checking the definition of `\glsxtrlocrangefmt`.

`displaystartloc` Start of a location range.

```
5030 \newcommand*{\glsxtrdisplaystartloc}[2]{%
5031   \protected@edef\glsxtrlocrangefmt{#1}%
5032   \ifx\glsxtrlocrangefmt\empty
5033     \def\glsxtrlocrangefmt{\glsnumberformat}%
5034   \fi
5035   \expandafter\glsxtrdisplaysingleloc
5036   \expandafter{\glsxtrlocrangefmt}{#2}%
5037 }
```

`trdisplayendloc` End of a location range.

```
5038 \newcommand*{\glsxtrdisplayendloc}[2]{%
5039   \protected@edef\@glsxtr@tmp{#1}%
5040   \ifdefempty{\@glsxtr@tmp}{\def\@glsxtr@tmp{\glsnumberformat}}{}%
5041   \ifx\glsxtrlocrangefmt\@glsxtr@tmp
5042     \else
5043       \GlossariesExtraWarning{Mismatched end location range
5044         (start=\glsxtrlocrangefmt, end=\@glsxtr@tmp)}%
5045     \fi
5046   \expandafter\glsxtrdisplayendlohook\expandafter{\@glsxtr@tmp}{#2}%
5047   \expandafter\glsxtrdisplaysingleloc
5048   \expandafter{\glsxtrlocrangefmt}{#2}%
5049   \def\glsxtrlocrangefmt{}%
5050 }
```

`splayendlohook` Allow the user to hook into the end of range command.

```
5051 \newcommand*{\glsxtrdisplayendlohook}[2]{}
```

`sxtrlocrangefmt` Current range format. Empty if not in a range.

```
5052 \newcommand*{\glsxtrlocrangefmt}{}%
```

`setentrycounter` Adjust `\setentrycounter` to save the original prefix.

```
5053 \renewcommand*{\setentrycounter}[2][]{%
5054   \def\glsxtrcounterprefix{#1}%
5055   \ifx\glsxtrcounterprefix\empty
5056     \def\@glo@counterprefix{.}%
5057   \else
5058     \def\@glo@counterprefix{.#1.}%
5059   \fi
5060   \def\glsentrycounter{#2}%
5061 }
```

```
ls@removespaces Redefine to allow adjustments to location hyperlink.
```

```
5062 \def\@gls@removespaces#1 #2\@nil{%
5063   \toks@=\expandafter{\the\toks@#1}%
5064   \ifx\\#2\\%
5065     \edef\@glo@tmp{\the\toks@}%
5066     \ifx\@glo@tmp\empty
5067     \else
5068       \expandafter\glsxtrlocationhyperlink\expandafter
5069         \glsentrycounter\expandafter\@glo@counterprefix\expandafter{\the\toks@}%
5070       \fi
5071     \else
5072       \gls@ReturnAfterFi{%
5073         \gls@removespaces#2\@nil
5074       }%
5075     \fi
5076 }
```

```
cationhyperlink
```

```
\glsxtrlocationhyperlink{\<counter>}{\<prefix>}{\<location>}
```

```
5077 \newcommand*\glsxtrlocationhyperlink[3]{%
5078   \ifdefvoid\glsxtrspplocationurl
5079   {%
5080     \GlsXtrInternalLocationHyperlink{#1}{#2}{#3}%
5081   }%
5082   {%
5083     \hyperref{\glsxtrspplocationurl}{\#1\#2\#3}{#3}%
5084   }%
5085 }
```

```
supphypernumber
```

```
5086 \newcommand*\glsxtrspphypernumber[1]{%
5087   {%
5088     \glshasattribute{\glscurrententrylabel}{externallocation}%
5089   }%
5090     \def\glsxtrspplocationurl{%
5091       \glsetattribute{\glscurrententrylabel}{externallocation}{}%
5092     }%
5093   {%
5094     \def\glsxtrspplocationurl{}%
5095   }%
5096   \glshypernumber{#1}%
5097 }%
5098 }
```

Give a bit of assistance to new users who are confused and don't know how to read transcript messages.

```
@print@glossary
5099 \renewcommand{\@print@glossary}{%
5100   \makeatletter
5101   \@input{\jobname.\csname @glotype@\glo@type @in\endcsname}%
5102   \IfFileExists{\jobname.\csname @glotype@\glo@type @in\endcsname}%
5103   {}%
5104   {\glsxtrNoGlossaryWarning{\glo@type}}%
5105   \ifglsxindy
5106     \ifcundeft{\xdy@\glo@type \language}%
5107     {}%
5108     \edef\@do@auxoutstuff{%
5109       \noexpand\AtEndDocument{%
5110         \noexpand\immediate\noexpand\write\auxout{%
5111           \string\providecommand\string\@xdylanguage[2]{}%}
5112         \noexpand\immediate\noexpand\write\auxout{%
5113           \string\@xdylanguage{\glo@type}{\xdy@main\language}}%}
5114       }%
5115     }%
5116   }%
5117   {}%
5118   \edef\@do@auxoutstuff{%
5119     \noexpand\AtEndDocument{%
5120       \noexpand\immediate\noexpand\write\auxout{%
5121         \string\providecommand\string\@xdylanguage[2]{}%}
5122       \noexpand\immediate\noexpand\write\auxout{%
5123         \string\@xdylanguage{\glo@type}{\csname \xdy@\glo@type
5124           \language\endcsname}}%}
5125     }%
5126   }%
5127   {}%
5128   \do@auxoutstuff
5129   \edef\@do@auxoutstuff{%
5130     \noexpand\AtEndDocument{%
5131       \noexpand\immediate\noexpand\write\auxout{%
5132         \string\providecommand\string\@gls@codepage[2]{}%}
5133       \noexpand\immediate\noexpand\write\auxout{%
5134         \string\@gls@codepage{\glo@type}{\gls@codepage}}%}
5135     }%
5136   }%
5137   \do@auxoutstuff
5138 \fi
5139 \renewcommand*{\@warn@nomakeglossaries}{%
5140   \GlossariesWarningNoLine{\string\makeglossaries\space
5141     hasn't been used,^^Jthe glossaries will not be updated}%
5142 }%
5143 }
```

Setup the warning text to display if the external file for the given glossary is missing.

oGlsWarningHead Header message.

```
5144 \newcommand{\GlsXtrNoGlsWarningHead}[2]{%
5145   This document is incomplete. The external file associated with
5146   the glossary '#1' (which should be called \texttt{\#2})
5147   hasn't been created.%}
5148 }
```

rningEmptyStart No entries have been added to the glossary.

```
5149 \newcommand{\GlsXtrNoGlsWarningEmptyStart}{%
5150   This has probably happened because there are no entries defined
5151   in this glossary.%}
5152 }
```

arningEmptyMain The default “main” glossary is empty.

```
5153 \newcommand{\GlsXtrNoGlsWarningEmptyMain}{%
5154   If you don't want this glossary,
5155   add \texttt{nomain} to your package option list when you load
5156   \texttt{glossaries-extra.sty}. For example:%}
5157 }
```

ingEmptyNotMain A glossary that isn't the default “main” glossary is empty.

```
5158 \newcommand{\GlsXtrNoGlsWarningEmptyNotMain}[1]{%
5159   Did you forget to use \texttt{type=\#1} when you defined your
5160   entries? If you tried to load entries into this glossary with
5161   \texttt{\string\loadglsentries} did you remember to use
5162   \texttt{\string[\#1]} as the optional argument? If you did, check that
5163   the definitions in the file you loaded all had the type set
5164   to \texttt{\string\glsdefaulttype}.%
5165 }
```

arningCheckFile Advisory message to check the file contents.

```
5166 \newcommand{\GlsXtrNoGlsWarningCheckFile}[1]{%
5167   Check the contents of the file \texttt{\#1}. If
5168   it's empty, that means you haven't indexed any of your entries in this
5169   glossary (using commands like \texttt{\string\gls} or
5170   \texttt{\string\glsadd}) so this list can't be generated.
5171   If the file isn't empty, the document build process hasn't been
5172   completed.%}
5173 }
```

WarningAutoMake Message when automake option has been used.

```
5174 \newcommand{\GlsXtrNoGlsWarningAutoMake}[1]{%
5175   You may need to rerun \LaTeX. If you already have, it may be that
5176   \TeX's shell escape doesn't allow you to run
5177   \texttt{\ifglsxindy xindy\else makeindex\fi}. Check the
5178   transcript file \texttt{\jobname.log}. If the shell escape is
```

```

5179 disabled, try one of the following:
5180
5181 \begin{itemize}
5182   \item Run the external (Lua) application:
5183     \texttt{\makeglossaries-lite \string"\jobname\string"}
5184
5185   \item Run the external (Perl) application:
5186     \texttt{\makeglossaries \string"\jobname\string"}
5187
5188 \end{itemize}
5189
5190 Then rerun \LaTeX\ on this document.
5191 \GlossariesExtraWarning{Rerun required to build the
5192 glossary '#1' or check TeX's shell escape allows
5193 you to run \ifglsxindy xindy\else makeindex\fi}%
5194
5195 }

```

WarningMisMatch Mismatching \makenoidxglossaries.

```

5196 \newcommand{\GlsXtrNoGlsWarningMisMatch}{%
5197   You need to either replace \texttt{\string\makenoidxglossaries}
5198   with \texttt{\string\makeglossaries} or replace
5199   \texttt{\string\printglossary} (or \texttt{\string\printglossaries}) with
5200   \texttt{\string\printnoidxglossary}
5201   (or \texttt{\string\printnoidxglossaries}) and then rebuild
5202   this document.%
5203 }

```

WarningBuildInfo Build advice.

```

5204 \newcommand{\GlsXtrNoGlsWarningBuildInfo}{%
5205   Try one of the following:
5206   \begin{itemize}
5207     \item Add \texttt{automake} to your package option list when you load
5208           \texttt{glossaries-extra.sty}. For example:
5209
5210           \texttt{\string\usepackage[automake]\{glossaries-extra\}}
5211
5212     \item Run the external (Lua) application:
5213
5214       \texttt{\makeglossaries-lite.lua \string"\jobname\string"}
5215
5216     \item Run the external (Perl) application:
5217
5218       \texttt{\makeglossaries \string"\jobname\string"}
5219
5220   \end{itemize}
5221
5222 Then rerun \LaTeX\ on this document.%
5223 }

```

```

trRecordWarning Paragraph for record=only.
5224 \newcommand{\GlsXtrRecordWarning}[1]{%
5225 \texttt{\string\printglossary} doesn't work
5226 with the \texttt{record=\@glsxtr@record@setting} package option
5227 use\par\texttt{\string\printunsrtglossary[type=#1]}\par
5228 instead (or change the package option).%
5229 }

oGlsWarningTail Final paragraph.
5230 \newcommand{\GlsXtrNoGlsWarningTail}{%
5231 This message will be removed once the problem has been fixed.%
5232 }

GlsWarningNoOut No out file created. Build advice.
5233 \newcommand{\GlsXtrNoGlsWarningNoOut}[1]{%
5234 The file \texttt{\#1} doesn't exist. This most likely means you haven't used
5235 \texttt{\string\makeglossaries} or you have used
5236 \texttt{\string\nofiles}. If this is just a draft version of the
5237 document, you can suppress this message using the
5238 \texttt{nomissingglstext} package option.%
5239 }

glossarywarning
5240 \newcommand*{\@glsxtr@defaultnoglossarywarning}[1]{%
5241 \glossarysection[\glossarytoctitle]{\glossarytitle}
5242 \GlsXtrNoGlsWarningHead{\#1}{\jobname.\csname@glo@type@in\endcsname}
5243 \par
5244 \glsxtrifemptyglossary{\#1}%
5245 {%
5246 \GlsXtrNoGlsWarningEmptyStart\space
5247 \ifthenelse{\equal{\#1}{main}}{\GlsXtrNoGlsWarningEmptyMain\par
5248 \medskip
5249 \noindent\texttt{\string\usepackage[nomain\ifglsacronym ,acronym\fi]}%
5250 \glsopenbrace glossaries-extra\glsclosebrace}
5251 \medskip
5252 }%
5253 {\GlsXtrNoGlsWarningEmptyNotMain{\#1}}%
5254 }%
5255 {%
5256 \IfFileExists{\jobname.\csname@glo@type@out\endcsname}%
5257 {%
5258 \GlsXtrNoGlsWarningCheckFile
5259 {\jobname.\csname@glo@type@out\endcsname}
5260
5261 \ifglsautomake
5262
5263 \GlsXtrNoGlsWarningAutoMake{\#1}
5264
5265 \else

```

```

5266      \ifthenelse{\equal{#1}{main}}%
5267      {%
5268          \GlsXtrNoGlsWarningEmptyMain\par
5269          \medskip
5270          \noindent\textrtt{\string\usepackage[nomain]%
5271              \glsopenbrace glossaries-extra\glsclosebrace}%
5272          \medskip
5273      }%
5274  }%
5275  {}%
5276
5277  \ifdefequal\makeglossaries\@no@makeglossaries
5278  {%
5279      \GlsXtrNoGlsWarningMisMatch
5280  }%
5281  {%
5282      \GlsXtrNoGlsWarningBuildInfo
5283  }%
5284  \fi
5285 }%
5286 {}%
5287  \GlsXtrNoGlsWarningNoOut
5288  {\jobname.\csname @glotype@\glo@type \out\endcsname}%
5289 }%
5290 }%
5291 \par
5292 \GlsXtrNoGlsWarningTail
5293 }

```

`glossarywarning` Warn about using `\printglossary` with record

```

5294 \newcommand*{\@glsxtr@record@glossarywarning}[1]{%
5295     \GlossariesExtraWarning{\string\printglossary\space doesn't work\MessageBreak
5296     with record=\@glsxtr@record@setting\space package option\MessageBreak(use
5297     \string\printunsrtglossary[type=#1])\MessageBreak
5298     instead (or change the package option)}%
5299 \glossarysection[\glossarytoctitle]{\glossarytitle}
5300 \GlsXtrRecordWarning{#1}
5301 \GlsXtrNoGlsWarningTail
5302 }

```

Provide some commands to accompany the record option for use with `bib2gls`.

`ResourceOptions` Default resource options.

```
5303 \newcommand*{\GlsXtrDefaultResourceOptions}{}%
```

`xtrresourcefile` Since it's dangerous for an external application to create a file with a .tex extension, as from v1.11 this enforces a .glstex extension to avoid conflict.

```
5304 \newcommand*{\glsxtrresourcefile}[2][]{%
```

The record option can't be set after this command.

```
5305 \disable@keys{glossaries-extra.sty}{record}%
5306 \glsxtr@writefields
5307 \ifdefempty\GlsXtrDefaultResourceOptions
5308 {%
5309   \protected@write\@auxout{\glsxtrresourceinit}%
5310   {\string\glsxtr@resource{\#1}{\#2}}%
5311 }%
5312 {%
5313   \protected@write\@auxout{\glsxtrresourceinit}%
5314   {\string\glsxtr@resource{\GlsXtrDefaultResourceOptions,\#1}{\#2}}%
5315 }%
5316 \let\@glsxtr@org@see@noindex\gls@see@noindex
5317 \let\@gls@see@noindex\relax
5318 \IfFileExists{\#2.glstex}%
5319 {%
```

Can't scope \@input so save and restore the category code of @ to allow for internal commands in the location list.

```
5320 \edef\@bibgls@restoreat{\noexpand\catcode\noexpand`@=\number\catcode`\@}%
5321 \makeatletter
5322 \@input{\#2.glstex}%
5323 \@bibgls@restoreat
```

If the record=nameref option has been set, check if this is supported by the installed version of bib2gls.

```
5324 \glsxtr@check@bibgls@nameref
5325 }%
5326 {%
5327   \GlossariesExtraWarning{No file '#2.glstex'}%
5328 }%
5329 \let\@gls@see@noindex\glsxtr@org@see@noindex
5330 }
5331 \onlypreamble\glsxtrresourcefile
```

@bibgls@nameref This will only warn after bib2gls has created the .glostex file, but there's way to check before.

```
5332 \newcommand{\glsxtr@check@bibgls@nameref}{%
5333   \ifx\glsxtr@record@setting\glsxtr@record@setting@nameref
5334     \ifdef\bibglshrefchar
5335   {}%
5336   {%
5337     \GlossariesExtraWarning{record=nameref requires at least
5338       version 1.8 of bib2gls}%
5339   }%
5340 \fi
5341 \let\glsxtr@check@bibgls@nameref\relax
5342 }
```

xtrresourceinit Code used during the protected write operation.

```
5343 \newcommand*\glsxtrresourceinit{}%
```

```

trresourcecount
 5344 \newcount\glsxtrresourcecount

trLoadResources Short cut that uses \glsxtrresourcefile with \jobname as the mandatory argument.
 5345 \newcommand*\GlsXtrLoadResources}[1][]{%
 5346   \ifnum\glsxtrresourcecount=0\relax
 5347     \glsxtrresourcefile[#1]{\jobname}%
 5348   \else
 5349     \glsxtrresourcefile[#1]{\jobname-\the\glsxtrresourcecount}%
 5350   \fi
 5351   \advance\glsxtrresourcecount by 1\relax
 5352 }

glsxtr@resource
 5353 \newcommand*\glsxtr@resource}[2]{}

\glsxtr@fields
 5354 \newcommand*\glsxtr@fields}[1]{}

xtr@texencoding
 5355 \newcommand*\glsxtr@texencoding}[1]{}

\glsxtr@langtag
 5356 \newcommand*\glsxtr@langtag}[1]{}

@pluralsuffixes
 5357 \newcommand*\glsxtr@pluralsuffixes}[4]{}

tr@shortcutsval
 5358 \newcommand*\glsxtr@shortcutsval}[1]{}

sxtr@linkprefix
 5359 \newcommand*\glsxtr@linkprefix}[1]{}

xtr@writefields This information only needs to be written once, so disable it after it's been used.
 5360 \newcommand*\glsxtr@writefields}{%
 5361   \protected@write\@auxout{}{%
 5362     {\string\providetoken{\string\glsxtr@fields}[1]{} }%
 5363   \protected@write\@auxout{}{%
 5364     {\string\providetoken{\string\glsxtr@resource}[2]{} }%
 5365   \protected@write\@auxout{}{%
 5366     {\string\providetoken{\string\glsxtr@pluralsuffixes}[4]{} }%
 5367   \protected@write\@auxout{}{%
 5368     {\string\providetoken{\string\glsxtr@shortcutsval}[1]{} }%
 5369   \protected@write\@auxout{}{%
 5370     {\string\providetoken{\string\glsxtr@linkprefix}[1]{} }%
 5371   \protected@write\@auxout{}{\string\glsxtr@fields{\@gls@keymap}}%

```

```

5372 \protected@write\@auxout{}%
5373   {\string\providecommand*\{\string\glsxtr@record} [5] {}}%
5374 \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
5375   \protected@write\@auxout{}%
5376   {\string\providecommand*\{\string\glsxtr@record@nameref} [8] {}}%
5377 \fi

```

If any languages have been loaded, the language tag will be available in \CurrentTrackedLanguageTag (provided by tracklang). For multilingual documents, the required locale will have to be indicated in the sort key when using \glsxtrresourcefile.

```

5378 \ifdef\CurrentTrackedLanguageTag
5379 {%
5380   \protected@write\@auxout{}{%
5381     \string\glsxtr@langtag{\CurrentTrackedLanguageTag}}}%
5382 }%
5383 {}%
5384 \protected@write\@auxout{}{\string\glsxtr@pluralsuffixes
5385   {\glspluralsuffix}\{\abbrvpluralsuffix}\{\acrpluralsuffix}}%
5386   {\glsxtrabbrvpluralsuffix}}}%
5387 \ifdef\inputencodingname
5388 {%
5389   \protected@write\@auxout{}{\string\glsxtr@texencoding{\inputencodingname}}}%
5390 }%
5391 {}%

```

If fontspec has been loaded, assume UTF-8. (The encoding can be changed with \XeTeXinputencoding, but I can't work out how to determine the current encoding.)

```

5392 \@ifpackageloaded{fontspec}%
5393   {\protected@write\@auxout{}{\string\glsxtr@texencoding{utf8}}}}}%
5394 {}%
5395 }%
5396 \protected@write\@auxout{}{\string\glsxtr@shortcutsval{\@glsxtr@shortcutsval}}}%

```

Prefix deferred until the beginning of the document in case it's redefined later in the preamble. This is picked up by bib2gls when the external option is used.

```

5397 \AtBeginDocument
5398   {\protected@write\@auxout{}{\string\glsxtr@linkprefix{\glolinkprefix}}}}}}%
5399 \let\glsxtr@writefields\relax

```

If the automake option is on, try running bib2gls if the aux file exists. This has to be done before the aux file is opened (so package options automake=immediate and automake=true are identical if just bib2gls is used). The double-quotes around \jobname have been removed (v1.19) since \jobname will include double-quotes if the file name has spaces.

```

5400 \ifglsautomake
5401   \IfFileExists{\jobname.aux}{}
5402   {\immediate\write18{bib2gls \jobname}}{}}

```

If \makeglossaries is also used, allow makeindex/xindy to also be run, otherwise disable the error message about requiring \makeglossaries with automake=true.

```

5403     \ifx\@gls@doautomake\@gls@doautomake@err
5404         \let\@gls@doautomake\relax
5405     \fi
5406 \fi

Check if order=letter has been used by mistake (but not if record=alsoindex has been used).

5407 \@glsxtr@if@record@only
5408 {\ifdefstring{\glsorder}{letter}%
5409   {\GlossariesExtraWarningNoLine{Package option ‘order=letter’ isn’t
5410     supported with ‘record=\@glsxtr@record@setting’. Use ‘break-at=none’
5411     resource option instead}}%
5412 {}%
5413 }%
5414 {}%
5415 }

```

do@automake@err

```

5416 \newcommand*{\@gls@doautomake@err}{%
5417   \PackageError{glossaries}{You must use
5418   \string\makeglossaries\space with automake=true}
5419   {%
5420     Either remove the automake=true setting or
5421     add \string\makeglossaries\space to your document preamble.%
5422   }%
5423 }

```

Allow locations specific to a particular counter to be recorded.

\glsxtr@record

```
5424 \newcommand*{\glsxtr@record}[5]{}
```

@record@nameref Used with record=nameref to include current label information.

```
5425 \newcommand*{\glsxtr@record@nameref}[8]{}
```

r@counterrecord Aux file command.

```
5426 \newcommand*{\glsxtr@counterrecord}[3]{%
5427   \glsxtrfieldlistgadd{\#1}{record.\#2}{\#3}%
5428 }
```

unterrecordhook Hook used by \@glsxtr@dorecord.

```
5429 \newcommand*{\@glsxtr@counterrecordhook}{}%
```

trRecordCounter Activate recording for a particular counter (identified in the argument).

```
5430 \newcommand*{\GlsXtrRecordCounter}[1]{%
5431   \@@glsxtr@recordcounter{\#1}%
5432 }
5433 \onlypreamble\GlsXtrRecordCounter
```

```

doccounterrecord
5434 \newcommand*{\@glsxstr@docounterrecord}[1]{%
5435   \protected@write\@auxout{}{\string\glsxstr@counterrecord
5436     {\@gls@label}{#1}{\csuse{the#1}}}}%
5437 }

lsxtrglossentry Users may prefer to have entries displayed throughout the document rather than gathered together in a list. This command emulates the way \glossentry behaves (without the style formatting commands like \item). This needs to define \currentglossary to the current glossary type (normally set at the start of \printglossary) and needs to define \glscurrententrylabel to the entry's label (normally set before \glossentry and \subglossentry). This needs some protection in case it's used in a section heading.
5438 \newcommand*{\glsxtrglossentry}[1]{%
5439   \glsxtrtitleorpdforheading
5440   {\@glsxtrglossentry{#1}}%
5441   {\glsentryname{#1}}%
5442   {\glsxtrheadname{#1}}%
5443 }

lsxtrglossentry Another test is needed in case \glsxtrglossentry has been written to the table of contents.
5444 \newrobustcmd*{\glsxtrglossentry}[1]{%
5445   \glsxtrtitleorpdforheading
5446   {%
5447     \glsdoifexists{#1}%
5448     {%
5449       \begingroup
5450         \protected@edef\glscurrententrylabel{\glsdetoklabel{#1}}%
5451         \protected@edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
5452         \ifglshasparent{#1}%
5453           {\GlsXtrStandaloneSubEntryItem{#1}}%
5454           {\glsentryitem{#1}}%
5455           \GlsXtrStandaloneEntryName{#1}%
5456         \endgroup
5457       }%
5458     }%
5459     {\glsentryname{#1}}%
5460     {\glsxtrheadname{#1}}%
5461   }

daloneEntryName
5462 \newcommand*{\GlsXtrStandaloneEntryName}[1]{%
5463   \glstarget{#1}{\glossentryname{#1}}%
5464 }

oneGlossaryType To make it easier to adjust the definition of \currentglossary within \glsxtrglossentry, this expands to the default definition. (If redefined, it must fully expand to the appropriate label.)

```

```

5465 \newcommand{\GlsXtrStandaloneGlossaryType}{\glsentrytype{\glscurrententrylabel}}
oneSubEntryItem Used for sub-entries in standalone format. The argument is the entry's label.
5466 \newcommand*{\GlsXtrStandaloneSubEntryItem}[1]{%
5467   \GlsXtrIfFieldEqNum{level}{#1}{1}{\glssubentryitem{#1}}{}%
5468 }

glossentryother As \glsxtrglossentry but uses a different field. First argument is code to use in the header.
The second argument is the entry's label. The third argument is the internal field label. This
needs to be expandable in case it occurs in a sectioning command so it can't have an optional
argument.
5469 \newcommand*{\glsxtrglossentryother}[3]{%
5470   \ifstrempty{#1}{%
5471     {%
5472       \ifcsdef{glsxtrhead#3}{%
5473         {%
5474           \glsxtrtitleorpdforheading
5475           {\@glsxtrglossentryother{#2}{#3}{#1}}%
5476           {\@gls@entry@field{#2}{#3}}%
5477           {\csuse{glsxtrhead#3}{#2}}%
5478         }%
5479       {%
5480         \glsxtrtitleorpdforheading
5481         {\@glsxtrglossentryother{#2}{#3}{#1}}%
5482         {\@gls@entry@field{#2}{#3}}%
5483         {\@gls@entry@field{\NoCaseChange{#2}}{#3}}%
5484       }%
5485     }%
5486   {%
5487     \glsxtrtitleorpdforheading
5488     {\@glsxtrglossentryother{#2}{#3}{#1}}%
5489     {\@gls@entry@field{#2}{#3}}%
5490     {#1}}%
5491   }%
5492 }

glossentryother As \glsxtrglossentry but uses a different field.
5493 \newrobustcmd*{\glsxtrglossentryother}[3]{%
5494   \glsxtrtitleorpdforheading
5495   {%
5496     \glsdoifexists{#1}{%
5497       {%
5498         \begingroup
5499           \protected@edef\glscurrententrylabel{\glsdetoklabel{#1}}%
5500           \protected@edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
5501           \ifglshasparent{#1}{%
5502             {\GlsXtrStandaloneSubEntryItem{#1}}%
5503             {\glsentryitem{#1}}%

```

```

5504     \GlsXtrStandaloneEntryOther{#1}%
5505     \endgroup
5506   }%
5507 }%
5508 {\@gls@entry@field{#1}{#2}}%
5509 {#3}%
5510 }

```

aloneEntryOther

```

5511 \newcommand*{\GlsXtrStandaloneEntryOther}[2]{%
5512   \glstarget{#1}{\glossentrynameother{#1}{#2}}%
5513 }

```

`ntunsrtglossary` Similar to `\printnoidxglossary` but it displays all entries defined for the given glossary without sorting. Check for `\printgloss@checkexists` which was introduced to glossaries v4.46.

```

5514 \ifdef\@printgloss@checkexists
5515 {
5516   \newcommand*{\printunsrtglossary}{%
5517     \let\@printgloss@checkexists\@printgloss@checkexists@allowignored
5518     \@ifstar\s@printunsrtglossary\@printunsrtglossary
5519   }
5520 }
5521 {
5522   \newcommand*{\printunsrtglossary}{%
5523     \@ifstar\s@printunsrtglossary\@printunsrtglossary
5524   }
5525 }

```

`ntunsrtglossary` Unstarred version.

```

5526 \newcommand*{\@printunsrtglossary}[1][]{%
5527   \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%
5528 }

```

`ntunsrtglossary` Starred version.

```

5529 \newcommand*{\s@printunsrtglossary}[2][]{%
5530   \begingroup
5531     #2%
5532   \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%
5533   \endgroup
5534 }

```

`unsrtglossaries` Similar to `\printnoidxglossaries` but it displays all entries defined for the given glossary without sorting.

```

5535 \newcommand*{\printunsrtglossaries}{%
5536   \forallglossaries{\@glo@type}{\printunsrtglossary[type=\@glo@type]}%
5537 }

```

```

@unsrt@glossary
5538 \newcommand*{\@print@unsrt@glossary}{%
5539   \glossarysection[\glossarytoctitle]{\glossarytitle}%
5540   \glossarypreamble
      check for empty list
5541   \glsxtrifemptyglossary{\@glo@type}%
5542   {%
5543     \GlossariesExtraWarning{No entries defined in glossary '\@glo@type'}%
5544   }%
5545   {%
5546     \key@ifundefined{glossentry}{group}%
5547     {\let\@gls@getgrouptitle\@gls@noidx@getgrouptitle}%
5548     {\let\@gls@getgrouptitle\@glsxtr@unsrt@getgrouptitle}%
5549     \def\@gls@currentlettergroup{}%

```

A loop within the tabular-like styles can cause problems, so move the loop outside.

```

5550   \def\@glsxtr@doglossary{%
5551     \begin{theglossary}%
5552       \glossaryheader
5553       \glsresetentrylist
5554     }%
5555     \expandafter\@for\expandafter\glscurrententrylabel\expandafter
5556       :\expandafter=\csname glolist@\@glo@type\endcsname\do{%
5557         \ifdefempty{\glscurrententrylabel}%
5558         {}%
5559       }%

```

Provide a hook (for example to measure width).

```

5560   \let\glsxtr@process\@firstofone
5561   \let\printunsrtglossaryskipentry
5562     \glsxtr@printunsrtglossaryskipentry
5563   \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%

```

Don't check group for child entries.

```

5564   \glsxtr@process
5565   {%
5566     \ifglsxtr@printgloss@groups

```

This still uses `\ifglshasparent` to determine whether or not to check for a change in the letter group. (It doesn't take the level offset into account because `bib2gls` only saves the group information for parentless entries.)

```

5567     \ifglshasparent{\glscurrententrylabel}{}%
5568     {%
5569       \glsxtr@checkgroup\glscurrententrylabel
5570       \expandafter\appto\expandafter\@glsxtr@doglossary\expandafter
5571         {\@glsxtr@grouphheading}%
5572     }%
5573   \fi

```

```

5574     \protected@eappto\@glsxtr@glossary{%
5575         \noexpand\@printunsrt@glossary@handler{\glscurrententrylabel}}%
5576     }%
5577     }%
5578     }%
5579     \appto\@glsxtr@glossary{\end{theglossary}}%
5580     \printunsrtglossarypredoglossary
5581     \glsxtr@glossary
5582     }%
5583     \glossarypostamble
5584 }

```

`rtinnerglossary` Similar to `\printunsrtglossary` but doesn't add the section heading, preamble, postamble or start and end of `theglossary`. Grouping is automatically applied so it may cause a problem within tabular-like environments. The beginning and ending of `theglossary` should be added around this command (but ensure the style has been set first). The simplest way of doing this is to place `\printunsrtinnerglossary` inside the `printunsrtglossarywrap` environment.

```

5585 \newcommand*\printunsrtinnerglossary[3] []{%
5586     \begingroup
5587     \def\@glsxtr@printglossopts{\#1}%
5588     \def\@glo@type{\glsdefaulttype}%
5589     \setkeys{printgloss}{title,toctitle,style,numberedsection,sort,label}[\#1]%
5590     \let\currentglossary\@glo@type
5591     #2%
5592     \print@unsrt@innerglossary
5593     #3%
5594     \endgroup
5595 }

```

`srtglossarywrap`

```

5596 \newenvironment{printunsrtglossarywrap}[1] []{%
5597 }%
5598 \def\@glsxtr@printglossopts{\#1}%
5599 \def\@glo@type{\glsdefaulttype}%
5600 \def\glossarytitle{\csname @glotype@\@glo@type @title\endcsname}%
5601 \def\glossarytoctitle{\glossarytitle}%
5602 \let\org@glossarytitle\glossarytitle
5603 \def\@glossarystyle{%
5604     \ifx\@glossary@default@style\relax
5605         \GlossariesWarning{No default glossary style provided \MessageBreak
5606             for the glossary '\@glo@type'. \MessageBreak
5607             Using deprecated fallback. \MessageBreak
5608             To fix this set the style with \MessageBreak
5609             \string\setglossarystyle\space or use the \MessageBreak
5610             style key=value option}%
5611     \fi
5612 }%
5613 \def\gls@dotocstyle{\glssettoctitle{\@glo@type}}%
5614 \let\org@glossaryentrynumbers\glossaryentrynumbers

```

```

5615  \@printgloss@setsort
5616  \setkeys{printgloss}{#1}%
      The type key simply allows the title to be set if the title key isn't supplied.
5617  \ifglossaryexists*\{@glo@type}%
5618  {%
5619  \ifx\glossarytitle\org@glossarytitle
5620  \else
5621  \expandafter\let\csname @glotype@\@glo@type @title\endcsname
5622  \glossarytitle
5623  \fi
5624  \let\currentglossary\@glo@type
5625  }%
5626  {}%
5627  \let\org@glossaryentrynumbers\glossaryentrynumbers
5628  \let\glsnonextpages\@glsnonextpages
5629  \let\glsnextpages\@glsnextpages
5630  \let\nopostdesc\@nopostdesc
5631  \gls@dotocitle
5632  \glossarystyle
5633  \let\gls@org@glossaryentryfield\glossentry
5634  \let\gls@org@glossarysubentryfield\subglossentry

5635  \renewcommand{\glossentry}[1]{%
5636  \protected@xdef\glscurrententrylabel{\glsdetoklabel{##1}}%
5637  \gls@org@glossaryentryfield{##1}%
5638  }%
5639  \renewcommand{\subglossentry}[2]{%
5640  \protected@xdef\glscurrententrylabel{\glsdetoklabel{##2}}%
5641  \gls@org@glossarysubentryfield{##1}{##2}%
5642  }%
5643  \gls@preglossaryhook
5644  \glossarysection[\glossarytoctitle]{\glossarytitle}%
5645  \glossarypreamble
5646  \begin{theglossary}%
5647  \glossaryheader
5648  \glsresetentrylist
5649 }%
5650 {}%
5651 \end{theglossary}%
5652 \glossarypostamble
5653 \global\let\glossaryentrynumbers\@org@glossaryentrynumbers
5654 \global\let\warn@noprintglossary\relax
5655 }

```

t@innerglossary This is much like \@print@unsrt@innerglossary but only contains what would normally be the content of the theglossary.

```
5656 \newcommand*{\@print@unsrt@innerglossary}{%
```

No section header or preamble.

```

5657 \glsxtrifemptyglossary{@glo@type}%
5658 {%
5659   \GlossariesExtraWarning{No entries defined in glossary '\@glo@type'}%
5660 }%
5661 {%
5662   \key@ifundefined{glossentry}{group}%
5663   {\let\@gls@getgrouptitle\@gls@noidx@getgroupitle}%
5664   {\let\@gls@getgroupitle\@glsxtr@unsrt@getgroupitle}%
5665   \def\@gls@currentlettergroup{}%

```

No header or reset.

```

5666 \def\@glsxtr@doglossary{}%
5667 \expandafter\for\expandafter\glscurrententrylabel\expandafter
5668   :\expandafter=\csname glolist@\@glo@type\endcsname\do{%
5669   \ifdefempty{\glscurrententrylabel}%
5670   {}%%
5671   {}%

```

Provide a hook (for example to measure width).

```

5672 \let\glsxtr@process\@firstofone
5673 \let\printunsrtglossaryskipentry
5674   \@glsxtr@printunsrtglossaryskipentry
5675   \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%

```

Don't check group for child entries.

```

5676 \glsxtr@process
5677 {%
5678   \ifglsxtr@printgloss@groups

```

This still uses `\ifglshasparent` to determine whether or not to check for a change in the letter group. (It doesn't take the level offset into account because `bib2gls` only saves the group information for parentless entries.)

```

5679 \ifglshasparent{\glscurrententrylabel}{}%
5680 {%
5681   \@glsxtr@checkgroup\glscurrententrylabel
5682   \expandafter\appto\expandafter\@glsxtr@doglossary\expandafter
5683     {\@glsxtr@groupheding}%
5684   }%
5685 \fi

5686 \protected@eappto\@glsxtr@doglossary{%
5687   \noexpand\@printunsrt@glossary@handler{\glscurrententrylabel}}%
5688 }%
5689 }%
5690 }%
5691 \printunsrtglossarypredoglossary
5692 \@glsxtr@doglossary
5693 }%

```

No postamble.

```
5694 }
```

```

ntryprocesshook
 5695 \newcommand*{\printunsrtglossaryentryprocesshook}[1]{}

ossaryskipentry
 5696 \newcommand*{\printunsrtglossaryskipentry}{%
 5697   \PackageError{glossaries-extra}{\string\printunsrtglossaryskipentry\space
 5698 can only be used within \string\printunsrtglossaryentryprocesshook}{}
 5699 }

ntryprocesshook
 5700 \newcommand*{\@glsxtr@printunsrtglossaryskipentry}{%
 5701   \let\glsxtr@process\@gobble
 5702 }

rypredoglossary
 5703 \newcommand*{\printunsrtglossarypredoglossary}{}

lossary@handler
 5704 \newcommand{\@printunsrtglossary@handler}[1]{%
 5705   \protected@xdef\glscurrententrylabel{#1}%
 5706   \printunsrtglossaryhandler\glscurrententrylabel
 5707 }

glossaryhandler
 5708 \newcommand{\printunsrtglossaryhandler}[1]{%
 5709   \glsxtrunsrtdo{#1}%
 5710 }

triflabelinlist
  \glsxtriflabelinlist{\label}{\list}{\true}{\false}

Might be useful for the handler to check if an entry label or category label is contained in a list, so provide a user-level version of \@gls@ifinlist which ensures the label and list are fully expanded.

 5711 \newrobustcmd*{\glsxtriflabelinlist}[4]{%
 5712   \protected@edef\@glsxtr@doiflabelinlist{\noexpand\gls@ifinlist{#1}{#2}}%
 5713   \@glsxtr@doiflabelinlist{#3}{#4}%
 5714 }

srtglossaryunit
 5715 \newcommand{\print@op@unsrtglossaryunit}[2][]{%
 5716   \s@printunsrtglossary[type=\glsdefaulttype,#1]{%
 5717     \printunsrtglossaryunitsetup{#2}%
 5718   }%
 5719 }

```

```

ossaryunitsetup
5720 \newcommand*{\printunsrtglossaryunitsetup}[1]{%
5721   \renewcommand{\printunsrtglossaryhandler}[1]{%
5722     \glsxtrfieldxifinlist{##1}{record.#1}{\csuse{the#1}}%
5723     {\glsxtrunsrtdo{##1}}%
5724     {}%
5725   }%
5726
      Only the target names should have the prefixes adjusted as \gls etc need the original
      \glolinkprefix. The \gobble part discards \glolinkprefix.
5726   \ifcsundef{theH#1}%
5727   {}%
5728     \renewcommand*{\@glsxtrhypernameprefix}{record.#1.\csuse{the#1}. \gobble}%
5729   }%
5730   {}%
5731     \renewcommand*{\@glsxtrhypernameprefix}{record.#1.\csuse{theH#1}. \gobble}%
5732   }%
5733   \renewcommand*{\glossarysection}[2]{}%
5734   \appto\glossarypostamble{\glspar\medskip\glspar}%
5735 }

srtglossaryunit
5736 \newcommand{\print@noop@unsrtglossaryunit}[2]{}%
5737   \PackageError{glossaries-extra}{\string\printunsrtglossaryunit\space
5738   requires the record=only or record=alsoindex package option}{}%
5739 }

t@getgroupitle
5740 \newrobustcmd*{\@glsxtr@unsrt@getgroupitle}[2]{%
5741   \protected@edef{\glsxtr@titlelabel}{\glsxtr@groupitle@#1}%
5742   \onelevel@sanitize{\glsxtr@titlelabel}%
5743   \ifcsdef{\@glsxtr@titlelabel}%
5744     {\letcs{\@glsxtr@titlelabel}{\glsxtr@titlelabel}}%
5745     {\def{\@glsxtr@titlelabel}{\glsxtr@titlelabel}}%
5746 }

\glsxtrunsrtdo  Provide a user-level call to \@glsxtr@noidx@do to make it easier to define a new handler.
5747 \newcommand{\glsxtrunsrtdo}{\@glsxtr@noidx@do}

lsxtrgroupfield  bib2gls provides a supplementary field labelled secondarygroup for secondary glossaries,
so provide a way of switching to that field. (The group key still needs checking. There's no
associated key with the internal field).
5748 \newcommand*{\glsxtrgroupfield}{group}

      The tabular-like glossary styles cause quite a problem with the iterative approach. In par-
      ticular for the group skip. To compensate for this, the groups are now determined while
      \@glsxtr@doglossary is being constructed rather than in the handler.

```

sxtr@checkgroup The argument is the entry's label. (This block of code was formerly in \glsxtr@noidx@do.) Now that this is no longer within a tabular environment, the global definitions aren't needed. The result is now stored in \glsxtr@grouphereading, which will be empty if no heading is required.

```

5749 \newcommand*{\glsxtr@checkgroup}[1]{%
5750   \def\glsxtr@grouphereading{}%
5751   \key@ifundefined{glossentry}{group}%
5752   {%
5753     \letcs{\gls@sort}{glo@\glsdetoklabel{#1}@sort}%
5754     \expandafter\glo@grabfirst\gls@sort{}{}\@nil
5755   }%
5756   {%
5757     \protected@edef\glo@thislettergrp{%
5758       \csuse{glo@\glsdetoklabel{#1}@glsxtrgroupfield}%
5759     }%
5760     \ifdefequal{\glo@thislettergrp}{\gls@currentlettergroup}%
5761     {}%
5762     {%
5763       \ifdefempty{\gls@currentlettergroup}{}%
5764       {\def\glsxtr@grouphereading{\gls@groupskip}}%
5765       \protected@appto\glsxtr@grouphereading{%
5766         \noexpand\gls@groupheading{\expandonce\glo@thislettergrp}%
5767       }%
5768     }%
5769     \let\gls@currentlettergroup\glo@thislettergrp
5770   }

```

trLocationField Stores the internal name of the location field.

```
5771 \newcommand*{\GlsXtrLocationField}[location]
```

glsxtr@noidx@do Minor modification of \gls@noidx@do to check for location field if present, but also need to check for the group field.

```

5772 \newcommand{\glsxtr@noidx@do}[1]{%
5773   \ifglsentryexists{#1}%
5774   {%
5775     \global\letcs{\gls@loclist}{glo@\glsdetoklabel{#1}@loclist}%
5776     \global\letcs{\gls@location}{glo@\glsdetoklabel{#1}@GlsXtrLocationField}%

```

Use level number to determine whether or not this entry has a parent.

```

5777   \gls@level=\numexpr\csuse{glo@\glsdetoklabel{#1}@level}+\glsxtr@leveloffset\relax
5778   \ifnum\gls@level>0
5779     \let\glsxtr@ifischild\@firstoftwo
5780   \else
5781     \let\glsxtr@ifischild\@secondoftwo
5782   \fi

```

Some glossary styles (such as topicmcols) save the level using \def so make sure \gls@level is expanded before being passed to \subglossentry.

```

5783 \glsxtr@ifischild
5784 {%
5785   \ifdefvoid{\gls@location}{%
5786     {%
5787       \ifdefvoid{\gls@loclist}{%
5788         {%
5789           \expandafter\subglossentry\expandafter{\number\gls@level}{#1}{%
5790         }%
5791         {%
5792           \expandafter\subglossentry\expandafter{\number\gls@level}{#1}{%
5793             {%
5794               \glossaryentrynumbers{\glsnoidxloclist{\gls@loclist}}%
5795             }%
5796             {%
5797             }%
5798             {%
5799               \expandafter\subglossentry\expandafter{%
5800                 {\number\gls@level}{#1}{\glossaryentrynumbers{\gls@location}}%
5801               }%
5802             }%
5803             {%
5804               \ifdefvoid{\gls@location}{%
5805                 {%
5806                   \ifdefvoid{\gls@loclist}{%
5807                     {%
5808                       \glossentry{#1}{%
5809                     }%
5810                     {%
5811                       \glossentry{#1}{%
5812                         {%
5813                           \glossaryentrynumbers{\glsnoidxloclist{\gls@loclist}}%
5814                         }%
5815                         {%
5816                         }%
5817                         {%
5818                           \glossentry{#1}{%
5819                             {%
5820                               \glossaryentrynumbers{\gls@location}}%
5821                             }%
5822                           }%
5823                         }%
5824                       }%
5825                       {%
5826 }

```

Provide a way to conveniently define commands that behaves like `\gls` with a label prefix.
 It's possible that the user might want minor variations with the same prefix but different default options, so use a counter to provide unique inner commands.

```
\glsxtrnewgls
5827 \newcount\@glsxtrnewgls@inner
```

(The default options supplied in *<options>* below could possibly be used to form the inner control sequence name to help make it unique, but it might feasibly contain the value where the value might contain commands.)

```
r@providenewgls
5828 \newcommand*\@glsxtr@providenewgls}{%
5829   \protected@write\auxout{}{\string\providecommand{\string\@glsxtr@newglslike}[2]{}}%
5830   \let\@glsxtr@providenewgls\relax
5831 }
```

`identifyglslike` Identify the command given in the second argument for the benefit of `bib2gls`.

```
5832 \newcommand{\glsxtridentifyglslike}[2]{%
5833   \ifdefequal\@glsxtr@record@setting\@glsxtr@record@setting@off
5834   {}%
5835   {%
5836     \@glsxtr@providenewgls
5837     \protected@write\auxout{}{\string\@glsxtr@newglslike{\#1}{\string#2}}%
5838   }%
5839 }
```

\@glsxtrnewgls

`\glsxtrnewgls[<options>]{<prefix>}{{<cs>}}{<inner cs name>}`

```
5840 \newcommand*\@glsxtrnewgls[4]{%
5841   \ifdef{\#3}{%
5842     {%
5843       \PackageError{glossaries-extra}{Command \string#3\space already
5844 defined}{}%
5845     }%
5846     {%
```

Write information to the aux file for `bib2gls`.

```
5847   \glsxtridentifyglslike{\#2}{\#3}%
5848   \ifcsdef{@#4like@#2}{%
5849     {%
5850       \advance\@glsxtrnewgls@inner by \cne
5851       \def\@glsxtrnewgls@innercsname{@#4like\number\@glsxtrnewgls@inner @#2}%
5852     }%
5853     {\def\@glsxtrnewgls@innercsname{@#4like@#2}}%
5854     \expandafter\newrobustcmd\expandafter*\expandafter
5855     #3\expandafter{\expandafter\@gls@hyp@opt\csname\@glsxtrnewgls@innercsname\endcsname}%
5856     \ifstrempty{\#1}{%
5857       {%
```

```

5858     \expandafter\newcommand\expandafter*\csname@glsxtrnewgls@innercsname\endcsname[2] []{%
5859         \new@ifnextchar[%
5860             {\csname @#4@\endcsname{##1}{#2##2}}%
5861             {\csname @#4@\endcsname{##1}{#2##2}[] }%
5862         }%
5863     }%
5864     {%
5865         \expandafter\newcommand\expandafter*\csname@glsxtrnewgls@innercsname\endcsname[2] []{%
5866             \new@ifnextchar[%
5867                 {\csname @#4@\endcsname{#1,##1}{#2##2}}%
5868                 {\csname @#4@\endcsname{#1,##1}{#2##2}[] }%
5869             }%
5870         }%
5871     }%
5872 }

```

\glsxtrnewgls

\glsxtrnewgls[*options*]{*prefix*}{{*cs*}}

The first argument prepends to the options and the second argument is the prefix.

```

5873 \newrobustcmd*{\glsxtrnewgls}[3] []{%
5874   \@glsxtrnewgls{#1}{#2}{#3}{gls}%
5875 }

```

`lsxtrnewglslike` Provide a way to conveniently define commands that behave like `\gls`, `\glspl`, `\Gls` and `\Glspl` with a label prefix. The first argument prepends to the options and the second argument is the prefix.

```

5876 \newrobustcmd*{\glsxtrnewglslike}[6] []{%
5877   \@glsxtrnewgls{#1}{#2}{#3}{gls}%
5878   \@glsxtrnewgls{#1}{#2}{#4}{glspl}%
5879   \@glsxtrnewgls{#1}{#2}{#5}{Gls}%
5880   \@glsxtrnewgls{#1}{#2}{#6}{Glspl}%
5881 }

```

`lsxtrnewGLSlike` Provide a way to conveniently define commands that behave like `\GLS`, `\GLSpl` with a label prefix. The first argument prepends to the options and the second argument is the prefix.

```

5882 \newrobustcmd*{\glsxtrnewGLSlike}[4] []{%
5883   \@glsxtrnewgls{#1}{#2}{#3}{GLS}%
5884   \@glsxtrnewgls{#1}{#2}{#4}{GLSpl}%
5885 }

```

`\glsxtrnewrgls` As `\glsxtrnewgls` but for `\rgls`.

```

5886 \newrobustcmd*{\glsxtrnewrgls}[3] []{%
5887   \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
5888 }

```

sxtrnewrglslike As \glsxtrnewrglslike but for \rgls etc.

```
5889 \newrobustcmd*\{\glsxtrnewrglslike\}[6] [] {%
5890   \@glsxtrnewgls{\#1}{\#2}{\#3}{rgls}%
5891   \@glsxtrnewgls{\#1}{\#2}{\#4}{rglsp1}%
5892   \@glsxtrnewgls{\#1}{\#2}{\#5}{rGls}%
5893   \@glsxtrnewgls{\#1}{\#2}{\#6}{rGlp1}%
5894 }
```

sxtrnewrGLSlike As \glsxtrnewGLSlike but for \rGLS etc.

```
5895 \newrobustcmd*\{\glsxtrnewrGLSlike\}[4] [] {%
5896   \@glsxtrnewgls{\#1}{\#2}{\#3}{rGLS}%
5897   \@glsxtrnewgls{\#1}{\#2}{\#4}{rGLSp1}%
5898 }
```

Provide easy access to record count fields.

totalRecordCount Access total record count. This is designed to be expandable. The argument is the label.

```
5899 \newcommand*\{\GlsXtrTotalRecordCount\}[1] {%
5900   \ifcsdef{glo@\glsdetoklabel{\#1}@recordcount}%
5901   {\csname glo@\glsdetoklabel{\#1}@recordcount\endcsname}%
5902   {0}%
5903 }
```

sXtrRecordCount Access record count for a particular counter. The first argument is the label. The second argument is the counter name.

```
5904 \newcommand*\{\GlsXtrRecordCount\}[2] {%
5905   \ifcsdef{glo@\glsdetoklabel{\#1}@recordcount.\#2}%
5906   {\csname glo@\glsdetoklabel{\#1}@recordcount.\#2\endcsname}%
5907   {0}%
5908 }
```

tionRecordCount Access record count for a particular counter and location. The first argument is the label. The second argument is the counter name. The third argument is the location. This command shouldn't be used if the location doesn't fully expand unless \glsxtrdetoklocation can be set to something sensible.

```
5909 \newcommand*\{\GlsXtrLocationRecordCount\}[3] {%
5910   \ifcsdef{glo@\glsdetoklabel{\#1}@recordcount.\#2.\glsxtrdetoklocation{\#3}}%
5911   {\csname glo@\glsdetoklabel{\#1}@recordcount.\#2.\glsxtrdetoklocation{\#3}\endcsname}%
5912   {0}%
5913 }
```

trdetoklocation

```
5914 \newcommand*\{\glsxtrdetoklocation\}[1]{#1}
```

ablerecordcount

```
5915 \newcommand*\{\glsxtrenablerecordcount\} {%
5916   \renewcommand*\{\gls\}{\rgls}%
5917   \renewcommand*\{\Gls\}{\rGls}%
```

```

5918 \renewcommand*\glSpl{\rglSpl}%
5919 \renewcommand*\GlsPl{\rGlsPl}%
5920 \renewcommand*\GLS{\rGLS}%
5921 \renewcommand*\GLSpL{\rGLSpL}%
5922 }

```

`ordtriggervalue` The value used by the record trigger test. The argument is the entry's label.

```

5923 \newcommand*\glsxtrrecordtriggervalue[1]{%
5924 \GlsXtrTotalRecordCount{#1}%
5925 }

```

`dCountAttribute`

```

5926 \newcommand*\GlsXtrSetRecordCountAttribute[2]{%
5927 \@for@glsxtr@cat:=#1\do
5928 {%
5929 \ifdefempty{@glsxtr@cat}{%
5930 {%
5931 \glssetcategoryattribute{@glsxtr@cat}{recordcount}{#2}%
5932 }%
5933 }%
5934 }

```

`ifrecordtrigger`

$\glsxtrifrecordtrigger{<label>}{{<trigger format>}}{<normal>}$

```

5935 \newcommand*\glsxtrifrecordtrigger[3]{%
5936 \glshasattribute{#1}{recordcount}%
5937 {%
5938 \ifnum\glsxtrrecordtriggervalue{#1}>\glsgetattribute{#1}{recordcount}\relax
5939 #3%
5940 \else
5941 #2%
5942 \fi
5943 }%
5944 {#3}%
5945 }

```

`trigger@record` Still need a record to ensure that `bib2gls` selects the entry.

```

5946 \newcommand*\@glsxtr@rgltrigger@record[3]{%
5947 \protected@edef\glslabel{\glsdetoklabel{#2}}%
5948 \let@gls@link@label\glslabel
5949 \def@glsxtr@thevalue{}%
5950 \def@glsxtr@theHvalue{\@glsxtr@thevalue}%
5951 \def@glsnumberformat{glstriggerrecordformat}%
5952 \protected@edef@gls@counter{\csname glo@\glslabel @counter\endcsname}%

```

```

5953 \protected@edef\glstype{\csname glo@\glslabel @type\endcsname}%
5954 \def\@glsxtr@thevalue{}%
5955 \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%

Save local setting.

5956 \@gls@save@glslocal
5957 \glsxtrinitwrgloss
5958 \glslinkpresetkeys
5959 \setkeys{glslink}{#1}%
5960 \glslinkpostsetkeys
5961 \ifdefempty{\@glsxtr@thevalue}%
5962 {%
5963   \@gls@saveentrycounter
5964 }%
5965 {%
5966   \let\the\glsentrycounter\@glsxtr@thevalue
5967   \def\theH\glsentrycounter{\@glsxtr@theHvalue}%
5968 }%
5969 \glslinkwrcontent
5970 {%
5971   \ifglsxtrinitwrglossbefore
5972     \@do@wrglossary{#2}%
5973   \fi
5974   #3%
5975   \ifglsxtrinitwrglossbefore
5976   \else
5977     \@do@wrglossary{#2}%
5978   \fi
5979 }%
5980 \@gls@restore@glslocal
5981 \@gls@do@glsunset{#2}%
5982 }

```

`gerrecordformat` Typically won't be used as it should be recognised as a special type of ignored location by `bib2gls`.

```
5983 \newcommand*\glstriggerrecordformat[1]{}%
```

```
\rgls
5984 \newrobustcmd*\rgls{\gls@hyp@opt\rgls}
```

```
\@rgls
5985 \newcommand*\@rgls[2][]{%
5986   \new@ifnextchar[\@rgls@{\#1}{\#2}]{\@rgls@{\#1}{\#2}[]}{%
5987 }
```

```
\@rgls@
5988 \def\@rgls@#1#2[#3]{%
5989   \glsxtrifrecordtrigger{#2}%
5990 }%
```

```

5991     \glsxtr@rglstrigger@record{#1}{#2}{\rglsformat{#2}{#3}}%
5992   }%
5993   {%
5994     \gls@{#1}{#2}{#3}%
5995   }%
5996 }%

\rglspl
5997 \newrobustcmd*\rglspl{\gls@hyp@opt\rglspl}

\@rglspl
5998 \newcommand*\@rglspl[2][]{%
5999   \new@ifnextchar[\@rglspl@{#1}{#2}]{\@rglspl@{#1}{#2}[]}{%
6000 }

\@rglspl@
6001 \def\@rglspl@#1#2[#3]{%
6002   \glsxtrifrecordtrigger{#2}%
6003   {%
6004     \glsxtr@rglstrigger@record{#1}{#2}{\rglsplformat{#2}{#3}}%
6005   }%
6006   {%
6007     \glspl@{#1}{#2}{#3}%
6008   }%
6009 }%

\rGls
6010 \newrobustcmd*\rGls{\gls@hyp@opt\rGls}

\@rGls
6011 \newcommand*\@rGls[2][]{%
6012   \new@ifnextchar[\@rGls@{#1}{#2}]{\@rGls@{#1}{#2}[]}{%
6013 }

\@rGls@
6014 \def\@rGls@#1#2[#3]{%
6015   \glsxtrifrecordtrigger{#2}%
6016   {%
6017     \glsxtr@rglstrigger@record{#1}{#2}{\rGlsformat{#2}{#3}}%
6018   }%
6019   {%
6020     \gls@{#1}{#2}{#3}%
6021   }%
6022 }%

\rGlspl
6023 \newrobustcmd*\rGlspl{\gls@hyp@opt\rGlspl}

```

```

\@rGlspl
6024 \newcommand*{\@rGlspl}[2] []{%
6025   \new@ifnextchar[{\@rGlspl@{\#1}{\#2}}{\@rGlspl@{\#1}{\#2}[] }%
6026 }

\@rGlspl@
6027 \def\@rGlspl@#1#2[#3]{%
6028   \glsxtrifrecordtrigger{#2}%
6029   {%
6030     \glsxtr@rglstrigger@record{\#1}{\#2}{\rGlsplformat{\#2}{\#3}}%
6031   }%
6032   {%
6033     \@Glspl@{\#1}{\#2}[]#3%
6034   }%
6035 }%

\rGLS
6036 \newrobustcmd*{\rGLS}{\gls@hyp@opt\@rGLS}

\@rGLS
6037 \newcommand*{\@rGLS}[2] []{%
6038   \new@ifnextchar[{\@rGLS@{\#1}{\#2}}{\@rGLS@{\#1}{\#2}[] }%
6039 }

\@rGLS@
6040 \def\@rGLS@#1#2[#3]{%
6041   \glsxtrifrecordtrigger{#2}%
6042   {%
6043     \glsxtr@rglstrigger@record{\#1}{\#2}{\rGLSformat{\#2}{\#3}}%
6044   }%
6045   {%
6046     \@GLS@{\#1}{\#2}[]#3%
6047   }%
6048 }%

\rGLSpl
6049 \newrobustcmd*{\rGLSpl}{\gls@hyp@opt\@rGLSpl}

\@rGLSpl
6050 \newcommand*{\@rGLSpl}[2] []{%
6051   \new@ifnextchar[{\@rGLSpl@{\#1}{\#2}}{\@rGLSpl@{\#1}{\#2}[] }%
6052 }

\@rGLSpl@
6053 \def\@rGLSpl@#1#2[#3]{%
6054   \glsxtrifrecordtrigger{#2}%
6055   {%
6056     \glsxtr@rglstrigger@record{\#1}{\#2}{\rGLSplformat{\#2}{\#3}}%

```

```

6057 }%
6058 {%
6059 \@GLSpl@{#1}{#2}[#3]%
6060 }%
6061 }%


\rglsformat
6062 \newcommand*{\rglsformat}[2]{%
6063   \glsifregular{#1}%
6064   {\glsentryfirst{#1}}%
6065   {\ifglshaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
6066 }

\rglsplformat
6067 \newcommand*{\rglsplformat}[2]{%
6068   \glsifregular{#1}%
6069   {\glsentryfirstplural{#1}}%
6070   {\ifglshaslong{#1}{\glsentrylongplural{#1}}{\glsentryfirstplural{#1}}}#2%
6071 }

\rGlsformat
6072 \newcommand*{\rGlsformat}[2]{%
6073   \glsifregular{#1}%
6074   {\Glsentryfirst{#1}}%
6075   {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
6076 }

\rGlsplformat
6077 \newcommand*{\rGlsplformat}[2]{%
6078   \glsifregular{#1}%
6079   {\Glsentryfirstplural{#1}}%
6080   {\ifglshaslong{#1}{\Glsentrylongplural{#1}}{\Glsentryfirstplural{#1}}}#2%
6081 }

\rGLSformat
6082 \newcommand*{\rGLSformat}[2]{%
6083   \expandafter\mfirstuMakeUppercase\expandafter{\rglsformat{#1}{#2}}%
6084 }

\rGLSplformat
6085 \newcommand*{\rGLSplformat}[2]{%
6086   \expandafter\mfirstuMakeUppercase\expandafter{\rglsplformat{#1}{#2}}%
6087 }

```

1.4 Link Counting

This is different to the entry counting provided by the base package (which counts the number of times the first use flag is unset). Instead, this method hooks into `\@gls@link` (through

\glsxtr@inc@linkcount) to increment an associated counter. To preserve resources, the counter is only defined if it needs to be incremented. This method is independent of the presence of hyperlinks. (The “link” part of the name refers to \gls@link not \hyperlink.)

o@inc@linkcount This performs the actual incrementing and counter definition. The counter is given by \c@glsxtr@linkcount@<label> where <label> is the entry’s label. Since this is performed within \gls@link the label can be accessed with \glslabel.

```
6088 \newcommand{\glsxtr@do@inc@linkcount}{%
```

Does this entry have the linkcount attribute set?

```
6089 \glsifattribute{\glslabel}{linkcount}{true}%
6090 {%
```

Does the counter exist?

```
6091 \ifcsdef{c@glsxtr@linkcount@\glslabel}{}%
6092 {%
```

Counter doesn’t exist, so define it.

```
6093 \newcounter{glsxtr@linkcount@\glslabel}%
```

If linkcountmaster is set, add to counter reset.

```
6094 \glshasattribute{\glslabel}{linkcountmaster}%
6095 {%
```

Need to ensure values are fully expanded.

```
6096 \begingroup
6097   \edef\@glo@tmp{\endgroup\noexpand\@addtoreset{glsxtr@linkcount@\glslabel}%
6098     {\glsgetattribute{\glslabel}{linkcountmaster}}}}
6099   \@glo@tmp
6100 }
6101 {%
6102 }%
```

Increment counter:

```
6103 \glsxtrinlinkcounter{glsxtr@linkcount@\glslabel}%
6104 }%
6105 {%
6106 }
```

rinlinkcounter May be redefined to use \refstepcounter if required.

```
6107 \newcommand*{\glsxtrinlinkcounter}[1]{\stepcounter{#1}}
```

inkCounterValue Expands to the associated link counter register or 0 if not defined.

```
6108 \newcommand*{\GlsXtrLinkCounterValue}[1]{%
6109   \ifcsundef{c@glsxtr@linkcount@#1}{0}{\csname c@glsxtr@linkcount@#1\endcsname}%
6110 }
```

rTheLinkCounter Expands to the display value of the associated link counter or 0 if not defined.

```
6111 \newcommand*{\GlsXtrTheLinkCounter}[1]{%
6112   \ifcsundef{theglsxtr@linkcount@#1}{0}{%
6113     {\csname theglsxtr@linkcount@#1\endcsname}%
6114 }}
```

```
fLinkCounterDef Tests if the counter has been defined
6115 \newcommand*{\GlsXtrIfLinkCounterDef}[3]{%
6116   \ifcsundef{the\glsxtr@linkcount@\#1}{\#3}{\#2}%
6117 }

LinkCounterName Expands to the associated link counter name. (No check for existence.)
6118 \newcommand*{\GlsXtrLinkCounterName}[1]{\glsxtr@linkcount@\#1}
```

bleLinkCounting

`\GlsXtrEnableLinkCounting[<master counter>]{<categories>}`

Enable link counting for the given categories.

```
6119 \newcommand*{\GlsXtrEnableLinkCounting}[2][]{%
6120   \let\glsxtr@inc@linkcount\glsxtr@do@inc@linkcount
6121   \@for\glsxtr@label:=\#2\do
6122   {%
6123     \glssetcategoryattribute{\glsxtr@label}{linkcount}{true}%
6124     \ifstrempty{\#1}{%
6125       \ifcsundef{c@\#1}%
6126         {\@nocounterr{\#1}}%
6127         {\glssetcategoryattribute{\glsxtr@label}{linkcountmaster}{\#1}}%
6128       }%
6129     }%
6130   }%
6131 }
6132 \onlypreamble\GlsXtrEnableLinkCounting
```

1.5 Integration with glossaries-accsupp

Provide better integration with the `glossaries-accsupp` package. (Must be loaded before the main code of `glossaries-extra` either explicitly or through the `accsupp` package option.)

These commands have their definitions set according to whether or not `glossaries-extra` has been loaded.

```
6133 \ifpackageloaded{glossaries-accsupp}%
6134 {
```

Define (or redefine) commands to use the accessibility information.

`\glsaccessname` Display the name value (no link and no check for existence).

```
6135 \newcommand*{\glsaccessname}[1]{%
6136   \glsnameaccessdisplay
6137   {%
6138     \glsentryname{\#1}%
6139   }%
6140   {\#1}%
6141 }
```

\Glsaccessname Display the name value (no link and no check for existence) with the first letter converted to upper case.

```

6142 \newcommand*{\Glsaccessname}[1]{%
6143   \glsnameaccessdisplay
6144   {%
6145     \Glsentryname{#1}%
6146   }%
6147   {#1}%
6148 }
```

\GLSaccessname Display the name value (no link and no check for existence) converted to upper case.

```

6149 \newcommand*{\GLSaccessname}[1]{%
6150   \glsnameaccessdisplay
6151   {%
6152     \mfirstucMakeUppercase{\glsentryname{#1}}%
6153   }%
6154   {#1}%
6155 }
```

\glsaccesstext Display the text value (no link and no check for existence).

```

6156 \newcommand*{\glsaccesstext}[1]{%
6157   \glstextaccessdisplay
6158   {%
6159     \glsentrytext{#1}%
6160   }%
6161   {#1}%
6162 }
```

\Glsaccesstext Display the text value (no link and no check for existence) with the first letter converted to upper case.

```

6163 \newcommand*{\Glsaccesstext}[1]{%
6164   \glstextaccessdisplay
6165   {%
6166     \Glsentrytext{#1}%
6167   }%
6168   {#1}%
6169 }
```

\GLSaccesstext Display the text value (no link and no check for existence) converted to upper case.

```

6170 \newcommand*{\GLSaccesstext}[1]{%
6171   \glstextaccessdisplay
6172   {%
6173     \mfirstucMakeUppercase{\glsentrytext{#1}}%
6174   }%
6175   {#1}%
6176 }
```

\glsaccessplural Display the plural value (no link and no check for existence).

```
6177 \newcommand*{\glsaccessplural}[1]{%
6178   \glspluralaccessdisplay
6179   {%
6180     \glsentryplural{\#1}%
6181   }%
6182   {\#1}%
6183 }
```

`Glsaccessplural` Display the plural value (no link and no check for existence) with the first letter converted to upper case.

```
6184 \newcommand*{\Glsaccessplural}[1]{%
6185   \glspluralaccessdisplay
6186   {%
6187     \Glsentryplural{\#1}%
6188   }%
6189   {\#1}%
6190 }
```

`GLSaccessplural` Display the plural value (no link and no check for existence) converted to upper case.

```
6191 \newcommand*{\GLSaccessplural}[1]{%
6192   \glspluralaccessdisplay
6193   {%
6194     \mfirstucMakeUppercase{\glsentryplural{\#1}}%
6195   }%
6196   {\#1}%
6197 }
```

`\glsaccessfirst` Display the first value (no link and no check for existence).

```
6198 \newcommand*{\glsaccessfirst}[1]{%
6199   \glsfirstaccessdisplay
6200   {%
6201     \glsentryfirst{\#1}%
6202   }%
6203   {\#1}%
6204 }
```

`\Glsaccessfirst` Display the first value (no link and no check for existence) with the first letter converted to upper case.

```
6205 \newcommand*{\Glsaccessfirst}[1]{%
6206   \glsfirstaccessdisplay
6207   {%
6208     \Glsentryfirst{\#1}%
6209   }%
6210   {\#1}%
6211 }
```

`\GLSaccessfirst` Display the first value (no link and no check for existence) converted to upper case.

```
6212 \newcommand*{\GLSaccessfirst}[1]{%
```

```

6213     \glsfirstaccessdisplay
6214     {%
6215         \mfirstucMakeUppercase{\glsentryfirst{\#1}}%
6216     }%
6217     {\#1}%
6218 }

cessfirstplural Display the firstplural value (no link and no check for existence).
6219 \newcommand*{\glsaccessfirstplural}[1]{%
6220     \glsfirstpluralaccessdisplay
6221     {%
6222         \glsentryfirstplural{\#1}%
6223     }%
6224     {\#1}%
6225 }

cessfirstplural Display the firstplural value (no link and no check for existence) with the first letter converted
to upper case.
6226 \newcommand*{\Glsaccessfirstplural}[1]{%
6227     \glsfirstpluralaccessdisplay
6228     {%
6229         \Glsentryfirstplural{\#1}%
6230     }%
6231     {\#1}%
6232 }

cessfirstplural Display the firstplural value (no link and no check for existence) converted to upper case.
6233 \newcommand*{\GLSaccessfirstplural}[1]{%
6234     \glsfirstpluralaccessdisplay
6235     {%
6236         \mfirstucMakeUppercase{\glsentryfirstplural{\#1}}%
6237     }%
6238     {\#1}%
6239 }

glsaccesssymbol Display the symbol value (no link and no check for existence).
6240 \newcommand*{\glsaccesssymbol}[1]{%
6241     \glssymbolaccessdisplay
6242     {%
6243         \glsentrysymbol{\#1}%
6244     }%
6245     {\#1}%
6246 }

Glsaccesssymbol Display the symbol value (no link and no check for existence) with the first letter converted to
upper case.
6247 \newcommand*{\Glsaccesssymbol}[1]{%
6248     \glssymbolaccessdisplay

```

```
6249     {%
6250         \Glsentrysymbol{#1}%
6251     }%
6252     {#1}%
6253 }
```

`GLSaccessssymbol` Display the symbol value (no link and no check for existence) converted to upper case.

```
6254 \newcommand*{\GLSaccessssymbol}[1]{%
6255     \glssymbolaccessdisplay
6256     {%
6257         \mfirstucMakeUppercase{\glsentrysymbol{#1}}%
6258     }%
6259     {#1}%
6260 }
```

`esssymbolplural` Display the symbolplural value (no link and no check for existence).

```
6261 \newcommand*{\glsaccessssymbolplural}[1]{%
6262     \glssymbolpluralaccessdisplay
6263     {%
6264         \glsentrysymbolplural{#1}%
6265     }%
6266     {#1}%
6267 }
```

`esssymbolplural` Display the symbolplural value (no link and no check for existence) with the first letter converted to upper case.

```
6268 \newcommand*{\Glsaccessssymbolplural}[1]{%
6269     \glssymbolpluralaccessdisplay
6270     {%
6271         \Glsentrysymbolplural{#1}%
6272     }%
6273     {#1}%
6274 }
```

`esssymbolplural` Display the symbolplural value (no link and no check for existence) converted to upper case.

```
6275 \newcommand*{\GLSaccessssymbolplural}[1]{%
6276     \glssymbolpluralaccessdisplay
6277     {%
6278         \mfirstucMakeUppercase{\glsentrysymbolplural{#1}}%
6279     }%
6280     {#1}%
6281 }
```

`\glsaccessdesc` Display the desc value (no link and no check for existence).

```
6282 \newcommand*{\glsaccessdesc}[1]{%
6283     \glsdescriptionaccessdisplay
6284     {%
6285         \glsentrydesc{#1}%
6286 }
```

```
6286     }%
6287     {#1}%
6288 }
```

\Glsaccessdesc Display the desc value (no link and no check for existence) with the first letter converted to upper case.

```
6289 \newcommand*{\Glsaccessdesc}[1]{%
6290   \glsdescriptionaccessdisplay
6291   {%
6292     \Glsentrydesc{#1}%
6293   }%
6294   {#1}%
6295 }
```

\GLSaccessdesc Display the desc value (no link and no check for existence) converted to upper case.

```
6296 \newcommand*{\GLSaccessdesc}[1]{%
6297   \glsdescriptionaccessdisplay
6298   {%
6299     \mfirstucMakeUppercase{\glsentrydesc{#1}}%
6300   }%
6301   {#1}%
6302 }
```

ccessdescplural Display the descplural value (no link and no check for existence).

```
6303 \newcommand*{\glsaccessdescplural}[1]{%
6304   \glsdescriptionpluralaccessdisplay
6305   {%
6306     \glsentrydescplural{#1}%
6307   }%
6308   {#1}%
6309 }
```

ccessdescplural Display the descplural value (no link and no check for existence) with the first letter converted to upper case.

```
6310 \newcommand*{\Glsaccessdescplural}[1]{%
6311   \glsdescriptionpluralaccessdisplay
6312   {%
6313     \Glsentrydescplural{#1}%
6314   }%
6315   {#1}%
6316 }
```

ccessdescplural Display the descplural value (no link and no check for existence) converted to upper case.

```
6317 \newcommand*{\GLSaccessdescplural}[1]{%
6318   \glsdescriptionpluralaccessdisplay
6319   {%
6320     \mfirstucMakeUppercase{\glsentrydescplural{#1}}%
6321   }%
```

```

6322     {#1}%
6323 }

\glsaccessshort Display the short form (no link and no check for existence).
6324 \newcommand*{\glsaccessshort}[1]{%
6325   \glsshortaccessdisplay
6326   {%
6327     \glsentryshort{#1}%
6328   }%
6329   {#1}%
6330 }

\Glsaccessshort Display the short form with first letter converted to uppercase (no link and no check for existence).
6331 \newcommand*{\Glsaccessshort}[1]{%
6332   \glsshortaccessdisplay
6333   {%
6334     \Glsentryshort{#1}%
6335   }%
6336   {#1}%
6337 }

\GLSaccessshort Display the short value (no link and no check for existence) converted to upper case.
6338 \newcommand*{\GLSaccessshort}[1]{%
6339   \glsshortaccessdisplay
6340   {%
6341     \mfirstucMakeUppercase{\glsentryshort{#1}}%
6342   }%
6343   {#1}%
6344 }

\lsaccessshortpl Display the short plural form (no link and no check for existence).
6345 \newcommand*{\lsaccessshortpl}[1]{%
6346   \glsshortpluralaccessdisplay
6347   {%
6348     \glsentryshortpl{#1}%
6349   }%
6350   {#1}%
6351 }

\lsaccessshorttpl Display the short plural form with first letter converted to uppercase (no link and no check for existence).
6352 \newcommand*{\lsaccessshorttpl}[1]{%
6353   \glsshortpluralaccessdisplay
6354   {%
6355     \Glsentryshortpl{#1}%
6356   }%
6357   {#1}%
6358 }

```

```

LSaccessshortpl Display the shortplural value (no link and no check for existence) converted to upper case.
6359 \newcommand*{\GLSaccessshortpl}[1]{%
6360   \glsshortpluralaccessdisplay
6361   {%
6362     \mfirstucMakeUppercase{\glsentryshortpl{#1}}%
6363   }%
6364   {#1}%
6365 }

\glsaccesslong Display the long form (no link and no check for existence).
6366 \newcommand*{\glsaccesslong}[1]{%
6367   \glslongaccessdisplay{\glsentrylong{#1}}{#1}%
6368 }

\Glsaccesslong Display the long form (no link and no check for existence).
6369
6370 \newcommand*{\Glsaccesslong}[1]{%
6371   \glslongaccessdisplay{\Glsentrylong{#1}}{#1}%
6372 }

\GLSaccesslong Display the long value (no link and no check for existence) converted to upper case.
6373 \newcommand*{\GLSaccesslong}[1]{%
6374   \glslongaccessdisplay
6375   {%
6376     \mfirstucMakeUppercase{\glsentrylong{#1}}%
6377   }%
6378   {#1}%
6379 }

\glsaccesslongpl Display the long plural form (no link and no check for existence).
6380 \newcommand*{\glsaccesslongpl}[1]{%
6381   \glslongpluralaccessdisplay{\glsentrylongpl{#1}}{#1}%
6382 }

\Glsaccesslongpl Display the long plural form (no link and no check for existence).
6383
6384 \newcommand*{\Glsaccesslongpl}[1]{%
6385   \glslongpluralaccessdisplay{\Glsentrylongpl{#1}}{#1}%
6386 }

\GLSaccesslongpl Display the longplural value (no link and no check for existence) converted to upper case.
6387 \newcommand*{\GLSaccesslongpl}[1]{%
6388   \glslongpluralaccessdisplay
6389   {%
6390     \mfirstucMakeUppercase{\glsentrylongpl{#1}}%
6391   }%
6392   {#1}%
6393 }

```

Keys for accessibility support.

```
6394 \define@key{glsxtrabrv}{access}{%
6395   \def\@gls@nameaccess{#1}%
6396 }
6397 \define@key{glsxtrabrv}{textaccess}{%
6398   \def\@gls@textaccess{#1}%
6399 }
6400 \define@key{glsxtrabrv}{pluralaccess}{%
6401   \def\@gls@pluralaccess{#1}%
6402 }
6403 \define@key{glsxtrabrv}{firstaccess}{%
6404   \def\@gls@firstaccess{#1}%
6405 }
6406 \define@key{glsxtrabrv}{firstpluralaccess}{%
6407   \def\@gls@firstpluralaccess{#1}%
6408 }
6409 \define@key{glsxtrabrv}{shortaccess}{%
6410   \def\@gls@shortaccess{#1}%
6411 }
6412 \define@key{glsxtrabrv}{shortpluralaccess}{%
6413   \def\@gls@shortaccesspl{#1}%
6414 }
6415 \define@key{glsxtrabrv}{longaccess}{%
6416   \def\@gls@longaccess{#1}%
6417 }
6418 \define@key{glsxtrabrv}{shortlonglaccess}{%
6419   \def\@gls@longaccesspl{#1}%
6420 }
```

@initaccesskeys

```
6421 \newcommand*\@gls@initaccesskeys{%
6422   \def\@gls@nameaccess{}%
6423   \def\@gls@textaccess{}%
6424   \def\@gls@pluralaccess{}%
6425   \def\@gls@firstaccess{}%
6426   \def\@gls@firstpluralaccess{}%
6427   \def\@gls@shortaccess{}%
6428   \def\@gls@shortaccesspl{}%
6429   \def\@gls@longaccess{}%
6430   \def\@gls@longaccesspl{}%
6431 }
```

ssattribute@set

```
\gls@ifaccessattribute@set{\attribute}{\true}{\false}
```

```
6432 \newcommand{\gls@ifaccessattribute@set}[3]{%
6433   \glsifcategoryattribute{\glscategorylabel}{access#1}{true}%
6434   {#2}%
6435   {%
6436     \glsifcategoryattribute{\glscategorylabel}{access#1}{false}%
6437     {#3}%
6438     {%
6439       \glsifcategoryattribute{\glscategorylabel}{#1}{true}%
6440       {#2}%
6441       {#3}%
6442     }%
6443   }%
6444 }
```

As from glossaries v4.45, the replacement text support has been corrected so that the accessibility support for abbreviations use the “E” (expanded value) element. This should actually contain the long form since it’s supposed to explain the abbreviation. This is a bit redundant on first use for styles like long-short.

aultshortaccess

```
\glsdefaultshortaccess{\long}{\short}
```

This command was only introduced to glossaries-accsupp 1.42 so it may not be defined.

```
6445 \def\glsdefaultshortaccess#1#2{#1 (#2)}
```

signactualsetup

```
6446 \newcommand{\glsxtrassignactualsetup}{%
6447   \let\@empty
6448   \let\emph\@firstofone
6449   \let\textbf\@firstofone
6450   \let\textmd\@firstofone
6451   \let\textit\@firstofone
6452   \let\textsl\@firstofone
6453   \let\textsc\@firstofone
6454   \let\textrm\@firstofone
6455   \let\textsf\@firstofone
6456   \let\texttt\@firstofone
6457 }
```

s@assn@actual

```
6458 \ifdef\pdfstringdef
6459 {
6460   \newcommand{\gls@assn@actual}{%
```

```

6461 \begingroup
6462   \glsxtrassignactualsetup
6463   \pdfstringdef{\gls@actualshort}{\glsxtrorgshort}%
6464   \pdfstringdef{\gls@actuallong}{\glsxtrorglong}%
6465   \pdfstringdef{\gls@actualshortpl}{\gls@shortpl}%
6466   \pdfstringdef{\gls@actuallongpl}{\gls@longpl}%
6467 \protected@edef{\gls@tmp}{\endgroup
6468   \def\noexpand{\gls@actualshort}{\expandonce{\gls@actualshort}}%
6469   \def\noexpand{\gls@actuallong}{\expandonce{\gls@actuallong}}%
6470   \def\noexpand{\gls@actualshortpl}{\expandonce{\gls@actualshortpl}}%
6471   \def\noexpand{\gls@actuallongpl}{\expandonce{\gls@actuallongpl}}%
6472 }%
6473   \gls@tmp
6474 }
6475 }
6476 {
6477 \newcommand{\gls@assign@actual}{%
6478   \begingroup
6479     \glsxtrassignactualsetup
6480     \protected@edef{\gls@tmp}{\endgroup
6481       \def\noexpand{\gls@actualshort}{\glsxtrorgshort}%
6482       \def\noexpand{\gls@actuallong}{\glsxtrorglong}%
6483       \def\noexpand{\gls@actualshortpl}{\gls@shortpl}%
6484       \def\noexpand{\gls@actuallongpl}{\gls@longpl}%
6485     }%
6486     \gls@tmp
6487   }
6488 }

```

`lt@short@access` Renamed `\gls@setup@default@access` and removed argument since it can be obtained from `\glsxtrorgshort`.

`@default@access` Assign the default value of the `shortaccess` key. The argument is the short value passed to `\newabbreviation`. The `shortaccess` value should explain the abbreviation.

```

6489 \newcommand{\gls@setup@default@access}{%
6490   \gls@assign@actual
6491   \ifdefempty{\gls@shortaccess}
6492   {}

```

Check if the `accessinsertdots` attribute has been set but only if `shortaccess` hasn't been set.

```

6493   \gls@ifaccessattribute{set{insertdots}}%
6494   {}
6495   \expandafter\glsxtr@insertdots\expandafter\gls@actualshort\expandafter
6496   {\gls@actualshort}%
6497 }%
6498 {}%
6499 \ifdefempty{\gls@longaccess}
6500 {}
6501 \protected@edef{\gls@shortaccess}{\glsdefaultshortaccess}

```

```

6502      {\expandonce{@gls@actuallong}{\expandonce{@gls@actualshort}}}%
6503  }%
6504  {%
6505      \protected@edef{@gls@shortaccess{\glsdefaultshortaccess
6506          {\expandonce{@gls@longaccess}{\expandonce{@gls@actualshort}}}}}%
6507  }%
6508  \appto{\ExtraCustomAbbreviationFields{shortaccess={\gls@shortaccess},}}%

```

If `shortaccessplural` hasn't been set, assign plural form.

```

6509  \ifdefempty{@gls@shortaccesspl}
6510  {%
6511      {@gls@ifaccessattribute@set{aposplural}}%
6512  {%
6513      \expandafter{\expandafter{\expandafter{\gls@shortaccesspl}\expandafter{%
6514          \gls@actualshort}'\glsxtrabbrvpluralsuffix}}}%
6515  }%
6516  {%
6517      {@gls@ifaccessattribute@set{noshortplural}}%
6518  {%
6519      \let{@gls@shortaccesspl}{@gls@shortaccess}
6520  }%
6521  {%
6522      \let{@gls@shortaccesspl}{@gls@actualshortpl}
6523  }%
6524  }%
6525  \ifdefempty{@gls@longaccesspl}
6526  {%
6527      \protected@edef{@gls@shortaccesspl{\glsdefaultshortaccess
6528          {\expandonce{@gls@actuallongpl}{\expandonce{@gls@actualshortpl}}}}}%
6529  }%
6530  {%
6531      \protected@edef{@gls@shortaccesspl{\glsdefaultshortaccess
6532          {\expandonce{@gls@longaccesspl}{\expandonce{@gls@actualshort}}}}}%
6533  }%
6534  \appto{\ExtraCustomAbbreviationFields{shortpluralaccess={\gls@shortaccesspl},}}%
6535  }%
6536  {}%
6537 }%
6538 {%
6539     \ifdefempty{@gls@shortaccesspl}
6540     {\let{@gls@shortaccesspl}{@gls@shortaccess}}%
6541     {}%
6542 }%

```

If `access` key hasn't been set, check if the `nameaccess` attribute has been set.

```

6543  \ifdefempty{@gls@nameaccess}
6544  {%
6545      \glscategoryattribute{\glscategorylabel}{nameaccess}{true}}%
6546  {}%

```

```

6547     \eappto\ExtraCustomAbbreviationFields{access={\@gls@shortaccess},}%
6548     }%
6549     {}%
6550     }%
6551     {}%
6552
6553     If textaccess key hasn't been set, check if the textshortaccess attribute has been set.
6554     \ifdefempty{\gls@textaccess}
6555     {}%
6556     \glsifcategoryattribute{\glscategorylabel}{textshortaccess}{true}%
6557     }%
6558     {}%
6559     }%
6560     {}%
6561     \ifdefempty{\gls@pluralaccess}
6562     {}%
6563     \glsifcategoryattribute{\glscategorylabel}{textshortaccess}{true}%
6564     {}%
6565     \eappto\ExtraCustomAbbreviationFields{%
6566         pluralaccess={\@gls@shortaccesspl},%
6567     }%
6568     }%
6569     {}%
6570     }%
6571     {}%
6572
6573     If firstaccess key hasn't been set, check if the firstshortaccess attribute has been set.
6574     \ifdefempty{\gls@firstaccess}
6575     {}%
6576     \glsifcategoryattribute{\glscategorylabel}{firstshortaccess}{true}%
6577     }%
6578     {}%
6579     }%
6580     {}%
6581     \ifdefempty{\gls@firstpluralaccess}
6582     {}%
6583     \glsifcategoryattribute{\glscategorylabel}{firstshortaccess}{true}%
6584     {}%
6585     \eappto\ExtraCustomAbbreviationFields{%
6586         firstpluralaccess={\@gls@shortaccesspl},%
6587     }%
6588     }%
6589     {}%
6590     }%
6591     {}%
6592 }

```

Provide hooks for \setabbreviationstyle that automatically set the attributes appropriate for the style. If the name is just the short form and the description contains the long form, then it may not be necessary to set nameshortaccess but it would depend on the glossary style.

Need to provide \glsxtr{category}{field}accsupp if not already defined.

ovideaccsuppcmd

```
6593 \newcommand*{\glsxtrprovideaccsuppcmd}[2]{%
6594   \ifcsundef{\glsxtr#1#2accsupp}%
6595     {\csdef{\glsxtr#1#2accsupp}{\glsshortaccsupp}}%
6596   {}%
6597 }
```

rSetNoLongAttrs For styles where the name, first and text are just the abbreviation.

```
6598 \newcommand*{\glsxtrAccSuppAbbrSetNoLongAttrs}[1]{%
6599   \glssetcategoryattribute{#1}{nameshortaccess}{true}%
6600   \glssetcategoryattribute{#1}{firstshortaccess}{true}%
6601   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6602   \glsxtrprovideaccsuppcmd{#1}{name}%
6603   \glsxtrprovideaccsuppcmd{#1}{first}%
6604   \glsxtrprovideaccsuppcmd{#1}{firstpl}%
6605   \glsxtrprovideaccsuppcmd{#1}{text}%
6606   \glsxtrprovideaccsuppcmd{#1}{plural}%
6607 }
```

tFirstLongAttrs For styles where the name and text are just the abbreviation. The first form may just be long or may be short and long.

```
6608 \newcommand*{\glsxtrAccSuppAbbrSetFirstLongAttrs}[1]{%
6609   \glssetcategoryattribute{#1}{nameshortaccess}{true}%
6610   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6611   \glsxtrprovideaccsuppcmd{#1}{name}%
6612   \glsxtrprovideaccsuppcmd{#1}{text}%
6613   \glsxtrprovideaccsuppcmd{#1}{plural}%
6614 }
```

tTextShortAttrs For styles where only the text is just the abbreviation. The name and first form may just be long or may be short and long. The name may also be short but followed by the long form in the description.

```
6615 \newcommand*{\glsxtrAccSuppAbbrSetTextShortAttrs}[1]{%
6616   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6617   \glsxtrprovideaccsuppcmd{#1}{text}%
6618   \glsxtrprovideaccsuppcmd{#1}{plural}%
6619 }
```

tNameShortAttrs For styles where only the name is just the abbreviation. The first and subsequent form may just be long or may be short and long.

```
6620 \newcommand*{\glsxtrAccSuppAbbrSetNameShortAttrs}[1]{%
6621   \glssetcategoryattribute{#1}{nameshortaccess}{true}%
6622   \glsxtrprovideaccsuppcmd{#1}{name}%
6623 }
```

etNameLongAttrs For styles where the first and text are just the abbreviation. The name may just be long or may be short and long or the name may be short.

```

6624 \newcommand*{\glsxtrAccSuppAbbrSetNameLongAttrs}[1]{%
6625   \glssetcategoryattribute{#1}{firstshortaccess}{true}%
6626   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6627   \glsxtrprovideaccsuppcmd{#1}{first}%
6628   \glsxtrprovideaccsuppcmd{#1}{firstpl}%
6629   \glsxtrprovideaccsuppcmd{#1}{text}%
6630   \glsxtrprovideaccsuppcmd{#1}{plural}%
6631 }
    
```

End of if accsupp part

```

6632 }
6633 {
    
```

No accessibility support. Just define these commands to do \glsentry<xxx>

\glsaccessname Display the name value (no link and no check for existence).

```

6634 \newcommand*{\glsaccessname}[1]{\glsentryname{#1}}
    
```

\Glsaccessname Display the name value (no link and no check for existence) with the first letter converted to upper case.

```

6635 \newcommand*{\Glsaccessname}[1]{\Glsentryname{#1}}
    
```

\GLSaccessname Display the name value (no link and no check for existence). converted to upper case.

```

6636 \newcommand*{\GLSaccessname}[1]{%
6637   \protect\mfirstucMakeUppercase{\glsentryname{#1}}}
    
```

\glsaccesstext Display the text value (no link and no check for existence).

```

6638 \newcommand*{\glsaccesstext}[1]{\glsentrytext{#1}}
    
```

\Glsaccesstext Display the text value (no link and no check for existence) with the first letter converted to upper case.

```

6639 \newcommand*{\Glsaccesstext}[1]{\Glsentrytext{#1}}
    
```

\GLSaccesstext Display the text value (no link and no check for existence). converted to upper case.

```

6640 \newcommand*{\GLSaccesstext}[1]{%
6641   \protect\mfirstucMakeUppercase{\glsentrytext{#1}}}
    
```

glsaccessplural Display the plural value (no link and no check for existence).

```

6642 \newcommand*{\glsaccessplural}[1]{\glsentryplural{#1}}
    
```

Glsaccessplural Display the plural value (no link and no check for existence) with the first letter converted to upper case.

```

6643 \newcommand*{\Glsaccessplural}[1]{\Glsentryplural{#1}}
    
```

GLSaccessplural Display the plural value (no link and no check for existence). converted to upper case.

```

6644 \newcommand*{\GLSaccessplural}[1]{%
6645   \protect\mfirstucMakeUppercase{\glsentryplural{#1}}}
    
```

```

\glsaccessfirst  Display the first value (no link and no check for existence).
6646  \newcommand*{\glsaccessfirst}[1]{\glsentryfirst{\#1}}


\Glsaccessfirst  Display the first value (no link and no check for existence) with the first letter converted to
upper case.
6647  \newcommand*{\Glsaccessfirst}[1]{\Glsentryfirst{\#1}}


\GLSaccessfirst  Display the first value (no link and no check for existence). converted to upper case.
6648  \newcommand*{\GLSaccessfirst}[1]{%
6649    \protect\mfistucMakeUppercase{\glsentryfirst{\#1}}%


cessfirstplural  Display the firstplural value (no link and no check for existence).
6650  \newcommand*{\glsaccessfirstplural}[1]{\glsentryfirstplural{\#1}}


cessfirstplural  Display the firstplural value (no link and no check for existence) with the first letter converted
to upper case.
6651  \newcommand*{\Glsaccessfirstplural}[1]{\Glsentryfirstplural{\#1}}


cessfirstplural  Display the firstplural value (no link and no check for existence). converted to upper case.
6652  \newcommand*{\GLSaccessfirstplural}[1]{%
6653    \protect\mfistucMakeUppercase{\glsentryfirstplural{\#1}}%


glsaccesssymbol  Display the symbol value (no link and no check for existence).
6654  \newcommand*{\glsaccesssymbol}[1]{\glsentrysymbol{\#1}}


Glsaccesssymbol  Display the symbol value (no link and no check for existence) with the first letter converted to
upper case.
6655  \newcommand*{\Glsaccesssymbol}[1]{\Glsentrysymbol{\#1}}


GLSaccesssymbol  Display the symbol value (no link and no check for existence). converted to upper case.
6656  \newcommand*{\GLSaccesssymbol}[1]{%
6657    \protect\mfistucMakeUppercase{\glsentrysymbol{\#1}}%


esssymbolplural  Display the symbolplural value (no link and no check for existence).
6658  \newcommand*{\glsaccesssymbolplural}[1]{\glsentrysymbolplural{\#1}}


esssymbolplural  Display the symbolplural value (no link and no check for existence) with the first letter con-
verted to upper case.
6659  \newcommand*{\Glsaccesssymbolplural}[1]{\Glsentrysymbolplural{\#1}}


esssymbolplural  Display the symbolplural value (no link and no check for existence). converted to upper case.
6660  \newcommand*{\GLSaccesssymbolplural}[1]{%
6661    \protect\mfistucMakeUppercase{\glsentrysymbolplural{\#1}}%


\glsaccessdesc  Display the desc value (no link and no check for existence).
6662  \newcommand*{\glsaccessdesc}[1]{\glsentrydesc{\#1}}

```

\Glsaccessdesc Display the desc value (no link and no check for existence) with the first letter converted to upper case.
6663 \newcommand*{\Glsaccessdesc}[1]{\Glsentrydesc{\#1}}

\GLSaccessdesc Display the desc value (no link and no check for existence). converted to upper case.
6664 \newcommand*{\GLSaccessdesc}[1]{%
6665 \protect\mfirstucMakeUppercase{\glsentrydesc{\#1}}}

\accessdescplural Display the descplural value (no link and no check for existence).
6666 \newcommand*{\glsaccessdescplural}[1]{\glsentrydescplural{\#1}}

\accessdescplural Display the descplural value (no link and no check for existence) with the first letter converted to upper case.
6667 \newcommand*{\Glsaccessdescplural}[1]{\Glsentrydescplural{\#1}}

\accessdescplural Display the descplural value (no link and no check for existence). converted to upper case.
6668 \newcommand*{\GLSaccessdescplural}[1]{%
6669 \protect\mfirstucMakeUppercase{\glsentrydescplural{\#1}}}

\glsaccessshort Display the short form (no link and no check for existence).
6670 \newcommand*{\glsaccessshort}[1]{\glsentryshort{\#1}}

\GLSaccessshort Display the short form with first letter converted to uppercase (no link and no check for existence).
6671 \newcommand*{\Glsaccessshort}[1]{\Glsentryshort{\#1}}

\GLSaccessshort Display the short value (no link and no check for existence). converted to upper case.
6672 \newcommand*{\GLSaccessshort}[1]{%
6673 \protect\mfirstucMakeUppercase{\glsentryshort{\#1}}}

\lsaccessshortpl Display the short plural form (no link and no check for existence).
6674 \newcommand*{\glsaccessshortpl}[1]{\glsentryshortpl{\#1}}

\lsaccessshortpl Display the short plural form with first letter converted to uppercase (no link and no check for existence).
6675 \newcommand*{\Glsaccessshortpl}[1]{\Glsentryshortpl{\#1}}

\Laccessshortpl Display the shortplural value (no link and no check for existence). converted to upper case.
6676 \newcommand*{\GLSaccessshortpl}[1]{%
6677 \protect\mfirstucMakeUppercase{\glsentryshortpl{\#1}}}

\glsaccesslong Display the long form (no link and no check for existence).
6678 \newcommand*{\glsaccesslong}[1]{\glsentrylong{\#1}}

\GLsaccesslong Display the long form (no link and no check for existence).
6679 \newcommand*{\Glsaccesslong}[1]{\Glsentrylong{\#1}}

```

\GLSaccesslong  Display the long value (no link and no check for existence). converted to upper case.
6680  \newcommand*{\GLSaccesslong}[1]{%
6681    \protect\mfirstucMakeUppercase{\glsentrylong{#1}}}

\glsaccesslongpl  Display the long plural form (no link and no check for existence).
6682  \newcommand*{\glsaccesslongpl}[1]{\glsentrylongpl{#1}{}}

\Glsaccesslongpl  Display the long plural form (no link and no check for existence).
6683  \newcommand*{\Glsaccesslongpl}[1]{\Glsentrylongpl{#1}{}} 

\GLSaccesslongpl  Display the longplural value (no link and no check for existence). converted to upper case.
6684  \newcommand*{\GLSaccesslongpl}[1]{%
6685    \protect\mfirstucMakeUppercase{\glsentrylongpl{#1}}}

@initaccesskeys  This does nothing if there's no accessibility support.
6686  \newcommand*{\@gls@initaccesskeys}{}{}

@default@access  This does nothing if there's no accessibility support.
6687  \newcommand{\@gls@setup@default@access}{}{}

rSetNoLongAttrs  This does nothing if there's no accessibility support.
6688  \newcommand*{\glsxtrAccSuppAbbrSetNoLongAttrs}[1]{}{}

tFirstLongAttrs  This does nothing if there's no accessibility support.
6689  \newcommand*{\glsxtrAccSuppAbbrSetFirstLongAttrs}[1]{}{}

tTextShortAttrs  This does nothing if there's no accessibility support.
6690  \newcommand*{\glsxtrAccSuppAbbrSetTextShortAttrs}[1]{}{}

tNameShortAttrs  This does nothing if there's no accessibility support.
6691  \newcommand*{\glsxtrAccSuppAbbrSetNameShortAttrs}[1]{}{}

etNameLongAttrs  This does nothing if there's no accessibility support.
6692  \newcommand*{\glsxtrAccSuppAbbrSetNameLongAttrs}[1]{}{}

      End of else part
6693 }

```

1.6 Categories

```

\glscategory  Add a new storage key that can be used to indicate a category. The default category is general.
6694 \glsaddstoragekey{category}{general}{\glscategory}

\glsifcategory  Convenient shortcut to determine if an entry has the given category.
6695 \newcommand{\glsifcategory}[4]{%
6696  \ifglsfieldeq{#1}{category}{#2}{#3}{#4}%
6697 }

```

Categories can have attributes.

categoryattribute

```
\glssetcategoryattribute{\langle category \rangle}{\langle attribute-label \rangle}{\langle value \rangle}
```

Set (or override if already set) an attribute for the given category.

```
6698 \newcommand*\glssetcategoryattribute[3]{%
6699   \csdef{\glsxtr@categoryattr@@#1@#2}{#3}%
6700 }
```

categoriesattribute

```
\glssetcategoriesattribute{\langle category list \rangle}{\langle attribute-label \rangle}{\langle value \rangle}
```

Similar to above, but globally apply to each category in the list.

```
6701 \newcommand*\glssetcategoriesattribute[3]{%
6702   \@for\gls@thiscatlabel:=#1\do{%
6703     \csgdef{\glsxtr@categoryattr@@\gls@thiscatlabel @#2}{#3}%
6704   }%
6705 }
```

categoriesattributes

```
\glssetcategoriesattributes{\langle category list \rangle}{\langle attribute-label list \rangle}{\langle value \rangle}
```

Similar to above, but apply to each category and attribute in the list.

```
6706 \newcommand*\glssetcategoriesattributes[3]{%
```

Group to avoid problems with nested \@for.

```
6707 {%
6708   \@for\gls@thisattrlabel:=#2\do{%
6709     \glssetcategoriesattribute{\#1}{\gls@thisattrlabel}{\#3}%
6710   }%
6711 }%
6712 }
```

categoryattribute

```
\glsgetcategoryattribute{\langle category \rangle}{\langle attribute-label \rangle}
```

Get the value of the given attribute for the given category. Does nothing if the attribute isn't defined.

```
6713 \newcommand*{\glsgetcategoryattribute}[2]{%
6714   \csuse{@glsxtr@categoryattr@@#1@#2}%
6715 }
```

categoryattribute

```
\glsunsetcategoryattribute{\category}{\attribute-label}
```

Unsets the given attribute for the given category.

```
6716 \newcommand*{\glsunsetcategoryattribute}[2]{%
6717   \csundef{@glsxtr@categoryattr@@#1@#2}%
6718 }
```

categoryattribute

```
\glshascategoryattribute{\category}{\attribute-label}{\true}{\false}
```

Tests if the category has the given attribute set.

```
6719 \newcommand*{\glshascategoryattribute}[4]{%
6720   \ifcsvvoid{@glsxtr@categoryattr@@#1@#2}{#4}{#3}%
6721 }
```

glssetattribute

```
\glssetattribute{\entry_label}{\attribute-label}{\value}
```

Short cut where the category label is obtained from the entry information.

```
6722 \newcommand*{\glssetattribute}[3]{%
6723   \glssetcategoryattribute{\glscategory{#1}}{#2}{#3}%
6724 }
```

glsgetattribute

```
\glsgetattribute{\entry_label}{\attribute-label}
```

Short cut where the category label is obtained from the entry information.

```
6725 \newcommand*{\glsgetattribute}[2]{%
6726   \glsgetcategoryattribute{\glscategory{#1}}{#2}%
6727 }
```

glshasattribute

```
\glshasattribute{\entrylabel}{\attributelabel}{\true}{\false}
```

Short cut to test if the given attribute has been set where the category label is obtained from the entry information.

```
6728 \newcommand*\glshasattribute[4]{%
6729   \ifglsentryexists{#1}%
6730   {\glshascategoryattribute{\glscategory{#1}}{#2}{#3}{#4}}%
6731   {#4}%
6732 }
```

categoryattribute

```
\glsifcategoryattribute{\category}{\attributelabel}{\value}{\truepart}{\falsepart}
```

True if category has the attribute with the given value.

```
6733 \newcommand{\glsifcategoryattribute}[5]{%
6734   \ifcsundef{\glsxtrcategoryattr@#1@#2}%
6735   {#5}%
6736   {\ifcsstring{\glsxtrcategoryattr@#1@#2}{#3}{#4}{#5}}%
6737 }
```

\glsifattribute

```
\glsifattribute{\entrylabel}{\attributelabel}{\value}{\truepart}{\falsepart}
```

Short cut to determine if the given entry has a category with the given attribute set.

```
6738 \newcommand{\glsifattribute}[5]{%
6739   \ifglsentryexists{#1}%
6740   {\glsifcategoryattribute{\glscategory{#1}}{#2}{#3}{#4}{#5}}%
6741   {#5}%
6742 }
```

Set attributes for the default general category:

```
6743 \glssetcategoryattribute{general}{regular}{true}
```

Acronyms are regular by default, since they're typically just treated like normal words.

```
6744 \glssetcategoryattribute{acronym}{regular}{true}
```

regularcategory Convenient shortcut to add the regular attribute.

```
6745 \newcommand*\glssetregularcategory[1]{%
6746   \glssetcategoryattribute{#1}{regular}{true}%
6747 }
```

regularcategory

```
\glsifregularcategory{\category}{(true part)}{(false part)}
```

Short cut to determine if a category has the regular attribute explicitly set to true.

```
6748 \newcommand{\glsifregularcategory}[3]{%
6749   \glsifcategoryattribute{#1}{regular}{true}{#2}{#3}%
6750 }
```

regularcategory

```
\glsifnotregularcategory{\category}{(true part)}{(false part)}
```

Short cut to determine if a category has the regular attribute explicitly set to false.

```
6751 \newcommand{\glsifnotregularcategory}[3]{%
6752   \glsifcategoryattribute{#1}{regular}{false}{#2}{#3}%
6753 }
```

\glsifregular

```
\glsifregular{\entrylabel}{(true part)}{(false part)}
```

Short cut to determine if an entry has a regular attribute set to true.

```
6754 \newcommand{\glsifregular}[3]{%
6755   \glsifregularcategory{\glscategory{#1}}{#2}{#3}%
6756 }
```

glsifnotregular

```
\glsifnotregular{\entrylabel}{(true part)}{(false part)}
```

Short cut to determine if an entry has a regular attribute set to false.

```
6757 \newcommand{\glsifnotregular}[3]{%
6758   \glsifnotregularcategory{\glscategory{#1}}{#2}{#3}%
6759 }
```

reachincategory

```
\glsforeachincategory[<glossary labels>]{<category-label>}{<glossary-cs>}{<label-cs>}{<body>}
```

Iterates through all entries in all the glossaries (or just those listed in *<glossary labels>*) and does *<body>* if the category matches *<category-label>*. The control sequences *<glossary-cs>* and

`<label-cs>` may be used in `<body>` to access the glossary label and entry label for the current iteration.

```
6760 \newcommand{\glsforeachincategory}[5] [\\@glo@types]{%
6761   \\forallglossaries[#1]{#3}%
6762   {%
6763     \\forglsentries[#3]{#4}%
6764     {%
6765       \\glsifcategory{#4}{#2}{#5}{}}%
6766     }%
6767   }%
6768 }
```

chwithattribute

```
\glsforeachwithattribute[<glossary labels>]{<attribute-label>}%
{<attribute-value>}{{<glossary-cs>}}{{<label-cs>}}{{<body>}}
```

Iterates through all entries in all the glossaries (or just those listed in `<glossary labels>`) and does `<body>` if the category attribute `<attribute-label>` matches `<attribute-value>`. The control sequences `<glossary-cs>` and `<label-cs>` may be used in `<body>` to access the glossary label and entry label for the current iteration.

```
6769 \newcommand{\glsforeachwithattribute}[6] [\\@glo@types]{%
6770   \\forallglossaries[#1]{#4}%
6771   {%
6772     \\forglsentries[#4]{#5}%
6773     {%
6774       \\glsifattribute{#5}{#2}{#3}{#6}{}}%
6775     }%
6776   }%
6777 }
```

If `\newterm` has been defined, redefine it so that it automatically sets the category label to `index` and add `\glsxtrpostdescription`.

```
6778 \\ifdef\\newterm
6779 {%
```

`\newterm`

```
6780 \\renewcommand*{\\newterm}[2] [] {%
6781   \\newglossaryentry[#2]%
6782   {type={index},category=index,name={#2},%
6783    description={\\glsxtrpostdescription\\nopostdesc},#1}%
6784 }
```

Indexed terms are regular by default.

```
6785 \\glssetcategoryattribute{index}{regular}{true}
```

```

trpostdescindex
6786 \newcommand*{\glsxtrpostdescindex}{}%
6787 }%
6788 {}%

If the symbols package option was used, define a similar command for symbols, but set the
default sort to the label rather than the name as the symbols will typically contain commands
that will confuse makeindex and xindy.

6789 \ifdef\printsymbols
6790 {%

glsxtrnewsymbol Unlike \newterm, this has a separate argument for the label (since the symbol will likely con-
tain commands).
6791 \newcommand*{\glsxtrnewsymbol}[3] []{%
6792 \newglossaryentry{\#2}{name=\#3,sort=\#2,type=symbols,category=symbol,\#1}%
6793 }%

Symbols are regular by default.
6794 \glssetcategoryattribute{symbol}{regular}{true}

rpostdescsymbol
6795 \newcommand*{\glsxtrpostdescsymbol}{}%
6796 }%
6797 {}%

Similar for the numbers option.
6798 \ifdef\printnumbers
6799 {%

glsxtrnewnumber
6800 \ifdef\printnumbers
6801 \newcommand*{\glsxtrnewnumber}[3] []{%
6802 \newglossaryentry{\#2}{name=\#3,sort=\#2,type=numbers,category=number,\#1}%
6803 }%

Numbers are regular by default.
6804 \glssetcategoryattribute{number}{regular}{true}

rpostdescnumber
6805 \newcommand*{\glsxtrpostdescnumber}{}%
6806 }%
6807 {}%

```

`sxtrsetcategory` Set the category for all listed labels. The first argument is the list of entry labels and the second argument is the category label.

```
6808 \newcommand*{\glsxtrsetcategory}[2]{%
6809   \@for\@glsxtr@label:=#1\do
6810   {%
6811     \glsfieldxdef{\@glsxtr@label}{category}{#2}%
6812   }%
6813 }
```

`tcategoryforall` Set the category for all entries in the listed glossaries. The first argument is the list of glossary labels and the second argument is the category label.

```
6814 \newcommand*{\glsxtrsetcategoryforall}[2]{%
6815   \forallglossaries[#1]{\@glsxtr@type}{%
6816     \forglsentries[\@glsxtr@type]{\@glsxtr@label}{%
6817       {%
6818         \glsfieldxdef{\@glsxtr@label}{category}{#2}%
6819       }%
6820     }%
6821 }
```

`rfieldtitlecase`

```
\glsxtrfieldtitlecase{\label}{\field}
```

Apply title casing to the contents of the given field.

```
6822 \newcommand*{\glsxtrfieldtitlecase}[2]{%
6823   \expandafter\glsxtrfieldtitlecasecs\expandafter
6824   {\csname glo@\glsdetoklabel{#1}@#2\endcsname}%
6825 }
```

`fieldtitlecasecs` The command used by `\glsxtrfieldtitlecase`. May be redefined to use a different command, for example, `\xcapitalisefmtwords`. Check for `\glscapitalisewords`, which was added to glossaries v4.48.

```
6826 \ifdef\glscapitalisewords
6827 {
6828   \newcommand*{\glsxtrfieldtitlecasecs}[1]{%
6829     \expandafter\glscapitalisewords\expandafter{#1}%
6830   }
6831 {
6832   \newcommand*{\glsxtrfieldtitlecasecs}[1]{\xcapitalisewords{#1}}
6833 }
```

Provide a convenient way to modify glossary styles without having to define a new style just to convert the first letter of fields to upper case.

`\glossentrydesc` If the `glossdesc` attribute is “firstuc” convert first letter to upper case. If the attribute is “title” use title case.

```

6834 \@ifpackageloaded{glossaries-accsupp}
6835 {
6836   \renewcommand*\glossentrydesc[1]{%
6837     \glsdoifexistsorwarn{#1}%
6838     {%
6839       \glssetabrvfmt{\glscategory{#1}}%
6840       \glshasattribute{#1}{glossdescfont}%
6841       {%
6842         \protected@edef\glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%
6843         \ifcsdef{\glsxtr@attrval}%
6844         {%
6845           \letcs{\glsxtr@glossdescfont}{\glsxtr@attrval}%
6846         }%
6847         {%
6848           \GlossariesExtraWarning{Unknown control sequence name
6849             '\glsxtr@attrval' supplied in glossdescfont attribute
6850             for entry '#1'. Ignoring}%
6851           \let\glsxtr@glossdescfont\firstofone
6852         }%
6853       }%
6854       {\let\glsxtr@glossdescfont\firstofone}%
6855       \glsifattribute{#1}{glossdesc}{firstuc}%
6856       {%
6857         \glsxtr@glossdescfont{\Glsaccessdesc{#1}}%
6858       }%
6859       {%
6860         \glsifattribute{#1}{glossdesc}{title}%
6861         {%
6862           \glsxtr@do@titlecaps@warn
6863           \glsdescriptionaccessdisplay
6864           {%
6865             \glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
6866           }%
6867           {#1}%
6868         }%
6869         {%
6870           \glsxtr@glossdescfont{\glsaccessdesc{#1}}%
6871         }%
6872       }%
6873     }%
6874   }
6875 }
6876 {
6877   \renewcommand*\glossentrydesc[1]{%
6878     \glsdoifexistsorwarn{#1}%
6879     {%
6880       \glssetabrvfmt{\glscategory{#1}}%
6881       \glshasattribute{#1}{glossdescfont}%

```

```

6882   {%
6883     \protected@edef{\glsxtr@attrval}{\glsgetattribute{#1}{glossdescfont}}%
6884     \ifcsdef{\glsxtr@attrval}{%
6885       {%
6886         \letcs{\glossdescfont}{\glsxtr@attrval}%
6887       }%
6888       {%
6889         \GlossariesExtraWarning{Unknown control sequence name
6890           '@glsxtr@attrval' supplied in glossdescfont attribute
6891           for entry '#1'. Ignoring}%
6892         \let{\glossdescfont}{\firstofone}%
6893       }%
6894     }%
6895     {\let{\glossdescfont}{\firstofone}%
6896      \glsifattribute{#1}{glossdesc}{firstuc}%
6897      {%
6898        \glsxtr@glossdescfont{\glsentrydesc{#1}}%
6899      }%
6900      {%
6901        \glsifattribute{#1}{glossdesc}{title}%
6902        {%
6903          \glsxtr@do@titlecaps@warn
6904          \glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
6905        }%
6906        {%
6907          \glsxtr@glossdescfont{\glsentrydesc{#1}}%
6908        }%
6909      }%
6910    }%
6911  }%
6912 }

```

\glossentryname If the glossname attribute is “firstuc” convert first letter to upper case. If the attribute is “title” use title case.

```

6913 \ifpackageloaded{glossaries-accsupp}
6914 {
6915   \renewcommand*{\glossentryname}[1]{%
6916     \glsdoifexistsorwarn{#1}%
6917     {%
6918       \glssetabrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the glossnamefont attribute to determine the font applied.

```

6919   \glshasattribute{#1}{glossnamefont}%
6920   {%
6921     \protected@edef{\glsxtr@attrval}{\glsgetattribute{#1}{glossnamefont}}%
6922     \ifcsdef{\glsxtr@attrval}{%
6923       {%
6924         \letcs{\glossnamefont}{\glsxtr@attrval}%
6925       }%

```

```

6926   {%
6927     \GlossariesExtraWarning{Unknown control sequence name
6928       '\@glsxtr@attrval' supplied in glossnamefont attribute
6929       for entry '#1'. Reverting to default \string\glsnamefont}%
6930     \let\@glsxtr@glossnamefont\glsnamefont
6931   }%
6932 }%
6933 {\let\@glsxtr@glossnamefont\glsnamefont}%
6934 \glsifattribute{#1}{glossname}{firststuc}%
6935 {%
6936   \glsnameaccessdisplay
6937   {%
6938     \glsxtr@glossnamefont{\Glsentryname{#1}}%
6939   }%
6940   {#1}%
6941 }%
6942 {%
6943   \glsifattribute{#1}{glossname}{title}%
6944   {%
6945     \glsxtr@do@titlecaps@warn
6946     \glsnameaccessdisplay
6947     {%
6948       \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
6949     }%
6950     {#1}%
6951   }%
6952 {%
6953   \glsifattribute{#1}{glossname}{uc}%
6954   {%
6955     \glsnameaccessdisplay
6956   }%

```

Hide the label from the upper-casing command.

```

6957   \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6958   \glsxtr@glossnamefont{\mfirststucMakeUppercase{\glo@name}}%
6959   }%
6960   {#1}%
6961 }%
6962 {%
6963   \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6964   \glsnameaccessdisplay
6965   {%
6966     \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
6967   }%
6968   {#1}%
6969   }%
6970 }%
6971 }%

```

Do post-name hook:

```

6972     \glsxtrpostnamehook{#1}%
6973   }%
6974 }
6975 }
6976 {
6977 \renewcommand*\glossentryname[1]{%
6978   \@glsdoifexistsorwarn{#1}%
6979   {%
6980     \glssetabbrvfmt{\glscategory{#1}}%
6981     \glshasattribute{#1}{glossnamefont}%
6982   }%
6983   \protected@edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6984   \ifcsdef\glsxtr@attrval{%
6985   }%
6986     \letcs\glossnamefont{\glsxtr@attrval}%
6987   }%
6988   {%
6989     \GlossariesExtraWarning{Unknown control sequence name
6990       '\glsxtr@attrval' supplied in glossnamefont attribute
6991       for entry '#1'. Reverting to default \string\glossnamefont}%
6992     \let\glossnamefont\glsnamefont
6993   }%
6994 }%
6995 {\let\glossnamefont\glsnamefont}%
6996 \glsifattribute{#1}{glossname}{firststuc}%
6997 {%
6998   \glsxtr@glossnamefont{\Glossentryname{#1}}%
6999 }%
7000 {%
7001   \glsifattribute{#1}{glossname}{title}%
7002   {%
7003     \glsxtr@do@titlecaps@warn
7004     \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
7005   }%
7006   {%
7007     \glsifattribute{#1}{glossname}{uc}%
7008   }%

```

Hide the label from the upper-casing command.

```

7009   \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
7010   \glsxtr@glossnamefont{\mfirststucMakeUppercase{\glo@name}}%
7011 }%
7012 {%

```

This little trick is used by glossaries to allow the user to redefine \glossnamefont to use \makefirststuc. Support it even though they can now use the firststuc attribute.

```

7013   \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
7014   \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
7015 }%

```

```

7016      }%
7017      }%
    Do post-name hook.
7018      \glsxtrpostnamehook{#1}%
7019      }%
7020  }
7021 }

```

\Glossentryname Redefine to set the abbreviation format and accessibility support.

```

7022 \@ifpackageloaded{glossaries-accsupp}
7023 {
7024   \renewcommand*{\Glossentryname}[1]{%
7025     \@glsdoifexistsorwarn{#1}%
7026     {%
7027       \glssetabbrvfmt{\glscategory{#1}}%
7028       \glshasattribute{#1}{glossnamefont}%
7029       {%
7030         \protected@edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
7031         \ifcsdef{\@glsxtr@attrval}%
7032         {%
7033           \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
7034         }%
7035         {%
7036           \GlossariesExtraWarning{Unknown control sequence name
7037             '\@glsxtr@attrval' supplied in glossnamefont attribute
7038             for entry '#1'. Reverting to default \string\glsnamefont}%
7039           \let\@glsxtr@glossnamefont\glsnamefont
7040         }%
7041       }%
7042       {\let\@glsxtr@glossnamefont\glsnamefont}%
7043       \glsnameaccessdisplay
7044       {%
7045         \@glsxtr@glossnamefont{\Glossentryname{#1}}%
7046       }%
7047     {#1}%
7048     \glsxtrpostnamehook{#1}%
7049     }%
7050   }
7051 }
7052 {
7053   \renewcommand*{\Glossentryname}[1]{%
7054     \@glsdoifexistsorwarn{#1}%
7055     {%
7056       \glssetabbrvfmt{\glscategory{#1}}%
7057       \glshasattribute{#1}{glossnamefont}%
7058     }%
7059   }
7060 }
7061 }
7062 
```

Do post-name hook:

```

7048   \glsxtrpostnamehook{#1}%
7049   }%
7050 }
7051 }
7052 {
7053   \renewcommand*{\Glossentryname}[1]{%
7054     \@glsdoifexistsorwarn{#1}%
7055     {%
7056       \glssetabbrvfmt{\glscategory{#1}}%
7057       \glshasattribute{#1}{glossnamefont}%
7058     }%
7059   }
7060 }
7061 }
7062 
```

```

7058     {%
7059         \protected@edef{\glsxtr@attrval}{\glsgetattribute{#1}{glossnamefont}}%
7060         \ifcsdef{\glsxtr@attrval}{%
7061             {%
7062                 \let\cs{\glsxtr@glossnamefont}%
7063             }%
7064             {%
7065                 \GlossariesExtraWarning{Unknown control sequence name
7066                     '\glsxtr@attrval' supplied in glossnamefont attribute
7067                     for entry '#1'. Reverting to default \string\glsnamefont}%
7068                 \let\@glsxtr@glossnamefont\glsnamefont
7069             }%
7070             {%
7071                 \let\@glsxtr@glossnamefont\glsnamefont%
7072             \glsxtr@glossnamefont{\Glsentryname{#1}}%
7073         }%
7074     }%
7075   }%
7076 }

```

Do post-name hook:

```

7073     \glsxtrpostnamehook{#1}%
7074   }%
7075 }%
7076 }

```

Provide a convenient way to also index the entries using the standard \index mechanism.
This may use different actual, encap and escape characters to those used for the glossaries.

`xtrpostnamehook` Hook to append stuff after the name is displayed in the glossary. The argument is the entry's label.

```

7077 \newcommand*{\glsxtrpostnamehook}[1]{%
7078   \let\@glsnumberformat\glsxtr@defaultnumberformat
7079   \glsxtrdoautoindexname{#1}{indexname}%

```

Allow additional code regardless of category:

```

7080 \glsextrapostnamehook{#1}%
7081 \csuse{\glsxtrpostname\glscategory{#1}}%
7082 }

```

`trapostnamehook`

```

7083 \newcommand*{\glsextrapostnamehook}[1]{}%

```

`\glsdefpostname` Provide a convenient command for defining the post-name hook for the given category.

```

7084 \newcommand*{\glsdefpostname}[2]{%
7085   \csdef{\glsxtrpostname#1}{#2}%
7086 }

```

`etaccessdisplay`

```

7087 \@ifpackageloaded{glossaries-accsupp}%
7088 {

```

```

7089 \newcommand*{\glsxtr@setaccessdisplay}[1]{%
7090   \ifcsdef{gls#1accessdisplay}{%
7091     {\letcs{\glsxtr@accessdisplay}{\gls#1accessdisplay}}%
7092   }%
7093   \protected@edef{\gls@thisval{#1}}{%
7094     \@for\@gls@map:=\@gls@keymap\do{%
7095       \protected@edef{\this@key}{\expandafter\@secondoftwo\@gls@map}%
7096       \ifdefequal{\@this@key}{\@gls@thisval}{%
7097         \%
7098         \protected@edef{\gls@thisval}{\expandafter\@firstoftwo\@gls@map}%
7099         \@endfortrue
7100       }%
7101     \%
7102   }%
7103   \ifcsdef{gls@\gls@thisval accessdisplay}{%
7104     {\letcs{\glsxtr@accessdisplay}{\gls@\gls@thisval accessdisplay}}%
7105     {\let{\glsxtr@accessdisplay}{\@firstoftwo}}%
7106   }%
7107 }
7108 }
7109 }%
7110 \newcommand*{\glsxtr@setaccessdisplay}[1]{%
7111   \let{\glsxtr@accessdisplay}{\@firstoftwo}
7112 }

```

`sentrynameother` Provide a command that works like `\glossentryname` but accesses a different field (which must be supplied using its internal field label).

```

7113 \newrobustcmd*{\glossentrynameother}[2]{%
7114   \@glsdoifexistsorwarn{#1}%
7115 }%

```

Accessibility support:

```

7116   \glsxtr@setaccessdisplay{#2}%

```

Set the abbreviation format:

```

7117   \glssetabbrvfmt{\glscategory{#1}}%
7118   \glshasattribute{#1}{glossnamefont}%
7119   \%
7120   \protected@edef{\glsxtr@attrval}{\glsgetattribute{#1}{glossnamefont}}%
7121   \ifcsdef{\glsxtr@attrval}{%
7122     \%
7123     \letcs{\glsxtr@glossnamefont}{\glsxtr@attrval}%
7124   }%
7125   \%
7126   \GlossariesExtraWarning{Unknown control sequence name
7127     '\@glsxtr@attrval' supplied in glossnamefont attribute}

```

```

7128     for entry '#1'. Reverting to default \string\glsnamefont}%
7129     \let\@glsxtr@glossnamefont\glsnamefont
7130   }%
7131 }%
7132 {\let\@glsxtr@glossnamefont\glsnamefont}%
7133 \glsifattribute{#1}{glossname}{firstuc}%
7134 {%
7135   \@glsxtr@accessdisplay
7136   {\@glsxtr@glossnamefont{\@Gls@entry@field{#1}{#2}}}%
7137   {#1}%
7138 }%
7139 {%
7140   \glsifattribute{#1}{glossname}{title}%
7141   {%
7142     \@glsxtr@do@titlecaps@warn
7143     \@glsxtr@accessdisplay
7144     {\@glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{#2}}}%
7145     {#1}%
7146   }%
7147   {%
7148     \glsifattribute{#1}{glossname}{uc}%
7149     {%
7150       \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
7151       \@glsxtr@accessdisplay
7152       {\@glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}}%
7153       {#1}%
7154     }%
7155     {%
7156       \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
7157       \@glsxtr@accessdisplay
7158       {\expandafter\@glsxtr@glossnamefont\expandafter{\glo@name}}%
7159       {#1}%
7160     }%
7161   }%
7162 }%

```

Do post-name hook.

```

7163   \glsxtrpostnamehook{#1}%
7164 }%
7165 }

```

`format@override` Determines if the `format` key should override the `indexing` attribute value.

```

7166 \newif\if@glsxtr@format@override
7167 \glsxtr@format@overridefalse

```

If overriding is enabled, the `\glshypernumber` command will have to be redefined in the index to use `\hyperpage` instead.

`xFormatOverride`

```

7168 \@ifpackageloaded{hyperref}

```

```

7169 {
    If hyperref's hyperindex option is on, then hyperref will automatically add \hyperpage, so
    don't add it.

7170  \ifHy@hyperindex
7171      \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
7172          \@glsxtr@format@overridetrue
7173          \appto\theindex{\let\glshypernumber\@firstofone}%
7174      }
7175  \else
7176      \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
7177          \@glsxtr@format@overridetrue
7178          \appto\theindex{\let\glshypernumber\hyperpage}%
7179      }
7180  \fi
7181 }
7182 {
7183  \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
7184      \@glsxtr@format@overridetrue
7185  }
7186 }
7187 \onlypreamble\GlsXtrEnableIndexFormatOverride

```

doautoindexname

```

7188 \newcommand*{\glsxtrdoautoindexname}[2]{%
7189     \glshasattribute{#1}{#2}%
7190     {%

```

Escape any makeindex/xindy characters in the value of the name field. Take care with babel
as this won't work if the category code has changed for those characters.

```
7191     \@glsxtr@autoindex@setname{#1}%

```

If the attribute value is simply "true" don't add an encap, otherwise use the value as the encap.

```

7192     \protected@edef\@glsxtr@attrval{\glsgetattribute{#1}{#2}}%
7193     \if@glsxtr@format@override
7194         \ifx\@glsnumberformat\@glsxtr@defaultnumberformat
7195             \else
7196                 \let\@glsxtr@attrval\@glsnumberformat
7197             \fi
7198         \fi
7199
7200         \ifdefstring{\@glsxtr@attrval}{true}%
7201         {}%
7202         {\protected@eappto\@glo@name{\@glsxtr@autoindex@encap\@glsxtr@attrval}}%
7203         \expandafter\glsxtrautoindex\expandafter{\@glo@name}%
7204     }%
7205 }%

```

```

glsxtrautoindex
7206 \newcommand*{\glsxtrautoindex}{\index}

xtrautoindexesc
7207 \newcommand{\glsxtrautoindexesc}{%
7208   \@gls@checkmkidxchars\@glo@sort
7209   \@glsxtr@autoindex@doextra@esc\@glo@sort
7210 }

toindex@setname Assign \@glo@name for use with indexname attribute.
7211 \newcommand*{\@glsxtr@autoindex@setname}[1]{%
7212   \protected@edef{\glo@name}{\glsxtrautoindexentry{\#1}}%
7213   \glsxtrautoindexasssignsort{\@glo@sort}{\#1}%
7214   \glsxtrautoindexesc
7215   \epreto{\glo@name}{\@glo@sort\glsxtr@autoindex@at}%
7216 }

rautoindexentry Command used for the actual part when auto-indexing.
7217 \newcommand*{\glsxtrautoindexentry}[1]{\string\glsentryname{\#1} }

indexasssignsort Used to assign the sort value when auto-indexing.
7218 \newcommand*{\glsxtrautoindexasssignsort}[2]{%
7219   \glsletentryfield{\#1}{\#2}{sort}%
7220 }

dex@doextra@esc
7221 \newcommand*{\@glsxtr@autoindex@doextra@esc}[1]{%
  Escape the escape character unless it has already been escaped.
7222   \ifx\@glsxtr@autoindex@esc\@gls@quotechar
7223   \else
7224     \def\@gls@checkedmkidx{}%
7225     \edef\@glsxtr@checkspch{%
7226       \noexpand\@glsxtr@autoindex@escquote\expandonce{\#1}%
7227       \noexpand\@empty\@glsxtr@autoindex@esc\noexpand\@nnil
7228       \glsxtr@autoindex@esc\noexpand\@empty\noexpand\@glsxtr@endescspch}%
7229     \@@glsxtr@checkspch
7230     \let#1\@gls@checkedmkidx\relax
7231   \fi
  Escape actual character unless it has already been escaped.
7232   \ifx\@glsxtr@autoindex@at\@gls@actualchar
7233   \else
7234     \def\@gls@checkedmkidx{}%
7235     \edef\@glsxtr@checkspch{%
7236       \noexpand\@glsxtr@autoindex@escat\expandonce{\#1}%
7237       \noexpand\@empty\@glsxtr@autoindex@at\noexpand\@nnil
7238       \glsxtr@autoindex@at\noexpand\@empty\noexpand\@glsxtr@endescspch}%
7239     \@@glsxtr@checkspch

```

```

7240      \let#1\@gls@checkedmkidx\relax
7241  \fi
    Escape level character unless it has already been escaped.

7242  \ifx\@glsxtr@autoindex@level\@gls@levelchar
7243  \else
7244      \def\@gls@checkedmkidx{}%
7245      \edef\@glsxtr@checkspch{}%
7246          \noexpand\@glsxtr@autoindex@esclevel\expandonce{#1}%
7247          \noexpand\@empty\@glsxtr@autoindex@level\noexpand\@nnil
7248          \@glsxtr@autoindex@level\noexpand\@empty\noexpand\@glsxtr@endescspch}%
7249      \@@glsxtr@checkspch
7250      \let#1\@gls@checkedmkidx\relax
7251  \fi
    Escape encap character unless it has already been escaped.

7252  \ifx\@glsxtr@autoindex@encap\@gls@encapchar
7253  \else
7254      \def\@gls@checkedmkidx{}%
7255      \edef\@glsxtr@checkspch{}%
7256          \noexpand\@glsxtr@autoindex@escencap\expandonce{#1}%
7257          \noexpand\@empty\@glsxtr@autoindex@encap\noexpand\@nnil
7258          \@glsxtr@autoindex@encap\noexpand\@empty\noexpand\@glsxtr@endescspch}%
7259      \@@glsxtr@checkspch
7260      \let#1\@gls@checkedmkidx\relax
7261  \fi
7262 }

```

The user commands here have a preamble-only restriction to ensure they are set before required and also to reduce the chances of complications caused by babel's shorthands.

tr@autoindex@at Actual character for use with \index.

```
7263 \newcommand*\@glsxtr@autoindex@at{}%
```

trSetActualChar Set the actual character.

```

7264 \newcommand*\GlsXtrSetActualChar[1]%
7265   \gdef\@glsxtr@autoindex@at{#1}%
7266   \def\@glsxtr@autoindex@escat##1#2#1##3\@glsxtr@endescspch{%
7267       \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escat}{##1}{##2}{##3}%
7268   }%
7269 }
7270 \onlypreamble\GlsXtrSetActualChar
7271 \makeatother
7272 \GlsXtrSetActualChar{0}
7273 \makeatletter

```

autoindex@encap Encap character for use with \index.

```
7274 \newcommand*\@glsxtr@autoindex@encap{}%
```

```

XtrSetEncapChar Set the encapsulation character.
7275 \newcommand*{\GlsXtrSetEncapChar}[1]{%
7276   \gdef\@glsxtr@autoindex@encap{#1}%
7277   \def\@glsxtr@autoindex@escencap##1##2##3\@glsxtr@endescspch{%
7278     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escencap}{##1}{##2}{##3}%
7279   }%
7280 }
7281 \GlsXtrSetEncapChar{}%
7282 \onlypreamble\GlsXtrSetEncapChar

autoindex@level Level character for use with \index.
7283 \newcommand*{\@glsxtr@autoindex@level}{}%

XtrSetLevelChar Set the level character.
7284 \newcommand*{\GlsXtrSetLevelChar}[1]{%
7285   \gdef\@glsxtr@autoindex@level{#1}%
7286   \def\@glsxtr@autoindex@esclevel##1##2##3\@glsxtr@endescspch{%
7287     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@esclevel}{##1}{##2}{##3}%
7288   }%
7289 }
7290 \GlsXtrSetLevelChar{}%
7291 \onlypreamble\GlsXtrSetLevelChar

r@autoindex@esc Escape character for use with \index.
7292 \newcommand*{\@glsxtr@autoindex@esc}{"}

lsXtrSetEscChar Set the escape character.
7293 \newcommand*{\GlsXtrSetEscChar}[1]{%
7294   \gdef\@glsxtr@autoindex@esc{#1}%
7295   \def\@glsxtr@autoindex@escquote##1##2##3\@glsxtr@endescspch{%
7296     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escquote}{##1}{##2}{##3}%
7297   }%
7298 }
7299 \GlsXtrSetEscChar{}%
7300 \onlypreamble\GlsXtrSetEscChar

      Set if defined. (For example, if doc package has been loaded.) Actual character \actualchar:
7301 \ifdef\actualchar
7302   {\expandafter\GlsXtrSetActualChar\expandafter{\actualchar}}
7303 {}

      Quote character \quotechar:
7304 \ifdef\quotechar
7305   {\expandafter\GlsXtrSetEscChar\expandafter{\quotechar}}
7306 {}

      Level character \levelchar:
7307 \ifdef\levelchar
7308   {\expandafter\GlsXtrSetLevelChar\expandafter{\levelchar}}
7309 {}

```

Encap character \encapchar:

```
7310 \ifdef\encapchar
7311 {\expandafter\GlsXtrSetEncapChar\expandafter{\encapchar}}
7312 {}
```

leto@endescspch

```
7313 \def\@glsxtr@gobbleto@endescspch#1\@glsxtr@endescspch{}
```

\@@glsxtr@autoindex@escspch{\char}{\cs}{\pre}{\mid}{\post}

```
7314 \newcommand*\@glsxtr@autoindex@escspch}[5]{%
7315   \gls@tmpb=\expandafter{\gls@checkedmidx}%
7316   \toks@={#3}%
7317   \ifx\@nnil#3\relax
7318     \def\@glsxtr@checkspch{\glsxtr@gobbleto@endescspch#5\glsxtr@endescspch}%
7319   \else
7320     \ifx\@nnil#4\relax
7321       \edef\gls@checkedmidx{\the\gls@tmpb\the\toks@}%
7322       \def\@glsxtr@checkspch{\glsxtr@gobbleto@endescspch
7323         #4#5@glsxtr@endescspch}%
7324     \else
7325       \edef\gls@checkedmidx{\the\gls@tmpb\the\toks@%
7326         @glsxtr@autoindex@esc#1}%
7327       \def\@glsxtr@checkspch[#2#5#1\@nnil#1@glsxtr@endescspch]%
7328     \fi
7329   \fi
7330   \@@glsxtr@checkspch
7331 }
```

\Glossentrydesc Redefine to set the abbreviation format and accessibility support.

```
7332 \renewcommand*\Glossentrydesc}[1]{%
7333   \glsdoifexistsorwarn{#1}%
7334   {%
7335     \glssetabrvfmt{\glscategory{#1}}%
7336     \Glsaccessdesc{#1}%
7337   }%
7338 }
```

\lossentrysymbol Redefine to set the format and accessibility support. Allow for the possibility of being used in a section heading for standalone entry definitions.

```
7339 \ifdef\texorpdfstring
7340 {
7341   \renewcommand*\glossentrysymbol}[1]{%
7342     \texorpdfstring{\glossentrysymbol{#1}}{\glsentrypdfsymbol{#1}}%
7343 }
```

```

7344 }
7345 {
7346   \renewcommand*{\glossentrysymbol}[1]{\glossentrysymbol{#1}}
7347 }

```

`sentrypdfsymbol` May be redefined to a field that expands to a value that's more suitable for PDF bookmarks.

```
7348 \newcommand{\glsentrypdfsymbol}[1]{\glsentrysymbol{#1}}
```

`lossentrysymbol` There are no case-changing attributes as it's less usual for symbols.

```

7349 \newrobustcmd*{\glossentrysymbol}[1]{%
7350   \glsdoifexistsorwarn{#1}%
7351   {%
7352     \begingroup
7353       \glssetabbrvfmt{\glscategory{#1}}%
7354       \glshasattribute{#1}{glosssymbolfont}%
7355       {%
7356         \protected@edef\glsxtr@attrval{\glsgetattribute{#1}{glosssymbolfont}}%
7357         \ifcsdef{\glsxtr@attrval}%
7358         {%
7359           \letcs{\glsxtr@glosssymbolfont}{\glsxtr@attrval}%
7360         }%
7361         {%
7362           \GlossariesExtraWarning{Unknown control sequence name
7363             '\glsxtr@attrval' supplied in glosssymbolfont attribute
7364             for entry '#1'. Ignoring}%
7365           \let\glsxtr@glosssymbolfont\firstofone
7366         }%
7367       }%
7368       {\let\glsxtr@glosssymbolfont\firstofone}%
7369       \glsxtr@glosssymbolfont{\glsaccesssymbol{#1}}%
7370     \endgroup
7371   }%
7372 }

```

`lossentrysymbol` Redefine to set the abbreviation format and accessibility support.

```

7373 \renewcommand*{\Glossentrysymbol}[1]{%
7374   \glsdoifexistsorwarn{#1}%
7375   {%
7376     \glssetabbrvfmt{\glscategory{#1}}%
7377     \Glsaccesssymbol{#1}%
7378   }%
7379 }

```

Allow initials to be marked but only use the formatting for the tag in the glossary.

`eInitialTagging` Allow initial tagging. The first argument is a list of categories to apply this to. The second argument is the name of the command to use to tag the initials. This can't already be defined for safety unless the starred version is used.

```
7380 \newcommand*{\GlsXtrEnableInitialTagging}{%
```

```
7381  \@ifstar\s@glsxtr@enabletagging\@glsxtr@enabletagging
7382 }
7383 \onlypreamble\GlsXtrEnableInitialTagging
```

r@enabletagging Starred version undefines command.

```
7384 \newcommand*{\s@glsxtr@enabletagging}[2]{%
7385   \undef#2%
7386   \glsxtr@enabletagging{#1}{#2}%
7387 }
```

r@enabletagging Internal command.

```
7388 \newcommand*{\@glsxtr@enabletagging}[2]{%
```

Set attributes for categories given in the first argument.

```
7389  \@for\@glsxtr@cat:=#1\do
7390  {%
7391    \ifdefempty\@glsxtr@cat
7392    {}%
7393    {\glssetcategoryattribute{\@glsxtr@cat}{tagging}{true}}%
7394  }%
7395  \newrobustcmd*#2[1]{##1}%
7396  \def\@glsxtr@taggingcs{#2}%
7397  \renewcommand*\@glsxtr@activate@initialtagging{%
7398    \let#2\@glsxtr@tag
7399  }%
7400  \ifundefined\gls@preglossaryhook
7401  {\GlossariesExtraWarning{Initial tagging requires at least
7402    glossaries.sty v4.19 to work correctly}}%
7403  {}%
7404 }
```

Are we using an old version of mfirstuc that has a bug in \capitalisewords? If so, patch it so we don't have a problem with a combination of tagging and title case.

fu@checkword@do If this command hasn't been defined, then we have pre v2.02 of mfirstuc

```
7405 \ifundefined\mfu@checkword@do
7406 {
7407  \newcommand*{\mfu@checkword@do}[1]{%
7408    \ifdefstring{\mfu@checkword@arg}{#1}%
7409    {}%
7410    \let\@mfu@domakefirstuc\@firstofone
7411    \listbreak
7412  }%
7413  {}%
7414 }
```

\mfu@checkword \capitalisewords was introduced in mfirstuc v1.06. If \mfu@checkword hasn't been defined mfirstuc is too old to support the title case attribute.

```
7415 \ifundefined\mfu@checkword
```

```

7416  {
7417    \newcommand{\glsxtr@do@titlecaps@warn}{%
7418      \GlossariesExtraWarning{mfirstuc.sty too old. Title Caps
7419        support not available}%
7420      \let\glsxtr@do@titlecaps@warn\relax
7421    }
7422  }
7423  {
7424    \renewcommand*\mfp@checkword[1]{%
7425      \def\mfp@checkword@arg{#1}%
7426      \let\mfp@domakefirstuc\makefirstuc
7427      \forlistloop{\mfp@checkword@do}{\mfp@nocaplist}
7428    }
7429  }
7430 }
7431 {}% no patch required

```

@titlecaps@warn Do warning if title case not supported.

```
7432 \newcommand*{\glsxtr@do@titlecaps@warn}{}%
```

@initialtagging Used in \printglossary but at least v4.19 of glossaries required.

```
7433 \newcommand*{\glsxtr@activate@initialtagging}{}%
```

\@glsxtr@tag Definition of tagging command when used in glossary.

```

7434 \newrobustcmd*{\glsxtr@tag}[1]{%
7435   \glsifattribute{\glscurrententrylabel}{tagging}{true}%
7436   {\glsxtrtagfont{#1}}{#1}%
7437 }
```

\glsxtrtagfont Used in the glossary.

```
7438 \newcommand*{\glsxtrtagfont}[1]{\underline{#1}}
```

preglossaryhook This macro was introduced in glossaries version 4.19, so it may not be defined. If it hasn't been defined this feature is unavailable. A check is added for the entry's existence to prevent errors from occurring if the user removes an entry or changes the label, which can interrupt the build process.

```

7439 \ifdef{\gls@preglossaryhook}
7440 {
7441   \renewcommand*{\gls@preglossaryhook}{%
7442     \glsxtr@activate@initialtagging}
```

Since the glossaries are automatically scoped, \@glsxtr@org@postdescription shouldn't already be defined, but check anyway just as a precautionary measure.

```

7443 \ifundef{\glsxtr@org@postdescription}
7444 {%
7445   \let\glsxtr@org@postdescription\gls@postdescription
7446   \renewcommand*{\gls@postdescription}{%
```

```

7447     \ifglsentryexists{\glscurrententrylabel}%
7448     {%
7449         \glsxtrpostdescription
7450         \glsxtr@org@postdescription
7451     }%
7452     {}%
7453 }%
7454 }%
7455 {}%

```

Enable the options used by \@@glsxtrp:

```

7456     \glossxtrsetopts
7457 }%
7458 }
7459 {}%

```

postdescription This command will only be used if \gls@preglossaryhook is available *and* the glossary style uses \glspostdescription without modifying it. (\nopostdesc will suppress this.) The glossaries-extra-stylemods package will add the post description hook to all the predefined styles that don't include it.

```

7460 \newcommand*{\glsxtrpostdescription}{%
7461     \csuse{glsxtrpostdesc\glscategory{\glscurrententrylabel}}%
7462 }

```

postdescgeneral

```
7463 \newcommand*{\glsxtrpostdescgeneral}{}%
```

xtrpostdescterm

```
7464 \newcommand*{\glsxtrpostdescterm}{}%
```

postdescacronym

```
7465 \newcommand*{\glsxtrpostdescacronym}{}%
```

escabbreviation

```
7466 \newcommand*{\glsxtrpostdescabbreviation}{}%
```

\glsdefpostdesc Provide a convenient command for defining the post-description hook for the given category.

```

7467 \newcommand*{\glsdefpostdesc}[2]{%
7468     \csdef{glsxtrpostdesc#1}{\#2}%
7469 }

```

glspostlinkhook Redefine the post link hook used by commands like \gls to make it easier for categories or attributes to modify this action. Since this hook occurs outside the existence check of commands like \gls, this needs to be checked again here. Do nothing if the entry hasn't been defined.

```

7470 \renewcommand*{\glspostlinkhook}{%
7471     \ifglsentryexists{\glslabel}{\glsxtrpostlinkhook}{}%
7472 }

```

xtrpostlinkhook The entry label should already be stored in \glslabel by \@gls@link.

```
7473 \newcommand*{\glsxtrpostlinkhook}{%
7474   \glsxtrdiscardperiod{\glslabel}%
7475   {\glsxtrpostlinkendsentence}%
7476   {\glsxtrifcustomdiscardperiod
7477     {\glsxtrifperiod{\glsxtrpostlinkendsentence}{\glsxtrpostlink}}%
7478     {\glsxtrpostlink}%
7479   }%
7480 }
```

omdiscardperiod Allow user to provide a custom check. Should expand to #2 if no check is required otherwise expand to #1.

```
7481 \newcommand*{\glsxtrifcustomdiscardperiod}[2]{#2}
```

\glsxtrpostlink

```
7482 \newcommand*{\glsxtrpostlink}{%
7483   \csuse{glsxtrpostlink}\glscategory{\glslabel}}%
7484 }
```

\glsdefpostlink Provide a convenient command for defining the post-link hook for the given category. Doesn't allow an empty argument (which) would overwrite \glsxtrpostlink.

```
7485 \newcommand*{\glsdefpostlink}[2]{%
  \ifthenelse{\equal{#1}{}}{%
    \PackageError{glossaries-extra}{%
      Invalid empty category label in \string\glsdefpostlink{}%
    }%
  }{%
    \csdef{glsxtrpostlink#1}{#2}%
  }
}
```

```
7486 \ifthenelse{\equal{#1}{}}{%
7487   \PackageError{glossaries-extra}{%
7488     Invalid empty category label in \string\glsdefpostlink{}%
7489   }%
7490 }
```

linkendsentence Done by \glsxtrpostlinkhook if a full stop is discarded.

```
7491 \newcommand*{\glsxtrpostlinkendsentence}{%
7492   \ifcsdef{glsxtrpostlink}\glscategory{\glslabel}{%
7493     %
7494     \csuse{glsxtrpostlink}\glscategory{\glslabel}}%
```

Put the full stop back.

```
7495   .\spacefactor\sfcodes`.\relax
7496 }%
7497 {%
```

Assume the full stop was discarded because the entry ends with a period, so adjust the space-factor.

```
7498   \spacefactor\sfcodes`.\relax
7499 }%
7500 }
```

dDescOnFirstUse Provide a command for appending the description in parentheses on first use, for the convenience of users wanting to add this to the post link hook.

```
7501 \newcommand*{\glsxtrpostlinkAddDescOnFirstUse}{%
7502   \glsxtrifwasfirstuse{\space\glsxtrparen{\glsaccessdesc{\glslabel}}}{}}%
7503 }
```

ymbolOnFirstUse Provide a command for appending the symbol (if defined) in parentheses on first use, for the convenience of users wanting to add this to the post link hook.

```
7504 \newcommand*{\glsxtrpostlinkAddSymbolOnFirstUse}{%
7505   \glsxtrifwasfirstuse
7506   {%
7507     \ifglshassymbol{\glslabel}%
7508     {\space\glsxtrparen{\glsaccesssymbol{\glslabel}}}{}}%
7509   {}%
7510 }%
7511 {}%
7512 }
```

lDescOnFirstUse Provide a command for appending the symbol (if defined) and description in parentheses on first use, for the convenience of users wanting to add this to the post link hook.

```
7513 \newcommand*{\glsxtrpostlinkAddSymbolDescOnFirstUse}{%
7514   \glsxtrifwasfirstuse
7515   {%
7516     \space\glsxtrparen
7517     {%
7518       \ifglshassymbol{\glslabel}%
7519       {\glsaccesssymbol{\glslabel}, }%
7520       {}%
7521       \glsaccessdesc{\glslabel}%
7522     }%
7523   }%
7524   {}%
7525 }
```

trdiscardperiod Discard following period (if present) if the discardperiod attribute is true. If a period is discarded, do the second argument otherwise do the third argument. The entry label is in the first argument. Since this is designed for abbreviations that end with a period, check if the plural form was used (which typically won't end with a period).

```
7526 \newcommand*{\glsxtrdiscardperiod}[3]{%
7527   \glsxtrifwasfirstuse
7528   {%
7529     \glsifattribute{#1}{retainfirstuseperiod}{true}%
7530     {#3}%
7531   {%
7532     \glsifattribute{#1}{discardperiod}{true}%
7533     {%
7534       \glsifplural
7535     }%
```

```

7536     \glsifattribute{#1}{pluraldiscardperiod}{true}%
7537     {\glsxtrifperiod{#2}{#3}}%
7538     {#3}%
7539   }%
7540   {%
7541     \glsxtrifperiod{#2}{#3}%
7542   }%
7543 }%
7544 {#3}%
7545 }%
7546 }%
7547 {%
7548 \glsifattribute{#1}{discardperiod}{true}%
7549 {%
7550 \glsifplural
7551 {%
7552 \glsifattribute{#1}{pluraldiscardperiod}{true}%
7553 {\glsxtrifperiod{#2}{#3}}%
7554 {#3}%
7555 }%
7556 {%
7557 \glsxtrifperiod{#2}{#3}%
7558 }%
7559 }%
7560 {#3}%
7561 }%
7562 }

```

`\glsxtrifperiod` Make a convenient user command to check if the next character is a full stop (period). Works like `\@ifstar` but uses `\new@ifnextchar` rather than `\@ifnextchar`

```
7563 \newcommand*{\glsxtrifperiod}[1]{\new@ifnextchar.{\@firstoftwo{#1}}}
```

Sometimes it's useful to test if there's a punctuation character following the glossary entry.

`glsxtr@punclist` List of characters identified as punctuation marks. (Be careful of babel shorthands!) This doesn't allow for punctuation marks made up from multiple characters (such as ',').

```
7564 \newcommand*{\glsxtr@punclist}{.,;?!}
```

`punctuationmark` Add character to punctuation list.

```
7565 \newcommand*{\glsxtraddpunctuationmark}[1]{\appto\glsxtr@punclist{#1}}
```

`unctuationmarks` Reset the punctuation list.

```
7566 \newcommand*{\glsxtrsetpunctuationmarks}[1]{\def\glsxtr@punclist{#1}}
```

`\glsxtrifpunc`

```
\glsxtrifnextpunc{\langle true part \rangle}{\langle false part \rangle}
```

Test if this is followed by a punctuation mark. (Adapted from `\new@ifnextchar`.)

```

7567 \newcommand{\glsxtrifnextpunc}[2]{%
7568   \def\reserved@a{#1}%
7569   \def\reserved@b{#2}%
7570   \futurelet\glspunc@token\glsxtr@ifnextpunc
7571 }

sxtr@ifnextpunc
7572 \newcommand{\glsxtr@ifnextpunc}{%
7573   \glsxtr@ifpunctoken{\glspunc@token}{\let\reserved@b\reserved@a}{}%
7574   \reserved@b
7575 }

xtr@ifpunctoken Test if the token given in the first argument is in the punctuation list.
7576 \newcommand{\glsxtr@ifpunctoken}[1]{%
7577   \expandafter\glsxtr@ifpunctoken\expandafter#1\glsxtr@punclist\@nnil
7578 }

xtr@ifpunctoken
7579 \def\@glsxtr@ifpunctoken#1#2{%
7580   \let\reserved@d=#2%
7581   \ifx\reserved@d\@nnil
7582     \let\glsxtr@next\glsxtr@notfoundinlist
7583   \else
7584     \ifx#1\reserved@d
7585       \let\glsxtr@next\glsxtr@foundinlist
7586     \else
7587       \let\glsxtr@next\glsxtr@ifpunctoken
7588     \fi
7589   \fi
7590   \glsxtr@next#1%
7591 }

xtr@foundinlist
7592 \def\@glsxtr@foundinlist#1\@nnil{\@firstoftwo}

@notfoundinlist
7593 \def\@glsxtr@notfoundinlist#1{\@secondoftwo}

lsxtrdopostpunc

```

`\glsxtrdopostpunc{(code)}`

If this is followed be a punctuation character, do `(code)` after the character otherwise do `(code)` before whatever comes next.

```

7594 \newcommand{\glsxtrdopostpunc}[1]{%
7595   \glsxtrifnextpunc{\glsxtr@swaptwo{#1}}{#1}%
7596 }

```

```
@glsxtr@swaptwo
7597 \newcommand{\glsxtr@swaptwo}[2]{#2#1}
```

1.7 Abbreviations

The “acronym” code from `glossaries` is misnamed as it’s more often used for other forms of abbreviations. This code corrects this inconsistency, but rather than just having synonyms, provide commands for abbreviations that have a similar, but not identical, underlying mechanism to acronyms.

If there’s a style for the given category, it needs to be applied by `\newabbreviation`.

```
7598 \define@key{glsxtrabbrv}{category}{%
7599   \protected@edef\glscategorylabel{#1}%
7600 }
```

Save the short plural form. This may be needed before the entry is defined.

```
7601 \define@key{glsxtrabbrv}{shortplural}{%
7602   \def\@gls@shortpl{#1}%
7603 }
```

Similarly for the long plural form.

```
7604 \define@key{glsxtrabbrv}{longplural}{%
7605   \def\@gls@longpl{#1}%
7606 }
```

Token registers for the short plural and long plural, provided for use in the abbreviation style definitions.

```
\glsshortpltok
7607 \newtoks\glsshortpltok
```

```
\glslongpltok
7608 \newtoks\glslongpltok
```

`sxtr@insertdots` Provided in case user wants to automatically insert dots between each letter of the abbreviation. This should be applied before defining the abbreviation to optimise the document build. (Otherwise, it would have to be done each time the short form is required, which is an unnecessary waste of time.) For this to work the short form must be expanded when passed to `\newabbreviation`. Note that explicitly using the short or shortplural keys will override this.

```
7609 \newcommand*{\glsxtr@insertdots}[2]{%
7610   \def#1{}%
7611   \glsxtr@insert@dots#1#2\@nnil
7612 }
```

```
xtr@insert@dots
7613 \newcommand*{\glsxtr@insert@dots}[2]{%
7614   \ifx\@nnil#2\relax
```

```

7615   \let\@glsxstr@insert@dots@next\@gobble
7616   \else
7617     \ifx\relax#2\relax
7618     \else
7619       \appto{\#1}{\#2.}%
7620     \fi
7621   \let\@glsxstr@insert@dots@next\@glsxstr@insert@dots
7622 \fi
7623 \glsxstr@insert@dots@next{\#1}%
7624 }

```

Similarly provide a way of replacing spaces with `\glsxtrwordsep`, which first needs to be defined:

`\glsxtrwordsep`

```

7625 \newcommand*{\glsxtrwordsep}{\space}

```

Each word is marked with

`\glsxtrword`

```

7626 \newcommand*{\glsxtrword}[1]{#1}

```

`tr@markwordseps`

```

7627 \newcommand*{\@glsxtr@markwordseps}[2]{%
7628   \def#1{}%
7629   \glsxtr@mark@wordseps{\#1}\@nnil
7630 }

```

`r@mark@wordseps`

```

7631 \def\@glsxtr@mark@wordseps{\#1\#2 \#3}{%
7632   \ifdefempty{\#1}{%
7633     {\def{\protect\glsxtrword{\#2}}{}}%
7634     {\appto{\protect\glsxtrwordsep{\#1}}{\protect\glsxtrword{\#2}}}%
7635     \ifx\@nnil\#3\relax
7636       \let\@glsxtr@mark@wordseps@next\relax
7637     \else
7638       \def\@glsxtr@mark@wordseps@next{%
7639         \glsxtr@mark@wordseps{\#1\#3}}%
7640     \fi
7641   \glsxtr@mark@wordseps@next
7642 }

```

`newabbreviation` Define a new generic abbreviation.

```

7643 \newcommand*{\newabbreviation}[4][]{%
7644   \glsxtr@newabbreviation{\#1}{\#2}{\#3}{\#4}%
7645 }

```

`newabbreviation` Internal macro. (`bib2gls` has an option that needs to temporarily redefine `\newabbreviation`. This is just makes it easier to save and restore the original definition.)

```

7646 \newcommand*{\glsxstr@newabbreviation}[4]{%
7647   \glskeylisttok{#1}%
7648   \glslabeltok{#2}%
7649   \glsshorttok{#3}%
7650   \glslongtok{#4}%

  Save the original short and long values (before attribute settings modify them).
7651   \def\glsxtrorgshort{#3}%
7652   \def\glsxtrorglong{#4}%

  Provide extra settings for hooks (if modified, this command must end with a comma).
7653   \def\ExtraCustomAbbreviationFields{}%

  Initialise accessibility settings if required.
7654   \gls@initaccesskeys

  Get the category.
7655   \def\glscategorylabel{abbreviation}%

  Ignore the shortplural and longplural keys.
7656   \setkeys*{\glsxtrabbrv}{[shortplural, longplural]{#1}}%

  Set the abbreviation style.
7657   \ifcsdef{@glsabbrv@current@\glscategorylabel}%
7658   {%
    Warning should already have been issued.
7659     \let\glsxtr@orgwarndep\GlsXtrWarnDeprecatedAbbrStyle
7660     \let\GlsXtrWarnDeprecatedAbbrStyle\gobbletwo
7661     \glsxtr@applyabbrvstyle{\csname@glsabbrv@current@\glscategorylabel\endcsname}%
7662     \let\GlsXtrWarnDeprecatedAbbrStyle\glsxtr@orgwarndep
7663   }%
7664   {%

  If no style has been associated with this category, fallback on the style for the abbreviation
  category.
7665   \glsxtr@applyabbrvstyle{@glsabbrv@current@abbreviation}%
7666   }%

  Set the default long plural
7667   \def\gls@longpl{#4\glspluralsuffix}%
7668   \let@gls@default@longpl@gls@longpl

  Has the markwords attribute been set?
7669   \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
7670   {%
7671     \glsxtr@markwordseps@gls@long{#4}%
7672     \expandafter\def\expandafter\gls@longpl\expandafter
7673       {\gls@long\glspluralsuffix}%
7674     \let@gls@default@longpl@gls@longpl

  Update \glslongtok.
7675   \expandafter\glslongtok\expandafter{@gls@long}%
7676   }%
7677   {}%

```

Has the markshortwords attribute been set? (Not compatible with insertdots.)

```
7678 \glsifcategoryattribute{\glscategorylabel}{markshortwords}{true}%
7679 {%
7680   \glsxtr@markwordseps\gls@short{#3}%
7681 }%
7682 {%
```

Has the insertdots attribute been set?

```
7683 \glsifcategoryattribute{\glscategorylabel}{insertdots}{true}%
7684 {%
7685   \glsxtr@insertdots\gls@short{#3}%
7686   \appto\gls@short{\@}%
7687 }%
7688 {\def\gls@short{#3}}%
7689 }%
```

Has the aposplural attribute been set? (Not compatible with noshortplural.)

```
7690 \glsifcategoryattribute{\glscategorylabel}{aposplural}{true}%
7691 {%
7692   \expandafter\def\expandafter\gls@shortpl\expandafter{\gls@short
7693     \abrvpluralsuffix}%
7694 }%
7695 {%
```

Has the noshortplural attribute been set?

```
7696 \glsifcategoryattribute{\glscategorylabel}{noshortplural}{true}%
7697 {%
7698   \let\gls@shortpl\gls@short
7699 }%
7700 {%
7701   \expandafter\def\expandafter\gls@shortpl\expandafter{\gls@short
7702     \abrvpluralsuffix}%
7703 }%
7704 }%
```

Update \glsshorthttok:

```
7705 \expandafter\glsshorthttok\expandafter{\gls@short}%
```

Hook for further customisation if required:

```
7706 \glsxtrnewabbrevpresetkeyhook{#1}{#2}{#3}%
```

Get the short and long plurals provided by user in optional argument to override defaults, if necessary. Ignore the category key (already obtained).

```
7707 \setkeys*{\glsxtrabbrv}[category]{#1}%
```

Save in case required.

```
7708 \let\gls@org@longpl\gls@longpl
7709 \let\gls@org@shortpl\gls@shortpl
```

Has the plural been explicitly set?

```
7710 \ifx\gls@default@longpl\gls@longpl
7711 \else
```

Has the markwords attribute been set?

```
7712 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
7713 {%
7714   \expandafter\@glsxtr@markwordseps\expandafter\@gls@longpl\expandafter
7715   {\@gls@longpl}%
7716 }%
7717 {}%
7718 \fi
```

Set the plural token registers so the values can be accessed by the abbreviation styles.

```
7719 \expandafter\glsshortpltok\expandafter{\@gls@shortpl}%
7720 \expandafter\glslongpltok\expandafter{\@gls@longpl}%
```

Hook for accessibility support (does nothing if glossaries-accsupp hasn't been loaded).

```
7721 \@gls@setup@default@access
```

Do any extra setup provided by hook:

```
7722 \newabbreviationhook
```

Define this entry:

```
7723 \protected@edef{@do@newglossaryentry}{%
7724   \noexpand\newglossaryentry{\the\glslabeltok}%
7725   {%
7726     type=\glsxtrabbrvtype,%
7727     category=abbreviation,%
7728     short={\the\glsshorttok},%
7729     shortplural={\the\glsshortpltok},%
7730     long={\the\glslongtok},%
7731     longplural={\the\glslongpltok},%
7732     name={\the\glsshorttok},%
7733     \CustomAbbreviationFields,%
7734 }
```

Hook may override abbreviation style default settings (this hook must end with a comma if set).

```
7734 \ExtraCustomAbbreviationFields
```

Any explicit fields set in the optional argument override all other settings.

```
7735 \the\glskeylisttok
7736 }%
7737 }%
7738 \@do@newglossaryentry
```

Obtain the type and add it to the list of abbreviations.

```
7739 \@glsxtr@addabbreviationlist{\glsentrytype{\the\glslabeltok}}%
7740 \GlsXtrPostNewAbbreviation
7741 }
```

evpresetkeyhook Hook for extra stuff in \newabbreviation

```
7742 \newcommand*{\glsxtrnewabbpresetkeyhook}[3]{}
```

NewAbbreviation Hook used by abbreviation styles.

```
7743 \newcommand*{\GlsXtrPostNewAbbreviation}{}%
```

`\bbrevertionhook` Hook for use with `\newabbreviation`.
 7744 `\newcommand*{\bbrevertionhook}{}{}`

`\reviationFields`
 7745 `\newcommand*{\CustomAbbreviationFields}{}{}`

`\glsxtrparen` For the parenthetical styles.
 7746 `\newcommand*{\glsxtrparen}[1]{(#1)}`

`\sxtrfullformat` Full format without case change.
 7747 `\newcommand*{\sxtrfullformat}[2]{%`
 7748 `\glsfirstlongfont{\glsaccesslong{#1}}#2\glsxtrfullsep{#1}%`
 7749 `\glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%`
 7750 `}`

`\sxtrfullformat` Full format with case change.
 7751 `\newcommand*{\Gsxtrfullformat}[2]{%`
 7752 `\glsfirstlongfont{\Glsaccesslong{#1}}#2\glsxtrfullsep{#1}%`
 7753 `\glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%`
 7754 `}`

`\xtrfullplformat` Plural full format without case change.
 7755 `\newcommand*{\glsxtrfullplformat}[2]{%`
 7756 `\glsfirstlongfont{\glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%`
 7757 `\glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}%`
 7758 `}`

`\xtrfullplformat` Plural full format with case change.
 7759 `\newcommand*{\Gsxtrfullplformat}[2]{%`
 7760 `\glsfirstlongfont{\Glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%`
 7761 `\glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}%`
 7762 `}`

`\glsxtrfullsep` Separator used by full format is a space by default. The argument is the entry's label.
 7763 `\newcommand*{\glsxtrfullsep}[1]{\space}`

In-line formats in case first use isn't compatible with `\glsentryfull` (for example, first use suppresses the long form or uses a footnote).

`\nlinefullformat` Full format without case change.
 7764 `\newcommand*{\glsxtrinelinefullformat}{\glsxtrfullformat}`

`\nlinefullformat` Full format with case change.
 7765 `\newcommand*{\Gsxtrinelinefullformat}{\Gsxtrfullformat}`

`\xtrfullplformat` Plural full format without case change.
 7766 `\newcommand*{\glsxtrinelinefullplformat}{\glsxtrfullplformat}`

inefullplformat Plural full format with case change.
 7767 `\newcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}`

Redefine `\glsentryfull` etc to use the inline format. Since these commands are supposed to be expandable, they can only use the currently applied style. If there are mixed styles, you'll need to use the `\glsxtrfull` set of commands instead.

```

\glsentryfull
  7768 \renewcommand*{\glsentryfull}[1]{\Glsxtrinlinefullformat{#1}{}}
\Glsentryfull
  7769 \renewcommand*{\Glsentryfull}[1]{\Glsxtrinlinefullformat{#1}{}}
\glsentryfullpl
  7770 \renewcommand*{\glsentryfullpl}[1]{\Glsxtrinlinefullplformat{#1}{}}
\Glsentryfullpl
  7771 \renewcommand*{\Glsentryfullpl}[1]{\Glsxtrinlinefullplformat{#1}{}}
```

sfirstabbrvfont Font changing command used for the abbreviation on first use or in the full format.
 7772 `\newcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{#1}}`

bbrvdefaultfont Font changing command used for the abbreviation on first use or in the full format.
 7773 `\newcommand*{\glsfirstabbrvdefaultfont}[1]{\glsabbrvdefaultfont{#1}}`

\glsabbrvfont Font changing command used for the abbreviation on subsequent use. This is redefined by the abbreviation styles, as appropriate.
 7774 `\newcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{#1}}`

bbrvdefaultfont
 7775 `\newcommand*{\glsabbrvdefaultfont}[1]{#1}`

\glslongfont Font changing command used for the long form in commands like `\glsxtrlong`.
 7776 `\newcommand*{\glslongfont}[1]{\glslongdefaultfont{#1}}`

longdefaultfont Default font changing command used for the long form in commands like `\glsxtrlong`.
 7777 `\newcommand*{\glslongdefaultfont}[1]{#1}`

\glsfirstlongfont Font changing command used for the long form on first use or in the full format.
 7778 `\newcommand*{\glsfirstlongfont}[1]{\glslongfont{#1}}`

longdefaultfont
 7779 `\newcommand*{\glsfirstlongdefaultfont}[1]{\glslongdefaultfont{#1}}`

brvpluralsuffix Default plural suffix. Allow an alternative default suffix for abbreviations.
 7780 `\newcommand*{\glsxtrabbrvpluralsuffix}{\glspluralsuffix}`

```
brvpluralsuffix Default plural suffix.  
7781 \newcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}
```

\glsxtrfull Full form (no case-change).

```
7782 \newrobustcmd*{\glsxtrfull}{\gls@hyp@opt\ns@glsxtrfull}  
7783 \newcommand*\ns@glsxtrfull[2][]{%  
7784   \new@ifnextchar[{\glsxtr@full{\#1}{\#2}}%  
7785     {\glsxtr@full{\#1}{\#2}[]}%  
7786 }
```

\glsxtr@full Low-level macro:

```
7787 \def\glsxtr@full#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
7788 \glsxtr@record{\#1}{\#2}{\glslink}{%  
7789 \glsdoifexists{\#2}{%  
7790 {  
7791   \glssetabrvfmt{\glscategory{\#2}}%  
7792   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper  
7793   \let\glsifplural\@secondoftwo  
7794   \let\glscapscase\@firstofthree  
7795   \let\glsinsert\@empty  
7796   \def\glscustomtext{\glsxtrinlinefullformat{\#2}{\#3}}{}}
```

What should \glsxtrifwasfirstuse be set to here? Where the inline and display full forms are the same, this is essentially emulating first use, so it makes sense for the postlink hook to pretend it was a first use instance. It makes less sense if the inline and display forms are different. Provide a hook to make it easier to reconfigure.

```
7797 \glsxtrsetupfulldefs  
7798   \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}{%  
7799 }%  
7800 \glspostlinkhook  
7801 }
```

trsetupfulldefs

```
7802 \newcommand*{\glsxtrsetupfulldefs}{%  
7803   \let\glsxtrifwasfirstuse\@firstoftwo  
7804 }
```

\Glsxtrfull Full form (first letter uppercase).

```
7805 \newrobustcmd*{\Glsxtrfull}{\gls@hyp@opt\ns@Glsxtrfull}  
7806 \newcommand*\ns@Glsxtrfull[2][]{%  
7807   \new@ifnextchar[{\Glsxtr@full{\#1}{\#2}}%  
7808     {\Glsxtr@full{\#1}{\#2}[]}%  
7809 }
```

\@Glsxtr@full Low-level macro:

```

7810 \def\@Glsxstr@full#1#2[#3]{%
7811   \glsdoifexists{#2}%
7812   {%
7813     \glssetabrvfmt{\glscategory{#2}}%
7814     \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7815     \let\glsifplural@\secondoftwo
7816     \let\glscapscase@\secondofthree
7817     \let\glsinsert@\empty
7818     \def\glscustomtext{\Glsxtrinlinefullformat{#2}{#3}}%
7819     \glsxtrsetupfulldefs
7820     \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7821   }%
7822   \glspostlinkhook
7823 }

```

\GLSxtrfull Full form (all uppercase).

```

7824 \newrobustcmd*\GLSxtrfull{\gls@hyp@opt\ns@GLSxtrfull}
7825 \newcommand*\ns@GLSxtrfull[2][]{%
7826   \new@ifnextchar[\{@Glsxtr@full{#1}{#2}}%
7827           {\{@Glsxtr@full{#1}{#2}[]}}%
7828 }

```

\@Glsxtr@full Low-level macro:

```

7829 \def\@Glsxtr@full#1#2[#3]{%
7830   \glsdoifexists{#2}%
7831   {%
7832     \glssetabrvfmt{\glscategory{#2}}%
7833     \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7834     \let\glsifplural@\secondoftwo
7835     \let\glscapscase@\thirdofthree
7836     \let\glsinsert@\empty
7837     \def\glscustomtext{\mfirstucMakeUppercase{\glsxtrinlinefullformat{#2}{#3}}}%
7838     \glsxtrsetupfulldefs
7839     \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7840   }%
7841   \glspostlinkhook
7842 }

```

\glsxtrfullpl Plural full form (no case-change).

```

7843 \newrobustcmd*\glsxtrfullpl{\gls@hyp@opt\ns@glsxtrfullpl}
7844 \newcommand*\ns@glsxtrfullpl[2][]{%
7845   \new@ifnextchar[\{@glsxtr@fullpl{#1}{#2}}%
7846           {\{@glsxtr@fullpl{#1}{#2}[]}}%
7847 }

```

\@glsxtr@fullpl Low-level macro:

```

7848 \def\@glsxtr@fullpl#1#2[#3]{%

```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
7849  \glsxstr@record{#1}{#2}{glslink}%
7850  \glsdoifexists{#2}%
7851  {%
7852    \glssetabrvfmt{\glscategory{#2}}%
7853    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7854    \let\glsifplural@\firstoftwo
7855    \let\glscapscase@\firstofthree
7856    \let\glsinsert@\empty
7857    \def\glscustomtext{\glsxtrinlinefullplformat{#2}{#3}}%
7858    \glsxtrsetupfulldefs
7859    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7860  }%
7861  \glspostlinkhook
7862 }
```

\Glsxtrfullpl Plural full form (first letter uppercase).

```
7863 \newrobustcmd*\Glsxtrfullpl{\gls@hyp@opt\ns@Glsxtrfullpl}
7864 \newcommand*\ns@Glsxtrfullpl[2][]{%
7865   \new@ifnextchar[\glsxtr@fullpl{#1}{#2}]{%
7866     \glsxtr@fullpl{#1}{#2}[] }%
7867 }
```

\@Glsxtr@fullpl Low-level macro:

```
7868 \def\@Glsxtr@fullpl#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
7869  \glsxstr@record{#1}{#2}{glslink}%
7870  \glsdoifexists{#2}%
7871  {%
7872    \glssetabrvfmt{\glscategory{#2}}%
7873    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7874    \let\glsifplural@\firstoftwo
7875    \let\glscapscase@\secondofthree
7876    \let\glsinsert@\empty
7877    \def\glscustomtext{\Glsxtrinlinefullplformat{#2}{#3}}%
7878    \glsxtrsetupfulldefs
7879    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7880  }%
7881  \glspostlinkhook
7882 }
```

\GLSxtrfullpl Plural full form (all upper case).

```
7883 \newrobustcmd*\GLSxtrfullpl{\gls@hyp@opt\ns@GLSxtrfullpl}
7884 \newcommand*\ns@GLSxtrfullpl[2][]{%
7885   \new@ifnextchar[\glsxtr@fullpl{#1}{#2}]{%
7886     \glsxtr@fullpl{#1}{#2}[] }%
```

```

7887 }

\@GLSxtr@fullpl Low-level macro:
7888 \def\@GLSxtr@fullpl#1#2[#3]{%
  If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).
7889   \glsxtr@record{#1}{#2}{glslink}%
7890   \glsdoifexists{#2}%
7891   {%
7892     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7893     \let\glsifplural\@firstoftwo
7894     \let\glscapscase\@thirdofthree
7895     \let\glsinsert\@empty
7896     \def\glscustomtext{%
7897       \mfirstucMakeUppercase{\glsxtrinlinefullplformat{#2}{#3}}%
7898       \glsxtrsetupfulldefs
7899       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7900     }%
7901     \glspostlinkhook
7902   }

```

The short and long forms work in a similar way to acronyms.

\glsxtrshort

```

7903 \newrobustcmd*\glsxtrshort{\gls@hyp@opt\ns@glsxtrshort}
  Define the un-starred form. Need to determine if there is a final optional argument
7904 \newcommand*\ns@glsxtrshort[2][]{%
7905   \new@ifnextchar[\glsxtrshort{#1}{#2}]{\glsxtrshort{#1}{#2}[]}{%
7906 }

```

Read in the final optional argument:

```

7907 \def\glsxtrshort#1#2[#3]{%
  If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```

```

7908   \glsxtr@record{#1}{#2}{glslink}%
7909   \glsdoifexists{#2}%
7910   {%

```

Need to make sure \glsabrvfont is set correctly.

```

7911   \glssetabrvfmt{\glscategory{#2}}%
7912   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7913   \let\glsxtrifwasfirstuse\@secondoftwo
7914   \let\glsifplural\@secondoftwo
7915   \let\glscapscase\@firstofthree
7916   \let\glsinsert\@empty
7917   \def\glscustomtext{%
7918     \glsabrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
7919     \ifglsxtrinsertinside\else#3\fi

```

```

7920      }%
7921      \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7922  }%
7923 \glspostlinkhook
7924 }

```

\Glsxtrshort

```
7925 \newrobustcmd*{\Glsxtrshort}{\gls@hyp@opt\ns@Glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7926 \newcommand*{\ns@Glsxtrshort}[2][]{%
7927   \new@ifnextchar[\{@Glsxtrshort[#1]{#2}\}{\@Glsxtrshort[#1]{#2}[]}}%
7928 }

```

Read in the final optional argument:

```
7929 \def\@Glsxtrshort#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```

7930  \glsxtr@record[#1]{#2}{glslink}%
7931  \glsdoifexists{#2}%
7932  {%
7933    \glssetabrvfmt{\glscategory{#2}}%
7934    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7935    \let\glsxtrifwasfirstuse\secondoftwo
7936    \let\glsifplural\secondoftwo
7937    \let\glscapscase\secondofthree
7938    \let\glsinsert\empty
7939    \def\glscustomtext{%
7940      \glsabbrvfont{\Glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
7941      \ifglsxtrinsertinside\else#3\fi
7942    }%
7943    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7944  }%
7945 \glspostlinkhook
7946 }

```

\GLSxtrshort

```
7947 \newrobustcmd*{\GLSxtrshort}{\gls@hyp@opt\ns@GLSxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7948 \newcommand*{\ns@GLSxtrshort}[2][]{%
7949   \new@ifnextchar[\{@GLSxtrshort[#1]{#2}\}{\@GLSxtrshort[#1]{#2}[]}}%
7950 }

```

Read in the final optional argument:

```
7951 \def\@GLSxtrshort#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
7952  \glsxtr@record[#1]{#2}{glslink}%
```

```

7953 \glsdoifexists{#2}%
7954 {%
7955   \glssetabrvfmt{\glscategory{#2}}%
7956   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7957   \let\glsxtrifwasfirstuse@secondoftwo
7958   \let\glsifplural@secondoftwo
7959   \let\glscapscase@thirdofthree
7960   \let\glsinsert@\empty
7961   \def\glscustomtext{%
7962     \mfirstucMakeUppercase
7963     {\glsabbrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
7964      \ifglsxtrinsertinside\else#3\fi
7965    }%
7966  }%
7967  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7968 }%
7969 \glspostlinkhook
7970 }

```

\glsxtrlong

```
7971 \newrobustcmd*\glsxtrlong{\gls@hyp@opt\ns@glsxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7972 \newcommand*{\ns@glsxtrlong}[2][]{%
7973   \new@ifnextchar[\{\glsxtrlong{#1}{#2}\}{\glsxtrlong{#1}{#2}[]}%
7974 }

```

Read in the final optional argument:

```
7975 \def\glsxtrlong#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```

7976 \glsxtr@record{#1}{#2}{glslink}%
7977 \glsdoifexists{#2}%
7978 {%
7979   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7980   \let\glsxtrifwasfirstuse@secondoftwo
7981   \let\glsifplural@secondoftwo
7982   \let\glscapscase@firstofthree
7983   \let\glsinsert@\empty
7984   \def\glscustomtext{%
7985     \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7986     \ifglsxtrinsertinside\else#3\fi
7987   }%
7988   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7989 }%
7990 \glspostlinkhook
7991 }

```

\Glsxtrlong

```
7992 \newrobustcmd*\Glsxtrlong{\gls@hyp@opt\ns@Glsxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7993 \newcommand*{\ns@Glsxtrlong}[2] []{%
7994   \new@ifnextchar[{\@\Glsxtrlong{#1}{#2}}{\@\Glsxtrlong{#1}{#2}[] }%
7995 }
```

Read in the final optional argument:

```
7996 \def\@Glsxtrlong#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
7997 \@glsxtr@record{#1}{#2}{glslink}%
7998 \glsdoifexists{#2}%
7999 {%
8000   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
8001   \let\glsxtrifwasfirstuse@secondoftwo
8002   \let\glsifplural@secondoftwo
8003   \let\glscapscase@secondofthree
8004   \let\glsinsert@\empty
8005   \def\glscustomtext{%
8006     \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
8007     \ifglsxtrinsertinside\else#3\fi
8008   }%
8009   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
8010 }%
8011 \glspostlinkhook
8012 }
```

\GLSxtrlong

```
8013 \newrobustcmd*{\GLSxtrlong}{\gls@hyp@opt\ns@GLSxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
8014 \newcommand*{\ns@GLSxtrlong}[2] []{%
8015   \new@ifnextchar[{\@\GLSxtrlong{#1}{#2}}{\@\GLSxtrlong{#1}{#2}[] }%
8016 }
```

Read in the final optional argument:

```
8017 \def\@GLSxtrlong#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
8018 \@glsxtr@record{#1}{#2}{glslink}%
8019 \glsdoifexists{#2}%
8020 {%
8021   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
8022   \let\glsxtrifwasfirstuse@secondoftwo
8023   \let\glsifplural@secondoftwo
8024   \let\glscapscase@thirdofthree
8025   \let\glsinsert@\empty
8026   \def\glscustomtext{%
8027     \mfirstucMakeUppercase
8028     \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
8029   }}
```

```

8029      \ifglsxtrinsertinside\else#3\fi
8030      }%
8031      }%
8032      \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
8033      }%
8034      \glspostlinkhook
8035 }

```

Plural short forms:

\glsxtrshortpl

```

8036 \newrobustcmd*\glsxtrshortpl{\gls@hyp@opt\ns@glsxtrshortpl}
Define the un-starred form. Need to determine if there is a final optional argument
8037 \newcommand*\ns@glsxtrshortpl[2][]{%
8038   \new@ifnextchar[\glsxtrshortpl[#1]{#2}{\glsxtrshortpl[#1]{#2}[]}}%
8039 }

```

Read in the final optional argument:

```
8040 \def\glsxtrshortpl#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```

8041 \glsxtr@record[#1]{#2}{glslink}%
8042 \glsdoifexists[#2]%
8043 {%
8044   \glssetabbrvfmt{\glscategory{#2}}%
8045   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
8046   \let\glsxtrifwasfirstuse\secondoftwo
8047   \let\glsifplural\firstoftwo
8048   \let\glscapscase\firstofthree
8049   \let\glsinsert\empty
8050   \def\glscustomtext{%
8051     \glsabbrvfont{\glsaccessshortpl[#2]\ifglsxtrinsertinside#3\fi}%
8052     \ifglsxtrinsertinside\else#3\fi
8053   }%
8054   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
8055 }%
8056 \glspostlinkhook
8057 }

```

\Glsxtrshortpl

```

8058 \newrobustcmd*\Glsxtrshortpl{\gls@hyp@opt\ns@Glsxtrshortpl}
Define the un-starred form. Need to determine if there is a final optional argument
8059 \newcommand*\ns@Glsxtrshortpl[2][]{%
8060   \new@ifnextchar[\Glsxtrshortpl[#1]{#2}{\Glsxtrshortpl[#1]{#2}[]}}%
8061 }

```

Read in the final optional argument:

```
8062 \def\Glsxtrshortpl#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```

8063  \@glsxtr@record{\#1}{\#2}{\glslink}%
8064  \glsdoifexists{\#2}%
8065  {%
8066    \glssetabrvfmt{\glscategory{\#2}}%
8067    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
8068      \let\glsxtrifwasfirstuse@secondoftwo
8069      \let\glsifplural@firstoftwo
8070      \let\glscapscase@secondofthree
8071      \let\glsinsert@\empty
8072      \def\glscustomtext{%
8073        \glsabbrvfont{\Glsaccessshortpl{\#2}\ifglsxtrinsertinside#3\fi}%
8074        \ifglsxtrinsertinside\else#3\fi
8075      }%
8076      \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
8077    }%
8078    \glspostlinkhook
8079 }

```

```
\GLSxtrshortpl
8080 \newrobustcmd*\GLSxtrshortpl{\gls@hyp@opt\ns@GLSxtrshortpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

8081 \newcommand*\ns@GLSxtrshortpl[2][]{%
8082   \new@ifnextchar[\ns@GLSxtrshortpl{\#1}{\#2}]{\ns@GLSxtrshortpl{\#1}{\#2}[]}{%
8083 }
```

Read in the final optional argument:

```
8084 \def\ns@GLSxtrshortpl#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```

8085  \@glsxtr@record{\#1}{\#2}{\glslink}%
8086  \glsdoifexists{\#2}%
8087  {%
8088    \glssetabrvfmt{\glscategory{\#2}}%
8089    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
8090      \let\glsxtrifwasfirstuse@secondoftwo
8091      \let\glsifplural@firstoftwo
8092      \let\glscapscase@thirdofthree
8093      \let\glsinsert@\empty
8094      \def\glscustomtext{%
8095        \mfirstrucMakeUppercase
8096        \glsabbrvfont{\Glsaccessshortpl{\#2}\ifglsxtrinsertinside#3\fi}%
8097        \ifglsxtrinsertinside\else#3\fi
8098      }%
8099    }%
8100    \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
8101  }%
```

```
8102 \glspostlinkhook
8103 }
```

Plural long forms:

```
\glsxtrlongpl
```

```
8104 \newrobustcmd*{\glsxtrlongpl}{\gls@hyp@opt\ns@glsxtrlongpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
8105 \newcommand*{\ns@glsxtrlongpl}[2][]{%
8106 \new@ifnextchar[{\glsxtrlongpl[#1]{#2}}{\glsxtrlongpl[#1]{#2}[]}%
8107 }
```

Read in the final optional argument:

```
8108 \def\glsxtrlongpl#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
8109 \glsxtr@record[#1]{#2}{glslink}%
8110 \glsdoifexists{#2}%
8111 {%
8112 \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
8113 \let\glsxtrifwasfirstuse\secondoftwo
8114 \let\glsifplural\firstoftwo
8115 \let\glscapscase\firstofthree
8116 \let\glsinsert\empty
8117 \def\glscustomtext{%
8118 \glslongfont{\glsaccesslongpl[#2]\ifglsxtrinsertinside#3\fi}%
8119 \ifglsxtrinsertinside\else#3\fi
8120 }%
8121 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
8122 }%
8123 \glspostlinkhook
8124 }
```

```
\Glsxtrlongpl
```

```
8125 \newrobustcmd*{\Glsxtrlongpl}{\gls@hyp@opt\ns@Glsxtrlongpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
8126 \newcommand*{\ns@Glsxtrlongpl}[2][]{%
8127 \new@ifnextchar[{\Glsxtrlongpl[#1]{#2}}{\Glsxtrlongpl[#1]{#2}[]}%
8128 }
```

Read in the final optional argument:

```
8129 \def\@Glsxtrlongpl#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
8130 \glsxtr@record[#1]{#2}{glslink}%
8131 \glsdoifexists{#2}%
8132 {%
```

```

8133   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
8134   \let\glsxtrifwasfirstuse\@secondoftwo
8135   \let\glsifplural\@firstoftwo
8136   \let\glscapscase\@secondofthree
8137   \let\glsinsert\@empty
8138   \def\glscustomtext{%
8139     \glslongfont{\Glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
8140     \ifglsxtrinsertinside\else#3\fi
8141   }%
8142   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
8143 }%
8144 \glspostlinkhook
8145 }

```

\GLSxtrlongpl
 8146 \newrobustcmd*\{\GLSxtrlongpl\}{\gls@hyp@opt\ns@GLSxtrlongpl}

Define the un-starred form. Need to determine if there is a final optional argument

```

8147 \newcommand*\{\ns@GLSxtrlongpl\}[2][]{%
8148   \new@ifnextchar[\{@GLSxtrlongpl{#1}{#2}\}{\@GLSxtrlongpl{#1}{#2}[]}%
8149 }

```

Read in the final optional argument:

8150 \def\@GLSxtrlongpl#1#2[#3]{%

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```

8151 \glsxtr@record{#1}{#2}{glslink}%
8152 \glsdoifexists{#2}%
8153 {%
8154   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
8155   \let\glsxtrifwasfirstuse\@secondoftwo
8156   \let\glsifplural\@firstoftwo
8157   \let\glscapscase\@thirdofthree
8158   \let\glsinsert\@empty
8159   \def\glscustomtext{%
8160     \mfirstucMakeUppercase
8161     \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
8162     \ifglsxtrinsertinside\else#3\fi
8163   }%
8164 }%
8165 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
8166 }%
8167 \glspostlinkhook
8168 }

```

\glssetabbrvfmt Set the current format for the given category (or the abbreviation category if unset).

```

8169 \newcommand*\{\glssetabbrvfmt\}[1]{%
8170   \ifcsdef{glsabrv@current@#1}%
8171     {\glsxtr@applyabbrvfmt{\csname glsabrv@current@#1\endcsname}}%

```

```

8172  {\glsxtr@applyabbrvfmt{\@glsabrv@current@abbreviation}}%
8173 }

\glsuseabbrvfont Provide a way to use the abbreviation font for a given category for arbitrary text.
8174 \newrobustcmd*{\glsuseabbrvfont}[2]{{\glssetabbrvfmt{\#2}\glsabrvfont{\#1}}}

\glsuselongfont Provide a way to use the long font for a given category for arbitrary text.
8175 \newrobustcmd*{\glsuselongfont}[2]{{\glssetabbrvfmt{\#2}\glslongfont{\#1}}}

\sxtrgenabbrvfmt Similar to \glsgenacfmt, but for abbreviations.
8176 \newcommand*{\glsxtrgenabbrvfmt}{%
8177   \ifdefempty{\glscustomtext}%
8178   {%
8179     \ifglsused{\glslabel}%
8180     {%
8181       \glsifplural
8182     }%
8183     \glscapscase
8184   }%
8185   \glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
8186 }%
8187 }%

Subsequent use:
8188 \glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
8189 }%
8190 }%

Subsequent plural form, don't adjust case:
8191 \Glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
8192 }%
8193 }%
8194 }%
8195 }%

Subsequent plural form, make first letter upper case:
8196 \mfirstrucMakeUppercase
8197   \glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
8198 }%
8199 }%
8200 }%

Subsequent singular form
8201 \glscapscase
8202 }%

Subsequent singular form, don't adjust case:
8203 \glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
8204 }%
8205 }%

```

Subsequent singular form, make first letter upper case:

```
8201      \Glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
8202      }%
8203      {%
```

Subsequent singular form, all caps:

```
8204      \mfirstucMakeUppercase
8205      {\glsxtrsubsequentfmt{\glslabel}{\glsinsert}}%
8206      }%
8207      }%
8208      }%
8209      {%
```

First use:

```
8210      \glsifplural
8211      {%
```

First use plural form:

```
8212      \glscapscase
8213      {%
```

First use plural form, don't adjust case:

```
8214      \glsxtrfullplformat{\glslabel}{\glsinsert}%
8215      }%
8216      {%
```

First use plural form, make first letter upper case:

```
8217      \Glsxtrfullplformat{\glslabel}{\glsinsert}%
8218      }%
8219      {%
```

First use plural form, all caps:

```
8220      \mfirstucMakeUppercase
8221      {\glsxtrfullplformat{\glslabel}{\glsinsert}}%
8222      }%
8223      }%
8224      {%
```

First use singular form

```
8225      \glscapscase
8226      {%
```

First use singular form, don't adjust case:

```
8227      \glsxtrfullformat{\glslabel}{\glsinsert}%
8228      }%
8229      {%
```

First use singular form, make first letter upper case:

```
8230      \Glsxtrfullformat{\glslabel}{\glsinsert}%
8231      }%
8232      {%
```

First use singular form, all caps:

```
8233      \mfirstucMakeUppercase
8234      {\glsxtrfullformat{\glslabel}{\glsinsert}}%
8235      }%
8236      }%
8237      }%
8238      }%
8239      {%
```

User supplied text.

```
8240      \glscustomtext
8241      }%
8242 }
```

trsubsequentfmt Subsequent use format (singular no case change).

```
8243 \newcommand*{\glsxtrsubsequentfmt}[2]{%
8244   \glsabbrvfont{\glsaccessshort{\#1}\ifglsxtrinsertinside #2\fi}%
8245   \ifglsxtrinsertinside \else#2\fi
8246 }
8247 \let\glsxtrdefaultsubsequentfmt\glsxtrsubsequentfmt
```

subsequentplfmt Subsequent use format (plural no case change).

```
8248 \newcommand*{\glsxtrsubsequentplfmt}[2]{%
8249   \glsabbrvfont{\glsaccessshort{\#1}\ifglsxtrinsertinside #2\fi}%
8250   \ifglsxtrinsertinside \else#2\fi
8251 }
8252 \let\glsxtrdefaultsubsequentplfmt\glsxtrsubsequentplfmt
```

trsubsequentfmt Subsequent use format (singular, first letter uppercase).

```
8253 \newcommand*{\Glsxtrsubsequentfmt}[2]{%
8254   \glsabbrvfont{\Glsaccessshort{\#1}\ifglsxtrinsertinside #2\fi}%
8255   \ifglsxtrinsertinside \else#2\fi
8256 }
8257 \let\Glsxtrdefaultsubsequentfmt\Glsxtrsubsequentfmt
```

subsequentplfmt Subsequent use format (plural, first letter uppercase).

```
8258 \newcommand*{\Glsxtrsubsequentplfmt}[2]{%
8259   \glsabbrvfont{\Glsaccessshort{\#1}\ifglsxtrinsertinside #2\fi}%
8260   \ifglsxtrinsertinside \else#2\fi
8261 }
8262 \let\Glsxtrdefaultsubsequentplfmt\Glsxtrsubsequentplfmt
```

1.7.1 Abbreviation Styles Setup

abbreviationstyle

```
8263 \newcommand*{\setabbreviationstyle}[2][abbreviation]{%
8264   \ifcsundef{@glsabbrv@dispstyle@setup@#2}%
8265   {%
```

```

8266     \PackageError{glossaries-extra}{Undefined abbreviation style '#2'}{}%
8267   }%
8268   {%
8269     \ifcsstring{@glsabrv@current@#1}{#2}%
8270   {%
8271     }%
8272     {%
8273       \def\@glsxtr@dostylewarn{}%
8274       \glsforeachincategory{#1}{\@gls@type}{\@gls@label}%
8275     {%
8276       \def\@glsxtr@dostylewarn{\GlossariesWarning{Abbreviation
8277         style has been switched \MessageBreak
8278         for category '#1', \MessageBreak
8279         but there have already been entries \MessageBreak
8280         defined for this category. Unwanted \MessageBreak
8281         side-effects may result}}%
8282       \@endfortrue
8283     }%
8284     \@glsxtr@dostylewarn
8285   Set up the style for the given category.
8286   \csdef{@glsabrv@current@#1}{#2}%
8287   \protected@edef\glscategorylabel{#1}%
8288   \glsxtr@applyabbrvstyle{#2}%
8289 }%
8290 }

```

`applyabbrvstyle` Apply the abbreviation style without existence check.

```

8291 \newcommand*{\glsxtr@applyabbrvstyle}[1]{%
8292   \csuse{@glsabrv@dispstyle@setup@#1}%
8293   \csuse{@glsabrv@dispstyle@fmts@#1}%
8294 }

```

`r@applyabbrvfmt` Only apply the style formats.

```

8295 \newcommand*{\glsxtr@applyabbrvfmt}[1]{%
8296   \csuse{@glsabrv@dispstyle@fmts@#1}%
8297 }

```

`abbreviationstyle` This is different from `\newacronymstyle`. The first argument is the label, the second argument sets the information required when defining the new abbreviation and the third argument sets the commands used to display the full format.

```

8298 \newcommand*{\newabbreviationstyle}[3]{%
8299   \ifcsdef{@glsabrv@dispstyle@setup@#1}%
8300   {%
8301     \PackageError{glossaries-extra}{Abbreviation style '#1' already

```

```

8302     defined}{}%
8303   }%
8304   {%
8305     \csdef{@glsabbrv@dispstyle@setup@#1}{%

```

Initialise hook to do nothing. The style may change this.

```

8306     \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
8307     #2}%
8308     \csdef{@glsabbrv@dispstyle@fmts@#1}{%

```

Assume in-line form is the same as first use. The style may change this.

```

8309     \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}%
8310     \renewcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}%
8311     \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}%
8312     \renewcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}%

```

Reset \glsxtrsubsequentfmt etc in case a style changes this.

```

8313     \let\glsxtrsubsequentfmt\glsxtrdefaultsubsequentfmt
8314     \let\glsxtrsubsequentplfmt\glsxtrdefaultsubsequentplfmt
8315     \let\Glsxtrsubsequentfmt\Glsxtrdefaultsubsequentfmt
8316     \let\Glsxtrsubsequentplfmt\Glsxtrdefaultsubsequentplfmt
8317     #3}%
8318   }%
8319 }

```

abbreviationstyle

```

8320 \newcommand*{\renewabbreviationstyle}[3]{%
8321   \ifcsundef{@glsabbrv@dispstyle@setup@#1}
8322   {%
8323     \PackageError{glossaries-extra}{Abbreviation style '#1' not defined}{}%
8324   }%
8325   {%
8326     \csdef{@glsabbrv@dispstyle@setup@#1}{%

```

Initialise hook to do nothing. The style may change this.

```

8327     \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
8328     #2}%
8329     \csdef{@glsabbrv@dispstyle@fmts@#1}{%

```

Assume in-line form is the same as first use. The style may change this.

```

8330     \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}%
8331     \renewcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}%
8332     \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}%
8333     \renewcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}%
8334     #3}%
8335   }%
8336 }

```

abbreviationstyle Define a synonym for an abbreviation style. The first argument is the new name. The second argument is the original style's name.

```
8337 \newcommand*{\letabbreviationstyle}[2]{%
```

```
8338 \csletcs{@glsabrv@dispstyle@setup@#1}{@glsabrv@dispstyle@setup@#2}%
8339 \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
8340 }
```

cated@abbrstyle

```
\@glsxtr@deprecated@abbrstyle{\old-name}{\new-name}
```

Define a synonym for a deprecated abbreviation style.

```
8341 \newcommand*{\@glsxtr@deprecated@abbrstyle}[2]{%
8342   \csdef{@glsabrv@dispstyle@setup@#1}{%
8343     \GlsXtrWarnDeprecatedAbbrStyle{#1}{#2}%
8344     \csuse{@glsabrv@dispstyle@setup@#2}%
8345   }%
8346   \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
8347 }
```

ecatedAbbrStyle Generate warning for deprecated style use.

```
8348 \newcommand*{\GlsXtrWarnDeprecatedAbbrStyle}[2]{%
8349   \GlossariesExtraWarning{Deprecated abbreviation style name '#1',
8350   use '#2' instead}%
8351 }
```

eAbbrStyleSetup

```
8352 \newcommand*{\GlsXtrUseAbbrStyleSetup}[1]{%
8353   \ifcsundef{@glsabrv@dispstyle@setup@#1}%
8354   {%
8355     \PackageError{glossaries-extra}%
8356     {Unknown abbreviation style definitions '#1'}{}%
8357   }%
8358   {%
8359     \csname @glsabrv@dispstyle@setup@#1\endcsname
8360   }%
8361 }
```

seAbbrStyleFmts

```
8362 \newcommand*{\GlsXtrUseAbbrStyleFmts}[1]{%
8363   \ifcsundef{@glsabrv@dispstyle@fmts@#1}%
8364   {%
8365     \PackageError{glossaries-extra}%
8366     {Unknown abbreviation style formats '#1'}{}%
8367   }%
8368   {%
8369     \csname @glsabrv@dispstyle@fmts@#1\endcsname
8370   }%
8371 }
```

1.7.2 Predefined Styles (Default Font)

Define some common styles. These will set the first, firstplural, text and plural keys, even if the regular attribute isn't set to "true". If this attribute is set, commands like \gls will use them as per a regular entry, otherwise those keys will be ignored unless explicitly invoked by the user with commands like \glsfirst. In order for the first letter uppercase versions to work correctly, \glsxtrfullformat needs to be expanded when those keys are set. The final optional argument of \glsfirst will behave differently to the final optional argument of \gls with some styles.

xtrinsertinside Switch to determine if the insert text should be inside or outside the font changing command. The default is outside.

```
8372 \newif\ifglsxtrinsertinside  
8373 \glsxtrinsertinsidetru
```

trlongshortname

```
8374 \newcommand*\glsxtrlongshortname{  
8375   \protect\glsabbrvfont{\the\glsshorttok}  
8376 }
```

long-short

```
8377 \newabbreviationstyle{long-short}{  
8378 {
```

Set accessibility attributes if enabled.

```
8379 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
8380 \renewcommand*\CustomAbbreviationFields{  
8381   name=\glsxtrlongshortname,  
8382   sort=\the\glsshorttok,  
8383   first=\protect\glsfirstlongfont{\the\glslongtok}  
8384     \protect\glsxtrfullsep{\the\glslabeltok}  
8385     \glsxtrparen{\protect\glsfirststabrvfont{\the\glsshorttok}},  
8386   firstplural=\protect\glsfirstlongfont{\the\glslongpltok}  
8387     \protect\glsxtrfullsep{\the\glslabeltok}  
8388     \glsxtrparen{\protect\glsfirststabrvfont{\the\glsshortpltok}},  
8389   plural=\protect\glsabbrvfont{\the\glsshortpltok},  
8390   text=\protect\glsabbrvfont{\the\glsshorttok},  
8391   description=\the\glslongtok}
```

Unset the regular attribute if it has been set.

```
8392 \renewcommand*\GlsXtrPostNewAbbreviation{  
8393   \glshasattribute{\the\glslabeltok}{regular}  
8394   {}  
8395     \glssetattribute{\the\glslabeltok}{regular}{false}  
8396   }  
8397 {}
```

```
8398  }%
8399 }%
8400 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
8401 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8402 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
8403 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8404 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8405 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
8406 \renewcommand*{\glsxtrfullformat}[2]{%
8407   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8408   \ifglsxtrinsertinside\else##2\fi
8409   \glsxtrfullsep{##1}%
8410   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
8411 }%
8412 \renewcommand*{\glsxtrfullplformat}[2]{%
8413   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8414   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8415   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
8416 }%
8417 \renewcommand*{\Glsxtrfullformat}[2]{%
8418   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8419   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8420   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
8421 }%
8422 \renewcommand*{\Glsxtrfullplformat}[2]{%
8423   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8424   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8425   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
8426 }%
8427 }
```

Set this as the default style for general abbreviations:

```
8428 \setabbreviationstyle{long-short}
```

ngshortdescsort

```
8429 \newcommand*{\glsxtrlongshortdescsort}{%
8430   \expandonce\glsxtrorglong\space (\expandonce\glsxtrorgshort)%
8431 }
```

ngshortdescname

```
8432 \newcommand*{\glsxtrlongshortdescname}{%
8433   \protect\glslongfont{\the\glslongtok}%
8434   \glsxtrparen{\protect\glsabbrvfont{\the\glsshorttok}}%
8435 }
```

`long-short-desc` User supplies description. The long form is included in the name.

```
8436 \newabbreviationstyle{long-short-desc}%
8437 {%
  Set accessibility attributes if enabled.
8438   \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
  Setup the default fields.
8439   \renewcommand*{\CustomAbbreviationFields}{%
8440     name={\glsxtrlongshortdescname},
8441     sort={\glsxtrlongshortdescsort},%
8442     first={\protect\glsfirstlongfont{\the\glslongtok}%
8443       \protect\glsxtrfullsep{\the\glslabeltok}%
8444       \glsxtrparen{\protect\glsfirststabrvfont{\the\glsshorttok}}},%
8445     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}%
8446       \protect\glsxtrfullsep{\the\glslabeltok}%
8447       \glsxtrparen{\protect\glsfirststabrvfont{\the\glsshortpltok}}},%
```

The text key should only have the short form.

```
8448   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8449   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
8450 }%
```

Unset the regular attribute if it has been set.

```
8451   \renewcommand*{\GlsXtrPostNewAbbreviation}%
8452     \glshasattribute{\the\glslabeltok}{regular}%
8453     {%
8454       \glssetattribute{\the\glslabeltok}{regular}{false}%
8455     }%
8456     {}%
8457   }%
8458 }%
8459 {%
8460   \GlsXtrUseAbbrStyleFmts{long-short}%
8461 }
```

`trshortlongname`

```
8462 \newcommand*{\glsxtrshortlongname}%
8463   \protect\glsabbrvfont{\the\glsshorttok}%
8464 }
```

`short-long` Short form followed by long form in parenthesis on first use.

```
8465 \newabbreviationstyle{short-long}%
8466 {%
  Set accessibility attributes if enabled.
8467   \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
  Setup the default fields.
8468   \renewcommand*{\CustomAbbreviationFields}{%
```

```

8469   name={\glsxtrshortlongname},
8470   sort={\the\glsshorttok},
8471   description={\the\glslongtok},%
8472   first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
8473     \protect\glsxtrfullsep{\the\glslabeltok}%
8474     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
8475   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
8476     \protect\glsxtrfullsep{\the\glslabeltok}%
8477     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
8478   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8479   plural={\protect\glsabbrvfont{\the\glsshortpltok}}}

```

Unset the regular attribute if it has been set.

```

8480 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8481   \glshasattribute{\the\glslabeltok}{regular}%
8482   {%
8483     \glssetattribute{\the\glslabeltok}{regular}{false}%
8484   }%
8485   {}%
8486 }%
8487 }%
8488 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8489 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8490 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
8491 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8492 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8493 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8494 \renewcommand*{\glsxtrfullformat}[2]{%
8495   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8496   \ifglsxtrinsertinside\else##2\fi
8497   \glsxtrfullsep{##1}%
8498   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8499 }%
8500 \renewcommand*{\glsxtrfullplformat}[2]{%
8501   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8502   \ifglsxtrinsertinside\else##2\fi
8503   \glsxtrfullsep{##1}%
8504   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
8505 }%
8506 \renewcommand*{\GlsXtrfullformat}[2]{%
8507   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8508   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8509   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8510 }%
8511 \renewcommand*{\GlsXtrfullplformat}[2]{%
8512   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```
8513     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8514     \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
8515 }%
8516 }
```

ortlongdescsort

```
8517 \newcommand*{\glsxtrshortlongdescsort}{\the\glsshorttok}
```

ortlongdescname

```
8518 \newcommand*{\glsxtrshortlongdescname}{%
8519   \protect\glsabbrvfont{\the\glsshorttok}%
8520   \glsxtrparen{\protect\glslongfont{\the\glslongtok}}%
8521 }
```

short-long-desc User supplies description. The long form is included in the name.

```
8522 \newabbreviationstyle{short-long-desc}%
8523 {%
```

Set accessibility attributes if enabled.

```
8524 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
8525 \renewcommand*{\CustomAbbreviationFields}{%
8526   name={\glsxtrshortlongdescname},
8527   sort={\glsxtrshortlongdescsort},
8528   first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
8529     \protect\glsxtrfullsep{\the\glslabeltok}%
8530     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
8531   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
8532     \protect\glsxtrfullsep{\the\glslabeltok}%
8533     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
8534   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8535   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
8536 }%
```

Unset the regular attribute if it has been set.

```
8537 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8538   \glshasattribute{\the\glslabeltok}{regular}%
8539   {%
8540     \glssetattribute{\the\glslabeltok}{regular}{false}%
8541   }%
8542   {}%
8543 }%
8544 }%
8545 {%
8546 \GlsXtrUseAbbrStyleFmts{short-long}%
8547 }
```

ongfootnotefont Only used by the “footnote” styles.

```
8548 \newcommand*{\glsfirstlongfootnotefont}[1]{\glslongfootnotefont{#1}}%
```

ongfootnotefont Only used by the “footnote” styles.

```
8549 \newcommand*{\glslongfootnotefont}[1]{\glslongdefaultfont{#1}}%
```

trabbrvfootnote

```
\glsxtrabbrvfootnote{\label}{\long}
```

Command used by footnote abbreviation styles. The default definition ignores the first argument. The second argument *long* includes the font changing command and may be the singular or plural form, depending on the command that was used (for example, `\gls` or `\glsp`).

```
8550 \newcommand*{\glsxtrabbrvfootnote}[2]{\footnote{#2}}
```

xtrfootnotename

```
8551 \newcommand*{\glsxtrfootnotename}{%
8552   \protect\glsabbrvfont{\the\glsshorttok}%
8553 }
```

footnote Short form followed by long form in footnote on first use.

```
8554 \newabbreviationstyle{footnote}{%
8555 {%
```

Set accessibility attributes if enabled. (Add `firstshortaccess` since long form is hidden in a footnote on first use.)

```
8556 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
8557 \renewcommand*{\CustomAbbreviationFields}{%
8558   name={\glsxtrfootnotename},
8559   sort={\the\glsshorttok},
8560   description={\the\glslongtok},%
8561   first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
8562     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8563       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8564   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
8565     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8566       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
8567   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8568   plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%
```

Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute if it has been set.

```
8569 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
```

```

8570 \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8571 \glshasattribute{\the\glslabeltok}{regular}%
8572 {%
8573   \glssetattribute{\the\glslabeltok}{regular}{false}%
8574 }%
8575 {}%
8576 }%
8577 }%
8578 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8579 \renewcommand*\abrvpluralsuffix{\glsxtrabbrrvpluralsuffix}%
8580 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
8581 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
8582 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
8583 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

8584 \renewcommand*\glsxtrfullformat[2]{%
8585   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8586   \ifglsxtrinsertinside\else##2\fi
8587   \protect\glsxtrabbrrvfootnote{##1}%
8588   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8589 }%
8590 \renewcommand*\glsxtrfullplformat[2]{%
8591   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8592   \ifglsxtrinsertinside\else##2\fi
8593   \protect\glsxtrabbrrvfootnote{##1}%
8594   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8595 }%
8596 \renewcommand*\Glsxtrfullformat[2]{%
8597   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8598   \ifglsxtrinsertinside\else##2\fi
8599   \protect\glsxtrabbrrvfootnote{##1}%
8600   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8601 }%
8602 \renewcommand*\Glsxtrfullplformat[2]{%
8603   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8604   \ifglsxtrinsertinside\else##2\fi
8605   \protect\glsxtrabbrrvfootnote{##1}%
8606   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8607 }%

```

The first use full form and the inline full form use the short (long) style.

```

8608 \renewcommand*\glsxtrinlinefullformat[2]{%
8609   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8610   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8611   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8612 }%
8613 \renewcommand*\glsxtrinlinefullplformat[2]{%
8614   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

8615   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8616   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8617 }%
8618 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8619   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8620   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8621   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8622 }%
8623 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8624   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8625   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8626   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8627 }%
8628 }

```

short-footnote

```
8629 \letabbreviationstyle{short-footnote}{footnote}
```

ootnotedescname

```

8630 \newcommand*{\glsxtrfootnotedescname}{%
8631   \protect\glsabbrvfont{\the\glsshorttok}%
8632   \protect\glsxtrfullsep{\the\glslabeltok}%
8633   \protect\glsxtrparen{\protect\glslongfont{\the\glslongtok}}%
8634 }

```

ootnotedescsort

```
8635 \newcommand*{\glsxtrfootnotedescsort}{\the\glsshorttok}
```

t-footnote-desc

Like short-footnote but with user supplied description.

```
8636 \newabbreviationstyle{short-footnote-desc}{%
8637 }%
```

Set accessibility attributes if enabled

```
8638 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```

8639 \renewcommand*{\CustomAbbreviationFields}{%
8640   name={\glsxtrfootnotedescname},
8641   sort={\glsxtrfootnotedescsort},
8642   first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
8643     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8644     {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8645   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
8646     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8647     {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
8648   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8649   plural={\protect\glsabbrvfont{\the\glsshortpltok}}}

```

Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute if it has been set.

```

8650 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8651   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8652   \glshasattribute{\the\glslabeltok}{regular}%
8653   {%
8654     \glssetattribute{\the\glslabeltok}{regular}{false}%
8655   }%
8656   {}%
8657 }%
8658 }%
8659 {%
8660 \GlsXtrUseAbbrStyleFmts{footnote}%
8661 }

```

footnote-desc Synonym.

```
8662 \letabbreviationstyle{footnote-desc}{short-footnote-desc}
```

postfootnote Similar to footnote but the footnote is placed afterwards, outside the link. This avoids nested links and can also move the footnote marker after any following punctuation mark. Pre v1.07 included \footnote in the first keys, which was incorrect as it caused duplicate footnotes.

```

8663 \newabbreviationstyle{postfootnote}%
8664 {%

```

Set accessibility attributes if enabled. (Add firstshortaccess since long form is hidden in a footnote on first use.)

```
8665 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

8666 \renewcommand*\CustomAbbreviationFields}{%
8667   name={\glsxtrfootnotename},%
8668   sort={\the\glsshorttok},%
8669   description={\the\glslongtok},%
8670   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
8671   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
8672   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8673   plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%

```

Make this category insert a footnote after the link if this was the first use, and unset the regular attribute if it has been set.

```

8674 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8675   \csdef{glsxtrpostlink\glscategorylabel}{%
8676     \glsxtrifwasfirstuse
8677   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

8678   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8679   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}%
8680 }%
8681 {}%

```

```

8682   }%
8683   \glshasattribute{\the\glslabeltok}{regular}%
8684   {%
8685     \glssetattribute{\the\glslabeltok}{regular}{false}%
8686   }%
8687   {}%
8688 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

8689 \renewcommand*{\glsxtrsetupfulldefs}{%
8690   \let\glsxtrifwasfirstuse\@secondoftwo
8691 }%
8692 }%
8693 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8694 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8695 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
8696 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8697 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8698 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

8699 \renewcommand*{\glsxtrfullformat}[2]{%
8700   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8701   \ifglsxtrinsertinside\else##2\fi
8702 }%
8703 \renewcommand*{\glsxtrfullplformat}[2]{%
8704   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8705   \ifglsxtrinsertinside\else##2\fi
8706 }%
8707 \renewcommand*{\Glsxtrfullformat}[2]{%
8708   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8709   \ifglsxtrinsertinside\else##2\fi
8710 }%
8711 \renewcommand*{\Glsxtrfullplformat}[2]{%
8712   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8713   \ifglsxtrinsertinside\else##2\fi
8714 }%

```

The first use full form and the inline full form use the short (long) style.

```

8715 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8716   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8717   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8718   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8719 }%
8720 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8721   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8722   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8723   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%

```

```

8724 }%
8725 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8726   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8727   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8728   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}}%
8729 }%
8730 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8731   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8732   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8733   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}}%
8734 }%
8735 }

```

rt-postfootnote

```
8736 \letabbreviationstyle{short-postfootnote}{postfootnote}
```

stfootnote-desc

Like short-postfootnote but with user supplied description.

```
8737 \newabbreviationstyle{short-postfootnote-desc}{%
8738 }%
```

Set accessibility attributes if enabled.

```
8739 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
8740 \renewcommand*{\CustomAbbreviationFields}{%
8741   name={\glsxtrfootnotedescname},%
8742   sort={\glsxtrfootnotedescsort},%
8743   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
8744   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
8745   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8746   plural={\protect\glsabbrvfont{\the\glsshortpltok}}}}%
```

Make this category insert a footnote after the link if this was the first use, and unset the regular attribute if it has been set.

```
8747 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8748   \csdef{glsxtrpostlink\glscategorylabel}{%
8749     \glsxtrifwasfirstuse
8750   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
8751   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8752   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}}%
8753 }%
8754 {}%
8755 }%
8756 \glshasattribute{\the\glslabeltok}{regular}%
8757 {}%
8758 \glssetattribute{\the\glslabeltok}{regular}{false}}%
```

```
8759 }%
8760 {%
8761 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
8762 \renewcommand*\glsxtrsetupfulldefs{%
8763   \let\glsxtrifwasfirstuse\@secondoftwo
8764 }%
8765 }%
8766 {%
8767 \GlsXtrUseAbbrStyleFmts{postfootnote}%
8768 }
```

stfootnote-desc

```
8769 \letabbreviationstyle{postfootnote-desc}{short-postfootnote-desc}
```

shortnolongname

```
8770 \newcommand*\glsxtrshortnolongname{%
8771   \protect\glsabbrvfont{\the\glsshorttok}%
8772 }
```

short Provide a style that only displays the short form on first use, but the short and long form can be displayed with the “full” commands that use the inline format. If the user supplies a description, the long form won’t be displayed in the predefined glossary styles, but the post description hook can be employed to automatically insert it.

```
8773 \newabbreviationstyle{short}%
8774 {%
```

Set accessibility attributes if enabled.

```
8775 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
8776 \renewcommand*\CustomAbbreviationFields{%
8777   name=\glsxtrshortnolongname,
8778   sort=\the\glsshorttok,
8779   first=\protect\glsfirstabbrvfont{\the\glsshorttok},
8780   firstplural=\protect\glsfirstabbrvfont{\the\glsshortpltok},
8781   text=\protect\glsabbrvfont{\the\glsshorttok},
8782   plural=\protect\glsabbrvfont{\the\glsshortpltok},
8783   description=\the\glslongtok}%
8784 \renewcommand*\GlsXtrPostNewAbbreviation{%
8785   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8786 }%
8787 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
8788 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
8789 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{\#1}}%
8790 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{\#1}}%
```

```
8791 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8792 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short form followed by the long form in parentheses.

```
8793 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8794   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
8795   \ifglsxtrinsertinside##2\fi}%
8796 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8797 \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8798 }%
8799 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8800   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
8801   \ifglsxtrinsertinside##2\fi}%
8802 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8803 \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
8804 }%
8805 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8806   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
8807   \ifglsxtrinsertinside##2\fi}%
8808 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8809 \glsxtrparen{\glsfirstlongfont{\Glsaccesslong{##1}}}%
8810 }%
8811 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8812   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
8813   \ifglsxtrinsertinside##2\fi}%
8814 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8815 \glsxtrparen{\glsfirstlongfont{\Glsaccesslongpl{##1}}}%
8816 }%
```

The first use full form only displays the short form, but it typically won't be used as the regular attribute is set by this style.

```
8817 \renewcommand*{\glsxtrfullformat}[2]{%
8818   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8819   \ifglsxtrinsertinside\else##2\fi
8820 }%
8821 \renewcommand*{\glsxtrfullplformat}[2]{%
8822   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8823   \ifglsxtrinsertinside\else##2\fi
8824 }%
8825 \renewcommand*{\Glsxtrfullformat}[2]{%
8826   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8827   \ifglsxtrinsertinside\else##2\fi
8828 }%
8829 \renewcommand*{\Glsxtrfullplformat}[2]{%
8830   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8831   \ifglsxtrinsertinside\else##2\fi
8832 }%
8833 }
```

Set this as the default style for acronyms:

```

8834 \setabbreviationstyle[acronym]{short}

short-nolong
8835 \letabbreviationstyle{short-nolong}{short}

rt-nolong-noreg Like short-nolong but doesn't set the regular attribute.
8836 \newabbreviationstyle{short-nolong-noreg}%
8837 {%
8838   \GlsXtrUseAbbrStyleSetup{short-nolong}%
   Unset the regular attribute if it has been set.
8839   \renewcommand*\GlsXtrPostNewAbbreviation{%
8840     \glshasattribute{\the\glslabeltok}{regular}%
8841     {%
8842       \glssetattribute{\the\glslabeltok}{regular}{false}%
8843     }%
8844     {}%
8845   }%
8846 }%
8847 {%
8848   \GlsXtrUseAbbrStyleFmts{short-nolong}%
8849 }

trshortdescname
8850 \newcommand*\glsxtrshortdescname{%
8851   \protect\glsabbrvfont{\the\glsshorttok}%
8852   \protect\glsxtrfullsep{\the\glslabeltok}%
8853   \protect\glsxtrparen{\protect\glslongfont{\the\glslongtok}}%
8854 }

short-desc The user must supply the description in this style. The long form is added to the name. The short style (possibly with the post-description hooks set) might be a better option.
8855 \newabbreviationstyle{short-desc}%
8856 {%
   Set accessibility attributes if enabled.
8857   \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
   Setup the default fields.
8858   \renewcommand*\CustomAbbreviationFields{%
8859     name={\glsxtrshortdescname},
8860     sort={\glsshorttok},
8861     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
8862     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
8863     text={\protect\glsabbrvfont{\the\glsshorttok}},
8864     plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%%
8865   \renewcommand*\GlsXtrPostNewAbbreviation{%
8866     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8867 }%
8868 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```
8869 \renewcommand*\{\abbrvpluralsuffix\}\glsxtrabbrvpluralsuffix}%
8870 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
8871 \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8872 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8873 \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short format followed by the long form in parentheses.

```
8874 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
8875   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8876   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8877   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8878 }%
8879 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
8880   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8881   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8882   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
8883 }%
8884 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
8885   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8886   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8887   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8888 }%
8889 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
8890   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8891   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8892   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
8893 }%
```

The first use full form only displays the short form, but it typically won't be used as the regular attribute is set by this style.

```
8894 \renewcommand*\{\glsxtrfullformat}[2]{%
8895   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8896   \ifglsxtrinsertinside\else##2\fi
8897 }%
8898 \renewcommand*\{\glsxtrfullplformat}[2]{%
8899   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8900   \ifglsxtrinsertinside\else##2\fi
8901 }%
8902 \renewcommand*\{\Glsxtrfullformat}[2]{%
8903   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8904   \ifglsxtrinsertinside\else##2\fi
8905 }%
8906 \renewcommand*\{\Glsxtrfullplformat}[2]{%
8907   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8908   \ifglsxtrinsertinside\else##2\fi
8909 }%
8910 }
```

ort-nolong-desc

```
8911 \let\abbreviationstyle{\short-nolong-desc}{\short-desc}
```

long-desc-noreg Like `short-nolong-desc` but doesn't set the `regular` attribute.

```
8912 \newabbreviationstyle{\short-nolong-desc-noreg}{%
8913 {%
8914   \GlsXtrUseAbbrStyleSetup{\short-nolong-desc}{%
```

Unset the `regular` attribute if it has been set.

```
8915   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8916     \glshasattribute{\the\glslabeltok}{regular}{%
8917       {%
8918         \glssetattribute{\the\glslabeltok}{regular}{false}{%
8919           }{%
8920             {}{%
8921               }{%
8922             }{%
8923           }{%
8924             \GlsXtrUseAbbrStyleFmts{\short-nolong-desc}{%
8925           }}}}}{}}
```

nolong-short Similar to `short-nolong` but the full form shows the long form followed by the short form in parentheses.

```
8926 \newabbreviationstyle{\nolong-short}{%
8927 {%
8928   \GlsXtrUseAbbrStyleSetup{\short-nolong}{%
8929 }{%
8930 {%
8931   \GlsXtrUseAbbrStyleFmts{\short-nolong}{%
```

The inline full form displays the long form followed by the short form in parentheses.

```
8932 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8933   \protect\glsfirstlongfont{\glsaccesslong{##1}}{%
8934     \ifglsxtrinsertinside##2\fi}{%
8935     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}{%
8936       \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}}}{%
8937 }{%
8938 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8939   \protect\glsfirstlongfont{\glsaccesslongpl{##1}}{%
8940     \ifglsxtrinsertinside##2\fi}{%
8941     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}{%
8942       \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}}{%
8943 }{%
8944 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8945   \protect\glsfirstlongfont{\glsaccesslong{##1}}{%
8946     \ifglsxtrinsertinside##2\fi}{%
8947     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}{%
8948       \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshort{##1}}}}}{%
8949 }{%
8950 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8951   \protect\glsfirstlongfont{\glsaccesslongpl{##1}}{}}
```

```

8952      \ifglsxtrinsertinside##2\fi}%
8953      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8954      \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshortpl{##1}}}%
8955  }%
8956 }

```

`nolong-short-noreg` Like `nolong-short` but doesn't set the `regular` attribute.

```

8957 \newabbreviationstyle{nolong-short-noreg}{%
8958 {%
8959   \GlsXtrUseAbbrStyleSetup{nolong-short}%

```

Unset the `regular` attribute if it has been set.

```

8960  \renewcommand*\GlsXtrPostNewAbbreviation{%
8961    \glshasattribute{\the\glslabeltok}{regular}%
8962    {%
8963      \glssetattribute{\the\glslabeltok}{regular}{false}%
8964    }%
8965    {}%
8966  }%
8967 }%
8968 {%
8969   \GlsXtrUseAbbrStyleFmts{nolong-short}%
8970 }

```

`noshortdescname`

```

8971 \newcommand*\glsxtrlongnoshortdescname{%
8972   \protect\glslongfont{\the\glslongtok}%
8973 }

```

`long-desc` Provide a style that only displays the long form, but the long and short form can be displayed with the “full” commands that use the inline format. The predefined glossary styles won't show the short form. The user must supply a description for this style. The accessibility attributes don't need setting here.

```

8974 \newabbreviationstyle{long-desc}{%
8975 {%
8976   \renewcommand*\CustomAbbreviationFields{%
8977     name={\glsxtrlongnoshortdescname},
8978     sort={\the\glslongtok},
8979     first={\protect\glsfirstlongfont{\the\glslongtok}},
8980     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
8981     text={\glslongfont{\the\glslongtok}},
8982     plural={\glslongfont{\the\glslongpltok}}%
8983   }%
8984   \renewcommand*\GlsXtrPostNewAbbreviation{%
8985     \glssetattribute{\the\glslabeltok}{regular}{true}%
8986   }%
8987 }

```

In case the user wants to mix and match font styles, these are redefined here.

```

8988 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8989 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
8990 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8991 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8992 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8993 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8994   \glslongfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8995   \ifglsxtrinsertinside \else##2\fi
8996 }%
8997 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8998   \glslongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8999   \ifglsxtrinsertinside \else##2\fi
9000 }%
9001 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9002   \glslongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9003   \ifglsxtrinsertinside \else##2\fi
9004 }%
9005 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9006   \glslongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9007   \ifglsxtrinsertinside \else##2\fi
9008 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9009 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9010   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9011   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9012   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
9013 }%
9014 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9015   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9016   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9017   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
9018 }%
9019 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9020   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9021   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9022   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
9023 }%
9024 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9025   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9026   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9027   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
9028 }%

```

The first use full form only displays the long form, but it typically won't be used as the regular attribute is set by this style.

```

9029 \renewcommand*{\glsxtrfullformat}[2]{%
9030   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9031   \ifglsxtrinsertinside\else##2\fi

```

```

9032 }%
9033 \renewcommand*{\glsxtrfullplformat}[2]{%
9034   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9035   \ifglsxtrinsertinside\else##2\fi
9036 }%
9037 \renewcommand*{\Glsxtrfullformat}[2]{%
9038   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9039   \ifglsxtrinsertinside\else##2\fi
9040 }%
9041 \renewcommand*{\Glsxtrfullplformat}[2]{%
9042   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9043   \ifglsxtrinsertinside\else##2\fi
9044 }%
9045 }

```

`ng-noshort-desc` Provide a synonym that matches similar styles.

```
9046 \letabbreviationstyle{long-noshort-desc}{long-desc}
```

`hort-desc-noreg` Like `long-noshort-desc` but doesn't set the `regular` attribute.

```

9047 \newabbreviationstyle{long-noshort-desc-noreg}{%
9048 {%
9049   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}{%

```

Unset the `regular` attribute if it has been set.

```

9050   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9051     \glshasattribute{\the\glslabeltok}{regular}{%
9052       {%
9053         \glssetattribute{\the\glslabeltok}{regular}{false}{%
9054       }%
9055     }%
9056   }%
9057 }%
9058 {%
9059   \GlsXtrUseAbbrStyleFmts{long-noshort-desc}{%
9060 }

```

`longnoshortname`

```

9061 \newcommand*{\glsxtrlongnoshortname}{%
9062   \protect\glsabbrvfont{\the\glsshorttok}{%
9063 }
```

`long` It doesn't really make a great deal of sense to have a long-only style that doesn't have a description (unless no glossary is required), but the best course of action here is to use the short form as the name and the long form as the description.

```
9064 \newabbreviationstyle{long}{%
9065 {%
```

Set accessibility attributes if enabled.

```
9066 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
```

Setup the default fields.

```
9067 \renewcommand*\CustomAbbreviationFields{%
9068   name={\glsxtrlongnoshortname},
9069   sort={\the\glsshorttok},
9070   first={\protect\glsfirstlongfont{\the\glslongtok}},
9071   firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
9072   text={\glslongfont{\the\glslongtok}},
9073   plural={\glslongfont{\the\glslongpltok}},%
9074   description={\the\glslongtok}%
9075 }%
9076 \renewcommand*\GlsXtrPostNewAbbreviation{%
9077   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9078 }%
9079 {%
9080 \GlsXtrUseAbbrStyleFmts{long-desc}%
9081 }
```

`long-noshort` Provide a synonym that matches similar styles.

```
9082 \letabbreviationstyle{long-noshort}{long}
```

`g-noshort-noreg` Like `long-noshort` but doesn't set the `regular` attribute.

```
9083 \newabbreviationstyle{long-noshort-noreg}%
9084 {%
9085 \GlsXtrUseAbbrStyleSetup{long-noshort}%

Unset the regular attribute if it has been set.
```

```
9086 \renewcommand*\GlsXtrPostNewAbbreviation{%
9087   \glshasattribute{\the\glslabeltok}{regular}}%
9088 {%
9089   \glssetattribute{\the\glslabeltok}{regular}{false}}%
9090 }%
9091 {}%
9092 }%
9093 }%
9094 {%
9095 \GlsXtrUseAbbrStyleFmts{long-noshort}%
9096 }
```

1.7.3 Predefined Styles (Small Capitals)

These styles use `\textsc` for the short form.

`\glsxtrscfont` Maintained for backward-compatibility.

```
9097 \newcommand*\glsxtrscfont[1]{\textsc{#1}}
```

`\glsabbrvscfont` Added for consistent naming.

```
9098 \newcommand*\glsabbrvscfont{\glsxtrscfont}
```

```

sxtrfirstscfont Maintained for backward-compatibility.
9099 \newcommand*{\glsxtrfirstscfont}[1]{\glsabbrvscfont{#1}}


irstabbrvscfont Added for consistent naming.
9100 \newcommand*{\glsfirstabbrvscfont}{\glsxtrfirstscfont}

and for the default short form suffix:

\glsxtrscsuffix \protect needs to come inside \s to avoid interfering with all caps.
9101 \newcommand*{\glsxtrscsuffix}{\protect\glstextup{\glsxtrabbrypluralsuffix}}


long-short-sc

9102 \newabbreviationstyle{long-short-sc}%
9103 {%

Set accessibility attributes if enabled.

9104 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel

Setup the default fields.

9105 \renewcommand*{\CustomAbbreviationFields}{%
9106   name={\glsxtrlongshortname},
9107   sort={\the\glsshorttok},
9108   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
9109     \protect\glsxtrfullsep{\the\glslabeltok}%
9110     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
9111   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
9112     \protect\glsxtrfullsep{\the\glslabeltok}%
9113     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
9114   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9115   plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%
9116   description={\the\glslongtok}}%
9117 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9118   \glshasattribute{\the\glslabeltok}{regular}%
9119   {%
9120     \glssetattribute{\the\glslabeltok}{regular}{false}%
9121   }%
9122   {}%
9123 }%
9124 }%
9125 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9126 \renewcommand*{\abbrvpluralsuffix}{\glsxtrscsuffix}%
9127 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9128 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%


Use the default long fonts.

9129 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9130 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```
9131 \renewcommand*\{\glsxtrfullformat}[2]{%
9132   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9133   \ifglsxtrinsertinside\else##2\fi
9134   \glsxtrfullsep{##1}%
9135   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
9136 }%
9137 \renewcommand*\{\glsxtrfullplformat}[2]{%
9138   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9139   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9140   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
9141 }%
9142 \renewcommand*\{\Glsxtrfullformat}[2]{%
9143   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9144   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9145   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
9146 }%
9147 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9148   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9149   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9150   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
9151 }%
9152 }
```

g-short-sc-desc

```
9153 \newabbreviationstyle{long-short-sc-desc}%
9154 {%
```

Set accessibility attributes if enabled.

```
9155 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
9156 \renewcommand*\{\CustomAbbreviationFields}{%
9157   name=\{\glsxtrlongshortdescname\},
9158   sort=\{\glsxtrlongshortdescsort\},%
9159   first=\{\protect\glsfirstlongdefaultfont{\the\glslongtok}\}%
9160   \protect\glsxtrfullsep{\the\glslabeltok}%
9161   \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
9162   firstplural=\{\protect\glsfirstlongdefaultfont{\the\glslongpltok}\}%
9163   \protect\glsxtrfullsep{\the\glslabeltok}%
9164   \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
9165   text=\{\protect\glsabbrvscfont{\the\glsshorttok}\},%
9166   plural=\{\protect\glsabbrvscfont{\the\glsshortpltok}\}}%
9167 }%
```

Unset the regular attribute if it has been set.

```
9168 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
9169   \glshasattribute{\the\glslabeltok}{regular}%
9170   {%
9171     \glssetattribute{\the\glslabeltok}{regular}{false}}%
```

```
9172    }%
9173    {}%
9174  }%
9175 }%
9176 {%
```

As long-short-sc style:

```
9177 \GlsXtrUseAbbrStyleFmts{long-short-sc}%
9178 }
```

short-sc-long Now the short (long) version

```
9179 \newabbreviationstyle{short-sc-long}%
9180 {}%
```

Set accessibility attributes if enabled.

```
9181 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
9182 \renewcommand*\{\CustomAbbreviationFields}{%
9183   name={\glsxtrshortlongname},
9184   sort={\the\glsshorttok},
9185   description={\the\glslongtok},%
9186   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
9187     \protect\glsxtrfullsep{\the\glslabeltok}%
9188     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9189   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
9190     \protect\glsxtrfullsep{\the\glslabeltok}%
9191     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9192   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9193   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
9194 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
9195   \glshasattribute{\the\glslabeltok}{regular}%
9196   {}%
9197   \glssetattribute{\the\glslabeltok}{regular}{false}%
9198   {}%
9199   {}%
9200 }%
9201 }%
9202 {}%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
9203 \renewcommand*\{\abbrvpluralsuffix}{\glsxtrscsuffix}%
9204 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\##1}}%
9205 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\##1}}%
9206 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\##1}}%
9207 \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{\##1}}%
```

The first use full form and the inline full form are the same for this style.

```
9208 \renewcommand*\{\glsxtrfullformat}[2]{%
9209   \glsfirstabbrvscfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
}
```

```

9210   \ifglsxtrinsertinside\else##2\fi
9211   \glsxtrfullsep{##1}%
9212   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9213 }%
9214 \renewcommand*{\glsxtrfullplformat}[2]{%
9215   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9216   \ifglsxtrinsertinside\else##2\fi
9217   \glsxtrfullsep{##1}%
9218   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9219 }%
9220 \renewcommand*{\Glsxtrfullformat}[2]{%
9221   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9222   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9223   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9224 }%
9225 \renewcommand*{\Glsxtrfullplformat}[2]{%
9226   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9227   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9228   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9229 }%
9230 }

```

`rt-sc-long-desc` As before but user provides description

```

9231 \newabbreviationstyle{short-sc-long-desc}{%
9232 }%

```

Set accessibility attributes if enabled.

```

9233 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

9234 \renewcommand*{\CustomAbbreviationFields}{%
9235   name={\glsxtrshortlongdescname},
9236   sort={\glsxtrshortlongdescsort},
9237   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
9238     \protect\glsxtrfullsep{\the\glslabeltok}%
9239     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9240   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
9241     \protect\glsxtrfullsep{\the\glslabeltok}%
9242     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9243   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9244   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}
9245 }%

```

Unset the regular attribute if it has been set.

```

9246 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9247   \glshasattribute{\the\glslabeltok}{regular}%
9248   {%
9249     \glssetattribute{\the\glslabeltok}{regular}{false}%
9250   }%
9251 {}%

```

```
9252  }%
9253 }%
9254 {%
    As short-sc-long style:
```

```
9255  \GlsXtrUseAbbrStyleFmts{short-sc-long}%
9256 }
```

short-sc

```
9257 \newabbreviationstyle{short-sc}%
9258 {%
```

Set accessibility attributes if enabled.

```
9259  \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
9260  \renewcommand*{\CustomAbbreviationFields}{%
9261      name={\glsxtrshortnolongname},
9262      sort={\the\glsshorttok},
9263      first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
9264      firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
9265      text={\protect\glsabbrvscfont{\the\glsshorttok}},
9266      plural={\protect\glsabbrvscfont{\the\glsshortpltok}},
9267      description={\the\glslongtok}}%
9268  \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9269      \glssetattribute{\the\glslabeltok}{regular}{true}}%
9270 }%
9271 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
9272  \renewcommand*{\abbrvpluralsuffix}{\glsxtrscsuffix}%
9273  \renewcommand*{\glsabbrvfont[1]}{\glsabbrvscfont{\##1}}%
9274  \renewcommand*{\glsfirstabbrvfont[1]}{\glsfirstabbrvscfont{\##1}}%
9275  \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\##1}}%
9276  \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{\##1}}%
```

The inline full form displays the short form followed by the long form in parentheses.

```
9277  \renewcommand*{\glsxtrinlinefullformat}[2]{%
9278      \protect\glsfirstabbrvscfont{\glsaccessshort{\##1}}%
9279      \ifglsxtrinsertinside{\##2\fi}%
9280      \ifglsxtrinsertinside\else{\##2\fi}\glsxtrfullsep{\##1}%
9281      \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}%
9282 }%
9283  \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9284      \protect\glsfirstabbrvscfont{\glsaccessshortpl{\##1}}%
9285      \ifglsxtrinsertinside{\##2\fi}%
9286      \ifglsxtrinsertinside\else{\##2\fi}\glsxtrfullsep{\##1}%
9287      \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{\##1}}}%
9288 }%
9289  \renewcommand*{\Glsxtrinlinefullformat}[2]{%
```

```

9290 \protect\glsfirstabbrvscfont{\Glsaccessshort{##1}%
9291   \ifglsxtrinsertinside##2\fi}%
9292 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9293 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9294 }%
9295 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
9296   \protect\glsfirstabbrvscfont{\Glsaccessshortpl{##1}%
9297     \ifglsxtrinsertinside##2\fi}%
9298     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9299     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9300 }%

```

The first use full form only displays the short form, but it typically won't be used as the regular attribute is set by this style.

```

9301 \renewcommand*\{\glsxtrfullformat}[2]{%
9302   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9303   \ifglsxtrinsertinside\else##2\fi
9304 }%
9305 \renewcommand*\{\glsxtrfullplformat}[2]{%
9306   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9307   \ifglsxtrinsertinside\else##2\fi
9308 }%
9309 \renewcommand*\{\Glsxtrfullformat}[2]{%
9310   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9311   \ifglsxtrinsertinside\else##2\fi
9312 }%
9313 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9314   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9315   \ifglsxtrinsertinside\else##2\fi
9316 }%
9317 }

```

short-sc-nolong

```
9318 \letabbreviationstyle{short-sc-nolong}{short-sc}
```

short-sc-desc

```

9319 \newabbreviationstyle{short-sc-desc}{%
9320 }%
```

Set accessibility attributes if enabled.

```
9321 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```

9322 \renewcommand*\{\CustomAbbreviationFields}{%
9323   name={\glsxtrshortdescname},
9324   sort={\the\glsshorttok},
9325   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
9326   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
9327   text={\protect\glsabbrvscfont{\the\glsshorttok}},
9328   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%

```

```

9329 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9330   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9331 }%
9332 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9333 \renewcommand*\abbrvpluralsuffix}{\glsxtrscsuffix}%
9334 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9335 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9336 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9337 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

9338 \renewcommand*\glsxtrinlinefullformat}[2]{%
9339   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9340   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9341   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9342 }%
9343 \renewcommand*\glsxtrinlinefullplformat}[2]{%
9344   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9345   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9346   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9347 }%
9348 \renewcommand*\Glsxtrinlinefullformat}[2]{%
9349   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9350   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9351   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9352 }%
9353 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
9354   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9355   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9356   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9357 }%

```

The first use full form only displays the short form, but it typically won't be used as the regular attribute is set by this style.

```

9358 \renewcommand*\glsxtrfullformat}[2]{%
9359   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9360   \ifglsxtrinsertinside\else##2\fi
9361 }%
9362 \renewcommand*\glsxtrfullplformat}[2]{%
9363   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9364   \ifglsxtrinsertinside\else##2\fi
9365 }%
9366 \renewcommand*\Glsxtrfullformat}[2]{%
9367   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9368   \ifglsxtrinsertinside\else##2\fi
9369 }%
9370 \renewcommand*\Glsxtrfullplformat}[2]{%
9371   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9372   \ifglsxtrinsertinside\else##2\fi

```

```

9373 }%
9374 }

-sc-nolong-desc
9375 \let\abbreviationstyle{\short-sc-nolong-desc}{\short-sc-desc}

```

```

nolong-short-sc
9376 \newabbreviationstyle{nolong-short-sc}%
9377 {%
9378   \GlsXtrUseAbbrStyleSetup{short-sc-nolong}%
9379 }%
9380 {%
9381   \GlsXtrUseAbbrStyleFmts{short-sc-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

9382 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9383   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
9384     \ifglsxtrinsertinside##2\fi}%
9385   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9386   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
9387 }%
9388 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9389   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
9390     \ifglsxtrinsertinside##2\fi}%
9391   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9392   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
9393 }%
9394 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9395   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
9396     \ifglsxtrinsertinside##2\fi}%
9397   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9398   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
9399 }%
9400 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9401   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
9402     \ifglsxtrinsertinside##2\fi}%
9403   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9404   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
9405 }%
9406 }

```

long-noshort-sc The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsxtrshort`. No accessibility attributes needed here.

```

9407 \newabbreviationstyle{long-noshort-sc}%
9408 {%
9409   \renewcommand*{\CustomAbbreviationFields}{%
9410     name={\glsxtrlongnoshortname},%
9411     sort={\the\glsshorttok},%
9412     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},%

```

```

9413   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},  

9414   text={\protect\glslongdefaultfont{\the\glslongtok}},  

9415   plural={\protect\glslongdefaultfont{\the\glslongpltok}},%  

9416   description={\the\glslongtok}%
9417 }%
9418 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9419   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9420 }%
9421 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9422 \renewcommand*\abbrvpluralsuffix}{\glsxtrscsuffix}%
9423 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9424 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9425 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9426 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9427 \renewcommand*\glsxtrsubsequentfmt}[2]{%
9428   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9429   \ifglsxtrinsertinside \else##2\fi
9430 }%
9431 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
9432   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9433   \ifglsxtrinsertinside \else##2\fi
9434 }%
9435 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
9436   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9437   \ifglsxtrinsertinside \else##2\fi
9438 }%
9439 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
9440   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9441   \ifglsxtrinsertinside \else##2\fi
9442 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9443 \renewcommand*\glsxtrinlinefullformat}[2]{%
9444   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9445   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9446   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
9447 }%
9448 \renewcommand*\glsxtrinlinefullplformat}[2]{%
9449   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9450   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9451   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
9452 }%
9453 \renewcommand*\Glsxtrinlinefullformat}[2]{%
9454   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9455   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9456   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
9457 }%

```

```

9458 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9459   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9460   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9461   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
9462 }%

```

The first use full form only displays the long form, but it typically won't be used as the regular attribute is set by this style.

```

9463 \renewcommand*{\glsxtrfullformat}[2]{%
9464   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9465   \ifglsxtrinsertinside\else##2\fi
9466 }%
9467 \renewcommand*{\glsxtrfullplformat}[2]{%
9468   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9469   \ifglsxtrinsertinside\else##2\fi
9470 }%
9471 \renewcommand*{\Glsxtrfullformat}[2]{%
9472   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9473   \ifglsxtrinsertinside\else##2\fi
9474 }%
9475 \renewcommand*{\Glsxtrfullplformat}[2]{%
9476   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9477   \ifglsxtrinsertinside\else##2\fi
9478 }%
9479 }

```

long-sc Backward compatibility:

```
9480 @glsxtr@deprecated@abbrstyle{long-sc}{long-noshort-sc}
```

noshort-sc-desc The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

9481 \newabbreviationstyle{long-noshort-sc-desc}%
9482 {%
9483   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
9484 }%
9485 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9486 \renewcommand*{\abbrvpluralsuffix}{\glsxtrscsuffix}%
9487 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9488 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9489 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9490 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9491 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9492   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9493   \ifglsxtrinsertinside \else##2\fi
9494 }%
9495 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%

```

```

9496   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9497   \ifglsxtrinsertinside \else##2\fi
9498 }%
9499 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9500   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9501   \ifglsxtrinsertinside \else##2\fi
9502 }%
9503 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9504   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9505   \ifglsxtrinsertinside \else##2\fi
9506 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9507 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9508   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9509   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9510   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
9511 }%
9512 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9513   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9514   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9515   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
9516 }%
9517 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9518   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9519   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9520   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
9521 }%
9522 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9523   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9524   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9525   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
9526 }%

```

The first use full form only displays the long form, but it typically won't be used as the regular attribute is set by this style.

```

9527 \renewcommand*{\glsxtrfullformat}[2]{%
9528   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9529   \ifglsxtrinsertinside\else##2\fi
9530 }%
9531 \renewcommand*{\glsxtrfullplformat}[2]{%
9532   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9533   \ifglsxtrinsertinside\else##2\fi
9534 }%
9535 \renewcommand*{\Glsxtrfullformat}[2]{%
9536   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9537   \ifglsxtrinsertinside\else##2\fi
9538 }%
9539 \renewcommand*{\Glsxtrfullplformat}[2]{%
9540   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

9541     \ifglsxtrinsertinside\else##2\fi
9542   }%
9543 }

long-desc-sc Backward compatibility:
9544 \@glsxtr@deprecated@abbrstyle{long-desc-sc}{long-noshort-sc-desc}

short-sc-footnote
9545 \newabbreviationstyle{short-sc-footnote}%
9546 {%
  Set accessibility attributes if enabled.
9547 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
  Setup the default fields.
9548 \renewcommand*\CustomAbbreviationFields{%
9549   name={\glsxtrfootnotename},
9550   sort={\the\glsshorttok},
9551   description={\the\glslongtok},%
9552   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
9553     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9554       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9555   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
9556     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9557       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9558   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9559   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}}%

  Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute
  if it has been set.
9560 \renewcommand*\GlsXtrPostNewAbbreviation{%
9561   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9562   \glshasattribute{\the\glslabeltok}{regular}%
9563   {%
9564     \glssetattribute{\the\glslabeltok}{regular}{false}%
9565   }%
9566   {}%
9567 }%
9568 }%
9569 {%

  Use smallcaps and adjust the plural suffix to revert to upright.
9570 \renewcommand*\abbrvpluralsuffix{\glsxtrscsuffix}%
9571 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\#1}}%
9572 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\#1}}%
9573 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{\#1}}%
9574 \renewcommand*\glslongfont[1]{\glslongfootnotefont{\#1}}%

  The full format displays the short form followed by the long form as a footnote.
9575 \renewcommand*\glsxtrfullformat[2]{%
9576   \glsfirstabbrvscfont{\glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%

```

```

9577   \ifglsxtrinsertinside\else##2\fi
9578   \protect\glsxtrabrvfootnote{##1}%
9579   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9580 }%
9581 \renewcommand*{\glsxtrfullplformat}[2]{%
9582   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9583   \ifglsxtrinsertinside\else##2\fi
9584   \protect\glsxtrabrvfootnote{##1}%
9585   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9586 }%
9587 \renewcommand*{\Glsxtrfullformat}[2]{%
9588   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9589   \ifglsxtrinsertinside\else##2\fi
9590   \protect\glsxtrabrvfootnote{##1}%
9591   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9592 }%
9593 \renewcommand*{\Glsxtrfullplformat}[2]{%
9594   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9595   \ifglsxtrinsertinside\else##2\fi
9596   \protect\glsxtrabrvfootnote{##1}%
9597   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9598 }%

```

The first use full form and the inline full form use the short (long) style.

```

9599 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9600   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9601   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9602   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9603 }%
9604 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9605   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9606   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9607   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9608 }%
9609 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9610   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9611   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9612   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9613 }%
9614 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9615   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9616   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9617   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9618 }%
9619 }

```

footnote-sc Backward compatibility:

```
9620 \glsxtr@deprecated@abbrstyle{footnote-sc}{short-sc-footnote}
```

c-footnote-desc Like short-sc-footnote but with user supplied description.

```

9621 \newabbreviationstyle{short-sc-footnote-desc}%
9622 {%
    Set accessibility attributes if enabled.
9623   \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
    Setup the default fields.
9624   \renewcommand*{\CustomAbbreviationFields}{%
9625     name={\glsxtrfootnotedescname},
9626     sort={\glsxtrfootnotedescsort},
9627     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
9628       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9629         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9630     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
9631       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9632         {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9633     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9634     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}}%

```

Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute if it has been set.

```

9635   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9636     \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9637     \glshasattribute{\the\glslabeltok}{regular}%
9638     {%
9639       \glssetattribute{\the\glslabeltok}{regular}{false}%
9640     }%
9641     {}%
9642   }%
9643 }%
9644 {%
9645   \GlsXtrUseAbbrStyleFmts{short-sc-footnote}%
9646 }

```

sc-postfootnote

```

9647 \newabbreviationstyle{short-sc-postfootnote}%
9648 {%
    Set accessibility attributes if enabled.
9649   \glsxtrAccSuppAbbrSetNameNoLongAttrs\glscategorylabel
    Setup the default fields.
9650   \renewcommand*{\CustomAbbreviationFields}{%
9651     name={\glsxtrfootnotename},
9652     sort={\the\glsshorttok},
9653     description={\the\glslongtok},%
9654     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
9655     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
9656     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9657     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}}%

```

Make this category insert a footnote after the link if this was the first use, and unset the regular attribute if it has been set.

```
9658 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9659   \csdef{glsxtrpostlink\glscategorylabel}{%
9660     \glsxtrifwasfirstuse
9661   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
9662   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9663   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}} }%
9664 }%
9665 {}%
9666 }%
9667 \glshasattribute{\the\glslabeltok}{regular}%
9668 {}%
9669 \glssetattribute{\the\glslabeltok}{regular}{false}%
9670 }%
9671 {}%
9672 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
9673 \renewcommand*\glsxtrsetupfulldefs}{%
9674   \let\glsxtrifwasfirstuse\@secondoftwo
9675 }%
9676 }%
9677 {}
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
9678 \renewcommand*\abbrvpluralsuffix{\glsxtrscsuffix}%
9679 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9680 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9681 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
9682 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form. The long form is deferred.

```
9683 \renewcommand*\glsxtrfullformat}[2]{%
9684   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9685   \ifglsxtrinsertinside\else##2\fi
9686 }%
9687 \renewcommand*\glsxtrfullplformat}[2]{%
9688   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9689   \ifglsxtrinsertinside\else##2\fi
9690 }%
9691 \renewcommand*\GlsXtrfullformat}[2]{%
9692   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9693   \ifglsxtrinsertinside\else##2\fi
9694 }%
9695 \renewcommand*\Glsxtrfullplformat}[2]{%
```

```

9696     \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9697     \ifglsxtrinsertinside\else##2\fi
9698 }%

```

The first use full form and the inline full form use the short (long) style.

```

9699 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9700   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9701   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9702   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9703 }%
9704 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9705   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9706   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9707   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9708 }%
9709 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9710   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9711   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9712   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9713 }%
9714 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9715   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9716   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9717   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9718 }%
9719 }

```

`postfootnote-sc` Backward compatibility:

```
9720 \glsxtr@deprecated@abbrstyle{postfootnote-sc}{short-sc-postfootnote}
```

`stfootnote-desc` Like `short-sc-footnote` but with user supplied description.

```

9721 \newabbreviationstyle{short-sc-postfootnote-desc}{%
9722 }%

```

Set accessibility attributes if enabled.

```
9723 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```

9724 \renewcommand*{\CustomAbbreviationFields}{%
9725   name={\glsxtrfootnotedescname},
9726   sort={\glsxtrfootnotedescsort},
9727   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
9728   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
9729   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9730   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%

```

Make this category insert a footnote after the link if this was the first use, and unset the regular attribute if it has been set.

```

9731 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9732   \csdef{glsxtrpostlink\glscategorylabel}{%
9733     \glsxtrifwasfirstuse

```

```
9734      {%
  Needs the specific font command here as the style may have been lost by the time the foot-
  note occurs.
```

```
9735      \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9736      {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}}}%
9737      }%
9738      {}%
9739      }%
9740      \glshasattribute{\the\glslabeltok}{regular}}%
9741      {}%
9742      \glssetattribute{\the\glslabeltok}{regular}{false}}%
9743      }%
9744      {}%
9745      }%
```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```
9746 \renewcommand*{\glsxtrsetupfulldefs}{%
9747   \let\glsxtrifwasfirstuse\@secondoftwo
9748 }%
9749 }%
9750 {}%
9751 \GlsXtrUseAbbrStyleFmts{short-sc-postfootnote}%
9752 }
```

1.7.4 Predefined Styles (Fake Small Capitals)

These styles require the `relsize` package, which must be loaded by the user. These styles all use:

`\glsxtrsmfont` Maintained for backward compatibility.

```
9753 \newcommand*{\glsxtrsmfont}[1]{\textsmaller{#1}}
```

`\glsabbrvsmfont` Added for consistent naming.

```
9754 \newcommand*{\glsabbrvsmfont}{\glsxtrsmfont}
```

`sxtrfirstsmfont` Maintained for backward compatibility.

```
9755 \newcommand*{\glsxtrfirstsmfont}[1]{\glsabbrvsmfont{#1}}
```

`irstabbrvsmfont` Added for consistent naming.

```
9756 \newcommand*{\glsfirstabbrvsmfont}{\glsxtrfirstsmfont}
```

and for the default short form suffix:

`\glsxtrsmsuffix`

```
9757 \newcommand*{\glsxtrsmsuffix}{\glsxtrabbrvpluralsuffix}
```

long-short-sm

```
9758 \newabbreviationstyle{long-short-sm}%
9759 {%
  Set accessibility attributes if enabled.
9760 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
  Setup the default fields.
9761 \renewcommand*\CustomAbbreviationFields{%
9762   name={\glsxtrlongshortname},
9763   sort={\the\glsshorttok},
9764   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
9765     \protect\glsxtrfullsep{\the\glslabeltok}%
9766     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
9767   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
9768     \protect\glsxtrfullsep{\the\glslabeltok}%
9769     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
9770   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9771   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},%
9772   description={\the\glslongtok}}%
9773 \renewcommand*\GlsXtrPostNewAbbreviation{%
9774   \glshasattribute{\the\glslabeltok}{regular}%
9775   {%
9776     \glssetattribute{\the\glslabeltok}{regular}{false}%
9777   }%
9778   {}%
9779 }%
9780 }%
9781 {%
9782 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9783 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9784 \renewcommand*\abbrvpluralsuffix{\glsxtrsmsuffix}%
```

Use the default long fonts.

```
9785 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9786 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
9787 \renewcommand*\glsxtrfullformat[2]{%
9788   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9789   \ifglsxtrinsertinside\else##2\fi
9790   \glsxtrfullsep{##1}%
9791   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9792 }%
9793 \renewcommand*\glsxtrfullplformat[2]{%
9794   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9795   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9796   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9797 }%
9798 \renewcommand*\Glsxtrfullformat[2]{%
```

```

9799   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9800   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9801   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9802 }%
9803 \renewcommand*\Glsxtrfullplformat}[2]{%
9804   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9805   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9806   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9807 }%
9808 }

```

g-short-sm-desc

```

9809 \newabbreviationstyle{long-short-sm-desc}%
9810 {%

```

Set accessibility attributes if enabled.

```

9811 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

9812 \renewcommand*\CustomAbbreviationFields}{%
9813   name={\glsxtrlongshortdescname},%
9814   sort={\glsxtrlongshortdescsort},%
9815   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
9816     \protect\glsxtrfullsep{\the\glslabeltok}%
9817     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glosshorttok}}},%
9818   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
9819     \protect\glsxtrfullsep{\the\glslabeltok}%
9820     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glosshortpltok}}},%
9821   text={\protect\glsabbrvsmfont{\the\glosshorttok}},%
9822   plural={\protect\glsabbrvsmfont{\the\glosshortpltok}}%
9823 }%

```

Unset the regular attribute if it has been set.

```

9824 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9825   \glshasattribute{\the\glslabeltok}{regular}%
9826   {%
9827     \glssetattribute{\the\glslabeltok}{regular}{false}%
9828   }%
9829   {}%
9830 }%
9831 }%
9832 {%

```

As long-short-sm style:

```

9833 \GlsXtrUseAbbrStyleFmts{long-short-sm}%
9834 }

```

short-sm-long Now the short (long) version

```

9835 \newabbreviationstyle{short-sm-long}%
9836 {%

```

Set accessibility attributes if enabled.

```
9837 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
9838 \renewcommand*\CustomAbbreviationFields{%
9839   name={\glsxtrshortlongname},
9840   sort={\the\glsshorttok},
9841   description={\the\glslongtok},%
9842   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}}%
9843   \protect\glsxtrfullsep{\the\glslabeltok}%
9844   \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}},%
9845   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}%
9846   \protect\glsxtrfullsep{\the\glslabeltok}%
9847   \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}},%
9848   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9849   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
9850 \renewcommand*\GlsXtrPostNewAbbreviation{%
9851   \glshasattribute{\the\glslabeltok}{regular}%
9852   {%
9853     \glssetattribute{\the\glslabeltok}{regular}{false}%
9854   }%
9855   {}%
9856 }%
9857 }%
9858 {%
9859 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9860 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9861 \renewcommand*\abbrvpluralsuffix{\glsxtrmsuffix}%
9862 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9863 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
9864 \renewcommand*\glsxtrfullformat}[2]{%
9865   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9866   \ifglsxtrinsertinside\else##2\fi
9867   \glsxtrfullsep{##1}%
9868   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9869 }%
9870 \renewcommand*\glsxtrfullplformat}[2]{%
9871   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9872   \ifglsxtrinsertinside\else##2\fi
9873   \glsxtrfullsep{##1}%
9874   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9875 }%
9876 \renewcommand*\GlsXtrfullformat}[2]{%
9877   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9878   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
}
```

```

9879   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9880   }%
9881   \renewcommand*{\Glsxtrfullplformat}[2]{%
9882     \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9883     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9884     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9885   }%
9886 }

rt-sm-long-desc As before but user provides description
9887 \newabbreviationstyle{short-sm-long-desc}{%
9888 {%
  Set accessibility attributes if enabled.
9889   \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
  Setup the default fields.
9890   \renewcommand*{\CustomAbbreviationFields}{%
9891     name={\glsxtrshortlongdescname},
9892     sort={\glsxtrshortlongdescsort},
9893     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
9894       \protect\glsxtrfullsep{\the\glslabeltok}%
9895       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9896     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
9897       \protect\glsxtrfullsep{\the\glslabeltok}%
9898       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9899     text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9900     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}%
9901   }%
  Unset the regular attribute if it has been set.
9902   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9903     \glshasattribute{\the\glslabeltok}{regular}%
9904     {%
9905       \glssetattribute{\the\glslabeltok}{regular}{false}%
9906     }%
9907     {}%
9908   }%
9909 }%
9910 {%
  As short-sm-long style:
9911   \GlsXtrUseAbbrStyleFmts{short-sm-long}%
9912 }

short-sm
9913 \newabbreviationstyle{short-sm}{%
9914 {%
  Set accessibility attributes if enabled.
9915   \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel

```

Setup the default fields.

```
9916 \renewcommand*\CustomAbbreviationFields{%
9917   name={\glsxtrshortnolongname},
9918   sort={\the\glsshorttok},
9919   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
9920   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
9921   text={\protect\glsabbrvsmfont{\the\glsshorttok}},
9922   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
9923   description={\the\glslongtok}}%
9924 \renewcommand*\GlsXtrPostNewAbbreviation{%
9925   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9926 }%
9927 {%
9928 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9929 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9930 \renewcommand*\abbrvpluralsuffix{\glsxtrmsuffix}%
9931 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9932 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short form followed by the long form in parentheses.

```
9933 \renewcommand*\glsxtrinlinefullformat[2]{%
9934   \protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}%
9935   \ifglsxtrinsertinside##2\fi}%
9936 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9937 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9938 }%
9939 \renewcommand*\glsxtrinlinefullplformat[2]{%
9940   \protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}%
9941   \ifglsxtrinsertinside##2\fi}%
9942 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9943 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9944 }%
9945 \renewcommand*\Glsxtrinlinefullformat[2]{%
9946   \protect\glsfirstabbrvsmfont{\Glsaccessshort{##1}}%
9947   \ifglsxtrinsertinside##2\fi}%
9948 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9949 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9950 }%
9951 \renewcommand*\Glsxtrinlinefullplformat[2]{%
9952   \protect\glsfirstabbrvsmfont{\Glsaccessshortpl{##1}}%
9953   \ifglsxtrinsertinside##2\fi}%
9954 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9955 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9956 }%
```

The first use full form only displays the short form, but it typically won't be used as the regular attribute is set by this style.

```
9957 \renewcommand*\glsxtrfullformat[2]{%
```

```

9958   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9959   \ifglsxtrinsertinside\else##2\fi
9960 }%
9961 \renewcommand*{\glsxtrfullplformat}[2]{%
9962   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9963   \ifglsxtrinsertinside\else##2\fi
9964 }%
9965 \renewcommand*{\Glsxtrfullformat}[2]{%
9966   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9967   \ifglsxtrinsertinside\else##2\fi
9968 }%
9969 \renewcommand*{\Glsxtrfullplformat}[2]{%
9970   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9971   \ifglsxtrinsertinside\else##2\fi
9972 }%
9973 }

```

short-sm-nolong

```
9974 \letabbreviationstyle{short-sm-nolong}{short-sm}
```

short-sm-desc

```
9975 \newabbreviationstyle{short-sm-desc}%
9976 {%
```

Set accessibility attributes if enabled.

```
9977 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

9978 \renewcommand*{\CustomAbbreviationFields}{%
9979   name={\glsxtrshortdescname},
9980   sort={\the\glsshorttok},
9981   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
9982   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
9983   text={\protect\glsabbrvsmfont{\the\glsshorttok}},
9984   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%
9985 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9986   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9987 }%
9988 {%
9989 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9990 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9991 \renewcommand*{\abbrvpluralsuffix}{\glsxtrmsuffix}%
9992 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9993 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

9994 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9995   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9996   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%

```

```

9997   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9998 }%
9999 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10000   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10001   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10002   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
```

10003 }%

10004 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10005 \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10006 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10007 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%

10008 }%

10009 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10010 \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10011 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10012 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%

10013 }%

The first use full form only displays the short form, but it typically won't be used as the regular attribute is set by this style.

```

10014 \renewcommand*{\glsxtrfullformat}[2]{%
10015   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10016   \ifglsxtrinsertinside\else##2\fi
10017 }%
10018 \renewcommand*{\glsxtrfullplformat}[2]{%
10019   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10020   \ifglsxtrinsertinside\else##2\fi
10021 }%
10022 \renewcommand*{\Glsxtrfullformat}[2]{%
10023   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10024   \ifglsxtrinsertinside\else##2\fi
10025 }%
10026 \renewcommand*{\Glsxtrfullplformat}[2]{%
10027   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10028   \ifglsxtrinsertinside\else##2\fi
10029 }%
10030 }
```

-sm-nolong-desc

```
10031 \letabbreviationstyle{short-sm-nolong-desc}{short-sm-desc}
```

nolong-short-sm

```

10032 \newabbreviationstyle{nolong-short-sm}%
10033 {%
10034   \GlsXtrUseAbbrStyleSetup{short-sm-nolong}%
10035 }%
10036 {%
10037   \GlsXtrUseAbbrStyleFmts{short-sm-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

10038 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10039   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
10040     \ifglsxtrinsertinside##2\fi}%
10041     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10042     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
10043 }%
10044 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10045   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
10046     \ifglsxtrinsertinside##2\fi}%
10047     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10048     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
10049 }%
10050 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10051   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
10052     \ifglsxtrinsertinside##2\fi}%
10053     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10054     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
10055 }%
10056 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10057   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
10058     \ifglsxtrinsertinside##2\fi}%
10059     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10060     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
10061 }%
10062 }

```

`long-noshort-sm` The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

10063 \newabbreviationstyle{long-noshort-sm}{%
10064 {%

```

Set accessibility attributes if enabled.

```

10065 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel

```

Setup the default fields.

```

10066 \renewcommand*{\CustomAbbreviationFields}{%
10067   name={\glsxtrlongnoshortname},
10068   sort={\the\glsshorttok},
10069   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
10070   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
10071   text={\protect\glslongdefaultfont{\the\glslongtok}},
10072   plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
10073   description={\the\glslongtok}%
10074 }%
10075 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10076   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10077 }%
10078 {%

```

```

10079 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%

```

```

10080 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
10081 \renewcommand*\abrvpluralsuffix{\glsxtrmsuffix}%
10082 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
10083 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10084 \renewcommand*\glsxtrsubsequentfmt[2]{%
10085   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10086   \ifglsxtrinsertinside \else##2\fi
10087 }%
10088 \renewcommand*\glsxtrsubsequentplfmt[2]{%
10089   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10090   \ifglsxtrinsertinside \else##2\fi
10091 }%
10092 \renewcommand*\Glsxtrsubsequentfmt[2]{%
10093   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10094   \ifglsxtrinsertinside \else##2\fi
10095 }%
10096 \renewcommand*\Glsxtrsubsequentplfmt[2]{%
10097   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10098   \ifglsxtrinsertinside \else##2\fi
10099 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

10100 \renewcommand*\glsxtrinlinefullformat[2]{%
10101   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10102   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10103   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
10104 }%
10105 \renewcommand*\glsxtrinlinefullplformat[2]{%
10106   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10107   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10108   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
10109 }%
10110 \renewcommand*\Glsxtrinlinefullformat[2]{%
10111   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10112   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10113   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
10114 }%
10115 \renewcommand*\Glsxtrinlinefullplformat[2]{%
10116   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10117   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10118   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
10119 }%

```

The first use full form only displays the long form, but it typically won't be used as the regular attribute is set by this style.

```

10120 \renewcommand*\glsxtrfullformat[2]{%
10121   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10122   \ifglsxtrinsertinside\else##2\fi

```

```

10123 }%
10124 \renewcommand*{\glsxtrfullplformat}[2]{%
10125   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10126   \ifglsxtrinsertinside\else##2\fi
10127 }%
10128 \renewcommand*{\Glsxtrfullformat}[2]{%
10129   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10130   \ifglsxtrinsertinside\else##2\fi
10131 }%
10132 \renewcommand*{\Glsxtrfullplformat}[2]{%
10133   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10134   \ifglsxtrinsertinside\else##2\fi
10135 }%
10136 }

```

long-sm Backward compatibility:

```
10137 \glsxtr@deprecated@abbrstyle{long-sm}{long-noshort-sm}
```

noshort-sm-desc The smaller font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

10138 \newabbreviationstyle{long-noshort-sm-desc}%
10139 {%
10140   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
10141 }%
10142 {%
10143   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
10144   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
10145   \renewcommand*{\abbrvpluralsuffix}{\glsxtrmsuffix}%
10146   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
10147   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10148 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10149   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10150   \ifglsxtrinsertinside\else##2\fi
10151 }%
10152 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
10153   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10154   \ifglsxtrinsertinside\else##2\fi
10155 }%
10156 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10157   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10158   \ifglsxtrinsertinside\else##2\fi
10159 }%
10160 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10161   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10162   \ifglsxtrinsertinside\else##2\fi
10163 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```
10164 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10165   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10166   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10167   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
10168 }%
10169 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10170   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10171   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10172   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
10173 }%
10174 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10175   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10176   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10177   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
10178 }%
10179 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10180   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10181   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10182   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
10183 }%
```

The first use full form only displays the long form, but it typically won't be used as the regular attribute is set by this style.

```
10184 \renewcommand*{\glsxtrfullformat}[2]{%
10185   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10186   \ifglsxtrinsertinside\else##2\fi
10187 }%
10188 \renewcommand*{\glsxtrfullplformat}[2]{%
10189   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10190   \ifglsxtrinsertinside\else##2\fi
10191 }%
10192 \renewcommand*{\Glsxtrfullformat}[2]{%
10193   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10194   \ifglsxtrinsertinside\else##2\fi
10195 }%
10196 \renewcommand*{\Glsxtrfullplformat}[2]{%
10197   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10198   \ifglsxtrinsertinside\else##2\fi
10199 }%
10200 }
```

long-desc-sm Backward compatibility:

```
10201 @glsxtr@deprecated@abbrstyle{long-desc-sm}{long-noshort-sm-desc}
```

short-sm-footnote

```
10202 \newabbreviationstyle{short-sm-footnote}%
10203 {%
```

Set accessibility attributes if enabled.

```
10204 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
10205 \renewcommand*\CustomAbbreviationFields{%
10206   name={\glsxtrfootnotename},
10207   sort={\the\glsshorttok},
10208   description={\the\glslongtok},%
10209   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
10210     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10211       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
10212   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
10213     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10214       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
10215   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
10216   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%
```

Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute if it has been set.

```
10217 \renewcommand*\GlsXtrPostNewAbbreviation{%
10218   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
10219   \glshasattribute{\the\glslabeltok}{regular}%
10220   {%
10221     \glssetattribute{\the\glslabeltok}{regular}{false}%
10222   }%
10223   {}%
10224 }%
10225 }%
10226 {}%

10227 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
10228 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
10229 \renewcommand*\abbrvpluralsuffix{\glsxtrmssuffix}%
10230 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
10231 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```
10232 \renewcommand*\glsxtrfullformat[2]{%
10233   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10234   \ifglsxtrinsertinside\else##2\fi
10235   \protect\glsxtrabbrvfootnote{##1}%
10236     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}}%
10237 }%
10238 \renewcommand*\glsxtrfullplformat[2]{%
10239   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10240   \ifglsxtrinsertinside\else##2\fi
10241   \protect\glsxtrabbrvfootnote{##1}%
10242     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}}%
10243 }%
10244 \renewcommand*\Glsxtrfullformat[2]{%
```

```

10245 \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10246 \ifglsxtrinsertinside\else##2\fi
10247 \protect\glsxtrabbrvfootnote{##1}%
10248 {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10249 }%
10250 \renewcommand*\{\Glsxtrfullplformat}[2]{%
10251 \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10252 \ifglsxtrinsertinside\else##2\fi
10253 \protect\glsxtrabbrvfootnote{##1}%
10254 {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10255 }%

```

The first use full form and the inline full form use the short (long) style.

```

10256 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
10257 \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10258 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10259 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10260 }%
10261 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
10262 \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10263 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10264 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10265 }%
10266 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
10267 \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10268 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10269 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10270 }%
10271 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
10272 \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10273 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10274 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10275 }%
10276 }

```

footnote-sm Backward compatibility:

```
10277 \glsxtr@deprecated@abbrstyle{footnote-sm}{short-sm-footnote}
```

m-footnote-desc Like short-footnote but with user supplied description.

```
10278 \newabbreviationstyle{short-sm-footnote-desc}%
10279 {%
```

Set accessibility attributes if enabled.

```
10280 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
10281 \renewcommand*\{\CustomAbbreviationFields}{%
10282   name={\glsxtrfootnotedescname},%
10283   sort={\glsxtrfootnotedescsort},%
10284   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}}%
```

```

10285     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10286         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
10287     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
10288         \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10289             {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
10290     text={\protect\glsabbrvsmfont{\the\glsshortttok}},%
10291     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%

```

Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute if it has been set.

```

10292 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10293     \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
10294     \glshasattribute{\the\glslabeltok}{regular}%
10295     {%
10296         \glssetattribute{\the\glslabeltok}{regular}{false}%
10297     }%
10298     {}%
10299 }%
10300 }%
10301 {%
10302     \GlsXtrUseAbbrStyleFmts{short-sm-footnote}%
10303 }

```

sm-postfootnote

```

10304 \newabbreviationstyle{short-sm-postfootnote}%
10305 {%

```

Set accessibility attributes if enabled.

```
10306 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

10307 \renewcommand*\CustomAbbreviationFields}{%
10308     name={\glsxtrfootnotename},
10309     sort={\the\glsshorttok},
10310     description={\the\glslongtok},%
10311     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
10312     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
10313     text={\protect\glsabbrvsmfont{\the\glsshortttok}},%
10314     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%

```

Make this category insert a footnote after the link if this was the first use, and unset the regular attribute if it has been set.

```

10315 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10316     \csdef{glsxtrpostlink\glscategorylabel}{%
10317         \glsxtrifwasfirstuse
10318     }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

10319     \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
10320         {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}%

```

```

10321      }%
10322      {}%
10323      }%
10324      \glshasattribute{\the\glslabeltok}{regular}%
10325      {}%
10326      \glssetattribute{\the\glslabeltok}{regular}{false}%
10327      }%
10328      {}%
10329      }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

10330 \renewcommand*{\glsxtrsetupfulldefs}{%
10331   \let\glsxtrifwasfirstuse\secondoftwo
10332 }%
10333 }%
10334 {%
10335 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
10336 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
10337 \renewcommand*{\abbrvpluralsuffix}{\glsxtrsnsuffix}%
10338 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
10339 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

10340 \renewcommand*{\glsxtrfullformat}[2]{%
10341   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10342   \ifglsxtrinsertinside\else##2\fi
10343 }%
10344 \renewcommand*{\glsxtrfullplformat}[2]{%
10345   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10346   \ifglsxtrinsertinside\else##2\fi
10347 }%
10348 \renewcommand*{\Glsxtrfullformat}[2]{%
10349   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10350   \ifglsxtrinsertinside\else##2\fi
10351 }%
10352 \renewcommand*{\Glsxtrfullplformat}[2]{%
10353   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10354   \ifglsxtrinsertinside\else##2\fi
10355 }%

```

The first use full form and the inline full form use the short (long) style.

```

10356 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10357   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10358   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10359   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10360 }%
10361 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10362   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10363   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%

```

```

10364     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10365   }%
10366   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10367     \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10368     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10369     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10370   }%
10371   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10372     \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10373     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10374     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10375   }%
10376 }

```

postfootnote-sm Backward compatibility:

```
10377 \glsxtr@deprecated@abbrstyle{postfootnote-sm}{short-sm-postfootnote}
```

stfootnote-desc Like short-sm-postfootnote but with user supplied description.

```

10378 \newabbreviationstyle{short-sm-postfootnote-desc}{%
10379 }%

```

Set accessibility attributes if enabled.

```
10380 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```

10381 \renewcommand*{\CustomAbbreviationFields}{%
10382   name={\glsxtrfootnotedescname},
10383   sort={\glsxtrfootnotedescsort},
10384   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
10385   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
10386   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
10387   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%

```

Make this category insert a footnote after the link if this was the first use, and unset the regular attribute if it has been set.

```

10388 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10389   \csdef{glsxtrpostlink\glscategorylabel}{%
10390     \glsxtrifwasfirstuse
10391   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

10392   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
10393   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}%
10394 }%
10395 {}%
10396 }%
10397 \glshasattribute{\the\glslabeltok}{regular}%
10398 {}%
10399 \glssetattribute{\the\glslabeltok}{regular}{false}%

```

```
10400    }%
10401    {}%
10402    }%
```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```
10403 \renewcommand*{\glsxtrsetupfulldefs}{%
10404   \let\glsxtrifwasfirstuse\@secondoftwo
10405 }%
10406 }%
10407 {}%
10408 \GlsXtrUseAbbrStyleFmts{short-sm-postfootnote}%
10409 }
```

1.7.5 Predefined Styles (Emphasized)

These styles use `\emph` for the short form.

```
\glsabbrvemfont
10410 \newcommand*{\glsabbrvemfont}[1]{\emph{#1}}%
```

```
irstabbrvemfont
10411 \newcommand*{\glsfirstabbrvemfont}[1]{\glsabbrvemfont{#1}}%
```

The default short form suffix:

```
\glsxtremsuffix
10412 \newcommand*{\glsxtremsuffix}{\glsxtrabbrypluralsuffix}
```

`firstlongemfont` Only used by the “long-em” styles.

```
10413 \newcommand*{\glsfirstlongemfont}[1]{\glslongemfont{#1}}%
```

`\glslongemfont` Only used by the “long-em” styles.

```
10414 \newcommand*{\glslongemfont}[1]{\emph{#1}}%
```

`long-short-em` The long form is just set in the default long font.

```
10415 \newabbreviationstyle{long-short-em}{%
10416 {}%
```

Set accessibility attributes if enabled.

```
10417 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
10418 \renewcommand*{\CustomAbbreviationFields}{%
10419   name={\glsxtrlongshortname},
10420   sort={\the\glsshorttok},
10421   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
10422   \protect\glsxtrfullsep{\the\glslabeltok}%
10423   \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
10424   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
```

```

10425 \protect\glsxtrfullsep{\the\glslabeltok}%
10426 \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
10427 text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10428 plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
10429 description={\the\glslongtok}}%
10430 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10431 \glshasattribute{\the\glslabeltok}{regular}}%
10432 {%
10433 \glssetattribute{\the\glslabeltok}{regular}{false}}%
10434 }%
10435 {}%
10436 }%
10437 }%
10438 {%
10439 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10440 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10441 \renewcommand*\abbrvpluralsuffix{\glsxtremsuffix}%

```

Use the default long fonts.

```

10442 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
10443 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10444 \renewcommand*\glsxtrfullformat[2]{%
10445 \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10446 \ifglsxtrinsertinside\else##2\fi
10447 \glsxtrfullsep{##1}%
10448 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10449 }%
10450 \renewcommand*\glsxtrfullplformat[2]{%
10451 \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10452 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10453 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10454 }%
10455 \renewcommand*\Glsxtrfullformat[2]{%
10456 \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10457 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10458 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10459 }%
10460 \renewcommand*\Glsxtrfullplformat[2]{%
10461 \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10462 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10463 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10464 }%
10465 }%

```

g-short-em-desc

```

10466 \newabbreviationstyle{long-short-em-desc}%
10467 {%

```

Set accessibility attributes if enabled.

```
10468 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
10469 \renewcommand*\CustomAbbreviationFields{%
10470   name={\glsxtrlongshortdescname},
10471   sort={\glsxtrlongshortdescsort},%
10472   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
10473     \protect\glsxtrfullsep{\the\glslabeltok}%
10474     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
10475   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
10476     \protect\glsxtrfullsep{\the\glslabeltok}%
10477     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
10478   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10479   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
10480 }%
```

Unset the regular attribute if it has been set.

```
10481 \renewcommand*\GlsXtrPostNewAbbreviation{%
10482   \glshasattribute{\the\glslabeltok}{regular}%
10483   {%
10484     \glssetattribute{\the\glslabeltok}{regular}{false}%
10485   }%
10486   {}%
10487 }%
10488 }%
10489 {%
```

As long-short-em style:

```
10490 \GlsXtrUseAbbrStyleFmts{long-short-em}%
10491 }
```

long-em-short-em

```
10492 \newabbreviationstyle{long-em-short-em}%
10493 {%
```

Set accessibility attributes if enabled.

```
10494 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields. \glslongemfont is used in the description since \glsdesc doesn't set the style.

```
10495 \renewcommand*\CustomAbbreviationFields{%
10496   name={\glsxtrlongshortname},
10497   sort={\the\glsshorttok},
10498   first={\protect\glsfirstlongemfont{\the\glslongtok}%
10499     \protect\glsxtrfullsep{\the\glslabeltok}%
10500     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
10501   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
10502     \protect\glsxtrfullsep{\the\glslabeltok}%
10503     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
```

```

10504     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10505     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
10506     description={\protect\glslongemfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```

10507 \renewcommand*\GlsXtrPostNewAbbreviation{%
10508   \glshasattribute{\the\glslabeltok}{regular}%
10509   {%
10510     \glssetattribute{\the\glslabeltok}{regular}{false}%
10511   }%
10512   {}%
10513 }%
10514 }%
10515 {%
10516 \renewcommand*\abrvpluralsuffix}{\glsxtremsuffix}%
10517 \renewcommand*\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
10518 \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10519 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
10520 \renewcommand*\glslongfont}[1]{\glslongemfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10521 \renewcommand*\glsxtrfullformat}[2]{%
10522   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10523   \ifglsxtrinsertinside\else##2\fi
10524   \glsxtrfullsep{##1}%
10525   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10526 }%
10527 \renewcommand*\glsxtrfullplformat}[2]{%
10528   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10529   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10530   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10531 }%
10532 \renewcommand*\Glsxtrfullformat}[2]{%
10533   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10534   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10535   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10536 }%
10537 \renewcommand*\Glsxtrfullplformat}[2]{%
10538   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10539   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10540   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10541 }%
10542 }%

```

m-short-em-desc

```

10543 \newabbreviationstyle{long-em-short-em-desc}%
10544 {%

```

Set accessibility attributes if enabled.

```

10545 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```
10546 \renewcommand*{\CustomAbbreviationFields}{%
10547   name={\glsxtrlongshortdescname},
10548   sort={\glsxtrlongshortdescsort},%
10549   first={\protect\glsfirstlongemfont{\the\glslongtok}%
10550     \protect\glsxtrfullsep{\the\glslabeltok}%
10551     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
10552   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
10553     \protect\glsxtrfullsep{\the\glslabeltok}%
10554     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
10555   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10556   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
10557 }%
```

Unset the regular attribute if it has been set.

```
10558 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10559   \glshasattribute{\the\glslabeltok}{regular}%
10560   {%
10561     \glssetattribute{\the\glslabeltok}{regular}{false}%
10562   }%
10563   {}%
10564 }%
10565 }%
10566 {%
10567 \GlsXtrUseAbbrStyleFmts{long-em-short-em}%
10568 }
```

short-em-long Now the short (long) version

```
10569 \newabbreviationstyle{short-em-long}%
10570 {%
```

Set accessibility attributes if enabled.

```
10571 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
10572 \renewcommand*{\CustomAbbreviationFields}{%
10573   name={\glsxtrshortlongname},
10574   sort={\the\glsshorttok},
10575   description={\the\glslongtok},%
10576   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10577     \protect\glsxtrfullsep{\the\glslabeltok}%
10578     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
10579   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10580     \protect\glsxtrfullsep{\the\glslabeltok}%
10581     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
10582   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10583   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
10584 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10585   \glshasattribute{\the\glslabeltok}{regular}%
```

```

10586     {%
10587         \glssetattribute{\the\glslabeltok}{regular}{false}%
10588     }%
10589     {}%
10590 }%
10591 }%
10592 {%

```

Mostly as short-long style:

```

10593 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
10594 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10595 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10596 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
10597 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10598 \renewcommand*{\glsxtrfullformat}[2]{%
10599     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10600     \ifglsxtrinsertinside\else##2\fi
10601     \glsxtrfullsep{##1}%
10602     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10603 }%
10604 \renewcommand*{\glsxtrfullplformat}[2]{%
10605     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10606     \ifglsxtrinsertinside\else##2\fi
10607     \glsxtrfullsep{##1}%
10608     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10609 }%
10610 \renewcommand*{\Glsxtrfullformat}[2]{%
10611     \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10612     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10613     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10614 }%
10615 \renewcommand*{\Glsxtrfullplformat}[2]{%
10616     \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10617     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10618     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10619 }%
10620 }

```

`rt-em-long-desc` As before but user provides description

```

10621 \newabbreviationstyle{short-em-long-desc}%
10622 {%

```

Set accessibility attributes if enabled.

```
10623 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

10624 \renewcommand*{\CustomAbbreviationFields}{%
10625     name={\glsxtrshortlongdescname},
10626     sort={\glsxtrshortlongdescsort},
```

```

10627   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10628     \protect\glsxtrfullsep{\the\glslabeltok}%
10629     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
10630   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10631     \protect\glsxtrfullsep{\the\glslabeltok}%
10632     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
10633   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10634   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
10635 }%

```

Unset the regular attribute if it has been set.

```

10636 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10637   \glshasattribute{\the\glslabeltok}{regular}%
10638   {%
10639     \glssetattribute{\the\glslabeltok}{regular}{false}%
10640   }%
10641   {}%
10642 }%
10643 }%
10644 {%
10645 \GlsXtrUseAbbrStyleFmts{short-em-long}%
10646 }

```

hort-em-long-em

```

10647 \newabbreviationstyle{short-em-long-em}%
10648 {%

```

Set accessibility attributes if enabled.

```
10649 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields. \glslongemfont is used in the description since \glsdesc doesn't set the style.

```

10650 \renewcommand*\CustomAbbreviationFields}{%
10651   name={\glsxtrshortlongname},
10652   sort={\the\glsshorttok},
10653   description={\protect\glslongemfont{\the\glslongtok}},%
10654   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10655     \protect\glsxtrfullsep{\the\glslabeltok}%
10656     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
10657   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10658     \protect\glsxtrfullsep{\the\glslabeltok}%
10659     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
10660   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10661   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

10662 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10663   \glshasattribute{\the\glslabeltok}{regular}%
10664   {%
10665     \glssetattribute{\the\glslabeltok}{regular}{false}%

```

```

10666      }%
10667      {}%
10668  }%
10669 }%
10670 {%

10671  \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
10672  \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
10673  \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10674  \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
10675  \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10676  \renewcommand*{\glsxtrfullformat}[2]{%
10677    \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10678    \ifglsxtrinsertinside\else##2\fi
10679    \glsxtrfullsep{##1}%
10680    \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}%
10681 }%
10682 \renewcommand*{\glsxtrfullplformat}[2]{%
10683   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10684   \ifglsxtrinsertinside\else##2\fi
10685   \glsxtrfullsep{##1}%
10686   \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}%
10687 }%
10688 \renewcommand*{\Glsxtrfullformat}[2]{%
10689   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10690   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10691   \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}%
10692 }%
10693 \renewcommand*{\Glsxtrfullplformat}[2]{%
10694   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10695   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10696   \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}%
10697 }%
10698 }%

```

em-long-em-desc

```

10699 \newabbreviationstyle{short-em-long-em-desc}%
10700 {%

```

Set accessibility attributes if enabled.

```
10701 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

10702 \renewcommand*{\CustomAbbreviationFields}{%
10703   name={\glsxtrshortlongdescname},%
10704   sort={\glsxtrshortlongdescsort},%
10705   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%
10706   \protect\glsxtrfullsep{\the\glslabeltok}%
10707   \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%

```

```

10708     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10709         \protect\glsxtrfullsep{\the\glslabeltok}%
10710         \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
10711     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10712     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
10713 }%

```

Unset the regular attribute if it has been set.

```

10714 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10715     \glshasattribute{\the\glslabeltok}{regular}%
10716     {%
10717         \glssetattribute{\the\glslabeltok}{regular}{false}%
10718     }%
10719     {}%
10720 }%
10721 }%
10722 {%
10723 \GlsXtrUseAbbrStyleFmts{short-em-long-em}%
10724 }%

```

`short-em`

```

10725 \newabbreviationstyle{short-em}%
10726 {%

```

Set accessibility attributes if enabled.

```
10727 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

10728 \renewcommand*\CustomAbbreviationFields}{%
10729     name={\glsxtrshortnolongname},
10730     sort={\the\glsshorttok},
10731     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
10732     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
10733     text={\protect\glsabbrvemfont{\the\glsshorttok}},
10734     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},
10735     description={\the\glslongtok}}%
10736 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10737     \glssetattribute{\the\glslabeltok}{regular}{true}%
10738 }%
10739 {%

```

```

10740 \renewcommand*\abrvpluralsuffix}{\glsxtremsuffix}%
10741 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
10742 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{\##1}}%
10743 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\##1}}%
10744 \renewcommand*\glslongfont[1]{\glslongdefaultfont{\##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

10745 \renewcommand*\glsxtrinlinefullformat[2]{%
10746     \protect\glsfirstabbrvemfont{\glsaccessshort{\##1}}%
10747     \ifglsxtrinsertinside{\##2}\fi}%

```

```

10748 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10749 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10750 }%
10751 \renewcommand*{\glsxtrinlinelinefullplformat}[2]{%
10752   \protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}%
10753   \ifglsxtrinsertinside##2\fi}%
10754 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10755 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10756 }%
10757 \renewcommand*{\Glsxtrinlinelinefullformat}[2]{%
10758   \protect\glsfirstabbrvemfont{\Glsaccessshort{##1}}%
10759   \ifglsxtrinsertinside##2\fi}%
10760 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10761 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10762 }%
10763 \renewcommand*{\Glsxtrinlinelinefullplformat}[2]{%
10764   \protect\glsfirstabbrvemfont{\Glsaccessshortpl{##1}}%
10765   \ifglsxtrinsertinside##2\fi}%
10766 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10767 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10768 }%

```

The first use full form only displays the short form, but it typically won't be used as the regular attribute is set by this style.

```

10769 \renewcommand*{\glsxtrfullformat}[2]{%
10770   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10771   \ifglsxtrinsertinside\else##2\fi
10772 }%
10773 \renewcommand*{\glsxtrfullplformat}[2]{%
10774   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10775   \ifglsxtrinsertinside\else##2\fi
10776 }%
10777 \renewcommand*{\Glsxtrfullformat}[2]{%
10778   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10779   \ifglsxtrinsertinside\else##2\fi
10780 }%
10781 \renewcommand*{\Glsxtrfullplformat}[2]{%
10782   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10783   \ifglsxtrinsertinside\else##2\fi
10784 }%
10785 }

```

short-em-nolong

```
10786 \letabbreviationstyle{short-em-nolong}{short-em}
```

short-em-desc

```
10787 \newabbreviationstyle{short-em-desc}{%
10788 {%
```

Set accessibility attributes if enabled. The default name includes the long form but \glsxtrshortdescname could be modified to omit the long form, so include the nameshortaccess attribute.

```
10789 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
10790 \renewcommand*\CustomAbbreviationFields{%
10791   name={\glsxtrshortdescname},
10792   sort={\the\glsshorttok},
10793   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
10794   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
10795   text={\protect\glsabbrvemfont{\the\glsshorttok}},
10796   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
10797 \renewcommand*\GlsXtrPostNewAbbreviation{%
10798   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10799 }%
10800 {%
10801 \renewcommand*\abrvpluralsuffix}{\glsxtremsuffix}%
10802 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
10803 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{\##1}}%
10804 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\##1}}%
10805 \renewcommand*\glslongfont[1]{\glslongdefaultfont{\##1}}%
```

The inline full form displays the short format followed by the long form in parentheses.

```
10806 \renewcommand*\glsxtrinlinefullformat[2]{%
10807   \glsfirstabbrvemfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2\fi}}%
10808   \ifglsxtrinsertinside\else{\##2\fi}\glsxtrfullsep{\##1}}%
10809 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}%
10810 }%
10811 \renewcommand*\glsxtrinlinefullplformat[2]{%
10812   \glsfirstabbrvemfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2\fi}}%
10813   \ifglsxtrinsertinside\else{\##2\fi}\glsxtrfullsep{\##1}}%
10814 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}%
10815 }%
10816 \renewcommand*\GlsXtrinlinefullformat[2]{%
10817   \glsfirstabbrvemfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside{\##2\fi}}%
10818   \ifglsxtrinsertinside\else{\##2\fi}\glsxtrfullsep{\##1}}%
10819 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}%
10820 }%
10821 \renewcommand*\GlsXtrinlinefullplformat[2]{%
10822   \glsfirstabbrvemfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside{\##2\fi}}%
10823   \ifglsxtrinsertinside\else{\##2\fi}\glsxtrfullsep{\##1}}%
10824 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}%
10825 }%
```

The first use full form only displays the short form, but it typically won't be used as the regular attribute is set by this style.

```
10826 \renewcommand*\glsxtrfullformat[2]{%
10827   \glsfirstabbrvemfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2\fi}}%
10828   \ifglsxtrinsertinside\else{\##2\fi}
```

```

10829 }%
10830 \renewcommand*{\glsxtrfullplformat}[2]{%
10831   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10832   \ifglsxtrinsertinside\else##2\fi
10833 }%
10834 \renewcommand*{\Glsxtrfullformat}[2]{%
10835   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10836   \ifglsxtrinsertinside\else##2\fi
10837 }%
10838 \renewcommand*{\Glsxtrfullplformat}[2]{%
10839   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10840   \ifglsxtrinsertinside\else##2\fi
10841 }%
10842 }

```

-em-nolong-desc

```
10843 \letabbreviationstyle{short-em-nolong-desc}{short-em-desc}
```

nolong-short-em

```

10844 \newabbreviationstyle{nolong-short-em}%
10845 {%
10846   \GlsXtrUseAbbrStyleSetup{short-em-nolong}%
10847 }%
10848 {%
10849   \GlsXtrUseAbbrStyleFmts{short-em-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

10850 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10851   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}}%
10852   \ifglsxtrinsertinside##2\fi}%
10853 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10854 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10855 }%
10856 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10857   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}%
10858   \ifglsxtrinsertinside##2\fi}%
10859 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10860 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10861 }%
10862 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10863   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}}%
10864   \ifglsxtrinsertinside##2\fi}%
10865 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10866 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10867 }%
10868 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10869   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
10870   \ifglsxtrinsertinside##2\fi}%
10871 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10872 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%

```

```
10873 }%
10874 }
```

long-noshort-em The short form is explicitly invoked through commands like \glsshort.

```
10875 \newabbreviationstyle{long-noshort-em}%
10876 {%
```

Set accessibility attributes if enabled.

```
10877 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
```

Setup the default fields.

```
10878 \renewcommand*\{\CustomAbbreviationFields}{%
10879   name={\glsxtrlongnoshortname},
10880   sort={\the\glsshorttok},
10881   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
10882   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
10883   text={\protect\glslongdefaultfont{\the\glslongtok}},
10884   plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
10885   description={\the\glslongtok}%
10886 }%
10887 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
10888   \glssetattribute{\the\glslabeltok}{regular}{true}%
10889 }%
10890 {%
10891 \renewcommand*\{\abbrvpluralsuffix}{\glsxtremsuffix}%
10892 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10893 \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10894 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
10895 \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
10896 \renewcommand*\{\glsxtrsubsequentfmt}[2]{%
10897   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10898   \ifglsxtrinsertinside \else##2\fi
10899 }%
10900 \renewcommand*\{\glsxtrsubsequentplfmt}[2]{%
10901   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10902   \ifglsxtrinsertinside \else##2\fi
10903 }%
10904 \renewcommand*\{\GlsXtrsubsequentfmt}[2]{%
10905   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10906   \ifglsxtrinsertinside \else##2\fi
10907 }%
10908 \renewcommand*\{\GlsXtrsubsequentplfmt}[2]{%
10909   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10910   \ifglsxtrinsertinside \else##2\fi
10911 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
10912 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
```

```

10913 \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10914 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10915 \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10916 }%
10917 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10918 \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10919 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10920 \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10921 }%
10922 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10923 \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10924 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10925 \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10926 }%
10927 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10928 \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10929 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10930 \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10931 }%

```

The first use full form only displays the long form, but it typically won't be used as the regular attribute is set by this style.

```

10932 \renewcommand*{\glsxtrfullformat}[2]{%
10933 \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10934 \ifglsxtrinsertinside\else##2\fi
10935 }%
10936 \renewcommand*{\glsxtrfullplformat}[2]{%
10937 \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10938 \ifglsxtrinsertinside\else##2\fi
10939 }%
10940 \renewcommand*{\Glsxtrfullformat}[2]{%
10941 \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10942 \ifglsxtrinsertinside\else##2\fi
10943 }%
10944 \renewcommand*{\Glsxtrfullplformat}[2]{%
10945 \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10946 \ifglsxtrinsertinside\else##2\fi
10947 }%
10948 }

```

long-em Backward compatibility:

```
10949 @glsxtr@deprecated@abbrstyle{long-em}{long-noshort-em}
```

g-em-noshort-em The short form is explicitly invoked through commands like `\glsshort`.

```
10950 \newabbreviationstyle{long-em-noshort-em}%
10951 {%
```

Set accessibility attributes if enabled.

```
10952 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
```

Setup the default fields.

```
10953 \renewcommand*\CustomAbbreviationFields}{%
10954   name={\glsxtrlongnoshortname},
10955   sort={\the\glsshorttok},
10956   first={\protect\glsfirstlongemfont{\the\glslongtok}},
10957   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
10958   text={\protect\glslongemfont{\the\glslongtok}},
10959   plural={\protect\glslongemfont{\the\glslongpltok}},%
10960   description={\protect\glslongemfont{\the\glslongtok}}%
10961 }%
10962 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10963   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10964 }%
10965 %

10966 \renewcommand*\abbrvpluralsuffix}{\glsxtremsuffix}%
10967 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10968 \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10969 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
10970 \renewcommand*\glslongfont}[1]{\glslongemfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
10971 \renewcommand*\glsxtrsubsequentfmt}[2]{%
10972   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10973   \ifglsxtrinsertinside \else##2\fi
10974 }%
10975 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
10976   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10977   \ifglsxtrinsertinside \else##2\fi
10978 }%
10979 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
10980   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10981   \ifglsxtrinsertinside \else##2\fi
10982 }%
10983 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
10984   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10985   \ifglsxtrinsertinside \else##2\fi
10986 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
10987 \renewcommand*\glsxtrinlinefullformat}[2]{%
10988   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10989   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
10990   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
10991 }%
10992 \renewcommand*\glsxtrinlinefullplformat}[2]{%
10993   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10994   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
10995   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
10996 }%
```

```

10997 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10998   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10999   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11000   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
11001 }%
11002 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11003   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11004   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11005   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
11006 }%

```

The first use full form only displays the long form, but it typically won't be used as the regular attribute is set by this style.

```

11007 \renewcommand*{\glsxtrfullformat}[2]{%
11008   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11009   \ifglsxtrinsertinside\else##2\fi
11010 }%
11011 \renewcommand*{\glsxtrfullplformat}[2]{%
11012   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11013   \ifglsxtrinsertinside\else##2\fi
11014 }%
11015 \renewcommand*{\Glsxtrfullformat}[2]{%
11016   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11017   \ifglsxtrinsertinside\else##2\fi
11018 }%
11019 \renewcommand*{\Glsxtrfullplformat}[2]{%
11020   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11021   \ifglsxtrinsertinside\else##2\fi
11022 }%
11023 }

```

`oshort-em-noreg` Like `long-em-noshort-em` but doesn't set the regular attribute.

```

11024 \newabbreviationstyle{long-em-noshort-em-noreg}{%
11025 }%

```

Set accessibility attributes if enabled.

```
11026 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
```

Setup the default fields.

```
11027 \GlsXtrUseAbbrStyleSetup{long-em-noshort-em}{}
```

Unset the regular attribute if it has been set.

```

11028 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11029   \glshasattribute{\the\glslabeltok}{regular}%
11030   {%
11031     \glssetattribute{\the\glslabeltok}{regular}{false}%
11032   }%
11033   {}%
11034 }%
11035 }%
11036 }%

```

```

11037 \GlsXtrUseAbbrStyleFmts{long-em-noshort-em}%
11038 }

```

noshort-em-desc The emphasized font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

11039 \newabbreviationstyle{long-noshort-em-desc}%
11040 {%
11041   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
11042 }%
11043 {%
11044   \renewcommand*\abrvpluralsuffix}{\glsxtremsuffix}%
11045   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
11046   \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{\##1}}%
11047   \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\##1}}%
11048   \renewcommand*\glslongfont}[1]{\glslongdefaultfont{\##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

11049 \renewcommand*\glsxtrsubsequentfmt}[2]{%
11050   \glslongdefaultfont{\glsaccesslong{\##1}\ifglsxtrinsertinside ##2\fi}%
11051   \ifglsxtrinsertinside \else##2\fi
11052 }%
11053 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
11054   \glslongdefaultfont{\glsaccesslongpl{\##1}\ifglsxtrinsertinside ##2\fi}%
11055   \ifglsxtrinsertinside \else##2\fi
11056 }%
11057 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
11058   \glslongdefaultfont{\Glsaccesslong{\##1}\ifglsxtrinsertinside ##2\fi}%
11059   \ifglsxtrinsertinside \else##2\fi
11060 }%
11061 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
11062   \glslongdefaultfont{\Glsaccesslongpl{\##1}\ifglsxtrinsertinside ##2\fi}%
11063   \ifglsxtrinsertinside \else##2\fi
11064 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

11065 \renewcommand*\glsxtrinlinefullformat}[2]{%
11066   \glsfirstlongdefaultfont{\glsaccesslong{\##1}\ifglsxtrinsertinside##2\fi}%
11067   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\##1}%
11068   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{\##1}}}%
11069 }%
11070 \renewcommand*\glsxtrinlinefullplformat}[2]{%
11071   \glsfirstlongdefaultfont{\glsaccesslongpl{\##1}\ifglsxtrinsertinside##2\fi}%
11072   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\##1}%
11073   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{\##1}}}%
11074 }%
11075 \renewcommand*\Glsxtrinlinefullformat}[2]{%
11076   \glsfirstlongdefaultfont{\Glsaccesslong{\##1}\ifglsxtrinsertinside##2\fi}%
11077   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\##1}%
11078   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{\##1}}}%

```

```

11079 }%
11080 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11081   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11082   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11083   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
11084 }%

```

The first use full form only displays the long form, but it typically won't be used as the regular attribute is set by this style.

```

11085 \renewcommand*{\glsxtrfullformat}[2]{%
11086   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11087   \ifglsxtrinsertinside\else##2\fi
11088 }%
11089 \renewcommand*{\glsxtrfullplformat}[2]{%
11090   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11091   \ifglsxtrinsertinside\else##2\fi
11092 }%
11093 \renewcommand*{\Glsxtrfullformat}[2]{%
11094   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11095   \ifglsxtrinsertinside\else##2\fi
11096 }%
11097 \renewcommand*{\Glsxtrfullplformat}[2]{%
11098   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11099   \ifglsxtrinsertinside\else##2\fi
11100 }%
11101 }

```

long-desc-em Backward compatibility:

```
11102 @glsxtr@deprecated@abbrstyle{long-desc-em}{long-noshort-em-desc}
```

noshort-em-desc The short form is explicitly invoked through commands like `\glsxtrshort`. The long form is emphasized. No accessibility attributes need to be set.

```

11103 \newabbreviationstyle{long-em-noshort-em-desc}%
11104 }%
11105 \renewcommand*{\CustomAbbreviationFields}{%
11106   name={\glsxtrlongnoshortdescname},
11107   sort={\the\glslongtok},
11108   first={\protect\glsfirstlongemfont{\the\glslongtok}},
11109   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
11110   text={\glslongemfont{\the\glslongtok}},
11111   plural={\glslongemfont{\the\glslongpltok}}%
11112 }%
11113 \renewcommand*{\GlsXtrPostNewAbbreviation}%
11114   \glssetattribute{\the\glslabeltok}{regular}{true}%
11115 }%
11116 }%
11117 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
11118 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
11119 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%

```

```

11120 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
11121 \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

11122 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
11123   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
11124   \ifglsxtrinsertinside \else##2\fi
11125 }%
11126 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
11127   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
11128   \ifglsxtrinsertinside \else##2\fi
11129 }%
11130 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
11131   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
11132   \ifglsxtrinsertinside \else##2\fi
11133 }%
11134 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
11135   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
11136   \ifglsxtrinsertinside \else##2\fi
11137 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

11138 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11139   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11140   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11141   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
11142 }%
11143 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11144   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11145   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11146   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
11147 }%
11148 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11149   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11150   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11151   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
11152 }%
11153 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11154   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11155   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11156   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
11157 }%

```

The first use full form only displays the long form, but it typically won't be used as the regular attribute is set by this style.

```

11158 \renewcommand*{\glsxtrfullformat}[2]{%
11159   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11160   \ifglsxtrinsertinside\else##2\fi
11161 }%
11162 \renewcommand*{\glsxtrfullplformat}[2]{%

```

```

11163     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11164     \ifglsxtrinsertinside\else##2\fi
11165 }
11166 \renewcommand*\{\Glsxtrfullformat}[2]{%
11167     \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11168     \ifglsxtrinsertinside\else##2\fi
11169 }
11170 \renewcommand*\{\Glsxtrfullplformat}[2]{%
11171     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11172     \ifglsxtrinsertinside\else##2\fi
11173 }
11174 }

```

t-em-desc-noreg Like long-em-noshort-em-desc but doesn't set the regular attribute.

```

11175 \newabbreviationstyle{long-em-noshort-em-desc-noreg}{%
11176 {%
11177     \GlsXtrUseAbbrStyleSetup{long-em-noshort-em-desc}%

```

Unset the regular attribute if it has been set.

```

11178 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
11179     \glshasattribute{\the\glslabeltok}{regular}%
11180     {%
11181         \glssetattribute{\the\glslabeltok}{regular}{false}%
11182     }%
11183     {}%
11184 }
11185 }%
11186 {%
11187     \GlsXtrUseAbbrStyleFmts{long-em-noshort-em-desc}%
11188 }

```

ort-em-footnote

```

11189 \newabbreviationstyle{short-em-footnote}{%
11190 {%

```

Set accessibility attributes if enabled.

```
11191 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

11192 \renewcommand*\{\CustomAbbreviationFields}{%
11193     name={\glsxtrfootnotename},
11194     sort={\the\glsshorttok},
11195     description={\the\glslongtok},%
11196     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
11197         \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
11198             {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
11199     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
11200         \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
11201             {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
11202     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
11203     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%

```

Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute if it has been set.

```

11204 \renewcommand*\GlsXtrPostNewAbbreviation}{%
11205   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
11206   \glshasattribute{\the\glslabeltok}{regular}%
11207   {%
11208     \glssetattribute{\the\glslabeltok}{regular}{false}%
11209   }%
11210   {}%
11211 }%
11212 }%
11213 {%
11214 \renewcommand*\abbrvpluralsuffix}{\glsxtremsuffix}%
11215 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
11216 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
11217 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
11218 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

11219 \renewcommand*\glsxtrfullformat}[2]{%
11220   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11221   \ifglsxtrinsertinside\else##2\fi
11222   \protect\glsxtrabrvfootnote{##1}%
11223   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
11224 }%
11225 \renewcommand*\glsxtrfullplformat}[2]{%
11226   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11227   \ifglsxtrinsertinside\else##2\fi
11228   \protect\glsxtrabrvfootnote{##1}%
11229   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11230 }%
11231 \renewcommand*\Glsxtrfullformat}[2]{%
11232   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11233   \ifglsxtrinsertinside\else##2\fi
11234   \protect\glsxtrabrvfootnote{##1}%
11235   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
11236 }%
11237 \renewcommand*\Glsxtrfullplformat}[2]{%
11238   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11239   \ifglsxtrinsertinside\else##2\fi
11240   \protect\glsxtrabrvfootnote{##1}%
11241   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11242 }%

```

The first use full form and the inline full form use the short (long) style.

```

11243 \renewcommand*\glsxtrinlinefullformat}[2]{%
11244   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11245   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11246   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%

```

```

11247 }%
11248 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11249   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11250   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11251   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11252 }%
11253 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11254   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11255   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11256   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
11257 }%
11258 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11259   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11260   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11261   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11262 }%
11263 }

```

footnote-em Backward compatibility:

```
11264 \@glsxtr@deprecated@abbrstyle{footnote-em}{short-em-footnote}
```

m-footnote-desc Like short-em-footnote but with user supplied description.

```
11265 \newabbreviationstyle{short-em-footnote-desc}%
11266 {%
```

Set accessibility attributes if enabled.

```
11267 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
11268 \renewcommand*{\CustomAbbreviationFields}{%
11269   name={\glsxtrfootnotedescname},%
11270   sort={\glsxtrfootnotedescsort},%
11271   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
11272     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
11273       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
11274   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
11275     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
11276       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
11277   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
11278   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
```

Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute if it has been set.

```
11279 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11280   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
11281   \glshasattribute{\the\glslabeltok}{regular}%
11282   {%
11283     \glssetattribute{\the\glslabeltok}{regular}{false}%
11284   }%
11285 }
```

```

11286  }%
11287 }%
11288 {%
11289 \GlsXtrUseAbbrStyleFmts{short-em-footnote}%
11290 }

em-postfootnote
11291 \newabbreviationstyle{short-em-postfootnote}{%
11292 {%
    Set accessibility attributes if enabled.
11293 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
    Setup the default fields.
11294 \renewcommand*{\CustomAbbreviationFields}{%
11295     name={\glsxtrfootnotename},
11296     sort={\the\glsshorttok},
11297     description={\the\glslongtok},%
11298     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
11299     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
11300     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
11301     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
11302 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11303     \csdef{glsxtrpostlink\glscategorylabel}{%
11304         \glsxtrifwasfirstuse
11305     }%
11306     \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
11307     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
11308 }%
11309 {}%
11310 }%
11311 \glshasattribute{\the\glslabeltok}{regular}%
11312 {}%
11313 \glssetattribute{\the\glslabeltok}{regular}{false}%
11314 }%
11315 {}%
11316 }%
11317 \renewcommand*{\glsxtrsetupfulldefs}{%
11318     \let\glsxtrifwasfirstuse\@secondoftwo
11319 }%
11320 }%
11321 }%

```

```

11322 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
11323 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
11324 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
11325 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
11326 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

11327 \renewcommand*{\glsxtrfullformat}[2]{%
11328   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11329   \ifglsxtrinsertinside\else##2\fi
11330 }%
11331 \renewcommand*{\glsxtrfullplformat}[2]{%
11332   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11333   \ifglsxtrinsertinside\else##2\fi
11334 }%
11335 \renewcommand*{\Glsxtrfullformat}[2]{%
11336   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11337   \ifglsxtrinsertinside\else##2\fi
11338 }%
11339 \renewcommand*{\Glsxtrfullplformat}[2]{%
11340   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11341   \ifglsxtrinsertinside\else##2\fi
11342 }%

```

The first use full form and the inline full form use the short (long) style.

```

11343 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11344   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11345   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11346   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
11347 }%
11348 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11349   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11350   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11351   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11352 }%
11353 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11354   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11355   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11356   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
11357 }%
11358 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11359   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11360   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11361   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11362 }%
11363 }

```

`postfootnote-em` Backward compatibility:

```
11364 @glsxtr@deprecated@abbrstyle{postfootnote-em}{short-em-postfootnote}
```

stfootnote-desc Like short-em-postfootnote but with user supplied description.

```
11365 \newabbreviationstyle{short-em-postfootnote-desc}%
11366 {%
```

Set accessibility attributes if enabled.

```
11367 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
11368 \renewcommand*{\CustomAbbreviationFields}{%
11369   name={\glsxtrfootnotedescname},
11370   sort={\glsxtrfootnotedescsort},
11371   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
11372   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
11373   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
11374   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
```

Make this category insert a footnote after the link if this was the first use, and unset the regular attribute if it has been set.

```
11375 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11376   \csdef{glsxtrpostlink\glscategorylabel}{%
11377     \glsxtrifwasfirstuse
11378   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
11379   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
11380   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
11381 }
11382 {}
11383 }
11384 \glshasattribute{\the\glslabeltok}{regular}%
11385 {}
11386   \glssetattribute{\the\glslabeltok}{regular}{false}%
11387 }
11388 {}
11389 }
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
11390 \renewcommand*{\glsxtrsetupfulldefs}{%
11391   \let\glsxtrifwasfirstuse\@secondoftwo
11392 }
11393 }
11394 {
11395 \GlsXtrUseAbbrStyleFmts{short-em-postfootnote}%
11396 }
```

1.7.6 Predefined Styles (User Parentheses Hook)

These styles allow the user to adjust the parenthetical forms. These styles all test for the existence of the field given by:

`glsxtruserfield` Default is the useri field.

```
11397 \newcommand*{\glsxtruserfield}[1]{#1}
```

`glsxtruserparen` The format of the parenthetical information. The first argument is the long/short form. The second argument is the entry's label. If `\glscurrentfieldvalue` has been defined, then we have at least glossaries v4.23, which makes it easier for the user to adjust this.

```
11398 \ifdef{\glscurrentfieldvalue}
11399 {
11400   \newcommand*{\glsxtruserparen}[2]{%
11401     \glsxtrfullsep{#2}%
11402     \glsxtrparen
11403     {#1\ifglshasfield{\glsxtruserfield}{#2}{, \glscurrentfieldvalue}{}%}
11404   }
11405 }
11406 {
11407   \newcommand*{\glsxtruserparen}[2]{%
11408     \glsxtrfullsep{#2}%
11409     \glsxtrparen
11410     {#1\ifglshasfield{\glsxtruserfield}{#2}{, \glo@thisvalue}{}%}
11411   }
11412 }
```

Font used for short form:

`lsabbrvuserfont`

```
11413 \newcommand*{\glsabbrvuserfont}[1]{\glsabbrvdefaultfont{#1}}
```

Font used for short form on first use:

`stabbrvuserfont`

```
11414 \newcommand*{\glsfirststabbrvuserfont}[1]{\glsabbrvuserfont{#1}}
```

Font used for long form:

`glslonguserfont`

```
11415 \newcommand*{\glslonguserfont}[1]{\glslongdefaultfont{#1}}
```

Font used for long form on first use:

`rstlonguserfont`

```
11416 \newcommand*{\glsfirstlonguserfont}[1]{\glslonguserfont{#1}}
```

The default short form suffix:

`lsxtrusersuffix`

```
11417 \newcommand*{\glsxtrusersuffix}{\glsxtrabbrvpluralsuffix}
```

Description encapsulator.

`userdescription` The first argument is the description. The second argument is the label.

```
11418 \newcommand*{\glsuserdescription}[2]{\glslonguserfont{#1}}
```

```

long-short-user
11419 \newabbreviationstyle{long-short-user}%
11420 {%
    Set accessibility attributes if enabled.
11421   \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
    Setup the default fields.
11422   \renewcommand*{\CustomAbbreviationFields}{%
11423     name={\glsxtrlongshortname},
11424     sort={\the\glsshorttok},
11425     first={\protect\glsfirstlonguserfont{\the\glslongtok}%
11426       \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%{\the\glslabeltok}},%
11427     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}%
11428       \protect\glsxtruserparen
11429       {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%
11430     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11431     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
11432     description={\protect\glsuserdescription{\the\glslongtok}%
11433       {\the\glslabeltok}}}%
11434   }

    Unset the regular attribute if it has been set.
11435   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11436     \glshasattribute{\the\glslabeltok}{regular}%
11437     {%
11438       \glssetattribute{\the\glslabeltok}{regular}{false}%
11439     }%
11440   }%
11441 }%
11442 }%
11443 {%
    In case the user wants to mix and match font styles, these are redefined here.
11444   \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
11445   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
11446   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
11447   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
11448   \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

    The first use full form and the inline full form are the same for this style.
11449   \renewcommand*{\glsxtrfullformat}[2]{%
11450     \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11451     \ifglsxtrinsertinside\else##2\fi
11452     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11453   }%
11454   \renewcommand*{\glsxtrfullplformat}[2]{%
11455     \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11456     \ifglsxtrinsertinside\else##2\fi
11457     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%

```

```

11458 }%
11459 \renewcommand*{\Glsxtrfullformat}[2]{%
11460   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11461   \ifglsxtrinsertinside\else##2\fi
11462   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11463 }%
11464 \renewcommand*{\Glsxtrfullplformat}[2]{%
11465   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11466   \ifglsxtrinsertinside\else##2\fi
11467   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11468 }%
11469 }

```

-postshort-user Like long-short-user but defers the parenthetical matter to after the link.

```

11470 \newabbreviationstyle{long-postshort-user}%
11471 {%

```

Set accessibility attributes if enabled.

```

11472 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel

```

Setup the default fields.

```

11473 \renewcommand*{\CustomAbbreviationFields}{%
11474   name={\glsxtrlongshortname},
11475   sort={\the\glsshorttok},
11476   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11477   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11478   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11479   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
11480   description={\protect\glsuserdescription{\the\glslongtok}%
11481     {\the\glslabeltok}}}%
11482 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11483   \csdef{glsxtrpostlink\glscategorylabel}{%
11484     \glsxtrifwasfirstuse
11485   {%
11486     \glsxtruserparen
11487       {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}}%
11488       {\glslabel}%
11489   }%
11490   {}%
11491 }%
11492   \glshasattribute{\the\glslabeltok}{regular}%
11493   {}%
11494     \glssetattribute{\the\glslabeltok}{regular}{false}%
11495   {}%
11496   {}%
11497 }%
11498 }%
11499 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11500 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
11501 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
11502 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
11503 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
11504 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

11505 \renewcommand*{\glsxtrfullformat}[2]{%
11506   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11507   \ifglsxtrinsertinside\else##2\fi
11508 }%
11509 \renewcommand*{\glsxtrfullplformat}[2]{%
11510   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11511   \ifglsxtrinsertinside\else##2\fi
11512 }%
11513 \renewcommand*{\Glsxtrfullformat}[2]{%
11514   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11515   \ifglsxtrinsertinside\else##2\fi
11516 }%
11517 \renewcommand*{\Glsxtrfullplformat}[2]{%
11518   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11519   \ifglsxtrinsertinside\else##2\fi
11520 }%

```

In-line format:

```

11521 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11522   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11523   \ifglsxtrinsertinside\else##2\fi
11524   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11525 }%
11526 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11527   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11528   \ifglsxtrinsertinside\else##2\fi
11529   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11530 }%
11531 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11532   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11533   \ifglsxtrinsertinside\else##2\fi
11534   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11535 }%
11536 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11537   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11538   \ifglsxtrinsertinside\else##2\fi
11539   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11540 }%
11541 }

```

Small-caps is awkward, so support for that is added.

abbrvscuserfont

```
11542 \newcommand*{\glsabbrvscuserfont}{\glsabbrvscfont}%
```

```
abbrvscuserfont
11543 \newcommand*{\glsfirstabbrvscuserfont}{\glsabbrvscuserfont}%
```

The default short form suffix:

```
xtrscusersuffix
11544 \newcommand*{\glsxtrscusersuffix}{\glsxtrscsuffix}
```

lsxtrscusername The default name format for this style.

```
11545 \newcommand*{\glsxtrlongshortscusername}{%
11546   \protect\glsabbrvscuserfont{\the\glsshorttok}%
11547 }
```

stshort-sc-user Like long-short-sc-user but uses smallcaps.

```
11548 \newabbreviationstyle{long-postshort-sc-user}%
11549 {%
```

Set accessibility attributes if enabled.

```
11550 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11551 \renewcommand*{\CustomAbbreviationFields}{%
11552   name={\glsxtrlongshortscusername},
11553   sort={\the\glsshorttok},
11554   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11555   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11556   text={\protect\glsabbrvscuserfont{\the\glsshorttok}},%
11557   plural={\protect\glsabbrvscuserfont{\the\glsshortpltok}},%
11558   description={\protect\glsuserdescription{\the\glslongtok}%
11559     {\the\glslabeltok}}}%
11560 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11561   \csdef{glsxtrpostlink\glscategorylabel}{%
11562     \glsxtrifwasfirstuse
11563     {%
11564       \glsxtruserparen
11565         {\glsfirstabbrvscuserfont{\glsentryshort{\glslabel}}}%
11566         {\glslabel}%
11567     }%
11568     {}%
11569   }%
11570   \glshasattribute{\the\glslabeltok}{regular}%
11571   {%
11572     \glssetattribute{\the\glslabeltok}{regular}{false}%
11573   }%
11574   {}%
11575 }%
11576 }%
11577 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
11578 \renewcommand*{\abbrvpluralsuffix}{\glsxtrscusersuffix}%
11579 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvscuserfont{##1}}%
11580 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvscuserfont{##1}}%
11581 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
11582 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%
```

First use full form:

```
11583 \renewcommand*{\glsxtrfullformat}[2]{%
11584   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11585   \ifglsxtrinsertinside\else##2\fi
11586 }%
11587 \renewcommand*{\glsxtrfullplformat}[2]{%
11588   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11589   \ifglsxtrinsertinside\else##2\fi
11590 }%
11591 \renewcommand*{\Glsxtrfullformat}[2]{%
11592   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11593   \ifglsxtrinsertinside\else##2\fi
11594 }%
11595 \renewcommand*{\Glsxtrfullplformat}[2]{%
11596   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11597   \ifglsxtrinsertinside\else##2\fi
11598 }%
```

In-line format:

```
11599 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11600   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11601   \ifglsxtrinsertinside\else##2\fi
11602   \glsxtruserparen{\glsfirstabbrvscuserfont{\glsaccessshort{##1}}}{##1}%
11603 }%
11604 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11605   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11606   \ifglsxtrinsertinside\else##2\fi
11607   \glsxtruserparen{\glsfirstabbrvscuserfont{\glsaccessshortpl{##1}}}{##1}%
11608 }%
11609 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11610   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11611   \ifglsxtrinsertinside\else##2\fi
11612   \glsxtruserparen{\glsfirstabbrvscuserfont{\glsaccessshort{##1}}}{##1}%
11613 }%
11614 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11615   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11616   \ifglsxtrinsertinside\else##2\fi
11617   \glsxtruserparen{\glsfirstabbrvscuserfont{\glsaccessshortpl{##1}}}{##1}%
11618 }%
11619 }
```

ortuserdescname

```
11620 \newcommand*{\glsxtrlongshortuserdescname}{%
```

```

11621 \protect\glslonguserfont{\the\glslongtok}%
11622 \protect\glsxtruserparen
11623 {\protect\glsabbrvuserfont{\the\glsshorttok}}{\the\glslabeltok}%
11624 }

```

`short-user-desc` Like `long-postshort-user` but the user supplies the description.

```

11625 \newabbreviationstyle{long-postshort-user-desc}%
11626 {%

```

Set accessibility attributes if enabled.

```

11627 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11628 \renewcommand*\CustomAbbreviationFields{%
11629   name={\glsxtrlongshortuserdescname},
11630   sort={\the\glslongtok},
11631   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11632   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11633   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11634   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
11635 }%
11636 \renewcommand*\GlsXtrPostNewAbbreviation{%
11637   \csdef{glsxtrpostlink}\glscategorylabel{%
11638     \glsxtrifwasfirstuse
11639     {%
11640       \glsxtruserparen
11641         {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}%
11642         {\glslabel}%
11643       }%
11644     {}%
11645   }%
11646   \glshasattribute{\the\glslabeltok}{regular}%
11647   {%
11648     \glssetattribute{\the\glslabeltok}{regular}{false}%
11649   }%
11650   {}%
11651 }%
11652 }%
11653 {%
11654 \GlsXtrUseAbbrStyleFmts{long-postshort-user}%
11655 }

```

`tscuserdescname`

```

11656 \newcommand*\glsxtrlongshortscuserdescname{%
11657   \protect\glslonguserfont{\the\glslongtok}%
11658   \protect\glsxtruserparen
11659   {\protect\glsabbrvscuserfont{\the\glsshorttok}}{\the\glslabeltok}%
11660 }

```

`rt-sc-user-desc` Like `long-postshort-sc-user` but the user supplies the description.

```
11661 \newabbreviationstyle{long-postshort-sc-user-desc}%
11662 {%
  Set accessibility attributes if enabled.
11663   \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
  Setup the default fields.
11664   \renewcommand*{\CustomAbbreviationFields}{%
11665     name={\glsxtrlongshortscuserdescname},
11666     sort={\the\glslongtok},
11667     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11668     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11669     text={\protect\glsabbrvscuserfont{\the\glsshorttok}},%
11670     plural={\protect\glsabbrvscuserfont{\the\glsshortpltok}}%
11671 }%
11672 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11673   \csdef{glsxtrpostlink\glscategorylabel}{%
11674     \glsxtrifwasfirstuse
11675   }%
11676     \glsxtruserparen
11677       {\glsfirstabbrvscuserfont{\glsentryshort{\glslabel}}}%
11678       {\glslabel}%
11679   }%
11680   {}%
11681 }%
11682 \glshasattribute{\the\glslabeltok}{regular}%
11683 {}%
11684   \glssetattribute{\the\glslabeltok}{regular}{false}%
11685 }%
11686   {}%
11687 }%
11688 }%
11689 {%
11690   \GlsXtrUseAbbrStyleFmts{long-postshort-sc-user}%
11691 }
```

`t-postlong-user` Like `short-long-user` but defers the parenthetical matter to after the link.

```
11692 \newabbreviationstyle{short-postlong-user}%
11693 {%
  Set accessibility attributes if enabled.
11694   \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
  Setup the default fields.
11695   \renewcommand*{\CustomAbbreviationFields}{%
11696     name={\glsxtrshortlongname},
11697     sort={\the\glsshorttok},
11698     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11699     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
```

```

11700     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11701     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
11702     description={\protect\glsuserdescription{\the\glslongtok}%
11703       {\the\glslabeltok}}}}%
11704 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
11705   \csdef{glsxtrpostlink\glscategorylabel}{%
11706     \glsxtrifwasfirstuse
11707     {%
11708       \glsxtruserparen
11709         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}%
11710         {\glslabel}%
11711       }%
11712     {}%
11713   }%
11714   \glshasattribute{\the\glslabeltok}{regular}%
11715   {%
11716     \glssetattribute{\the\glslabeltok}{regular}{false}%
11717   }%
11718   {}%
11719 }%
11720 }%
11721 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11722 \renewcommand*\{\abbrvpluralsuffix}{\glsxtrusersuffix}%
11723 \renewcommand*\{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
11724 \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
11725 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
11726 \renewcommand*\{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

11727 \renewcommand*\{\glsxtrfullformat}[2]{%
11728   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11729   \ifglsxtrinsertinside\else##2\fi
11730 }%
11731 \renewcommand*\{\glsxtrfullplformat}[2]{%
11732   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11733   \ifglsxtrinsertinside\else##2\fi
11734 }%
11735 \renewcommand*\{\Glsxtrfullformat}[2]{%
11736   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11737   \ifglsxtrinsertinside\else##2\fi
11738 }%
11739 \renewcommand*\{\Glsxtrfullplformat}[2]{%
11740   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11741   \ifglsxtrinsertinside\else##2\fi
11742 }%

```

In-line format:

```

11743 \renewcommand*\{\glsxtrinlinefullformat}[2]{%

```

```

11744     \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11745     \ifglsxtrinsertinside\else##2\fi
11746     \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11747 }%
11748 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11749     \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11750     \ifglsxtrinsertinside\else##2\fi
11751     \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11752 }%
11753 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11754     \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11755     \ifglsxtrinsertinside\else##2\fi
11756     \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11757 }%
11758 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11759     \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11760     \ifglsxtrinsertinside\else##2\fi
11761     \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11762 }%
11763 }

```

onguserdescname

```

11764 \newcommand*{\glsxtrshortlonguserdescname}{%
11765 \protect\glsabbrvuserfont{\the\glsshorttok}%
11766 \protect\glsxtruserparen
11767 {\protect\glslonguserfont{\the\glslongtok}}%
11768 {\the\glslabeltok}%
11769 }

```

tlong-user-desc Like short-postlong-user but leaves the user to specify the description.

```

11770 \newabbreviationstyle{short-postlong-user-desc}%
11771 {%

```

Set accessibility attributes if enabled.

```

11772 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11773 \renewcommand*{\CustomAbbreviationFields}{%
11774     name={\glsxtrshortlonguserdescname},
11775     sort={\the\glsshorttok},
11776     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11777     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11778     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11779     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
11780 }%
11781 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11782     \csdef{glsxtrpostlink\glscategorylabel}{%
11783         \glsxtrifwasfirstuse
11784     }%

```

```

11785     \glsxtruserparen
11786         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}%
11787         {\glslabel}%
11788     }%
11789     {}%
11790 }%
11791 \glshasattribute{\the\glslabeltok}{regular}%
11792 {}%
11793     \glssetattribute{\the\glslabeltok}{regular}{false}%
11794 }%
11795 {}%
11796 }%
11797 }%
11798 {}%
11799 \GlsXtrUseAbbrStyleFmts{short-postlong-user}%
11800 }

```

short-user-desc

```

11801 \newabbreviationstyle{long-short-user-desc}%
11802 {}%

```

Set accessibility attributes if enabled.

```
11803 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

11804 \renewcommand*{\CustomAbbreviationFields}{%
11805     name={\glsxtrlongshortuserdescname},%
11806     sort={\glsxtrlongshortdescsort},%
11807     first={\protect\glsfirstlonguserfont{\the\glslongtok}%
11808         \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
11809         {\the\glslabeltok}},%
11810     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}%
11811         \protect\glsxtruserparen%
11812             {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%
11813     text={\protect\glsabbrvfont{\the\glsshorttok}},%
11814     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
11815 }%

```

Unset the regular attribute if it has been set.

```

11816 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11817     \glshasattribute{\the\glslabeltok}{regular}%
11818     {}%
11819     \glssetattribute{\the\glslabeltok}{regular}{false}%
11820 }%
11821 {}%
11822 }%
11823 }%
11824 {}%
11825 \GlsXtrUseAbbrStyleFmts{long-short-user}%
11826 }

```

```

short-long-user
11827 \newabbreviationstyle{short-long-user}%
11828 {%
  Set accessibility attributes if enabled.
11829   \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
  Setup the default fields.
  \glslonguserfont is used in the description since \glsdesc doesn't set the style. (Now in
  \glsuserdescription.)
11830   \renewcommand*\CustomAbbreviationFields{%
11831     name={\glsxtrshortlongname},
11832     sort={\the\glsshorttok},
11833     description={\protect\glsuserdescription{\the\glslongtok}%
11834       {\the\glslabeltok}},%
11835     first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
11836       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
11837         {\the\glslabeltok}},%
11838     firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
11839       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
11840         {\the\glslabeltok}},%
11841     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11842     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}}%
  Unset the regular attribute if it has been set.
11843   \renewcommand*\GlsXtrPostNewAbbreviation{%
11844     \glshasattribute{\the\glslabeltok}{regular}%
11845     {%
11846       \glssetattribute{\the\glslabeltok}{regular}{false}%
11847     }%
11848     {}%
11849   }%
11850 }%
11851 {%
  In case the user wants to mix and match font styles, these are redefined here.
11852   \renewcommand*\abbrvpluralsuffix{\glsxtrusersuffix}%
11853   \renewcommand*\glsabbrvfont[1]{\glsabbrvuserfont{##1}}%
11854   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvuserfont{##1}}%
11855   \renewcommand*\glsfirstlongfont[1]{\glsfirstlonguserfont{##1}}%
11856   \renewcommand*\glslongfont[1]{\glslonguserfont{##1}}%
  The first use full form and the inline full form are the same for this style.
11857   \renewcommand*\glsxtrfullformat}[2]{%
11858     \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11859     \ifglsxtrinsertinside\else##2\fi
11860     \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11861   }%
11862   \renewcommand*\glsxtrfullplformat}[2]{%

```

```

11863   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11864   \ifglsxtrinsertinside\else##2\fi
11865   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11866 }%
11867 \renewcommand*\Glsxtrfullformat[2]{%
11868   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11869   \ifglsxtrinsertinside\else##2\fi
11870   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11871 }%
11872 \renewcommand*\Glsxtrfullplformat[2]{%
11873   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11874   \ifglsxtrinsertinside\else##2\fi
11875   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11876 }%
11877 }

-long-user-desc
11878 \newabbreviationstyle{short-long-user-desc}%
11879 {%
  Set accessibility attributes if enabled.
11880 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
  Setup the default fields.
11881 \renewcommand*\CustomAbbreviationFields{%
11882   name={\glsxtrshortlonguserdescname},
11883   sort={\glsxtrshortlongdescsort},%
11884   first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
11885     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
11886     {\the\glslabeltok}},%
11887   firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
11888     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
11889     {\the\glslabeltok}},%
11890   text={\protect\glsabbrvfont{\the\glsshorttok}},%
11891   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
11892 }%
  Unset the regular attribute if it has been set.
11893 \renewcommand*\GlsXtrPostNewAbbreviation{%
11894   \glshasattribute{\the\glslabeltok}{regular}%
11895   {%
11896     \glssetattribute{\the\glslabeltok}{regular}{false}%
11897   }%
11898   {}%
11899 }%
11900 }%
11901 {%
11902 \GlsXtrUseAbbrStyleFmts{short-long-user}%
11903 }

```

1.7.7 Predefined Styles (Hyphen)

These styles are designed to work with the `markwords` attribute. They check if the inserted material (provided by the final optional argument of commands like `\gls`) starts with a hyphen. If it does, the insert is added to the parenthetical material. Note that commands like `\glsxtrlong` set `\glsinsert` to empty with the entire link-text stored in `\glscustomtext`.

`trifhyphenstart` Checks if the argument starts with a hyphen. The argument may be `\glsinsert` so check for that and expand.

```
11904 \newrobustcmd*\{\glsxtrifhyphenstart\}[3]{%
11905   \ifx\glsinsert#1\relax
11906     \expandafter\@glsxtrifhyphenstart#1\relax\relax
11907     @end@glsxtrifhyphenstart{#2}{#3}%
11908   \else
11909     \@glsxtrifhyphenstart#1\relax\relax@end@glsxtrifhyphenstart{#2}{#3}%
11910   \fi
11911 }
```

`trifhyphenstart`

```
11912 \def\@glsxtrifhyphenstart#1#2@end@glsxtrifhyphenstart#3#4{%
11913   \ifx-#1\relax#3\else #4\fi
11914 }
```

`longhyphenshort`

```
\glsxtrlonghyphenshort{\langle label \rangle}{\langle long \rangle}{\langle short \rangle}{\langle insert \rangle}
```

The `\langle long \rangle` and `\langle short \rangle` arguments may be the plural form. The `\langle long \rangle` argument may also be the first letter uppercase form.

```
11915 \newcommand*\{\glsxtrlonghyphenshort\}[4]{%
```

Grouping is needed to localise the redefinitions.

```
11916 {%
```

If `\langle insert \rangle` starts with a hyphen, redefine `\glsxtrwordsep` to a hyphen. The inserted material is also inserted into the parenthetical part. (The inserted material is grouped as a precautionary measure.) No change is made to `\glsxtrwordsep` if `\langle insert \rangle` doesn't start with a hyphen.

```
11917   \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
11918   \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#4}\fi}%
11919   \ifglsxtrinsertinside\else{#4}\fi
11920   \glsxtrfullsep{#1}%
11921   \glsxtrparen{\glsfirstabbrvhyphenfont{#3\ifglsxtrinsertinside{#4}\fi}%
11922   \ifglsxtrinsertinside\else{#4}\fi}%
11923 }%
11924 }
```

`abbrvhyphenfont`

```
11925 \newcommand*\{\glsabbrvhyphenfont\}{\glsabbrvdefaultfont}%
```

```
abbrvhyphenfont  
11926 \newcommand*{\glsfirstabbrvhyphenfont}{\glsabbrvhyphenfont}%
```

```
slonghyphenfont  
11927 \newcommand*{\glslonghyphenfont}{\glslongdefaultfont}%
```

```
tlonghyphenfont  
11928 \newcommand*{\glsfirsttlonghyphenfont}{\glslonghyphenfont}%
```

The default short form suffix:

```
xtrhyphensuffix  
11929 \newcommand*{\glsxtrhyphensuffix}{\glsxtrabbrvpluralsuffix}
```

en-short-hyphen Designed for use with the markwords attribute.

```
11930 \newabbreviationstyle{long-hyphen-short-hyphen}%
11931 {%
```

Set accessibility attributes if enabled.

```
11932 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11933 \renewcommand*{\CustomAbbreviationFields}{%
11934   name={\glsxtrlongshortname},
11935   sort={\the\glsshorttok},
11936   first={\protect\glsfirsttlonghyphenfont{\the\glslongtok}%
11937     \protect\glsxtrfullsep{\the\glslabeltok}%
11938     \glsxtrparen{\protect\glsfirstabbrvhyphenfont{\the\glsshorttok}}},%
11939   firstplural={\protect\glsfirsttlonghyphenfont{\the\glslongpltok}%
11940     \protect\glsxtrfullsep{\the\glslabeltok}%
11941     \glsxtrparen{\protect\glsfirstabbrvhyphenfont{\the\glsshortpltok}}},%
11942   text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
11943   plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}},%
11944   description={\protect\glslonghyphenfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
11945 \renewcommand*{\GlsXtrPostNewAbbreviation}%
11946   \glshasattribute{\the\glslabeltok}{regular}%
11947 {%
11948   \glssetattribute{\the\glslabeltok}{regular}{false}%
11949 }%
11950 {%
11951 }%
11952 }%
11953 {%
11954 \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
11955 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhyphenfont{##1}}%
11956 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhyphenfont{##1}}%
11957 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
11958 \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
11959 \renewcommand*\glsxtrfullformat}[2]{%
11960   \glsxtrlonghyphenshort{##1}{\glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
11961 }%
11962 \renewcommand*\glsxtrfullplformat}[2]{%
11963   \glsxtrlonghyphenshort{##1}{\glsaccesslongpl{##1}}%
11964     {\glsaccessshortpl{##1}}{##2}%
11965 }%
11966 \renewcommand*\Glsxtrfullformat}[2]{%
11967   \glsxtrlonghyphenshort{##1}{\Glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
11968 }%
11969 \renewcommand*\Glsxtrfullplformat}[2]{%
11970   \glsxtrlonghyphenshort{##1}{\Glsaccesslongpl{##1}}%
11971     {\glsaccessshortpl{##1}}{##2}%
11972 }%
11973 }
```

ort-hyphen-desc Like long-hyphen-short-hyphen but the description must be supplied by the user.

```
11974 \newabbreviationstyle{long-hyphen-short-hyphen-desc}%
11975 {%
```

Set accessibility attributes if enabled.

```
11976 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
11977 \renewcommand*\CustomAbbreviationFields}{%
11978   name={\glsxtrlongshortdescname},
11979   sort={\glsxtrlongshortdescsort},
11980   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}%
11981     \protect\glsxtrfullsep{\the\glslabeltok}%
11982       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
11983   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}%
11984     \protect\glsxtrfullsep{\the\glslabeltok}%
11985       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
11986   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11987   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
11988 }%
```

Unset the regular attribute if it has been set.

```
11989 \renewcommand*\GlsXtrPostNewAbbreviation}{%
11990   \glshasattribute{\the\glslabeltok}{regular}%
11991   {%
11992     \glssetattribute{\the\glslabeltok}{regular}{false}%
11993   }%
11994   {}%
11995 }%
11996 }%
11997 {%
11998 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%
11999 }
```

nghyphennoshort

```
\glsxtrlonghyphennoshort{\label}{\long}{\insert}
```

```
12000 \newcommand*\glsxtrlonghyphennoshort[3]{%
```

Grouping is needed to localise the redefinitions.

```
12001 {%
```

If *insert* starts with a hyphen, redefine `\glsxtrwordsep` to a hyphen. The inserted material is also inserted into the parenthetical part. (The inserted material is grouped as a precautionary measure.) No change is made to `\glsxtrwordsep` if *insert* doesn't start with a hyphen.

```
12002   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}{}{}}
```

```
12003   \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#3}\fi}%
```

```
12004   \ifglsxtrinsertinside\else{#3}\fi
```

```
12005 }%
```

```
12006 }
```

hort-desc-noreg This version doesn't show the short form (except explicitly with `\glsxtrshort`). Since `\glsxtrshort` doesn't support the hyphen switch, the short form just uses the default short-form font command. This style won't work with the regular as the regular form isn't flexible enough. No accessibility attributes need to be set.

```
12007 \newabbreviationstyle{long-hyphen-noshort-desc-noreg}{%
```

```
12008 {%
```

```
12009   \renewcommand*\CustomAbbreviationFields{%
```

```
12010     name={\glsxtrlongnoshortdescname},
```

```
12011     sort={\expandonce\glsxtrorglong},
```

```
12012     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
```

```
12013     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
```

```
12014     text={\protect\glslonghyphenfont{\the\glslongtok}},%
```

```
12015     plural={\protect\glslonghyphenfont{\the\glslongpltok}}%
```

```
12016 }%
```

Unset the regular attribute if it has been set.

```
12017 \renewcommand*\GlsXtrPostNewAbbreviation{%
```

```
12018   \glshasattribute{\the\glslabeltok}{regular}%
```

```
12019   {%
```

```
12020     \glssetattribute{\the\glslabeltok}{regular}{false}%
```

```
12021   }%
```

```
12022   {}%
```

```
12023 }%
```

```
12024 }%
```

```
12025 {}%
```

```
12026 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}{}
```

In case the user wants to mix and match font styles, these are redefined here.

```
12027 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
```

```
12028 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
```

```
12029 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
```

```

12030 \renewcommand*\glsfirstlongfont[1]{\glsfirstlonghyphenfont{##1}}%
12031 \renewcommand*\glslongfont[1]{\glslonghyphenfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

12032 \renewcommand*\glsxtrsubsequentfmt[2]{%
12033   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
12034 }%
12035 \renewcommand*\glsxtrsubsequentplfmt[2]{%
12036   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
12037 }%
12038 \renewcommand*\Glsxtrsubsequentfmt[2]{%
12039   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
12040 }%
12041 \renewcommand*\Glsxtrsubsequentplfmt[2]{%
12042   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
12043 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

12044 \renewcommand*\glsxtrinlinefullformat[2]{%
12045   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
12046   \glsxtrfullsep{##1}%
12047   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
12048 }%
12049 \renewcommand*\glsxtrinlinefullplformat[2]{%
12050   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
12051   \glsxtrfullsep{##1}%
12052   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
12053 }%
12054 \renewcommand*\Glsxtrinlinefullformat[2]{%
12055   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
12056   \glsxtrfullsep{##1}%
12057   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
12058 }%
12059 \renewcommand*\Glsxtrinlinefullplformat[2]{%
12060   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
12061   \glsxtrfullsep{##1}%
12062   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
12063 }%

```

The first use full form only displays the long form.

```

12064 \renewcommand*\glsxtrfullformat[2]{%
12065   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
12066 }%
12067 \renewcommand*\glsxtrfullplformat[2]{%
12068   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
12069 }%
12070 \renewcommand*\Glsxtrfullformat[2]{%
12071   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
12072 }%
12073 \renewcommand*\Glsxtrfullplformat[2]{%
12074   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%

```

```
12075  }%
12076 }
```

n-noshort-noreg It doesn't really make a great deal of sense to have a long-only style that doesn't have a description (unless no glossary is required), but the best course of action here is to use the short form as the name and the long form as the description.

```
12077 \newabbreviationstyle{long-hyphen-noshort-noreg}%
12078 {%
```

Set accessibility attributes if enabled.

```
12079 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
```

Setup the default fields.

```
12080 \renewcommand*\CustomAbbreviationFields}{%
12081   name={\glsxtrlongnoshortname},
12082   sort={\the\glsshorttok},
12083   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
12084   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
12085   text={\protect\glslonghyphenfont{\the\glslongtok}},%
12086   plural={\protect\glslonghyphenfont{\the\glslongpltok}},%
12087   description={\the\glslongtok}%
12088 }%
```

Unset the regular attribute if it has been set.

```
12089 \renewcommand*\GlsXtrPostNewAbbreviation}{%
12090   \glshasattribute{\the\glslabeltok}{regular}%
12091   {%
12092     \glssetattribute{\the\glslabeltok}{regular}{false}%
12093   }%
12094   {}%
12095 }%
12096 }%
12097 {%
12098 \GlsXtrUseAbbrStyleFmts{long-hyphen-noshort-desc-noreg}%
12099 }
```

glsxtrlonghyphen

```
\glsxtrlonghyphen{<long>}{{<label>}}{<insert>}
```

Used by long-hyphen-postshort-hyphen. The *insert* is checked to determine if it starts with a hyphen but isn't used here as it's moved to the post-link hook.

```
12100 \newcommand*\glsxtrlonghyphen}[3]{%
```

Grouping is needed to localise the redefinitions.

```
12101 {%
12102   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
12103   \glsfirstlonghyphenfont{#1}%
12104 }
```

```
12104 }%
12105 }
```

posthyphenshort

```
\glsxtrposthyphenshort{\label}{\insert}
```

Used in the post-link hook for the long-hyphen-postshort-hyphen style. Much like \glsxtrlonghyphenshort but omits the *long* part. This always uses the singular short form.

```
12106 \newcommand*{\glsxtrposthyphenshort}[2]{%
12107 {%
12108   \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
12109   \ifglsxtrinsertinside{\glsfirstlonghyphenfont{#2}}\else{#2}\fi
12110   \glsxtrfullsep{#1}%
12111   \glsxtrparens
12112   {\glsfirstabbrvhyphenfont{\glsentryshort{#1}\ifglsxtrinsertinside{#2}\fi}%
12113     \ifglsxtrinsertinside\else{#2}\fi
12114   }%
12115 }%
12116 }
```

yphensubsequent

```
\glsxtrposthyphensubsequent{\label}{\insert}
```

Format in the post-link hook for subsequent use. The label is ignored by default.

```
12117 \newcommand*{\glsxtrposthyphensubsequent}[2]{%
12118   \glsabbrvfont{\ifglsxtrinsertinside {#2}\fi}%
12119   \ifglsxtrinsertinside \else{#2}\fi
12120 }
```

ostshort-hyphen Like long-hyphen-short-hyphen but shifts the insert and parenthetical material to the post-link hook.

```
12121 \newabbreviationstyle{long-hyphen-postshort-hyphen}%
12122 {}%
```

Set accessibility attributes if enabled.

```
12123 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
12124 \renewcommand*{\CustomAbbreviationFields}{%
12125   name={\glsxtrlongshortname},
12126   sort={\the\glsshorttok},
12127   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
12128   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
12129   text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
```

```

12130     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
12131     description={\protect\glslonghypenfont{\the\glslongtok}}}%
12132 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
12133   \csdef{glsxtrpostlink\glscategorylabel}{%
12134     \glsxtrifwasfirstuse
12135   }%
12136   \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
12137 }%
12138 }%

```

Put the insertion into the post-link:

```

12139   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
12140 }%
12141 }%
12142 \glshasattribute{\the\glslabeltok}{regular}%
12143 }%
12144 \glssetattribute{\the\glslabeltok}{regular}{false}%
12145 }%
12146 {}%
12147 }%
12148 }%
12149 }%

```

In case the user wants to mix and match font styles, these are redefined here.

```

12150 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
12151 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
12152 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
12153 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
12154 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

Subsequent use needs to omit the insertion:

```

12155 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
12156   \glsabbrvfont{\glsaccessshort{##1}}}%
12157 }%
12158 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
12159   \glsabbrvfont{\glsaccessshortpl{##1}}}%
12160 }%
12161 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
12162   \glsabbrvfont{\Glsaccessshort{##1}}}%
12163 }%
12164 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
12165   \glsabbrvfont{\Glsaccessshortpl{##1}}}%
12166 }%

```

First use full form:

```

12167 \renewcommand*{\glsxtrfullformat}[2]{%
12168   \glsxtrlonghypen{\glsaccesslong{##1}}{##1}{##2}%
12169 }%
12170 \renewcommand*{\glsxtrfullplformat}[2]{%
12171   \glsxtrlonghypen{\glsaccesslongpl{##1}}{##1}{##2}%
12172 }%

```

```

12173 \renewcommand*{\Glsxtrfullformat}[2]{%
12174   \glsxtrlonghyphen{\Glsaccesslong{##1}}{##1}{##2}%
12175 }%
12176 \renewcommand*{\Glsxtrfullplformat}[2]{%
12177   \glsxtrlonghyphen{\Glsaccesslongpl{##1}}{##1}{##2}%
12178 }%

```

In-line format.

```

12179 \renewcommand*{\glsxtrinlinefullformat}[2]{%
12180   \glsfirstlonghyphenfont{\glsaccesslong{##1}}{%
12181     \ifglsxtrinsertinside{##2}\fi}%
12182   \ifglsxtrinsertinside \else{##2}\fi
12183 }%
12184 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
12185   \glsfirstlonghyphenfont{\glsaccesslongpl{##1}}{%
12186     \ifglsxtrinsertinside{##2}\fi}%
12187   \ifglsxtrinsertinside \else{##2}\fi
12188 }%
12189 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
12190   \glsfirstlonghyphenfont{\Glsaccesslong{##1}}{%
12191     \ifglsxtrinsertinside{##2}\fi}%
12192   \ifglsxtrinsertinside \else{##2}\fi
12193 }%
12194 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
12195   \glsfirstlonghyphenfont{\Glsaccesslongpl{##1}}{%
12196     \ifglsxtrinsertinside{##2}\fi}%
12197   \ifglsxtrinsertinside \else{##2}\fi
12198 }%
12199 }

```

`ort-hyphen-desc` Like `long-hyphen-postshort-hyphen` but the description must be supplied by the user.

```

12200 \newabbreviationstyle{long-hyphen-postshort-hyphen-desc}%
12201 {%

```

Set accessibility attributes if enabled.

```
12202 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

12203 \renewcommand*{\CustomAbbreviationFields}{%
12204   name={\glsxtrlongshortdescname},%
12205   sort={\glsxtrlongshortdescsort},%
12206   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
12207   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
12208   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
12209   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
12210 }%
12211 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
12212   \csdef{glsxtrpostlink\glscategorylabel}{%
12213     \glsxtrifwasfirstuse
12214   }%

```

```

12215      \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
12216      }%
12217      {%

```

Put the insertion into the post-link:

```

12218      \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
12219      }%
12220      }%
12221      \glshasattribute{\the\glslabeltok}{regular}%
12222      {%
12223      \glssetattribute{\the\glslabeltok}{regular}{false}%
12224      }%
12225      {}%
12226      }%
12227 }%
12228 {%
12229 \GlsXtrUseAbbrStyleFmts{long-hyphen-postshort-hyphen}%
1230 }

```

shorthypenlong

`\glsxtrshorthypenlong{\label}{\short}{\long}{\insert}`

The `\label` and `\short` arguments may be the plural form. The `\long` argument may also be the first letter uppercase form.

```
12231 \newcommand*{\glsxtrshorthypenlong}[4]{%
```

Grouping is needed to localise the redefinitions.

```
12232 {%
```

If `\insert` starts with a hyphen, redefine `\glsxtrwordsep` to a hyphen. The inserted material is also inserted into the parenthetical part. (The inserted material is grouped as a precautionary measure.)

```

12233 \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
12234 \glsfirstabbrvhyphenfont{#2\ifglsxtrinsertinside{#4}\fi}%
12235 \ifglsxtrinsertinside\else{#4}\fi
12236 \glsxtrfullsep{#1}%
12237 \glsxtrparen{\glsfirstlonghyphenfont{#3\ifglsxtrinsertinside{#4}\fi}%
12238 \ifglsxtrinsertinside\else{#4}\fi}%
12239 }%
12240 }

```

hen-long-hyphen Designed for use with the `markwords` attribute.

```
12241 \newabbreviationstyle{short-hyphen-long-hyphen}%
12242 {}%
```

Set accessibility attributes if enabled.

```
12243 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
12244 \renewcommand*{\CustomAbbreviationFields}{%
12245   name={\glsxtrshortlongname},
12246   sort={\the\glsshorttok},
12247   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
12248     \protect\glsxtrfullsep{\the\glslabeltok}%
12249     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
12250   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
12251     \protect\glsxtrfullsep{\the\glslabeltok}%
12252     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
12253   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
12254   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
12255   description={\protect\glslonghypenfont{\the\glslongtok}}}
```

Unset the regular attribute if it has been set.

```
12256 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
12257   \glshasattribute{\the\glslabeltok}{regular}%
12258   {%
12259     \glssetattribute{\the\glslabeltok}{regular}{false}%
12260   }%
12261   {}%
12262 }%
12263 }%
12264 {%
12265 \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
12266 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
12267 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
12268 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
12269 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
12270 \renewcommand*{\glsxtrfullformat}[2]{%
12271   \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\glsaccesslong{##1}}{##2}%
12272 }%
12273 \renewcommand*{\glsxtrfullplformat}[2]{%
12274   \glsxtrshorthypenlong{##1}%
12275   {\glsaccessshort{##1}}{\glsaccesslongpl{##1}}{##2}%
12276 }%
12277 \renewcommand*{\Glsxtrfullformat}[2]{%
12278   \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\Glsaccesslong{##1}}{##2}%
12279 }%
12280 \renewcommand*{\Glsxtrfullplformat}[2]{%
12281   \glsxtrshorthypenlong{##1}%
12282   {\glsaccessshort{##1}}{\Glsaccesslongpl{##1}}{##2}%
12283 }%
12284 }
```

ong-hyphen-desc Like short-hyphen-long-hyphen but the description must be supplied by the user.

```
12285 \newabbreviationstyle{short-hyphen-long-hyphen-desc}%
12286 {%
```

Set accessibility attributes if enabled.

```
12287 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
12288 \renewcommand*\CustomAbbreviationFields{%
12289   name={\glsxtrshortlongdescname},
12290   sort={\glsxtrshortlongdescsort},
12291   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
12292     \protect\glsxtrfullsep{\the\glslabeltok}%
12293     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
12294   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
12295     \protect\glsxtrfullsep{\the\glslabeltok}%
12296     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
12297   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
12298   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
12299 }%
```

Unset the regular attribute if it has been set.

```
12300 \renewcommand*\GlsXtrPostNewAbbreviation{%
12301   \glshasattribute{\the\glslabeltok}{regular}%
12302   {%
12303     \glssetattribute{\the\glslabeltok}{regular}{false}%
12304   }%
12305   {}%
12306 }%
12307 }%
12308 {%
12309 \GlsXtrUseAbbrStyleFmts{short-hyphen-long-hyphen}%
12310 }
```

sxtrshorthypen

```
\glsxtrshorthypen{\<short>}{\<label>}{\<insert>}
```

Used by short-hyphen-postlong-hyphen. The *<insert>* is checked to determine if it starts with a hyphen but isn't used here as it's moved to the post-link hook.

```
12311 \newcommand*\glsxtrshorthypen[3]{%
```

Grouping is needed to localise the redefinitions.

```
12312 {%
12313   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
12314   \glsfirstabbrvhypenfont{#1}%
12315 }%
12316 }
```

rposthypenlong

```
\glsxtrposthyphenlong{\label}{\insert}
```

Used in the post-link hook for the short-hyphen-postlong-hyphen style. Much like \glsxtrshorthyphenlong but omits the *<short>* part. This always uses the singular long form.

```
12317 \newcommand*\glsxtrposthyphenlong[2]{%
12318  {%
12319   \glsxtrifhyphenstart{\#2}{\def\glsxtrwordsep{-}}{}%
12320   \ifglsxtrinsertinside{\glsfirstabbrvhyphenfont{\#2}}\else{\#2}\fi
12321   \glsxtrfullsep{\#1}%
12322   \glsxtrparen
12323   {\glsfirstlonghyphenfont{\glsentrylong{\#1}}\ifglsxtrinsertinside{\#2}\fi}%
12324   \ifglsxtrinsertinside\else{\#2}\fi
12325  }%
12326 }%
12327 }
```

postlong-hyphen Like short-hyphen-long-hyphen but shifts the insert and parenthetical material to the post-link hook.

```
12328 \newabbreviationstyle{short-hyphen-postlong-hyphen}{%
12329 {%
```

Set accessibility attributes if enabled.

```
12330 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
12331 \renewcommand*\CustomAbbreviationFields{%
12332   name={\glsxtrshortlongname},
12333   sort={\the\glsshorttok},
12334   first={\protect\glsfirstabbrvhyphenfont{\the\glsshorttok}},%
12335   firstplural={\protect\glsfirstabbrvhyphenfont{\the\glsshortpltok}},%
12336   text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
12337   plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}},%
12338   description={\protect\glslonghyphenfont{\the\glslongtok}}}%
12339 \renewcommand*\GlsXtrPostNewAbbreviation{%
12340   \csdef{glsxtrpostlink\glscategorylabel}{%
12341     \glsxtrifwasfirstuse
12342   {%
12343     \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
12344   }%
12345   {}}
```

Put the insertion into the post-link:

```
12346   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
12347   }%
12348 }%
12349 \glshasattribute{\the\glslabeltok}{regular}%
12350 {%
12351   \glssetattribute{\the\glslabeltok}{regular}{false}%
12352 }%
12353 {}%
```

```

12354  }%
12355 }%
12356 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

12357 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
12358 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
12359 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
12360 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
12361 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

Subsequent use needs to omit the insertion:

```

12362 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
12363   \glsabbrvfont{\glsaccessshort{##1}}%
12364 }%
12365 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
12366   \glsabbrvfont{\glsaccessshortpl{##1}}%
12367 }%
12368 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
12369   \glsabbrvfont{\Glsaccessshort{##1}}%
12370 }%
12371 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
12372   \glsabbrvfont{\Glsaccessshortpl{##1}}%
12373 }%

```

First use full form:

```

12374 \renewcommand*{\glsxtrfullformat}[2]{%
12375   \glsxtrshorthypen{\glsaccessshort{##1}{##1}{##2}}%
12376 }%
12377 \renewcommand*{\glsxtrfullplformat}[2]{%
12378   \glsxtrshorthypen{\glsaccessshortpl{##1}{##1}{##2}}%
12379 }%
12380 \renewcommand*{\Glsxtrfullformat}[2]{%
12381   \glsxtrshorthypen{\Glsaccessshort{##1}{##1}{##2}}%
12382 }%
12383 \renewcommand*{\Glsxtrfullplformat}[2]{%
12384   \glsxtrshorthypen{\Glsaccessshortpl{##1}{##1}{##2}}%
12385 }%

```

In-line format. Commands like \glsxtrfull set \glsinsert to empty. The entire link-text (provided by the following commands) is stored in \glscustomtext.

```

12386 \renewcommand*{\glsxtrinlinefullformat}[2]{%
12387   \glsfirstabbrvhypenfont{\glsaccessshort{##1}}%
12388   \ifglsxtrinsertinside{##2}\fi}%
12389   \ifglsxtrinsertinside \else{##2}\fi
12390 }%
12391 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
12392   \glsfirstabbrvhypenfont{\glsaccessshortpl{##1}}%
12393   \ifglsxtrinsertinside{##2}\fi}%
12394   \ifglsxtrinsertinside \else{##2}\fi
12395 }%

```

```

12396 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
12397   \glsfirstabbrvhyphenfont{\Glsaccessshort{##1}}%
12398   \ifglsxtrinsertinside{##2}\fi}%
12399   \ifglsxtrinsertinside \else{##2}\fi
12400 }%
12401 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
12402   \glsfirstabbrvhyphenfont{\Glsaccessshortpl{##1}}%
12403   \ifglsxtrinsertinside{##2}\fi}%
12404   \ifglsxtrinsertinside \else{##2}\fi
12405 }%
12406 }

```

`ong-hyphen-desc` Like `short-hyphen-postlong-hyphen` but the description must be supplied by the user.

```

12407 \newabbreviationstyle{short-hyphen-postlong-hyphen-desc}{%
12408 }%

```

Set accessibility attributes if enabled.

```
12409 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

12410 \renewcommand*{\CustomAbbreviationFields}{%
12411   name={\glsxtrshortlongdescname},%
12412   sort={\glsxtrshortlongdescsort},%
12413   first={\protect\glsfirstabbrvhyphenfont{\the\glsshorttok}},%
12414   firstplural={\protect\glsfirstabbrvhyphenfont{\the\glsshortpltok}},%
12415   text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
12416   plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}}%
12417 }%
12418 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
12419   \csdef{glsxtrpostlink\glscategorylabel}{%
12420     \glsxtrifwasfirstuse
12421   }%
12422   \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
12423 }%
12424 }%

```

Put the insertion into the post-link:

```

12425   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
12426 }%
12427 }%
12428 \glshasattribute{\the\glslabeltok}{regular}%
12429 {%
12430   \glssetattribute{\the\glslabeltok}{regular}{false}%
12431 }%
12432 {}%
12433 }%
12434 }%
12435 {}%
12436 \GlsXtrUseAbbrStyleFmts{short-hyphen-postlong-hyphen}%
12437 }

```

1.7.8 Predefined Styles (No Short on First Use)

These styles show only the long form on first use and only the short form on subsequent use.

```
lsabbrvonlyfont  
12438 \newcommand*{\glsabbrvonlyfont}{\glsabbrvdefaultfont}%
stabbrvonlyfont  
12439 \newcommand*{\glsfirstabbrvonlyfont}{\glsabbrvonlyfont}%
glslongonlyfont  
12440 \newcommand*{\glslongonlyfont}{\glslongdefaultfont}%
rstlongonlyfont  
12441 \newcommand*{\glsfirstlongonlyfont}{\glslongonlyfont}%
```

The default short form suffix:

```
lsxtronlysuffix  
12442 \newcommand*{\glsxtronlysuffix}{\glsxtrabbrvpluralsuffix}
```

\glsxtronlyname The default name format for this style.

```
12443 \newcommand*{\glsxtronlyname}{}%
12444   \protect\glsabbrvonlyfont{\the\glsshorttok}%
12445 }
```

only-short-only

```
12446 \newabbreviationstyle{long-only-short-only}%
12447 {}%
```

Set accessibility attributes if enabled.

```
12448 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
12449 \renewcommand*{\CustomAbbreviationFields}{}%
12450   name={\glsxtronlyname},
12451   sort={\the\glsshorttok},
12452   first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
12453   firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
12454   text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
12455   plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}},%
12456   description={\protect\glslongonlyfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
12457 \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
12458   \glshasattribute{\the\glslabeltok}{regular}%
12459   {}%
12460   \glssetattribute{\the\glslabeltok}{regular}{false}%
12461   {}%
12462   {}%
```

```

12463  }%
12464 }%
12465 {%
12466 \renewcommand*\{\abrvpluralsuffix\}{\glsxtronlysuffix}%
12467 \renewcommand*\{\glsabbrvfont\}[1]{\glsabbrvonlyfont{##1}}%
12468 \renewcommand*\{\glsfirstabbrvfont\}[1]{\glsfirstabbrvonlyfont{##1}}%
12469 \renewcommand*\{\glsfirstlongfont\}[1]{\glsfirstlongonlyfont{##1}}%
12470 \renewcommand*\{\glslongfont\}[1]{\glslongonlyfont{##1}}%

```

The first use full form doesn't show the short form.

```

12471 \renewcommand*\{\glsxtrfullformat\}[2]{%
12472   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
12473   \ifglsxtrinsertinside\else##2\fi
12474 }%
12475 \renewcommand*\{\glsxtrfullplformat\}[2]{%
12476   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
12477   \ifglsxtrinsertinside\else##2\fi
12478 }%
12479 \renewcommand*\{\Glsxtrfullformat\}[2]{%
12480   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
12481   \ifglsxtrinsertinside\else##2\fi
12482 }%
12483 \renewcommand*\{\Glsxtrfullplformat\}[2]{%
12484   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
12485   \ifglsxtrinsertinside\else##2\fi
12486 }%

```

The inline full form does show the short form.

```

12487 \renewcommand*\{\glsxtrinlinefullformat\}[2]{%
12488   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
12489   \ifglsxtrinsertinside\else##2\fi
12490   \glsxtrfullsep{##1}%
12491   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshort{##1}}}%
12492 }%
12493 \renewcommand*\{\glsxtrinlinefullplformat\}[2]{%
12494   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
12495   \ifglsxtrinsertinside\else##2\fi
12496   \glsxtrfullsep{##1}%
12497   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
12498 }%
12499 \renewcommand*\{\Glsxtrinlinefullformat\}[2]{%
12500   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
12501   \ifglsxtrinsertinside\else##2\fi
12502   \glsxtrfullsep{##1}%
12503   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
12504 }%
12505 \renewcommand*\{\Glsxtrinlinefullplformat\}[2]{%
12506   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
12507   \ifglsxtrinsertinside\else##2\fi

```

```
12508     \glsxtrfullsep{##1}%
12509     \glsxtrparen{\protect\glsfirstabbrvonlyfont{\Glsaccessshortpl{##1}}}%
12510 }%
12511 }
```

xtronlydescsort

```
12512 \newcommand*{\glsxtronlydescsort}{\the\glslongtok}
```

xtronlydescname

```
12513 \newcommand*{\glsxtronlydescname}{%
12514   \protect\glslongfont{\the\glslongtok}%
12515 }
```

short-only-desc

```
12516 \newabbreviationstyle{long-only-short-only-desc}{%
12517 {%
```

Set accessibility attributes if enabled.

```
12518 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
12519 \renewcommand*{\CustomAbbreviationFields}{%
12520   name={\glsxtronlydescname},
12521   sort={\glsxtronlydescsort},%
12522   first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
12523   firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
12524   text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
12525   plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}}%
12526 }%
```

Unset the regular attribute if it has been set.

```
12527 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
12528   \glshasattribute{\the\glslabeltok}{regular}%
12529   {%
12530     \glssetattribute{\the\glslabeltok}{regular}{false}%
12531   }%
12532   {}%
12533 }%
12534 }%
12535 {%
12536 \GlsXtrUseAbbrStyleFmts{long-only-short-only}%
12537 }
```

Small-caps is awkward, so support for that is added.

abbrvsconlyfont

```
12538 \newcommand*{\glsabbrvsconlyfont}{\glsabbrvscfont}%
```

abbrvsconlyfont

```
12539 \newcommand*{\glsfirstabbrvsconlyfont}{\glsabbrvsconlyfont}%
```

The default short form suffix:

```
xtrsconlysuffix  
12540 \newcommand*{\glsxtrsconlysuffix}{\glsxtrscsuffix}
```

lsxtrsconlyname The default name format for this style.

```
12541 \newcommand*{\glsxtrsconlyname}{%  
12542   \protect\glsabbrvsonlyfont{\the\glsshorttok}-%  
12543 }
```

y-short-sc-only

```
12544 \newabbreviationstyle{long-only-short-sc-only}{%  
12545 {%
```

Set accessibility attributes if enabled.

```
12546 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
12547 \renewcommand*{\CustomAbbreviationFields}{%  
12548   name={\glsxtrsconlyname},  
12549   sort={\the\glsshorttok},  
12550   first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%  
12551   firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%  
12552   text={\protect\glsabbrvsconlyfont{\the\glsshorttok}},%  
12553   plural={\protect\glsabbrvsconlyfont{\the\glsshortpltok}},%  
12554   description={\protect\glslongonlyfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
12555 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  
12556   \glshasattribute{\the\glslabeltok}{regular}-%  
12557   {%-  
12558     \glssetattribute{\the\glslabeltok}{regular}{false}-%  
12559   }%-  
12560   {}%-  
12561 }%-  
12562 {%-  
12563 {%-  
12564 \renewcommand*{\abbrvpluralsuffix}{\glsxtrsconlysuffix}%  
12565 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvsconlyfont{##1}}%  
12566 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvsconlyfont{##1}}%  
12567 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongonlyfont{##1}}%  
12568 \renewcommand*{\glslongfont}[1]{\glslongonlyfont{##1}}%
```

The first use full form doesn't show the short form.

```
12569 \renewcommand*{\glsxtrfullformat}[2]{%  
12570   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}-%  
12571   \ifglsxtrinsertinside\else##2\fi  
12572 }%-  
12573 \renewcommand*{\glsxtrfullplformat}[2]{%  
12574   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}-%  
12575   \ifglsxtrinsertinside\else##2\fi
```

```

12576 }%
12577 \renewcommand*{\Glsxtrfullformat}[2]{%
12578   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
12579   \ifglsxtrinsertinside\else##2\fi
12580 }%
12581 \renewcommand*{\Glsxtrfullplformat}[2]{%
12582   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
12583   \ifglsxtrinsertinside\else##2\fi
12584 }%

```

The inline full form does show the short form.

```

12585 \renewcommand*{\glsxtrinlinefullformat}[2]{%
12586   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
12587   \ifglsxtrinsertinside\else##2\fi
12588   \glsxtrfullsep{##1}%
12589   \glsxtrparen{\protect\glsfirstabbrvsonlyfont{\glsaccessshort{##1}}}%
12590 }%
12591 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
12592   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
12593   \ifglsxtrinsertinside\else##2\fi
12594   \glsxtrfullsep{##1}%
12595   \glsxtrparen{\protect\glsfirstabbrvsonlyfont{\glsaccessshortpl{##1}}}%
12596 }%
12597 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
12598   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
12599   \ifglsxtrinsertinside\else##2\fi
12600   \glsxtrfullsep{##1}%
12601   \glsxtrparen{\protect\glsfirstabbrvsonlyfont{\glsaccessshortpl{##1}}}%
12602 }%
12603 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
12604   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
12605   \ifglsxtrinsertinside\else##2\fi
12606   \glsxtrfullsep{##1}%
12607   \glsxtrparen{\protect\glsfirstabbrvsonlyfont{\Glsaccessshortpl{##1}}}%
12608 }%
12609 }

```

rsconlydescsort

```
12610 \newcommand*{\glsxtrsconlydescsort}{\glsxtronlydescsort}
```

rsconlydescname

```
12611 \newcommand*{\glsxtrsconlydescname}{\glsxtronlydescname}
```

rt-sc-only-desc

```
12612 \newabbreviationstyle{long-only-short-sc-only-desc}%
12613 {%
```

Set accessibility attributes if enabled.

```
12614 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
12615 \renewcommand*\CustomAbbreviationFields{%
12616   name={\glsxtrsonlydescname},
12617   sort={\glsxtrsonlydescsort},%
12618   first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
12619   firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
12620   text={\protect\glsabbrvsonlyfont{\the\glosshorttok}},%
12621   plural={\protect\glsabbrvsonlyfont{\the\glosshortpltok}}%
12622 }%
```

Unset the regular attribute if it has been set.

```
12623 \renewcommand*\GlsXtrPostNewAbbreviation{%
12624   \glshasattribute{\the\glslabeltok}{regular}%
12625   {%
12626     \glssetattribute{\the\glslabeltok}{regular}{false}%
12627   }%
12628   {}%
12629 }%
12630 }%
12631 {%
12632 \GlsXtrUseAbbrStyleFmts{long-only-short-sc-only}%
12633 }
```

1.8 Using Entries in Headings

There are four main problems with using entries in sectioning commands: they can mess with the first use flag if they end up in the table of contents, they can add unwanted numbers to the entry's location list, the label is corrupted if used inside `\MakeUppercase` (which is used by the default headings style) and they need to be expandable for PDF bookmarks. The `glossaries` package therefore recommends the use of the expandable commands, such as `\glsentryshort`, instead but this doesn't reflect the formatting since it doesn't include `\glsabbrvfont`. The commands below are an attempt to get around these problems.

The PDF bookmark issue can easily be fixed with `hyperref`'s `\texorpdfstring` which can simply use the expandable command in the PDF string case. The `TEX` string case can now use `\glsxtrshort` with the `noindex` key set, which prevents the unwanted additions to the location list, and the `hyper` key set to false, which prevents the problem of nested links. This just leaves one thing left that needs to be dealt with, and that's what to do if the heading style uses `\MakeUppercase`.

Note that `glossaries` automatically loads `textcase`, so the label can be protected from case change with `textcase`'s `\NoCaseChange`. This means that we don't have a problem provided the page style uses `\MakeTextUppercase`, but the default heading page style uses `\MakeUppercase`.

To get around this, save the original definition of `\markboth` and `\markright` and adjust it so that `\MakeUppercase` is temporarily redefined to `\MakeTextUppercase`. Some packages or classes redefine these commands, so we can't just assume they still have the original kernel definition.

\markright Save original definition:

```
12634 \let\@glsxtr@org@markright\markright
```

Redefine (grouping not added in case it interferes with the original code):

```
12635 \renewcommand*\{\markright}[1]{%
12636   \glsxtrmarkhook
12637   \@glsxtr@org@markright{\@glsxtrinmark#1\@glsxtrnotinmark}%
12638   \glsxtrrestoremarkhook
12639 }
```

\markboth Save original definition:

```
12640 \let\@glsxtr@org@markboth\markboth
```

Redefine (grouping not added in case it interferes with the original code):

```
12641 \renewcommand*\{\markboth}[2]{%
12642   \glsxtrmarkhook
12643   \@glsxtr@org@markboth
12644   {\@glsxtrinmark#1\@glsxtrnotinmark}%
12645   {\@glsxtrinmark#2\@glsxtrnotinmark}%
12646   \glsxtrrestoremarkhook
12647 }
```

Also do this for \@starttoc

\@starttoc Save original definition:

```
12648 \let\@glsxtr@org@starttoc\@starttoc
```

Redefine:

```
12649 \renewcommand*\{@starttoc}[1]{%
12650   \glsxtrmarkhook
12651   \@glsxtrinmark
12652   \@glsxtr@org@starttoc{#1}%
12653   \@glsxtrnotinmark
12654   \glsxtrrestoremarkhook
12655 }
```

If this causes a problem provide a simple way of switching back to the original definitions:

sxtrRevertMarks

```
12656 \newcommand*\{\glsxtrRevertMarks}{%
12657   \let\markright\@glsxtr@org@markright
12658   \let\markboth\@glsxtr@org@markboth
12659   \let\@starttoc\@glsxtr@org@starttoc
12660 }
```

rRevertTocMarks Just restores \@starttoc.

```
12661 \newcommand*\{\glsxtrRevertTocMarks}{%
12662   \let\@starttoc\@glsxtr@org@starttoc
12663 }
```

```

\glsxtrifinmark
12664 \newcommand*{\glsxtrifinmark}[2]{#2}

@\glsxtrinmark
12665 \newrobustcmd*{\@glsxtrinmark}{%
12666   \let\glsxtrifinmark\@firstoftwo
12667 }

glsxtrnotinmark
12668 \newrobustcmd*{\@glsxtrnotinmark}{%
12669   \let\glsxtrifinmark\@secondoftwo
12670 }

eorpdfforheading
12671 \ifdef\texorpdfstring
12672 {
12673   \newcommand*{\glsxtrtitleorpdfforheading}[3]{\texorpdfstring{#1}{#2}}
12674 }
12675 {
12676   \newcommand*{\glsxtrtitleorpdfforheading}[3]{#1}
12677 }

\glsxtrmarkhook Hook used in new definition of \markboth and \markright to make some changes to apply
to the marks:
12678 \newcommand*{\glsxtrmarkhook}{%  

  Save current definitions:  

12679   \let{@glsxtr@org@MakeUppercase\MakeUppercase
12680   \let{@glsxtr@org@glsxtrtitleorpdfforheading\glsxtrtitleorpdfforheading
12681   \let{@glsxtr@org@glsxtrtitleshort\glsxtrtitleshort
12682   \let{@glsxtr@org@glsxtrtitleshortpl\glsxtrtitleshortpl
12683   \let{@glsxtr@org@Glsxtrtitleshort\Glsxtrtitleshort
12684   \let{@glsxtr@org@Glsxtrtitleshortpl\Glsxtrtitleshortpl
12685   \let{@glsxtr@org@glsxtrtitlename\glsxtrtitlename
12686   \let{@glsxtr@org@Glsxtrtitlename\Glsxtrtitlename
12687   \let{@glsxtr@org@glsxtrtitletext\glsxtrtitletext
12688   \let{@glsxtr@org@Glsxtrtitletext\Glsxtrtitletext
12689   \let{@glsxtr@org@glsxtrtitleplural\glsxtrtitleplural
12690   \let{@glsxtr@org@Glsxtrtitleplural\Glsxtrtitleplural
12691   \let{@glsxtr@org@glsxtrtitlefirst\glsxtrtitlefirst
12692   \let{@glsxtr@org@Glsxtrtitlefirst\Glsxtrtitlefirst
12693   \let{@glsxtr@org@glsxtrtitlefirstplural\glsxtrtitlefirstplural
12694   \let{@glsxtr@org@Glsxtrtitlefirstplural\Glsxtrtitlefirstplural
12695   \let{@glsxtr@org@glsxtrtitlelong\glsxtrtitlelong
12696   \let{@glsxtr@org@glsxtrtitlelongpl\glsxtrtitlelongpl
12697   \let{@glsxtr@org@Glsxtrtitlelong\Glsxtrtitlelong
12698   \let{@glsxtr@org@Glsxtrtitlelongpl\Glsxtrtitlelongpl
12699   \let{@glsxtr@org@glsxtrtitlefull\glsxtrtitlefull
12700   \let{@glsxtr@org@glsxtrtitlefullpl\glsxtrtitlefullpl

```

```

12701 \let\@glsxtr@org@Glsxrttitlefull\Glsxrttitlefull
12702 \let\@glsxtr@org@Glsxrttitlefullpl\Glsxrttitlefullpl

```

New definitions

```

12703 \let\glsxtrifinmark\@firstoftwo
12704 \let\MakeUppercase\MakeTextUppercase
12705 \let\glsxrttitleorpdforheading\@thirdofthree
12706 \let\glsxrttitleshort\glsxtrheadshort
12707 \let\glsxrttitleshortpl\glsxtrheadshortpl
12708 \let\Glsxrttitleshort\Glsxtrheadshort
12709 \let\Glsxrttitleshortpl\Glsxtrheadshortpl
12710 \let\glsxrttitlename\glsxtrheadname
12711 \let\Glsxrttitlename\Glsxtrheadname
12712 \let\glsxrttitletext\glsxtrheadtext
12713 \let\Glsxrttitletext\Glsxtrheadtext
12714 \let\glsxrttitleplural\glsxtrheadplural
12715 \let\Glsxrttitleplural\Glsxtrheadplural
12716 \let\glsxrttitlefirst\glsxtrheadfirst
12717 \let\Glsxrttitlefirst\Glsxtrheadfirst
12718 \let\glsxrttitlefirstplural\glsxtrheadfirstplural
12719 \let\Glsxrttitlefirstplural\Glsxtrheadfirstplural
12720 \let\glsxrttitlelong\glsxtrheadlong
12721 \let\glsxrttitlelongpl\glsxtrheadlongpl
12722 \let\Glsxrttitlelong\Glsxtrheadlong
12723 \let\Glsxrttitlelongpl\Glsxtrheadlongpl
12724 \let\glsxrttitlefull\glsxtrheadfull
12725 \let\glsxrttitlefullpl\glsxtrheadfullpl
12726 \let\Glsxrttitlefull\Glsxtrheadfull
12727 \let\Glsxrttitlefullpl\Glsxtrheadfullpl
12728 }

```

`restoremarkhook` Hook used in new definition of `\markboth` and `\markright` to restore the modified definitions. (This is in case the original `\markboth` and `\markright` shouldn't be grouped for some reason. There already is some grouping within those original definitions, but some of the code lies outside that grouping, and possibly there's a reason for it.)

```

12729 \newcommand*\glsxtrrestoremarkhook{%
12730   \let\glsxtrifinmark\@secondoftwo
12731   \let\MakeUppercase\@glsxtr@org@MakeUppercase
12732   \let\glsxrttitleorpdforheading\@glsxtr@org@glsxrttitleorpdforheading
12733   \let\glsxrttitleshort\@glsxtr@org@glsxrttitleshort
12734   \let\glsxrttitleshortpl\@glsxtr@org@glsxrttitleshortpl
12735   \let\Glsxrttitleshort\@glsxtr@org@Glsxrttitleshort
12736   \let\Glsxrttitleshortpl\@glsxtr@org@Glsxrttitleshortpl
12737   \let\glsxrttitlename\@glsxtr@org@glsxrttitlename
12738   \let\Glsxrttitlename\@glsxtr@org@Glsxrttitlename
12739   \let\glsxrttitletext\@glsxtr@org@glsxrttitletext
12740   \let\Glsxrttitletext\@glsxtr@org@Glsxrttitletext
12741   \let\glsxrttitleplural\@glsxtr@org@glsxrttitleplural
12742   \let\Glsxrttitleplural\@glsxtr@org@Glsxrttitleplural

```

```

12743 \let\glsxtrtitlefirst\@glsxtr@org@glsxtrtitlefirst
12744 \let\Glsxtrtitlefirst\@glsxtr@org@Glsxtrtitlefirst
12745 \let\glsxtrtitlefirstplural\@glsxtr@org@glsxtrtitlefirstplural
12746 \let\Glsxtrtitlefirstplural\@glsxtr@org@Glsxtrtitlefirstplural
12747 \let\glsxtrtitlelong\@glsxtr@org@glsxtrtitlelong
12748 \let\glsxtrtitlelongpl\@glsxtr@org@glsxtrtitlelongpl
12749 \let\Glsxtrtitlelong\@glsxtr@org@Glsxtrtitlelong
12750 \let\Glsxtrtitlelongpl\@glsxtr@org@Glsxtrtitlelongpl
12751 \let\glsxtrtitlefull\@glsxtr@org@glsxtrtitlefull
12752 \let\glsxtrtitlefullpl\@glsxtr@org@glsxtrtitlefullpl
12753 \let\Glsxtrtitlefull\@glsxtr@org@Glsxtrtitlefull
12754 \let\Glsxtrtitlefullpl\@glsxtr@org@Glsxtrtitlefullpl
12755 }

```

Instead of using one document-wide conditional, use `headuc` attribute to determine whether or not to use the all upper case form.

`glsxtrheadshort` Command used to display short form in the page header.

```

12756 \newcommand*\glsxtrheadshort[1]{%
12757 \protect\NoCaseChange
12758 {%
12759   \glsifattribute{#1}{headuc}{true}{%
12760     {%
12761       \GLSxtrshort [noindex,hyper=false]{#1}[]%
12762     }%
12763     {%
12764       \glsxtrshort [noindex,hyper=false]{#1}[]%
12765     }%
12766   }%
12767 }

```

`lsxtrtitleshort` Command to display short form of abbreviation in section title and table of contents.

```

12768 \newrobustcmd*\glsxtrtitleshort[1]{%
12769   \glsxtrshort [noindex,hyper=false]{#1}[]%
12770 }

```

`sxtrheadshortpl` Command used to display plural short form in the page header. If you want the text converted to upper case, this needs to be redefined to use `\GLSxtrshortpl` instead. If you are using a `smallcaps` style, the default fonts don't provide italic smallcaps.

```

12771 \newcommand*\glsxtrheadshortpl[1]{%
12772 \protect\NoCaseChange
12773 {%
12774   \glsifattribute{#1}{headuc}{true}{%
12775     {%
12776       \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
12777     }%
12778     {%
12779       \glsxtrshortpl [noindex,hyper=false]{#1}[]%
12780     }%

```

```
12781 }%
12782 }
```

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents.

```
12783 \newrobustcmd*\{\glsxtrtitleshortpl\}[1]{%
12784   \glsxtrshortpl[noindex,hyper=false]{#1}[]%
12785 }
```

Glsxtrheadshort Command used to display short form in the page header with the first letter converted to upper case.

```
12786 \newcommand*\{\Glsxtrheadshort\}[1]{%
12787   \protect\NoCaseChange
12788 {%
12789   \glsifattribute{#1}{headuc}{true}%
12790   {%
12791     \GLSxtrshort[noindex,hyper=false]{#1}[]%
12792   }%
12793   {%
12794     \Glsxtrshort[noindex,hyper=false]{#1}[]%
12795   }%
12796 }%
12797 }
```

lsxtrtitleshort Command to display short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
12798 \newrobustcmd*\{\Glsxtrtitleshort\}[1]{%
12799   \Glsxtrshort[noindex,hyper=false]{#1}[]%
12800 }
```

LSxtrtitleshort Command to display short form of abbreviation in section title and table of contents in all upper case.

```
12801 \newrobustcmd*\{\GLSxtrtitleshort\}[1]{%
12802   \GLSxtrshort[noindex,hyper=false]{#1}[]%
12803 }
```

sxtrheadshortpl Command used to display plural short form in the page header with the first letter converted to upper case.

```
12804 \newcommand*\{\Glsxtrheadshortpl\}[1]{%
12805   \protect\NoCaseChange
12806 {%
12807   \glsifattribute{#1}{headuc}{true}%
12808   {%
12809     \GLSxtrshortpl[noindex,hyper=false]{#1}[]%
12810   }%
12811   {%
12812     \Glsxtrshortpl[noindex,hyper=false]{#1}[]%
12813   }%
12814 }%
12815 }
```

```

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents
with the first letter converted to upper case.
12816 \newrobustcmd*\{\Glsxtrtitleshortpl\}[1]{%
12817   \Glsxtrshortpl[noindex,hyper=false]{#1}[]%
12818 }

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents
in all upper case.
12819 \newrobustcmd*\{\GLSxtrtitleshortpl\}[1]{%
12820   \GLSxtrshortpl[noindex,hyper=false]{#1}[]%
12821 }

\glsxtrheadname As above but for the name value.
12822 \newcommand*\{\glsxtrheadname\}[1]{%
12823   \protect\NoCaseChange
12824   {%
12825     \glsifattribute{#1}{headuc}{true}%
12826     {%
12827       \GLSname[noindex,hyper=false]{#1}[]%
12828     }%
12829     {%
12830       \glsname[noindex,hyper=false]{#1}[]%
12831     }%
12832   }%
12833 }

glsxtrtitlename Command to display name value in section title and table of contents.
12834 \newrobustcmd*\{\glsxtrtitlename\}[1]{%
12835   \glsname[noindex,hyper=false]{#1}[]%
12836 }

\Glsxtrheadname First letter converted to upper case
12837 \newcommand*\{\Glsxtrheadname\}[1]{%
12838   \protect\NoCaseChange
12839   {%
12840     \glsifattribute{#1}{headuc}{true}%
12841     {%
12842       \GLSname[noindex,hyper=false]{#1}[]%
12843     }%
12844     {%
12845       \Glsname[noindex,hyper=false]{#1}[]%
12846     }%
12847   }%
12848 }

Glsxtrtitlename Command to display name value in section title and table of contents with the first letter
changed to upper case.
12849 \newrobustcmd*\{\Glsxtrtitlename\}[1]{%

```

```
12850 \Glsname [noindex,hyper=false]{#1}[]%  
12851 }
```

GLSxtrtitlename Command to display name value in section title and table of contents in all upper case.

```
12852 \newrobustcmd*\{\GLSxtrtitlename\}[1]{%  
12853 \GLSname [noindex,hyper=false]{#1}[]%  
12854 }
```

\glsxtrheadtext As above but for the text value.

```
12855 \newcommand*\{\glsxtrheadtext\}[1]{%  
12856 \protect\NoCaseChange  
12857 {  
12858 \glsifattribute{#1}{headuc}{true}{%  
12859 {  
12860 \GLStext [noindex,hyper=false]{#1}[]%  
12861 }%  
12862 {  
12863 \glstext [noindex,hyper=false]{#1}[]%  
12864 }%  
12865 }%  
12866 }
```

glsxtrtitletext Command to display text value in section title and table of contents.

```
12867 \newrobustcmd*\{\glsxtrtitletext\}[1]{%  
12868 \glstext [noindex,hyper=false]{#1}[]%  
12869 }
```

\Glsxtrheadtext First letter converted to upper case

```
12870 \newcommand*\{\Glsxtrheadtext\}[1]{%  
12871 \protect\NoCaseChange  
12872 {  
12873 \glsifattribute{#1}{headuc}{true}{%  
12874 {  
12875 \GLStext [noindex,hyper=false]{#1}[]%  
12876 }%  
12877 {  
12878 \Glstext [noindex,hyper=false]{#1}[]%  
12879 }%  
12880 }%  
12881 }
```

Glsxtrtitletext Command to display text value in section title and table of contents with the first letter changed to upper case.

```
12882 \newrobustcmd*\{\Glsxtrtitletext\}[1]{%  
12883 \Glstext [noindex,hyper=false]{#1}[]%  
12884 }
```

GLSxtrtitletext Command to display text value in section title and table of contents in all upper case.

```
12885 \newrobustcmd*\{\GLSxrttitletext\}[1]{%
12886   \GLStext[noindex,hyper=false]{#1}[]%
12887 }
```

`lsxtrheadplural` As above but for the plural value.

```
12888 \newcommand*\{\glsxtrheadplural\}[1]{%
12889   \protect\NoCaseChange
12890 {%
12891   \glsifattribute{#1}{headuc}{true}{%
12892     {%
12893       \GLSplural[noindex,hyper=false]{#1}[]%
12894     }%
12895     {%
12896       \glsplural[noindex,hyper=false]{#1}[]%
12897     }%
12898   }%
12899 }
```

`sxtrtitleplural` Command to display plural value in section title and table of contents.

```
12900 \newrobustcmd*\{\glsxtrtitleplural\}[1]{%
12901   \glsplural[noindex,hyper=false]{#1}[]%
12902 }
```

`lsxtrheadplural` Convert first letter to upper case.

```
12903 \newcommand*\{\Glsxtrheadplural\}[1]{%
12904   \protect\NoCaseChange
12905 {%
12906   \glsifattribute{#1}{headuc}{true}{%
12907     {%
12908       \GLSplural[noindex,hyper=false]{#1}[]%
12909     }%
12910     {%
12911       \Glsplural[noindex,hyper=false]{#1}[]%
12912     }%
12913   }%
12914 }
```

`sxtrtitleplural` Command to display plural value in section title and table of contents with the first letter changed to upper case.

```
12915 \newrobustcmd*\{\Glsxtrtitleplural\}[1]{%
12916   \Glsplural[noindex,hyper=false]{#1}[]%
12917 }
```

`Sxtrtitleplural` Command to display plural value in section title and table of contents in all upper case.

```
12918 \newrobustcmd*\{\GLSxrttitleplural\}[1]{%
12919   \GLSplural[noindex,hyper=false]{#1}[]%
12920 }
```

`glsxtrheadfirst` As above but for the first value.

```
12921 \newcommand*{\glsxtrheadfirst}[1]{%
12922   \protect\NoCaseChange
12923   {%
12924     \glsifattribute{#1}{headuc}{true}{%
12925       {%
12926         \GLSfirst[noindex,hyper=false]{#1}[]%
12927       }%
12928     {%
12929       \glsfirst[noindex,hyper=false]{#1}[]%
12930     }%
12931   }%
12932 }
```

`lsxrttitlefirst` Command to display first value in section title and table of contents.

```
12933 \newrobustcmd*{\glsxrttitlefirst}[1]{%
12934   \glsfirst[noindex,hyper=false]{#1}[]%
12935 }
```

`Glsxtrheadfirst` First letter converted to upper case

```
12936 \newcommand*{\Glsxtrheadfirst}[1]{%
12937   \protect\NoCaseChange
12938   {%
12939     \glsifattribute{#1}{headuc}{true}{%
12940       {%
12941         \GLSfirst[noindex,hyper=false]{#1}[]%
12942       }%
12943     {%
12944       \Glsfirst[noindex,hyper=false]{#1}[]%
12945     }%
12946   }%
12947 }
```

`lsxrttitlefirst` Command to display first value in section title and table of contents with the first letter changed to upper case.

```
12948 \newrobustcmd*{\Glsxrttitlefirst}[1]{%
12949   \Glsfirst[noindex,hyper=false]{#1}[]%
12950 }
```

`LSxrttitlefirst` Command to display first value in section title and table of contents in all upper case.

```
12951 \newrobustcmd*{\GLSxrttitlefirst}[1]{%
12952   \GLSfirst[noindex,hyper=false]{#1}[]%
12953 }
```

`headfirstplural` As above but for the `firstplural` value.

```
12954 \newcommand*{\glsxtrheadfirstplural}[1]{%
12955   \protect\NoCaseChange
12956   {%
```

```

12957 \glsifattribute{#1}{headuc}{true}%
12958 {%
12959   \GLSfirstplural[noindex,hyper=false]{#1}[]%
12960 }%
12961 {%
12962   \glsfirstplural[noindex,hyper=false]{#1}[]%
12963 }%
12964 }%
12965 }

```

`titlefirstplural` Command to display `firstplural` value in section title and table of contents.

```

12966 \newrobustcmd*\{\glsxtrtitlefirstplural\}[1]{%
12967   \glsfirstplural[noindex,hyper=false]{#1}[]%
12968 }

```

`headfirstplural` First letter converted to upper case

```

12969 \newcommand*\{\Glsxtrheadfirstplural\}[1]{%
12970   \protect\NoCaseChange
12971 {%
12972   \glsifattribute{#1}{headuc}{true}%
12973 }%
12974   \GLSfirstplural[noindex,hyper=false]{#1}[]%
12975 }%
12976 {%
12977   \Glsfirstplural[noindex,hyper=false]{#1}[]%
12978 }%
12979 }%
12980 }

```

`titlefirstplural` Command to display `first` value in section title and table of contents with the first letter changed to upper case.

```

12981 \newrobustcmd*\{\Glsxtrtitlefirstplural\}[1]{%
12982   \Glsfirstplural[noindex,hyper=false]{#1}[]%
12983 }

```

`titlefirstplural` Command to display `first` value in section title and table of contents in all upper case.

```

12984 \newrobustcmd*\{\GLSxtrtitlefirstplural\}[1]{%
12985   \GLSfirstplural[noindex,hyper=false]{#1}[]%
12986 }

```

`\glsxtrheadlong` Command used to display long form in the page header.

```

12987 \newcommand*\{\glsxtrheadlong\}[1]{%
12988   \protect\NoCaseChange
12989 {%
12990   \glsifattribute{#1}{headuc}{true}%
12991 }%
12992   \GLSxtrlong[noindex,hyper=false]{#1}[]%
12993 }%

```

```
12994 {%
12995   \glsxtrlong[noindex,hyper=false]{#1}[]%
12996 }%
12997 }%
12998 }
```

`glsxtrtitlelong` Command to display long form of abbreviation in section title and table of contents.

```
12999 \newrobustcmd*{\glsxtrtitlelong}[1]{%
13000   \glsxtrlong[noindex,hyper=false]{#1}[]%
13001 }
```

`lsxtrheadlongpl` Command used to display plural long form in the page header. If you want the text converted to upper case, this needs to be redefined to use `\GLSxtrlongpl` instead. If you are using a `smallcaps` style, the default fonts don't provide italic `smallcaps`.

```
13002 \newcommand*{\glsxtrheadlongpl}[1]{%
13003   \protect\NoCaseChange
13004 {%
13005   \glsifattribute{#1}{headuc}{true}%
13006   {%
13007     \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
13008   }%
13009   {%
13010     \glsxtrlongpl[noindex,hyper=false]{#1}[]%
13011   }%
13012 }%
13013 }
```

`sxtrtitlelongpl` Command to display plural long form of abbreviation in section title and table of contents.

```
13014 \newrobustcmd*{\glsxtrtitlelongpl}[1]{%
13015   \glsxtrlongpl[noindex,hyper=false]{#1}[]%
13016 }
```

`\Glsxtrheadlong` Command used to display long form in the page header with the first letter converted to upper case.

```
13017 \newcommand*{\Glsxtrheadlong}[1]{%
13018   \protect\NoCaseChange
13019 {%
13020   \glsifattribute{#1}{headuc}{true}%
13021   {%
13022     \GLSxtrlong[noindex,hyper=false]{#1}[]%
13023   }%
13024   {%
13025     \Glsxtrlong[noindex,hyper=false]{#1}[]%
13026   }%
13027 }%
13028 }
```

`Glsxtrtitlelong` Command to display long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
13029 \newrobustcmd*\{\Glsxtrtitlelong\}[1]{%
13030   \Glsxtrlong[noindex,hyper=false]{#1}[]%
13031 }
```

`Glsxtrtitlelong` Command to display long form of abbreviation in section title and table of contents in all upper case.

```
13032 \newrobustcmd*\{\GLSxtrtitlelong\}[1]{%
13033   \GLSxtrlong[noindex,hyper=false]{#1}[]%
13034 }
```

`lsxtrheadlongpl` Command used to display plural long form in the page header with the first letter converted to upper case.

```
13035 \newcommand*\{\Glsxtrheadlongpl\}[1]{%
13036   \protect\NoCaseChange
13037 {%
13038   \glsifattribute{#1}{headuc}{true}%
13039   {%
13040     \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
13041   }%
13042   {%
13043     \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
13044   }%
13045 }%
13046 }
```

`sxttitlelongpl` Command to display plural long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
13047 \newrobustcmd*\{\Glsxtrtitlelongpl\}[1]{%
13048   \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
13049 }
```

`Sxtrtitlelongpl` Command to display plural long form of abbreviation in section title and table of contents in all upper case.

```
13050 \newrobustcmd*\{\GLSxtrtitlelongpl\}[1]{%
13051   \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
13052 }
```

`\glsxtrheadfull` Command used to display full form in the page header.

```
13053 \newcommand*\{\glsxtrheadfull\}[1]{%
13054   \protect\NoCaseChange
13055 {%
13056   \glsifattribute{#1}{headuc}{true}%
13057   {%
13058     \GLSxtrfull[noindex,hyper=false]{#1}[]%
13059   }%
13060   {%
13061     \glsxtrfull[noindex,hyper=false]{#1}[]%
13062   }%
```

```
13063 }%
13064 }
```

`glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents.

```
13065 \newrobustcmd*\{\glsxtrtitlefull\}[1]{%
13066   \glsxtrfull[noindex,hyper=false]{#1}[]%
13067 }
```

`lsxtrheadfullpl` Command used to display plural full form in the page header. If you want the text converted to upper case, this needs to be redefined to use `\GLSxtrfullpl` instead. If you are using a `smallcaps` style, the default fonts don't provide italic smallcaps.

```
13068 \newcommand*\{\glsxtrheadfullpl\}[1]{%
13069   \protect\NoCaseChange
13070   {%
13071     \glsifattribute{#1}{headuc}{true}%
13072     {%
13073       \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
13074     }%
13075     {%
13076       \glsxtrfullpl[noindex,hyper=false]{#1}[]%
13077     }%
13078   }%
13079 }
```

`sxttitlefullpl` Command to display plural full form of abbreviation in section title and table of contents.

```
13080 \newrobustcmd*\{\glsxtrtitlefullpl\}[1]{%
13081   \glsxtrfullpl[noindex,hyper=false]{#1}[]%
13082 }
```

`\Glsxtrheadfull` Command used to display full form in the page header with the first letter converted to upper case.

```
13083 \newcommand*\{\Glsxtrheadfull\}[1]{%
13084   \protect\NoCaseChange
13085   {%
13086     \glsifattribute{#1}{headuc}{true}%
13087     {%
13088       \GLSxtrfull[noindex,hyper=false]{#1}[]%
13089     }%
13090     {%
13091       \Glsxtrfull[noindex,hyper=false]{#1}[]%
13092     }%
13093   }%
13094 }
```

`Glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
13095 \newrobustcmd*\{\Glsxtrtitlefull\}[1]{%
13096   \Glsxtrfull[noindex,hyper=false]{#1}[]%
13097 }
```

`GLSxtrtitlefull` Command to display full form of abbreviation in section title and table of contents in all upper case.

```
13098 \newrobustcmd*\{\GLSxtrtitlefull\}[1]{%
13099   \GLSxtrfull[noindex,hyper=false]{#1}[]%
13100 }
```

`lsxtrheadfullpl` Command used to display plural full form in the page header with the first letter converted to upper case.

```
13101 \newcommand*\{\Glsxtrheadfullpl\}[1]{%
13102   \protect\NoCaseChange
13103   {%
13104     \glsifattribute{#1}{headuc}{true}%
13105     {%
13106       \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
13107     }%
13108     {%
13109       \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
13110     }%
13111   }%
13112 }
```

`sxttitlefullpl` Command to display plural full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
13113 \newrobustcmd*\{\Glsxtrtitlefullpl\}[1]{%
13114   \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
13115 }
```

`Sxtrtitlefullpl` Command to display plural full form of abbreviation in section title and table of contents in all upper case.

```
13116 \newrobustcmd*\{\GLSxtrtitlefullpl\}[1]{%
13117   \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
13118 }
```

`\glsfmtshort` Provide a way of using the formatted short form in section headings. If hyperref has been loaded, use `\texorpdfstring` for convenience in PDF bookmarks.

```
13119 \ifdef\texorpdfstring
13120 {
13121   \newcommand*\{\glsfmtshort\}[1]{%
13122     \texorpdfstring
13123     {\glsxtrtitleshort{#1}}%
13124     {\glsentryshort{#1}}%
13125   }
13126 }
13127 {
13128   \newcommand*\{\glsfmtshort\}[1]{%
13129     \glsxtrtitleshort{#1}%
13130 }
```

Similarly for the plural version.

```
\glsfmtshortpl
13131 \ifdef\textorpdfstring
13132 {
13133   \newcommand*\glsfmtshortpl[1]{%
13134     \textorpdfstring
13135     {\glsxtrtitleshortpl{\#1}}%
13136     {\glsentryshortpl{\#1}}%
13137   }
13138 }
13139 {
13140   \newcommand*\glsfmtshortpl[1]{%
13141     \glsxtrtitleshortpl{\#1}%
13142 }
```

The case-changing version isn't suitable for PDF bookmarks, so the PDF alternative uses the non-case-changing version.

\Glsfmtshort Singular form (first letter uppercase).

```
13143 \ifdef\textorpdfstring
13144 {
13145   \newcommand*\Glsfmtshort[1]{%
13146     \textorpdfstring
13147     {\Glsxtrtitleshort{\#1}}%
13148     {\glsentryshort{\#1}}%
13149   }
13150 }
13151 {
13152   \newcommand*\Glsfmtshort[1]{%
13153     \Glsxtrtitleshort{\#1}%
13154 }
```

\Glsfmtshortpl Plural form (first letter uppercase).

```
13155 \ifdef\textorpdfstring
13156 {
13157   \newcommand*\Glsfmtshortpl[1]{%
13158     \textorpdfstring
13159     {\Glsxtrtitleshortpl{\#1}}%
13160     {\glsentryshortpl{\#1}}%
13161   }
13162 }
13163 {
13164   \newcommand*\Glsfmtshortpl[1]{%
13165     \Glsxtrtitleshortpl{\#1}%
13166 }
```

\glsfmtname As above but for the name value.

```
13167 \ifdef\textorpdfstring
```

```

13168 {
13169   \newcommand*{\glsfmtname}[1]{%
13170     \texorpdfstring
13171       {\glsxtrtitlename{#1}}%
13172       {\glsentryname{#1}}%
13173   }
13174 }
13175 {
13176   \newcommand*{\glsfmtname}[1]{%
13177     \glsxtrtitlename{#1}}
13178 }

```

\Glsfmtname First letter converted to upper case.

```

13179 \ifdef\texorpdfstring
13180 {
13181   \newcommand*{\Glsfmtname}[1]{%
13182     \texorpdfstring
13183       {\Glsxtrtitlename{#1}}%
13184       {\glsentryname{#1}}%
13185   }
13186 }
13187 {
13188   \newcommand*{\Glsfmtname}[1]{%
13189     \Glsxtrtitlename{#1}}
13190 }

```

\GLSfmtname All upper case.

```

13191 \ifdef\texorpdfstring
13192 {
13193   \newcommand*{\GLSfmtname}[1]{%
13194     \texorpdfstring
13195       {\GLSxtrtitlename{#1}}%
13196       {\glsentryname{#1}}%
13197   }
13198 }
13199 {
13200   \newcommand*{\GLSfmtname}[1]{%
13201     \GLSxtrtitlename{#1}}
13202 }

```

\glsfmttext As above but for the text value.

```

13203 \ifdef\texorpdfstring
13204 {
13205   \newcommand*{\glsfmttext}[1]{%
13206     \texorpdfstring
13207       {\glsxtrtitletext{#1}}%
13208       {\glsentrytext{#1}}%
13209   }
13210 }

```

```
13211 {  
13212   \newcommand*{\glsfmttext}[1]{%  
13213     \glsxtrtitletext{#1}}  
13214 }
```

\Glsfmttext First letter converted to upper case.

```
13215 \ifdef\textorpdfstring  
13216 {  
13217   \newcommand*{\Glsfmttext}[1]{%  
13218     \textorpdfstring  
13219       {\glsxtrtitletext{#1}}%  
13220       {\glsentrytext{#1}}%  
13221 }  
13222 }  
13223 {  
13224   \newcommand*{\Glsfmttext}[1]{%  
13225     \Glsxtrtitletext{#1}}  
13226 }
```

\GLSfmttext All upper case.

```
13227 \ifdef\textorpdfstring  
13228 {  
13229   \newcommand*{\GLSfmttext}[1]{%  
13230     \textorpdfstring  
13231       {\GLSxtrtitletext{#1}}%  
13232       {\glsentrytext{#1}}%  
13233 }  
13234 }  
13235 {  
13236   \newcommand*{\GLSfmttext}[1]{%  
13237     \GLSxtrtitletext{#1}}  
13238 }
```

\glsfmtplural As above but for the plural value.

```
13239 \ifdef\textorpdfstring  
13240 {  
13241   \newcommand*{\glsfmtplural}[1]{%  
13242     \textorpdfstring  
13243       {\glsxtrtitleplural{#1}}%  
13244       {\glsentryplural{#1}}%  
13245 }  
13246 }  
13247 {  
13248   \newcommand*{\glsfmtplural}[1]{%  
13249     \glsxtrtitleplural{#1}}  
13250 }
```

\Glsfmtplural First letter converted to upper case.

```
13251 \ifdef\textorpdfstring
```

```

13252 {
13253   \newcommand*{\Glsfmtplural}[1]{%
13254     \texorpdfstring
13255       {\Glsxrttitleplural{\#1}}%
13256       {\glsentryplural{\#1}}%
13257   }
13258 }
13259 {
13260   \newcommand*{\Glsfmtplural}[1]{%
13261     \Glsxrttitleplural{\#1}}
13262 }
```

\GLSfmtplural All upper case.

```

13263 \ifdef\texorpdfstring
13264 {
13265   \newcommand*{\GLSfmtplural}[1]{%
13266     \texorpdfstring
13267       {\GLSxrttitleplural{\#1}}%
13268       {\glsentryplural{\#1}}%
13269   }
13270 }
13271 {
13272   \newcommand*{\GLSfmtplural}[1]{%
13273     \GLSxrttitleplural{\#1}}
13274 }
```

\glsfmtfirst As above but for the first value.

```

13275 \ifdef\texorpdfstring
13276 {
13277   \newcommand*{\glsfmtfirst}[1]{%
13278     \texorpdfstring
13279       {\glsxrttitlefirst{\#1}}%
13280       {\glsentryfirst{\#1}}%
13281   }
13282 }
13283 {
13284   \newcommand*{\glsfmtfirst}[1]{%
13285     \glsxrttitlefirst{\#1}}
13286 }
```

\Glsfmtfirst First letter converted to upper case.

```

13287 \ifdef\texorpdfstring
13288 {
13289   \newcommand*{\Glsfmtfirst}[1]{%
13290     \texorpdfstring
13291       {\Glsxrttitlefirst{\#1}}%
13292       {\glsentryfirst{\#1}}%
13293   }
13294 }
```

```
13295 {
13296   \newcommand*{\Glsfmtfirst}[1]{%
13297     \Glsxrttitlefirst{#1}%
13298 }
```

\GLSfmtfirst All upper case.

```
13299 \ifdef\textorpdfstring
13300 {
13301   \newcommand*{\GLSfmtfirst}[1]{%
13302     \textorpdfstring
13303       {\GLSxrttitlefirst{#1}}%
13304       {\glsentryfirst{#1}}%
13305   }
13306 }
13307 {
13308   \newcommand*{\GLSfmtfirst}[1]{%
13309     \Glsxrttitlefirst{#1}%
13310 }
```

\glsfmtfirstpl As above but for the firstplural value.

```
13311 \ifdef\textorpdfstring
13312 {
13313   \newcommand*{\glsfmtfirstpl}[1]{%
13314     \textorpdfstring
13315       {\glsxrttitlefirstplural{#1}}%
13316       {\glsentryfirstplural{#1}}%
13317   }
13318 }
13319 {
13320   \newcommand*{\glsfmtfirstpl}[1]{%
13321     \glsxrttitlefirstplural{#1}%
13322 }
```

\Glsfmtfirstpl First letter converted to upper case.

```
13323 \ifdef\textorpdfstring
13324 {
13325   \newcommand*{\Glsfmtfirstpl}[1]{%
13326     \textorpdfstring
13327       {\Glsxrttitlefirstplural{#1}}%
13328       {\glsentryfirstplural{#1}}%
13329   }
13330 }
13331 {
13332   \newcommand*{\Glsfmtfirstpl}[1]{%
13333     \Glsxrttitlefirstplural{#1}%
13334 }
```

\GLSfmtfirstpl All upper case.

```
13335 \ifdef\textorpdfstring
```

```

13336 {
13337   \newcommand*{\GLSfmtfirstpl}[1]{%
13338     \texorpdfstring
13339       {\GLSxtrtitlefirstplural{#1}}%
13340       {\glsentryfirstplural{#1}}%
13341   }
13342 }
13343 {
13344   \newcommand*{\GLSfmtfirstpl}[1]{%
13345     \GLSxtrtitlefirstplural{#1}%
13346 }

```

\glsfmtlong As above but for the long value.

```

13347 \ifdef\texorpdfstring
13348 {
13349   \newcommand*{\glsfmtlong}[1]{%
13350     \texorpdfstring
13351       {\glsxtrtitlelong{#1}}%
13352       {\glsentrylong{#1}}%
13353   }
13354 }
13355 {
13356   \newcommand*{\glsfmtlong}[1]{%
13357     \glsxtrtitlelong{#1}%
13358 }

```

\Glsfmtlong First letter converted to upper case.

```

13359 \ifdef\texorpdfstring
13360 {
13361   \newcommand*{\Glsfmtlong}[1]{%
13362     \texorpdfstring
13363       {\Glsxtrtitlelong{#1}}%
13364       {\glsentrylong{#1}}%
13365   }
13366 }
13367 {
13368   \newcommand*{\Glsfmtlong}[1]{%
13369     \Glsxtrtitlelong{#1}%
13370 }

```

\GLSfmtlong All upper case.

```

13371 \ifdef\texorpdfstring
13372 {
13373   \newcommand*{\GLSfmtlong}[1]{%
13374     \texorpdfstring
13375       {\GLSxtrtitlelong{#1}}%
13376       {\glsentrylong{#1}}%
13377   }
13378 }

```

```
13379 {
1380   \newcommand*{\GLSfmtlong}[1]{%
1381     \GLSxtrtitlelong{#1}}
1382 }
```

\glsfmtlongpl As above but for the longplural value.

```
13383 \ifdef\textorpdfstring
13384 {
13385   \newcommand*{\glsfmtlongpl}[1]{%
13386     \textorpdfstring
13387       {\glsxtrtitlelongpl{#1}}%
13388       {\glsentrylongpl{#1}}%
13389   }
13390 }
13391 {
13392   \newcommand*{\glsfmtlongpl}[1]{%
13393     \glsxtrtitlelongpl{#1}}
13394 }
```

\Glsfmtlongpl First letter converted to upper case.

```
13395 \ifdef\textorpdfstring
13396 {
13397   \newcommand*{\Glsfmtlongpl}[1]{%
13398     \textorpdfstring
13399       {\Glsxtrtitlelongpl{#1}}%
13400       {\glsentrylongpl{#1}}%
13401   }
13402 }
13403 {
13404   \newcommand*{\Glsfmtlongpl}[1]{%
13405     \Glsxtrtitlelongpl{#1}}
13406 }
```

\GLSfmtlongpl All upper case.

```
13407 \ifdef\textorpdfstring
13408 {
13409   \newcommand*{\GLSfmtlongpl}[1]{%
13410     \textorpdfstring
13411       {\GLSxtrtitlelongpl{#1}}%
13412       {\glsentrylongpl{#1}}%
13413   }
13414 }
13415 {
13416   \newcommand*{\GLSfmtlongpl}[1]{%
13417     \GLSxtrtitlelongpl{#1}}
13418 }
```

\glspdfmtfull Can't use \glsxtrinlinefullformat in PDF bookmarks as it's not fully expandable. This command is for the PDF part of \textorpdfstring for the full form.

```
13419 \newcommand*{\glspdffmtfull}[1]{\glsentrylong{\#1} (\glsentryshort{\#1})}%
\glspdffmtfullpl Likewise for plural.
```

```
13420 \newcommand*{\glspdffmtfullpl}[1]{\glsentrylongpl{\#1} (\glsentryshortpl{\#1})}%
```

\glsfmtfull In-line full format.

```
13421 \ifdef\texorpdfstring
13422 {
13423   \newcommand*{\glsfmtfull}[1]{%
13424     \texorpdfstring
13425     {\glsxtrtitlefull{\#1}}%
13426     {\glspdffmtfull{\#1}}%
13427   }
13428 }
13429 {
13430   \newcommand*{\glsfmtfull}[1]{%
13431     \glsxtrtitlefull{\#1}}
13432 }
```

\Glsfmtfull First letter converted to upper case.

```
13433 \ifdef\texorpdfstring
13434 {
13435   \newcommand*{\Glsfmtfull}[1]{%
13436     \texorpdfstring
13437     {\Glsxtrtitlefull{\#1}}%
13438     {\glspdffmtfull{\#1}{}}%
13439   }
13440 }
13441 {
13442   \newcommand*{\Glsfmtfull}[1]{%
13443     \Glsxtrtitlefull{\#1}}
13444 }
```

\GLSfmtfull All upper case.

```
13445 \ifdef\texorpdfstring
13446 {
13447   \newcommand*{\GLSfmtfull}[1]{%
13448     \texorpdfstring
13449     {\GLSxtrtitlefull{\#1}}%
13450     {\glspdffmtfull{\#1}}%
13451   }
13452 }
13453 {
13454   \newcommand*{\GLSfmtfull}[1]{%
13455     \GLSxtrtitlefull{\#1}}
13456 }
```

\glsfmtfullpl In-line full plural format.

```

13457 \ifdef\textorpdfstring
13458 {
13459   \newcommand*{\glsfmtfullpl}[1]{%
13460     \textorpdfstring
13461     {\glsxtrtitlefullpl{\#1}}%
13462     {\glspdffmtfullpl{\#1}}%
13463   }
13464 }
13465 {
13466   \newcommand*{\glsfmtfullpl}[1]{%
13467     \glsxtrtitlefullpl{\#1}%
13468 }

```

\Glsfmtfullpl First letter converted to upper case.

```

13469 \ifdef\textorpdfstring
13470 {
13471   \newcommand*{\Glsfmtfullpl}[1]{%
13472     \textorpdfstring
13473     {\Glsxtrtitlefullpl{\#1}}%
13474     {\glspdffmtfullpl{\#1}{}}%
13475   }
13476 }
13477 {
13478   \newcommand*{\Glsfmtfullpl}[1]{%
13479     \Glsxtrtitlefullpl{\#1}%
13480 }

```

\GLSfmtfullpl All upper case.

```

13481 \ifdef\textorpdfstring
13482 {
13483   \newcommand*{\GLSfmtfullpl}[1]{%
13484     \textorpdfstring
13485     {\GLSxtrtitlefullpl{\#1}}%
13486     {\glspdffmtfullpl{\#1}{}}%
13487   }
13488 }
13489 {
13490   \newcommand*{\GLSfmtfullpl}[1]{%
13491     \GLSxtrtitlefullpl{\#1}%
13492 }

```

1.9 Multi (Combined/Compound) Entries

(I'd rather call these combined or compound entries but \cgl is already taken.)

New to version 1.48, the commands here provide a way of referencing multiple entries as a single unit. For example, biological organisms are often referred to by their genus and species, such as *Clostridium botulinum* and *Clostridium perfringens* (where the genus is Clostridium).

The genus is often abbreviated after first use, regardless of which species in the genus is being referenced. For example, “*Clostridium botulinum* and *C. perfringens*”. This can’t be supported by any abbreviation styles unless the genus and species names are defined separately. For example:

```
\setabbreviationstyle{long-only-short-only}
\newabbreviation{clostridium}{C.}{Clostridium}
\newglossaryentry{botulinum}{name={botulinum},description={}}
\newglossaryentry{perfringens}{name={perfringens},description={}}
```

This means that the entries then need to be referenced using a rather cumbersome method:

```
\gls{clostridium} \gls{botulinum} and \gls{clostridum}
\gls{perfringens}
```

This section provides a command that will provide a way of defining a label that represents a combination of entries (which must all be first defined). For example:

```
\multiglossaryentry{cbot}{clostridium,botulinum}
```

This label can then be referenced using `\mgls`, which internally uses `\gls` for each component. The last component in the list is considered the “main” component (not to be confused with the main glossary). If this isn’t the case, the label of the main component should be added in the optional argument before the label list. Note that the multi-label (cbot in this case) can’t be referenced using commands like `\gls`.

First define the general set of options that should be applied to all multi-entries. These can be set with:

```
ssaryentrysetup
13493 \newcommand*{\multiglossaryentrysetup}[1]{\setkeys{glsxtrcombined}{#1}}
combined@indexmain Numeric value: 0=false (don't index main component), 1=true (always index main component), 2=first (only index main component on first use). Default: 1 (true);
13494 \@gls@combined@indexmain{1}
13495 \define@choicekey{glsxtrcombined}{indexmain}%
13496 [\@gls@combined@indexmain@val\@gls@combined@indexmain]
13497 {false,true,first}[true]{}

ned@indexothers Numeric value: 0=false (don't index other components), 1=true (always index other components), 2=first (only index other components on first use). Default: 2 (first);
13498 \@gls@combined@indexothers{2}
13499 \define@choicekey{glsxtrcombined}{indexothers}%
13500 [\@gls@combined@indexothers@val\@gls@combined@indexothers]
13501 {false,true,first}[true]{}

combined@hyper Numeric value: 0=none (\mgls doesn't create a hyperlink), 1=allmain (all content hyperlinks to the main component), 2=mainonly (only the main component has a hyperlink), 3=individual (each component has a hyperlink to their own target). Default: 3.
```

```

13502 \newcommand*{\@gls@combined@hyper}{3}
13503 \define@choicekey{glsxtrcombined}{hyper}%
13504 [\@gls@combined@hyper@val\@gls@combined@hyper]
13505 {none,allmain,mainonly,individual,otheronly,notmainfirst,nototherfirst,notfirst}{}}

bined@encapmain Location encapsulation value for main component (corresponding to format key in \gls).
13506 \newcommand*{\@gls@combined@encapmain}{glsnumberformat}
13507 \define@key{glsxtrcombined}{encapmain}%
13508 \renewcommand*{\@gls@combined@encapmain}{#1}%
13509 }

ned@encapothers Location encapsulation value for other components (corresponding to format key in \gls).
13510 \newcommand*{\@gls@combined@encapothers}{glsnumberformat}
13511 \define@key{glsxtrcombined}{encapothers}%
13512 \renewcommand*{\@gls@combined@encapothers}{#1}%
13513 }

ined@textformat Encapsulate entire content with the command identified by the given control sequence name.
13514 \newcommand*{\@gls@combined@textformat}{@firstofone}
13515 \define@key{glsxtrcombined}{textformat}%
13516 \renewcommand*{\@gls@combined@textformat}{#1}%
13517 }

mbined@category Assign a category to the combined set.
13518 \newcommand*{\@gls@combined@category}{}%
13519 \define@key{glsxtrcombined}{category}%
13520 \renewcommand*{\@gls@combined@category}{#1}%
13521 }

    Pre-options family:
13522 \define@key{glsxtrcombinedpreopts}{category}%
13523 \renewcommand*{\@gls@combined@category}{#1}%
13524 }

mbined@mglsopts Default options to pass to \mgl.
13525 \newcommand*{\@gls@combined@mglsopts}{}%
13526 \define@key{glsxtrcombined}{mglsopts}%
13527 \renewcommand*{\@gls@combined@mglsopts}{#1}%
13528 }
13529 \define@key{glsxtrcombinedpreopts}{mglsopts}%
13530 \@gls@combined@mglsopts@do
13531 {%
13532 \renewcommand*{\@gls@combined@mglsopts}{#1}%
13533 }%
13534 }

ned@mglsopts@do
13535 \newcommand*{\@gls@combined@mglsopts@do}[1]{#1}

```

```

isable@mglsopts
13536 \newcommand*{\mglsopts@disable}{%
13537   \let\@gls@combined@mglsopts@do\@gls@combined@mglsopts@do@not
13538 }

enable@mglsopts
13539 \newcommand*{\mglsopts@Enable}{%
13540   \let\@gls@combined@mglsopts@do\@firstofone
13541 }

ned@mglsopts@do
13542 \newcommand*{\@gls@combined@mglsopts@do@not}[1]{%
13543   \PackageError{glossaries-extra}{`mglsopts' key not permitted inside
13544   `setup' value}{}%
13545 }

ned@firstprefix Prefix for multi-entry first use.
13546 \newcommand*{\@gls@combined@firstprefix}{}%
13547 \define@key{glsxtrcombined}{firstprefix}{%
13548   \renewcommand*{\@gls@combined@firstprefix}{#1}%
13549 }

ined@usedprefix Prefix for multi-entry subsequent first use.
13550 \newcommand*{\@gls@combined@usedprefix}{}%
13551 \define@key{glsxtrcombined}{usedprefix}{%
13552   \renewcommand*{\@gls@combined@usedprefix}{#1}%
13553 }

ned@firstsuffix Suffix for multi-entry first use.
13554 \newcommand*{\@gls@combined@firstsuffix}{}%
13555 \define@key{glsxtrcombined}{firstsuffix}{%
13556   \renewcommand*{\@gls@combined@firstsuffix}{#1}%
13557 }

ined@usedsuffix Suffix for multi-entry subsequent first use.
13558 \newcommand*{\@gls@combined@usedsuffix}{}%
13559 \define@key{glsxtrcombined}{usedsuffix}{%
13560   \renewcommand*{\@gls@combined@usedsuffix}{#1}%
13561 }

d@firstskipmain Skip the main element on first use (multi-entry first use not element first use).
13562 \define@boolkey{glsxtrcombined}{firstskipmain}{true}{}%
13563 \KV@glsxtrcombined@firstskipmainfalse

firstskipothers Skip the other elements on first use (multi-entry first use not element first use).
13564 \define@boolkey{glsxtrcombined}{firstskipothers}{true}{}%
13565 \KV@glsxtrcombined@firstskipothersfalse

```

`@usedskipmain` Skip the main element on subsequent use (multi-entry subsequent use not element subsequent use).
 13566 `\define@boolkey{glsxtrcombined}{usedskipmain}[true]{}`
 13567 `\KV@glsxtrcombined@usedskipmainfalse`

`@usedskipothers` Skip the other elements on subsequent use (multi-entry subsequent use not element subsequent use).
 13568 `\define@boolkey{glsxtrcombined}{usedskipothers}[true]{}`
 13569 `\KV@glsxtrcombined@usedskipothersfalse`

`bined@postlinks` Determine whether or not to use the individual element post-link hooks.
 13570 `\newcommand*{\@gls@combined@postlinks@nr}{0}`
 13571 `\define@choicekey{glsxtrcombined}{postlinks}{}%`
 13572 `[\@gls@combined@postlinks@val\@gls@combined@postlinks@nr]`
 13573 `{none,all,notlast,mainnotlast,mainonly,othersnotlast,otheronly}{}{}`

`bined@mpostlink` Determine whether or not to use the multi-entry post-link hook.
 13574 `\newcommand*{\@gls@combined@mpostlink@nr}{1}`
 13575 `\define@choicekey{glsxtrcombined}{mpostlink}{}%`
 13576 `[\@gls@combined@mpostlink@val\@gls@combined@mpostlink@nr]`
 13577 `{false,true,firstronly,usedonly}[true]{}{}`

`postlinkelement` Determine which element to use for the post-link hook.
 13578 `\newcommand*{\@gls@combined@mpostlinkelement@nr}{0}`
 13579 `\define@choicekey{glsxtrcombined}{mpostlinkelement}{}%`
 13580 `[\@gls@combined@mpostlinkelement@val\@gls@combined@mpostlinkelement@nr]`
 13581 `{last,main,custom}{}{}`

`\glsxtrifmulti`
 13582 `\newcommand*{\glsxtrifmulti}[3]{\ifcsdef{@gls@combined@#1@main}{#2}{#3}}`

`glsxtrmultimain`
 13583 `\newcommand*{\glsxtrmultimain}[1]{\csuse{@gls@combined@#1@main}}`

`glsxtrmultilist`
 13584 `\newcommand*{\glsxtrmultilist}[1]{\csuse{@gls@combined@#1@list}}`

`titotalelements` Total number of elements.
 13585 `\newcommand*{\glsxtrmultitotalelements}[1]{\csuse{@gls@combined@#1@total}}`

`rmultimainindex` Index of main element (starting from 1). If the main element is the last element in the list then this should equal the total number of elements.
 13586 `\newcommand*{\glsxtrmultimainindex}[1]{\csuse{@gls@combined@#1@mainindex}}`

`ilastotherindex` Index of the last non-main element.
 13587 `\newcommand*{\glsxtrmultilastotherindex}[1]{\csuse{@gls@combined@#1@lastotherindex}}`

saryentryglobal Make definitions global.

```
13588 \newif\ifmultiglossaryentryglobal  
13589 \multiglossaryentryglobalse
```

glselementindex Count register to keep track of the current element index.

```
13590 \newcount\mglselementindex
```

tiglossaryentry

```
\multiglossaryentry[<options>]{<multi-label>}[<main label>]{<label list>}
```

Defines the label *<multi-label>* that can be used in `\mgls`.

```
13591 \newrobustcmd{\multiglossaryentry}[1][]{%  
13592   \def\@gls@combined@current@opts{#1}%">  
13593   \ifnum\@glsxtr@docdefval=1\relax  
13594     \let\@multi@glossentry@donext\@defmultiglossaryentry  
13595   \else  
13596     \let\@multi@glossentry@donext\@multiglossaryentry  
13597   \fi  
13598   \@multi@glossentry@donext  
13599 }
```

tiglossaryentry

```
13600 \newcommand*{\@multiglossaryentry}[1]{%  
13601   \def\@gls@combined@current@label{#1}%">  
13602   \@multi@glossaryentry  
13603 }
```

i@glossaryentry Check for existence.

```
13604 \newcommand*{\@multi@glossaryentry}[2][]{%  
13605   \ifcsdef{@gls@combined@\@gls@combined@current@label}{@main}{}%  
13606   {\PackageError{glossaries-extra}{%  
13607     Multi-entry label '\@gls@combined@current@label' already defined}{}}%  
13608   {}%  
13609 }%  
13610 {}%  
13611   \@multi@glossary@entry{#1}{#2}%"  
13612 }%  
13613 }
```

tiglossaryentry Used if document definitions are on.

```
13614 \newcommand*{\@defmultiglossaryentry}[1]{%  
13615   \def\@gls@combined@current@label{#1}%">  
13616   \@def@multi@glossaryentry  
13617 }
```

```
i@glossaryentry Used if document definitions are on.
13618 \newcommand*{\@def@multi@glossaryentry}[2] []{%
13619   \let\@def@multi@glossaryentry\do\@multi@glossary@entry
13620   \ifundef\@glsxtr@docdefs@multilist
13621   {%
13622     \gdef\@glsxtr@docdefs@multilist{}%
13623     \listxadd
13624       {\@glsxtr@docdefs@multilist}{\expandonce\@gls@combined@current@label}%
13625   }%
13626   {%
13627     \xifinlist{\@gls@combined@current@label}{\@glsxtr@docdefs@multilist}%
13628   }%
13629     \PackageError{glossaries-extra}%
13630     {Multi-entry label '\@gls@combined@current@label' already defined}%
13631   }%
13632   \let\@def@multi@glossaryentry\do\@gobbletwo
13633 }%
13634 {%
13635   \listxadd
13636     {\@glsxtr@docdefs@multilist}{\expandonce\@gls@combined@current@label}%
13637 }%
13638 }%
13639 \@def@multi@glossaryentry\do{\#1}{\#2}%
13640 }

sary@doifexists
13641 \newcommand*{\@multi@glossary@doifexists}{\glsdoifexists}
```

tiglossaryentry

```
\providemultiglossaryentry[options]{multi-label}[main label]{label list}
```

Defines a multi-entry unless it has already been defined.

```
13642 \newrobustcmd{\providemultiglossaryentry}[2] []{%
13643   \def\@gls@combined@current@opts{\#1}%
13644   \def\@gls@combined@current@label{\#2}%
13645   \ifcsdef{@gls@combined@\@gls@combined@current@label @main}%
13646     {\def\@multi@glossentry@donext{\@provide@multi@glossaryentry@noop}}%
13647   {%
13648     \ifnum\@glsxtr@docdefval=1\relax
13649       \def\@multi@glossentry@donext{\@def@multi@glossaryentry}%
13650     \else
13651       \def\@multi@glossentry@donext{\@multi@glossaryentry}%
13652     \fi
13653   }%
13654   \@multi@glossentry@donext
13655 }
```

```

ssaryentry@noop  Do nothing.
13656 \newcommand*{\@provide@multi@glossaryentry@noop}[2][]{}

ssaryentry@list  List of all defined multi-entry sets.
13657 \newcommand*{\@multi@glossaryentry@list}{}{}

@glossary@entry
13658 \newcommand*{\@multi@glossary@entry}[2]{%
13659   \protected@edef\@gls@combined@current@main{\#1}%
}

  Fully expand list.
13660   \protected@edef\@gls@combined@currentlist{\#2}%

  Count items in list, check they are all defined, and find last item at the same time.
13661   \mglselementindex=0\relax
13662   \cfor{\@gls@tmp}{\@gls@combined@currentlist}{\do}{%
13663     \advance\mglselementindex by 1\relax
13664     \@multi@glossary@doifexists{\@gls@tmp}{}%
13665     \let\@gls@combined@finalitem\@gls@tmp
13666     \ifdefvoid{\@gls@combined@current@main}{}%
13667     {}%
13668     {}%
13669     \ifx\@gls@combined@current@main\@gls@tmp
13670       \ifmultiglossaryentryglobal
13671         \global\cslet{\@gls@combined@\@gls@combined@current@label}{\@main}%
13672         \gls@combined@current@main
13673         \csxdef{\@gls@combined@\@gls@combined@current@label}{\@mainindex}%
13674         {\the\mglselementindex}%
13675       \else
13676         \cslet{\@gls@combined@\@gls@combined@current@label}{\@main}%
13677         \gls@combined@current@main
13678         \csedef{\@gls@combined@\@gls@combined@current@label}{\@mainindex}%
13679         {\the\mglselementindex}%
13680       \fi
13681     \else
13682       \ifmultiglossaryentryglobal
13683         \csxdef{\@gls@combined@\@gls@combined@current@label}{\lastotherindex}%
13684         {\the\mglselementindex}%
13685       \else
13686         \csedef{\@gls@combined@\@gls@combined@current@label}{\lastotherindex}%
13687         {\the\mglselementindex}%
13688       \fi
13689     \fi
13690   }%
13691 }%
13692 \ifmultiglossaryentryglobal
13693   \csxdef{\@gls@combined@\@gls@combined@current@label}{\total}%
13694   {\the\mglselementindex}%
13695 \else
13696   \csedef{\@gls@combined@\@gls@combined@current@label}{\total}%

```

```

13697         {\the\mglselementindex}%
13698     \fi
13699     \ifnum\mglselementindex<2\relax
13700         \PackageError{glossaries-extra}{At least 2 labels required in
13701             multi-entry element list (\number\mglselementindex\space found)}{}%
13702     \else
13703         \ifdefvoid{\gls@combined@current@main}
13704         {}%
13705     {}%
13706     If \gls@combined@\label@main hasn't been set then it wasn't included in the list.
13707     \ifcsundef{\gls@combined@\gls@combined@current@label @main}%
13708         {\PackageError{glossaries-extra}%
13709             {Main element '\gls@combined@current@main' not found in list}%
13710             {The final element '\gls@combined@finalitem' will be used instead}}
13711     Set to empty so that the default (final element) is used instead.
13712     \let{\gls@combined@current@main}\empty
13713     {}%
13714     \ifdefvoid{\gls@combined@current@main}
13715     {}%
13716     Set main to final element.
13717     \ifmultiglossaryglobal
13718         \global\cslet{\gls@combined@\gls@combined@current@label @main}%
13719             {\gls@combined@finalitem}
13720         \global\csletcs{\gls@combined@\gls@combined@current@label @mainindex}%
13721             {\gls@combined@\gls@combined@current@label @total}%
13722         \csxdef{\gls@combined@\gls@combined@current@label @lastotherindex}%
13723             {\the\numexpr\mglselementindex-1 }%
13724     \else
13725         \cslet{\gls@combined@\gls@combined@current@label @main}%
13726             {\gls@combined@finalitem}
13727         \csletcs{\gls@combined@\gls@combined@current@label @mainindex}%
13728             {\gls@combined@\gls@combined@current@label @total}%
13729         \csedef{\gls@combined@\gls@combined@current@label @lastotherindex}%
13730             {\the\numexpr\mglselementindex-1 }%
13731     \fi
13732     {}%
13733     \ifmultiglossaryglobal
13734         \global\cslet{\gls@combined@\gls@combined@current@label @list}%
13735             {\gls@combined@currentlist}
13736     Globally define element list.
13737     \protected\csxdef{\gls@combined@\gls@combined@current@label @options}%
13738             {\gls@combined@current@opts}%

```

Global conditional definition.

```
13738 \expandafter\@ifdefinable
13739   \csname if@gls@combined@\@gls@combined@current@label @flag\endcsname
13740   {\expandafter\global\expandafter
13741     \newif\csname if@gls@combined@\@gls@combined@current@label @flag\endcsname}%
13742   \expandafter\global
13743   \csname @gls@combined@\@gls@combined@current@label @flagfalse\endcsname
13744 \else
```

Locally define element list.

```
13745 \cslet{@gls@combined@\@gls@combined@current@label @list}%
13746   \@gls@combined@currentlist
```

Locally define options.

```
13747 \protected\csedef{@gls@combined@\@gls@combined@current@label @options}%
13748   {@gls@combined@current@opts}%
```

Local conditional definition.

```
13749 \newboolean{@gls@combined@\@gls@combined@current@label @flag}%
13750   \csname @gls@combined@\@gls@combined@current@label @flagfalse\endcsname
13751 \fi
13752 \fi
13753 \writemultiglossentry
13754   {@gls@combined@current@opts}{@gls@combined@current@label}%
13755   {@csuse{@gls@combined@\@gls@combined@current@label @main}}{#2}%
```

Append label to list.

```
13756 \ifmultiglossaryentryglobal
13757   \ifempty@multi@glossaryentry@list
13758     {\let@multi@glossaryentry@list\@gls@combined@current@label}%
13759     {%
13760       \appto@multi@glossaryentry@list{,\expandonce\@gls@combined@current@label}%
13761     }%
13762 \else
13763   \ifempty@multi@glossaryentry@list
13764     {\global\let@multi@glossaryentry@list\@gls@combined@current@label}%
13765     {%
13766       \appto@multi@glossaryentry@list{,\expandonce\@gls@combined@current@label}%
13767     }%
13768 \fi
13769 }
```

sxtr@multientry

```
\@glsxtr@multientry{@options}{@multilabel}{@main}{@list}
```

Information for aux file. Useful for bib2gls and also for docdef.

```
13770 \newcommand*{\glsxtr@multientry}[4]{%
13771   \ifnum\glsxtr@docdefval=1\relax
```

```

13772 \bgroup
13773   \def\@gls@combined@current@opts{\#1}%
13774   \def\@gls@combined@current@label{\#2}%
13775   \let\@multi@glossary@doifexists\@secondoftwo
13776   \let\writemultiglossentry\@gobblefour
13777   \multiglossaryentryglobaltrue
13778   \@multi@glossary@entry{\#3}{\#4}%
13779 \egroup
1380 \fi
1381 }

```

`\multiglossentry` This can be redefined to do nothing if the information isn't required.

```

13782 \newcommand*{\writemultiglossentry}[4]{%
13783   \protected@write\auxout{}{\string\glsxtr@multientry{\#1}{\#2}{\#3}{\#4}}%
13784 }

```

`\ifmglssused` Determines whether or not the multi-entry set has been referenced by commands like `\mglssname` or `\mglssname`.

```

13785 \newcommand*{\ifmglssused}[3]{%
13786   \ifbool{@gls@combined@#1@flag}{\#2}{\#3}%
13787 }

```

`\mglunset` Unset the flag.

```

13788 \newcommand*{\mglunset}[1]{%
13789   \gls@ifnotmeasuring
13790   {%
13791     \glsxtrifmulti{\#1}{\@mglunset{\#1}}%
13792     {%
13793       \glsxtrundefaction{Multi entry '#1' hasn't been defined}%
13794       {You need to define '#1' with \string\multiglossary}%
13795     }%
13796   }%
13797 }

```

`\@mglunset`

```

13798 \newcommand*{\@mglunset}[1]{%
13799   \expandafter\global\csname @gls@combined@#1@flagtrue\endcsname
13800 }

```

`\mglreset` Unset the flag.

```

13801 \newcommand*{\mglreset}[1]{%
13802   \gls@ifnotmeasuring
13803   {%
13804     \glsxtrifmulti{\#1}{\@mglreset{\#1}}%
13805     {%
13806       \glsxtrundefaction{Multi entry '#1' hasn't been defined}%
13807       {You need to define '#1' with \string\multiglossary}%
13808     }%

```

```

13809 }%
13810 }

\@mglreset
13811 \newcommand*{\@mglreset}[1]{%
13812   \expandafter\global\csname @gls@combined@\#1@flagfalse\endcsname
13813 }

\mgllocalunset Unset the flag.
13814 \newcommand*{\mgllocalunset}[1]{%
13815   \gls@ifnotmeasuring
13816   {%
13817     \glsxtrifmulti{#1}{\@mgllocalunset{#1}}%
13818     {%
13819       \glsxtrundefaction{Multi entry '#1' hasn't been defined}%
13820       {You need to define '#1' with \string\multiglossary}%
13821     }%
13822   }%
13823 }

@mgllocalunset
13824 \newcommand*{\@mgllocalunset}[1]{%
13825   \csname @gls@combined@\#1@flagtrue\endcsname
13826 }

\mgllocalreset Unset the flag.
13827 \newcommand*{\mgllocalreset}[1]{%
13828   \gls@ifnotmeasuring
13829   {%
13830     \glsxtrifmulti{#1}{\@mgllocalreset{#1}}%
13831     {%
13832       \glsxtrundefaction{Multi entry '#1' hasn't been defined}%
13833       {You need to define '#1' with \string\multiglossary}%
13834     }%
13835   }%
13836 }

@mgllocalreset
13837 \newcommand*{\@mgllocalreset}[1]{%
13838   \csname @gls@combined@\#1@flagfalse\endcsname
13839 }

\mglunsetall Unset all.
13840 \newcommand*{\mglunsetall}{%
13841   \@for\@gls@thislabel:=\@multi@glossaryentry@list\do{\mglunset{\@gls@thislabel}}%
13842 }

```

```
\mglresetall Reset all.
```

```
13843 \newcommand{\mglresetall}{%
13844   \for{\gls@thislabel}{\multi@glossaryentry@list}{\do{\mglreset{\gls@thislabel}}{}}%
13845 }%
```

```
\mglSetMain
```

```
\mglSetName{\multi-label}{new main}
```

Allow the main label to be changed (local).

```
13846 \newrobustcmd{\mglSetMain}[2]{%
13847   \ifcsundef{\gls@combined@#1@main}{%
13848     {\PackageError{glossaries-extra}{Multi-entry label '#1' not defined}{}{}}%
13849   }%
13850   \protected\edef{\gls@combined@current@main}{%
13851     \letcs{\gls@combined@currentlist}{\gls@combined@#1@list}}%
```

Check that the given label is in the list of elements and update main and last other element index.

```
13852   \mglselementindex=0\relax
13853   \count@=0\relax
13854   \for{\gls@tmp}{\gls@combined@currentlist}{\do{%
13855     \advance{\mglselementindex}{1}\relax
13856     \ifx{\gls@combined@current@main}{\gls@tmp}
13857       \count@=\mglselementindex\relax
13858       \let{\gls@combined@finalitem}{\gls@tmp}
13859       \ifmultiglossaryglobal
13860         \global\cslet{\gls@combined@#1@main}{\gls@combined@current@main}%
13861         \csxdef{\gls@combined@#1@mainindex}{\the\mglselementindex}%
13862       \else
13863         \cslet{\gls@combined@#1@main}{\gls@combined@current@main}%
13864         \csedef{\gls@combined@#1@mainindex}{\the\mglselementindex}%
13865       \fi
13866     \else
13867       \ifmultiglossaryglobal
13868         \csxdef{\gls@combined@#1@lastotherindex}{\the\mglselementindex}%
13869       \else
13870         \csedef{\gls@combined@#1@lastotherindex}{\the\mglselementindex}%
13871       \fi
13872     \fi
13873   }%
13874   \ifnum{\count@=0}\relax
13875     \PackageError{glossaries-extra}{Label '#2' is not in '#1' set
13876     (\gls@combined@currentlist)}{}%
```

Default to final item.

```
13877   \ifmultiglossaryglobal
13878     \global\cslet{\gls@combined@#1@main}{\gls@combined@finalitem}
```

```

13879      \csxdef{@gls@combined@#1@mainindex}{\the\mglselementindex}%
13880      \csxdef{@gls@combined@#1@lastotherindex}{%
13881          \number\numexpr\mglselementindex-1 }%
13882      \else
13883          \cslet{@gls@combined@#1@main}\@gls@combined@finalitem
13884          \csedef{@gls@combined@#1@mainindex}{\the\mglselementindex}%
13885          \csedef{@gls@combined@#1@lastotherindex}{%
13886              \number\numexpr\mglselementindex-1 }%
13887      \fi
13888  \fi
13889 }%
13890 }
```

\mglsSetOptions

```
\mglsSetOptions{<multi-label>}{<new options>}
```

Allow the options to be changed (local). No expansion is applied.

```

13891 \newrobustcmd{\mglsSetOptions}[2]{%
13892     \ifcsundef{@gls@combined@#1@main}%
13893         {\PackageError{glossaries-extra}{Multi-entry label '#1' not defined}{}}
13894     {%
13895         \csdef{@gls@combined@#1@options}{#2}%
13896     }%
13897 }
```

\mglsAddOptions

```
\mglsAddOptions{<multi-label>}{<extra options>}
```

Allow the options to be changed (local). No expansion is applied.

```

13898 \newrobustcmd{\mglsAddOptions}[2]{%
13899     \ifcsundef{@gls@combined@#1@main}%
13900         {\PackageError{glossaries-extra}{Multi-entry label '#1' not defined}{}}
13901     {%
13902         \ifcsempty{@gls@combined@#1@options}%
13903             {\csdef{@gls@combined@#1@options}{#2}}%
13904             {\csappto{@gls@combined@#1@options}{,#2}}%
13905     }%
13906 }
```

Options for \mgls:

\@mgls@all Options to apply to all elements.

```

13907 \newcommand*\@mgls@all{}%
13908 \define@key{mgls}{all}{\renewcommand*\@mgls@all{\#1}}
```

```

\@mglS@main Options to apply to the main element only.
13909 \newcommand*{\@mglS@main}={}
13910 \define@key{mglS}{main}{\renewcommand*{\@mglS@main}{#1}}


\@mglS@others Options to apply to the other (no main) elements.
13911 \newcommand*{\@mglS@others}={}
13912 \define@key{mglS}{others}{\renewcommand*{\@mglS@others}{#1}}


\@mglS@setup Options to apply to \multiglossaryentrysetup.
13913 \newcommand*{\@mglS@setup}={}
13914 \define@key{mglS}{setup}{%
13915   \@mglS@setup@do{\renewcommand*{\@mglS@setup}{#1}}%
13916 }

\@mglS@setup@do
13917 \newcommand*{\@mglS@setup@do}[1]{#1}

ls@setup@do@not
13918 \newcommand*{\@mglS@setup@do@not}[1]{%
13919   \PackageError{glossaries-extra}{‘setup’ key not permitted inside
13920   ‘mglSopts’ value}{}
13921 }

s@disable@setup
13922 \newcommand*{\mglS@disable@setup}{%
13923   \let\@mglS@setup@do\@mglS@setup@do@not
13924 }

ls@enable@setup
13925 \newcommand*{\mglS@enable@setup}{%
13926   \let\@mglS@setup@do\@firstofone
13927 }

gls@unsetaction
13928 \newcommand{\@mglS@unsetaction}{}
13929 \define@choicekey{mglS}{multiunset}{[\@mglS@unsetaction@val\@mglS@unsetaction]}{%
13930   {global,local,none}{}
13931 }

gls@presetlocal
13931 \define@boolkey{mglS}{presetlocal}{true}{}
13932 \KV@mglS@presetlocalfalse

\@mglS@hyper
13933 \newcommand*{\@mglS@hyper}={}
13934 \define@choicekey{mglS}{hyper}{[\@mglS@hyper@val\@mglS@hyper@nr]}{true,false}{true}%
13935 {%
13936   \renewcommand*{\@mglS@hyper}{hyper=#1}%
13937   \ifnum\@mglS@hyper@nr=1\relax

```

```

13938   \let\@mglsc@hyperlink\@secondoftwo
13939   \else
13940   \let\@mglsc@hyperlink\@mglsc@hyperlink
13941   \fi
13942 }

@mglsc@hyperlink
13943 \newcommand*{\@mglsc@hyperlink}[2]{%
13944   \ifx\@glslink\glsdonohyperlink
13945     #2%
13946   \else
13947     \glsxtr@org@dohyperlink{\glolinkprefix#1}{#2}%
13948   \fi
13949 }

@mglsc@hyperlink
13950 \let\@mglsc@hyperlink\@mglsc@hyperlink

```

mglscforelements

`\mglscforelements{\multi-label}{\cs}{\body}`

```

13951 \newcommand*{\mglscforelements}[3]{%
13952   \expandafter\@for\expandafter#2\expandafter:\expandafter
13953     =\csname @gls@combined@\#1@list\endcsname\do{\#3}%
13954 }

```

orotherelements

`\mglscforotherelements{\multi-label}{\cs}{\body}`

```

13955 \newcommand*{\mglscforotherelements}[3]{%
13956   \expandafter\@for\expandafter#2\expandafter:\expandafter
13957     =\csname @gls@combined@\#1@list\endcsname\do
13958     {\expandafter\ifdef\csname @gls@combined@\#1@main\endcsname{#2}{}{#3}}%
13959 }

```

mglscunsetothers

```

13960 \newcommand*{\mglscunsetothers}[1]{%
13961   \mglscforotherelements{\#1}{\@gls@tmp}{\glsunset{\@gls@tmp}}%
13962 }

```

ocalunsetothers

```

13963 \newcommand*{\mglsclocalunsetothers}[1]{%
13964   \mglscforotherelements{\#1}{\@gls@tmp}{\glslocalunset{\@gls@tmp}}%
13965 }

```

```

glselementreset
13966 \newcommand*{\mglselementreset}[1]{%
13967   \ifKV@mglsl@presetlocal
13968     \glslocalreset{#1}%
13969   \else
13970     \glsreset{#1}%
13971   \fi
13972 }

glselementunset
13973 \newcommand*{\mglselementunset}[1]{%
13974   \ifKV@mglsl@presetlocal
13975     \glslocalunset{#1}%
13976   \else
13977     \glsunset{#1}%
13978   \fi
13979 }

\@mglsl@resetall
13980 \newcommand*{\@mglsl@resetall}{}%
13981 \define@choicekey{mglsl}{resetall}%
13982 [\\@mglsl@resetall@val\\@mglsl@resetall@nr]{false,true}[true]%
13983 {%
13984   \ifcase\\@mglsl@resetall@nr\relax
13985     \renewcommand*{\@mglsl@resetall}{}%
13986   \or
13987     \renewcommand*{\@mglsl@resetall}{}%
13988     \\@for\\@gls@resetlabel:=\\mglslcurrentlist\\do{\\mglselementreset\\@gls@resetlabel}}%
13989     \renewcommand*{\@mglsl@unsetall}{}%
13990   \fi
13991 }

@mglsl@resetmain
13992 \newcommand*{\@mglsl@resetmain}{}%
13993 \define@choicekey{mglsl}{resetmain}%
13994 [\\@mglsl@resetmain@val\\@mglsl@resetmain@nr]{false,true}[true]%
13995 {%
13996   \ifcase\\@mglsl@resetmain@nr\relax
13997     \renewcommand*{\@mglsl@resetmain}{}%
13998   \or
13999     \renewcommand*{\@mglsl@resetmain}{\\mglselementreset\\mglslcurrentmainlabel}%
14000     \renewcommand*{\@mglsl@unsetmain}{}%
14001   \fi
14002 }

gls@resetothers
14003 \newcommand*{\@mglsl@resetothers}{}%
14004 \define@choicekey{mglsl}{resetothers}%
14005 [\\@mglsl@resetothers@val\\@mglsl@resetothers@nr]{false,true}[true]%

```

```

14006 {%
14007   \ifcase\@mglsc@resetothers@nr\relax
14008     \renewcommand*{\@mglsc@resetothers}{}%
14009   \or
14010     \renewcommand*{\@mglsc@resetothers}{}%
14011       \@for\@gls@resetlabel:=\mglscurrentlist\do{%
14012         \ifx\@gls@resetlabel\mglscurrentmainlabel
14013           \else
14014             \mglselementreset\@gls@resetlabel
14015           \fi
14016         }%
14017       }%
14018     \renewcommand*{\@mglsc@unsetothers}{}%
14019   \fi
14020 }

\@mglsc@unsetall
14021 \newcommand*{\@mglsc@unsetall}{}%
14022 \define@choicekey{mglsc}{unsetall}%
14023 [\\@mglsc@unsetall@val\\@mglsc@unsetall@nr]{false,true}[true]%
14024 {%
14025   \ifcase\@mglsc@unsetall@nr\relax
14026     \renewcommand*{\@mglsc@unsetall}{}%
14027   \or
14028     \renewcommand*{\@mglsc@unsetall}{}%
14029       \@for\@gls@unsetlabel:=\mglscurrentlist\do{\mglselementunset\@gls@unsetlabel}%
14030     \renewcommand*{\@mglsc@resetall}{}%
14031   \fi
14032 }

@mglsc@unsetmain
14033 \newcommand*{\@mglsc@unsetmain}{}%
14034 \define@choicekey{mglsc}{unsetmain}%
14035 [\\@mglsc@unsetmain@val\\@mglsc@unsetmain@nr]{false,true}[true]%
14036 {%
14037   \ifcase\@mglsc@unsetmain@nr\relax
14038     \renewcommand*{\@mglsc@unsetmain}{}%
14039   \or
14040     \renewcommand*{\@mglsc@unsetmain}{\mglselementunset\mglscurrentmainlabel}%
14041     \renewcommand*{\@mglsc@resetmain}{}%
14042   \fi
14043 }

gls@unsetothers
14044 \newcommand*{\@mglsc@unsetothers}{}%
14045 \define@choicekey{mglsc}{unsetothers}%
14046 [\\@mglsc@unsetothers@val\\@mglsc@unsetothers@nr]{false,true}[true]%
14047 {%
14048   \ifcase\@mglsc@unsetothers@nr\relax

```

```

14049 \renewcommand*{\@mglscurrentlist}{}
14050 \or
14051 \renewcommand*{\@mglscurrentlist}{%
14052   @for\@gls@unsetlabel:=\mglscurrentlist\do{%
14053     \ifx\@gls@unsetlabel\mglscurrentmainlabel
14054     \else
14055       \mglselementunset\@gls@unsetlabel
14056     \fi
14057   }%
14058 }%
14059 \renewcommand*{\@mglscurrentlist}{}
14060 \fi
14061 }

```

setup@docurrent Set up the commands to determine whether or not to do the current element.

```

14062 \newcommand{\glsxtr@setup@docurrent}{%
  \mglscurrentlabel expands to the label of the current element. Should this element be
  skipped?

```

```
14063 \ifx\mglscurrentlabel\mglscurrentmainlabel
```

Main element. Should it be skipped?

```

14064 \mglscurrentlist
14065 {%
14066   \ifKV@glsxtrcombined@firstskipmain
14067     \let\@mglscurrentlist\@gobble
14068   \else
14069     \let\@mglscurrentlist\@firstofone
14070   \fi
14071 }%
14072 {%
14073   \ifKV@glsxtrcombined@usedskipmain
14074     \let\@mglscurrentlist\@gobble
14075   \else
14076     \let\@mglscurrentlist\@firstofone
14077   \fi
14078 }%
14079 \else

```

Other element. Should it be skipped?

```

14080 \mglscurrentlist
14081 {%
14082   \ifKV@glsxtrcombined@firstskipothers
14083     \let\@mglscurrentlist\@gobble
14084   \else
14085     \let\@mglscurrentlist\@firstofone
14086   \fi
14087 }%
14088 {%
14089   \ifKV@glsxtrcombined@usedskipothers

```

```

14090      \let\@mglscurrent@element\gobble
14091      \else
14092          \let\@mglscurrent@element\@firstofone
14093      \fi
14094  }%
14095 \fi
14096 }

```

`checklastelement` If the last element is skipped, `\mglscurrent@element` needs adjusting. The first argument should be either `first` or `used`. The second argument is the multi-element label.

```

14097 \newcommand*{\glsxtr@mglscurrent@checklastelement}[2]{%
14098   \ifbool{KV@glsxtrcombined@#1skipmain}{%
14099     {%
14100       \ifbool{KV@glsxtrcombined@#1skipothers}{%
14101         {%

```

This condition has already been checked for.

```

14102   }%
14103   {%

```

Main skipped. The last item will be the last other element.

```

14104   \ifnum\mglselementindex=\glsxtrmultilastotherindex{#2}\relax
14105     \let\mglscurrent@element\@firstoftwo
14106   \else
14107     \let\mglscurrent@element\@secondoftwo
14108   \fi
14109 }%
14110 }%
14111 {%

```

Main not skipped.

```

14112   \ifbool{KV@glsxtrcombined@#1skipothers}{%
14113     {%

```

Others skipped. The main element is the only item.

```

14114   \ifnum\mglselementindex=\glsxtrmultimainindex{#2}\relax
14115     \let\mglscurrent@element\@firstoftwo
14116   \else
14117     \let\mglscurrent@element\@secondoftwo
14118   \fi
14119 }%
14120 {%

```

None skipped. This isn't the last element.

```

14121   \let\mglscurrent@element\@secondoftwo
14122 }%
14123 }%
14124 }%

```

`sWarnAllSkipped` Warning if all elements are skipped. The first argument is the warning message, the second argument is the inserted content (final optional argument), the third command is the encapsulation command (which may be a hyperlink).

```
14125 \newcommand{\glsxtrmglswarnallskipped}[3]{%
14126   \GlossariesExtraWarning{#1}%
14127   #3{#2}%
14128 }
```

`@mglscapplyopts`

```
14129 \newcommand*\glsxtr@mglscapplyopts[1]{%
14130   \edef\@mglscdooptions{\noexpand\setkeys*{\mglsc}{\expandonce#1}}%
14131   \@mglscdooptions
```

Append any unknown options to all.

```
14132 \ifdefvoid\XKV@rm{}{\eappto\@mglscall{,\expandonce\XKV@rm}}%
```

If setup key has been used, check for pre-option keys:

```
14133 \ifdefvoid\@mglscsetup
14134 {}%
14135 {}%
14136 \edef\@mglscdooptions{%
14137   \noexpand\setkeys*{\glsxtrcombinedpreopts}{\expandonce\@mglscsetup}}%
14138 \mglscdisable@mglsopts
14139 \@mglscdooptions
14140 \mglscenable@mglsopts
```

Save remaining setup options.

```
14141 \ifx\@mglscsetupoptions\empty
14142   \let\@mglscsetupoptions\XKV@rm
14143 \else
14144   \eappto\@mglscsetupoptions{,\expandonce\XKV@rm}}%
14145 \fi
14146 }%
```

Apply gls unset/reset options.

```
14147 \@mglscresetall
14148 \@mglscunsetall
14149 \@mglscresetmain
14150 \@mglscunsetmain
14151 \@mglscresetothers
14152 \@mglscunsetothers
```

Disable.

```
14153 \let\@mglscresetall\empty
14154 \let\@mglscresetmain\empty
14155 \let\@mglscresetothers\empty
14156 \let\@mglscunsetall\empty
14157 \let\@mglscunsetmain\empty
14158 \let\@mglscunsetothers\empty
```

First use flags.

```
14159 \ifmglssused\mglscurrentmultilabel
14160 {\let\mglssisfirstuse\@secondoftwo}%
14161 {\let\mglssisfirstuse\@firstoftwo}%
14162 }
```

\@firstofthree

```
14163 \providecommand{\@firstofthree}[3]{#1}
```

\@secondofthree

```
14164 \providecommand{\@secondofthree}[3]{#2}
```

\@thirdofthree

```
14165 \providecommand{\@thirdofthree}[3]{#3}
```

The main internal command for referencing multi-entries:

sxtr@mglss@inner

```
\glsxtr@mglss@inner{\langle options \rangle}{\langle label \rangle}{\langle insert \rangle}{\langle first cs \rangle}{\langle not first cs \rangle}{\langle main first cs \rangle}{\langle main other cs \rangle}
```

```
14166 \newcommand*\glsxtr@mglss@inner[7]{%
14167 \let\mglslastmainlabel\@empty
14168 \let\mglssiflastmainwasfirstuse\@firstoftwo
14169 \let\mglssiflastmainwasplural\@secondoftwo
14170 \let\mglssiflastmaincapscase\@firstofthree
14171 \let\mglssiflastmainskipped\@firstoftwo
14172 \bgroup
14173 \ifcsundef{@gls@combined@#2@main}%
14174 {%
14175 \glsxtrundefined{Multi entry '#2' hasn't been defined}%
14176 {You need to define '#2' with \string\multiglossaryentry}%
14177 \gdef@\mglss@post@hookdefs{%
14178 \protected@edef\mglslastmultilabel{#2}%
14179 \let\mglswasfirstuse\@firstoftwo
14180 \let\mglslastcategory\@empty
14181 \let\mglssiflastelements skipped\@firstoftwo
14182 \let\mglssiflastelementwasfirstuse\@firstoftwo
14183 \let\mglssiflastelementwasplural\@secondoftwo
14184 \let\mglssiflastelementcaps case\@firstofthree
14185 \let\mglslastelementlabel\@empty
14186 \let\mglss@do@postlinkhook\relax
14187 }%
14188 }%
14189 {%
14190 \protected@edef\mglscurrentmultilabel{#2}%
14191 }
```

```
14191 \letcs{\mglscurrentmainlabel}{\gls@combined@#2@main}%
14192 \letcs{\mglscurrentlist}{\gls@combined@#2@list}%
14193 \letcs{\mglscurrentoptions}{\gls@combined@#2@options}%
```

Initialise (may be changed if multiunset is present):

```
14194 \ifmglssused{\mglscurrentmultilabel}
14195 {\let{\mglsisfirstuse}{\secondoftwo}}
14196 {\let{\mglsisfirstuse}{\firstoftwo}}
```

Only obtain pre-option keys:

```
14197 \edef{\mglscurrentoptions}{%
14198 \noexpand\setkeys*{\glsxtrcombinedpreopts}{\expandonce{\mglscurrentoptions}}}
14199 \mglscurrentoptions
```

Save remaining setup options.

```
14200 \let{\mglscurrentsetupoptions}{\XKV@rm}
```

Apply \mglscurrentoptions.

```
14201 \mglscurrentoptions@disable@setup
14202 \ifdefvoid{\gls@combined@mglsopts}{}
14203 {}
14204 {\glsxtr@mglscurrentoptions@applyopts{\gls@combined@mglsopts}}
14205 \mglscurrentoptions@enable@setup
```

Apply options provided in #1.

```
14206 \ifstrempty{\def{\mglscurrentoptions}{\glsxtr@mglscurrentoptions}}
```

Check for attribute settings.

```
14207 \ifx{\gls@combined@category}{empty}
```

No category

```
14208 \else
```

Attribute options:

```
14209 \glshascategoryattribute{\gls@combined@category}{multioptions}%
14210 {}
14211 \letcs{\mglscurrentattroptions}{\glsxtrcategoryattr@@{\gls@combined@category}}
14212 {multioptions}
```

Only obtain pre-option keys:

```
14213 \let{\gls@combined@mglsopts}{empty}
14214 \edef{\mglscurrentoptions}{%
14215 \noexpand\setkeys*{\glsxtrcombinedpreopts}{\expandonce{\mglscurrentattroptions}}}
14216 \mglscurrentoptions
```

Append remaining options:

```
14217 \eappto{\mglscurrentsetupoptions}{\expandonce{\XKV@rm}}
14218 \ifx{\gls@combined@mglsopts}{empty}
14219 \else
```

mglscurrentoptions found:

```
14220 \let{\mglscurrentsetup}{empty}
14221 \mglscurrentoptions@disable@setup
14222 \glsxtr@mglscurrentoptions@applyopts{\gls@combined@mglsopts}
```

```

14223      \mglsc@enable@setup
14224      \fi
14225  }%
14226  {}%
14227 \fi

    Apply setup options.

14228 \edef\@mglsc@dooptions{%
14229   \noexpand\setkeys{glsxtrcombined}{\expandonce\@mglsc@setupoptions}}%
14230 \@mglsc@dooptions

    Provide local user-level access to category.

14231 \let\mglscurrentcategory\gls@combined@category

    Should the entire content be a hyperlink?

14232 \ifnum\gls@combined@hyper=1\relax
14233   \def\@mglsc@combinedlink{\@mglsc@hyperlink{\mglscurrentmainlabel}}%
14234 \else
14235   \def\@mglsc@combinedlink{\@firstofone}%
14236 \fi

    Entire content encapsulator.

14237 \def@gls@combined@encapsulator##1{%
14238   \@mglsc@combinedlink{\csuse{\gls@combined@textformat}{##1}}}%

    Initialise.

14239 \let\@mglsc@do@current@element\@firstofone

    Check if all elements are being skipped.

14240 \mglsc@firstuse
14241 {%
14242   \ifKV@glsxtrcombined@firstskipmain
14243     \ifKV@glsxtrcombined@firstskipothers

    Just do the warning and insert. This will ignore the loop.

14244 \let@gls@org@combined@encapsulator@gls@combined@encapsulator
14245 \def@gls@combined@encapsulator##1{%
14246   \glsxtrmglsWarnAllSkipped{All elements skipped for
14247     first use of multi-entry '#2'}{#3}%
14248   {\gls@org@combined@encapsulator}%
14249 }%
14250   \let\@mglsc@do@current@element\gobble
14251 \fi
14252 \fi
14253 }%
14254 {%
14255   \ifKV@glsxtrcombined@usedskipmain
14256     \ifKV@glsxtrcombined@usedskipothers

    Just do the warning and insert. This will ignore the loop.

14257 \let@gls@org@combined@encapsulator@gls@combined@encapsulator
14258 \def@gls@combined@encapsulator##1{%

```

```

14259      \glsxtrmglswarnAllSkipped{All elements skipped for
14260      subsequent use of multi-entry '#2'}{#3}%
14261      {\@gls@org@combined@encapsulator}%
14262      }%
14263      \let\@mglscurrent@element\@gobble
14264      \fi
14265      \fi
14266  }%

```

Determine prefix and suffix.

```

14267  \mglsisfirstuse
14268  {%
14269      \let\mglscurrentprefix\@gls@combined@firstprefix
14270      \let\mglscurrentsuffix\@gls@combined@firstsuffix
14271  }%
14272  {%
14273      \let\mglscurrentprefix\@gls@combined@usedprefix
14274      \let\mglscurrentsuffix\@gls@combined@usedsuffix
14275  }%

```

Set up post-link hook used after current scope.

```

14276  \xdef\@mglscurrentposthook{%
14277      \noexpand\def\noexpand\mglslastmultilabel{\expandonce\mglscurrentmultilabel}%
14278      \noexpand\def\noexpand\mglslastcategory{\mglscurrentcategory}%
14279  }%
14280  \ifx\@mglscurrentposthook\@empty
14281      \gappto\@mglscurrentposthook{%
14282          \let\mglscurrentposthook\@firstoftwo
14283          \let\mglscurrentposthook\@empty
14284          \let\mglscurrentposthook\@firstoftwo
14285          \let\mglscurrentposthook\@secondoftwo
14286          \let\mglscurrentposthook\@firstofthree
14287      }%
14288  \fi
14289  \mglsisfirstuse
14290  {%
14291      \gappto\@mglscurrentposthook{\let\mglscurrentposthook\@firstoftwo}%

```

Determine if the multi-entry post-link hook should be applied.

```

14292  \ifcase\@gls@combined@mpostlink@nr\relax
14293      \or
14294      \or
14295      \or
14296      \or
14297      \or
14298      \or
14299      \or

```

```

14300      \gappto{@mglscustompostlinkhook}{\let\mglscustompostlinkhook\mglscustompostlinkhook}%
14301      \fi
14302      \or
14303      \ifcase@gls@combined@mpostlinkelement@nr\relax
14304          \gappto{@mglscustompostlinkhook}{\let\mglscustompostlinkhook\mglscustompostlinkhook}%
14305          \or
14306          \gappto{@mglscustompostlinkhook}{\let\mglscustompostlinkhook\mglscustompostlinkhook}%
14307          \or
14308          \gappto{@mglscustompostlinkhook}{\let\mglscustompostlinkhook\mglscustompostlinkhook}%
14309          \fi
14310          \or
14311          \gappto{@mglscustompostlinkhook}{\let\mglscustompostlinkhook\relax}%
14312          \fi
14313      }%
14314      {%
14315      \gappto{@mglscustompostlinkhook}{\let\mglscustompostlinkhook\mglscustompostlinkhook}%
14316      Determine if the multi-entry post-link hook should be applied.
14317      \ifcase@gls@combined@mpostlink@nr\relax
14318          \mglscustompostlink=false.
14319          \gappto{@mglscustompostlink}{\let\mglscustompostlink\relax}%
14320          \or
14321          \mglscustompostlink=true.
14322          \gappto{@mglscustompostlink}{\let\mglscustompostlink\relax}%
14323          \or
14324          \gappto{@mglscustompostlink}{\let\mglscustompostlink\mglscustompostlinkhook}%
14325          \fi
14326          \or
14327          \mglscustompostlink=firstonly.
14328          \gappto{@mglscustompostlink}{\let\mglscustompostlink\relax}%
14329          \or
14330          \mglscustompostlink=usedonly.
14331          \gappto{@mglscustompostlink}{\let\mglscustompostlink\relax}%
14332          \or
14333          \gappto{@mglscustompostlink}{\let\mglscustompostlink\mglscustompostlinkhook}%
14334          \or
14335          \gappto{@mglscustompostlink}{\let\mglscustompostlink\mglscustompostlinkhook}%
14336          \fi
14337      }%

```

Save current post-link hook.

```
14338 \let\mglsc@org@postlinkhook\glspostlinkhook
```

Prefix.

```
14339 \mglsprefix
```

Initialise last element label (for \mglssuffix).

```
14340 \let\mglslastelementlabel\@empty
```

```
14341 \gls@combined@encapsulator
```

```
14342 {%
```

Save previous label.

```
14343 \def\@mglsc@previouslabel{}%
```

```
14344 \mglselementindex=0\relax
```

```
14345 \@for\mglscurrentlabel:=\mglscurrentlist\do{%
```

```
14346 \advance\mglselementindex by 1\relax
```

```
14347 \glsxtr@setup@docurrent
```

Is this the last element?

```
14348 \ifx\@xfor@nextelement\@nnil
```

```
14349 \let\mglstiflast\@firstoftwo
```

```
14350 \else
```

```
14351 \let\mglstiflast\@secondoftwo
```

Are any elements being skipped?

```
14352 \mglstisfirstuse
```

```
14353 {%
```

```
14354 \glsxtr@mglsc@checklastelement{first}{#2}%
```

```
14355 }%
```

```
14356 {%
```

```
14357 \glsxtr@mglsc@checklastelement{used}{#2}%
```

```
14358 }%
```

```
14359 \fi
```

Should the element post-link hook be used?

```
14360 \ifcase\gls@combined@postlinks@nr\relax
```

postlinks=none

```
14361 \let\glspostlinkhook\relax
```

```
14362 \or
```

postlinks=all

```
14363 \let\glspostlinkhook\mglsc@org@postlinkhook
```

```
14364 \or
```

postlinks=notlast

```
14365 \mglstiflast
```

```
14366 {%
```

```
14367 \let\glspostlinkhook\relax
```

```
14368 }%
```

```
14369 {%
```

```
14370 \let\glspostlinkhook\mglsc@org@postlinkhook
```

```
14371 }%
```

```
14372 \or
```

```

postlinks=mainnotlast
14373      \ifx\mglscurrentlabel\mglscurrentmainlabel
14374          \mglscurrentmainlabel
14375          {%
14376              \let\glspostlinkhook\relax
14377          }%
14378          {%
14379              \let\glspostlinkhook\mglscurrentmainlabel
14380          }%
14381      \else
14382          \let\glspostlinkhook\relax
14383      \fi
14384  \or

postlinks=mainonly
14385      \ifx\mglscurrentlabel\mglscurrentmainlabel
14386          \let\glspostlinkhook\mglscurrentmainlabel
14387      \else
14388          \let\glspostlinkhook\relax
14389      \fi
14390  \or

postlinks=othernotlast
14391      \ifx\mglscurrentlabel\mglscurrentmainlabel
14392          \let\glspostlinkhook\relax
14393      \else
14394          \mglscurrentmainlabel
14395          {%
14396              \let\glspostlinkhook\relax
14397          }%
14398          {%
14399              \let\glspostlinkhook\mglscurrentmainlabel
14400          }%
14401      \fi
14402  \or

postlinks=otheronly
14403      \ifx\mglscurrentlabel\mglscurrentmainlabel
14404          \let\glspostlinkhook\relax
14405      \else
14406          \let\glspostlinkhook\mglscurrentmainlabel
14407      \fi
14408  \fi

```

Save the last element for the multi-entry post-link hook.

```

14409  \mglscurrentmainlabel
14410  {%
14411      \xappto\mglscurrentmainlabel{%
14412          \noexpand\def\noexpand\mglscurrentmainlabel{%
14413              \expandonce\mglscurrentmainlabel}%
14414      }%

```

14415 {}%

Do current element:

14416 \@mglscurrent@element

14417 {}%

Pre element hook.

14418 \mglselementprehook

Is this the first use of the current element?

14419 \GlsXtrIfUnusedOrUndefined{\mglscurrentlabel}%

14420 {\let\@mglscurrent@iffirstuse\@firstoftwo}%

14421 {\let\@mglscurrent@iffirstuse\@secondoftwo}%

14422 \ifx\mglscurrentlabel\mglscurrentmainlabel

Main element. Location encap option:

14423 \edef\@mglscurrent@options{format=\@gls@combined@encapmain}%

Indexing option:

14424 \ifcase\@gls@combined@indexmain
14425 \appto\@mglscurrent@options{,noindex}%
14426 \or
14427 \appto\@mglscurrent@options{,noindex=false}%
14428 \or
14429 \@mglscurrent@iffirstuse
14430 {\appto\@mglscurrent@options{,noindex=false}%
14431 {\appto\@mglscurrent@options{,noindex}}%
14432 \fi

Hyperlink option:

14433 \ifcase\@gls@combined@hyper\relax
14434 \appto\@mglscurrent@options{,hyper=false}%
none
14435 \or
14436 \appto\@mglscurrent@options{,hyper=false}%
allmain
14437 \or
14438 \eappto\@mglscurrent@options{,\@mglscurrent@hyper}%
mainonly
14439 \or
14440 \eappto\@mglscurrent@options{,\@mglscurrent@hyper}%
individual
14441 \or
14442 \appto\@mglscurrent@options{,hyper=false}%
otheronly
14443 \or
14444 \mglscurrent@isfirstuse
14445 \%
14446 \appto\@mglscurrent@options{,hyper=false}%
notmainfirst
14447 \%
14448 \%
14449 \eappto\@mglscurrent@options{,\@mglscurrent@hyper}%
notmainfirst
14450 \%
14451 \or
14452 \eappto\@mglscurrent@options{,\@mglscurrent@hyper}%
nototherfirst
14453 \or
14454 \mglscurrent@isfirstuse

```

14455      {%
14456          \appto{\mglscurrentoptions{,hyper=false}}% notfirst
14457      }%
14458      {%
14459          \eappto{\mglscurrentoptions{,\mglshyper}}% notfirst
14460      }%
14461  \fi

```

Append all and then main:

```

14462      \eappto{\mglscurrentoptions{,\mglscall,\mglsmain}}%
14463  \else

```

Other element. Location encapsulation option:

```

14464      \edef{\mglscurrentoptions{format=\glscombinedencapother}}%

```

Indexing option:

```

14465      \ifcase{\glscombinedindexother}\relax
14466          \appto{\mglscurrentoptions{,noindex}}%
14467      \or
14468          \appto{\mglscurrentoptions{,noindex=false}}%
14469      \or
14470          \mglscurrentiffirstuse
14471          {\appto{\mglscurrentoptions{,noindex=false}}\%
14472          {\appto{\mglscurrentoptions{,noindex}}\%
14473  \fi

```

Hyperlink option:

```

14474      \ifcase{\glscombinedhyper}\relax
14475          \appto{\mglscurrentoptions{,hyper=false}}% none
14476      \or
14477          \appto{\mglscurrentoptions{,hyper=false}}% allmain
14478      \or
14479          \appto{\mglscurrentoptions{,hyper=false}}% mainonly
14480      \or
14481          \eappto{\mglscurrentoptions{,\mglshyper}}% individual
14482      \or
14483          \eappto{\mglscurrentoptions{,\mglshyper}}% otheronly
14484      \or
14485          \eappto{\mglscurrentoptions{,\mglshyper}}% notmainfirst
14486      \or
14487          \mglsisfirstuse
14488      {%
14489          \appto{\mglscurrentoptions{,hyper=false}}% nototherfirst
14490      }%
14491      {%
14492          \eappto{\mglscurrentoptions{,\mglshyper}}% nototherfirst
14493      }%
14494      \or
14495          \mglsisfirstuse
14496      {%
14497          \appto{\mglscurrentoptions{,hyper=false}}% notfirst

```

```

14498      }%
14499      {%
14500          \eappto\@mglst@current@options{,\@mglst@hyper}%
14501      }%
14502  \fi

```

Append all and then others:

```

14503      \eappto\@mglst@current@options{,\@mglst@all,\@mglst@others}%
14504  \fi

```

Is this the first element?

```

14505      \ifx\@mglst@previouslabel\empty
14506          \ifx\mglst@currentlabel\mglst@currentmainlabel
14507              \let\@mglst@cs#6\relax
14508          \else
14509              \let\@mglst@cs#4\relax
14510          \fi
14511      \else

```

Not the first element so add separator.

```

14512      \@mglst@previous@iffirstuse
14513      {%
14514          \@mglst@current@iffirstuse
14515          {\glscombinedfirstsep{\@mglst@previouslabel}{\mglst@currentlabel}}%
14516          {\glscombinedfirstsep{\@mglst@previouslabel}{\mglst@currentlabel}}%
14517      }%
14518      {%
14519          \@mglst@current@iffirstuse
14520          {\glscombinedsepfirst{\@mglst@previouslabel}{\mglst@currentlabel}}%
14521          {\glscombinedsep{\@mglst@previouslabel}{\mglst@currentlabel}}%
14522      }%
14523      \ifx\mglst@currentlabel\mglst@currentmainlabel
14524          \let\@mglst@cs#7\relax
14525      \else
14526          \let\@mglst@cs#5\relax
14527      \fi
14528  \fi

```

Is this the last element?

```

14529      \mglst@iflast
14530          {\expandafter\@mglst@cs\expandafter{\@mglst@current@options}{\mglst@currentlabel}[\#3]}%
14531          {\expandafter\@mglst@cs\expandafter{\@mglst@current@options}{\mglst@currentlabel}[]}%

```

Is this the main element? If so, save information for post-link hook.

```

14532      \ifx\mglst@currentlabel\mglst@currentmainlabel
14533          \xappto\@mglst@post@hookdefs{%
14534              \noexpand\def\noexpand\mglst@lastmainlabel
14535                  {\expandonce\mglst@currentmainlabel}%
14536          }%
14537          \glsxtrifwasfirstuse
14538      {%

```

```

14539      \gappto\@mglss@post@hookdefs{\let\mglssiflastmainwasfirstuse\@firstoftwo}%
14540      }%
14541      {%
14542          \gappto\@mglss@post@hookdefs{\let\mglssiflastmainwasfirstuse\@secondoftwo}%
14543          }%
14544          \glsifplural
14545          {%
14546              \gappto\@mglss@post@hookdefs{\let\mglssiflastmainwasplural\@firstoftwo}%
14547              }%
14548              {%
14549                  \gappto\@mglss@post@hookdefs{\let\mglssiflastmainwasplural\@secondoftwo}%
14550                  }%
14551                  \glscapscase
14552                  {%
14553                      \gappto\@mglss@post@hookdefs{%
14554                          \let\mglssiflastmaincapscase\@firstofthree
14555                          }%
14556                          {%
14557                              {%
14558                                  \gappto\@mglss@post@hookdefs{%
14559                                      \let\mglssiflastmaincapscase\@secondofthree
14560                                      }%
14561                                      {%
14562                                          {%
14563                                              \gappto\@mglss@post@hookdefs{%
14564                                                  \let\mglssiflastmaincapscase\@thirdofthree
14565                                                  }%
14566                                                  {%
14567                                                      \fi
14568                                                      \let\@mglss@previouslabel\mglsscurrentlabel
14569                                                      \let\@mglss@previous@iffirstuse\@mglss@current@iffirstuse
14570                                                      }%
14571      
```

Post element hook.

```

14571          \mglselementposthook
14572          }%
14573          \ifx\mglsslastmainlabel\empty
14574              \gappto\@mglss@post@hookdefs{\let\mglssiflastmainskipped\@firstoftwo}%
14575          \else
14576              \gappto\@mglss@post@hookdefs{\let\mglssiflastmainskipped\@secondoftwo}%
14577          \fi
14578      
```

Encapsulator may introduce grouping so check here.

```

14578          \ifx\@mglss@do@current@element\gobble
14579              \gappto\@mglss@post@hookdefs{\let\mglssiflastelements skipped\@firstoftwo}%
14580          \else
14581              \gappto\@mglss@post@hookdefs{\let\mglssiflastelements skipped\@secondoftwo}%
14582          \fi
14583          \glsxtrifwasfirstuse
14584      
```

```

14585     \gappto\@mglss@post@hookdefs{\let\mglssiflastelementwasfirstuse\@firstoftwo}%
14586     }%
14587     {%
14588         \gappto\@mglss@post@hookdefs{\let\mglssiflastelementwasfirstuse\@secondoftwo}%
14589         }%
14590         \glssifplural
14591         {%
14592             \gappto\@mglss@post@hookdefs{\let\mglssiflastelementwasplural\@firstoftwo}%
14593             }%
14594             {%
14595                 \gappto\@mglss@post@hookdefs{\let\mglssiflastelementwasplural\@secondoftwo}%
14596                 }%
14597                 \glscapscase
14598                 {%
14599                     \gappto\@mglss@post@hookdefs{%
14600                         \let\mglssiflastelementcapscase\@firstofthree
14601                         }%
14602                         }%
14603                         {%
14604                             \gappto\@mglss@post@hookdefs{%
14605                                 \let\mglssiflastelementcapscase\@secondofthree
14606                                 }%
14607                                 }%
14608                                 {%
14609                                     \gappto\@mglss@post@hookdefs{%
14610                                         \let\mglssiflastelementcapscase\@thirdofthree
14611                                         }%
14612                                         }%
14613                                         }%

```

Suffix needs post-link hook commands.

```

14614     \@mglss@post@hookdefs
14615     \mglssuffix

```

Unset multi-entry first use flag after current scope.

```

14616     \ifcase\@mglss@unsetaction\relax
14617         \xappto\@mglss@post@hookdefs{%
14618             \noexpand\mglssunset{\expandonce\mglsscurrentmultilabel}}%
14619             \or
14620                 \xappto\@mglss@post@hookdefs{%
14621                     \noexpand\mglsslocalunset{\expandonce\mglsscurrentmultilabel}}%
14622             \fi
14623     }%
14624     \glsxtrmglswrite{#2}%
14625     \egroup
14626     \@mglss@post@hookdefs
14627     \mglss@do@postlinkhook
14628 }

```

tompostlinkhook

```

14629 \newcommand*{\mglscustompostlinkhook}{}}

entpostlinkhook
14630 \newcommand*{\mglslastelementpostlinkhook}{%
14631 \let\glsxtrifwasfirstuse\mglstiflastelementwasfirstuse
14632 \let\glsifplural\mglstiflastelementwasplural
14633 \let\glscapscase\mglstiflastelementcapscase
14634 \let\glslabel\mglstlastelementlabel
14635 \glspostlinkhook
14636 }

ainpostlinkhook
14637 \newcommand*{\mglslastmainpostlinkhook}{%
14638 \let\glsxtrifwasfirstuse\mglstiflastmainwasfirstuse
14639 \let\glsifplural\mglstiflastmainwasplural
14640 \let\glscapscase\mglstiflastmaincapscase
14641 \let\glslabel\mglstlastmainlabel
14642 \glspostlinkhook
14643 }

fcategoryprefix
14644 \newcommand*{\mglscategoryprefix}[2]{%
14645 \csdef{mglsprefix@#1}{#2}%
14646 }

scategoryprefix
14647 \newcommand*{\mglshascategoryprefix}[3]{%
14648 \ifcsdef{mglsprefix@#1}{#2}{#3}%
14649 }

ecategoryprefix
14650 \newcommand*{\mglssusecategoryprefix}[1]{%
14651 \csuse{mglsprefix@#1}%
14652 }

\mglsprefix
14653 \newcommand*{\mglsprefix}{%
14654 \ifdefempty{\mglstcurrentcategory}%
14655 {\mglstcurrentprefix}%
14656 {%
14657 \mglshascategoryprefix{\mglstcurrentcategory}%
14658 {\mglssusecategoryprefix{\mglstcurrentcategory}}%
14659 {\mglstcurrentprefix}%
14660 }%
14661 }

fcategoriesuffix
14662 \newcommand*{\mglscategorysuffix}[2]{%
14663 \csdef{mglssuffix@#1}{#2}%
14664 }

```

```

scategorysuffix
14665 \newcommand*{\mglshascategorysuffix}[3]{%
14666  \ifcsdef{mglssuffix@#1}{#2}{#3}%
14667 }

ecategorysuffix
14668 \newcommand*{\mglssusecategorysuffix}[1]{%
14669  \csuse{mglssuffix@#1}%
14670 }

\mglssuffix
14671 \newcommand*{\mglssuffix}{%
14672  \ifdefempty{\mglscurrentcategory}%
14673  {\ifdefempty{\mglscurrentsuffix}{}{\space(\mglscurrentsuffix)}}}%
14674 }%
14675  \mglshascategorysuffix{\mglscurrentcategory}%
14676  {\mglssusecategorysuffix{\mglscurrentcategory}}%
14677  {\ifdefempty{\mglscurrentsuffix}{}{\space(\mglscurrentsuffix)}}}%
14678 }%
14679 }

selementprehook
14680 \newcommand*{\mglselementprehook}{}}

elementposthook
14681 \newcommand*{\mglselementposthook}{}}

Separators.

\glscombinedsep Separator between two elements that have been marked as used. This takes the two element labels as arguments.
14682 \newcommand*{\glscombinedsep}[2]{%
14683  \glshasattribute{#1}{combinedsep}%
14684  {\glsgetattribute{#1}{combinedsep}}%
14685  { }%
14686 }

\glsfirstsepfirst Separator following and preceding a first use.
14687 \newcommand*{\glscombinedfirstsepfirst}[2]{%
14688  \glshasattribute{#1}{combinedfirstsepfirst}%
14689  {\glsgetattribute{#1}{combinedfirstsepfirst}}%
14690  {\glscombinedsep{#1}{#2}}}%
14691 }

\glscombinedfirstsep Separator following a first use.
14692 \newcommand*{\glscombinedfirstsep}[2]{%
14693  \glshasattribute{#1}{combinedfirstsep}%
14694  {\glsgetattribute{#1}{combinedfirstsep}}%
14695  {\glscombinedsep{#1}{#2}}}%
14696 }

```

ombinedsepfirst Separator preceding a first use.

```
14697 \newcommand*{\glscombinedsepfirst}[2]{%
14698   \glshasattribute{#1}{combinedsepfirst}%
14699   {\glsgetattribute{#1}{combinedsepfirst}}%
14700   {\glscombinedsep{#1}{#2}}%
14701 }
```

nedsepabbrvnbsp Provide shortcut for using non-breakable space following an abbreviation that has already been used.

```
14702 \newcommand*{\glssetcombinedsepabbrvnbsp}{%
14703   \renewcommand*{\glscombinedsep}[2]{%
14704     \glshasattribute{##1}{combinedsep}%
14705     {\glsgetattribute{##1}{combinedsep}}%
14706     {\ifhasshort{##1}{~}{ }}%
14707   }%
14708   \renewcommand*{\glscombinedsepfirst}[2]{%
14709     \glshasattribute{##1}{combinedsepfirst}%
14710     {\glsgetattribute{##1}{combinedsepfirst}}%
14711     {\ifhasshort{##1}{~}{ }}%
14712   }%
14713   \renewcommand*{\glscombinedfirstsep}[2]{%
14714     \glshasattribute{##1}{combinedfirstsep}%
14715     {\glsgetattribute{##1}{combinedfirstsep}}%
14716     { }%
14717   }%
14718   \renewcommand*{\glscombinedfirstsepfirst}[2]{%
14719     \glshasattribute{##1}{combinedfirstsepfirst}%
14720     {\glsgetattribute{##1}{combinedfirstsepfirst}}%
14721     { }%
14722   }%
14723 }
```

nedsepabbrvnone Provide shortcut for using nothing if either on next use are abbreviations (otherwise use space).

```
14724 \newcommand*{\glssetcombinedsepabbrvnone}{%
14725   \renewcommand*{\glscombinedsep}[2]{%
14726     \glshasattribute{##1}{combinedsep}%
14727     {\glsgetattribute{##1}{combinedsep}}%
14728     {\ifhasshort{##1}{\{}{\ifhasshort{##2}{\}{\ }}{\ }}\}}%
14729   }%
14730   \renewcommand*{\glscombinedsepfirst}[2]{%
14731     \glshasattribute{##1}{combinedsepfirst}%
14732     {\glsgetattribute{##1}{combinedsepfirst}}%
14733     {\ifhasshort{##1}{\{}{\ }}\}}%
14734   }%
14735   \renewcommand*{\glscombinedfirstsep}[2]{%
14736     \glshasattribute{##1}{combinedfirstsep}%
14737     {\glsgetattribute{##1}{combinedfirstsep}}%
14738     {\ifhasshort{##2}{\{}{\ }}\}}%
```

```

14739 }%
14740 \renewcommand*{\glscombinedfirstsepfirst}[2]{%
14741   \glshasattribute{##1}{combinedfirstsepfirst}%
14742   {\glsgetattribute{##1}{combinedfirstsepfirst}}%
14743   { }%
14744 }%
14745 }

```

`mbinedseparrow` Measures both.

```

14746 \newcommand*{\glssetcombinedseparrow}[2]{%
14747   \renewcommand*{\glscombinedsep}[2]{%
14748     \glshasattribute{##1}{combinedsep}%
14749     {\glsgetattribute{##1}{combinedsep}}%
14750     {%
14751       \ifhasshort{##1}%
14752         {\settowidth{\dimen@}{\glsentryshort{##1}}}%
14753         {\settowidth{\dimen@}{\glsentrytext{##1}}}%
14754         \ifdim\dimen@<#1\relax
14755           #2%
14756         \else
14757           \ifhasshort{##2}%
14758             {\settowidth{\dimen@}{\glsentryshort{##2}}}%
14759             {\settowidth{\dimen@}{\glsentrytext{##2}}}%
14760             \ifdim\dimen@<#1\relax
14761               #2%
14762             \else
14763               \space
14764             \fi
14765           \fi
14766         }%
14767     }%
14768   \renewcommand*{\glscombinedsepfirst}[2]{%
14769     \glshasattribute{##1}{combinedsepfirst}%
14770     {\glsgetattribute{##1}{combinedsepfirst}}%
14771     {%
14772       \ifhasshort{##1}%
14773         {\settowidth{\dimen@}{\glsentryshort{##1}}}%
14774         {\settowidth{\dimen@}{\glsentrytext{##1}}}%
14775         \ifdim\dimen@<#1\relax
14776           #2%
14777         \else
14778           \ifhaslong{##2}%
14779             {\settowidth{\dimen@}{\glsentrylong{##2}}}%
14780             {\settowidth{\dimen@}{\glsentryfirst{##2}}}%
14781             \ifdim\dimen@<#1\relax
14782               #2%
14783             \else
14784               \space
14785             \fi

```

```

14786     \fi
14787   }%
14788 }%
14789 \renewcommand*{\glscombinedfirstsep}[2]{%
14800   \glshasattribute{##1}{combinedfirstsep}%
14801   {\glsgetattribute{##1}{combinedfirstsep}}%
14802   {%
14803     \ifhaslong{##1}%
14804       {\settowidth{\dimen@}{\glsentrylong{##1}}}%
14805       {\settowidth{\dimen@}{\glsentryfirst{##1}}}%
14806       \ifdim\dimen@<#1\relax
14807         #2%
14808       \else
14809         \ifhasshort{##2}%
14810           {\settowidth{\dimen@}{\glsentryshort{##2}}}%
14811           {\settowidth{\dimen@}{\glsentrytext{##2}}}%
14812           \ifdim\dimen@<#1\relax
14813             #2%
14814           \else
14815             \space
14816           \fi
14817         \fi
14818       }%
14819   }%
14820 \renewcommand*{\glscombinedfirstsepfirst}[2]{%
14821   \glshasattribute{##1}{combinedfirstsepfirst}%
14822   {\glsgetattribute{##1}{combinedfirstsepfirst}}%
14823   {%
14824     \ifhaslong{##1}%
14825       {\settowidth{\dimen@}{\glsentrylong{##1}}}%
14826       {\settowidth{\dimen@}{\glsentryfirst{##1}}}%
14827       \ifdim\dimen@<#1\relax
14828         #2%
14829       \else
14830         \space
14831       \fi
14832     }%
14833   }%
14834 }%

```

lsxtr@mglswrite Write information to the aux file for bib2gls to pick up, but only need to do it once per label since it only indicates which multi-entry has been referenced without any additional

information.

```
14832 \newcommand{\glsxtrmglswrite}[1]{%
14833   \ifx\@glsxtr@record@setting\@glsxtr@record@setting@off
14834   \else
14835   \protected@edef\@glsxtr@mglslabel{#1}%
14836   \ifdef\@glsxtr@mglereflist
14837   {%
14838     \expandafter\DTLifinlist\expandafter{\@glsxtr@mglslabel}%
14839     {\@glsxtr@mglereflist}{}%
14840     {%
14841       \xappto\@glsxtr@mglereflist{,\expandonce\@glsxtr@mglslabel}%
14842       \if@mglsl@writeseparaterefs
14843         \protected@write\auxout{}{\string\@glsxtr@mglrefs{#1}}%
14844       \fi
14845     }%
14846   }%
14847   {%
14848     \global\let\@glsxtr@mglereflist\@glsxtr@mglslabel
14849     \if@mglsl@writeseparaterefs
14850       \protected@write\auxout{}{\string\@glsxtr@mglrefs{#1}}%
14851     \else
14852       \AtEndDocument{\immediate\protected@write\auxout{}{%
14853         \string\@glsxtr@mglrefs{\@glsxtr@mglereflist}}}%
14854     \fi
14855     \c@mglsl@disable@writeseparateref@cond
14856   }%
14857 \fi
14858 }
```

glsxtr@mglrefs

```
14859 \newcommand{\@glsxtr@mglrefs}[1]{}%
```

iteSeparateRefs If this conditional is changed, it must be done before the first instance of any \mglslike command.

```
14860 \newif\if@mglsl@writeseparaterefs \c@mglsl@writeseparateref@false
```

eparateRefsTrue

```
14861 \newcommand{\mglsl@WriteSeparateRefsTrue}{\global\c@mglsl@writeseparateref@true}
```

parateRefsFalse

```
14862 \newcommand{\mglsl@WriteSeparateRefsFalse}{\global\c@mglsl@writeseparateref@false}
```

eparateref@cond

```
14863 \newcommand*{\c@mglsl@disable@writeseparateref@cond}{%
14864   \gdef\mglsl@WriteSeparateRefsTrue{\PackageError{glossaries-extra}%
14865     {Too late to use \string\mglsl@WriteSeparateRefsTrue}%
14866     {\string\mglsl@WriteSeparateRefsTrue\space can only be used before
14867      the first instance of any \string\mglslike command}}%
```

```

14868 \gdef\mglsWriteSeparateRefsFalse{\PackageError{glossaries-extra}%
14869 {Too late to use \string\mglsWriteSeparateRefsFalse}%
14870 {\string\mglsWriteSeparateRefsFalse\space can only be used before
14871 the first instance of any \string\mgls-like command}%
14872 }

\glsxtr@newmgls
14873 \newcommand{\glsxtr@newmgls}[5]{%
14874 \edef@glsxr@newmgls@do{%
14875 \noexpand\newrobustcmd*\{\expandonce{\csname #1\endcsname}\}%
14876 {\noexpand\gls@hyp@opt\expandonce{\csname ns@glsxtr@#1\endcsname}\}%
14877 \noexpand\newcommand*\{\expandonce{\csname ns@glsxtr@#1\endcsname}\}[2][]{%
14878 \noexpand\new@ifnextchar[%
14879 {\expandonce{\csname glsxtr@#1\endcsname}{####1}{####2}}%
14880 {\expandonce{\csname glsxtr@#1\endcsname}{####1}{####2}[]}%
14881 }%
14882 \noexpand\def\expandonce{\csname glsxtr@#1\endcsname}####1####2[####3]{%
14883 \noexpand\def\noexpand\glsxtrcurrentmglscsname{#1}%
14884 \noexpand\glsxtr@mgls@inner{####1}{####2}{####3}%
14885 {\noexpand#2}{\noexpand#3}{\noexpand#4}{\noexpand#5}%
14886 }%
14887 }%
14888 \glsxr@newmgls@do
14889 \ifx\glsxtr@record@setting\glsxtr@record@setting@off
14900 \else

```

Provide a way for bib2gls to recognise the command (this will make it easier to add extra commands without having to modify bib2gls).

```

14891 \ifdef\glsxtr@mglslikelist
14892 {\xappto\glsxtr@mglslikelist{,#1}}%
14893 {%
14894 \gdef\glsxtr@mglslikelist{#1}%
14895 \AtEndDocument{\immediate\protected@write\@auxout{}{%
14896 {\string\glsxtr@mglslike{\glsxtr@mglslikelist}}}}%
14897 }%
14898 \fi
14899 }

```

`glsxtr@mglslike`

```
14900 \newcommand*{\glsxtr@mglslike}[1]{}
```

`GlsXtrMglsOrGls`

$\backslash GlsXtrMglsOrGls\{<mgls_cs>\}<gls_cs><modifier>[<options>]<label>\\ [<insert>]$

```
14901 \newcommand*{\GlsXtrMglsOrGls}[2]{%
```

```
14902 \def\@glsxtr@mglss@or@gls@mcs{\#1}%
14903 \def\@glsxtr@mglss@or@gls@gcs{\#2}%
14904 \c@ifstar{\s@GlsXtrMglssOrGls}%
14905 {%
14906 \c@ifnextchar+\{PLUS\ciffirstoftwo{\p@GlsXtrMglssOrGls}\}%
14907 {%
14908 \cifdefempty\@gls@alt@hyp@opt@char\@GlsXtrMglssOrGls\alt@GlsXtrMglssOrGls
14909 }%
14910 }%
14911 }
```

GlsXtrMglssOrGls

```
14912 \newcommand*\@GlsXtrMglssOrGls{%
14913 \expandafter\cifnextchar\@gls@alt@hyp@opt@char
14914 {\ciffirstoftwo{\@alt@GlsXtrMglssOrGls}{\@GlsXtrMglssOrGls}}%
14915 }
```

GlsXtrMglssOrGls

```
14916 \newcommand*\@GlsXtrMglssOrGls[2][]{%
14917 \glsxtrifmulti{\#2}%
14918 {\@glsxtr@mglss@or@gls@mcs[\#1]{\#2}}%
14919 {\@glsxtr@mglss@or@gls@gcs[\#1]{\#2}}%
14920 }
```

GlsXtrMglssOrGls

```
14921 \newcommand*\s@GlsXtrMglssOrGls[2][]{%
14922 \glsxtrifmulti{\#2}%
14923 {\@glsxtr@mglss@or@gls@mcs*[{\#1}{\#2}]}%
14924 {\@glsxtr@mglss@or@gls@gcs*[{\#1}{\#2}]}%
14925 }
```

GlsXtrMglssOrGls

```
14926 \newcommand*\p@GlsXtrMglssOrGls[2][]{%
14927 \glsxtrifmulti{\#2}%
14928 {\@glsxtr@mglss@or@gls@mcs+[\#1]{\#2}}%
14929 {\@glsxtr@mglss@or@gls@gcs+[\#1]{\#2}}%
14930 }
```

GlsXtrMglssOrGls

```
14931 \newcommand*\@alt@GlsXtrMglssOrGls[2][]{%
14932 \glsxtrifmulti{\#2}%
14933 {\expandafter\@glsxtr@mglss@or@gls@mcs\@gls@alt@hyp@opt@char[\#1]{\#2}}%
14934 {\expandafter\@glsxtr@mglss@or@gls@gcs\@gls@alt@hyp@opt@char[\#1]{\#2}}%
14935 }
```

\mglss

```
\mgl{[options]}{[label]}{[insert]}
```

Use `\gls` for all elements.

```
14936 \glsxtr@newmgl{mgl}{\gls@\gls@\gls@\gls@}%
```

`\mglspl`

```
\mglspl{[options]}{[label]}{[insert]}
```

Use `\glspl` for all elements.

```
14937 \glsxtr@newmgl{mglspl}{\glspl@\glspl@\glspl@\glspl@}%
```

`\mglsmainpl`

```
\mglsmainpl{[options]}{[label]}{[insert]}
```

Only use `\glspl` for the main element, otherwise use `\gls`.

```
14938 \glsxtr@newmgl{mglsmainpl}{\gls@\gls@\glspl@\glspl@}%
```

`\Mgl{}`

```
\Mgl{[options]}{[label]}{[insert]}
```

Use `\Gls` for first element and `\gls` for others.

```
14939 \glsxtr@newmgl{Mgl}{\Gls@\gls@\Gls@\gls@}%
```

`\Mglsp{}`

```
\Mglsp{[options]}{[label]}{[insert]}
```

Use `\Glspl` for first element and `\glspl` for others.

```
14940 \glsxtr@newmgl{Mglsp}{\Glspl@\glspl@\Glspl@\glspl@}%
```

`\mglsmainpl`

```
\mglsmainpl{[options]}{[label]}{[insert]}
```

Upper case the first element, no case change for others. Use plural for the main element only.

```
14941 \glsxtr@newmgl{mglsmainpl}{\Gls@\gls@\Glspl@\glspl@}%
```

\MGls

\MGls[*options*]{*label*} [*insert*]]

Use \Gls for all elements.

\MG1spl

\MGlsp[*options*]{*label*}[*insert*]

Use \Glspl for all elements.

\MG1smainpl

```
\MGlsmainpl[options]{label}{insert}
```

Start all elements with upper case. Only use plural for main element.

```
\MGT.S[options]{{label}}{insert}
```

Use \GTS for all elements

\MGLSp1

```
\MGLSp1[options]{{label}}[insert]
```

Use \G[Sp1] for all elements.

14946 \glsxtr@newmglss{MGLSp1}{\@GLSp1@}{\@GLSp1@}{\@GLSp1@}{\@GLSp1@}{\@GLSp1@}{\%}

\MGLSmainpl

```
\MGLSmainpl[options]{label}{insert}
```

Upper case all elements. Only use plural for main element.

```

@glslongortext@
14948 \def\@glslongortext#1#2[#3]{%
14949   \ifglshaslong{#2}{\@glsxtrlong{#1}{#2}[#3]}{\@glstext@{#1}{#2}[#3]}%
14950 }

glsshortortext@
14951 \def\@glsshortortext#1#2[#3]{%
14952   \ifglshasshort{#2}{\@glsxtrshort{#1}{#2}[#3]}{\@glstext@{#1}{#2}[#3]}%
14953 }

glsfullorfirst@
14954 \def\@glsfullorfirst#1#2[#3]{%
14955   \ifglshasshort{#2}{\@glsxtr@full{#1}{#2}[#3]}{\@glsfirst@{#1}{#2}[#3]}%
14956 }

@Glslongortext@
14957 \def\@Glslongortext#1#2[#3]{%
14958   \ifglshaslong{#2}{\@Glsxtrlong{#1}{#2}[#3]}{\@Glstext@{#1}{#2}[#3]}%
14959 }

Glsshortortext@
14960 \def\@Glsshortortext#1#2[#3]{%
14961   \ifglshasshort{#2}{\@Glsxtrshort{#1}{#2}[#3]}{\@Glstext@{#1}{#2}[#3]}%
14962 }

Glsfullorfirst@
14963 \def\@Glsfullorfirst#1#2[#3]{%
14964   \ifglshasshort{#2}{\@Glsxtr@full{#1}{#2}[#3]}{\@Glsfirst@{#1}{#2}[#3]}%
14965 }

```

\mglsshort

`\mglsshort[options]{label}[insert]`

Use short or text for all elements.

```

14966 \glsxtr@newmglsshort{%
14967 {\@glsshortortext}{\@glsshortortext}{\@glsshortortext}{\@glsshortortext}}%

```

\mglslong

`\mglslong[options]{label}[insert]`

Use long or text for all elements.

```

14968 \glsxtr@newmglslong{%
14969 {\@glslongortext}{\@glslongortext}{\@glslongortext}{\@glslongortext}}%

```

\mgl{full}

\mgl{lsfull}[\textit{options}] \{\textit{label}\} [\textit{insert}]

Use full or first for all elements.

14970 \glsxtr@newmgls{mglsfull}\%
14971 {\@glsfullorfirst}{\@glsfullorfirst}{\@glsfullorfirst}{\@glsfullorfirst}\%

\Mglsshort

\Mglsshort[*options*]{*label*}[*insert*]

Use short or text for all elements with initial cap on first element.

14972 \glsxstr@newmglss{Mglsshort} %
14973 {\@Glsshortortext}{\@glsshortortext}{\@Glsshortortext}{\@glsshortortext} %

\Mglslong

```
\Mglslong[options]{{label}}[insert]
```

Use long or text for all elements with initial cap on first element.

```
14974 \glsxstr@newmglss{Mglslong}%
14975 {\@Glslongortext}{\@Glslongortext}{\@Glslongortext}{\@Glslongortext}%
```

\Mglsfull

```
\Mglsfull[options]{{label}}[insert]
```

Use full or first for all elements with initial cap on first element

14976 \glsxstr@newmglsls{Mglslsfull}\%
14977 {\glsfullorfirst}{\glsfullorfirst}{\glsfullorfirst}{\glsfullorfirst}\%

\mglsname

```
\mglsname[options]{{label}}[insert]
```

Use name for all elements

14978 \glssxtr@newmgls{mglssname}\%

\Mglsname

```
\Mglsname[<options>]{<label>}[<insert>]
```

Use name for all elements with initial cap on first element.

```
14980 \glsxtr@newmgl{Mglsname}%
14981 {\@Glsname@}{\@glsname@}{\@Glsname@}{\@glsname@}%
```

\MGlsname

```
\MGlsname[<options>]{<label>}[<insert>]
```

Use name for all elements with initial cap on all elements.

```
14982 \glsxtr@newmgl{MGlsname}%
14983 {\@Glsname@}{\@Glsname@}{\@Glsname@}{\@Glsname@}%
```

@glssymbolorgls

```
14984 \def\@glssymbolorgls#1#2[#3]{%
14985   \ifglshassymbol{#2}{\@glssymbol@{#1}{#2}[#3]}{\@gls@{#1}{#2}[#3]}%
14986 }
```

@glssymbolorGls

```
14987 \def\@glssymbolorGls#1#2[#3]{%
14988   \ifglshassymbol{#2}{\@glssymbol@{#1}{#2}[#3]}{\@Gls@{#1}{#2}[#3]}%
14989 }
```

\mglssymbol

```
\mglssymbol[<options>]{<label>}[<insert>]
```

Use \glssymbol if the symbol key is set otherwise use \gls.

```
14990 \glsxtr@newmgl{mglssymbol}%
14991 {\@glssymbolorgls}{\@glssymbolorgls}{\@glssymbolorgls}{\@glssymbolorgls}%
```

\Mglssymbol

```
\Mglssymbol[<options>]{<label>}[<insert>]
```

As above but initial the first element if it's not a symbol.

```
14992 \glsxtr@newmgl{Mglssymbol}%
14993 {\@glssymbolorGls}{\@glssymbolorgls}{\@glssymbolorGls}{\@glssymbolorgls}%
```

\MGlssymbol

\MGlssymbol[*options*]{*label*} [*insert*]]

As above but initial each element if it's not a symbol.

```
14994 \glsxtr@newmglsl{MGlssymbol}{%  
14995 { {@glssymbolorGls}{ {@glssymbolorGls}{ {@glssymbolorGls}{ {@glssymbolorGls}{%
```

\mgl{sf}ield

14996 \newcommand{\mglSfield}{useri}

\@glsfieldorgls

```
14997 \def@\glsfieldorgls[#1#2[#3]{%
14998   \glsxtrifhasfield{\mglsgls}{#2}%
14999   {@glsdisp[#1]{#2}{\glscurrentfieldvalue#3}}%
15000   {@gls@{#1}{#2}[#3]}%
15001 }
```

\@Glsfieldorgls

```
15002 \def\@Glsfieldorgls#1#2[#3]{%
15003   \glsxtrifhasfield{\mglstitle}{#2}{%
15004     {\@glsdisp[#1]{#2}{\xmakefirststuc\glscurrentfieldvalue#3}}%
15005     {\@Gls@{#1}{#2}[#3]}%
15006 }
```

\mglusefield

\mglusefield[*options*]{*label*}{*insert*}

Use the field given by \useri.

\Mglssusefield

```
\Mglsusefield[options]{{label}}[insert]
```

As above but use initial cap for first element only.

15009 \glsxtr@newmgl{Mglseusefield}%

```
\MGlsusefield[options]{label}[{insert}]
```

As above but use initial cap for all elements.

```
15011 \glsxtr@newmgl{MGlsusefield}%
15012 {\@Glsfieldorgls}{\@Glsfieldorgls}{\@Glsfieldorgls}{\@Glsfieldorgls}%
```

Use commands provided by glossaries-prefix if it has been loaded.

```
\mpglsWarning
15013 \newcommand*\mpglsWarning{}%
15014   \GlossariesExtraWarning{glossaries-prefix.sty is required for
15015   \string\mpgls\space family of commands (either load after
15016   glossaries-extra.sty or use the ‘prefix’ package option)}%
15017 }

\@pglsorgls
15018 \def\@pglsorgls#1#2[#3]%
15019   \ifdef{\pgls}{\@pgls@{\@pgls@{\#1}{\#2}}[#3]}{\mpglsWarning\@gls@{\#1}{\#2}}[#3]%
15020 }

\@pglsorglsp
15021 \def\@pglsorglsp#1#2[#3]%
15022   \ifdef{\pglsp}{\@pglsp@{\@pglsp@{\#1}{\#2}}[#3]}{\mpglsWarning\@glspl@{\#1}{\#2}}[#3]%
15023 }

\@Pglsorgls
15024 \def\@Pglsorgls#1#2[#3]%
15025   \ifdef{\Pgls}{\@Pgls@{\@Pgls@{\#1}{\#2}}[#3]}{\mpglsWarning\@Gls@{\#1}{\#2}}[#3]%
15026 }

\@pglsorglsp
15027 \def\@pglsorglsp#1#2[#3]%
15028   \ifdef{\pglsp}{\@pglsp@{\@pglsp@{\#1}{\#2}}[#3]}{\mpglsWarning\@glspl@{\#1}{\#2}}[#3]%
15029 }

\@Pglsp
15030 \def\@Pglsp#1#2[#3]%
15031   \ifdef{\Pglsp}{\@Pglsp@{\@Pglsp@{\#1}{\#2}}[#3]}{\mpglsWarning\@Glspl@{\#1}{\#2}}[#3]%
15032 }

\@PGLSorgls
15033 \def\@PGLSorgls#1#2[#3]%
15034   \ifdef{\PGLS}{\@PGLS@{\@PGLS@{\#1}{\#2}}[#3]}{\mpglsWarning\@GLS@{\#1}{\#2}}[#3]%
15035 }

\@PGLSorglsp
15036 \def\@PGLSorglsp#1#2[#3]%
15037   \ifdef{\PGLSp}{\@PGLSp@{\@PGLSp@{\#1}{\#2}}[#3]}{\mpglsWarning\@GLSpl@{\#1}{\#2}}[#3]%
15038 }
```

\mpgls

```
\mpgls[options]{label}[insert]
```

Use \pgls for the first element and \gls for the remainder.

```
15039 \glsxtr@newmgls{mpgls}{\pglsorgls@\gls@\pglsorgls@\gls@}%
```

\mpglspl

```
\mpglspl[options]{label}[insert]
```

Use \pglspl for the first element and \glspl for the remainder.

```
15040 \glsxtr@newmgls{mpglspl}{\pglsorglsp@\glspl@\pglsorglsp@\glspl@}%
```

\mpglsmainpl

```
\mpglsmainpl[options]{label}[insert]
```

Only use plural for main element and only use prefixing command for first element.

```
15041 \glsxtr@newmgls{mpglsmainpl}{\pglsorgls@\gls@\pglsorglsp@\glspl@}%
```

\Mpgls

```
\Mpgls[options]{label}[insert]
```

Use \Pgl for the first element and \gls for the remainder.

```
15042 \glsxtr@newmgls{Mpgls}{\Pglorgls@\gls@\Pglorgls@\gls@}%
```

\Mglspl

```
\Mglspl[options]{label}[insert]
```

Use \Pgl for the first element and \glspl for the remainder.

```
15043 \glsxtr@newmgls{Mglspl}{\Pglorglsp@\glspl@\Pglorglsp@\glspl@}%
```

\Mpglsmainpl

```
\Mpglsmainpl[options]{label}[insert]
```

Only use plural for main element and only use first letter uppercase prefixing command for first element.

```
15044 \glsxtr@newmgls{Mpglsmainpl}{\Pglorgls@\gls@\Pglorglsp@\glspl@}%
```

\MPGls

```
\MPGls[<options>]{<label>}{<insert>}
```

Use \Pgl for the first element and \Gls for the remainder.

```
15045 \glsxtr@newmgls{MPGls}{\@Pglorgls@}{\@Gls@}{\@Pglorgls@}{\@Gls@}%
```

\MPGlspl

```
\MPGlspl[<options>]{<label>}{<insert>}
```

Use \Pglspl for the first element and \Glsp1 for the remainder.

```
15046 \glsxtr@newmgls{MPGlspl}{\@Pglorglsp1@}{\@Glsp1@}{\@Pglorglsp1@}{\@Glsp1@}%
```

\MPGlsmainpl

```
\MPGlsmainpl[<options>]{<label>}{<insert>}
```

Only use plural for main element and first letter uppercase all elements.

```
15047 \glsxtr@newmgls{MPGlsmainpl}{\@Pglorgls@}{\@Gls@}{\@Pglorglsp1@}{\@Glsp1@}%
```

\MPGLS

```
\MPGLS[<options>]{<label>}{<insert>}
```

Use \PGLS for the first element and \GLS for the remainder.

```
15048 \glsxtr@newmgls{MPGLS}{\@PGLSorgls@}{\@GLS@}{\@PGLSorgls@}{\@GLS@}%
```

\MPGLSpl

```
\MPGLSpl[<options>]{<label>}{<insert>}
```

Use \PGLSpl for the first element and \GLSp1 for the remainder.

```
15049 \glsxtr@newmgls{MPGLSpl}{\@PGLSorglsp1@}{\@GLSp1@}{\@PGLSorglsp1@}{\@GLSp1@}%
```

\MPGLSmainpl

```
\MPGLSmainpl[<options>]{<label>}{<insert>}
```

Only use plural for main element and uppercase all elements.

```
15050 \glsxtr@newmgls{MPGLSmainpl}{\@PGLSorgls@}{\@GLS@}{\@PGLSorglsp1@}{\@GLSp1@}%
```

Not currently implementing any other variations.

1.10 Multi-Lingual Support

Add the facility to load language modules, if they are installed, but none are provided with this package.

sariesExtraLang

```
15051 \newcommand{\RequireGlossariesExtraLang}[1]{%
15052   \@ifundefined{ver@glossariesxtr-\#1.ldf}{\input{glossariesxtr-\#1.ldf}}{}%
15053 }
```

sariesExtraLang

```
15054 \newcommand{\ProvidesGlossariesExtraLang}[1]{%
15055   \ProvidesFile{glossariesxtr-\#1.ldf}%
15056 }
```

Load any required language modules that are available. This doesn't generate any warning if none are found, since they're not essential. (The only command that really needs defining for the document is `\abbreviationsname`, which can simply be redefined. However, with `bib2gls` it might be useful to provide custom rules for a particular locale.)

xtr@loaddialect The dialect label should be stored in `\this@dialect` before using this command.

```
15057 \newcommand{\glsxtr@loaddialect}{%
15058   \IfTrackedLanguageFileExists{\this@dialect}%
15059   {glossariesxtr-}%
15060   {.ldf}%
15061   {%
15062     \RequireGlossariesExtraLang{\CurrentTrackedTag}%
15063   }%
15064   {}%
15065 }%
15066 not found
```

If `glossaries-extra-bib2gls` has been loaded, `\@glsxtrdialecthook` will check for the associated script, otherwise it will do nothing.

```
15065 \glsxtrdialecthook
15066 %

15067 \@ifpackageloaded{tracklang} {%
15068   \AnyTrackedLanguages
15069   {%
15070     \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
15071   }%
15072   {}%
15073 } {}
```

Load `glossaries-extra-stylemods` if required.

```
15074 \glsxtr@redefstyles
and set the style:
15075 \glsxtr@do@style
```

1.11 glossaries-extra-bib2gls.sty

This package provides additional support for `bib2gls` and is automatically loaded by the `record option`.

```
15076 \NeedsTeXFormat{LaTeX2e}
15077 \ProvidesPackage{glossaries-extra-bib2gls}[2021/11/22 v1.48 (NLCT)]
```

Provide convenient shortcut commands for predefined glossary types.

```
ntunsrtacronyms
```

```
15078 \ifglsacronym
15079   \providecommand*\printunsrtacronyms[1][]{%
15080     \printunsrtglossary[type=\acronymtype,#1]}%
15081 \fi
```

```
printunsrtindex
```

```
15082 \ifglossaryexists{index}
15083 {
15084   \providecommand*\printunsrtindex[1][]{%
15085     \printunsrtglossary[type=index,#1]}%
15086 }{}
```

```
intunsrtsymbols
```

```
15087 \ifglossaryexists{symbols}
15088 {
15089   \providecommand*\printunsrtsymbols[1][]{%
15090     \printunsrtglossary[type=symbols,#1]}%
15091 }{}
```

```
intunsrtnumbers
```

```
15092 \ifglossaryexists{numbers}
15093 {
15094   \providecommand*\printunsrtnumbers[1][]{%
15095     \printunsrtglossary[type=numbers,#1]}%
15096 }{}
```

```
rabbreviations
```

```
15097 \ifglossaryexists{abbreviations}
15098 {
15099   \providecommand*\printunsrtabbreviations[1][]{%
15100     \printunsrtglossary[type=abbreviations,#1]}%
15101 }{}
```

splaynumberlist Allow `\glsdisplaynumberlist` and make it robust.

```
15102 \renewcommand*\glsdisplaynumberlist[1]{%
15103   \glsdoifexists{#1}{%
15104     {%
15105       \let\bibglsdelimN\glsnumlistsep
15106       \let\bibglslastDelimN\glsnumlistlastsep}}
```

```

15107     \glsxtrusefield{#1}{location}%
15108   }%
15109 }%
15110 }%
15111 \robustify\glsdisplaynumberlist

```

entrynumberlist

```
15112 \renewcommand*{\glsentrynumberlist}[1]{\glsxtrusefield{#1}{location}}
```

These are some convenient macros for use with custom rules.

```
\glshex
15113 \newcommand*{\glshex}{\string\u}
```

lscapturedgroup

```
15114 \newcommand*{\lscapturedgroup}{\string\$}
```

nZeroChildCount For use with bib2gls's save-child-count resource option.

```

15115 \newcommand*{\GlsXtrIfHasNonZeroChildCount}{%
15116   \@ifstar\s@GlsXtrIfHasNonZeroChildCount\@GlsXtrIfHasNonZeroChildCount
15117 }
```

nZeroChildCount

```

15118 \newcommand*{\@GlsXtrIfHasNonZeroChildCount}[3]{%
15119   \@GlsXtrIfFieldNonZero{childcount}{#1}{#2}{#3}%
15120 }
```

nZeroChildCount

```

15121 \newcommand*{\s@GlsXtrIfHasNonZeroChildCount}[3]{%
15122   \s@GlsXtrIfFieldNonZero{childcount}{#1}{#2}{#3}%
15123 }
```

rprovidecommand For use in @preamble, this behaves like \providecommand in the document but like \renewcommand

```
15124 \newcommand*{\glsxtrprovidecommand}{\providecommand}
```

glsrenewcommand Like \renewcommand but only generates a warning rather than an error if the command isn't defined.

```
15125 \newcommand*{\glsrenewcommand}{\star@or@long\glsxtr@renewcommand}
```

tr@renewcommand

```

15126 \newcommand*{\glsxtr@renewcommand}[1]{%
15127   \begingroup \escapechar\m@ne\xdef\@gtempa{\{\string#\1\}}\endgroup
15128   \expandafter\@ifundefined\@gtempa
15129   {%
15130     \GlossariesExtraWarning{can't redefine \noexpand#1(not already defined)}%
15131   }%
15132   \relax

```

```
15133 \relax
15134 \let\@ifdefinable\@rc@ifdefinable
15135 \newcommand{\@ifdefinable}[2]{#1}
15136 }
```

lossarylocation For use with indexcounter and bib2gls.

```
15137 \newcommand*{\glsxstr@wrglossarylocation}[2]{#1}
```

indexCounterLink

```
\GlsXtrIndexCounterLink{\text}{\label}
```

For use with indexcounter and bib2gls.

```
15138 \ifdef\hyperref
15139 {%
15140   \newcommand*{\GlsXtrIndexCounterLink}[2]{%
15141     \glsxtrifhasfield{indexcounter}{#2}%
15142     {\hyperref[wrglossary.\glscurrentfieldvalue]{#1}}%
15143     {#1}%
15144   }
15145 }
15146 {
15147   \newcommand*{\GlsXtrIndexCounterLink}[2]{#1}
15148 }
```

GlsXtrDualField

```
\GlsXtrDualField
```

The internal field used to store the dual label. The dual-field defaults to dual if no value is supplied so that's used as the default.

```
15149 \newcommand*{\GlsXtrDualField}{dual}
```

XtrDualBackLink

```
\GlsXtrDualBackLink{\text}{\label}
```

Adds a hyperlink to the dual entry.

```
15150 \newcommand*{\GlsXtrDualBackLink}[2]{%
15151   \glsxtrifhasfield{\GlsXtrDualField}{#2}%
15152   {\glshyperlink[#1]{\glscurrentfieldvalue}}%
15153   {#2}%
15154 }
```

`\TeXEntryAliases` Convenient shortcut for use with entry-type-aliases to alias standard BIB_TE_X entry types to `@bibtexentry`.

```
15155 \newcommand*{\GlsXtrBibTeXEntryAliases}{%
15156   article=bibtexentry,
15157   book=bibtexentry,
15158   booklet=bibtexentry,
15159   conference=bibtexentry,
15160   inbook=bibtexentry,
15161   incollection=bibtexentry,
15162   inproceedings=bibtexentry,
15163   manual=bibtexentry,
15164   mastersthesis=bibtexentry,
15165   misc=bibtexentry,
15166   phdthesis=bibtexentry,
15167   proceedings=bibtexentry,
15168   techreport=bibtexentry,
15169   unpublished=bibtexentry
15170 }
```

`\ideBibTeXFields` Convenient shortcut to define the standard BIB_TE_X fields.

```
15171 \newcommand*{\GlsXtrProvideBibTeXFields}{%
15172   \glsaddstoragekey{address}{}{\glsxtrbibaddress}%
15173   \glsaddstoragekey{author}{}{\glsxtrbibauthor}%
15174   \glsaddstoragekey{booktitle}{}{\glsxtrbibbooktitle}%
15175   \glsaddstoragekey{chapter}{}{\glsxtrbibchapter}%
15176   \glsaddstoragekey{edition}{}{\glsxtrbibedition}%
15177   \glsaddstoragekey{howpublished}{}{\glsxtrbibhowpublished}%
15178   \glsaddstoragekey{institution}{}{\glsxtrbibinstitution}%
15179   \glsaddstoragekey{journal}{}{\glsxtrbibjournal}%
15180   \glsaddstoragekey{month}{}{\glsxtrbibmonth}%
15181   \glsaddstoragekey{note}{}{\glsxtrbibnote}%
15182   \glsaddstoragekey{number}{}{\glsxtrbibnumber}%
15183   \glsaddstoragekey{organization}{}{\glsxtrbiborganization}%
15184   \glsaddstoragekey{pages}{}{\glsxtrbibpages}%
15185   \glsaddstoragekey{publisher}{}{\glsxtrbibpublisher}%
15186   \glsaddstoragekey{school}{}{\glsxtrbibschool}%
15187   \glsaddstoragekey{series}{}{\glsxtrbibseries}%
15188   \glsaddstoragekey{title}{}{\glsxtrbibtitle}%
15189   \glsaddstoragekey{bibtextype}{}{\glsxtrbibtype}%
15190   \glsaddstoragekey{volume}{}{\glsxtrbibvolume}%
15191 }
```

Multiple supplementary references are only supported with `bib2gls`.

`\ltisuplocation` This is like `\glsxtrsuphypernumber` but the second argument is the external file name (which isn't obtained from the `externallocation` attribute). The third argument is the formatting (`encap`) control sequence *name*. This is ignored by default, but is set by `bib2gls` to the original `encap` in case it's required.

```
15192 \newcommand*{\glsxtrmultisuplocation}[3]{%
```

```

15193  {%
15194    \def\glsxtrsupplocationurl{#2}%
15195    \glshypernumber{#1}%
15196  }%
15197 }

```

rdisplaysupploc

`\glsxtrdisplaysupploc{\langle prefix \rangle}{\langle counter \rangle}{\langle format \rangle}{\langle src \rangle}{\langle location \rangle}`

This is like `\glsnoidxdisplayloc` but is used for supplementary locations and so requires an extra argument.

```

15198 \newcommand*\glsxtrdisplaysupploc[5]{%
15199   \setentrycounter[#1]{#2}%
15200   \glsxtrmultisupplocation{#5}{#4}{#3}%
15201 }

```

splaylocnameref `\glsxtrdisplaylocnameref{\langle prefix \rangle}{\langle counter \rangle}{\langle format \rangle}{\langle location \rangle}{\langle name \rangle}{\langle href \rangle}{\langle hcounter \rangle}{\langle external file \rangle}` Used with the [nameref] record package option. The `\langle href \rangle` argument was obtained from `\@currentHref` and the `\langle hcounter \rangle` argument was obtained from `\theHentrycounter`, which is more reliable. If hyperref hasn't been loaded, this just behaves like `\glsnoidxdisplayloc`.

```

15202 \ifundef\hyperlink
15203 {
15204   \newcommand*\glsxtrdisplaylocnameref[8]{%
15205     \glsnoidxdisplayloc{#1}{#2}{#3}{#4}%
15206   }
15207 }
15208 {

```

Default action uses `\langle hcounter \rangle`. Equations and pages typically don't have a title, so check the counter name (otherwise the title may section or chapter title, which may be confusing). As from v1.42, this now checks if the control sequence `\glsxtr<counter>locfmt` is defined.

```

15209 \newcommand*\glsxtrdisplaylocnameref[8]{%
15210   \ifcsdef{glsxtr#2locfmt}%
15211     {\glsxtrnamereflink{#3}{\csuse{glsxtr#2locfmt}{#4}{#5}}{#2.#7}{#8}}%
15212   {%
15213     \ifstrempty{#5}%
15214     {%

```

No title, so just use the location as the link text.

```

15215     \glsxtrnamereflink{#3}{#4}{#2.#7}{#8}%
15216   }%
15217   {%
15218     \ifstrequal{#2}{page}%
15219     {\glsxtrnamereflink{#3}{#4}{#2.#7}{#8}}%
15220     {\glsxtrnamereflink{#3}{#5}{#2.#7}{#8}}%

```

```
15221      }%
15222  }%
15223 }
15224 }
```

requationlocfmt

```
\glsxtrequationlocfmt{\location}{\title}
```

```
15225 \newcommand*\glsxtrequationlocfmt[2]{(#1)}
```

sxtrnamereflink

```
\glsxtrfmtnamereflink{\format}{\title}{\href}{\externalfile}
```

```
15226 \newcommand*\glsxtrnamereflink[4]{%
```

Locally change `\glshypernumber` to `\@firstofone` to remove the normal location hyperlink.

```
15227 \begingroup
15228   \let\glshypernumber\@firstofone
```

If the `\externalfile` argument is empty, an internal link is used, otherwise an external one is needed.

```
15229   \ifstrempty{#4}%
15230     {\glsxtrfmtinternalnameref{#3}{#1}{#2}}%
15231     {\glsxtrfmtexternalnameref{#3}{#1}{#2}{#4}}%
15232 \endgroup
15233 }
```

sxtrnameloclink

```
\glsxtrnamerefloclink{\prefix}{\counter}{\format}{\location}{\text}{\externalfile}
```

Like `\@gls@numberlink`, this creates a hyperlink to the target obtained from the prefix, counter and location but uses `\text` as the hyperlink text. As with regular indexing, this will fail if the target name can't be formed by prefixing the location value.

```
15234 \newcommand{\glsxtrnameloclink}[6]{%
15235   \begingroup
15236   \setentrycounter[#1]{#2}%
15237   \def\glsxtr@locationhypertext{#5}%
15238   \let\glshypernumber\@firstofone
15239   \def\@glsnumberformat{#3}%
15240   \def\glsxtrs@pplocationurl{#6}%
15241 }
```

```

15241 \toks@={}%
15242 \@glsxtr@bibgls@removespaces#4 \@nil
15243 \endgroup
15244 }

ls@removespaces
15245 \def\@glsxtr@bibgls@removespaces#1 #2 \@nil{%
15246 \toks@=\expandafter{\the\toks@#1}%
15247 \ifx\\#2\\%
15248 \edef\@glo@tmp{\the\toks@}%
15249 \ifx\@glo@tmp\empty
15250 \else
15251 \protected\edef\@glo@tmp{\glsentrycounter\@glo@counterprefix\the\toks@}%
15252 \ifdefvoid\glsxtrsupplocationurl
15253 {%
15254 \expandafter\glsxtrfmtinternalnameref\expandafter{\@glo@tmp}%
15255 {\@glsnumberformat}\{\glsxtr@locationhypertext}%
15256 }%
15257 {%
15258 \expandafter\glsxtrfmtexternalnameref\expandafter{\@glo@tmp}%
15259 {\@glsnumberformat}\{\glsxtr@locationhypertext}\{\glsxtrsupplocationurl}%
15260 }%
15261 \fi
15262 \else
15263 \gls@ReturnAfterFi{%
15264 \@glsxtr@bibgls@removespaces#2 \@nil
15265 }%
15266 \fi
15267 }

```

internalnameref

`\glsxtrfmtinternalnameloc{\langle target \rangle}{\langle format \rangle}{\langle title \rangle}`

```

15268 \newcommand*{\glsxtrfmtinternalnameref}[3]{%
15269 \csuse{#2}{\glsdohyperlink{#1}{#3}}%
15270 }

```

externalnameref

`\glsxtrfmtexternalnameloc{\langle target \rangle}{\langle format \rangle}{\langle title \rangle}{\langle file \rangle}`

```

15271 \newcommand*{\glsxtrfmtexternalnameref}[4]{%
15272 \csuse{#2}{\hyperref{#4}{\{}{#1}{\#3}\}}%
15273 }

```

```
glsxtrSetWidest
```

```
\glsxtrSetWidest{\<type>}{\<level>}{\<text>}
```

As from **bib2gls** v1.8, this is used by the `set-widest` resource option for the `alttree` and the styles provided by the `glossary-longextra` package.

```
15274 \newcommand*\glsxtrSetWidest}[3]{%
```

Check which style options have been provided. (The style packages may not have been loaded.)

```
15275 \ifdef\glsupdatewidest
15276 {%
15277   \ifdef\glslongextraUpdateWidest
15278   {%
```

Relevant style packages all loaded. If the `<type>` has been given, append to glossary preamble.

```
15279   \ifstrempty{#1}
15280   {%
15281     \glsupdatewidest[#2]{#3}%
15282     \ifnum#2=0\relax
15283       \glslongextraUpdateWidest{#3}%
15284     \else
15285       \glslongextraUpdateWidestChild[#2]{#3}%
15286     \fi
15287   }%
15288   {%
15289     \apptoglossarypreamble[#1]{\glsupdatewidest[#2]{#3}}%
15290     \ifnum#2=0\relax
15291       \apptoglossarypreamble[#1]{\glslongextraUpdateWidest{#3}}%
15292     \else
15293       \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild[#2]{#3}}%
15294     \fi
15295   }%
15296 }%
15297 {%
```

Only `alttree`.

```
15298 \ifstrempty{#1}
15299 {%
15300   \glsupdatewidest[#2]{#3}%
15301 }%
15302 {%
15303   \apptoglossarypreamble[#1]{\glsupdatewidest[#2]{#3}}%
15304 }%
15305 }%
15306 }%
15307 {%
```

`\glsupdatewidest` hasn't been defined. This could just mean that the `glossaries-extra-stylemods` package hasn't been loaded.

```

15308 \ifdef\glssetwidest
15309 {%
15310   \ifdef\glslongextraUpdateWidest
15311   {%
    Relevant glossary-tree and glossary-longextra have been loaded. If the <type> has been given,
    append to glossary preamble.
15312     \ifstrempty{#1}
15313     {%
15314       \glssetwidest[#2]{#3}%
15315       \ifnum#2=0\relax
15316         \glslongextraUpdateWidest{#3}%
15317       \else
15318         \glslongextraUpdateWidestChild[#2]{#3}%
15319       \fi
15320     }%
15321     {%
15322       \apptoglossarypreamble[#1]{\glssetwidest[#2]{#3}}%
15323       \ifnum#2=0\relax
15324         \apptoglossarypreamble[#1]{\glslongextraUpdateWidest{#3}}%
15325       \else
15326         \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild[#2]{#3}}%
15327       \fi
15328     }%
15329   }%
15330   {%

```

Only alttree.

```

15331     \ifstrempty{#1}
15332     {%
15333       \glssetwidest[#2]{#3}%
15334     }%
15335     {%
15336       \apptoglossarypreamble[#1]{\glssetwidest[#2]{#3}}%
15337     }%
15338   }%
15339 }%
15340 {%
15341   \ifdef\glslongextraUpdateWidest
15342   {%

```

glossary-longextra has been loaded.

```

15343     \ifstrempty{#1}
15344     {%
15345       \ifnum#2=0\relax
15346         \glslongextraUpdateWidest{#3}%
15347       \else
15348         \glslongextraUpdateWidestChild[#2]{#3}%
15349       \fi
15350     }%
15351   }%

```

```

15352          \ifnum#2=0\relax
15353              \apptoglossarypreamble[#1]{\glslongextraUpdateWidest[#3]}%
15354          \else
15355              \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild[#2]{#3}}%
15356          \fi
15357      }%
15358  }%

```

Neither glossary-tree nor glossary-longextra have been loaded. Do nothing.

```

15359      {}%
15360  }%
15361 }%
15362 }

```

tWidestFallback

```
\glsxtrSetWidestFallback{\<max depth>}{\<list>}
```

Used when `bib2gls` can't determine the widest name. The `<list>` argument is a comma-separated list of glossary labels. The `<max depth>` refers to the maximum hierarchical depth. This will either be 0 (only top-level entries) or 2 (up to two child-levels).

```

15363 \newcommand*\glsxtrSetWidestFallback}[2]{%
15364     \ifnum#1=0\relax
15365         \ifdef\glsFindWidestTopLevelName
15366         {}%
15367         \glsFindWidestTopLevelName[#2]%
15368     }%
15369     {}%
15370     \GlossariesExtraWarning{You need stylemods={tree} to
15371         provide a fallback for set-widest}%
15372     }%
15373 \else
15374     \ifdef\glsFindWidestLevelTwo
15375     {}%
15376     \glsFindWidestLevelTwo[#2]%
15377     \ifdef\glslongextraUpdateWidestChild
15378     {}%
15379     \glslongextraUpdateWidestChild[#1]{\csuse{@glswidestnamei}}%
15380     \glslongextraUpdateWidestChild[#1]{\csuse{@glswidestnameii}}%
15381     }%
15382     {}%
15383     }%
15384     {}%
15385     \GlossariesExtraWarning{You need stylemods={tree} to
15386         provide a fallback for set-widest}%
15387     }%
15388 \fi
15389 }

```

r@labelprefixes List of label prefixes.

```
15390 \newcommand*{\@glsxtr@labelprefixes}{}%
```

arlabelprefixes List of label prefixes.

```
15391 \newcommand*{\glsxtrclearlabelprefixes}{}%
15392 \renewcommand*{\@glsxtr@labelprefixes}{}%
15393 }%
```

raddlabelprefix Add prefix to the list. These should be added in the order of precedence with the last one as a fallback. This doesn't check against duplicates as it may be useful to replicate a prefix at the end as the fallback.

```
15394 \newcommand*{\glsxtrraddlabelprefix}[1]{
15395 \ifstrempty{#1}%
15396 {\glsxtrraddlabelprefix{\empty}}%
15397 {%
15398 \ifdefempty{\glsxtr@labelprefixes}
15399 {\def\glsxtr@labelprefixes{#1}}%
15400 {\appto{\glsxtr@labelprefixes}{, #1}}%
15401 }%
15402 }
```

pendlabelprefix Inserts at the start of the list.

```
15403 \newcommand*{\glsxtrrprependlabelprefix}[1]{
15404 \ifstrempty{#1}%
15405 {\glsxtrrprependlabelprefix{\empty}}%
15406 {%
15407 \ifdefempty{\glsxtr@labelprefixes}
15408 {\def\glsxtr@labelprefixes{#1}}%
15409 {\preto{\glsxtr@labelprefixes}{#1,}}%
15410 }%
15411 }
```

labelprefixlist

```
\glsxtrifinlabelprefixlist{\<prefix\>}{\<true\>}{\<false\>}
```

Test if the given prefix is in the list.

```
15412 \newcommand*{\glsxtrifinlabelprefixlist}[3]{
15413 \ifstrempty{#1}%
15414 {\glsxtrifinlabelprefixlist{\empty}{#2}{#3}}%
15415 {%
15416 \DTLifinlist{#1}{\glsxtr@labelprefixes}{#2}{#3}}%
15417 }%
15418 }
```

`prefixlabelist` This is provided for the benefit of `bib2gls`. It's possible that the user may add more prefixes after the start of the document, but that can lead to inconsistencies. The final element of the list (the fallback) is the only prefix of interest for `bib2gls`.

```
15419 \AtBeginDocument{%
15420   \protected@write\@auxout{}{\string\providecommand{\string\@glsxtr@prefixlabelist}[1]{}%}
15421   \protected@write\@auxout{}{\string\@glsxtr@prefixlabelist{\@glsxtr@labelprefixes}}%
15422 }
```

`t@prefixedlabel` Iterate through all the prefixes and find the first prefix and label combination that exists. If none found, this could mean that it's the first L^AT_EX run, so the last prefix in the list needs to be the fallback one. Grouping is used in case of a nested for loop.

```
15423 \newcommand*{\@glsxtr@get@prefixedlabel}[1]{%
15424   \begingroup
```

Initialise to the unprefixed label in the event that the list is empty.

```
15425   \protected@edef{\gls@thislabel}{#1}%
15426   \for\@glsxtr@prefix:=\@glsxtr@labelprefixes\do
15427   {%
15428     \protected@edef{\gls@thislabel}{\@glsxtr@prefix#1}%
15429     \ifglsentryexists{\gls@thislabel}{\endfortrue}{}%
15430   }%
15431   \edef\@glo@tmp{\endgroup\noexpand\def\noexpand\@gls@thislabel{\gls@thislabel}}\@glo@tmp
15432 }
```

`\dgls` Like `\gls` but tries the prefixes. (Can't use `\pgls` as that's provided by `glossaries-prefix`.) Since this command is designed for `bib2gls`'s dual entry system, the "d" stands for "dual".

```
15433 \newrobustcmd*{\dgls}{\gls@hyp@opt\@dgls}
```

`\@dgls`

```
15434 \newcommand*{\@dgls}[2][]{%
15435   \glsxtr@get@prefixedlabel{#2}%
15436   \new@ifnextchar[\{\gls@{\#1}\{\gls@thislabel\}]{\gls@{\#1}\{\gls@thislabel\}}{}%
15437 }
```

`\dglspl`

```
15438 \newrobustcmd*{\dglspl}{\gls@hyp@opt\@dglspl}
```

`\@dglspl`

```
15439 \newcommand*{\@dglspl}[2][]{%
15440   \glsxtr@get@prefixedlabel{#2}%
15441   \new@ifnextchar[\{\glspl@{\#1}\{\gls@thislabel\}]{\glspl@{\#1}\{\gls@thislabel\}}{}%
15442 }
```

`\dGls`

```
15443 \newrobustcmd*{\dGls}{\gls@hyp@opt\@dGls}
```

```

\@dGls
15444 \newcommand*{\@dGls}[2] []{%
15445   \@glsxtr@get@prefixedlabel{#2}%
15446   \new@ifnextchar[{\@\Gls@{#1}{\@gls@thislabel}}{\@\Gls@{#1}{\@gls@thislabel}[]}%
15447 }

\dGlspl
15448 \newrobustcmd*{\dGlspl}{\@gls@hyp@opt\@dGlspl}

\@dGlspl
15449 \newcommand*{\@dGlspl}[2] []{%
15450   \@glsxtr@get@prefixedlabel{#2}%
15451   \new@ifnextchar[{\@\Glspl@{#1}{\@gls@thislabel}}{\@\Glspl@{#1}{\@gls@thislabel}[]}%
15452 }

\dGLS
15453 \newrobustcmd*{\dGLS}{\@gls@hyp@opt\@dGLS}

\@dGLS
15454 \newcommand*{\@dGLS}[2] []{%
15455   \@glsxtr@get@prefixedlabel{#2}%
15456   \new@ifnextchar[{\@\GLS@{#1}{\@gls@thislabel}}{\@\GLS@{#1}{\@gls@thislabel}[]}%
15457 }

\dGLSpl
15458 \newrobustcmd*{\dGLSpl}{\@gls@hyp@opt\@dGLSpl}

\@dGLSpl
15459 \newcommand*{\@dGLSpl}[2] []{%
15460   \@glsxtr@get@prefixedlabel{#2}%
15461   \new@ifnextchar[{\@\GLSpl@{#1}{\@gls@thislabel}}{\@\GLSpl@{#1}{\@gls@thislabel}[]}%
15462 }

\dglslink Like \glslink but tries the prefixes.
15463 \newrobustcmd*{\dglslink}[3] []{%
15464   \@glsxtr@get@prefixedlabel{#2}%
15465   \glslink[#1]{\@gls@thislabel}{#3}%
15466 }

\dglsdisp Like \glsdisp but tries the prefixes.
15467 \newrobustcmd*{\dglsdisp}[3] []{%
15468   \@glsxtr@get@prefixedlabel{#2}%
15469   \glsdisp[#1]{\@gls@thislabel}{#3}%
15470 }

```

Multi (compound/combined) entry commands used by `bib2gls`.

tryadjustedname

```
\glsxtrmultientryadjustedname{{list1}}{name}{{list2}}{label}
```

This command is used by `bib2gls` when it adjusts the name field of an entry that's been identified as a main entry in the multi-entry set *label*.

The final argument *label* is the multi-entry label from which the set was obtained. The first argument *list1* is the list of other labels that come before the main label. The third argument *list2* is the remaining list of other labels. The *name* argument is the previous name before adjustment.

```
15471 \newrobustcmd*{\glsxtrmultientryadjustedname}[4]{%
15472   \bgroup
15473     \let\@glsxtrmultientryadjustednamesep\glsxtrmultientryadjustednamesep
15474     \let\@glsxtrmultientryadjustednamepresep\glsxtrmultientryadjustednamepresep
15475     \let\@glsxtrmultientryadjustednamepostsep\glsxtrmultientryadjustednamepostsep
15476     \let\@glsxtrmultientryadjustednameother\glsxtrmultientryadjustednameother
15477     \let\@glsxtrmultientryadjustednamefmt\glsxtrmultientryadjustednamefmt
15478     \let\@glsxtrmultientryadjustednamefirstother\glsxtrmultientryadjustednameother
15479     \let\@glsxtrmultientryadjustednamefirstfmt\glsxtrmultientryadjustednamefmt
15480     \@glsxtrmultientryadjustedname{#1}{#2}{#3}{#4}%
15481   \egroup
15482 }
```

tryadjustedname First letter upper case

```
15483 \newrobustcmd*{\Glsxtrmultientryadjustedname}[4]{%
15484   \bgroup
15485     \let\@glsxtrmultientryadjustednamesep\glsxtrmultientryadjustednamesep
15486     \let\@glsxtrmultientryadjustednamepresep\glsxtrmultientryadjustednamepresep
15487     \let\@glsxtrmultientryadjustednamepostsep\glsxtrmultientryadjustednamepostsep
15488     \let\@glsxtrmultientryadjustednameother\glsxtrmultientryadjustednameother
15489     \let\@glsxtrmultientryadjustednamefmt\glsxtrmultientryadjustednamefmt
15490     \let\@glsxtrmultientryadjustednamefirstother\Glsxtrmultientryadjustednameother
15491     \let\@glsxtrmultientryadjustednamefirstfmt\Glsxtrmultientryadjustednamefmt
15492     \@glsxtrmultientryadjustedname{#1}{#2}{#3}{#4}%
15493   \egroup
15494 }
```

tryadjustedname Title case

```
15495 \newrobustcmd*{\GlsXtrmultientryadjustedname}[4]{%
15496   \bgroup
15497     \let\@glsxtrmultientryadjustednamesep\glsxtrmultientryadjustednamesep
15498     \let\@glsxtrmultientryadjustednamepresep\glsxtrmultientryadjustednamepresep
15499     \let\@glsxtrmultientryadjustednamepostsep\glsxtrmultientryadjustednamepostsep
15500     \let\@glsxtrmultientryadjustednameother\GlsXtrmultientryadjustednameother
15501     \let\@glsxtrmultientryadjustednamefmt\GlsXtrmultientryadjustednamefmt
15502     \let\@glsxtrmultientryadjustednamefirstother\GlsXtrmultientryadjustednameother
15503     \let\@glsxtrmultientryadjustednamefirstfmt\GlsXtrmultientryadjustednamefmt
15504     \@glsxtrmultientryadjustedname{#1}{#2}{#3}{#4}%

```

```

15505 \egroup
15506 }

tryadjustedname All caps.
15507 \newrobustcmd*{\GLSxtrmultientryadjustedname}[4]{%
15508 \bgroup
15509 \let\@glsxtrmultientryadjustednamesep\glsxtrmultientryadjustednamesep
15510 \let\@glsxtrmultientryadjustednamepresep\glsxtrmultientryadjustednamepresep
15511 \let\@glsxtrmultientryadjustednamepostsep\glsxtrmultientryadjustednamepostsep
15512 \let\@glsxtrmultientryadjustednameother\GLSxtrmultientryadjustednameother
15513 \let\@glsxtrmultientryadjustednamefmt\GLSxtrmultientryadjustednamefmt
15514 \let\@glsxtrmultientryadjustednamefirstother\GLSxtrmultientryadjustednameother
15515 \let\@glsxtrmultientryadjustednamefirstfmt\GLSxtrmultientryadjustednamefmt
15516 \glsxtrmultientryadjustedname{#1}{#2}{#3}{#4}%
15517 \egroup
15518 }

tryadjustedname
15519 \newcommand*{\@glsxtrmultientryadjustedname}[4]{%
15520 \letcs\mglscurrentmainlabel{@gls@combined@#4@main}%
15521 \letcs\mglscurrentmainlist{@gls@combined@#4@list}%
15522 \letcs\mglscurrentmainoptions{@gls@combined@#4@options}%
15523 \ifblank{#1}%
15524 {%
15525 \glsxtrmultientryadjustednamefirstfmt{#2}%
15526 }%
15527 {%
15528 \def\@mglscurrentlabel{}%
15529 \let\@gls@xtradjustedother\glsxtrmultientryadjustednamefirstother
15530 \for\mglscurrentlabel:=#1\do{%
15531 \ifx\@mglscurrentlabel\empty
15532 \else
15533 \glsxtrmultientryadjustednamesep{\@mglscurrentlabel}{\mglscurrentlabel}%
15534 \fi
15535 \gls@xtradjustedother{\mglscurrentlabel}%
15536 \let\@mglscurrentlabel\mglscurrentlabel
15537 \let\@gls@xtradjustedother\glsxtrmultientryadjustednameother
15538 }%
15539 \glsxtrmultientryadjustednamepresep{\@mglscurrentlabel}{\mglscurrentmainlabel}%
15540 \glsxtrmultientryadjustednamefmt{#2}%
15541 }%
15542 \ifblank{#3}%
15543 {}%
15544 {%
15545 \let\@mglscurrentmainlabel\mglscurrentmainlabel
15546 \let\@gls@xtrmultientryadjustednamesep\glsxtrmultientryadjustednamepostsep
15547 \for\mglscurrentlabel:=#3\do{%
15548 \gls@xtrmultientryadjustednamesep{\@mglscurrentlabel}{\mglscurrentlabel}%
15549 \glsxtrmultientryadjustednameother{\mglscurrentlabel}%

```

```

15550      \let\@mglsl@previouslabel\mglslcurrentlabel
15551      \let\@gls@xtrmultientryadjustednamesep\@glsxtrmultientryadjustednamesep
15552  }%
15553 }%
15554 }

adjustednamesep
15555 \newcommand*{\glsxtrmultientryadjustednamesep}{\glscombinedfirstsepfirst}

ustednamepresep Separator before main name.
15556 \newcommand*{\glsxtrmultientryadjustednamepresep}{\glsxtrmultientryadjustednamesep}

stednamepostsep Separator after main name.
15557 \newcommand*{\glsxtrmultientryadjustednamepostsep}{\glsxtrmultientryadjustednamesep}

adjustednamefmt
15558 \newcommand*{\glsxtrmultientryadjustednamefmt}[1]{#1}

justednameother
15559 \newcommand*{\glsxtrmultientryadjustednameother}[1]{\glsentryname{#1}}

adjustednamefmt
15560 \newcommand*{\Glsxtrmultientryadjustednamefmt}[1]{\makefirstuc{#1}}

justednameother
15561 \newcommand*{\Glsxtrmultientryadjustednameother}[1]{\Glsentryname{#1}}

justednameother
15562 \newcommand*{\GlsXtrmultientryadjustednameother}[1]{%
15563  \glsentrytitlecase{#1}{name}%

adjustednamefmt
15564 \ifdef\glscapitalisewords
15565 {%
15566  \newcommand*{\GlsXtrmultientryadjustednamefmt}[1]{\glscapitalisewords{#1}}
15567 }
15568 {
15569  \newcommand*{\GlsXtrmultientryadjustednamefmt}[1]{\capitalisewords{#1}}
15570 }

justednameother
15571 \newcommand*{\GLSxtrmultientryadjustednameother}[1]{%
15572  \mfirstrucMakeUppercase{\glsentryname{#1}}}

adjustednamefmt
15573 \newcommand*{\GLSxtrmultientryadjustednamefmt}[1]{\mfirstrucMakeUppercase{#1}}

```

Provide missing Greek letters for use in maths mode. These commands are recognised by bib2gls and will be mapped to the Mathematical Greek Italic letters. This ensures that the Greek letters that have the same shape as Latin letters are kept with the other mathematical Greek letters for sorting purposes. The L^AT_EX version of these commands (provided here) use an upright font for capitals and italic for lower case to provide a better match with the other Greek symbols provided by the kernel.

```
\Alpha
15574 \providecommand*\Alpha{\mathrm{A}}


\Beta
15575 \providecommand*\Beta{\mathrm{B}}


\Epsilon
15576 \providecommand*\Epsilon{\mathrm{E}}


\Zeta
15577 \providecommand*\Zeta{\mathrm{Z}}


\Eta
15578 \providecommand*\Eta{\mathrm{H}}


\Iota
15579 \providecommand*\Iota{\mathrm{I}}


\Kappa
15580 \providecommand*\Kappa{\mathrm{K}}


\Mu
15581 \providecommand*\Mu{\mathrm{M}}


\nu
15582 \providecommand*\nu{\mathrm{N}}


\Omicron
15583 \providecommand*\Omicron{\mathrm{O}}


\rho
15584 \providecommand*\rho{\mathrm{P}}


\Tau
15585 \providecommand*\Tau{\mathrm{T}}


\Chi
15586 \providecommand*\Chi{\mathrm{X}}
```

```

\Digamma
15587 \providecommand*\Digamma{\mathrm{F}}

\omicron
15588 \providecommand*\omicron{\mathrm{o}}


Provide corresponding upright characters if upgreek has been loaded. (The upper case
characters are the same as above.)
15589 \@ifpackageloaded{upgreek}%
15590 {


\Upsilonalpha
15591 \providecommand*\Upsilonalpha{\mathrm{A}}


\Upsilonbeta
15592 \providecommand*\Upsilonbeta{\mathrm{B}}


\Upsilonepsilon
15593 \providecommand*\Upsilonepsilon{\mathrm{E}}


\Upsilonzeta
15594 \providecommand*\Upsilonzeta{\mathrm{Z}}


\Upsiloneta
15595 \providecommand*\Upsiloneta{\mathrm{H}}


\Upsiloniota
15596 \providecommand*\Upsiloniota{\mathrm{I}}


\Upsilonkappa
15597 \providecommand*\Upsilonkappa{\mathrm{K}}


\Upsilonmu
15598 \providecommand*\Upsilonmu{\mathrm{M}}


\Upsilonnu
15599 \providecommand*\Upsilonnu{\mathrm{N}}


\Upsilonomicron
15600 \providecommand*\Upsilonomicron{\mathrm{O}}


\Upsilonrho
15601 \providecommand*\Upsilonrho{\mathrm{P}}


\Upsilontau
15602 \providecommand*\Upsilontau{\mathrm{T}}

```

```
\Upchi
15603 \providecommand*\Upchi{\mathrm{X}}
\upomicron
15604 \providecommand*\upomicron{\mathrm{o}}
15605 }%
15606 {}% upgreek.sty not loaded
```

This package provides some basic rules, but it's not intended for complete coverage of all locales. The CLDR should provide the appropriate locale-sensitive rules. These macros are primarily to help construct custom rules to include, for example, Greek maths symbols mixed with Latin. For the full rule syntax, see the Java API for [RuleBaseCollator](#)

If you want to provide a rule-block for a particular locale to allow for customization within that locale, create a file called `glossariesxtr-<tag>.1df` (where `<tag>` identifies the locale) and add similar commands. See the description of `\IfTrackedLanguageFileExists` in the `tracklang` manual for the allowed forms of `<tag>`. The simplest is to just use the root language label or ISO code. The file will then be automatically loaded by `glossaries-extra` if the document has support for that language.

When combining these blocks of rules, remember to separate them with the appropriate character. For example:

```
sort-rule={\glsxtrcontrolrules
;\glsxtrspacerules
;\glsxtrnonprintablerules
;\glsxtrcombiningdiacriticrules
,\glsxtrhyphenrules
<\glsxtrgeneralpuncrules
<\glsxtrdigirules
<\glsxtrfractionrules
<\glsxtrGeneralLatinIVrules
<\glsxtrMathItalicGreekIRules
}
```

`xtrcontrolrules` These are control characters that are usually placed at the start of a rule in the ‘ignored characters’ section. These control characters are unlikely to appear in any entry fields but are provided for completeness. `\string` is used for punctuation characters in case they’ve been made active.

```
15607 \newcommand*\glsxtrcontrolrules}{%
15608 \string'\glshex 200B\string'\string=\glshex 200C\string=\glshex 200D
15609 \string=\glshex 200E\string=\glshex 200F\string=\glshex 0000\string=\glshex 0001
15610 \string=\glshex 0002\string=\glshex 0003\string=\glshex 0004\string=\glshex 0005
15611 \string=\glshex 0006\string=\glshex 0007\string=\glshex 0008
15612 \string=\string'\glshex 0009\string'\string=\string'\glshex 000B\string'
15613 \string=\glshex 000E\string=\glshex 000F\string=\string'\glshex
15614 0010\string'\string=\glshex 0011
15615 \string=\glshex 0012\string=\glshex 0013\string=\glshex 0014\string=\glshex 0015
15616 \string=\glshex 0016\string=\glshex 0017\string=\glshex 0018\string=\glshex 0019
```

```

15617 \string=\glshex 001A\string=\glshex 001B\string=\glshex 001C\string=\glshex 001D
15618 \string=\glshex 001E\string=\glshex 001F\string=\glshex 007F\string=\glshex 0080
15619 \string=\glshex 0081\string=\glshex 0082\string=\glshex 0083\string=\glshex 0084
15620 \string=\glshex 0085\string=\glshex 0086\string=\glshex 0087\string=\glshex 0088
15621 \string=\glshex 0089\string=\glshex 008A\string=\glshex 008B\string=\glshex 008C
15622 \string=\glshex 008D\string=\glshex 008E\string=\glshex 008F\string=\glshex 0090
15623 \string=\glshex 0091\string=\glshex 0092\string=\glshex 0093\string=\glshex 0094
15624 \string=\glshex 0095\string=\glshex 0096\string=\glshex 0097\string=\glshex 0098
15625 \string=\glshex 0099\string=\glshex 009A\string=\glshex 009B\string=\glshex 009C
15626 \string=\glshex 009D\string=\glshex 009E\string=\glshex 009F
15627 }

```

`lsxtrspacerules` These are space characters.

```

15628 \newcommand*{\glsxtrspacerules}{%
15629 \string' \string'\string;
15630 \string'\glshex 00A0\string'\string;
15631 \string'\glshex 2000\string'\string;
15632 \string'\glshex 2001\string'\string;
15633 \string'\glshex 2002\string'\string;
15634 \string'\glshex 2003\string'\string;
15635 \string'\glshex 2004\string'\string;
15636 \string'\glshex 2005\string'\string;
15637 \string'\glshex 2006\string'\string;
15638 \string'\glshex 2007\string'\string;
15639 \string'\glshex 2008\string'\string;
15640 \string'\glshex 2009\string'\string;
15641 \string'\glshex 200A\string'\string;
15642 \string'\glshex 3000\string'
15643 }

```

`nprintablerules` These are non-printable characters (BOM, tabs, line feed and carriage return).

```

15644 \newcommand*{\glsxtrnonprintablerules}{%
15645 \string'\glshex FFFF\string'\string;
15646 \string'\glshex 000A\string'\string;
15647 \string'\glshex 0009\string'\string;
15648 \string'\glshex 000C\string'\string;
15649 \string'\glshex 000B\string'
15650 }

```

`gdiacriticrules` Combining diacritic marks. This is split into multiple macros.

```

15651 \newcommand*{\glsxtrcombiningdiacriticrules}{%
15652 \glsxtrcombiningdiacriticIrules\string;
15653 \glsxtrcombiningdiacriticIIrules\string;
15654 \glsxtrcombiningdiacriticIIIrules\string;
15655 \glsxtrcombiningdiacriticIVrules
15656 }

```

`diacriticIrules` First set of combining diacritic marks.

```

15657 \newcommand*{\glsxtrcombiningdiacriticIrules}{%

```

```

15658 \glshex 0301\string;% combining acute
15659 \glshex 0300\string;% combining grave
15660 \glshex 0306\string;% combining breve
15661 \glshex 0302\string;% combining circumflex
15662 \glshex 030C\string;% combining caron
15663 \glshex 030A\string;% combining ring
15664 \glshex 030D\string;% combining vertical line above
15665 \glshex 0308\string;% combining diaeresis
15666 \glshex 030B\string;% combining double acute
15667 \glshex 0303\string;% combining tilde
15668 \glshex 0307\string;% combining dot above
15669 \glshex 0304% combining macron
15670 }

```

iacriticIIrules Second set of combining diacritic marks.

```

15671 \newcommand*{\glsxtrcombiningdiacriticIIrules}{%
15672 \glshex 0337\string;% combining short solidus overlay
15673 \glshex 0327\string;% combining cedilla
15674 \glshex 0328\string;% combining ogonek
15675 \glshex 0323\string;% combining dot below
15676 \glshex 0332\string;% combining low line
15677 \glshex 0305\string;% combining overline
15678 \glshex 0309\string;% combining hook above
15679 \glshex 030E\string;% combining double vertical line above
15680 \glshex 030F\string;% combining double grave accent
15681 \glshex 0310\string;% combining candrabindu
15682 \glshex 0311\string;% combining inverted breve
15683 \glshex 0312\string;% combining turned comma above
15684 \glshex 0313\string;% combining comma above
15685 \glshex 0314\string;% combining reversed comma above
15686 \glshex 0315\string;% combining comma above right
15687 \glshex 0316\string;% combining grave accent below
15688 \glshex 0317% combining acute accent below
15689 }

```

acriticIIIrules Third set of combining diacritic marks.

```

15690 \newcommand*{\glsxtrcombiningdiacriticIIIrules}{%
15691 \glshex 0318\string;% combining left tack below
15692 \glshex 0319\string;% combining right tack below
15693 \glshex 031A\string;% combining left angle above
15694 \glshex 031B\string;% combining horn
15695 \glshex 031C\string;% combining left half ring below
15696 \glshex 031D\string;% combining up tack below
15697 \glshex 031E\string;% combining down tack below
15698 \glshex 031F\string;% combining plus sign below
15699 \glshex 0320\string;% combining minus sign below
15700 \glshex 0321\string;% combining palatalized hook below
15701 \glshex 0322\string;% combining retroflex hook below
15702 \glshex 0324\string;% combining diaresis below

```

```

15703 \glshex 0325\string;% combining ring below
15704 \glshex 0326\string;% combining comma below
15705 \glshex 0329\string;% combining vertical line below
15706 \glshex 032A\string;% combining bridge below
15707 \glshex 032B\string;% combining inverted double arch below
15708 \glshex 032C\string;% combining caron below
15709 \glshex 032D\string;% combining circumflex accent below
15710 \glshex 032E\string;% combining breve below
15711 \glshex 032F\string;% combining inverted breve below
15712 \glshex 0330\string;% combining tilde below
15713 \glshex 0331\string;% combining macron below
15714 \glshex 0333\string;% combining double low line
15715 \glshex 0334\string;% combining tilde overlay
15716 \glshex 0335\string;% combining short stroke overlay
15717 \glshex 0336\string;% combining long stroke overlay
15718 \glshex 0338\string;% combining long solidus overlay
15719 \glshex 0339\string;% combining combining right half ring below
15720 \glshex 033A\string;% combining inverted bridge below
15721 \glshex 033B\string;% combining square below
15722 \glshex 033C\string;% combining seagull below
15723 \glshex 033D\string;% combining x above
15724 \glshex 033E\string;% combining vertical tilde
15725 \glshex 033F\string;% combining double overline
15726 \glshex 0342\string;% combining Greek perispomeni
15727 \glshex 0344\string;% combining Greek dialytika tonos
15728 \glshex 0345\string;% combining Greek ypogegrammeni
15729 \glshex 0360\string;% combining double tilde
15730 \glshex 0361\string;% combining double inverted breve
15731 \glshex 0483\string;% combining Cyrillic titlo
15732 \glshex 0484\string;% combining Cyrillic palatalization
15733 \glshex 0485\string;% combining Cyrillic dasia pneumata
15734 \glshex 0486% combining Cyrillic psili pneumata
15735 }

```

iacriticIVrules Fourth set of combining diacritic marks.

```

15736 \newcommand*{\glsxtrcombiningdiacriticIVrules}{%
15737 \glshex 20D0\string;% combining left harpoon above
15738 \glshex 20D1\string;% combining right harpoon above
15739 \glshex 20D2\string;% combining long vertical line overlay
15740 \glshex 20D3\string;% combining short vertical line overlay
15741 \glshex 20D4\string;% combining anticlockwise arrow above
15742 \glshex 20D5\string;% combining clockwise arrow above
15743 \glshex 20D6\string;% combining left arrow above
15744 \glshex 20D7\string;% combining right arrow above
15745 \glshex 20D8\string;% combining ring overlay
15746 \glshex 20D9\string;% combining clockwise ring overlay
15747 \glshex 20DA\string;% combining anticlockwise ring overlay
15748 \glshex 20DB\string;% combining three dots above
15749 \glshex 20DC\string;% combining four dots above

```

```

15750 \glshex 20DD\string;% combining enclosing circle
15751 \glshex 20DE\string;% combining enclosing square
15752 \glshex 20DF\string;% combining enclosing diamond
15753 \glshex 20E0\string;% combining enclosing circle backslash
15754 \glshex 20E1% combining left right arrow above
15755 }

```

sxtrhyphenrules Hyphens.

```

15756 \newcommand*\glsxtrhyphenrules}{%
15757 \string'\string-\string'\string;% ASCII hyphen
15758 \glshex 00AD\string;% soft hyphen
15759 \glshex 2010\string;% hyphen
15760 \glshex 2011\string;% non-breaking hyphen
15761 \glshex 2012\string;% figure dash
15762 \glshex 2013\string;% en dash
15763 \glshex 2014\string;% em dash
15764 \glshex 2015\string;% horizontal bar
15765 \glshex 2212\string=\glshex 207B\string=\glshex 208B% minus sign
15766 }

```

eneralpuncrules General punctuation.

```

15767 \newcommand*\glsxtrgeneralpuncrules}{%
15768 \glsxtrgeneralpuncIrules
15769 \string<\glsxtrcurrentryrules
15770 \string<\glsxtrgeneralpuncIIrules
15771 }

```

eneralpuncIrules First set of general punctuation.

```

15772 \newcommand*\glsxtrgeneralpuncIrules}{%
15773 \string'\glshex 005F\string'% underscore
15774 \string<\glshex 00AF% macron
15775 \string<\string'\glshex 002C\string'% comma
15776 \string<\string'\glshex 003B\string'% semi-colon
15777 \string<\string'\glshex 003A\string'% colon
15778 \string<\string'\glshex 0021\string'% exclamation mark
15779 \string<\glshex 00A1% inverted exclamation mark
15780 \string<\string'\glshex 003F\string'% question mark
15781 \string<\glshex 00BF% inverted question mark
15782 \string<\string'\glshex 002F\string'% solidus
15783 \string<\string'\glshex 002E\string'% full stop
15784 \string<\glshex 00B4% acute accent
15785 \string<\string'\glshex 0060\string'% grave accent
15786 \string<\string'\glshex 005E\string'% circumflex accent
15787 \string<\glshex 00A8% diaersis
15788 \string<\string'\glshex 007E\string'% tilde
15789 \string<\glshex 00B7% middle dot
15790 \string<\glshex 00B8% cedilla
15791 \string<\string'\glshex 0027\string'% straight apostrophe
15792 \string<\string'\glshex 0022\string'% straight double quote

```

```

15793 \string<\glshex 00AB% left guillemet
15794 \string<\glshex 00BB% right guillemet
15795 \string<\string'\glshex 0028\string'% left parenthesis
15796 \string=\glshex 207D\string=\glshex 208D% super/subscript left parenthesis
15797 \string<\string'\glshex 0029\string'% right parenthesis
15798 \string=\glshex 207E\string=\glshex 208E% super/subscript right parenthesis
15799 \string<\string'\glshex 005B\string'% left square bracket
15800 \string<\string'\glshex 005D\string'% right square bracket
15801 \string<\string'\glshex 007B\string'% left curly bracket
15802 \string<\string'\glshex 007D\string'% right curly bracket
15803 \string<\glshex 00A7% section sign
15804 \string<\glshex 00B6% pilcrow sign
15805 \string<\glshex 00A9% copyright sign
15806 \string<\glshex 00AE% registered sign
15807 \string<\string'\glshex 0040\string'% at sign
15808 }

```

trcurrencyrules General punctuation.

```

15809 \newcommand*\glsxtrcurrencyrules}{%
15810 \glshex 00A4% currency sign
15811 \string<\glshex 0E3F% Thai currency symbol baht
15812 \string<\glshex 00A2% cent sign
15813 \string<\glshex 20A1% colon sign
15814 \string<\glshex 20A2% cruzeiro sign
15815 \string<\string'\glshex 0024\string'% dollar sign
15816 \string<\glshex 20AB% dong sign
15817 \string<\glshex 20AC% euro sign
15818 \string<\glshex 20A3% French franc sign
15819 \string<\glshex 20A4% lira sign
15820 \string<\glshex 20A5% mill sign
15821 \string<\glshex 20A6% naira sign
15822 \string<\glshex 20A7% peseta sign
15823 \string<\glshex 00A3% pound sign
15824 \string<\glshex 20A8% rupee sign
15825 \string<\glshex 20AA% new sheqel sign
15826 \string<\glshex 20A9% won sign
15827 \string<\glshex 00A5% yen sign
15828 }

```

eralpuncIIrules Second set of general punctuation.

```

15829 \newcommand*\glsxtrgeneralpuncIIrules}{%
15830 \string'\glshex 002A\string'% asterisk
15831 \string<\string'\glshex 005C\string'% backslash
15832 \string<\string'\glshex 0026\string'% ampersand
15833 \string<\string'\glshex 0023\string'% hash sign
15834 \string<\string'\glshex 0025\string'% percent sign
15835 \string<\string'\glshex 002B\string'% plus sign
15836 \string=\glshex 207A\string=\glshex 208A% super/subscript plus sign
15837 \string<\glshex 00B1% plus-minus sign

```

```

15838 \string<\glshex 00F7% division sign
15839 \string<\glshex 00D7% multiplication sign
15840 \string<\string'\glshex 003C\string'% less-than sign
15841 \string<\string'\glshex 003D\string'% equals sign
15842 \string<\string'\glshex 003E\string'% greater-than sign
15843 \string<\glshex 00AC% not sign
15844 \string<\string'\glshex 007C\string'% vertical bar (pipe)
15845 \string<\glshex 00A6% broken bar
15846 \string<\glshex 00B0% degree sign
15847 \string<\glshex 00B5% micron sign
15848 }

```

eralLatinIrules Basic Latin alphabet.

```

15849 \newcommand*\glsxtrGeneralLatinIrules}{%
15850 \glsxtrLatinA
15851 \string<{b,B%
15852 \string<{c,C%
15853 \string<{d,D%
15854 \string<\glsxtrLatinE
15855 \string<{f,F%
15856 \string<{g,G%
15857 \string<\glsxtrLatinH
15858 \string<\glsxtrLatinI
15859 \string<{j,J%
15860 \string<\glsxtrLatinK
15861 \string<\glsxtrLatinL
15862 \string<\glsxtrLatinM
15863 \string<\glsxtrLatinN
15864 \string<\glsxtrLatinO
15865 \string<\glsxtrLatinP
15866 \string<{q,Q%
15867 \string<{r,R%
15868 \string<\glsxtrLatinS
15869 \string<\glsxtrLatinT
15870 \string<{u,U%
15871 \string<{v,V%
15872 \string<{w,W%
15873 \string<\glsxtrLatinX
15874 \string<{y,Y%
15875 \string<{z,Z
15876 }

```

ralLatinIIrules General Latin alphabet (eth between D and E, ß treated as SS).

```

15877 \newcommand*\glsxtrGeneralLatinIIrules}{%
15878 \glsxtrLatinA
15879 \string<{b,B%
15880 \string<{c,C%
15881 \string<{d,D%
15882 \string<\glsxtrLatinEth

```

```

15883 \string<\glsxtrLatinE
15884 \string<f,F%
15885 \string<g,G%
15886 \string<\glsxtrLatinH
15887 \string<\glsxtrLatinI
15888 \string<j,J%
15889 \string<\glsxtrLatinK
15890 \string<\glsxtrLatinL
15891 \string<\glsxtrLatinM
15892 \string<\glsxtrLatinN
15893 \string<\glsxtrLatinO
15894 \string<\glsxtrLatinP
15895 \string<q,Q%
15896 \string<r,R%
15897 \string<\glsxtrLatinS
15898 \string& SS \string, \glsxtrLatinEszettSs
15899 \string<\glsxtrLatinT
15900 \string<u,U%
15901 \string<v,V%
15902 \string<w,W%
15903 \string<\glsxtrLatinX
15904 \string<y,Y%
15905 \string<z,Z%
15906 }

```

`allLatinIIIrules` General Latin alphabet (eth between D and E, ß treated as SZ).

```

15907 \newcommand*\glsxtrGeneralLatinIIIrules}{%
15908 \glsxtrLatinA
15909 \string<b,B%
15910 \string<c,C%
15911 \string<d,D%
15912 \string<\glsxtrLatinEth
15913 \string<\glsxtrLatinE
15914 \string<f,F%
15915 \string<g,G%
15916 \string<\glsxtrLatinH
15917 \string<\glsxtrLatinI
15918 \string<j,J%
15919 \string<\glsxtrLatinK
15920 \string<\glsxtrLatinL
15921 \string<\glsxtrLatinM
15922 \string<\glsxtrLatinN
15923 \string<\glsxtrLatinO
15924 \string<\glsxtrLatinP
15925 \string<q,Q%
15926 \string<r,R%
15927 \string<\glsxtrLatinS
15928 \string& SZ, \glsxtrLatinEszettSz
15929 \string<\glsxtrLatinT

```

```

15930 \string<u,U%
15931 \string<v,V%
15932 \string<w,W%
15933 \string<\glsxtrLatinX
15934 \string<y,Y%
15935 \string<z,Z%
15936 }

```

ralLatinIVrules General Latin alphabet (Æ treated as AE and Ø treated as OE, Þ treated as TH, ß treated as SS, eth between D and E).

```

15937 \newcommand*\{\glsxtrGeneralLatinIVrules\}{%
15938 \glsxtrLatinA
15939 \string& AE , \glsxtrLatinAELigature
15940 \string<b,B%
15941 \string<c,C%
15942 \string<d,D%
15943 \string<\glsxtrLatinEth
15944 \string<\glsxtrLatinE
15945 \string<f,F%
15946 \string<g,G%
15947 \string<\glsxtrLatinH
15948 \string<\glsxtrLatinI
15949 \string<j,J%
15950 \string<\glsxtrLatinK
15951 \string<\glsxtrLatinL
15952 \string<\glsxtrLatinM
15953 \string<\glsxtrLatinN
15954 \string<\glsxtrLatinO
15955 \string& OE , \glsxtrLatinOELigature
15956 \string<\glsxtrLatinP
15957 \string<q,Q%
15958 \string<r,R%
15959 \string<\glsxtrLatinS
15960 \string& SS , \glsxtrLatinEszettSs
15961 \string<\glsxtrLatinT
15962 \string& th =\glshex 00DE
15963 \string& TH =\glshex 00FE
15964 \string<u,U%
15965 \string<v,V%
15966 \string<w,W%
15967 \string<\glsxtrLatinX
15968 \string<y,Y%
15969 \string<z,Z%
15970 }

```

eralLatinVrules General Latin alphabet (eth between D and E, ß treated as SS, Þ treated as TH).

```

15971 \newcommand*\{\glsxtrGeneralLatinVrules\}{%
15972 \glsxtrLatinA
15973 \string<b,B%

```

```

15974 \string<c,C%
15975 \string<d,D%
15976 \string<\glsxtrLatinEth
15977 \string<\glsxtrLatinE
15978 \string<f,F%
15979 \string<g,G%
15980 \string<\glsxtrLatinH
15981 \string<\glsxtrLatinI
15982 \string<j,J%
15983 \string<\glsxtrLatinK
15984 \string<\glsxtrLatinL
15985 \string<\glsxtrLatinM
15986 \string<\glsxtrLatinN
15987 \string<\glsxtrLatinO
15988 \string<\glsxtrLatinP
15989 \string<q,Q%
15990 \string<r,R%
15991 \string<\glsxtrLatinS
15992 \string& SS , \glsxtrLatinEszettSs
15993 \string<\glsxtrLatinT
15994 \string& th =\glshex 0ODE
15995 \string& TH =\glshex 0FE
15996 \string<u,U%
15997 \string<v,V%
15998 \string<w,W%
15999 \string<\glsxtrLatinX
16000 \string<y,Y%
16001 \string<z,Z%
16002 }

```

`ralLatinVIrules` General Latin alphabet (eth between D and E, ß treated as SZ, Þ treated as TH).

```

16003 \newcommand*\{\glsxtrGeneralLatinVIrules\}{%
16004 \glsxtrLatinA
16005 \string<b,B%
16006 \string<c,C%
16007 \string<d,D%
16008 \string<\glsxtrLatinEth
16009 \string<\glsxtrLatinE
16010 \string<f,F%
16011 \string<g,G%
16012 \string<\glsxtrLatinH
16013 \string<\glsxtrLatinI
16014 \string<j,J%
16015 \string<\glsxtrLatinK
16016 \string<\glsxtrLatinL
16017 \string<\glsxtrLatinM
16018 \string<\glsxtrLatinN
16019 \string<\glsxtrLatinO
16020 \string<\glsxtrLatinP

```

```

16021 \string<q,Q%
16022 \string<r,R%
16023 \string<\glsxtrLatinS
16024 \string& SZ , \glsxtrLatinEszettSz
16025 \string<\glsxtrLatinT
16026 \string& th =\glshex 00DE
16027 \string& TH =\glshex 00FE
16028 \string<u,U%
16029 \string<v,V%
16030 \string<w,W%
16031 \string<\glsxtrLatinX
16032 \string<y,Y%
16033 \string<z,Z%
16034 }

```

`allLatinVIIrules` General Latin alphabet (\textAE between A and B, eth between D and E, insular G as G, \textCE between O and P, long S equivalent to S, \textP between T and U and wynn as W).

```

16035 \newcommand*\glsxtrGeneralLatinVIIrules}{%
16036 \glsxtrLatinA
16037 \string<\glsxtrLatinAEligature
16038 \string<b,B%
16039 \string<c,C%
16040 \string<d,D%
16041 \string<\glsxtrLatinEth
16042 \string<\glsxtrLatinE
16043 \string<f,F%
16044 \string<\glsxtrLatinInsularG
16045 \string<\glsxtrLatinH
16046 \string<\glsxtrLatinI
16047 \string<j,J%
16048 \string<\glsxtrLatinK
16049 \string<\glsxtrLatinL
16050 \string<\glsxtrLatinM
16051 \string<\glsxtrLatinN
16052 \string<\glsxtrLatinO
16053 \string<\glsxtrLatinOEligature
16054 \string<\glsxtrLatinP
16055 \string<q,Q%
16056 \string<r,R%
16057 \string<\glshex 017F=\glsxtrLatinS % s and long s
16058 \string<\glsxtrLatinT
16059 \string<\glsxtrLatinThorn
16060 \string<u,U%
16061 \string<v,V%
16062 \string< w\string=\glshex 01BF, W\string=\glshex 01F7
16063 \string<\glsxtrLatinX
16064 \string<y,Y%
16065 \string<z,Z%
16066 }

```

```

1LatinVIIIRules General Latin alphabet (Æ treated as AE and Ø treated as OE, Þ treated as TH, ß treated as SS,
eth treated as D, Ø treated as O, Ł treated as L).
16067 \newcommand*{\glsxtrGeneralLatinVIIIRules}{%
16068   \glsxtrLatinA
16069   \string& AE , \glsxtrLatinAELigature
16070   \string<b,B%
16071   \string<c,C%
16072   \string<\glshex 00F0\string;d,\glshex 00D0\string;D% D and eth
16073   \string<\glsxtrLatinE
16074   \string<f,F%
16075   \string<g,G%
16076   \string<\glsxtrLatinH
16077   \string<\glsxtrLatinI
16078   \string<j,J%
16079   \string<\glsxtrLatinK
16080   \string<\glshex 0142\string=\glsxtrLatinL\string=\glshex 0141% L and \L
16081   \string<\glsxtrLatinM
16082   \string<\glsxtrLatinN
16083   \string<\glshex 00F8\string=\glsxtrLatinO\string=\glshex 00D8% O and \O
16084   \string& OE , \glsxtrLatinOELigature
16085   \string<\glsxtrLatinP
16086   \string<q,Q%
16087   \string<r,R%
16088   \string<\glsxtrLatinS
16089   \string& SS , \glsxtrLatinEszettSs
16090   \string<\glsxtrLatinT
16091   \string& th =\glshex 00DE
16092   \string& TH =\glshex 00FE
16093   \string<u,U%
16094   \string<v,V%
16095   \string<w,W%
16096   \string<\glsxtrLatinX
16097   \string<y,Y%
16098   \string<z,Z%
16099 }

\glsxtrLatinA
16100 \newcommand*{\glsxtrLatinA}{%
16101   a\string=\glshex 00AA\string=\glshex 2090,A
16102 }

\glsxtrLatinE
16103 \newcommand*{\glsxtrLatinE}{%
16104   e\string=\glshex 2091,E
16105 }

\glsxtrLatinH
16106 \newcommand*{\glsxtrLatinH}{%
16107   h\string=\glshex 2095,H

```

```

16108 }

\glsxtrLatinI
16109 \newcommand*{\glsxtrLatinI}{%
16110   i\string=\glshex{2071,I}
16111 }

\glsxtrLatinK
16112 \newcommand*{\glsxtrLatinK}{%
16113   k\string=\glshex{2096,K}
16114 }

\glsxtrLatinL
16115 \newcommand*{\glsxtrLatinL}{%
16116   l\string=\glshex{2097,L}
16117 }

\glsxtrLatinM
16118 \newcommand*{\glsxtrLatinM}{%
16119   m\string=\glshex{2098,M}
16120 }

\glsxtrLatinN
16121 \newcommand*{\glsxtrLatinN}{%
16122   n\string=\glshex{207F}\string=\glshex{2099,N}
16123 }

\glsxtrLatinO
16124 \newcommand*{\glsxtrLatinO}{%
16125   o\string=\glshex{00BA}\string=\glshex{2092,O}
16126 }

\glsxtrLatinP
16127 \newcommand*{\glsxtrLatinP}{%
16128   p\string=\glshex{209A,P}
16129 }

\glsxtrLatinS
16130 \newcommand*{\glsxtrLatinS}{%
16131   s\string=\glshex{209B,S}
16132 }

\glsxtrLatinT
16133 \newcommand*{\glsxtrLatinT}{%
16134   t\string=\glshex{209C,T}
16135 }

```

```

\glsxtrLatinX
16136 \newcommand*{\glsxtrLatinX}{%
16137   x\string=\glshex{2093}, X
16138 }

\lsxtrLatinSchwa Latin schwa (lower case, subscript and upper case).
16139 \newcommand*{\glsxtrLatinSchwa}{%
16140   \glshex{0259}\string=\glshex{2094}, \glshex{018F}
16141 }

\trLatinEszettSs
16142 \newcommand*{\glsxtrLatinEszettSs}{%
16143   \glshex{00DF} eszett
16144   \string=\glshex{017Fs} % long S s
16145 }

\trLatinEszettSz
16146 \newcommand*{\glsxtrLatinEszettSz}{%
16147   \glshex{00DF} eszett
16148   \string=\glshex{017Fz} % long S z
16149 }

\glsxtrLatinEth
16150 \newcommand*{\glsxtrLatinEth}{%
16151   \glshex{00F0}, \glshex{00D0} eth
16152 }

\lsxtrLatinThorn
16153 \newcommand*{\glsxtrLatinThorn}{%
16154   \glshex{00FE}, \glshex{00DE} thorn
16155 }

LatinAEligature
16156 \newcommand*{\glsxtrLatinAEligature}{%
16157   \glshex{00E6}, \glshex{00C6} AE-ligature
16158 }

LatinOEligature
16159 \newcommand*{\glsxtrLatinOEligature}{%
16160   \glshex{0153}, \glshex{0152} OE-ligature
16161 }

\glsxtrLatinAA
16162 \newcommand*{\glsxtrLatinAA}{%
16163   \glshex{00E5}=a\glshex{030A}, \% \aa
16164   \glshex{00C5}=A\glshex{030A}\% \AA
16165 }

```

```

glsxtrLatinWynn
16166 \newcommand*{\glsxtrLatinWynn}{%
16167 \glshex 01BF,\glshex 01F7% wynn
16168 }

trLatinInsularG
16169 \newcommand*{\glsxtrLatinInsularG}{%
16170 \glshex 1D79,\glshex A77D% insular G
16171 \string; g, G
16172 }

sxtrLatinOslash
16173 \newcommand*{\glsxtrLatinOslash}{%
16174 \glshex 00F8,\glshex 00D8% \o, \O
16175 }

sxtrLatinLslash
16176 \newcommand*{\glsxtrLatinLslash}{%
16177 \glshex 0142,\glshex 0141% \l, \L
16178 }

thUpGreekIrules Includes digamma between epsilon and zeta.
16179 \newcommand*{\glsxtrMathUpGreekIrules}{%
16180 \glsxtrUpAlpha
16181 \string<\glsxtrUpBeta
16182 \string<\glsxtrUpGamma
16183 \string<\glsxtrUpDelta
16184 \string<\glsxtrUpEpsilon
16185 \string<\glsxtrUpDigamma
16186 \string<\glsxtrUpZeta
16187 \string<\glsxtrUpEta
16188 \string<\glsxtrUpTheta
16189 \string<\glsxtrUpIota
16190 \string<\glsxtrUpKappa
16191 \string<\glsxtrUpLambda
16192 \string<\glsxtrUpMu
16193 \string<\glsxtrUpNu
16194 \string<\glsxtrUpXi
16195 \string<\glsxtrUpOmicron
16196 \string<\glsxtrUpPi
16197 \string<\glsxtrUpRho
16198 \string<\glsxtrUpSigma
16199 \string<\glsxtrUpTau
16200 \string<\glsxtrUpUpsilon
16201 \string<\glsxtrUpPhi
16202 \string<\glsxtrUpChi
16203 \string<\glsxtrUpPsi
16204 \string<\glsxtrUpOmega
16205 }

```

`hUpGreekIIrules` Doesn't include digamma.

```
16206 \newcommand*{\glsxtrMathUpGreekIIrules}{%
16207  \glsxtrUpAlpha
16208  \string<\glsxtrUpBeta
16209  \string<\glsxtrUpGamma
16210  \string<\glsxtrUpDelta
16211  \string<\glsxtrUpEpsilon
16212  \string<\glsxtrUpZeta
16213  \string<\glsxtrUpEta
16214  \string<\glsxtrUpTheta
16215  \string<\glsxtrUpIota
16216  \string<\glsxtrUpKappa
16217  \string<\glsxtrUpLambda
16218  \string<\glsxtrUpMu
16219  \string<\glsxtrUpNu
16220  \string<\glsxtrUpXi
16221  \string<\glsxtrUpOmicron
16222  \string<\glsxtrUpPi
16223  \string<\glsxtrUpRho
16224  \string<\glsxtrUpSigma
16225  \string<\glsxtrUpTau
16226  \string<\glsxtrUpUpsilon
16227  \string<\glsxtrUpPhi
16228  \string<\glsxtrUpChi
16229  \string<\glsxtrUpPsi
16230  \string<\glsxtrUpOmega
16231 }
```

`alicGreekIrules` Includes (upright) digamma between epsilon and zeta (there isn't an italic digamma), so don't mix with `\glsxtrMathUpGreekIrules` or there may be unexpected results.

```
16232 \newcommand*{\glsxtrMathItalicGreekIrules}{%
16233  \glsxtrMathItalicAlpha
16234  \string<\glsxtrMathItalicBeta
16235  \string<\glsxtrMathItalicGamma
16236  \string<\glsxtrMathItalicDelta
16237  \string<\glsxtrMathItalicEpsilon
16238  \string<\glsxtrUpDigamma
16239  \string<\glsxtrMathItalicZeta
16240  \string<\glsxtrMathItalicEta
16241  \string<\glsxtrMathItalicTheta
16242  \string<\glsxtrMathItalicIota
16243  \string<\glsxtrMathItalicKappa
16244  \string<\glsxtrMathItalicLambda
16245  \string<\glsxtrMathItalicMu
16246  \string<\glsxtrMathItalicNu
16247  \string<\glsxtrMathItalicXi
16248  \string<\glsxtrMathItalicOmicron
16249  \string<\glsxtrMathItalicPi
16250  \string<\glsxtrMathItalicRho
```

```

16251 \string<\glsxtrMathItalicSigma
16252 \string<\glsxtrMathItalicTau
16253 \string<\glsxtrMathItalicUpsilon
16254 \string<\glsxtrMathItalicPhi
16255 \string<\glsxtrMathItalicChi
16256 \string<\glsxtrMathItalicPsi
16257 \string<\glsxtrMathItalicOmega
16258 }

```

`licGreekIIrules` Doesn't include digamma.

```

16259 \newcommand*{\glsxtrMathItalicGreekIIrules}{%
16260 \glsxtrMathItalicAlpha
16261 \string<\glsxtrMathItalicBeta
16262 \string<\glsxtrMathItalicGamma
16263 \string<\glsxtrMathItalicDelta
16264 \string<\glsxtrMathItalicEpsilon
16265 \string<\glsxtrMathItalicZeta
16266 \string<\glsxtrMathItalicEta
16267 \string<\glsxtrMathItalicTheta
16268 \string<\glsxtrMathItalicIota
16269 \string<\glsxtrMathItalicKappa
16270 \string<\glsxtrMathItalicLambda
16271 \string<\glsxtrMathItalicMu
16272 \string<\glsxtrMathItalicNu
16273 \string<\glsxtrMathItalicXi
16274 \string<\glsxtrMathItalicOmicron
16275 \string<\glsxtrMathItalicPi
16276 \string<\glsxtrMathItalicRho
16277 \string<\glsxtrMathItalicSigma
16278 \string<\glsxtrMathItalicTau
16279 \string<\glsxtrMathItalicUpsilon
16280 \string<\glsxtrMathItalicPhi
16281 \string<\glsxtrMathItalicChi
16282 \string<\glsxtrMathItalicPsi
16283 \string<\glsxtrMathItalicOmega
16284 }

```

`upperGreekIrules` Upper case only (includes upright digamma).

```

16285 \newcommand*{\glsxtrMathItalicUpperGreekIrules}{%
16286 \glshex 1D6E2% upper case alpha (maths italic)
16287 \string<\glshex 1D6E3% upper case beta (maths italic)
16288 \string<\glshex 1D6E4% upper case gamma (maths italic)
16289 \string<\glshex 1D6E5% upper case delta (maths italic)
16290 \string<\glshex 1D6E6% upper case epsilon (maths italic)
16291 \string<\glshex 03DC% upper case digamma
16292 \string<\glshex 1D6E7% upper case zeta (maths italic)
16293 \string<\glshex 1D6E8% upper case eta (maths italic)
16294 \string<\glshex 1D6E9% upper case theta (maths italic)
16295 \string=\glshex 1D6F3% upper case theta variant (maths italic)

```

```

16296 \string<\glshex 1D6EA% upper case iota (maths italic)
16297 \string<\glshex 1D6EB% upper case kappa (maths italic)
16298 \string<\glshex 1D6EC% upper case lambda (maths italic)
16299 \string<\glshex 1D6ED% upper case mu (maths italic)
16300 \string<\glshex 1D6EE% upper case nu (maths italic)
16301 \string<\glshex 1D6EF% upper case xi (maths italic)
16302 \string<\glshex 1D6F0% upper case omicron (maths italic)
16303 \string<\glshex 1D6F1% upper case pi (maths italic)
16304 \string<\glshex 1D6F2% upper case rho (maths italic)
16305 \string<\glshex 1D6F4% upper case sigma (maths italic)
16306 \string<\glshex 1D6F5% upper case tau (maths italic)
16307 \string<\glshex 1D6F6% upper case upsilon (maths italic)
16308 \string<\glshex 1D6F7% upper case phi (maths italic)
16309 \string<\glshex 1D6F8% upper case chi (maths italic)
16310 \string<\glshex 1D6F9% upper case psi (maths italic)
16311 \string<\glshex 1D6FA% upper case omega (maths italic)
16312 }

```

`perGreekIIrules` Upper case only (doesn't include upright digamma).

```

16313 \newcommand*{\glsxtrMathItalicUpperGreekIIrules}{%
16314 \glshex 1D6E2% upper case alpha (maths italic)
16315 \string<\glshex 1D6E3% upper case beta (maths italic)
16316 \string<\glshex 1D6E4% upper case gamma (maths italic)
16317 \string<\glshex 1D6E5% upper case delta (maths italic)
16318 \string<\glshex 1D6E6% upper case epsilon (maths italic)
16319 \string<\glshex 1D6E7% upper case zeta (maths italic)
16320 \string<\glshex 1D6E8% upper case eta (maths italic)
16321 \string<\glshex 1D6E9% upper case theta (maths italic)
16322 \string=\glshex 1D6F3% upper case theta variant (maths italic)
16323 \string<\glshex 1D6EA% upper case iota (maths italic)
16324 \string<\glshex 1D6EB% upper case kappa (maths italic)
16325 \string<\glshex 1D6EC% upper case lambda (maths italic)
16326 \string<\glshex 1D6ED% upper case mu (maths italic)
16327 \string<\glshex 1D6EE% upper case nu (maths italic)
16328 \string<\glshex 1D6EF% upper case xi (maths italic)
16329 \string<\glshex 1D6F0% upper case omicron (maths italic)
16330 \string<\glshex 1D6F1% upper case pi (maths italic)
16331 \string<\glshex 1D6F2% upper case rho (maths italic)
16332 \string<\glshex 1D6F4% upper case sigma (maths italic)
16333 \string<\glshex 1D6F5% upper case tau (maths italic)
16334 \string<\glshex 1D6F6% upper case upsilon (maths italic)
16335 \string<\glshex 1D6F7% upper case phi (maths italic)
16336 \string<\glshex 1D6F8% upper case chi (maths italic)
16337 \string<\glshex 1D6F9% upper case psi (maths italic)
16338 \string<\glshex 1D6FA% upper case omega (maths italic)
16339 }

```

`lowerGreekIrules` Lower case only (includes upright digamma).

```
16340 \newcommand*{\glsxtrMathItalicLowerGreekIrules}{%
```

```

16341 \glshex 1D6FC% lower case alpha (maths italic)
16342 \string<\glshex 1D6FD% lower case beta (maths italic)
16343 \string<\glshex 1D6FE% lower case gamma (maths italic)
16344 \string<\glshex 1D6FF% lower case delta (maths italic)
16345 \string<\glshex 1D700% lower case epsilon (maths italic)
16346 \string=\glshex 1D716% lower case epsilon variant (maths italic)
16347 \string<\glshex 03DD% lower case digamma
16348 \string<\glshex 1D701% lower case zeta (maths italic)
16349 \string<\glshex 1D702% lower case eta (maths italic)
16350 \string<\glshex 1D703% lower case theta (maths italic)
16351 \string=\glshex 1D717% lower case theta variant (maths italic)
16352 \string<\glshex 1D704% lower case iota (maths italic)
16353 \string<\glshex 1D705% lower case kappa (maths italic)
16354 \string=\glshex 1D718% lower case kappa variant (maths italic)
16355 \string<\glshex 1D706% lower case lambda (maths italic)
16356 \string<\glshex 1D707% lower case mu (maths italic)
16357 \string<\glshex 1D708% lower case nu (maths italic)
16358 \string<\glshex 1D709% lower case xi (maths italic)
16359 \string<\glshex 1D70A% lower case omicron (maths italic)
16360 \string<\glshex 1D70B% lower case pi (maths italic)
16361 \string=\glshex 1D71B% lower case pi variant (maths italic)
16362 \string<\glshex 1D70C% lower case rho (maths italic)
16363 \string=\glshex 1D71A% lower case rho variant (maths italic)
16364 \string<\glshex 1D70D% lower case final sigma (maths italic)
16365 \string=\glshex 1D70E% lower case sigma (maths italic)
16366 \string<\glshex 1D70F% lower case tau (maths italic)
16367 \string<\glshex 1D710% lower case upsilon (maths italic)
16368 \string<\glshex 1D711% lower case phi (maths italic)
16369 \string=\glshex 1D719% lower case phi variant (maths italic)
16370 \string<\glshex 1D712% lower case chi (maths italic)
16371 \string<\glshex 1D713% lower case psi (maths italic)
16372 \string<\glshex 1D714% lower case omega (maths italic)
16373 }

```

werGreekIIrules Lower case only (doesn't includes upright digamma).

```

16374 \newcommand*\glsxtrMathItalicLowerGreekIIrules}{%
16375 \glshex 1D6FC% lower case alpha (maths italic)
16376 \string<\glshex 1D6FD% lower case beta (maths italic)
16377 \string<\glshex 1D6FE% lower case gamma (maths italic)
16378 \string<\glshex 1D6FF% lower case delta (maths italic)
16379 \string<\glshex 1D700% lower case epsilon (maths italic)
16380 \string=\glshex 1D716% lower case epsilon variant (maths italic)
16381 \string<\glshex 1D701% lower case zeta (maths italic)
16382 \string<\glshex 1D702% lower case eta (maths italic)
16383 \string<\glshex 1D703% lower case theta (maths italic)
16384 \string=\glshex 1D717% lower case theta variant (maths italic)
16385 \string<\glshex 1D704% lower case iota (maths italic)
16386 \string<\glshex 1D705% lower case kappa (maths italic)
16387 \string=\glshex 1D718% lower case kappa variant (maths italic)

```

```

16388 \string<\glshex 1D706% lower case lambda (maths italic)
16389 \string<\glshex 1D707% lower case mu (maths italic)
16390 \string<\glshex 1D708% lower case nu (maths italic)
16391 \string<\glshex 1D709% lower case xi (maths italic)
16392 \string<\glshex 1D70A% lower case omicron (maths italic)
16393 \string<\glshex 1D70B% lower case pi (maths italic)
16394 \string=\glshex 1D71B% lower case pi variant (maths italic)
16395 \string<\glshex 1D70C% lower case rho (maths italic)
16396 \string=\glshex 1D71A% lower case rho variant (maths italic)
16397 \string<\glshex 1D70D% lower case final sigma (maths italic)
16398 \string=\glshex 1D70E% lower case sigma (maths italic)
16399 \string<\glshex 1D70F% lower case tau (maths italic)
16400 \string<\glshex 1D710% lower case upsilon (maths italic)
16401 \string<\glshex 1D711% lower case phi (maths italic)
16402 \string=\glshex 1D719% lower case phi variant (maths italic)
16403 \string<\glshex 1D712% lower case chi (maths italic)
16404 \string<\glshex 1D713% lower case psi (maths italic)
16405 \string<\glshex 1D714% lower case omega (maths italic)
16406 }

```

MathGreekIrules Includes both upright and italic with digamma between epsilon and zeta.

```

16407 \newcommand*{\glsxtrMathGreekIrules}{%
16408 \glsxtrMathItalicAlpha
16409 \string; \glsxtrUpAlpha
16410 \string<\glsxtrMathItalicBeta
16411 \string; \glsxtrUpBeta
16412 \string<\glsxtrMathItalicGamma
16413 \string; \glsxtrUpGamma
16414 \string<\glsxtrMathItalicDelta
16415 \string; \glsxtrUpDelta
16416 \string<\glsxtrMathItalicEpsilon
16417 \string; \glsxtrUpEpsilon
16418 \string<\glsxtrUpDigamma
16419 \string<\glsxtrMathItalicZeta
16420 \string; \glsxtrUpZeta
16421 \string<\glsxtrMathItalicEta
16422 \string; \glsxtrUpEta
16423 \string<\glsxtrMathItalicTheta
16424 \string; \glsxtrUpTheta
16425 \string<\glsxtrMathItalicIota
16426 \string; \glsxtrUpIota
16427 \string<\glsxtrMathItalicKappa
16428 \string; \glsxtrUpKappa
16429 \string<\glsxtrMathItalicLambda
16430 \string; \glsxtrUpLambda
16431 \string<\glsxtrMathItalicMu
16432 \string; \glsxtrUpMu
16433 \string<\glsxtrMathItalicNu
16434 \string; \glsxtrUpNu

```

```

16435 \string<\glsxtrMathItalicXi
16436 \string; \glsxtrUpXi
16437 \string<\glsxtrMathItalicOmicron
16438 \string; \glsxtrUpOmicron
16439 \string<\glsxtrMathItalicPi
16440 \string; \glsxtrUpPi
16441 \string<\glsxtrMathItalicRho
16442 \string; \glsxtrUpRho
16443 \string<\glsxtrMathItalicSigma
16444 \string; \glsxtrUpSigma
16445 \string<\glsxtrMathItalicTau
16446 \string; \glsxtrUpTau
16447 \string<\glsxtrMathItalicUpsilon
16448 \string; \glsxtrUpUpsilon
16449 \string<\glsxtrMathItalicPhi
16450 \string; \glsxtrUpPhi
16451 \string<\glsxtrMathItalicChi
16452 \string; \glsxtrUpChi
16453 \string<\glsxtrMathItalicPsi
16454 \string; \glsxtrUpPsi
16455 \string<\glsxtrMathItalicOmega
16456 \string; \glsxtrUpOmega
16457 }

```

`athGreekIIrules` Includes both upright and italic (digamma not included).

```

16458 \newcommand*\glsxtrMathGreekIIrules}{%
16459 \glsxtrMathItalicAlpha
16460 \string; \glsxtrUpAlpha
16461 \string<\glsxtrMathItalicBeta
16462 \string; \glsxtrUpBeta
16463 \string<\glsxtrMathItalicGamma
16464 \string; \glsxtrUpGamma
16465 \string<\glsxtrMathItalicDelta
16466 \string; \glsxtrUpDelta
16467 \string<\glsxtrMathItalicEpsilon
16468 \string; \glsxtrUpEpsilon
16469 \string<\glsxtrMathItalicZeta
16470 \string; \glsxtrUpZeta
16471 \string<\glsxtrMathItalicEta
16472 \string; \glsxtrUpEta
16473 \string<\glsxtrMathItalicTheta
16474 \string; \glsxtrUpTheta
16475 \string<\glsxtrMathItalicIota
16476 \string; \glsxtrUpIota
16477 \string<\glsxtrMathItalicKappa
16478 \string; \glsxtrUpKappa
16479 \string<\glsxtrMathItalicLambda
16480 \string; \glsxtrUpLambda
16481 \string<\glsxtrMathItalicMu

```

```
16482 \string;\glsxtrUpMu
16483 \string<\glsxtrMathItalicNu
16484 \string;\glsxtrUpNu
16485 \string<\glsxtrMathItalicXi
16486 \string;\glsxtrUpXi
16487 \string<\glsxtrMathItalicOmicron
16488 \string;\glsxtrUpOmicron
16489 \string<\glsxtrMathItalicPi
16490 \string;\glsxtrUpPi
16491 \string<\glsxtrMathItalicRho
16492 \string;\glsxtrUpRho
16493 \string<\glsxtrMathItalicSigma
16494 \string;\glsxtrUpSigma
16495 \string<\glsxtrMathItalicTau
16496 \string;\glsxtrUpTau
16497 \string<\glsxtrMathItalicUpsilon
16498 \string;\glsxtrUpUpsilon
16499 \string<\glsxtrMathItalicPhi
16500 \string;\glsxtrUpPhi
16501 \string<\glsxtrMathItalicChi
16502 \string;\glsxtrUpChi
16503 \string<\glsxtrMathItalicPsi
16504 \string;\glsxtrUpPsi
16505 \string<\glsxtrMathItalicOmega
16506 \string;\glsxtrUpOmega
16507 }
```

\glsxtrUpAlpha

```
16508 \newcommand*\glsxtrUpAlpha}{%
16509 \glshex 03B1,% lower case alpha
16510 \glshex 0391% upper case alpha
16511 }
```

\glsxtrUpBeta

```
16512 \newcommand*\glsxtrUpBeta}{%
16513 \glshex 03B2,% lower case beta
16514 \glshex 0392% upper case beta
16515 }
```

\glsxtrUpGamma

```
16516 \newcommand*\glsxtrUpGamma}{%
16517 \glshex 03B3,% lower case gamma
16518 \glshex 0393% upper case gamma
16519 }
```

\glsxtrUpDelta

```
16520 \newcommand*\glsxtrUpDelta}{%
16521 \glshex 03B4,% lower case delta
16522 \glshex 0394% upper case delta
```

```

16523 }

glsxtrUpEpsilon
16524 \newcommand*{\glsxtrUpEpsilon}{%
16525 \glshex{03B5} lower case epsilon
16526 \string=\glshex{03F5}, lower case epsilon variant
16527 \glshex{0395} upper case epsilon
16528 }

glsxtrUpDigamma
16529 \newcommand*{\glsxtrUpDigamma}{%
16530 \glshex{03DD}, lower case digamma
16531 \glshex{03DC} upper case digamma
16532 }

\glsxtrUpZeta
16533 \newcommand*{\glsxtrUpZeta}{%
16534 \glshex{03B6}, lower case zeta
16535 \glshex{0396} upper case zeta
16536 }

\glsxtrUpEta
16537 \newcommand*{\glsxtrUpEta}{%
16538 \glshex{03B7}, lower case eta
16539 \glshex{0397} upper case eta
16540 }

\glsxtrUpTheta
16541 \newcommand*{\glsxtrUpTheta}{%
16542 \glshex{03B8} lower case theta
16543 \string=\glshex{03D1}, lower case theta variant
16544 \glshex{0398} upper case theta
16545 }

\glsxtrUpIota
16546 \newcommand*{\glsxtrUpIota}{%
16547 \glshex{03B9}, lower case iota
16548 \glshex{0399} upper case iota
16549 }

\glsxtrUpKappa
16550 \newcommand*{\glsxtrUpKappa}{%
16551 \glshex{03BA} lower case kappa
16552 \string=\glshex{03F0}, lower case kappa variant
16553 \glshex{039A} upper case kappa
16554 }

```

```

\glsxtrUpLambda
16555 \newcommand*{\glsxtrUpLambda}{%
16556 \glshex{03BB},% lower lambda
16557 \glshex{039B},% upper case lambda
16558 }

\glsxtrUpMu
16559 \newcommand*{\glsxtrUpMu}{%
16560 \glshex{03BC},% lower case mu
16561 \glshex{039C},% upper case mu
16562 }

\glsxtrUpNu
16563 \newcommand*{\glsxtrUpNu}{%
16564 \glshex{03BD},% lower case nu
16565 \glshex{039D},% upper case nu
16566 }

\glsxtrUpXi
16567 \newcommand*{\glsxtrUpXi}{%
16568 \glshex{03BE},% lower case xi
16569 \glshex{039E},% upper case xi
16570 }

glsxtrUpOmicron
16571 \newcommand*{\glsxtrUpOmicron}{%
16572 \glshex{03BF},% lower case omicron
16573 \glshex{039F},% upper case omicron
16574 }

\glsxtrUpPi
16575 \newcommand*{\glsxtrUpPi}{%
16576 \glshex{03C0},% lower case pi
16577 \string=\glshex{03D6},% lower case pi variant
16578 \glshex{03A0},% upper case pi
16579 }

\glsxtrUpRho
16580 \newcommand*{\glsxtrUpRho}{%
16581 \glshex{03C1},% lower case rho
16582 \string=\glshex{03F1},% lower case rho variant
16583 \glshex{03A1},% upper case rho
16584 }

\glsxtrUpSigma
16585 \newcommand*{\glsxtrUpSigma}{%
16586 \glshex{03C2},% lower case sigma
16587 \string=\glshex{03C3},% lower case sigma

```

```

16588 \glshex 03A3% upper case sigma
16589 }

\glsxtrUpTau
16590 \newcommand*\glsxtrUpTau{%
16591 \glshex 03C4,% lower case tau
16592 \glshex 03A4% upper case tau
16593 }

glsxtrUpUpsilon
16594 \newcommand*\glsxtrUpUpsilon{%
16595 \glshex 03C5,% lower case upsilon
16596 \glshex 03A5% upper case upsilon
16597 }

\glsxtrUpPhi
16598 \newcommand*\glsxtrUpPhi{%
16599 \glshex 03C6% lower case phi
16600 \string=\glshex 03D5,% lower case phi variant
16601 \glshex 03A6% upper case phi
16602 }

\glsxtrUpChi
16603 \newcommand*\glsxtrUpChi{%
16604 \glshex 03C7,% lower case chi
16605 \glshex 03A7% upper case chi
16606 }

\glsxtrUpPsi
16607 \newcommand*\glsxtrUpPsi{%
16608 \glshex 03C8,% lower case psi
16609 \glshex 03A8% upper case psi
16610 }

\glsxtrUpOmega
16611 \newcommand*\glsxtrUpOmega{%
16612 \glshex 03C9,% lower case omega
16613 \glshex 03A9% upper case omega
16614 }

MathItalicAlpha
16615 \newcommand*\glsxtrMathItalicAlpha{%
16616 \glshex 1D6FC,% lower case alpha (maths italic)
16617 \glshex 1D6E2% upper case alpha (maths italic)
16618 }

rMathItalicBeta
16619 \newcommand*\glsxtrMathItalicBeta{%

```

```
16620 \glshex 1D6FD,% lower case beta (maths italic)
16621 \glshex 1D6E3% upper case beta (maths italic)
16622 }
```

MathItalicGamma

```
16623 \newcommand*{\glsxtrMathItalicGamma}{%
16624 \glshex 1D6FE,% lower case gamma (maths italic)
16625 \glshex 1D6E4% upper case gamma (maths italic)
16626 }
```

MathItalicDelta

```
16627 \newcommand*{\glsxtrMathItalicDelta}{%
16628 \glshex 1D6FF,% lower case delta (maths italic)
16629 \glshex 1D6E5% upper case delta (maths italic)
16630 }
```

thItalicEpsilon

```
16631 \newcommand*{\glsxtrMathItalicEpsilon}{%
16632 \glshex 1D700% lower case epsilon (maths italic)
16633 \string=\glshex 1D716,% lower case epsilon variant (maths italic)
16634 \glshex 1D6E6% upper case epsilon (maths italic)
16635 }
```

rMathItalicZeta

```
16636 \newcommand*{\glsxtrMathItalicZeta}{%
16637 \glshex 1D701,% lower case zeta (maths italic)
16638 \glshex 1D6E7% upper case zeta (maths italic)
16639 }
```

trMathItalicEta

```
16640 \newcommand*{\glsxtrMathItalicEta}{%
16641 \glshex 1D702,% lower case eta (maths italic)
16642 \glshex 1D6E8% upper case eta (maths italic)
16643 }
```

MathItalicTheta

```
16644 \newcommand*{\glsxtrMathItalicTheta}{%
16645 \glshex 1D703% lower case theta (maths italic)
16646 \string=\glshex 1D717,% lower case theta variant (maths italic)
16647 \glshex 1D6E9% upper case theta (maths italic)
16648 \string=\glshex 1D6F3% upper case theta variant (maths italic)
16649 }
```

rMathItalicIota

```
16650 \newcommand*{\glsxtrMathItalicIota}{%
16651 \glshex 1D704,% lower case iota (maths italic)
16652 \glshex 1D6EA% upper case iota (maths italic)
16653 }
```

```

MathItalicKappa
16654 \newcommand*{\glsxtrMathItalicKappa}{%
16655 \glshex 1D705% lower case kappa (maths italic)
16656 \string=\glshex 1D718,% lower case kappa variant (maths italic)
16657 \glshex 1D6EB% upper case kappa (maths italic)
16658 }

athItalicLambda
16659 \newcommand*{\glsxtrMathItalicLambda}{%
16660 \glshex 1D706,% lower case lambda (maths italic)
16661 \glshex 1D6EC% upper case lambda (maths italic)
16662 }

xtrMathItalicMu
16663 \newcommand*{\glsxtrMathItalicMu}{%
16664 \glshex 1D707,% lower case mu (maths italic)
16665 \glshex 1D6ED% upper case mu (maths italic)
16666 }

xtrMathItalicNu
16667 \newcommand*{\glsxtrMathItalicNu}{%
16668 \glshex 1D708,% lower case nu (maths italic)
16669 \glshex 1D6EE% upper case nu (maths italic)
16670 }

xtrMathItalicXi
16671 \newcommand*{\glsxtrMathItalicXi}{%
16672 \glshex 1D709,% lower case xi (maths italic)
16673 \glshex 1D6EF% upper case xi (maths italic)
16674 }

thItalicOmicron
16675 \newcommand*{\glsxtrMathItalicOmicron}{%
16676 \glshex 1D70A,% lower case omicron (maths italic)
16677 \glshex 1D6F0% upper case omicron (maths italic)
16678 }

xtrMathItalicPi
16679 \newcommand*{\glsxtrMathItalicPi}{%
16680 \glshex 1D70B% lower case pi (maths italic)
16681 \string=\glshex 1D71B,% lower case pi variant (maths italic)
16682 \glshex 1D6F1% upper case pi (maths italic)
16683 }

trMathItalicRho
16684 \newcommand*{\glsxtrMathItalicRho}{%
16685 \glshex 1D70C% lower case rho (maths italic)
16686 \string=\glshex 1D71A,% lower case rho variant (maths italic)

```

```
16687 \glshex 1D6F2% upper case rho (maths italic)
16688 }
```

MathItalicSigma

```
16689 \newcommand*\glsxtrMathItalicSigma}{%
16690 \glshex 1D70D% lower case final sigma (maths italic)
16691 \string=\glshex 1D70E,% lower case sigma (maths italic)
16692 \glshex 1D6F4% upper case sigma (maths italic)
16693 }
```

trMathItalicTau

```
16694 \newcommand*\glsxtrMathItalicTau}{%
16695 \glshex 1D70F,% lower case tau (maths italic)
16696 \glshex 1D6F5% upper case tau (maths italic)
16697 }
```

thItalicUpsilon

```
16698 \newcommand*\glsxtrMathItalicUpsilon}{%
16699 \glshex 1D710,% lower case upsilon (maths italic)
16700 \glshex 1D6F6% upper case upsilon (maths italic)
16701 }
```

trMathItalicPhi

```
16702 \newcommand*\glsxtrMathItalicPhi}{%
16703 \glshex 1D711% lower case phi (maths italic)
16704 \string=\glshex 1D719,% lower case phi variant (maths italic)
16705 \glshex 1D6F7% upper case phi (maths italic)
16706 }
```

trMathItalicChi

```
16707 \newcommand*\glsxtrMathItalicChi}{%
16708 \glshex 1D712,% lower case chi (maths italic)
16709 \glshex 1D6F8% upper case chi (maths italic)
16710 }
```

trMathItalicPsi

```
16711 \newcommand*\glsxtrMathItalicPsi}{%
16712 \glshex 1D713,% lower case psi (maths italic)
16713 \glshex 1D6F9% upper case psi (maths italic)
16714 }
```

MathItalicOmega

```
16715 \newcommand*\glsxtrMathItalicOmega}{%
16716 \glshex 1D714,% lower case omega (maths italic)
16717 \glshex 1D6FA% upper case omega (maths italic)
16718 }
```

```
thItalicPartial
16719 \newcommand*{\glsxtrMathItalicPartial}{%
16720 \glshex 1D715% partial differential (maths italic)
16721 }
```

```
MathItalicNabla
16722 \newcommand*{\glsxtrMathItalicNabla}{%
16723 \glshex 1D6FB% nabla (maths italic)
16724 }
```

lsxtrdigirules Digits from the Basic Latin set and subscript and superscript digit rules.

```
16725 \newcommand*{\glsxtrdigirules}{%
16726 0\string=\glshex 2080\string=\glshex 2070
16727 \string<1\string=\glshex 2081\string=\glshex 00B9
16728 \string<2\string=\glshex 2082\string=\glshex 00B2
16729 \string<3\string=\glshex 2083\string=\glshex 00B3
16730 \string<4\string=\glshex 2084\string=\glshex 2074
16731 \string<5\string=\glshex 2085\string=\glshex 2075
16732 \string<6\string=\glshex 2086\string=\glshex 2076
16733 \string<7\string=\glshex 2087\string=\glshex 2077
16734 \string<8\string=\glshex 2088\string=\glshex 2078
16735 \string<9\string=\glshex 2089\string=\glshex 2079
16736 }
```

BasicDigitrules Digits from the Basic Latin set.

```
16737 \newcommand*{\glsxtrBasicDigitrules}{%
16738 0\string<1\string<2\string<3\string<4%
16739 \string<5\string<6\string<7\string<8\string<9%
16740 }
```

scriptDigitrules Subscript digits.

```
16741 \newcommand*{\glsxtrSubScriptDigitrules}{%
16742 \glshex 2080% subscript 0
16743 \string<\glshex 2081% subscript 1
16744 \string<\glshex 2082% subscript 2
16745 \string<\glshex 2083% subscript 3
16746 \string<\glshex 2084% subscript 4
16747 \string<\glshex 2085% subscript 5
16748 \string<\glshex 2086% subscript 6
16749 \string<\glshex 2087% subscript 7
16750 \string<\glshex 2088% subscript 8
16751 \string<\glshex 2089% subscript 9
16752 }
```

scriptDigitrules Superscript digits.

```
16753 \newcommand*{\glsxtrSuperScriptDigitrules}{%
16754 \glshex 2070% superscript 0
16755 \string<\glshex 00B9% superscript 1
```

```

16756 \string<\glshex 00B2% superscript 2
16757 \string<\glshex 00B3% superscript 3
16758 \string<\glshex 2074% superscript 4
16759 \string<\glshex 2075% superscript 5
16760 \string<\glshex 2076% superscript 6
16761 \string<\glshex 2077% superscript 7
16762 \string<\glshex 2078% superscript 8
16763 \string<\glshex 2079% superscript 9
16764 }

```

trfractionrules Vulgar fractions.

```

16765 \newcommand{\glsxtrfractionrules}{%
16766 \glshex 215F% fraction numerator one (1/)
16767 \string<\glshex 2189% zero thirds (0/3 = 0)
16768 \string<\glshex 2152% one tenth (1/10 = 0.1)
16769 \string<\glshex 2151% one ninth (1/9 ~ 0.111)
16770 \string<\glshex 215B% one eighth (1/8 = 0.125)
16771 \string<\glshex 2150% one seventh (1/7 ~ 0.143)
16772 \string<\glshex 2159% one sixth (1/6 ~ 0.167)
16773 \string<\glshex 2155% one fifth (1/5 = 0.2)
16774 \string<\glshex 00BC% one quarter (1/4 = 0.25)
16775 \string<\glshex 2153% one third (1/3 ~ 0.333)
16776 \string<\glshex 215C% three eighths (3/8 = 0.375)
16777 \string<\glshex 2156% two fifths (2/5 = 0.4)
16778 \string<\glshex 00BD% one half (1/2 = 0.5)
16779 \string<\glshex 2157% three fifths (3/5 = 0.6)
16780 \string<\glshex 215D% five eighths (5/8 = 0.625)
16781 \string<\glshex 2154% two thirds (2/3 ~ 0.667)
16782 \string<\glshex 00BE% three quarters (3/4 = 0.75)
16783 \string<\glshex 2158% four fifths (4/5 = 0.8)
16784 \string<\glshex 215A% five sixths (5/6 ~ 0.833)
16785 \string<\glshex 215E% seven eighths (7/8 = 0.875)
16786 }

```

sxtrdialecthook Check for scripts associated with the document dialects.

```

16787 \renewcommand{@glsxtrdialecthook}{%
16788 \ifdef\CurrentTrackedScript
16789 {%
16790 \TrackLangIfHasDefaultScript{\CurrentTrackedLanguage}%
16791 {%
16792 \edef\CurrentTrackedScript{%
16793 \TrackLangGetDefaultScript\CurrentTrackedLanguage}%
16794 }%
16795 {}}%
16796 }%
16797 {}}%
16798 \ifdef\CurrentTrackedScript
16799 {%
16800 \let\gls@orgTrackLangRequireDialectPrefix\TrackLangRequireDialectPrefix

```

```

16801 \def\TrackLangRequireDialectPrefix{glossariesxtr-}%
16802 \let\CurrentTrackedTag\CurrentTrackedScript
16803 \IfFileExists{\TrackLangRequireDialectPrefix\CurrentTrackedTag.ldf}{%
16804 {\RequireGlossariesExtraLang{\CurrentTrackedTag}}%
16805 {}%
16806 \let\TrackLangRequireDialectPrefix\gls@orgTrackLangRequireDialectPrefix
16807 }%
16808 {}%
16809 }

```

If `\glsxtr@loaddialect` has been defined, then `glossaries-extra-bib2gls` has been loaded after `glossaries-extra`. (For example, through `\glossariesextrasetup`.) Not recommended, but if this has been done try to find the associated language resources.

```

16810 \ifdef\glsxtr@loaddialect
16811 {%
16812 \@ifpackageloaded{tracklang}{%
16813 {}%
16814 \AnyTrackedLanguages{%
16815 {}%
16816 \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}}%
16817 }%
16818 {}%
16819 }%
16820 {}%
16821 }%
16822 {}

```

2 Style Adjustments (*glossaries-extra-stylemods.sty*)

This package adjusts the predefined styles so that they include the post description hook. Also, some other minor adjustments may be made to make existing styles more flexible.

2.1 Package Initialisation

First identify package:

```
16823 \NeedsTeXFormat{LaTeX2e}
16824 \ProvidesPackage{glossaries-extra-stylemods}[2021/11/22 v1.48 (NLCT)]
```

Provide package options to automatically load required predefined styles. The simplest method is to just test for the existence of the file *glossary-*option*.sty*. Packages can't be loaded whilst the options are being processed, so save the list in *\@glsxtr@loadstyles*.

```
sxtr@loadstyles
16825 \newcommand*\{@glsxtr@loadstyles}{}%
```

all Provide all known styles.

```
16826 \DeclareOption{all}{%
16827   \appto\@glsxtr@loadstyles{%
16828     \RequirePackage{glossary-inline}%
16829     \RequirePackage{glossary-list}%
16830     \RequirePackage{glossary-tree}%
16831     \RequirePackage{glossary-mcols}%
16832     \RequirePackage{glossary-long}%
16833     \RequirePackage{glossary-longragged}%
16834     \RequirePackage{glossary-longbooktabs}%
16835     \RequirePackage{glossary-super}%
16836     \RequirePackage{glossary-superragged}%
16837     \RequirePackage{glossary-bookindex}%
16838     \RequirePackage{glossary-longextra}%
16839     \RequirePackage{glossary-topic}%
16840   }
16841 }

16842 \DeclareOption*{%
16843   \IfFileExists{glossary-\CurrentOption.sty}%
16844   {\appto\@glsxtr@loadstyles{%
16845     \noexpand\RequirePackage{glossary-\CurrentOption}}%
16846   }%
```

```

16847   {%
16848     \PackageError{glossaries-extra-styles}{%
16849       {Unknown option '\CurrentOption'}{}%
16850     }%
16851 }

```

Process the package options:

```
16852 \ProcessOptions
```

Load the required packages:

```
16853 \@glsxtr@loadstyles
```

Adjust the styles so that they all have the post description hook. Also, instead of having a hard-coded \space before the location, use:

`sxtrprelocation` This uses `\providecommand` as the same command is also provided by `glossary-bookindex`.

```
16854 \providecommand*\@glsxtrprelocation{\space}
```

In case we have an old version of `glossaries`:

`ewglossarystyle`

```

16855 \providecommand{\renewglossarystyle}[2]{%
16856   \ifcsundef{@glsstyle@#1}{%
16857     {%
16858       \PackageError{glossaries-extra}{Glossary style '#1' isn't already defined}{}%
16859     }%
16860     {%
16861       \csdef{@glsstyle@#1}{#2}%
16862     }%
16863 }

```

2.2 List-Like Styles

The list-like styles mostly already use the post description hook. Only the `listdotted` style need modifying to add this.

```

16864 \ifdef{@glsstyle@listdotted}%
16865 {%
16866   \renewglossarystyle{listdotted}{%
16867     \setglossarystyle{list}{%
16868       \renewcommand*\@glossentry}[2]{%
16869         \item[]\makebox[\glslistdottedwidth][1]{%
16870           \glsentryitem{##1}%
16871           \glstarget{##1}{\glossentryname{##1}}%
16872           \unskip\leaders\hbox to 2.9mm{\hss.\hfill\strut}%
16873           \glossentrydesc{##1}\glspostdescription}%
16874       \renewcommand*\@subglossentry}[3]{%
16875         \item[]\makebox[\glslistdottedwidth][1]{%
16876           \glssubentryitem{##2}%
16877           \glstarget{##2}{\glossentryname{##2}}%
16878           \unskip\leaders\hbox to 2.9mm{\hss.\hfill\strut}%

```

```
16879     \glossentrydesc{##2}\glspostdescription}%
16880 }
16881 }
16882 {%
```

Assume the style isn't required if it hasn't already been defined.

16883 }

The sublistdotted style doesn't display the description for top-level entries. Sub-level entries use the listdottedstyle.

The other list styles would be easier to adapt if the space before the number list wasn't hard coded.

```
16884 \ifdef{\@glsstyle@list}{%  
16885 {%
```

listprelocation Space before number list for top-level entries.

```
16886 \newcommand{\glslistprelocation}{\glsxtrprelocation}
```

childprelocation Space before number list for child entries.

16887 \newcommand{\glslistchildprelocation}{\glslistprelocation}

ildpostlocation Full stop after number list.

```
16888 \newcommand{\glslistchildpostlocation}{.}
```

\glslistdesc

```
16889 \newcommand{\glslistdesc}[1]{\glossentrydesc{#1}\glspostdescription}
```

`listgroupskip`

16890 \newcommand{\glslistgroupskip}{\nobreak\indexspace\nobreak}

\glslistitem

```
16891 \newcommand{\glslistitem}[1]{%
16892     \item[\glsentryitem{#1}%
16893         \glstarget{#1}{\glossentryname{#1}}]%
16894 }
```

`\glslistinit` This command was only added to glossary-list v4.48 so provide it if it hasn't been defined:

```
16895 \providecommand{\glslistinit}{%
16896     \ifdef{\GetTitleStringDisableCommands}
16897     {%
16898         \GetTitleStringSetup{expand}%
16899         \GetTitleStringDisableCommands{%
16900             \let\glsentryitem\@gobble
16901             \let\glstarget\@secondoftwo
16902             \let\glossentryname\glslistexpandedname
16903             \let\glslistgroupheaderfmt\@firstofone
16904             \let\glsgetgrouptitle\@firstofone
```

Technically this has an optional argument but it's not used in the list styles.

```
16905      \let\glsnavhypertarget\@secondoftwo
16906      \let\glsnavigation\relax
16907  }%
16908  }%
16909  {}%
16910 }
```

`istexpandedname` This command was only added to glossary-list v4.48 so provide it if it hasn't been defined. The original definition uses `\glsunexpandedfieldvalue` which was added to glossaries v4.48 (so if `\glslistexpandedname` hasn't been defined then neither will `\glsunexpandedfieldvalue`).

```
16911 \providecommand{\glslistexpandedname}[1]{%
16912   \ifcsname glo@\glsdetoklabel{#1}@name\endcsname
16913     \expandafter\expandonce\csname glo@\glsdetoklabel{#1}@name\expandafter\endcsname
16914   \fi
16915 }
```

Redefine `list` to use these commands.

```
16916 \renewglossarystyle{list}{%
16917   \renewenvironment{theglossary}{%
16918     {\glslistinit\begin{description}}{\end{description}}%
16919     \renewcommand*{\glossaryheader}{}%
16920     \renewcommand*{\glsgroupheading}[1]{}%
16921     \renewcommand*{\glossentry}[2]{%
16922       \glslistitem{##1}\glslistdesc{##1}\glslistprelocation ##2}%
16923     \renewcommand*{\subglossentry}[3]{%
16924       \glssubentryitem{##2}%
16925       \glstarget{##2}{\strut}\space
16926       \glslistdesc{##2}%
16927       \glslistchildprelocation ##3\glslistchildpostlocation}%
16928     \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glslistgroupskip\fi}%
16929   }%
16930 }
16931 {}
```

Similarly for `altlist`. Since it requires `list`, the new commands should have been defined above.

```
16932 \ifdef{\glsstyle@altlist}
16933 {%
```

`\glsaltlistitem`

```
16934 \newcommand{\glsaltlistitem}[1]{%
16935   \glslistitem{#1}%
16936   \mbox{}\par\nobreak\@afterheading
16937 }
16938 \renewglossarystyle{altlist}{%
16939   \setglossarystyle{list}%
16940   \renewcommand*{\glossentry}[2]{%
16941     \glsaltlistitem{##1}%
16942 }
```

```

16942     \glslistdesc{##1}\glslistprelocation ##2}%
16943     \renewcommand{\subglossentry}[3]{%
16944         \par
16945         \glssubentryitem{##2}%
16946         \glstarget{##2}{\strut}\glslistdesc{##2}%
16947         \glslistchildprelocation ##3}%
16948     }
16949 }
16950 {}

```

Redefine `listgroup` so that it discourages a break after group headings.

```

16951 \ifdef{@glsstyle@listgroup}%
16952 {%

```

roupafterheader

```

16953 \newcommand{\glslistgroupheaderitem}[2]{\item[##2]}%
16954 \newcommand{\glslistgroupafterheader}{%
16955     \mbox{}\par\nobreak\@afterheading
16956 }

16957 \renewglossarystyle{listgroup}{%
16958     \setglossarystyle{list}%
16959     \renewcommand*{\glsgroupheading}[1]{%
16960         \glslistgroupheaderitem{##1}{\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}}%
16961         \glslistgroupafterheader
16962     }%
16963 }
16964 }
16965 {}

```

Similarly for `listhypergroup`.

```

16966 \ifdef{@glsstyle@listhypergroup}%
16967 {%
16968     \renewglossarystyle{listhypergroup}{%
16969         \setglossarystyle{list}%
16970         \renewcommand*{\glossaryheader}{%
16971             \glslistnavigationitem{\glsnavigation}%
16972         \renewcommand*{\glsgroupheading}[1]{%
16973             \glslistgroupheaderitem{##1}{\glslistgroupheaderfmt
16974                 {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}}%
16975             \glslistgroupafterheader
16976         }%
16977     }
16978 }
16979 {}

```

Similarly for `altlistgroup`.

```

16980 \ifdef{@glsstyle@altlistgroup}%
16981 {%
16982     \renewglossarystyle{altlistgroup}{%

```

```

16983 \setglossarystyle{altlist}%
16984 \renewcommand*{\glsgroupheading}[1]{%
16985   \glslistgroupheaderitem{##1}%
16986   {\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}}%
16987   \glslistgroupafterheader
16988 }%
16989 }
16990 }
16991 {}

```

Similarly for `altlisthypergroup`.

```

16992 \ifdef{\@glsstyle@altlisthypergroup}
16993 {%
16994   \renewglossarystyle{altlisthypergroup}{%
16995     \setglossarystyle{altlist}%
16996     \renewcommand*{\glossaryheader}{%
16997       \glslistnavigationitem{\glsnavigation}%
16998     \renewcommand*{\glsgroupheading}[1]{%
16999       \glslistgroupheaderitem{##1}{\glslistgroupheaderfmt
17000         {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}}%
17001       \glslistgroupafterheader
17002     }%
17003   }
17004 }
17005 {}

```

2.3 Longtable Styles

The three and four column styles require adjustment to add the post-description hook. The two column styles need the hard-coded `\space` changed to `\glsxtrprelocation`.

```

17006 \ifcsdef{@glsstyle@long}
17007 {%
17008   \renewglossarystyle{long}{%
17009     \renewenvironment{theglossary}%
17010       {\begin{longtable}{lp{\glsdescwidth}}}%
17011       {\end{longtable}}%
17012     \renewcommand*{\glossaryheader}{}%
17013     \renewcommand*{\glsgroupheading}[1]{}%
17014     \renewcommand{\glossentry}[2]{%
17015       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
17016       \glossentrydesc{##1}\glspostdescription
17017       \glsxtrprelocation ##2\tabularnewline
17018     }%
17019     \renewcommand{\subglossentry}[3]{%
17020       &
17021       \glssubentryitem{##2}%
17022       \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
17023       \glsxtrprelocation ##3\tabularnewline

```

```

17024     }%
17025     \ifglsnogroupskip
17026         \renewcommand*\glsgroupskip{}%
17027     \else
17028         \renewcommand*\glsgroupskip{\& \tabularnewline}%
17029     \fi
17030 }
17031 }
17032 {}
```

Three column style:

```

17033 \ifcsdef{@glsstyle@long3col}
17034 {%
17035     \renewglossarystyle{long3col}{%
17036         \renewenvironment{theglossary}{%
17037             {\begin{longtable}{lp{\glsdescwidth}p{\glspagelistwidth}}}%
17038             {\end{longtable}}%
17039         \renewcommand*\glossaryheader{}%
17040         \renewcommand*\glsgroupheading[1]{}%
17041         \renewcommand{\glossentry}[2]{%
17042             \glsentryitem{\#\#1}\glstarget{\#\#1}{\glossentryname{\#\#1}} &
17043             \glossentrydesc{\#\#1}\glspostdescription & ##2\tabularnewline
17044         }%
17045         \renewcommand{\subglossentry}[3]{%
17046             &
17047             \glssubentryitem{\#\#2}%
17048             \glstarget{\#\#2}{\strut}\glossentrydesc{\#\#2}\glspostdescription &
17049             ##3\tabularnewline
17050         }%
```

Conditional needs to be outside of \glsgroupskip otherwise it can cause “Incomplete \iftrue” errors.

```

17051     \ifglsnogroupskip
17052         \renewcommand*\glsgroupskip{}%
17053     \else
17054         \renewcommand*\glsgroupskip{\& \tabularnewline}%
17055     \fi
17056 }
17057 }
17058 {}
```

Four column style:

```

17059 \ifcsdef{@glsstyle@long4col}
17060 {%
17061     \renewglossarystyle{long4col}{%
17062         \renewenvironment{theglossary}{%
17063             {\begin{longtable}{llll}}%
17064             {\end{longtable}}%
17065         \renewcommand*\glossaryheader{}%
17066         \renewcommand*\glsgroupheading[1]{}%
17067         \renewcommand{\glossentry}[2]{%
```

```

17068     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
17069     \glossentrydesc{##1}\glspostdescription &
17070     \glossentrysymbol{##1} &
17071     ##2\tabularnewline
17072   }%
17073   \renewcommand{\subglossentry}[3]{%
17074     &
17075     \glssubentryitem{##2}%
17076     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
17077     \glossentrysymbol{##2} & ##3\tabularnewline
17078   }%
17079   \ifglsnogroupskip
17080     \renewcommand*\glsgroupskip{}%
17081   \else
17082     \renewcommand*\glsgroupskip{\& \& \&\tabularnewline}%
17083   \fi
17084 }
17085 }
17086 {}
```

The styles in `glossary-longbooktabs` are all based on the styles in `glossary-long`, so no adjustments are needed for that package.

2.4 Long Ragged Styles

The three and four column styles require adjustment for the post-description hook, but not the two column styles. However, the two-column styles need to have `\space` replaced with `\glsxtrprelocation`.

```

17087 \ifcsdef{glsstyle@longragged}
17088 {%
17089   \renewglossarystyle{longragged}{%
17090     \renewenvironment{theglossary}{%
17091       \begin{longtable}{l>{\raggedright}p{\glsdescwidth}}{}}%
17092       \end{longtable}}%
17093   \renewcommand*\glossaryheader{}%
17094   \renewcommand*\glsgroupheading[1]{}%
17095   \renewcommand{\glossentry}[2]{%
17096     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
17097     \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
17098     \tabularnewline
17099   }%
17100   \renewcommand{\subglossentry}[3]{%
17101     &
17102     \glssubentryitem{##2}%
17103     \glstarget{##2}{\strut}\glossentrydesc{##2}%
17104     \glspostdescription\glsxtrprelocation ##3%
17105     \tabularnewline
17106   }%
```

```

17107   \ifglsnogroupskip
17108     \renewcommand*\glsgroupskip{}%
17109   \else
17110     \renewcommand*\glsgroupskip{ & \tabularnewline}%
17111   \fi
17112 }
17113 }
17114 {}

```

Three and four column styles don't use `\glsxtrprelocation` since the number list is in its own column.

```

17115 \ifcsdef{@glsstyle@longragged3col}
17116 {%
17117   \renewglossarystyle{longragged3col}{%
17118     \renewenvironment{theglossary}{%
17119       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}%
17120         >{\raggedright}p{\glspagelistwidth}}{}}%
17121     {\end{longtable}}{}}%
17122   \renewcommand*\glossaryheader{}{%
17123   \renewcommand*\glsgroupheading}[1]{}}{%
17124   \renewcommand*\glossentry}[2]{%
17125     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
17126     \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
17127   }{%
17128   \renewcommand*\subglossentry}[3]{%
17129     &
17130     \glssubentryitem{##2}{%
17131       \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
17132       ##3\tabularnewline
17133   }{%
17134   \ifglsnogroupskip
17135     \renewcommand*\glsgroupskip{}{%
17136   \else
17137     \renewcommand*\glsgroupskip{& &\tabularnewline}{%
17138   \fi
17139 }
17140 }
17141 {}

```

Four column style:

```

17142 \ifcsdef{@glsstyle@altlongragged4col}
17143 {%
17144   \renewglossarystyle{altlongragged4col}{%
17145     \renewenvironment{theglossary}{%
17146       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}}{}}%
17147         >{\raggedright}p{\glspagelistwidth}}{}}{}}%
17148     {\end{longtable}}{}}%
17149   \renewcommand*\glossaryheader{}{%
17150   \renewcommand*\glsgroupheading}[1]{}}{%

```

```

17151 \renewcommand{\glossentry}[2]{%
17152   \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
17153   \glossentrydesc{##1}\glspostdescription & \glossentrysymbol{##1} &
17154   ##2\tabularnewline
17155 }%
17156 \renewcommand{\subglossentry}[3]{%
17157   &
17158   \glssubentryitem{##2}%
17159   \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
17160   \glossentrysymbol{##2} & ##3\tabularnewline
17161 }%
17162 \ifglsnogroupskip
17163   \renewcommand*\glsgroupskip{}%
17164 \else
17165   \renewcommand*\glsgroupskip{\& \& \&\tabularnewline}%
17166 \fi
17167 }
17168 }
17169 {}
```

2.5 Supertabular Styles

The three and four column styles require adjustment to add the post-description hook. The two column styles need the hard-coded `\space` changed to `\glsxtrprelocation`.

```

17170 \ifcsdef{@glsstyle@super}%
17171 {%
17172   \renewglossarystyle{super}{%
17173     \renewenvironment{theglossary}%
17174       {\tablehead{}\tabletail{}%
17175       \begin{supertabular}{lp{\glsdescwidth}}%
17176       \end{supertabular}}%
17177     \renewcommand*\glossaryheader{}%
17178     \renewcommand*\glsgroupheading[1]{}%
17179     \renewcommand{\glossentry}[2]{%
17180       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
17181       \glossentrydesc{##1}\glspostdescription
17182       \glsxtrprelocation ##2\tabularnewline
17183     }%
17184     \renewcommand{\subglossentry}[3]{%
17185       &
17186       \glssubentryitem{##2}%
17187       \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
17188       \glsxtrprelocation ##3\tabularnewline
17189     }%
17190   \ifglsnogroupskip
17191     \renewcommand*\glsgroupskip{}%
17192   \else
```

```

17193      \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
17194      \fi
17195  }
17196 }
17197 {}

```

Three column style:

```

17198 \ifcsdef{@glsstyle@super3col}%
17199 {%
17200   \renewglossarystyle{super3col}{%
17201     \renewenvironment{theglossary}{%
17202       {\tablehead{}\tabletail{}}%
17203       \begin{supertabular}{lp{\glsdescwidth}p{\glspagelistwidth}}}%
17204       {\end{supertabular}}%
17205       \renewcommand*{\glossaryheader}{}%
17206       \renewcommand*{\glsgroupheading}[1]{}%
17207       \renewcommand{\glossentry}[2]{%
17208         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
17209         \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
17210       }%
17211       \renewcommand{\subglossentry}[3]{%
17212         &
17213         \glssubentryitem{##2}%
17214         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
17215         ##3\tabularnewline
17216       }%
17217       \ifglsnogroupskip
17218         \renewcommand*{\glsgroupskip}{}%
17219       \else
17220         \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
17221       \fi
17222     }
17223   }
17224 {}}

```

Four column styles:

```

17225 \ifcsdef{@glsstyle@super4col}%
17226 {%
17227   \renewglossarystyle{super4col}{%
17228     \renewenvironment{theglossary}{%
17229       {\tablehead{}\tabletail{}}%
17230       \begin{supertabular}{llll}\{%
17231       \end{supertabular}}%
17232       \renewcommand*{\glossaryheader}{}%
17233       \renewcommand*{\glsgroupheading}[1]{}%
17234       \renewcommand{\glossentry}[2]{%
17235         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
17236         \glossentrydesc{##1}\glspostdescription &
17237         \glossentrysymbol{##1} & ##2\tabularnewline

```

```

17238 }%
17239 \renewcommand{\subglossentry}[3]{%
17240   &
17241   \glssubentryitem{##2}%
17242   \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
17243   \glossentrysymbol{##2} & ##3\tabularnewline
17244 }%
17245 \ifglsnogroupskip
17246   \renewcommand*\glsgroupskip{}%
17247 \else
17248   \renewcommand*\glsgroupskip{\& \& \&\tabularnewline}%
17249 \fi
17250 }
17251 }
17252 {}

```

2.6 Super Ragged Styles

The three and four column styles require adjustment for the post-description hook, but not the two column styles. However, the two-column styles need to have `\space` replaced with `\glsxtrprelocation`.

```

17253 \ifcsdef{glsstyle@superragged}%
17254 {}%
17255 \renewglossarystyle{superragged}{%
17256   \renewenvironment{theglossary}%
17257     {\tablehead{}\tabletail{}%
17258      \begin{supertabular}{l{\raggedright}p{\glsdescwidth}}{}}%
17259      \end{supertabular}}%
17260   \renewcommand*\glossaryheader{}%
17261   \renewcommand*\glsgroupheading[1]{}%
17262   \renewcommand{\glossentry}[2]{%
17263     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
17264     \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
17265     \tabularnewline
17266   }%
17267   \renewcommand{\subglossentry}[3]{%
17268     &
17269     \glssubentryitem{##2}%
17270     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
17271     \glsxtrprelocation ##3%
17272     \tabularnewline
17273   }%
17274 \ifglsnogroupskip
17275   \renewcommand*\glsgroupskip{}%
17276 \else
17277   \renewcommand*\glsgroupskip{\& \tabularnewline}%
17278 \fi

```

```
17279 }
17280 }
17281 {}
```

Three column style:

```
17282 \ifcsdef{@glsstyle@superragged3col}{%
17283 {%
17284   \renewglossarystyle{superragged3col}{%
17285     \renewenvironment{theglossary}{%
17286       {\tablehead{}\tabletail{}%
17287         \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}%
17288           >{\raggedright}p{\glspagelistwidth}}}}%
17289       {\end{supertabular}}%
17290     \renewcommand*{\glossaryheader}{}%
17291     \renewcommand*{\glsgroupheading}[1]{}%
17292     \renewcommand{\glossentry}[2]{%
17293       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
17294       \glossentrydesc{##1}\glspostdescription &
17295       ##2\tabularnewline
17296     }%
17297     \renewcommand{\subglossentry}[3]{%
17298       &
17299       \glssubentryitem{##2}%
17300       \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
17301       ##3\tabularnewline
17302     }%
17303   \ifglsnogroupskip
17304     \renewcommand*{\glsgroupskip}{}%
17305   \else
17306     \renewcommand*{\glsgroupskip}{ & &\tabularnewline}%
17307   \fi
17308 }
17309 }
17310 {}
```

Four columns:

```
17311 \ifcsdef{@glsstyle@altsuperragged4col}{%
17312 {%
17313   \renewglossarystyle{altsuperragged4col}{%
17314     \renewenvironment{theglossary}{%
17315       {\tablehead{}\tabletail{}%
17316         \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}}}}%
17317       {\end{supertabular}}%
17318     \renewcommand*{\glossaryheader}{}%
17319     \renewcommand{\glossentry}[2]{%
17320       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
17321       \glossentrydesc{##1}\glspostdescription &
17322       \glossentrysymbol{##1} & ##2\tabularnewline
17323     }%
```

```

17324 }%
17325 \renewcommand{\subglossentry}[3]{%
17326   &
17327   \glssubentryitem{##2}%
17328   \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
17329   \glossentrysymbol{##2} & ##3\tabularnewline
17330 }%
17331 \ifglsnogroupskip
17332   \renewcommand*\glsgroupskip{}%
17333 \else
17334   \renewcommand*\glsgroupskip{\& \& \&\tabularnewline}%
17335 \fi
17336 }
17337 }
17338 {}

```

2.7 Inline Style

The inline style is dealt with slightly differently. The `\glspostdescription` hook is actually in `\glspostinline`, which is called at the end of the glossary. The original definition of `\glspostinline` also includes a space, which is unnecessary. Here, instead of redefining the inline style, just redefine `\glspostinline` and `\glsinlinedescformat`.

```

17339 \ifdef{\glsstyle@inline}
17340 {%
17341   \renewcommand*\glspostinline{.\spacefactor\sffcode`\.}
Just use \glsxtrpostdescription instead of \glspostdescription.
17342   \renewcommand*\glsinlinedescformat[3]{%
17343     \space#1\glsxtrpostdescription}
17344   \renewcommand*\glsinlinesubdescformat[3]{%
17345     #1\glsxtrpostdescription}

```

The default settings don't show the location lists, so there's no adjustment for `\glsxtrprelocation`.

```

17346 }
17347 {}

```

2.8 Tree Styles

Redefine both `\glstreenamefmt` and `\glstreegroupheaderfmt` in terms of `\glstreedefaultnamefmt` to make it easier to change both at the same time or only change one without affecting the other.

```

17348 \ifdef{\glstreenamefmt}
17349 {%
edefaultnamefmt
17350   \newcommand{\glstreedefaultnamefmt}[1]{\textbf{#1}}

```

```
\glstreenamefmt
17351  \renewcommand{\glstreenamefmt}[1]{\glstreedefaultnamefmt{#1}}
egroupheaderfmt This command was only introduced to glossary-tree v4.22, so it may not be defined.
17352  \def\glstreegroupheaderfmt#1{\glstreedefaultnamefmt{#1}}
enavigationfmt This command was only introduced to glossary-tree v4.22, so it may not be defined.
17353  \def\glstreenavigationfmt#1{\glstreedefaultnamefmt{#1}}
lmtreePreHeader Takes the label as the first argument and title as the second argument so this can be modified
to add a bookmark.
17354  \newcommand{\glmtreePreHeader}[2]{}
17355 }
17356 {}

The index style is redefined so that the space before the number list isn't hard coded.
17357 \ifdef{\@glsstyle@index}{}
17358 {

treeprelocation The space before the number list for top-level entries. This is shared by the other tree styles.
17359 \newcommand*{\glstreeprelocation}{\glsxtrprelocation}

childprelocation The space before the number list for child entries. This is shared by the other tree styles.
17360 \newcommand*{\glstreechildprelocation}{\glstreeprelocation}

Don't prohibit a page break at the start of a new group if there's no header.

lmtreegroupskip
17361 \newcommand{\glstreegroupskip}{\indexspace}

groupheaderskip This doesn't include \@afterheading as it can cause interference with some styles.
17362 \newcommand{\glstreegroupheaderskip}{\nopagebreak\glstreegroupskip\nobreak}

Modify the index style.
17363 \renewglossarystyle[index]{%
17364   \renewenvironment{theglossary}{%
17365     {\setlength{\parindent}{0pt}}%
17366     {\setlength{\parskip}{0pt plus 0.3pt}}%
17367     \let\item\glstreeitem
17368     \let\subitem\glstreesubitem
17369     \let\subsubitem\glstreesubsubitem
17370   }%
17371   {\par}%
17372   \renewcommand*{\glossaryheader}{\%}%
17373   \renewcommand*{\glsgroupheading}[1]{\%}%
17374   \renewcommand*{\glossentry}[2]{\%}
17375   \item\glsentryitem{##1}\%}
```

```

17376     \glstreeentryfmt{\glstarget{##1}{\glossentryname{##1}}}{%
17377     \glstreesymbol{##1}%
17378     \glstreeDescLoc{##1}{##2}%
17379 }%
17380 \renewcommand{\subglossentry}[3]{%
17381     \ifcase##1\relax
17382         \item
17383     \or
17384         \subitem
17385         \glssubentryitem{##2}%
17386     \else
17387         \subsubitem
17388     \fi
17389     \glstreeentryfmt{\glstarget{##2}{\glossentryname{##2}}}{%
17390     \glstreechildsymbol{##2}%
17391     \glstreeChildDescLoc{##2}{##3}%
17392 }%
17393 \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glstreegroupskip\fi}%
17394 }
17395 }
17396 {}

```

The `indexgroup` style is redefined to discourage a page break after the heading.

```

17397 \ifdef{\@glsstyle@indexgroup}
17398 {%
17399     \renewglossarystyle{indexgroup}{%
17400         \setglossarystyle{index}%
17401         \renewcommand*{\glsgroupheading}[1]{%
17402             \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
17403             \glstreePreHeader{##1}{\glsxtr@grptitle}%
17404             \item\glstreegroupheaderfmt{\glsxtr@grptitle}%
17405             \glstreegroupheaderskip\@afterheading
17406         }%
17407     }
17408 }
17409 {}

```

Similarly for `indexhypergroup`.

```

17410 \ifdef{\@glsstyle@indexhypergroup}
17411 {%
17412     \renewglossarystyle{indexhypergroup}{%
17413         \setglossarystyle{index}%
17414         \renewcommand*{\glossaryheader}{%
17415             \item\glstreenavigationfmt{\glsnavigation}%
17416             \glstreegroupheaderskip\@afterheading}%
17417         \renewcommand*{\glsgroupheading}[1]{%
17418             \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
17419             \glstreePreHeader{##1}{\glsxtr@grptitle}%
17420             \item\glstreegroupheaderfmt
17421                 {\glsnavhypertarget{##1}{\glsxtr@grptitle}}%

```

```
17422     \glstreegroupheaderskip{@afterheading}%
17423 }%
17424 }%
17425 {}
```

Adjust tree style to remove hard coded space before number list.

```
17426 \ifdef{\@glsstyle@tree}%
17427 {%
```

The original alttree style doesn't use `\glstreepredesc` but since v1.42 the modified style (below) has switched to using `\glstreeDescLoc` so provide an alternative that can be used with alttree.

`sxtrtreepredesc`

```
17428 \newcommand{\glsxtrtreepredesc}{\glstreepredesc}
```

`reechildpredesc`

```
17429 \newcommand{\glsxtrtreechildpredesc}{\glstreechildpredesc}
```

Provide a command for use with the tree styles that displays the pre-description separator, the description and post-description hook.

`\glstreedesc`

```
17430 \newcommand{\glstreedesc}[1]{%
17431   \glsxtrtreepredesc\glossentrydesc{#1}\glspostdescription
17432 }
```

`\glstreeDescLoc`

```
\glstreeDescLoc{\label}{\location}
```

This checks for the description and symbol. If both are missing, a different separator may be required. For example, a comma and space if there's no description or symbol but just a space if either of those fields are present.

```
17433 \newcommand{\glstreeDescLoc}[2]{%
17434   \ifglshasdesc{#1}%
17435     {\glstreedesc{#1}\glstreeprelocation}%
17436     {\ifglshassymbol{#1}{\glstreeprelocation}{\glstreeNoDescSymbolPreLocation}}%
17437     #2%
17438 }
```

`mbolPreLocation`

```
\glstreeNoDescSymbolPreLocation
```

```
17439 \newcommand{\glstreeNoDescSymbolPreLocation}{\space}
```

Similarly for the symbol.

```
\glstreesymbol  
17440 \newcommand{\glstreesymbol}[1]{%  
17441   \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{}}%  
17442 }%
```

And for the child entries:

```
lstreechilddesc  
17443 \newcommand{\glstreechilddesc}[1]{%  
17444   \glsxtrtreechildpredesc\glossentrydesc{#1}\glspostdescription  
17445 }%
```

```
treeChildDescLoc  
17446 \newcommand{\glstreeChildDescLoc}[2]{%  
17447   \ifglshasdesc{#1}{%  
17448     {\glstreechilddesc{#1}\glstreechildprelocation}{%  
17449     {\ifglshassymbol{#1}{\glstreechildprelocation}{%  
17450       {\glstreeNoDescSymbolPreLocation}{%  
17451     }%  
17452     #2%  
17453 }%
```

treechildsymbol This just behaves in the same way as the top-level.

```
17454 \newcommand{\glstreechildsymbol}[1]{%  
17455   \glstreesymbol{#1}{%  
17456 }%  
  
17457 \renewglossarystyle{tree}{%  
17458   \renewenvironment{theglossary}{%  
17459     {\setlength{\parindent}{0pt}{%  
17460       \setlength{\parskip}{0pt plus 0.3pt}{}}%  
17461     }%  
17462   \renewcommand*{\glossaryheader}{}}%  
17463   \renewcommand*{\glsgroupheading}[1]{}}%  
17464   \renewcommand{\glossentry}[2]{%  
17465     \hangindent0pt\relax  
17466     \parindent0pt\relax  
17467     \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}{}}%  
17468     \glstreesymbol{##1}{%  
17469     \glstreeDescLoc{##1}{##2}\par  
17470   }%  
17471   \renewcommand{\subglossentry}[3]{%  
17472     \hangindent##1\glstreeindent\relax  
17473     \parindent##1\glstreeindent\relax  
17474     \ifnum##1=1\relax  
17475       \glssubentryitem{##2}{%  
17476     \fi  
17477     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}{}}%
```

```

17478      \glstreechildsymbol{##2}%
17479      \glstreeChildDescLoc{##2}{##3}\par
17480  }%
17481  \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glstreegroupskip\fi}%
17482 }%
17483 }%
17484 {}
```

The treegroup style is redefined to discourage a page break after the heading.

```

17485 \ifdef{\@glsstyle@treegroup}
17486 {%
17487  \renewglossarystyle{treegroup}{%
17488  \setglossarystyle{tree}%
17489  \renewcommand{\glsgroupheading}[1]{%
17490  \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
17491  \glstreePreHeader{##1}{\glsxtr@grptitle}%
17492  \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}%
17493  \glstreegroupheaderskip\@afterheading}%
17494 }%
17495 }%
17496 {}
```

Similarly for treehypergroup

```

17497 \ifdef{\@glsstyle@treehypergroup}
17498 {%
17499  \renewglossarystyle{treehypergroup}{%
17500  \setglossarystyle{tree}%
17501  \renewcommand*{\glossaryheader}{%
17502  \par\noindent\glstreenavigationfmt{\glsnavigation}%
17503  \glstreegroupheaderskip\@afterheading}%
17504  \renewcommand*{\glsgroupheading}[1]{%
17505  \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
17506  \glstreePreHeader{##1}{\glsxtr@grptitle}%
17507  \par\noindent
17508  \glstreegroupheaderfmt
17509  {\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
17510  \glstreegroupheaderskip\@afterheading}%
17511 }%
17512 }%
17513 {}
```

Adjust treenoname style to remove hard coded space before number list.

```

17514 \ifdef{\@glsstyle@treenoname}
17515 {%
```

Provide a command for use with the treenoname styles that displays the pre-description separator, the description and post-description hook.

`treenonamedesc`

```

17516 \newcommand{\glstreenonamedesc}[1]{%
17517  \glstreepredesc\glossentrydesc{#1}\glspostdescription
```

```
17518 }%
```

Similarly for the symbol.

```
reenonamesymbol
```

```
17519 \newcommand{\glstreenonamesymbol}[1]{%
17520   \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{}%
17521 }%
```

```
eenonameDescLoc
```

```
17522 \newcommand{\glstreenonameDescLoc}[2]{%
17523   \glstreenonamedesc{#1}\glstreeprelocation#2%
17524 }
```

nonamechilddesc The child entry doesn't have the pre-description separator as the name isn't displayed.

```
17525 \newcommand{\glstreenonamechilddesc}[1]{%
17526   \glossentrydesc{#1}\glspostdescription
17527 }%
```

```
ameChildDescLoc
```

```
17528 \newcommand{\glstreenonameChildDescLoc}[2]{%
17529   \glstreenonamechilddesc{#1}\glstreechildprelocation#2%
17530 }

17531 \renewglossarystyle{treenoname}{%
17532   \renewenvironment{theglossary}{%
17533     \setlength{\parindent}{0pt}%
17534     \setlength{\parskip}{0pt plus 0.3pt}}{%
17535   }%
17536 \renewcommand*{\glossaryheader}{%
17537 \renewcommand*{\glsgroupheading}[1]{%
17538 \renewcommand{\glossentry}[2]{%
17539   \hangindent0pt\relax
17540   \parindent0pt\relax
17541   \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
17542   \glstreenonamesymbol{##1}%

17543   \glstreenonameDescLoc{##1}{##2}\par
17544 }%
17545 \renewcommand{\subglossentry}[3]{%
17546   \hangindent##1\glstreeindent\relax
17547   \parindent##1\glstreeindent\relax
17548   \ifnum##1=1\relax
17549     \glssubentryitem{##2}%
17550   \fi
17551   \glstarget{##2}{\strut}%
17552   \glstreenonameChildDescLoc{##2}{##3}\par
17553 }%
17554 \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glstreegroupskip\fi}%
17555 }
```

```
17556 }  
17557 {}
```

The `treenonamegroup` style is redefined to discourage a page break after the heading.

```
17558 \ifdef{@glsstyle@treenonamegroup}  
17559 {  
17560   \renewglossarystyle{treenonamegroup}{%  
17561     \setglossarystyle{treenoname}{%  
17562       \renewcommand{\glsgroupheading}[1]{%  
17563         \glsxtrgetgroup{##1}{\glsxtr@grptitle}{%  
17564           \glstreePreHeader{##1}{\glsxtr@grptitle}{%  
17565             \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}{%  
17566               \glstreegroupheaderskip\@afterheading  
17567             }%  
17568       }  
17569     }  
17570   {}}
```

Similarly for `treenonamehypergroup`

```
17571 \ifdef{@glsstyle@treenonamehypergroup}  
17572 {  
17573   \renewglossarystyle{treenonamehypergroup}{%  
17574     \setglossarystyle{treenoname}{%  
17575       \renewcommand*{\glossaryheader}{%  
17576         \par\noindent\glstreenavigationfmt{\glsnavigation}{%  
17577           \glstreegroupheaderskip\@afterheading}{%  
17578         \renewcommand*{\glsgroupheading}[1]{%  
17579           \glsxtrgetgroup{##1}{\glsxtr@grptitle}{%  
17580             \glstreePreHeader{##1}{\glsxtr@grptitle}{%  
17581               \par\noindent  
17582               \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}{  
17583                 \glstreegroupheaderskip\@afterheading}{%  
17584       }  
17585     }  
17586   {}}
```

The `alttree` style is redefined to make it easier to made minor adjustments.

```
17587 \ifdef{@glsstyle@alttree}  
17588 {
```

Only redefine this style if it's already been defined.

```
salttreepredesc  
17589 \newcommand{\glsalttreepredesc}{}{}
```

```
reechildpredesc  
17590 \newcommand{\glsalttreechildpredesc}{\glsalttreepredesc}
```

```
boldDescLocation
```

```
\glsxtralttreeSymbolDescLocation{\label}{\location list}
```

Layout the symbol, description and location for top-level entries.

```
17591 \newcommand{\glsxtralttreeSymbolDescLocation}[2]{%
17592   {%
17593     \let\par\glsxtrAltTreePar
17594     \let\glsxtrtreepredesc\glsalttreepredesc
17595     \let\glsxtrtreechildpredesc\glsalttreechildpredesc
17596     \ifglshassymbol{#1}{(\glossentrysymbol{#1})\space}{}%
17597     \glstreeDescLoc{#1}{#2}\par
17598   }%
17599 }
```

trAltTreeIndent Paragraph indent for subsequent paragraphs in multi-paragraph descriptions.

```
17600 \newlength\glsxtrAltTreeIndent
```

lsxtrAltTreePar Multi-paragraph descriptions need to keep the hanging indent.

```
17601 \newcommand{\glsxtrAltTreePar}{%
17602   \@@par
17603   \glsxtrAltTreeSetHangIndent
17604   \setlength{\parindent}{\dimexpr\hangindent+\glsxtrAltTreeIndent}%
17605 }
```

bolDescLocation

```
\glsxtralttreeSubSymbolDescLocation{\level}{\label}{\location list}
```

Layout the symbol, description and location for sub-entries. Defaults to the same as the top-level.

```
17606 \newcommand{\glsxtralttreeSubSymbolDescLocation}[3]{%
17607   \glsxtralttreeSymbolDescLocation{#2}{#3}%
17608 }
```

trtreeopindent The original style has to keep computing the width of the name at each entry. This register allows the style to compute it once for the top-level at the start of the glossary.

```
17609 \newlength\glsxtrtreeopindent
```

sxtralttreeInit User-level initialisation for the alttree style.

```
17610 \newcommand*\glsxtralttreeInit}{%
17611   \settowidth{\glsxtrtreeopindent}{\glstreenamefmt{\glsgetwidestname\space}}%
17612   \glsxtrAltTreeIndent=\parindent
17613 }
```

\glssetwidest The original \glssetwidest only uses \def. This uses \gdef.

```
17614 \newcommand*{\glssetwidest}[2][0]{%
17615   \csgdef{@glswidestname\romannumeral#1}{#2}%
17616 }
```

\eglssetwidest The original \glssetwidest only uses \def. This uses \protected@csedef.

```
17617 \newcommand*{\eglssetwidest}[2][0]{%
17618   \protected@csedef{@glswidestname\romannumeral#1}{#2}%
17619 }
```

\xglssetwidest Like the above but uses \protected@csxdef.

```
17620 \newcommand*{\xglssetwidest}[2][0]{%
17621   \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
17622 }
```

\glsupdatewidest Only sets if new value is wider than old value.

```
17623 \newcommand*{\glsupdatewidest}[2][0]{%
17624   \ifcsundef{@glswidestname\romannumeral#1}%
17625     {\csdef{@glswidestname\romannumeral#1}{#2}}%
17626     {}%
17627       \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
17628       \settowidth{\dimen@ii}{#2}%
17629       \ifdim\dimen@ii>\dimen@
17630         \csdef{@glswidestname\romannumeral#1}{#2}%
17631       \fi
17632     }%
17633 }
```

\glsupdatewidest As above but global definition.

```
17634 \newcommand*{\gglsupdatewidest}[2][0]{%
17635   \ifcsundef{@glswidestname\romannumeral#1}%
17636     {\csgdef{@glswidestname\romannumeral#1}{#2}}%
17637     {}%
17638       \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
17639       \settowidth{\dimen@ii}{#2}%
17640       \ifdim\dimen@ii>\dimen@
17641         \csgdef{@glswidestname\romannumeral#1}{#2}%
17642       \fi
17643     }%
17644 }
```

\glsupdatewidest As \glsupdatewidest but expands value.

```
17645 \newcommand*{\eglsupdatewidest}[2][0]{%
17646   \ifcsundef{@glswidestname\romannumeral#1}%
17647     {\protected@csedef{@glswidestname\romannumeral#1}{#2}}%
17648     {}%
17649       \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
17650       \settowidth{\dimen@ii}{#2}%
```

```

17651     \ifdim\dimen@ii>\dimen@
17652         \protected@csedef{@glswidestname\romannumeral#1}{#2}%
17653     \fi
17654 }%
17655 }

```

`glsupdatewidest` As above but global.

```

17656 \newcommand*{\xglsupdatewidest}[2][0]{%
17657     \ifcsundef{@glswidestname\romannumeral#1}%
17658     {\protected@csxdef{@glswidestname\romannumeral#1}{#2}}%
17659     {%
17660         \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
17661         \settowidth{\dimen@ii}{#2}%
17662         \ifdim\dimen@ii>\dimen@
17663             \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
17664         \fi
17665     }%
17666 }

```

`lsgetwidestname` Provide a user-level macro to obtain the widest top-level name.

```
17667 \newcommand*{\lsgetwidestname}{\@glswidestname}
```

`etwidestsubname` Provide a user-level macro to obtain the widest sub-entry name.

```

17668 \newcommand*{\lsgetwidestsubname}[1]{%
17669     \ifcsundef{@glswidestname\romannumeral#1}%
17670     {@glswidestname}%
17671     {\csuse{@glswidestname\romannumeral#1}}%
17672 }

```

`estTopLevelName` CamelCase is easier for long command names. Provide a CamelCase synonym of `\glsfindwidesttoplevelname`

```
17673 \let\glsFindWidestTopLevelName\glsfindwidesttoplevelname
```

`sedTopLevelName` Like `\glsfindwidesttoplevelname` but has an additional check that the entry has been used. Only useful if the glossaries occur at the end of the document, in which case this command should go at the start of the glossary. Alternatively, place at the end of the document and save for the next run.

```

17674 \newrobustcmd*{\glsFindWidestUsedTopLevelName}[1][\@glo@types]{%
17675     \dimen@=0pt\relax
17676     \gls@tmp@len=0pt\relax
17677     \forall@glossaries[#1]{\@gls@type}%
17678     {%
17679         \for@glsentries[\@gls@type]{\@glo@label}%
17680         {%
17681             \ifglsused{\@glo@label}%
17682             {%
17683                 \ifglshasparent{\@glo@label}%
17684                 {}%
17685             {%

```

```

17686     \settowidth{\dimen@}%
17687         {\glstreenamefmt{\glsentryname{\glo@label}}}% 
17688     \ifdim\dimen@>\gls@tmpLen
17689         \gls@tmpLen=\dimen@
17690         \eglssetwidest{\glsentryname{\glo@label}}%
17691     \fi
17692     }%
17693     }%
17694     {}%
17695     }%
17696     }%
17697 }

```

`destUsedAnyName` Like the above but doesn't check the parent key. Useful if all levels should have the same width for the name.

```

17698 \newrobustcmd*{\glsFindWidestUsedAnyName}[1][\glo@types]{%
17699     \dimen@=0pt\relax
17700     \gls@tmpLen=0pt\relax
17701     \forallglossaries[#1]{\gls@type}%
17702     {}%
17703     \forglsentries[\gls@type]{\glo@label}%
17704     {}%
17705     \ifglsused{\glo@label}%
17706     {}%
17707     \settowidth{\dimen@}%
17708         {\glstreenamefmt{\glsentryname{\glo@label}}}% 
17709     \ifdim\dimen@>\gls@tmpLen
17710         \gls@tmpLen=\dimen@
17711         \eglssetwidest{\glsentryname{\glo@label}}%
17712     \fi
17713     }%
17714     {}%
17715     }%
17716     }%
17717 }

```

`ndWidestAnyName` Like the above but doesn't check if the entry has been used.

```

17718 \newrobustcmd*{\glsFindWidestAnyName}[1][\glo@types]{%
17719     \dimen@=0pt\relax
17720     \gls@tmpLen=0pt\relax
17721     \forallglossaries[#1]{\gls@type}%
17722     {}%
17723     \forglsentries[\gls@type]{\glo@label}%
17724     {}%
17725     \settowidth{\dimen@}%
17726         {\glstreenamefmt{\glsentryname{\glo@label}}}% 
17727     \ifdim\dimen@>\gls@tmpLen
17728         \gls@tmpLen=\dimen@
17729         \eglssetwidest{\glsentryname{\glo@label}}%

```

```

17730      \fi
17731    }%
17732  }%
17733 }

```

`estUsedLevelTwo` This is like `\glsFindWidestUsedTopLevelName` but also sets the first two sub-levels as well.
Any entry that has a great-grandparent is ignored.

```

17734 \newrobustcmd*\glsFindWidestUsedLevelTwo}[1][\glo@types]{%
17735   \dimen@=0pt\relax
17736   \dimen@i=0pt\relax
17737   \dimen@ii=0pt\relax
17738   \forallglossaries[#1]{\gls@type}%
17739 {%
17740     \forglsentries[\gls@type]{\glo@label}%
17741   }%
17742     \ifglsused{\glo@label}%
17743     {%
17744       \ifglshasparent{\glo@label}%
17745       {%
17746         \protected@edef@glo@parent{\csuse{glo@\glsdetoklabel{\glo@label}}@parent}%
17747         \ifglshasparent{\glo@parent}%
17748         {%
17749           \protected@edef@glo@parent{\csuse{glo@\glsdetoklabel{\glo@parent}}@parent}%
17750           \ifglshasparent{\glo@parent}%
17751           {%
17752             {%
17753               \settowidth{\gls@tmp[1]}%
17754                 {\glstreenamefmt{\glsentryname{\glo@label}}}%
17755               \ifdim\gls@tmp[1]>\dimen@ii
17756                 \dimen@ii=\gls@tmp[1]
17757                 \eglssetwidest[2]{\glsentryname{\glo@label}}%
17758               \fi
17759             }%
17760           }%
17761         {%
17762           \settowidth{\gls@tmp[1]}%
17763             {\glstreenamefmt{\glsentryname{\glo@label}}}%
17764           \ifdim\gls@tmp[1]>\dimen@i
17765             \dimen@i=\gls@tmp[1]
17766             \eglssetwidest[1]{\glsentryname{\glo@label}}%
17767           \fi
17768         }%
17769       }%
17770     {%
17771       \settowidth{\gls@tmp[1]}%
17772         {\glstreenamefmt{\glsentryname{\glo@label}}}%
17773       \ifdim\gls@tmp[1]>\dimen@
17774         \dimen@=\gls@tmp[1]
17775         \eglssetwidest{\glsentryname{\glo@label}}%

```

```

17776          \fi
17777      }%
17778  }%
17779  {}%
17780  }%
17781  {}%
17782 }

```

dWidestLevelTwo This is like \glsFindWidestUsedLevelTwo but doesn't check if the entry has been used.

```

17783 \newrobustcmd*{\glsFindWidestLevelTwo}[1][\@glo@types]{%
17784   \dimen@=Opt\relax
17785   \dimen@i=Opt\relax
17786   \dimen@ii=Opt\relax
17787   \forallglossaries[#1]{\@gls@type}%
17788   {%
17789     \forglsentries[\@gls@type]{\@glo@label}%
17790     {%
17791       \ifglshasparent{\@glo@label}%
17792       {%
17793         \protected@edef{\glo@parent}{\csuse{\glo@\glsdetoklabel{\@glo@label}}@parent}%
17794         \ifglshasparent{\@glo@parent}%
17795         {%
17796           \protected@edef{\glo@parent}{\csuse{\glo@\glsdetoklabel{\@glo@parent}}@parent}%
17797           \ifglshasparent{\@glo@parent}%
17798           {%
17799             {%
17800               \settowidth{\gls@tmp[1]}%
17801               {\glstreenamefmt{\glsentryname{\@glo@label}}}%
17802               \ifdim\gls@tmp[1]>\dimen@i
17803                 \dimen@i=\gls@tmp[1]
17804                 \eglssetwidest[2]{\glsentryname{\@glo@label}}%
17805                 \fi
17806               }%
17807             }%
17808           {%
17809             \settowidth{\gls@tmp[1]}%
17810             {\glstreenamefmt{\glsentryname{\@glo@label}}}%
17811             \ifdim\gls@tmp[1]>\dimen@i
17812               \dimen@i=\gls@tmp[1]
17813               \eglssetwidest[1]{\glsentryname{\@glo@label}}%
17814               \fi
17815             }%
17816           }%
17817         {%
17818           \settowidth{\gls@tmp[1]}%
17819             {\glstreenamefmt{\glsentryname{\@glo@label}}}%
17820             \ifdim\gls@tmp[1]>\dimen@i
17821               \dimen@i=\gls@tmp[1]
17822               \eglssetwidest{\glsentryname{\@glo@label}}%

```

```

17823      \fi
17824    }%
17825  }%
17826 }%
17827 }

```

`edAnyNameSymbol` Like the `\glsFindWidestUsedAnyName` but also measures the symbol. The length of the widest symbol is stored in the second argument should be a length register.

```

17828 \newrobustcmd*\{\glsFindWidestUsedAnyNameSymbol\}[2] [\\@glo@types]{%
17829   \dimen@=0pt\relax
17830   \gls@tmp@len=0pt\relax
17831   #2=0pt\relax
17832   \forallglossaries[#1]{\gls@type}{%
17833     {%
17834       \for@glsentries[\gls@type]{\glo@label}{%
17835         {%
17836           \ifglsused{\glo@label}{%
17837             {%
17838               \settowidth{\dimen@}{%
17839                 {\glstreenamefmt{\glsentryname{\glo@label}}}}{%
17840                 \ifdim\dimen@>\gls@tmp@len
17841                   \gls@tmp@len=\dimen@
17842                   \glssetwidest{\glsentryname{\glo@label}}{%
17843                     \fi
17844                     \settowidth{\dimen@}{%
17845                       {\glsentrysymbol{\glo@label}}}{%
17846                         \ifdim\dimen@>#2\relax
17847                           #2=\dimen@
17848                           \fi
17849                         }%
17850                         {}%
17851                         }%
17852                     }%
17853                   }%

```

`stAnyNameSymbol` Like the above but doesn't check if the entry has been used.

```

17854 \newrobustcmd*\{\glsFindWidestAnyNameSymbol\}[2] [\\@glo@types]{%
17855   \dimen@=0pt\relax
17856   \gls@tmp@len=0pt\relax
17857   #2=0pt\relax
17858   \forallglossaries[#1]{\gls@type}{%
17859     {%
17860       \for@glsentries[\gls@type]{\glo@label}{%
17861         {%
17862           \settowidth{\dimen@}{%
17863             {\glstreenamefmt{\glsentryname{\glo@label}}}}{%
17864             \ifdim\dimen@>\gls@tmp@len
17865               \gls@tmp@len=\dimen@
17866               \glssetwidest{\glsentryname{\glo@label}}{%

```

```

17867     \fi
17868     \settowidth{\dimen@}%
17869     {\glsentrysymbol{\glo@label}}%
17870     \ifdim\dimen@>\relax
17871         #2=\dimen@
17872     \fi
17873 }
17874 }
17875 }

```

`\glsFindWidestUsedAnyNameSymbolLocation` Like the `\glsFindWidestUsedAnyNameSymbol` but also measures the location list. This requires `\glsentrynumberlist`. The length of the widest symbol is stored in the second argument should be a length register. The length of the widest location list is stored in the third argument, which should also be a length register.

```

17876 \newrobustcmd*\glsFindWidestUsedAnyNameSymbolLocation}[3][\glo@types]{%
17877     \dimen@=0pt\relax
17878     \gls@tmpplen=0pt\relax
17879     #2=0pt\relax
17880     #3=0pt\relax
17881     \forallglossaries[#1]{\gls@type}{%
17882     {%
17883         \forallglsentries[\gls@type]{\glo@label}{%
17884         {%
17885             \ifglsused{\glo@label}{%
17886             {%
17887                 \settowidth{\dimen@}{%
17888                 {\glsentryname{\glo@label}}}}%
17889                 \ifdim\dimen@>\gls@tmpplen
17890                     \gls@tmpplen=\dimen@
17891                     \leglssetwidest{\glsentryname{\glo@label}}%
17892                 \fi
17893                 \settowidth{\dimen@}{%
17894                 {\glsentrysymbol{\glo@label}}}}%
17895                 \ifdim\dimen@>\relax
17896                     #2=\dimen@
17897                 \fi
17898                 \settowidth{\dimen@}{%
17899                 {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}}%
17900                 \ifdim\dimen@>\relax
17901                     #3=\dimen@
17902                 \fi
17903             }%
17904             {}%
17905         }%
17906     }%
17907 }

```

`\glsFindWidestUsedAnyNameSymbolLocation` Like the `\glsFindWidestUsedAnyNameSymbol` but doesn't check if the entry has been used.

```
17908 \newrobustcmd*\glsFindWidestAnyNameSymbolLocation}[3][\glo@types]{%
```

```

17909 \dimen@=0pt\relax
17910 \gls@tmp@len=0pt\relax
17911 #2=0pt\relax
17912 #3=0pt\relax
17913 \forall glossaries[#1]{\gls@type}%
17914 {%
17915   \for glsentries[\gls@type]{\glo@label}%
17916   {%
17917     \settowidth{\dimen@}%
17918     {\glstreenamefmt{\glsentryname{\glo@label}}}%
17919     \ifdim\dimen@>\gls@tmp@len
17920       \gls@tmp@len=\dimen@
17921       \eglssetwidest{\glsentryname{\glo@label}}%
17922     \fi
17923     \settowidth{\dimen@}%
17924     {\glsentrysymbol{\glo@label}}%
17925     \ifdim\dimen@>#2\relax
17926       #2=\dimen@
17927     \fi
17928     \settowidth{\dimen@}%
17929     {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}%
17930     \ifdim\dimen@>#3\relax
17931       #3=\dimen@
17932     \fi
17933   }%
17934 }%
17935 }

```

`AnyNameLocation` Like the `\glsFindWidestUsedAnyNameSymbolLocation` but doesn't measure the symbol. The length of the widest location list is stored in the second argument, which should be a length register.

```

17936 \newrobustcmd*{\glsFindWidestUsedAnyNameLocation}[2][\glo@types]{%
17937   \dimen@=0pt\relax
17938   \gls@tmp@len=0pt\relax
17939   #2=0pt\relax
17940   \forall glossaries[#1]{\gls@type}%
17941   {%
17942     \for glsentries[\gls@type]{\glo@label}%
17943     {%
17944       \if glsused{\glo@label}%
17945         {%
17946           \settowidth{\dimen@}%
17947           {\glstreenamefmt{\glsentryname{\glo@label}}}%
17948           \ifdim\dimen@>\gls@tmp@len
17949             \gls@tmp@len=\dimen@
17950             \eglssetwidest{\glsentryname{\glo@label}}%
17951           \fi
17952           \settowidth{\dimen@}%
17953           {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}%

```

```

17954      \ifdim\dimen@>#2\relax
17955          #2=\dimen@
17956      \fi
17957  }%
17958  {}%
17959  }%
17960  {}%
17961 }

```

`AnyNameLocation` Like the `\glsFindWidestAnyNameLocation` but doesn't check the **first use** flag.

```

17962 \newrobustcmd*\{\glsFindWidestAnyNameLocation}[2][\@glo@types]{%
17963     \dimen@=0pt\relax
17964     \gls@tmp@len=0pt\relax
17965     #2=0pt\relax
17966     \forall@glossaries[#1]{\gls@type}%
17967     {%
17968         \for@glsentries[\gls@type]{\glo@label}%
17969         {%
17970             \settowidth{\dimen@}%
17971             {\glstreeentryname{\glsentryname{\glo@label}}}}%
17972             \ifdim\dimen@>\gls@tmp@len
17973                 \gls@tmp@len=\dimen@
17974                 \eglssetwidest{\glsentryname{\glo@label}}%
17975             \fi
17976             \settowidth{\dimen@}%
17977             {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}}%
17978             \ifdim\dimen@>#2\relax
17979                 #2=\dimen@
17980             \fi
17981         }%
17982     }%
17983 }

```

`computeTreeIndent` Compute the value of `\glstreeindent`. Argument is the entry label. (Ignored in default definition, but this command may be redefined to take the particular entry into account.) Note that the sub-levels modify `\glstreeindent`.

```

17984 \newcommand*\{\glsxtrComputeTreeIndent}[1]{%
17985     \glstreeindent=\glsxtrtreeopindent\relax
17986 }

```

`teTreeSubIndent`

`\glsxtrComputeTreeSubIndent{<level>}{<label>}{<register>}`

Compute the indent for the sub-entries. The first argument is the level, the second argument is the entry label and the third argument is the length register used to store the computed indent.

```

17987 \newcommand*{\glsxtrComputeTreeSubIndent}[3]{%
17988   \ifcsundef{@glswidestname\romannumeral#1}%
17989   {%
17990     \settowidth{#3}{\glstreenamefmt{\@glswidestname\space}}%
17991   }%
17992   {%
17993     \settowidth{#3}{\glstreenamefmt{%
17994       \csname @glswidestname\romannumeral#1\endcsname\space}}%
17995   }%
17996 }

```

eeSetHangIndent Set \hangindent for top-level entries:

```
17997 \newcommand*{\glsxtrAltTreeSetHangIndent}{\hangindent\glstreeindent}
```

etSubHangIndent Set \hangindent for sub-entries:

```
17998 \newcommand*{\glsxtrAltTreeSetSubHangIndent}[1]{\hangindent\glstreeindent}
```

Redefine alttree:

```

17999 \renewglossarystyle{alttree}{%
18000   \renewenvironment{theglossary}{%
18001   {%
18002     \glsxtralttreeInit
18003     \def\@gls@prevlevel{-1}%
18004     \mbox{}\par}%
18005     {\par}%
18006     \renewcommand*{\glossaryheader}{}%
18007     \renewcommand*{\glsgroupheading}[1]{}%
18008     \renewcommand{\glossentry}[2]{%
18009       \ifnum\@gls@prevlevel=0\relax
18010       \else
18011         \glsxtrComputeTreeIndent{##1}%
18012       \fi
18013       \parindent\glstreeindent
18014       \glsxtrAltTreeSetHangIndent
18015       \makebox[0pt][r]%
18016     {%
18017       \glstreenamebox{\glstreeindent}%
18018     {%
18019       \glsentryitem{##1}%
18020       \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
18021     }%
18022   }%
18023   \glsxtralttreeSymbolDescLocation{##1}{##2}%
18024   \def\@gls@prevlevel{0}%
18025 }
18026 \renewcommand{\subglossentry}[3]{%
18027   \ifnum##1=1\relax
18028     \glssubentryitem{##2}%
18029   \fi

```

```

18030 \ifnum\@gls@prevlevel=##1\relax
18031 \else
18032   \glsxtrComputeTreeSubIndent{##1}{##2}{\gls@tmp[1]}%
18033   \ifnum\@gls@prevlevel<##1\relax
18034     \setlength\glstreeindent\gls@tmp[1]
18035     \addtolength\glstreeindent\parindent
18036     \parindent\glstreeindent
18037   \else
18038     \ifnum\@gls@prevlevel=0\relax
18039       \glsxtrComputeTreeIndent{##2}%
18040     \else
18041       \glsxtrComputeTreeSubIndent{\@gls@prevlevel}{##2}{\glstreeindent}%
18042     \fi
18043     \addtolength\parindent{-\glstreeindent}%
18044     \setlength\glstreeindent\parindent
18045   \fi
18046 \fi
18047 \glsxtrAltTreeSetSubHangIndent{##1}%
18048 \makebox[0pt][r]{\glstreenamebox{\gls@tmp[1]}%
18049   \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}}}%
18050 \glsxtralttreeSubSymbolDescLocation{##1}{##2}{##3}%
18051 \def\@gls@prevlevel{##1}%
18052 }%
18053 \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\glstreegroupskip\fi}%
18054 }%
18055 }%
18056 {%
18057 }

```

Redefine `alttreegroup` so that it discourages a break after group headings.

```

18058 \ifdef{@glsstyle@alttreegroup}%
18059 {%
18060   \renewglossarystyle{alttreegroup}{%
18061     \setglossarystyle{alttree}%
18062     \renewcommand{\glsgroupheading}[1]{\par
18063       \def\@gls@prevlevel{-1}%
18064       \hangindent0pt\relax
18065       \parindent0pt\relax
18066       \glsxtrgetgroup[1]{\glsxtr@grptitle}%
18067       \glstreePreHeader{##1}{\glsxtr@grptitle}%
18068       \glstreegroupheaderfmt{\glsxtr@grptitle}%
}

```

Can't use `\@afterheading` here as it messes with the first item of the group.

```

18069   \glstreegroupheaderskip
18070 }%
18071 }%
18072 }%
18073 {%
18074 }

```

Similarly for `alttreehypergroup`.

```

18075 \ifdef{@glsstyle@alttreehypergroup}
18076 {%
18077   \renewglossarystyle{alttreehypergroup}{%
18078     \setglossarystyle{alttree}{%
18079       \renewcommand*{\glossaryheader}{%
18080         \par
18081         \def\@gls@prevlevel{-1}%
18082         \hangindent0pt\relax
18083         \parindent0pt\relax
18084         \glstreenavigationfmt{\glsnavigation}}%

```

Can't use \@afterheading here as it messes with the first item of the group.

```

18085   \glstreegroupheaderskip
18086   }%
18087   \renewcommand*{\glsgroupheading}[1]{%
18088     \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
18089     \glstreePreHeader{##1}{\glsxtr@grptitle}%
18090     \par
18091     \def\@gls@prevlevel{-1}%
18092     \hangindent0pt\relax
18093     \parindent0pt\relax
18094     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%

```

Can't use \@afterheading here as it messes with the first item of the group.

```

18095   \glstreegroupheaderskip
18096   }%
18097 }
18098 }%
18099 {%
18100 }%

```

2.9 Multicolumn Styles

Adjust mcolindexgroup to discourage page breaks after the group headings.

```

18101 \ifdef{@glsstyle@mcolindexgroup}
18102 {%
18103   \renewglossarystyle{mcolindexgroup}{%
18104     \setglossarystyle{mcolindex}{%
18105       \renewcommand*{\glsgroupheading}[1]{%
18106         \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
18107         \glstreePreHeader{##1}{\glsxtr@grptitle}%
18108         \item\glstreegroupheaderfmt{\glsxtr@grptitle}}%
18109       \glstreegroupheaderskip\@afterheading
18110     }%
18111   }%
18112 }%
18113 {%
18114 }%

```

Similarly for mcolindexhypergroup.

```
18115 \ifdef{@glsstyle@mcolindexhypergroup}
18116 {%
18117   \renewglossarystyle{mcolindexhypergroup}{%
18118     \setglossarystyle{mcolindex}{%
18119       \renewcommand*{\glossaryheader}{%
18120         \item\glstreenavigationfmt{\glsnavigation}{%
18121           \glstreegroupheaderskip\@afterheading
18122         }%
18123       \renewcommand*{\glsgroupheading}[1]{%
18124         \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
18125         \glstreePreHeader{##1}{\glsxtr@grptitle}%
18126         \item\glstreegroupheaderfmt
18127           {\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
18128         \glstreegroupheaderskip\@afterheading
18129       }%
18130     }%
18131   }%
18132 {%
18133 }
```

Similarly for mcolindexspannav.

```
18134 \ifdef{@glsstyle@mcolindexspannav}
18135 {%
18136   \renewglossarystyle{mcolindexspannav}{%
18137     \setglossarystyle{index}{%
18138       \renewenvironment{theglossary}{%
18139         {%
18140           \begin{multicols}{\glsmcols}[\noindent\glstreenavigationfmt{\glsnavigation}]%
18141             \setlength{\parindent}{0pt}%
18142             \setlength{\parskip}{0pt plus 0.3pt}%
18143             \let\item\glstreeitem}%
18144         {\end{multicols}}%
18145       \renewcommand*{\glsgroupheading}[1]{%
18146         \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
18147         \glstreePreHeader{##1}{\glsxtr@grptitle}%
18148         \item\glstreegroupheaderfmt
18149           {\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
18150         \glstreegroupheaderskip\@afterheading
18151       }%
18152     }%
18153   }%
18154 {%
18155 }
```

Similarly for mcoltreegroup.

```
18156 \ifdef{@glsstyle@mcoltreegroup}
18157 {%
18158   \renewglossarystyle{mcoltreegroup}{%
```

```

18159 \setglossarystyle{mcoltree}%
18160 \renewcommand{\glsgroupheading}[1]{%
18161   \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
18162   \glstreePreHeader{##1}{\glsxtr@grptitle}%
18163   \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}%
18164   \glstreegroupheaderskip\@afterheading
18165 }%
18166 }
18167 }%
18168 {%
18169 }

```

Similarly for mcoltreehypergroup.

```

18170 \ifdef{@glsstyle@mcoltreehypergroup}%
18171 {%
18172   \renewglossarystyle{mcoltreehypergroup}{%
18173     \setglossarystyle{mcoltree}%
18174     \renewcommand*\glossaryheader{%
18175       \par\noindent\glstreenavigationfmt{\glsnavigation}%
18176       \glstreegroupheaderskip
18177     }%
18178     \renewcommand*\glsgroupheading[1]{%
18179       \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
18180       \glstreePreHeader{##1}{\glsxtr@grptitle}%
18181       \par\noindent
18182       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
18183       \glstreegroupheaderskip\@afterheading
18184     }%
18185   }%
18186 }%
18187 {%
18188 }

```

Similarly for mcoltreespannav.

```

18189 \ifdef{@glsstyle@mcoltreespannav}%
18190 {%
18191   \renewglossarystyle{mcoltreespannav}{%
18192     \setglossarystyle{tree}%
18193     \renewenvironment{theglossary}%
18194     {%
18195       \begin{multicols}{\glsmcols}%
18196         [\noindent\glstreenavigationfmt{\glsnavigation}]%
18197         \setlength{\parindent}{0pt}%
18198         \setlength{\parskip}{0pt plus 0.3pt}%
18199     }%
18200     {\end{multicols}}%
18201     \renewcommand*\glsgroupheading[1]{%
18202       \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
18203       \glstreePreHeader{##1}{\glsxtr@grptitle}%
18204       \par\noindent

```

```

18205      \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
18206      \glstreegroupheaderskip@afterheading
18207  }%
18208 }
18209 }%
18210 {%
18211 }%

```

Similarly for mcoltreenonamegroup.

```

18212 \ifdef{@glsstyle@mcoltreenonamegroup}%
18213 {%
18214   \renewglossarystyle{mcoltreenonamegroup}{%
18215     \setglossarystyle{mcoltreenoname}%
18216     \renewcommand{\glsgroupheading}[1]{%
18217       \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
18218       \glstreePreHeader{##1}{\glsxtr@grptitle}%
18219       \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}%
18220       \glstreegroupheaderskip@afterheading
18221     }%
18222   }%
18223 }%
18224 {%
18225 }%

```

Similarly for mcoltreenonamehypergroup.

```

18226 \ifdef{@glsstyle@mcoltreenonamehypergroup}%
18227 {%
18228   \renewglossarystyle{mcoltreenonamehypergroup}{%
18229     \setglossarystyle{mcoltreenoname}%
18230     \renewcommand*{\glossaryheader}{%
18231       \par\noindent\glstreenavigationfmt{\glsnavigation}%
18232       \glstreegroupheaderskip
18233     }%
18234     \renewcommand*{\glsgroupheading}[1]{%
18235       \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
18236       \glstreePreHeader{##1}{\glsxtr@grptitle}%
18237       \par\noindent
18238       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
18239       \glstreegroupheaderskip@afterheading
18240   }%
18241 }%
18242 {%
18243 }%

```

Similarly for mcoltreenonamespannav.

```

18244 \ifdef{@glsstyle@mcoltreenonamespannav}%
18245 {%
18246   \renewglossarystyle{mcoltreenonamespannav}{%
18247     \setglossarystyle{treenoname}%
18248     \renewenvironment{theglossary}%
18249   }%

```

```

18250      \begin{multicols}{\glsmcols}%
18251          [ \noindent \glstreenavigationfmt{\glsnavigation} ] %
18252          \setlength{\parindent}{0pt}%
18253          \setlength{\parskip}{0pt plus 0.3pt}%
18254      }%
18255      { \end{multicols} }%
18256      \renewcommand*{\glsgroupheading}[1]{%
18257          \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
18258          \glstreePreHeader{##1}{\glsxtr@grptitle}%
18259          \par\noindent
18260          \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
18261          \glstreegroupheaderskip@\afterheading}%
18262      }%
18263 }%
18264 {%
18265 }

```

mcolalttree needs adjusting so that it uses \glsxtralttreeInit This doesn't use \mbox{} \par which would unbalance the top of the columns.

```

18266 \ifdef{@glsstyle@mcolalttree}%
18267 {%
18268     \renewglossarystyle{mcolalttree}{%
18269         \setglossarystyle{alttree}%
18270         \renewenvironment{theglossary}%
18271     }%
18272         \glsxtralttreeInit
18273         \def@gls@prevlevel{-1}%
18274         \begin{multicols}{\glsmcols}%
18275     }%
18276     { \par \end{multicols} }%
18277 }%
18278 }%
18279 {%
18280 }

```

Redefine mcolalttreegroup to discourage page breaks after the group headings.

```

18281 \ifdef{@glsstyle@mcolalttreegroup}%
18282 {%
18283     \renewglossarystyle{mcolalttreegroup}{%
18284         \setglossarystyle{mcolalttree}%
18285         \renewcommand{\glsgroupheading}[1]{%
18286             \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
18287             \glstreePreHeader{##1}{\glsxtr@grptitle}%
18288             \par
18289             \def@gls@prevlevel{-1}%
18290             \hangindent0pt\relax
18291             \parindent0pt\relax
18292             \glstreegroupheaderfmt{\glsxtr@grptitle}%
18293             \glstreegroupheaderskip
18294         }%

```

```
18295  }
18296 }%
18297 {%
18298 }
```

Similarly for mcolalttreehypergroup.

```
18299 \ifdef{@glsstyle@mcolalttreehypergroup}%
18300 {%
18301   \renewglossarystyle{mcolalttreehypergroup}{%
18302     \setglossarystyle{mcolalttree}{%
18303       \renewcommand*\glossaryheader{%
18304         \par
18305         \def\@gls@prevlevel{-1}%
18306         \hangindent0pt\relax
18307         \parindent0pt\relax
18308         \glstreenavigationfmt{\glsnavigation}%
18309         \glstreegroupheaderskip
18310       }%
18311       \renewcommand*\glsgroupheading[1]{%
18312         \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
18313         \glstreePreHeader{##1}{\glsxtr@grptitle}%
18314         \par
18315         \def\@gls@prevlevel{-1}%
18316         \hangindent0pt\relax
18317         \parindent0pt\relax
18318         \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
18319         \glstreegroupheaderskip
18320       }%
18321     }%
18322   }%
18323 {%
18324 }
```

Similarly for mcolalttreespannav.

```
18325 \ifdef{@glsstyle@mcolalttreespannav}%
18326 {%
18327   \renewglossarystyle{mcolalttreespannav}{%
18328     \setglossarystyle{alttree}{%
18329       \renewenvironment{theglossary}{%
18330         {%
18331           \glsxtralttreeInit
18332           \def\@gls@prevlevel{-1}%
18333           \begin{multicols}{\glsmcols}%
18334             [\noindent\glstreenavigationfmt{\glsnavigation}]%
18335         }%
18336         {\par\end{multicols}}%
18337         \renewcommand*\glsgroupheading[1]{%
18338           \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
18339           \glstreePreHeader{##1}{\glsxtr@grptitle}%
18340           \par
```

```
18341     \def\@gls@prevlevel{-1}%
18342     \hangindent0pt\relax
18343     \parindent0pt\relax
18344     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
18345     \glstreegroupheaderskip
18346   }%
18347 }
18348 }%
18349 {%
18350 }
```

Reset the default style

```
18351 \ifx\@glossary@default@style\relax
18352 \else
18353   \setglossarystyle{\@glsxtr@current@style}
18354 \fi
```

3 bookindex style (glossary-bookindex.sty)

3.1 Package Initialisation and Options

```
18355 \NeedsTeXFormat{LaTeX2e}
18356 \ProvidesPackage{glossary-bookindex}[2021/11/22 v1.48 (NLCT)]
Load required packages.
18357 \RequirePackage{multicol}
18358 \RequirePackage{glossary-tree}

trbookindexcols Number of columns.
18359 \newcommand{\glsxtrbookindexcols}{2}

trbookindexname Format used for top-level entries. (Argument is the label.)
18360 \newcommand*{\glsxtrbookindexname}[1]{\glossentryname{\#1}}

bookindexsubname Format used for sub entries.
18361 \newcommand*{\glsxtrbookindexsubname}[1]{\glsxtrbookindexname{\#1}>

sxtrprelocation Provide in case glossaries-stylemods isn't loaded.
18362 \providecommand*{\glsxtrprelocation}{\space}

ndxprelocation Separator used before location list for top-level entries. Version 1.22 has removed the
\ifglsnopostrdot check since this style doesn't display the description.
18363 \newcommand*{\glsxtrbookindexprelocation}[1]{%
18364   \glsxtrifhasfield{location}{\#1}%
18365   {,\glsxtrprelocation}%
18366   {\glsxtrprelocation}%
18367 }

xsubprelocation Separator used before location list for sub-entries.
18368 \newcommand*{\glsxtrbookindexsubprelocation}[1]{%
18369   \glsxtrbookindexprelocation{\#1}%
18370 }
```

okindexlocation

```
\glsxtrbookindexlocation{\label}{\location}
```

Displays the location.

```
18371 \newcommand*{\glsxtrbookindexlocation}[2]{\#2}
```

ndexsublocation

```
\glsxtrbookindexlocation{\label}{\location}
```

Displays the location for sub-entries.

```
18372 \newcommand*{\glsxtrbookindexsublocation}{\glsxtrbookindexlocation}
```

xparentchildsep Separator used between top-level parent and child entry.

```
18373 \newcommand{\glsxtrbookindexparentchildsep}{\nopagebreak}
```

rentsubchildsep Separator used between sub-level parent and child entry.

```
18374 \newcommand{\glsxtrbookindexparentsubchildsep}{\glsxtrbookindexparentchildsep}
```

ookindexbetween Between two top-level entries identified by the labels in the arguments.

```
18375 \newcommand{\glsxtrbookindexbetween}[2]{}
```

indexsubbetween Between two level 1 entries identified by the labels in the arguments.

```
18376 \newcommand{\glsxtrbookindexsubbetween}[2]{}
```

exsubsubbetween Between two level 2 entries identified by the labels in the arguments.

```
18377 \newcommand{\glsxtrbookindexsubsubbetween}[2]{}
```

indexatendgroup At the end of a letter group. The argument is the index of the last top-level entry.

```
18378 \newcommand{\glsxtrbookindexatendgroup}[1]{}
```

exsubatendgroup At the end of a letter group. The argument is the index of the last level 1 entry.

```
18379 \newcommand{\glsxtrbookindexsubatendgroup}[1]{}
```

ubsubatendgroup At the end of a letter group. The argument is the index of the last level 2 entry.

```
18380 \newcommand{\glsxtrbookindexsubsubatendgroup}[1]{}
```

kindexgroupskip Group separator.

```
18381 \newcommand{\glsxtrbookindexgroupskip}{\ifglsnogroupskip\else\indexspace\fi}
```

Format group title.

dexformatheader Group separator.

```
18382 \newcommand*{\glsxtrbookindexformatheader}[1]{%
```

```
18383   \par{\centering\glstreegroupheaderfmt{\#1}\par}%
```

```
18384 }
```

okindexbookmark Book mark group heading if supported.

```
18385 \ifdef\pdfbookmark
```

```
18386 {%
```

```
18387   \newcommand*{\glsxtrbookindexbookmark}[2]{%
```

```
18388     \ifdefstring{\@glossarysec}{chapter}{%
```

```
18389       {\pdfbookmark[1]{\#1}{\#2}}%
```

```

18390     {\pdfbookmark[2]{#1}{#2}}%
18391 }
18392 }
18393 {%
18394 \newcommand*{\glsxtrbookindexbookmark}[2]{}
18395 }

```

xbookmarkprefix Make the bookmark label prefix used for letter groups depend on the glossary label (instead of original hardcoded “index.”).

```
18396 \newcommand*{\glsxtrbookindexbookmarkprefix}{\currentglossary.}
```

kindindexcolspread

```
18397 \newcommand*{\glsxtrbookindexcolspread}{}%
```

dexmulticolsenv

```
18398 \newcommand*{\glsxtrbookindexmulticolsenv}{multicols}
```

Define the style.

```

18399 \newglossarystyle{bookindex}{%
18400   \setglossarystyle{index}%
18401   \renewenvironment{theglossary}%
18402   {%
18403     \ifnum\glsxtrbookindexcols>1\relax
18404       \ifempty{\glsxtrbookindexcolspread}%
18405       {%
18406         \edef\glsxtr@beginbookindex{%
18407           \noexpand\begin{\glsxtrbookindexmulticolsenv}%
18408             {\glsxtrbookindexcols}%
18409           }%
18410       }%
18411       {%
18412         \edef\glsxtr@beginbookindex{%
18413           \noexpand\begin{\glsxtrbookindexmulticolsenv}%
18414             {\glsxtrbookindexcols}[\glsxtrbookindexcolspread]%
18415           }%
18416         }%
18417       \else
18418         \def\glsxtr@beginbookindex{}%
18419       \fi
18420       \glsxtr@beginbookindex
18421       \setlength{\parindent}{0pt}%
18422       \setlength{\parskip}{0pt plus 0.3pt}%
18423       \let@\glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
18424       \let@\glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
18425       \let@\glsxtr@bookindex@between@gobble
18426       \let@\glsxtr@bookindex@subbetween@gobble
18427       \let@\glsxtr@bookindex@subsubbetween@gobble
18428       \let@\glsxtr@bookindex@atendgroup\relax
18429       \let@\glsxtr@bookindex@subatendgroup\relax

```

```
18430     \let\@glsxtr@bookindex@subsubatendgroup\relax
18431     \let\@glsxtr@bookindexgroupskip\relax
18432   }%
18433 {%
```

Do end group hooks.

```
18434     \@glsxtr@bookindex@subsubatendgroup
18435     \@glsxtr@bookindex@subatendgroup
18436     \@glsxtr@bookindex@atendgroup
```

End multicols environment.

```
18437     \ifnum\glsxtrbookindexcols>1\relax
18438       \edef\glsxtr@endbookindex{%
18439         \noexpand\end{\glsxtrbookindexmulticolsenv}%
18440       }%
18441     \else
18442       \def\glsxtr@endbookindex{}%
18443     \fi
18444     \glsxtr@endbookindex
18445   }%
```

Use ragged right as columns are likely to be narrow and indexes tend not to be fully justified.

```
18446   \renewcommand*\glossaryheader{\raggedright}%
```

Top level entry format.

```
18447   \renewcommand*\glossentry[2]{%
```

Do separator.

```
18448     \@glsxtr@bookindex@between{##1}%
```

Update separators.

```
18449     \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
18450     \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
18451     \let\@glsxtr@bookindex@subbetween\@gobble
18452     \let\@glsxtr@bookindex@subsubbetween\@gobble
18453     \edef\@glsxtr@bookindex@between{%
18454       \noexpand\glsxtrbookindexbetween{##1}%
18455     }%
18456     \edef\@glsxtr@bookindex@atendgroup{%
18457       \noexpand\glsxtrbookindexatendgroup{##1}%
18458     }%
18459     \let\@glsxtr@bookindex@subatendgroup\relax
18460     \let\@glsxtr@bookindex@subsubatendgroup\relax
```

Format entry.

```
18461   \glstreeitem
18462     \glsentryitem{##1}%
18463     \glstarget{##1}{\glsxtrbookindexname{##1}}%
18464     \glsxtrbookindexprelocation{##1}%
18465     \glsxtrbookindexlocation{##1}{##2}%
18466   }%
18467   \renewcommand*\subglossentry[3]{%
18468     \ifcase##1\relax
```

Level 0 (shouldn't happen as that's formatted with \glossentry).

```
18469      \glstreeitem
18470      \or
    Level 1.
18471      \@glsxtr@bookindex@sep
18472      \@glsxtr@bookindex@subbetween{##2}%
18473      \let\@glsxtr@bookindex@sep\relax
```

Update separators.

```
18474      \let\@glsxtr@bookindex@subsubbetween\@obble
18475      \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
18476      \edef\@glsxtr@bookindex@subbetween{%
18477          \noexpand\glsxtrbookindexsubbetween{##2}%
18478      }%
18479      \edef\@glsxtr@bookindex@atsubendgroup{%
18480          \noexpand\glsxtrbookindexatsubendgroup{##1}%
18481      }%
```

Start sub-item.

```
18482      \glstreesubitem
18483      \glssubentryitem{##2}%
18484      \else
```

All other levels.

```
18485      \@glsxtr@bookindex@subsep
18486      \@glsxtr@bookindex@subsubbetween{##2}%
```

Update separators.

```
18487      \let\@glsxtr@bookindex@subsep\relax
18488      \edef\@glsxtr@bookindex@subsubbetween{%
18489          \noexpand\glsxtrbookindexsubsubbetween{##2}%
18490      }%
18491      \edef\@glsxtr@bookindex@atsubsubendgroup{%
18492          \noexpand\glsxtrbookindexatsubsubendgroup{##1}%
18493      }%
```

Start sub-sub-item.

```
18494      \glstreesubsubitem
18495      \fi
```

Format entry.

```
18496      \glstarget{##2}{\glsxtrbookindexsubname{##2}}%
18497      \glsxtrbookindexsubprelocation{##2}%
18498      \glsxtrbookindexsublocation{##2}{##3}%
18499  }%
```

The group skip is moved to the group heading to avoid interfering with the end letter group hooks.

```
18500  \renewcommand*\glsgroupskip{}%
```

Group heading format.

```
18501  \renewcommand*\glsgroupheading[1]{%
```

Do end group hooks.

```
18502  \glsxtr@bookindex@subsubatendgroup
18503  \glsxtr@bookindex@subatendgroup
18504  \glsxtr@bookindex@atendgroup
18505  \glsxtr@bookindexgroupskip
```

Update separators.

```
18506  \let\glsxtr@bookindexgroupskip\glsxtrbookindexgroupskip
18507  \let\glsxtr@bookindex@between@gobble
18508  \let\glsxtr@bookindex@atendgroup\relax
18509  \let\glsxtr@bookindex@subatendgroup\relax
18510  \let\glsxtr@bookindex@subsubatendgroup\relax
```

Fetch the group title from the label supplied in #1.

```
18511  \glsxtrgetgroup{##1}{\glsxtrcurrentgrptitle}%
```

Do the PDF bookmark if supported.

```
18512  \glsxtrbookindexbookmark{\glsxtrcurrentgrptitle}{\glsxtrbookindexbookmarkprefix##1}%
```

Format the group title.

```
18513  \glsxtrbookindexformatheader{\glsxtrcurrentgrptitle}%
18514  \nopagebreak\indexspace\nopagebreak@afterheading
18515 }%
18516 }
```

Some supplementary commands that may be useful. These store the entry label for the current page. Since the page number is needed in the control sequence, this uses \glsxtrbookindexthepage instead of \thepage in case the page numbering has been set to something that contains formatting commands.

`bookindexthepage` The \printglossary sets \currentglossary to the current glossary label. This is used as a prefix in case the page number is reset.

```
18517 \newcommand{\glsxtrbookindexthepage}{%
18518 \ifdef\currentglossary{\currentglossary.\arabic{page}}{\arabic{page}}%
18519 }
```

`bookindexmarkentry` Writes entry information to the .aux file. The argument is the entry label.

```
18520 \newcommand*{\glsxtrbookindexmarkentry}[1]{%
18521 \protected@write\auxout
18522 {\let\glsxtrbookindexthepage\relax}%
18523 {\string\glsxtr@setbookindexmark{\glsxtrbookindexthepage}{#1}}%
18524 }
```

`setbookindexmark`

```
18525 \newcommand*{\glsxtr@setbookindexmark}[2]{%
18526 \ifcsundef{\glsxtr@idxfirstmark@#1}%
18527 {\csgdef{\glsxtr@idxfirstmark@#1}{#2}}%
18528 {}%
18529 \csgdef{\glsxtr@idxlastmark@#1}{#2}%
18530 }
```

```
dexfirstmarkfmt
18531 \newcommand*{\glsxtrbookindexfirstmarkfmt}[1]{%
18532   \glsentryname{#1}%
18533 }

kindexfirstmark
18534 \newcommand*{\glsxtrbookindexfirstmark}{%
18535   \letcs{\glsxtr@label}{\glsxtr@idxfirstmark@\glsxtrbookindexthe page}%
18536   \ifdef{\glsxtr@label}%
18537     {\glsxtrbookindexfirstmarkfmt{\glsxtr@label}}%
18538   {}%
18539 }

ndexlastmarkfmt
18540 \newcommand*{\glsxtrbookindexlastmarkfmt}[1]{%
18541   \glsentryname{#1}%
18542 }

okindexlastmark
18543 \newcommand*{\glsxtrbookindexlastmark}{%
18544   \letcs{\glsxtr@label}{\glsxtr@idxlastmark@\glsxtrbookindexthe page}%
18545   \ifdef{\glsxtr@label}%
18546     {\glsxtrbookindexlastmarkfmt{\glsxtr@label}}%
18547   {}%
18548 }
```

4 longextra styles (glossary-longextra.sty)

4.1 Package Initialisation and Options

Provides additional long styles.

```
18549 \NeedsTeXFormat{LaTeX2e}
18550 \ProvidesPackage{glossary-longextra}[2021/11/22 v1.48 (NLCT)]
Load required packages.
18551 \RequirePackage{glossary-longbooktabs}
```

ongextraNameFmt

```
\glslongextraNameFmt{\label}
```

Governs the way the name is displayed.

```
18552 \newcommand{\glslongextraNameFmt}[1]{%
18553   \glsentryitem{\#1}\glstarget{\#1}{\glossentryname{\#1}}%
18554 }
```

ongextraDescFmt

```
\glslongextraDescFmt{\label}
```

Governs the way the description is displayed.

```
18555 \newcommand{\glslongextraDescFmt}[1]{%
18556   \glossentrydesc{\#1}\glspostdescription
18557 }
```

gextraSymbolFmt

```
\glslongextraSymbolFmt{\label}
```

Governs the way the symbol is displayed.

```
18558 \newcommand{\glslongextraSymbolFmt}[1]{\glossentrysymbol{\#1}}
```

xtraLocationFmt

```
\glslongextraLocationFmt{\label}{\location list}
```

Governs the way the location is displayed.

```
18559 \newcommand{\glslongextraLocationFmt}[2]{#2}
```

extraSubNameFmt

```
\glslongextraSubNameFmt{\level}{\label}
```

Governs the way the child name is displayed. Just does the sub-entry counter, if enabled, and the target.

```
18560 \newcommand{\glslongextraSubNameFmt}[2]{%
18561   \glssubentryitem{#2}\glstarget{#2}{\strut}%
18562 }
```

extraSubDescFmt

```
\glslongextraSubDescFmt{\level}{\label}
```

Governs the way the child description is displayed.

```
18563 \newcommand{\glslongextraSubDescFmt}[2]{%
18564   \glslongextraDescFmt{#2}%
18565 }
```

traSubSymbolFmt

```
\glslongextraSubSymbolFmt{\level}{\label}
```

Governs the way the child symbol is displayed.

```
18566 \newcommand{\glslongextraSubSymbolFmt}[2]{%
18567   \glslongextraSymbolFmt{#2}%
18568 }
```

aSubLocationFmt

```
\glslongextraSubLocationFmt{\level}{\label}{\location list}
```

Governs the way the child location list is displayed.

```
18569 \newcommand{\glslongextraSubLocationFmt}[3]{#3}
```

```

gextraNameAlign Alignment for the name column.
18570 \newcommand{\glslongextraNameAlign}{l}

gextraDescAlign Alignment for the description column.
18571 \newcommand{\glslongextraDescAlign}{>{\raggedright}p{\glsdescwidth} }

gextraSymbolAlign Alignment for the symbol column.
18572 \newcommand{\glslongextraSymbolAlign}{c}

gextraLocationAlign Alignment for the location column.
18573 \newcommand{\glslongextraLocationAlign}{>{\raggedright}p{\glspagelistwidth} }

gextraGroupHeading Used to format the letter group headings. The first argument is the number of columns in the
table. The second is the group label (not the title).
18574 \newcommand{\glslongextraGroupHeading}[2]{}

gextraHeaderFormat Format for the column headers.
18575 \newcommand{\glslongextraHeaderFmt}[1]{\textbf{#1} }

gextraNameDescHeader
18576 \newcommand{\glslongextraNameDescHeader}{%
18577 \glslongextraNameDescTabularHeader\endhead
18578 \glslongextraNameDescTabularFooter\endfoot
18579 }

gextraTabularHeader
18580 \newcommand{\glslongextraNameDescTabularHeader}{%
18581 \toprule
18582 \glslongextraHeaderFmt\entryname &
18583 \glslongextraHeaderFmt\descriptionname\tabularnewline
18584 \midrule
18585 }

gextraTabularFooter
18586 \newcommand{\glslongextraNameDescTabularFooter}{%
18587 \bottomrule
18588 }

    Unlike the altree style, there aren't different widths for the hierarchical levels.

gextraSetWidest Provide in case the tree styles haven't been loaded.
18589 \newcommand*{\glslongextraSetWidest}[1]{%
18590 \def\@glslongextrawidestname{\#1}%
18591 }

gextrawidestname Pick up the widest name from the altree style if it has been set. (Will expand to nothing
otherwise.)
18592 \newcommand*{\@glslongextrawidestname}{\csuse{@glswidestname}}

```

traUpdateWidest

```
18593 \newcommand*{\glslongextraUpdateWidest}[1]{%
18594   \ifundef\@glslongextrawidestname
18595   {\def\@glslongextrawidestname{\#1}}%
18596   {%
18597     \settowidth{\dimen@}{\@glslongextrawidestname}%
18598     \settowidth{\dimen@ii}{\#1}%
18599     \ifdim\dimen@ii>\dimen@
18600       \def\@glslongextrawidestname{\#1}%
18601     \fi
18602   }%
18603 }
```

dateWidestChild

```
\glslongextraUpdateWidestChild{<level>}{<text>}
```

Used by \glsxtrSetWidest in glossaries-extra-bib2gls. Does nothing by default, since the default action in these styles is to omit the child name. If the child name should be displayed, then this needs to be redefined to use \glslongextraUpdateWidest.

```
18604 \newcommand*{\glslongextraUpdateWidestChild}[2]{}
```

traSetDescWidth Computes the value of \glsdescwidth for the styles that only have name and description columns.

```
18605 \newcommand{\glslongextraSetDescWidth}{%
18606   \settowidth{\gls@tmp@len}{\glslongextraHeaderFmt\entryname}%

```

Has the widest name been set.

```
18607   \settowidth{\dimen@}{\glsnamefont{\@glslongextrawidestname}}%
18608   \ifdim\dimen@>\gls@tmp@len
18609     \gls@tmp@len=\dimen@
18610   \fi
```

Description width is \linewidth less 4\tabcolsep less the width of the name column.

```
18611   \setlength{\glsdescwidth}{\dimexpr\linewidth-4\tabcolsep-\gls@tmp@len}%
18612 }
```

SymSetDescWidth Computes the value of \glsdescwidth for the styles that only have name, symbol and description columns.

```
18613 \newcommand{\glslongextraSymSetDescWidth}{%
```

Work out the size for just the name and description style.

```
18614   \glslongextraSetDescWidth
```

Now work out the symbol column width. This is assuming that the column title will be the widest text in the column.

```
18615   \settowidth{\gls@tmp@len}{\glslongextraHeaderFmt\symbolname}%
```

Subtract 2\tabcolsep and the symbol header width.

```
18616 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\gls@tmp{len}}%
18617 }
```

LocSetDescWidth Computes the value of \glsdescwidth for the styles that only have name, location and description columns.

```
18618 \newcommand{\glslongextraLocSetDescWidth}{%
```

Work out the size for just the name and description style.

```
18619 \glslongextraSetDescWidth
```

Subtract 2\tabcolsep and the location list column width.

```
18620 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\glspagelistwidth}%
18621 }
```

LocSetDescWidth Computes the value of \glsdescwidth for the styles that have name, symbol, location and description columns.

```
18622 \newcommand{\glslongextraSymLocSetDescWidth}{%
```

Work out the size for just the name, symbol and description style.

```
18623 \glslongextraSymSetDescWidth
```

Subtract 2\tabcolsep and the location list column width.

```
18624 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\glspagelistwidth}%
18625 }
```

ExtraUseTabular If true use tabular instead of longtable. Obviously only intended for short glossaries that can fit into a single page.

```
18626 \newif\ifGlsLongExtraUseTabular
18627 \GlsLongExtraUseTabularfalse
```

raTabularVAlign Only used with the tabular setting.

```
18628 \newcommand*\glslongextraTabularVAlign[c]
```

long-name-desc Two column style with multi-lined descriptions and header. This is similar to the longragged-booktabs style.

```
18629 \newglossarystyle[long-name-desc]{%
18630 }%
18631 \ifGlsLongExtraUseTabular
18632 \renewenvironment{theglossary}{%
18633 }%
18634 \glslongextraSetDescWidth
18635 \edef\@glslongextra@begintab{%
18636 \noexpand\begin{tabular}[!htb]{l@{\glslongextraTabularVAlign}l}%
18637 \expandonce\glslongextraNameAlign
18638 \expandonce\glslongextraDescAlign}%
18639 \@glslongextra@begintab
18640 }%
18641 }%
```

```

18642     \glslongextraNameDescTabularFooter
18643     \end{tabular}%
18644   }%
18645   \renewcommand*{\glossaryheader}{\glslongextraNameDescTabularHeader}%
18646 \else
18647   \renewenvironment{theglossary}%
18648   {%
18649     \glspatchLToutput
18650     \glslongextraSetDescWidth
18651     \edef\@glslongextra@begintab{%
18652       \noexpand\begin{longtable}{%
18653         \expandonce\glslongextraNameAlign
18654         \expandonce\glslongextraDescAlign}}%
18655     \glslongextra@begintab
18656   }%
18657   {\end{longtable}}%
18658   \renewcommand*{\glossaryheader}{\glslongextraNameDescHeader}%
18659 \fi
18660 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{2}{##1}}%
18661 \renewcommand{\glossentry}[2]{%
18662   \glslongextraNameFmt{##1} %
18663   \glslongextraDescFmt{##1}\tabularnewline
18664 }%
18665 \renewcommand{\subglossentry}[3]{%
18666   \glslongextraSubNameFmt{##1}{##2}%
18667   &
18668   \glslongextraSubDescFmt{##1}{##2}%
18669   \tabularnewline
18670 }%
18671 \ifglsnogroupskip
18672   \renewcommand*{\glsgroupskip}{}%
18673 \else
18674   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
18675 \fi
18676 }

```

cLocationHeader

```

18677 \newcommand{\glslongextraNameDescLocationHeader}{%
18678   \glslongextraNameDescLocationTabularHeader\endhead
18679   \glslongextraNameDescLocationTabularFooter\endfoot
18680 }

```

onTabularHeader

```

18681 \newcommand{\glslongextraNameDescLocationTabularHeader}{%
18682   \toprule
18683   \glslongextraHeaderFmt\entryname &
18684   \glslongextraHeaderFmt\descriptionname &
18685   \glslongextraHeaderFmt\pagelistname\tabularnewline
18686   \midrule

```

```

18687 }

onTabularFooter
18688 \newcommand{\glslongextraNameDescLocationTabularFooter}{%
18689   \bottomrule
18690 }

g-name-desc-loc Three columns: name, description and location list.
18691 \newglossarystyle{long-name-desc-loc}{%
18692 {%
18693   \ifGlsLongExtraUseTabular
18694     \renewenvironment{theglossary}{%
18695       {%
18696         \glslongextraLocSetDescWidth
18697         \edef\@glslongextra@begintab{%
18698           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
18699             \expandonce\glslongextraNameAlign
18700             \expandonce\glslongextraDescAlign
18701             \expandonce\glslongextraLocationAlign
18702           }{}}%
18703         \@glslongextra@begintab
18704       }%
18705       {%
18706         \glslongextraNameDescLocationTabularFooter
18707         \end{tabular}%
18708       }%
18709     \renewcommand*\glossaryheader{\glslongextraNameDescLocationTabularHeader}%
18710   \else
18711     \renewenvironment{theglossary}{%
18712       {%
18713         \glspatchLToutput
18714         \glslongextraLocSetDescWidth
18715         \edef\@glslongextra@begintab{%
18716           \noexpand\begin{longtable}{%
18717             \expandonce\glslongextraNameAlign
18718             \expandonce\glslongextraDescAlign
18719             \expandonce\glslongextraLocationAlign
18720           }{}}%
18721         \@glslongextra@begintab
18722       }%
18723       {\end{longtable}}%
18724     \renewcommand*\glossaryheader{\glslongextraNameDescLocationHeader}%
18725   \fi
18726 \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}%
18727 \renewcommand{\glossentry}[2]{%
18728   \glslongextraNameFmt{##1} &
18729   \glslongextraDescFmt{##1} &
18730   \glslongextraLocationFmt{##1}{##2}\tabularnewline
18731 }

```

```

18732 \renewcommand{\subglossentry}[3]{%
18733   \glslongextraSubNameFmt{##1}{##2}&
18734   \glslongextraSubDescFmt{##1}{##2}&
18735   \glslongextraSubLocationFmt{##1}{##2}{##3}%
18736   \tabularnewline
18737 }%
18738 \ifglsnogroupskip
18739   \renewcommand*{\glsgroupskip}{}%
18740 \else
18741   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
18742 \fi
18743 }

```

aDescNameHeader

```

18744 \newcommand{\glslongextraDescNameHeader}{%
18745   \glslongextraDescNameTabularHeader\endhead
18746   \glslongextraDescNameTabularFooter\endfoot
18747 }

```

meTabularHeader

```

18748 \newcommand{\glslongextraDescNameTabularHeader}{%
18749   \toprule
18750   \glslongextraHeaderFmt\descriptionname&
18751   \glslongextraHeaderFmt\entryname \tabularnewline
18752   \midrule
18753 }

```

meTabularFooter

```

18754 \newcommand{\glslongextraDescNameTabularFooter}{%
18755   \bottomrule
18756 }

```

long-desc-name Like name-desc but swaps the columns.

```

18757 \newglossarystyle{long-desc-name}{%
18758 }%
18759 \ifGlsLongExtraUseTabular
18760   \renewenvironment{theglossary}{%
18761     {%
18762       \glslongextraSetDescWidth
18763       \edef\@glslongextra@begintab{%
18764         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
18765           \expandonce\glslongextraDescAlign
18766           \expandonce\glslongextraNameAlign}}%
18767       \@glslongextra@begintab
18768     }%
18769     {%
18770       \glslongextraDescNameTabularFooter
18771       \end{tabular}%
18772     }%

```

```

18773     \renewcommand*{\glossaryheader}{\glslongextraDescNameTabularHeader}%
18774     \else
18775     \renewenvironment{theglossary}%
18776     {%
18777         \glspatchLToutput
18778         \glslongextraSetDescWidth
18779         \edef\@glslongextra@begintab{%
18780             \noexpand\begin{longtable}{%
18781                 \expandonce\glslongextraDescAlign
18782                 \expandonce\glslongextraNameAlign}}%
18783         \@glslongextra@begintab
18784     }%
18785     {\end{longtable}}%
18786     \renewcommand*{\glossaryheader}{\glslongextraDescNameHeader}%
18787     \fi
18788     \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{2}{##1}}%
18789     \renewcommand{\glossentry}[2]{%
18790         \glslongextraDescFmt{##1} %
18791         \glslongextraNameFmt{##1}\tabularnewline
18792     }%
18793     \renewcommand{\subglossentry}[3]{%
18794         \glslongextraSubDescFmt{##1}{##2} %
18795         \glslongextraSubNameFmt{##1}{##2}\tabularnewline
18796     }%
18797     \ifglsnogroupskip
18798         \renewcommand*{\glsgroupskip}{}%
18799     \else
18800         \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
18801     \fi
18802 }

```

nDescNameHeader

```

18803 \newcommand{\glslongextraLocationDescNameHeader}{}%
18804 \glslongextraLocationDescNameTabularHeader\endhead
18805 \glslongextraLocationDescNameTabularFooter\endfoot
18806 }

```

meTabularHeader

```

18807 \newcommand{\glslongextraLocationDescNameTabularHeader}{}%
18808 \toprule
18809 \glslongextraHeaderFmt\pagelistname&
18810 \glslongextraHeaderFmt\descriptionname&
18811 \glslongextraHeaderFmt\entryname \tabularnewline
18812 \midrule
18813 }

```

meTabularFooter

```

18814 \newcommand{\glslongextraLocationDescNameTabularFooter}{}%
18815 \bottomrule

```

```

18816 }

g-loc-desc-name Three columns: location, description and name.
18817 \newglossarystyle{long-loc-desc-name}{%
18818 {%
18819   \ifGlsLongExtraUseTabular
18820     {%
18821       \glslongextraLocSetDescWidth
18822       \edef\@glslongextra@begintab{%
18823         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
18824           \expandonce\glslongextraLocationAlign
18825           \expandonce\glslongextraDescAlign
18826           \expandonce\glslongextraNameAlign}}%
18827       \@glslongextra@begintab
18828     }%
18829     {%
18830       \glslongextraLocationDescNameTabularFooter
18831       \end{tabular}%
18832     }%
18833     \renewcommand*\glossaryheader{\glslongextraLocationDescNameTabularHeader}%
18834   \else
18835     \renewenvironment{theglossary}{%
18836       {%
18837         \glspatchLToutput
18838         \glslongextraLocSetDescWidth
18839         \edef\@glslongextra@begintab{%
18840           \noexpand\begin{longtable}{%
18841             \expandonce\glslongextraLocationAlign
18842             \expandonce\glslongextraDescAlign
18843             \expandonce\glslongextraNameAlign}}%
18844         \@glslongextra@begintab
18845       }%
18846       {\end{longtable}}%
18847       \renewcommand*\glossaryheader{\glslongextraLocationDescNameHeader}%
18848     \fi
18849     \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}%
18850     \renewcommand{\glossentry}[2]{%
18851       \glslongextraLocationFmt{##1}{##2} %
18852       \glslongextraDescFmt{##1} %
18853       \glslongextraNameFmt{##1}\tabularnewline
18854     }%
18855     \renewcommand{\subglossentry}[3]{%
18856       \glslongextraSubLocationFmt{##1}{##2}{##3} %
18857       \glslongextraSubDescFmt{##1}{##2} %
18858       \glslongextraSubNameFmt{##1}{##2}\tabularnewline
18859     }%
18860     \ifglsnogroupskip
18861       \renewcommand*\glsgroupskip{}%
18862     \else

```

```

18863     \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
18864     \fi
18865 }

meDescSymHeader
18866 \newcommand{\glslongextraNameDescSymHeader}{%
18867 \glslongextraNameDescSymTabularHeader\endhead
18868 \glslongextraNameDescSymTabularFooter\endfoot
18869 }

ymTabularHeader
18870 \newcommand{\glslongextraNameDescSymTabularHeader}{%
18871 \toprule
18872 \glslongextraHeaderFmt\entryname &
18873 \glslongextraHeaderFmt\descriptionname &
18874 \glslongextraHeaderFmt\symbolname\tabularnewline
18875 \midrule
18876 }

ymTabularFooter
18877 \newcommand{\glslongextraNameDescSymTabularFooter}{%
18878 \bottomrule
18879 }

g-name-desc-sym Three column style with symbol in the third column.

```

```

18880 \newglossarystyle{long-name-desc-sym}{%
18881 {%
18882     \ifGlsLongExtraUseTabular
18883     \renewenvironment{theglossary}{%
18884         {%
18885             \glslongextraSymSetDescWidth
18886             \edef\@glslongextra@begintab{%
18887                 \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
18888                     \expandonce\glslongextraNameAlign
18889                     \expandonce\glslongextraDescAlign
18890                     \expandonce\glslongextraSymbolAlign
18891                 }{}}%
18892             \@glslongextra@begintab
18893         {%
18894             {%
18895                 \glslongextraNameDescSymTabularFooter
18896                 \end{tabular}%
18897             }%
18898             \renewcommand*{\glossaryheader}{\glslongextraNameDescSymTabularHeader}%
18899         \else
18900             \renewenvironment{theglossary}{%
18901                 {%
18902                     \glspatchLToutput
18903                     \glslongextraSymSetDescWidth

```

```

18904     \edef\@glslongextra@begintab{%
18905         \noexpand\begin{longtable}{%
18906             \expandonce\glslongextraNameAlign
18907             \expandonce\glslongextraDescAlign
18908             \expandonce\glslongextraSymbolAlign
18909         }{}}%
18910     \glslongextra@begintab
18911     }%
18912     {\end{longtable}}%
18913     \renewcommand*\glossaryheader{\glslongextraNameDescSymHeader}%
18914     \fi
18915     \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}%
18916     \renewcommand*\glossentry[2]{%
18917         \glslongextraNameFmt{##1} &
18918         \glslongextraDescFmt{##1} &
18919         \glslongextraSymbolFmt{##1}\tabularnewline
18920     }%
18921     \renewcommand*\subglossentry[3]{%
18922         \glslongextraSubNameFmt{##1}{##2} &
18923         \glslongextraSubDescFmt{##1}{##2} &
18924         \glslongextraSubSymbolFmt{##1}{##2}%
18925         \tabularnewline
18926     }%
18927     \ifglsnogroupskip
18928         \renewcommand*\glsgroupskip{}%
18929     \else
18930         \renewcommand*\glsgroupskip{\glspenaltygroupskip}%
18931     \fi
18932 }

```

mLocationHeader

```

18933 \newcommand{\glslongextraNameDescSymLocationHeader}{%
18934     \glslongextraNameDescSymLocationTabularHeader\endhead
18935     \glslongextraNameDescSymLocationTabularFooter\endfoot
18936 }

```

onTabularHeader

```

18937 \newcommand{\glslongextraNameDescSymLocationTabularHeader}{%
18938     \toprule
18939     \glslongextraHeaderFmt\entryname &
18940     \glslongextraHeaderFmt\descriptionname &
18941     \glslongextraHeaderFmt\symbolname &
18942     \glslongextraHeaderFmt\pagelistname\tabularnewline
18943     \midrule
18944 }

```

onTabularFooter

```

18945 \newcommand{\glslongextraNameDescSymLocationTabularFooter}{%
18946     \bottomrule

```

```

18947 }

me-desc-sym-loc Four columns: name, description and location
18948 \newglossarystyle{long-name-desc-sym-loc}%
18949 {%
18950   \ifGlsLongExtraUseTabular
18951     \renewenvironment{theglossary}%
18952     {%
18953       \glslongextraSymLocSetDescWidth
18954       \edef\@glslongextra@begintab{%
18955         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
18956           \expandonce\glslongextraNameAlign
18957           \expandonce\glslongextraDescAlign
18958           \expandonce\glslongextraSymbolAlign
18959           \expandonce\glslongextraLocationAlign
18960         }{}}%
18961       \@glslongextra@begintab
18962     }%
18963     {%
18964       \glslongextraNameDescSymLocationTabularFooter
18965       \end{tabular}%
18966     }%
18967     \renewcommand*\{\glossaryheader}{\glslongextraNameDescSymLocationTabularHeader}%
18968   \else
18969     \renewenvironment{theglossary}%
18970     {%
18971       \glspatchLToutput
18972       \glslongextraSymLocSetDescWidth
18973       \edef\@glslongextra@begintab{%
18974         \noexpand\begin{longtable}{%
18975           \expandonce\glslongextraNameAlign
18976           \expandonce\glslongextraDescAlign
18977           \expandonce\glslongextraSymbolAlign
18978           \expandonce\glslongextraLocationAlign
18979         }{}}%
18980       \@glslongextra@begintab
18981     }%
18982     {\end{longtable}}%
18983     \renewcommand*\{\glossaryheader}{\glslongextraNameDescSymLocationHeader}%
18984   \fi
18985   \renewcommand*\{\glsgroupheading}[1]{\glslongextraGroupHeading{4}{##1}}%
18986   \renewcommand{\glossentry}[2]{%
18987     \glslongextraNameFmt{##1} &
18988     \glslongextraDescFmt{##1} &
18989     \glslongextraSymbolFmt{##1}&
18990     \glslongextraLocationFmt{##1}{##2}\tabularnewline
18991   }%
18992   \renewcommand{\subglossentry}[3]{%
18993     \glslongextraSubNameFmt{##1}{##2} &

```

```

18994     \glslongextraSubDescFmt{##1}{##2} &
18995     \glslongextraSubSymbolFmt{##1}{##2}&
18996     \glslongextraSubLocationFmt{##1}{##2}{##3}%
18997     \tabularnewline
18998 }%
18999 \ifglsnogroupskip
19000   \renewcommand*\glsgroupskip{}%
19001 \else
19002   \renewcommand*\glsgroupskip{\glspenaltygroupskip}%
19003 \fi
19004 }

meSymDescHeader
19005 \newcommand{\glslongextraNameSymDescHeader}{%
19006   \glslongextraNameSymDescTabularHeader\endhead
19007   \glslongextraNameSymDescTabularFooter\endfoot
19008 }

scTabularHeader
19009 \newcommand{\glslongextraNameSymDescTabularHeader}{%
19010   \toprule
19011   \glslongextraHeaderFmt\entryname &
19012   \glslongextraHeaderFmt\symbolname &
19013   \glslongextraHeaderFmt\descriptionname\tabularnewline
19014   \midrule
19015 }

scTabularFooter
19016 \newcommand{\glslongextraNameSymDescTabularFooter}{%
19017   \bottomrule
19018 }

g-name-sym-desc Three column style with symbol in the second column.
19019 \newglossarystyle{long-name-sym-desc}{%
19020 }%
19021   \ifGlsLongExtraUseTabular
19022     \renewenvironment{theglossary}{%
19023       {%
19024         \glslongextraSymSetDescWidth
19025         \edef\@glslongextra@begintab{%
19026           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
19027             \expandonce\glslongextraNameAlign
19028             \expandonce\glslongextraSymbolAlign
19029             \expandonce\glslongextraDescAlign
19030           }{}}%
19031         \@glslongextra@begintab
19032       }%
19033       {%
19034         \glslongextraNameSymDescTabularFooter

```

```

19035     \end{tabular}%
19036     }%
19037     \renewcommand*{\glossaryheader}{\glslongextraNameSymDescTabularHeader}%
19038 \else
19039 \renewenvironment{theglossary}%
19040   {%
19041     \glspatchLToutput
19042     \glslongextraSymSetDescWidth
19043     \edef\@glslongextra@begintab{%
19044       \noexpand\begin{longtable}{%
19045         \expandonce\glslongextraNameAlign
19046         \expandonce\glslongextraSymbolAlign
19047         \expandonce\glslongextraDescAlign
19048       }}%
19049     \glslongextra@begintab
19050   }%
19051   {\end{longtable}}%
19052 \renewcommand*{\glossaryheader}{\glslongextraNameSymDescHeader}%
19053 \fi
19054 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}}%
19055 \renewcommand{\glossentry}[2]{%
19056   \glslongextraNameFmt{##1} %
19057   \glslongextraSymbolFmt{##1} %
19058   \glslongextraDescFmt{##1}\tabularnewline
19059 }%
19060 \renewcommand{\subglossentry}[3]{%
19061   \glslongextraSubNameFmt{##1}{##2} %
19062   \glslongextraSubSymbolFmt{##1}{##2} %
19063   \glslongextraSubDescFmt{##1}{##2}\tabularnewline
19064 }%
19065 \ifglsnogroupskip
19066   \renewcommand*{\glsgroupskip}{}%
19067 \else
19068   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
19069 \fi
19070 }

```

cLocationHeader

```

19071 \newcommand{\glslongextraNameSymDescLocationHeader}{%
19072   \glslongextraNameSymDescLocationTabularHeader\endhead
19073   \glslongextraNameSymDescLocationTabularFooter\endfoot
19074 }

```

onTabularHeader

```

19075 \newcommand{\glslongextraNameSymDescLocationTabularHeader}{%
19076   \toprule
19077   \glslongextraHeaderFmt\entryname %
19078   \glslongextraHeaderFmt\symbolname %
19079   \glslongextraHeaderFmt\descriptionname %

```

```

19080 \glslongextraHeaderFmt\pagelistname\tabularnewline
19081 \midrule
19082 }

onTabularFooter
19083 \newcommand{\glslongextraNameSymDescLocationTabularFooter}{%
19084 \bottomrule
19085 }

```

me-sym-desc-loc Four column style with symbol in the second column.

```

19086 \newglossarystyle{long-name-sym-desc-loc}%
19087 {%
19088   \ifGlsLongExtraUseTabular
19089     \renewenvironment{theglossary}%
19090     {%
19091       \glslongextraSymLocSetDescWidth
19092       \edef\@glslongextra@begintab{%
19093         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
19094           \expandonce\glslongextraNameAlign
19095           \expandonce\glslongextraSymbolAlign
19096           \expandonce\glslongextraDescAlign
19097           \expandonce\glslongextraLocationAlign
19098         }{}}%
19099       \@glslongextra@begintab
19100     }%
19101     {%
19102       \glslongextraNameSymDescLocationTabularFooter
19103       \end{tabular}%
19104     }%
19105     \renewcommand*\glossaryheader{\glslongextraNameSymDescLocationTabularHeader}%
19106   \else
19107     \renewenvironment{theglossary}%
19108     {%
19109       \glspatchLToutput
19110       \glslongextraSymLocSetDescWidth
19111       \edef\@glslongextra@begintab{%
19112         \noexpand\begin{longtable}[%}
19113           \expandonce\glslongextraNameAlign
19114           \expandonce\glslongextraSymbolAlign
19115           \expandonce\glslongextraDescAlign
19116           \expandonce\glslongextraLocationAlign
19117         }{}}%
19118       \@glslongextra@begintab
19119     }%
19120     {\end{longtable}}%
19121     \renewcommand*\glossaryheader{\glslongextraNameSymDescLocationHeader}%
19122   \fi
19123   \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{4}{##1}}%
19124   \renewcommand{\glossentry}[2]{%

```

```

19125   \glslongextraNameFmt{##1} &
19126   \glslongextraSymbolFmt{##1} &
19127   \glslongextraDescFmt{##1} &
19128   \glslongextraLocationFmt{##1}{##2}\tabularnewline
19129 }%
19130 \renewcommand{\subglossentry}[3]{%
19131   \glslongextraSubNameFmt{##1}{##2} &
19132   \glslongextraSubSymbolFmt{##1}{##2} &
19133   \glslongextraSubDescFmt{##1}{##2} &
19134   \glslongextraSubLocationFmt{##1}{##2}{##3}\tabularnewline
19135 }%
19136 \ifglsnogroupskip
19137   \renewcommand*{\glsgroupskip}{}%
19138 \else
19139   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
19140 \fi
19141 }

mDescNameHeader
19142 \newcommand{\glslongextraSymDescNameHeader}{%
19143   \glslongextraSymDescNameTabularHeader\endhead
19144   \glslongextraSymDescNameTabularFooter\endfoot
19145 }

meTabularHeader
19146 \newcommand{\glslongextraSymDescNameTabularHeader}{%
19147   \toprule
19148   \glslongextraHeaderFmt\symbolname &
19149   \glslongextraHeaderFmt\descriptionname &
19150   \glslongextraHeaderFmt\entryname\tabularnewline
19151   \midrule
19152 }

meTabularFooter
19153 \newcommand{\glslongextraSymDescNameTabularFooter}{%
19154   \bottomrule
19155 }


```

`g-sym-desc-name` Three column style with symbol in the first column, description in the second and name in the third.

```

19156 \newglossarystyle{long-sym-desc-name}{%
19157 }%
19158   \ifGlsLongExtraUseTabular
19159     \renewenvironment{theglossary}{%
19160       {%
19161         \glslongextraSymSetDescWidth
19162         \edef\@glslongextra@begintab{%
19163           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
19164             \expandonce\glslongextraSymbolAlign
```

```

19165      \expandonce\glslongextraDescAlign
19166      \expandonce\glslongextraNameAlign
19167  } } %
19168  @glslongextra@begintab
19169  } %
19170  { %
19171  \glslongextraSymDescNameTabularFooter
19172  \end{tabular} %
19173  } %
19174  \renewcommand*{\glossaryheader}{\glslongextraSymDescNameTabularHeader}%
19175 \else
19176 \renewenvironment{theglossary}%
19177 { %
19178  \glspatchLToutput
19179  \glslongextraSymSetDescWidth
19180  \edef\@glslongextra@begintab{%
19181  \noexpand\begin{longtable}{%
19182  \expandonce\glslongextraSymbolAlign
19183  \expandonce\glslongextraDescAlign
19184  \expandonce\glslongextraNameAlign
19185  } } %
19186  \glslongextra@begintab
19187  } %
19188  {\end{longtable}} %
19189  \renewcommand*{\glossaryheader}{\glslongextraSymDescNameHeader}%
19190 \fi
19191 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}}%
19192 \renewcommand{\glossentry}[2]{%
19193  \glslongextraSymbolFmt{##1} &
19194  \glslongextraDescFmt{##1} &
19195  \glslongextraNameFmt{##1}\tabularnewline
19196 } %
19197 \renewcommand{\subglossentry}[3]{%
19198  \glslongextraSubSymbolFmt{##1}{##2} &
19199  \glslongextraSubDescFmt{##1}{##2} &
19200  \glslongextraSubNameFmt{##1}{##2}\tabularnewline
19201 } %
19202 \ifglsnogroupskip
19203  \renewcommand*{\glsgroupskip}{}%
19204 \else
19205  \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
19206 \fi
19207 }

mDescNameHeader
19208 \newcommand{\glslongextraLocationSymDescNameHeader}{%
19209  \glslongextraLocationSymDescNameTabularHeader\endhead
19210  \glslongextraLocationSymDescNameTabularFooter\endfoot
19211 }

```

```

meTabularHeader
19212 \newcommand{\glslongextraLocationSymDescNameTabularHeader}{%
19213   \toprule
19214   \glslongextraHeaderFmt\pagelistname &
19215   \glslongextraHeaderFmt\symbolname &
19216   \glslongextraHeaderFmt\descriptionname &
19217   \glslongextraHeaderFmt\entryname\tabularnewline
19218   \midrule
19219 }

meTabularFooter
19220 \newcommand{\glslongextraLocationSymDescNameTabularFooter}{%
19221   \bottomrule
19222 }

c-sym-desc-name Four column style with location list, symbol, description and name.
19223 \newglossarystyle{long-loc-sym-desc-name}{%
19224 {%
19225   \ifGlsLongExtraUseTabular
19226     \renewenvironment{theglossary}{%
19227       {%
19228         \glslongextraSymLocSetDescWidth
19229         \edef\@glslongextra@begintab{%
19230           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
19231             \expandonce\glslongextraLocationAlign
19232             \expandonce\glslongextraSymbolAlign
19233             \expandonce\glslongextraDescAlign
19234             \expandonce\glslongextraNameAlign
19235           }{}}%
19236         \@glslongextra@begintab
19237       }{%
19238       {%
19239         \glslongextraLocationSymDescNameTabularFooter
19240         \end{tabular}{}}%
19241       }{%
19242       \renewcommand*\glossaryheader{\glslongextraLocationSymDescNameTabularHeader}{%
19243     \else
19244       \renewenvironment{theglossary}{%
19245         {%
19246           \glspatchLToutput
19247           \glslongextraSymLocSetDescWidth
19248           \edef\@glslongextra@begintab{%
19249             \noexpand\begin{longtable}{%
19250               \expandonce\glslongextraLocationAlign
19251               \expandonce\glslongextraSymbolAlign
19252               \expandonce\glslongextraDescAlign
19253               \expandonce\glslongextraNameAlign
19254             }{}}%
19255           \@glslongextra@begintab

```

```

19256    }%
19257    {\end{longtable}}%
19258    \renewcommand*{\glossaryheader}{\glslongextraLocationSymDescNameHeader}%
19259    \fi
19260    \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{4}{##1}}%
19261    \renewcommand{\glossentry}[2]{%
19262        \glslongextraLocationFmt{##1}{##2} &
19263        \glslongextraSymbolFmt{##1} &
19264        \glslongextraDescFmt{##1} &
19265        \glslongextraNameFmt{##1}\tabularnewline
19266    }%
19267    \renewcommand{\subglossentry}[3]{%
19268        \glslongextraSubLocationFmt{##1}{##2}{##3} &
19269        \glslongextraSubSymbolFmt{##1}{##2} &
19270        \glslongextraSubDescFmt{##1}{##2} &
19271        \glslongextraSubNameFmt{##1}{##2}\tabularnewline
19272    }%
19273    \ifglsnogroupskip
19274        \renewcommand*{\glsgroupskip}{}%
19275    \else
19276        \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
19277    \fi
19278 }

```

scSymNameHeader

```

19279 \newcommand{\glslongextraDescSymNameHeader}{%
19280     \glslongextraDescSymNameTabularHeader\endhead
19281     \glslongextraDescSymNameTabularFooter\endfoot
19282 }

```

meTabularHeader

```

19283 \newcommand{\glslongextraDescSymNameTabularHeader}{%
19284     \toprule
19285     \glslongextraHeaderFmt\descriptionname &
19286     \glslongextraHeaderFmt\symbolname &
19287     \glslongextraHeaderFmt\entryname\tabularnewline
19288     \midrule
19289 }

```

meTabularFooter

```

19290 \newcommand{\glslongextraDescSymNameTabularFooter}{%
19291     \bottomrule
19292 }

```

`g-desc-sym-name` Three column style with description in the first column, symbol in the second and name in the third.

```

19293 \newglossarystyle{long-desc-sym-name}{%
19294 {%
19295     \ifGlsLongExtraUseTabular

```

```

19296 \renewenvironment{theglossary}%
19297 {%
19298     \glslongextraSymSetDescWidth
19299     \edef\@glslongextra@begintab{%
19300         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
19301             \expandonce\glslongextraDescAlign
19302             \expandonce\glslongextraSymbolAlign
19303             \expandonce\glslongextraNameAlign
19304         }{}}%
19305     \glslongextra@begintab
19306     }%
19307     {%
19308         \glslongextraDescSymNameTabularFooter
19309         \end{tabular}%
19310     }%
19311     \renewcommand*\{\glossaryheader}{\glslongextraDescSymNameTabularHeader}%
19312 \else
19313     \renewenvironment{theglossary}%
19314     {%
19315         \glspatchLToutput
19316         \glslongextraSymSetDescWidth
19317         \edef\@glslongextra@begintab{%
19318             \noexpand\begin{longtable}-%
19319                 \expandonce\glslongextraDescAlign
19320                 \expandonce\glslongextraSymbolAlign
19321                 \expandonce\glslongextraNameAlign
19322             }{}}%
19323     \glslongextra@begintab
19324     }%
19325     {\end{longtable}}%
19326     \renewcommand*\{\glossaryheader}{\glslongextraDescSymNameHeader}%
19327 \fi
19328 \renewcommand*\{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}}%
19329 \renewcommand{\glossentry}[2]{%
19330     \glslongextraDescFmt{##1} &
19331     \glslongextraSymbolFmt{##1} &
19332     \glslongextraNameFmt{##1}\tabularnewline
19333 }%
19334 \renewcommand{\subglossentry}[3]{%
19335     \glslongextraSubDescFmt{##1}{##2} &
19336     \glslongextraSubSymbolFmt{##1}{##2} &
19337     \glslongextraSubNameFmt{##1}{##2}\tabularnewline
19338 }%
19339 \ifglsnogroupskip
19340     \renewcommand*\{\glsgroupskip}{}%
19341 \else
19342     \renewcommand*\{\glsgroupskip}{\glspenaltygroupskip}%
19343 \fi
19344 }

```

```

scSymNameHeader
19345 \newcommand{\glslongextraLocationDescSymNameHeader}{%
19346   \glslongextraLocationDescSymNameTabularHeader\endhead
19347   \glslongextraLocationDescSymNameTabularFooter\endfoot
19348 }

meTabularHeader
19349 \newcommand{\glslongextraLocationDescSymNameTabularHeader}{%
19350   \toprule
19351   \glslongextraHeaderFmt\pagelistname &
19352   \glslongextraHeaderFmt\descriptionname &
19353   \glslongextraHeaderFmt\symbolname &
19354   \glslongextraHeaderFmt\entryname\tabularnewline
19355   \midrule
19356 }

meTabularFooter
19357 \newcommand{\glslongextraLocationDescSymNameTabularFooter}{%
19358   \bottomrule
19359 }

c-desc-sym-name Four column style with location list, description, symbol and name.
19360 \newglossarystyle{long-loc-desc-sym-name}%
19361 {%
19362   \ifGlsLongExtraUseTabular
19363     \renewenvironment{theglossary}%
19364       {%
19365         \glslongextraSymLocSetDescWidth
19366         \edef\@glslongextra@begintab{%
19367           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
19368             \expandonce\glslongextraLocationAlign
19369             \expandonce\glslongextraDescAlign
19370             \expandonce\glslongextraSymbolAlign
19371             \expandonce\glslongextraNameAlign
19372           }{}}%
19373         \@glslongextra@begintab
19374       }%
19375       {%
19376         \glslongextraLocationDescSymNameTabularFooter
19377         \end{tabular}%
19378       }%
19379     \renewcommand*\glossaryheader{\glslongextraLocationDescSymNameTabularHeader}%
19380   \else
19381     \renewenvironment{theglossary}%
19382       {%
19383         \glspatchLToutput
19384         \glslongextraSymLocSetDescWidth
19385         \edef\@glslongextra@begintab{%
19386           \noexpand\begin{longtable}{%
```

```

19387      \expandonce\glslongextraLocationAlign
19388      \expandonce\glslongextraDescAlign
19389      \expandonce\glslongextraSymbolAlign
19390      \expandonce\glslongextraNameAlign
19391      } } %
19392      \glslongextra@begintab
19393      } %
19394      {\end{longtable}} %
19395      \renewcommand*{\glossaryheader}{\glslongextraLocationDescSymNameHeader}%
19396      \fi
19397      \renewcommand*{\glsgrouphheading}[1]{\glslongextraGroupHeading{4}{##1}}%
19398      \renewcommand{\glossentry}[2]{%
19399          \glslongextraLocationFmt{##1}{##2} &
19400          \glslongextraDescFmt{##1} &
19401          \glslongextraSymbolFmt{##1} &
19402          \glslongextraNameFmt{##1}\tabularnewline
19403      } %
19404      \renewcommand{\subglossentry}[3]{%
19405          \glslongextraSubLocationFmt{##1}{##2}{##3} &
19406          \glslongextraSubDescFmt{##1}{##2} &
19407          \glslongextraSubSymbolFmt{##1}{##2} &
19408          \glslongextraSubNameFmt{##1}{##2}\tabularnewline
19409      } %
19410      \ifglsnogroupskip
19411          \renewcommand*{\glsgroupskip}{}%
19412      \else
19413          \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
19414      \fi
19415 }

```

5 topic styles (glossary-topic.sty)

5.1 Package Initialisation and Options

Provides “topic” styles where top-level entries are considered a topic.

```
19416 \NeedsTeXFormat{LaTeX2e}
19417 \ProvidesPackage{glossary-topic}[2021/11/22 v1.48 (NLCT)]
```

Load required package.

```
19418 \RequirePackage{multicol}
```

The top-level entries act like headers. If the top-level entry has a description it's placed below the name.

topic

```
19419 \newglossarystyle{topic}{%
19420   \renewenvironment{theglossary}%
19421   {%
19422     \glstopicInit
19423     \def\glstopic@prechildren{}%
19424     \def\glstopic@prevlevel{-1}%
19425   }%
19426   {\par}%
19427   \renewcommand*\glossaryheader{}%
19428   \renewcommand*\glsgroupheading[1]{%
19429     \def\glstopic@prevlevel{-1}%
19430     \glstopicGroupHeading{\#1}%
19431   }%
19432   \renewcommand{\glossentry}[2]{%
19433     \hangindent0pt\relax
19434     \parindent\glstopicParIndent\relax
19435     \glstopicItem{\#1}{\#2}}%
```

If there isn't a description, penalise a page break.

```
19436   \ifglshasdesc{\#1}%
19437   {%
19438     \def\glstopic@prechildren{}%
19439   }%
19440   {%
19441     \def\glstopic@prechildren{\nopagebreak}%
19442   }%
19443 }%
19444 \renewcommand{\subglossentry}[3]{%
19445   \ifnum\glstopic@prevlevel=0\relax\glstopic@prechildren\fi
19446   \def\glstopic@prevlevel{\#1}%
}
```

Grouping is added to scope the effect of \everypar.

```
19447  \begingroup
19448  \glstopicAssignSubIndent{##1}%
19449  \glstopicSubItem{##1}{##2}{##3}%
19450  \par
19451  \endgroup
19452 }%
19453 \renewcommand*\glsgroupskip{}%
19454 }
```

\glstopicGroupHeading

```
\glstopicGroupHeading{\i<group_label>}
```

May be redefined if letter group headings are required. For example:

```
\renewcommand*\glstopicGroupHeading[1]{%
  \glsxtrgetgroupname{\#1}{\thisgrpname}%
  \section*\{\thisgrpname\}%
}
19455 \newcommand*\glstopicGroupHeading[1]{}
```

\glstopicItem

```
\glstopicItem{\i<label>}{\i<location_list>}
```

```
19456 \newcommand*\glstopicItem[2]{%
19457   \glspar\glstopicPreSkip\glspar\noindent
19458   \glstopicMarker{#1}%
19459   \glstopicTitleFont
19460   {%
19461     \glsentryitem{#1}\glstarget{#1}{\glstopicTitle{#1}}%
19462   }%
19463   \ifglshassdesc{#1}%
19464   {\glspar\nobreak\glstopicMidSkip\glspar\nobreak
19465     \afterheading\glstopicDesc{#1}\glspar\glstopicPostSkip}%
19466   {\glspar\nobreak\glstopicPostSkip}%
19467   \glstopicLoc{#1}{#2}%
19468 }
```

\glstopicMarker May be used to insert a bookmark etc if required.

```
19469 \newcommand*\glstopicMarker[1]{}
```

\glstopicName

```
19470 \newcommand*\glstopicTitle[1]{\Glossentryname{#1}%
19471   \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{}%
19472 }
```

```

topicTitleFont
19473 \newcommand*{\glstopicTitleFont}[1]{\textbf{\large #1}}


\glstopicDesc
19474 \newcommand*{\glstopicDesc}[1]{\Glossentrydesc{#1}\glspostdescription{}}
```

\glstopicLoc

```
19475 \newcommand*{\glstopicLoc}[2]{}
```

topicParIndent

```
19476 \newlength\glstopicParIndent
19477 \setlength\glstopicParIndent{20pt}
```

topicSubIndent

```
19478 \newlength\glstopicSubIndent
19479 \setlength\glstopicSubIndent{20pt}
```

\glstopicInit

```
19480 \newcommand{\glstopicInit}{} 
```

AssignSubIndent

```
\glstopicAssignSubIndent{\<level>}
```

Used to set the indentation for sub-levels.

```

19481 \newcommand*{\glstopicAssignSubIndent}[1]{%
19482   \par
19483   \parindent\dimexpr#1\glstopicSubIndent-\glstopicSubIndent\relax
19484   \glstopicAssignWidest{#1}%
19485   \glstopicsubitemhangindent=\dimexpr\parindent+\glstopicwidest\relax
19486   \hangindent\glstopicsubitemhangindent\relax
19487   \everypar{\hangindent\glstopicsubitemhangindent\relax
19488     \parindent\dimexpr\glstopicSubItemParIndent+\glstopicsubitemhangindent\relax}%
19489 }
```

bitemhangindent

```
19490 \newlength\glstopicsubitemhangindent
```

ubItemParIndent

```
19491 \newlength\glstopicSubItemParIndent
19492 \glstopicSubItemParIndent\parindent
```

\glstopicwidest

```
19493 \newlength\glstopicwidest
```

picAssignWidest

```
\glstopicAssignWidest{\level}
```

Used in the definition of \glstopicAssignSubIndent to set the indentation from the widest name for the given level. This will require glossary-tree to set the values.

```
19494 \newcommand*\glstopicAssignWidest[1]{%
19495   \ifcsundef{@glswidestlength\romannumeral#1}%
19496   {%
19497     \ifcsdef{@glswidestname\romannumeral#1}%
19498     {%
19499       \settowidth{\glstopicwidest}{%
19500         \glstopicSubNameFont{\csuse{@glswidestname\romannumeral#1}}%
19501         \glstopicSubItemSep
19502       }%
19503     }%
19504     {\setlength{\glstopicwidest}{0pt}}%
```

Save the value so that it doesn't have to keep being recalculated.

```
19505   \csedef{@glswidestlength\romannumeral#1}{\the\glstopicwidest}%
19506   }%
19507   {\setlength{\glstopicwidest}{\csuse{@glswidestlength\romannumeral#1}}}%
19508 }
```

glstopicPreSkip

```
19509 \newcommand*\glstopicPreSkip{\medskip}
```

glstopicMidSkip

```
19510 \newcommand*\glstopicMidSkip{\smallskip}
```

lstopicPostSkip

```
19511 \newcommand*\glstopicPostSkip{\smallskip}
```

glstopicSubItem

```
\glstopicSubItem{\level}{\label}{\location list}
```

```
19512 \newcommand*\glstopicSubItem[3]{%
19513   \glstopicSubItemBox{#1}{\glstopicSubNameFont{\glsentryitem{#2}}%
19514     \glstarget{#2}{\glossentryname{#2}}}}%
19515   \glstopicSubItemSep
19516 }%
19517 \ifglsassymbol{#2}{(\glosstrysymbol{#2})\space}{%
19518 \ifglsdesc{#2}{%
19519   {\glossentrydesc{#2}\glspostdescription\glstopicSubPreLocSep}{}%
19520 \glstopicSubLoc{#2}{#3}}%
19521 }
```

```

topicSubItemSep
19522 \newcommand*{\glstopicSubItemSep}{\quad}

topicSubItemBox
\glstopicSubItemBox{\langle level \rangle}{\langle text \rangle}

19523 \newcommand*{\glstopicSubItemBox}[2]{%
19524   \ifdim\glstopicwidest>0pt\relax\makebox[\glstopicwidest][1]{#2}\else#2\fi
19525 }

topicSubNameFont
19526 \newcommand*{\glstopicSubNameFont}[1]{\textbf{#1} }

topicSubPreLocSep
19527 \newcommand*{\glstopicSubPreLocSep}{\space}

\glstopicSubLoc
19528 \newcommand*{\glstopicSubLoc}[2]{#2}

\glstopicCols
19529 \newcommand*{\glstopicCols}{2}

glstopicColsEnv
19530 \newcommand*{\glstopicColsEnv}{multicols}

topicmccols
19531 \newglossarystyle{topicmccols}{%
19532   \renewenvironment{theglossary}{%
19533     {%
19534       \glstopicInit
19535       \def\glstopic@prechildren{}%
19536       \def\glstopic@postchildren{}%
19537       \def\glstopic@prevlevel{-1}%
19538     }%
19539     {%
19540       \ifnum\glstopic@prevlevel>0\relax\glstopic@postchildren\fi
19541       \par
19542     }%
19543     \renewcommand*{\glossaryheader}{%
19544     \renewcommand*{\glsgroupheading}[1]{%
19545       \ifnum\glstopic@prevlevel>0\relax\glstopic@postchildren\fi
19546       \def\glstopic@prevlevel{-1}%
19547       \glstopicGroupHeading{##1}%
19548     }%
19549     \renewcommand{\glossentry}[2]{%

```

```

19550 \ifnum\glstopic@prevlevel>0\relax\glstopic@postchildren\fi
19551 \def\glstopic@prevlevel{0}%
19552 \hangindent0pt\relax
19553 \parindent\glstopicParIndent\relax
19554 \glstopicItem{##1}{##2}%
19555 \ifnum\glstopicCols>1\relax

If there isn't a description, penalise a page break.

19556 \ifglshasdesc{##1}%
19557 {%
19558   \edef\glstopic@prechildren{%
19559     \noexpand\begin{\glstopicColsEnv}{\glstopicCols}%
19560   }%
19561 }%
19562 {%
19563   \edef\glstopic@prechildren{%
19564     \noexpand\nopagebreak
19565     \noexpand\begin{\glstopicColsEnv}{\glstopicCols}%
19566   }%
19567 }%
19568   \edef\glstopic@postchildren{\noexpand\end{\glstopicColsEnv}}%
19569 \fi
19570 }%
19571 \renewcommand{\subglossentry}[3]{%
19572   \ifnum\glstopic@prevlevel=0\relax\glstopic@prechildren\fi
19573   \def\glstopic@prevlevel{##1}%
19574   \glstopicAssignSubIndent{##1}%
19575   \glstopicSubItem{##1}{##2}{##3}%
19576 }%
19577 \renewcommand*\glsgroupskip{}%
19578 }

```

Glossary

bib2gls A command line Java application that selects entries from a .bib file and converts them to glossary definitions (like `bibtex` but also performs hierarchical sorting and collation, thus omitting the need for `xindy` or `makeindex`). Further details at: [http://www.dickimaw-books.com/software/bib2gls/..](http://www.dickimaw-books.com/software/bib2gls/)

First use The first time a glossary entry is used (from the start of the document or after a reset) with one of the following commands: `\gls`, `\Gls`, `\GLS`, `\glspl`, `\Glspl`, `\GLSpl` or `\glsdisp`. *see* **First use flag** & **First use text**

First use flag A conditional that determines whether or not the entry has been used according to the rules of **first use**.

First use text The text that is displayed on **first use**, which is governed by the first and first-plural keys of `\newglossaryentry`. (May be overridden by `\glsdisp`.)

makeindex An indexing application.

xindy An flexible indexing application with multilingual support written in Perl.

Change History

0.1 (2015-11-22)

General: Initial experimental release 4

0.2 (2015-11-30)

\Glsfmtshort: new 379
\glsfmtshort: new 378
\Glsfmtshortpl: new 379
\glsfmtshortpl: new 379
short: switched inline full form to short
(long) 265

0.3 (2015-12-02)

\@ACRlong: added redefinition 97
\@ACRlongpl: added redefinition 98
\@ACRshort: added redefinition 95
\@ACRshortpl: added redefinition 96
\@Acrlong: added redefinition 96
\@Acrlongpl: added redefinition 98
\@Acrshort: added redefinition 94
\@Acrshortpl: added redefinition 95
\@GLSdesc@: added redefinition 90
\@GLSdescplural@: added redefinition 91
\@GLSfirst@: added redefinition 88
\@GLSfirstplural@: added redefinition 89
\@GLSname@: added redefinition 90
\@GLSplural@: added redefinition 88
\@GLSsymbol@: added redefinition 91
\@GLSsymbolplural@: added
redefinition 92
\@GLStext@: added redefinition 87
\@GLSuseri@: added redefinition 92
\@GLSuserii@: added redefinition 92
\@GLSuseriii@: added redefinition 93
\@GLSuseriv@: added redefinition 93
\@GLSuserv@: added redefinition 93
\@GLSuservi@: added redefinition 93
\@Glsdesc@: added redefinition 90
\@Glsdescplural@: added redefinition 90
\@Glsfirst@: added redefinition 87
\@Glsfirstplural@: added redefinition 89
\@Glsname@: added redefinition 89
\@Gsplural@: added redefinition 88

\@Glssymbol@: added redefinition 91
\@Glssymbolplural@: added
redefinition 91
\@Gls{text@: added redefinition 87
\@Glsuseri@: added redefinition 92
\@Glsuserii@: added redefinition 92
\@Glsuseriii@: added redefinition 92
\@Glsuseriv@: added redefinition 93
\@Glsuserv@: added redefinition 93
\@Glsuservi@: added redefinition 93
\@Glsuserv@: added redefinition 93
\@Glsuservi@: added redefinition 93
\@Acrlong: added redefinition 96
\@Acrlongpl: added redefinition 97
\@acrshort: added redefinition 94
\@acrshortpl: added redefinition 95
\@gls@field@link: added optional
argument 77
\@glsdescplural@: added redefinition 90
\@glsfirst@: added redefinition 87
\@glsfirstplural@: added redefinition 88
\@glsplural@: added redefinition 88
\@glssymbolplural@: added
redefinition 91
\@glsxtr@defaultnoglossarywarning:
new 157
\@glsxtr@field@linkdefs: new 86
\@glsxtr@insertdots: new 229
\@print@glossary: added redefinition 154
\glsabbrvdefaultfont: renamed from
 \abbrvdefaultfont 235
\glsaccessdesc: new 187
\glsaccessdescplural: new 188
\glsaccessfirst: new 185
\glsaccessfirstplural: new 186
\Glsaccesslong: new 190
\glsaccesslong: new 190
\glsaccessname: new 183
\glsaccessplural: new 184
\Glsaccessshort: new 189
\glsaccessshort: new 189
\Glsaccessshortpl: new 189

\glsaccessshortpl: new	189
\glsaccesssymbol: new	186
\glsaccesssymbolplural: new	187
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\glslongpltok: new	229
\glsshortpltok: new	229
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\GLSxtrlongpl: new	246
\Glsxtrlongpl: new	245
\glsxtrlongpl: new	245
\glsxtrNoGlossaryWarning: new ..	24
\glsxtrpostlinkAddDescOnFirstUse: new	226
\glsxtrpostlinkAddSymbolOnFirstUse: new	226
\glsxtrpostlinkendsentence: new ..	225
\GLSxtrshortpl: new	244
\Glsxtrshortpl: new	243
\glsxtrshortpl: new	243
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long-short-desc: fixed name to use \glslabeltok	255
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{@glsxtr@doabbreviationsdef: added redefinition of \acronymtype	20
\Glsfmtshort: changed to use \Glsxtrshort	379
\glsfmtshort: changed to use \glsxtrshort	378
\Glsfmtshortpl: changed to use \glsxtrshortpl	379
\glsfmtshortpl: changed to use \glsxtrshortpl	379
\glsxtrifemptyglossary: new	34
\glsxtrnewnumber: added extra argument	206
\glsxtrnewsymbol: added extra argument	206
\MakeAcronymsAbbreviations: set the default type to \acronymtype	136
\newterm: fixed name argument	205
0.5 (2015-12-07)	
{@cGLS: new	126
{@cGLS@: new	126
{@cGLSpl: new	127
{@cGLSpl@: new	127
{@glsxtr@setentrycountunsetattr: new	122
\cGLS: new	126
\cGLSformat: new	126
\cGLSpl: new	126
\cGLSplformat: new	127
\GlossariesExtraWarningNoLine: new	18
\glsenableentrycount: new	122
\glsfirstabrvdefaultfont: new ..	235
\glsfirstlongdefaultfont: new ..	235
\Glsfmtfirst: new	382
\glsfmtfirst: new	382
\Glsfmtfirstpl: new	383
\glsfmtfirstpl: new	383
\Glsfmtplural: new	381
\glsfmtplural: new	381
\Glsfmtshort: changed to use \Glsxtrtitleshort	379
renamed from \Glsentryfmtshort ..	379
\glsfmtshort: changed to use \glsxtrtitleshort	378
renamed from \glsentryfmtshort ..	378
\Glsfmtshortpl: changed to use \Glsxtrtitleshortpl	379
renamed from \Glsentryfmtshortpl	379
\glsfmtshortpl: changed to use \glsxtrtitleshortpl	379
renamed from \glsentryfmtshortpl	379
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\glsfmttext: new	380
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\glsxtrscsuffix: new	273
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\glsxtrsmsuffix: new	289
short-em: new	314
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short-sc-footnote: new	284
short-sc-postfootnote: new	286
short-sm: new	293
short-sm-desc: new	295
short-sm-footnote: new	300
short-sm-long: new	291
short-sm-long-desc: new	293
short-sm-postfootnote: new	303
long-noshort-em: new	318
long-noshort-em-desc: new	322
long-noshort-sm: new	297
long-noshort-sm-desc: new	299
long-short-em: new	306
long-short-em-desc: new	307
long-short-sm: new	290
long-short-sm-desc: new	291
0.5.1 (2015-12-02)	
\Glsaccesstext: new	184
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\@glsxtr@doacccsupp: new	23
General: removed \ifglsxtruseuchhead	368
\Glsaccessdesc: new	188
\Glsaccessdescplural: new	188
\Glsaccessfirst: new	185
\Glsaccessfirstplural: new	186
\Glsaccessname: new	184
\Glsaccessplural: new	185
\Glsaccesssymbol: new	186
\Glsaccesssymbolplural: new	187
\Glsxtrheadfirst: now uses headuc attribute	373
\glsxtrheadfirst: now uses headuc <br attribute<="" td=""><td>373</td></br attribute>	373
\Glsxtrheadfirstplural: now uses headuc attribute	374
\glsxtrheadfirstplural: now uses headuc attribute	373
\Glsxtrheadplural: now uses headuc attribute	372
\glsxtrheadplural: now uses headuc attribute	372
\Glsxtrheadshort: now uses headuc attribute	369
\glsxtrheadshort: now uses headuc attribute	368
\Glsxtrheadshortpl: now uses headuc attribute	369
\glsxtrheadshortpl: now uses headuc <br attribute<="" td=""><td>368</td></br attribute>	368
\Glsxtrheadtext: now uses headuc <br attribute<="" td=""><td>371</td></br attribute>	371
\glsxtrheadtext: now uses headuc <br attribute<="" td=""><td>371</td></br attribute>	371
short-em-footnote: switch off regular attribute if set	326
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short-long: switch off regular attribute if set	256
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short-sc-footnote: switch off regular attribute if set	284
short-sc-footnote-desc: switch off regular attribute if set	286
short-sm-footnote: switch off regular attribute if set	301
short-sm-footnote-desc: switch off regular attribute if set	303
long-short: switch off regular attribute if set	253
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0.5.2 (2015-12-08)	
\@GLSdesc@: added accessibility support	90
\@GLSdescplural@: added accessibility support	91
\@GLSfirst@: added accessibility support	88
\@GLSfirstplural@: added accessibility support	89
\@GLSname@: added accessibility support	90
\@GLSplural@: added accessibility support	88
\@GLSsymbol@: added accessibility support	91
\@GLSsymbolplural@: added accessibility support	92

\@GLStext@: added accessibility support	87	\GLSaccesslongpl: new	190, 200
\@Glsdesc@: added accessibility support	90	\Glsaccesslongpl: new	190
\@Glsdescplural@: added accessibility support	90	\glsaccesslongpl: new	190
\@Glsfirst@: added accessibility support	87	\GLSaccessname: new	184, 197
\@Glsfirstplural@: added accessibility support	89	\GLSaccessplural: new	185, 197
\@Glsname@: add accessibility support ..	89	\GLSaccessshort: new	189, 199
\@Glsplural@: added accessibility support	88	\GLSaccessshortpl: new	190, 199
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