

glossaries-extra.sty v1.46: 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}[2021/09/20 v1.46 (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   \@onelvel@sanitize\@glsxtr@theentrycounter
182   \@onelvel@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
399 % \end{macrocode}
400 % Hybrid record (use bib2gls to fetch definitions) and index (use
401 % makeindex/xindy to sort and collate).
402 % \begin{macrocode}
403  \def\glsxtr@setup@record{%
404      \renewcommand*{\glsxtr@record@setting@alsoindex}{hybrid}%
405      \renewcommand*{\@do@seeglossary}{\glsxtr@dosee@alsoindex@glossary}%
406      \let\glsxtr@record\glsxtr@record
407      \let\@do@wrglossary\glsxtr@do@alsoindex@wrglossary
408      \let\gls@saveentrycounter\glsxtr@indexonly@saveentrycounter
409      \let\glsxtrundefaction\glsxtr@warn@undefaction
410      \let\glsxtr@warnonexistsordo\glsxtr@warn@onexistsordo
411      \glsxtr@addloclistfield
412      \let\@glsxtr@recordcounter\glsxtr@op@recordcounter
413      \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}%
414      \undef\glsxtrsetaliasnoindex
415  }%
416 \fi
417 }

```

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).
 418 `\newcommand*{\glsxtr@docdefval}{0}`

Need to provide conditional commands that are backward compatible:

`if@glsxtrdocdef`

```

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

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

sxtrdocdeffalse
421 \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.
422 \define@choicekey{glossaries-extra.sty}{docdef}
423 [\@glsxtr@docdefsetting\@glsxtr@docdefval]%
424 {false,true,restricted,atom}[true]%
425 {%
426 \ifnum@glsxtr@docdefval>1\relax
427 \renewcommand*{\@glsdoifexistsorwarn}{\glsdoifexists}%
428 \else
429 \renewcommand*{\@glsdoifexistsorwarn}{\glsdoifexistsorwarn}%
430 \fi
431 }

```

ocdefrestricted

```

432 \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).
433 \newcommand*{\@glsdoifexistsorwarn}{\glsdoifexistsorwarn}

indexcrossrefs Automatically index cross references at the end of the document
434 \define@boolkey{glossaries-extra.sty}[@glsxtr]{indexcrossrefs}[true]{%
435 \if@glsxtrindexcrossrefs
436 \else
437 \renewcommand*{\@glsxtr@autoindexcrossrefs}{}%
438 \fi
439 }

    Switch off since this can increase the build time.
440 \glsxtrindexcrossrefsfalse

    But allow see key to switch it on automatically.

oindexcrossrefs
441 \newcommand*{\@glsxtr@autoindexcrossrefs}{\@glsxtrindexcrossrefstrue}

```

`autoseeindex` Provide a boolean option to allow the user to prevent the automatic indexing of the cross-referencing keys `see`, `seealso` and `alias`.

```
442 \define@boolkey{glossaries-extra.sty}[@glsxtr@]{autoseeindex}[true]{%
443 }
444 \@glsxtr@autoseeindextrue
```

`equations` Provide a boolean option to automatically switch to the equation counter when in a numbered maths environment.

```
445 \define@boolkey{glossaries-extra.sty}[@glsxtr@]{equations}[true]{%
446 }
447 \@glsxtr@equationsfalse
```

`\glsxtr@float`

```
448 \let\glsxtr@float\@float
```

`\glsxtr@dblfloat`

```
449 \let\glsxtr@dblfloat\@dblfloat
```

`floats` Provide a boolean option to automatically switch to the the corresponding counter when in a float.

```
450 \define@boolkey{glossaries-extra.sty}[@glsxtr@]{floats}[true]{%
451   \if@glsxtr@floats
452     \renewcommand*{\@float}[1]{\renewcommand{\glscounter}{##1}\glsxtr@float{##1}}%
453     \renewcommand*{\@dblfloat}[1]{\renewcommand{\glscounter}{##1}\glsxtr@dblfloat{##1}}%
454   \else
455     \let\@float\glsxtr@float
456     \let\@dblfloat\glsxtr@dblfloat
457   \fi
458 }
459 \@glsxtr@floatsfalse
```

`iesExtraWarning` Allow users to suppress warnings.

```
460 \newcommand*{\GlossariesExtraWarning}[1]{\PackageWarning{glossaries-extra}{#1}}
```

`raWarningNoLine` Allow users to suppress warnings.

```
461 \newcommand*{\GlossariesExtraWarningNoLine}[1]{%
462   \PackageWarningNoLine{glossaries-extra}{#1}}
463 \@glsxtr@declareoption{nowarn}{%
464   \let\GlossariesExtraWarning\@gobble
465   \let\GlossariesExtraWarningNoLine\@gobble
466   \glsxtr@dooption{nowarn}}%
467 }
```

`xtr@defpostpunc` Redefines `\glspostdescription`. The `postdot` and `nopostdot` options will have to redefine this.

```
468 \newcommand*{\@glsxtr@defpostpunc}{}%
```

postdot Shortcut for `nopostdot=false`

```

469 \@glsxtr@declareoption{postdot}{%
470   \glsxtr@dooption{nopostdot=false}%
471   \renewcommand*\{@glsxtr@defpostpunc}{%
472     \renewcommand*\@glspostdescription}{%
473       \ifglsnopostdot\else.\spacefactor\sfcodespace\fi}%
474   }%
475 }

```

`nopostdot` Needs to redefine `\@glsxtr@defpostpunc`

```

476 \define@choicekey{glossaries-extra.sty}{nopostdot}{true, false}[true]{%
477   \glsxtr@dooption{nopostdot=#1}%
478   \renewcommand*\{@glsxtr@defpostpunc}{%
479     \renewcommand*\@glspostdescription}{%
480       \ifglsnopostdot\else.\spacefactor\sfcodespace\fi}%
481   }%
482 }

```

`postpunc` Set the post-description punctuation. This also sets the `\ifglsnopostdot` conditional, which now indicates if the post-description punctuation has been suppressed.

```

483 \define@key{glossaries-extra.sty}{postpunc}{%
484   \glsxtr@dooption{nopostdot=false}%
485   \ifstreq{\#1}{dot}%
486   {%
487     \renewcommand*\{@glsxtr@defpostpunc}{%
488       \renewcommand*\@glspostdescription}{.\spacefactor\sfcodespace\fi}%
489     }%
490   }%
491   {%
492     \ifstreq{\#1}{comma}%
493     {%
494       \renewcommand*\{@glsxtr@defpostpunc}{%
495         \renewcommand*\@glspostdescription}{,\spacefactor\sfcodespace\fi}%
496       }%
497     }%
498     {%
499       \ifstreq{\#1}{none}%
500       {%
501         \glsxtr@dooption{nopostdot=true}%
502         \renewcommand*\{@glsxtr@defpostpunc}{%
503           \renewcommand*\@glspostdescription}{\spacefactor\sfcodespace\fi}%
504         }%
505       }%
506       {%
507         \renewcommand*\{@glsxtr@defpostpunc}{%
508           \renewcommand*\@glspostdescription}{\#1\spacefactor\sfcodespace\fi}%
509         }%
510       }%
511     }%

```

```

512  }%
513 }

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

bbreviationsdef Set by abbreviations option.
515 \newcommand*{\@glsxtr@abbreviationsdef}{}{}

bbreviationsdef
516 \newcommand*{\@glsxtr@doabbreviationsdef}{%
517   \@ifpackageloaded{babel}{%
518     {\providecommand{\abbreviationsname}{\acronymname}}{%
519      {\providecommand{\abbreviationsname}{Abbreviations}}{%
520        \newglossary[glg-abr]{abbreviations}{gls-abr}{glo-abr}{\abbreviationsname}{%
521          \renewcommand*{\glsxtrabbrvtype}{abbreviations}}{%
522            \newcommand*{\printabbreviations}[1][]{%
523              \printglossary[type=\glsxtrabbrvtype,##1]}%
524          }%
525        \disable@keys{glossaries-extra.sty}{abbreviations}}{%
526          If the acronym option hasn't been used, change \acronymtype to \glsxtrabbrvtype.
527          \ifglsacronym{%
528            \renewcommand*{\acronymtype}{\glsxtrabbrvtype}}{%
529          }%
530        }%
531        \let\@glsxtr@declareoption{abbreviations}{}{%
532          \let\@glsxtr@abbreviationsdef\@glsxtr@doabbreviationsdef{%
533        }%
534        \newcommand*{\GlsXtrDefineAbbreviationShortcuts}{%
535          \newcommand*{\ab}{\cglsls}{%
536            \newcommand*{\abp}{\cglspl}{%
537              \newcommand*{\as}{\glsxtrshort}{%
538                \newcommand*{\asp}{\glsxtrshortpl}{%
539                  \newcommand*{\al}{\glsxtrlong}{%
540                    \newcommand*{\alp}{\glsxtrlongpl}{%
541                      \newcommand*{\af}{\glsxtrfull}{%
542                        \newcommand*{\afp}{\glsxtrfullpl}{%
543                          \newcommand*{\Ab}{\cGls}{%
544                            \newcommand*{\Abp}{\cGlspl}{%
545                              \newcommand*{\As}{\Glsxtrshort}{%
546                                \newcommand*{\Asp}{\Glsxtrshortpl}{%

```

```

547 \newcommand*{\A1}{\Glsxtrlong}%
548 \newcommand*{\Alp}{\Glsxtrlongpl}%
549 \newcommand*{\Af}{\Glsxtrfull}%
550 \newcommand*{\Afp}{\Glsxtrfullpl}%
551 \newcommand*{\AB}{\cGLS}%
552 \newcommand*{\ABP}{\cGLSpl}%
553 \newcommand*{\AS}{\GLSxtrshort}%
554 \newcommand*{\ASP}{\GLSxtrshortpl}%
555 \newcommand*{\AL}{\GLSxtrlong}%
556 \newcommand*{\ALP}{\GLSxtrlongpl}%
557 \newcommand*{\AF}{\GLSxtrfull}%
558 \newcommand*{\AFP}{\GLSxtrfullpl}%

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

```

Disable this command after it's been used.

```

560 \let\GlsXtrDefineAbbreviationShortcuts\relax
561 }

```

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

```

562 \newcommand*{\GlsXtrDefineAcShortcuts}%
563 \newcommand*{\ac}{\cgls}%
564 \newcommand*{\acp}{\cglspl}%
565 \newcommand*{\acs}{\glsxtrshort}%
566 \newcommand*{\acsp}{\glsxtrshortpl}%
567 \newcommand*{\acl}{\glsxtrlong}%
568 \newcommand*{\aclp}{\glsxtrlongpl}%
569 \newcommand*{\acf}{\glsxtrfull}%
570 \newcommand*{\acfp}{\glsxtrfullpl}%
571 \newcommand*{\Ac}{\cGls}%
572 \newcommand*{\Acp}{\cGlspl}%
573 \newcommand*{\Acs}{\Glsxtrshort}%
574 \newcommand*{\Acsp}{\Glsxtrshortpl}%
575 \newcommand*{\Acl}{\Glsxtrlong}%
576 \newcommand*{\Aclp}{\Glsxtrlongpl}%
577 \newcommand*{\Acf}{\Glsxtrfull}%
578 \newcommand*{\Acfp}{\Glsxtrfullpl}%
579 \newcommand*{\AC}{\cGLS}%
580 \newcommand*{\ACP}{\cGLSpl}%
581 \newcommand*{\ACS}{\GLSxtrshort}%
582 \newcommand*{\ACSP}{\GLSxtrshortpl}%
583 \newcommand*{\ACL}{\GLSxtrlong}%
584 \newcommand*{\ACLP}{\GLSxtrlongpl}%
585 \newcommand*{\ACF}{\GLSxtrfull}%
586 \newcommand*{\ACFP}{\GLSxtrfullpl}%

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

```

Disable this command after it's been used.

```
588 \let\GlsXtrDefineAcShortcuts\relax
589 }
```

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

```
590 \newcommand*{\GlsXtrDefineOtherShortcuts}{%
591   \newcommand*{\newentry}{\newglossaryentry}%
592   \ifdef\printsymbols
593   {%
594     \newcommand*{\newsym}{\glsxtrnewsymbol}%
595   }{%
596   \ifdef\printnumbers
597   {%
598     \newcommand*{\newnum}{\glsxtrnewnumber}%
599   }{%
600   \let\GlsXtrDefineOtherShortcuts\relax
601 }
```

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.

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

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

```
603 \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).

```
604 \define@choicekey{glossaries-extra.sty}{shortcuts}{%
605   [\@glsxtr@shortcutsval\@glsxtr@shortcutsnr]%
606   {acronyms,acro,abbreviations,abbr,other,all,true,ac,none,false}[true]{%
607     \ifcase\@glsxtr@shortcutsnr\relax % acronyms
608       \renewcommand*{\@glsxtr@setupshortcuts}{%
609         \glsacrshortcutstrue
610         \DefineAcronymSynonyms
611       }%
612     \or % acro
613       \renewcommand*{\@glsxtr@setupshortcuts}{%
614         \glsacrshortcutstrue
615         \DefineAcronymSynonyms
616       }%
617     \or % abbreviations
618       \renewcommand*{\@glsxtr@setupshortcuts}{%
619         \GlsXtrDefineAbbreviationShortcuts
620       }%
621   }%
622 }
```

```

620      }%
621      \or % abbr
622      \renewcommand*{\@glsxtr@setupshortcuts}{%
623          \GlsXtrDefineAbbreviationShortcuts
624      }%
625      \or % other
626      \renewcommand*{\@glsxtr@setupshortcuts}{%
627          \GlsXtrDefineOtherShortcuts
628      }%
629      \or % all
630      \renewcommand*{\@glsxtr@setupshortcuts}{%
631          \glsacrshortcutstrue
632          \GlsXtrDefineAcShortcuts
633          \GlsXtrDefineAbbreviationShortcuts
634          \GlsXtrDefineOtherShortcuts
635      }%
636      \or % true
637      \renewcommand*{\@glsxtr@setupshortcuts}{%
638          \glsacrshortcutstrue
639          \GlsXtrDefineAcShortcuts
640          \GlsXtrDefineAbbreviationShortcuts
641          \GlsXtrDefineOtherShortcuts
642      }%
643      \or % ac
644      \renewcommand*{\@glsxtr@setupshortcuts}{%
645          \glsacrshortcutstrue
646          \GlsXtrDefineAcShortcuts
647      }%

```

Leave none and false as last option.

```

648      \else % none, false
649      \renewcommand*{\@glsxtr@setupshortcuts}{}%
650      \fi
651 }

```

lsxtr@doaccsupp

```
652 \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.

```

653 \@glsxtr@declareoption{accsupp}{%
654   \renewcommand*{\@glsxtr@doaccsupp}{\RequirePackage{glossaries-accsupp}}}

```

tr@doloadprefix

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

```

prefix If prefix, load glossaries-prefix package.
656 \@glsxtr@declareoption{prefix}{%
657   \renewcommand*{\@glsxtr@doloadprefix}{\RequirePackage{glossaries-prefix}}}

GlossaryWarning Warning text displayed in document if the external glossary file given by the argument is missing.
658 \newcommand{\glsxtrNoGlossaryWarning}[1]{%
659   \GlossariesExtraWarning{Glossary '#1' is missing}%
660   \@glsxtr@defaultnoglossarywarning{#1}%
661 }

omissingglstext If true, suppress the text and warning produced if the external glossary file is missing.
662 \define@choicekey{glossaries-extra.sty}{nomissingglstext}%
663 [\@glsxtr@nomissingglstextval\@glsxtr@nomissingglstextnr]%
664 {true,false}[true]{%
665   \ifcase\@glsxtr@nomissingglstextnr\relax % true
666     \renewcommand{\glsxtrNoGlossaryWarning}[1]{\null}%
667   \else % false
668     \renewcommand{\glsxtrNoGlossaryWarning}[1]{%
669       \@glsxtr@defaultnoglossarywarning{#1}%
670     }%
671   \fi
672 }

```

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

```

xtr@redefstyles
673 \newcommand*{\@glsxtr@redefstyles}{}}

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

```

```

693     \eappto\@glsxtr@redefstyles{%
694         \noexpand\RequirePackage{glossary-\@glsxtr@tmp}}%
695     }%
696     {%
697         \PackageError{glossaries-extra}{%
698             {Glossaries style package `glossary-\@glsxtr@tmp.sty'%
699             doesn't exist (did you mean to use the 'style' key?)}%
700             {The list of values (#1) in the 'stylemods' key should%
701             match the glossary-xxx.sty files provided with%
702             glossaries.sty}}%
703     }%
704     }%
705     \appto\@glsxtr@redefstyles{\RequirePackage{glossaries-extra-stylemods}}%
706   }%
707 }%
708 }

```

glsxtr@do@style

```
709 \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.

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

Defer actual style change:

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

Set this as the default style:

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

Set this style:

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

```
714 }%
```

```
715 }
```

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.

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

cationHyperlink

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

The first two arguments are always control sequences.

```
717 \newcommand*{\GlsXtrInternalLocationHyperlink}[3]{%
718   \glsxtrhyperlink{#1#2#3}{#3}%
719 }
```

```

cationhyperlink
720 \newcommand*{\glsxtr@wrglossary@locationhyperlink}[3]{%
721   \pageref{wrglossary.#3}%
722 }

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.
723 \@glsxtr@declareoption{indexcounter}{%
724   \glsxtr@dooption{counter=wrglossary}%
725   \ifundef\c@wrglossary
726   {%
727     \newcounter{wrglossary}%
728     \renewcommand{\thewrglossary}{\arabic{wrglossary}}%
729   }%
730   {}%
731   \renewcommand*{\glsxtr@inc@wrglossaryctr}[1]{%}

Only increment if the current counter is wrglossary.
732   \ifdefstring@gls@counter{wrglossary}%
733   {%
734     \refstepcounter{wrglossary}%
735     \label{wrglossary.\thewrglossary}%
736   }%
737   {}%
738 }%
739 \renewcommand*{\GlsXtrInternalLocationHyperlink}[3]{%
740   \ifdefstring@glsentrycounter{wrglossary}%
741   {%
742     \glsxtr@wrglossary@locationhyperlink##1##2##3}%
743   }%
744   {\glsxtrhyperlink##1##2##3}%
745 }%
746 }

sxtrwrglossmark Marks the place where indexing occurs. Does nothing by default.
747 \newcommand*{\glsxtrwrglossmark}{}}

sxtrwrglossmark Since \glsadd can be used in the preamble, this action needs to be disabled until the start of the document.
748 \newcommand*{\@glsxtrwrglossmark}{}}
749 \AtBeginDocument{\renewcommand*{\@glsxtrwrglossmark}{\glsxtrwrglossmark}{}}

sxtrwrglossmark Does nothing by default.
750 \newcommand*{\glsxtrwrglossmark}{\ensuremath{\cdotp}}
```

```

debug Provide extra debug options.

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

```

Pass all other options to glossaries.

```

772 \\DeclareOptionX*{%
773   \\expandafter\\glsxtr@dooption\\expandafter{\\CurrentOption}}}

```

Process options.

```
774 \\ProcessOptionsX
```

Load glossaries if not already loaded.

```
775 \\RequirePackage{glossaries}
```

Load the glossaries-accsupp package if required.

```
776 \\glsxtr@doaccsupp
```

Load the glossaries-prefix package if required.

```
777 \\glsxtr@doloadprefix
```

Redefine \\glspostdescription if required.

```
778 \\glsxtr@defpostpunc
```

`\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.

```

779 \\ifdef\\glsshowtargetouter
780 {
781   \\renewcommand*{\\glsshowtarget}[1]{%
782     \\glsxtrtitleorpdforheading
783     {%
784       \\ifmmode

```

```

785      \nfss@text{\glsshowtargetfont [#1]}%
786      \else
787          \ifinner
788              {\glsshowtargetfont [#1]}%
789          \else
790              \glsshowtargetouter{#1}%
791          \fi
792      \fi
793  }%
794 { [#1]}%
795 {{\protect\glsshowtargetfont [#1]}}%
796 }
797 }
798 {

```

Old definition.

```

799 \def\glsshowtarget#1{%
800     \glsxtrtitleorpdforheading
801     {%
802         \ifmmode
803             \texttt{\small [#1]}%
804         \else
805             \ifinner
806                 \texttt{\small [#1]}%
807             \else
808                 \marginpar{\texttt{\small [#1]}}%
809             \fi
810         \fi
811     }%
812     { [#1]}%
813     {\texttt{\small [#1]}}%
814 }
815 }

```

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

r@doseeglossary This doesn't increment the associated counter.

```

817 \newcommand*{\@glsxtr@doseeglossary}[2]{%
818     \glsdoifexists{#1}{%
819     {%
820         \@@glsxtrwrglossmark
821         \glsxtr@org@doseeglossary{#1}{#2}%
822     }%
823 }

```

oindex@glossary

```

824 \newcommand*{\@glsxtr@dosee@alsoindex@glossary}[2]{%
825     \glsxtr@recordsee{#1}{#2}%

```

```

826  \@glsxtr@doseeglossary{#1}{#2}%
827 }

@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.)
828 \let\@glsxtr@org@gloautosee\@glo@autosee

    Check if user tried autoseeindex=false when it can't be supported.
829 \if@glsxtr@autoseeindex
830 \else
831   \ifdef\@glsxtr@org@gloautosee
832   {}%
833   {\PackageError{glossaries-extra}{`autoseeindex=false' package
834   option requires at least v4.30 of glossaries.sty}%
835   {You need to update the glossaries.sty package}%
836 }
837 \fi

@\glo@autosee If \@glo@autosee has been defined (glossaries v4.30 onwards), redefine it to test the au-
toseeindex option.
838 \ifdef\@glo@autosee
839 {%
840   \renewcommand*\@glo@autosee{%
841     \if@glsxtr@autoseeindex\@glsxtr@org@gloautosee\fi}%
842 }%
843 {}

checkseeallowed Don't prohibit the use of the see key before the indexing files have been opened if the auto-
matic see indexing has been disabled, since it's no longer an issue.
844 \renewcommand*\gls@checkseeallowed{%
845   \if@glsxtr@autoseeindex\gls@see@noindex\fi
846 }

    Define abbreviations glossaries if required.
847 \@glsxtr@abbreviationsdef
848 \let\@glsxtr@abbreviationsdef\relax

    Setup shortcuts if required.
849 \@glsxtr@setupshortcuts

    Redefine \@glsxtr@redef@forglsentries if required.
850 \@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:
851 \renewcommand{\glsxtr@dooption}[1]{\setupglossaries{#1}}%

```

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

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

Now define the user command:

```
853 \newcommand*{\glossariesextrasetup}[1]{%
854   \let\glsxtr@setup@record\relax
855   \let@\glsxtr@setupshortcuts\relax
856   \let@\glsxtr@redef@forglsentries\relax
857   \let@\glsxtr@doloadprefix\relax
858   \setkeys{glossaries-extra.sty}{#1}%
859   \glsxtr@abbreviationsdef
860   \let@\glsxtr@abbreviationsdef\relax
861   \glsxtr@setupshortcuts
862   \glsxtr@setup@record
863   \glsxtr@redef@forglsentries
864   \glsxtr@doloadprefix
865 }
```

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

```
866 \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.

```
867 \newcommand*{\glsxtr@do@wrglossary}[1]{%
868   \glsxtr@rwrglossmark
869   \glsxtr@inc@wrglossaryctr{#1}%
870   \glsxtr@org@do@wrglossary{#1}%
871 }
```

aveentrycounter Save original definition of @gls@saveentrycounter.

```
872 \let\glsxtr@saveentrycounter@gls@saveentrycounter
```

aveentrycounter Change @gls@saveentrycounter so that it only stores the entry counter information if the indexing is on.

```
873 \let@gls@saveentrycounter\glsxtr@indexonly@saveentrycounter
```

etcOUNTERPREFIX This command is provided by the base glossaries package, but is redefined here. The standard 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. Unfortunately, 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.

```
874 \renewcommand*{\gls@getcounterprefix}[2]{%
875   \protected@edef@gls@thisloc{#1}\protected@edef@gls@thisHloc{#2}%
876   \ifx@gls@thisloc@gls@thisHloc
877     \def@glo@counterprefix{}%
878   \else
879     \def@gls@get@counterprefix##1.#1##2\end@getprefix{%
880       \def@glo@tmp{##2}%
881     }
```

```

881     \ifx\@glo@tmp\@empty
882         \def\@glo@counterprefix{}%
883     \else
884         \def\@glo@counterprefix{\#1}%
885     \fi
886 }%
887 \gls@get@counterprefix#2.#1\end@getprefix
Warn if no prefix can be formed, unless record=nameref.

888 \ifx\@glo@counterprefix\@empty
889     \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
890     \else
891         \GlossariesExtraWarning{Hyper target '#2' can't be formed by
892             prefixing^^Jlocation '#1'. You need to modify the
893             definition of \string\theH\@gls@counter^^Jotherwise you
894             will get the warning: "name{\@gls@counter.#1}' has been^^J
895             referenced but does not exist"%
896         \ifx\@glsxtr@record@setting\@glsxtr@record@setting@only
897             . You may want to consider using record=nameref instead%
898         \fi}%
899     \fi
900 \fi
901 \fi
902 }

```

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

`sxtrdialecthook`

```
903 \newcommand*{\@glsxtrdialecthook}{}%
```

Set up record option if required.

```
904 \glsxtr@setup@record
```

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

```

905 \AtBeginDocument{%
906     \disable@keys{glossaries-extra.sty}{abbreviations,docdef,record}%
907     \def\@glsxtrundeftag{\glsxtrundeftag}%
908 }
```

1.2 Extra Utilities

`usedOrUndefined`

$\text{\GlsXtrIfUnusedOrUndefined}\{\langle label \rangle\}\{\langle true \rangle\}\{\langle false \rangle\}$

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

```

909 \newcommand*{\GlsXtrIfUnusedOrUndefined}[3]{%
910   \ifglsentryexists{#1}%
911   {\ifbool{glo@\glsdetoklabel{#1}@flag}{#3}{#2}}%
912   {#2}%
913 }

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

914 \ifdef\s@ifglossaryexists
915 {}
916 {

fglossaryexists
917 \renewcommand{\ifglossaryexists}{%
918   \@ifstar\s@ifglossaryexists\@ifglossaryexists
919 }

fglossaryexists
920 \newcommand{\@ifglossaryexists}[3]{%
921   \ifcsundef{\glotype@#1@out}{#3}{#2}%
922 }

fglossaryexists
923 \newcommand{\s@ifglossaryexists}[3]{%
924   \ifcsundef{\glolist@#1}{#3}{#2}%
925 }
926 }

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.)

```

927 \newcommand{\glsxtrifemptyglossary}[3]{%
928   \ifcsdef{\glolist@#1}{%
929   {}%
930   \ifcsstring{\glolist@#1}{,}{#2}{#3}}%
931   {}%
932   {}%
933   \glsxtrundefaction{Glossary type '#1' doesn't exist}{}%
934   #2%
935   {}%
936 }

```

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

```
937 \newcommand*{\glsxtrifkeydefined}[3]{%
938   \key@ifundefined{glossentry}{#1}{#3}{#2}%
939 }
```

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

```
940 \newcommand*{\glsxtrprovidestoragekey}{%
941   \@ifstar{\sglsxtr@provide@storagekey}{\glsxtr@provide@storagekey}%
942 }
```

vide@storagekey Unstarred version.

```
943 \newcommand*{\glsxtr@provide@storagekey}[3]{%
944   \key@ifundefined{glossentry}{#1}{%
945     {%
946       \define@key{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
947       \appto{\gls@keymap}{, {#1}{#1}}%
948       \appto{\newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
949       \appto{\newglossaryentryposthook}{%
950         \letcs{\glo@tmp}{@glo@#1}%
951         \gls@assign@field{#2}{\glo@label}{#1}{\glo@tmp}}%
952     }%
953 }
```

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

```
953   \ifblank{#3}%
954   {}%
955   {%
956     \newcommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
957   }%
958 }%
959 {%
```

Provide the no-link command if not already defined.

```
960   \ifblank{#3}%
961   {}%
962   {%
963     \providecommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
964   }%
965 }%
966 }
```

vide@storagekey Starred version.

```
967 \newcommand*{\glsxtr@provide@storagekey}[1]{%
968   \key@ifundefined{glossentry}{#1}{%
969     {%
970       \expandafter{\newcommand\expandafter*\expandafter}%
971       {\csname gls@assign@#1@field\endcsname}[2]{%
972         \gls@expand@field{##1}{#1}{##2}}%
973     }%
```

```

974 }%
975 {}%
976 \glsxstr@provide@addstoragekey{#1}%
977 }

```

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
978 \newcommand{\GlsXtrFmtField}[useri]
```

```
tDefaultOptions
979 \newcommand{\GlsXtrFmtDefaultOptions}[noindex]
```

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

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

`\@glsxtrfmt` Unstarred form.

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

`\s@glsxtrfmt` Starred form.

```
982 \newcommand*{\s@glsxtrfmt}[3][]{%
983   \new@ifnextchar{\s@glsxtrfmt{#1}{#2}{#3}}{%
984     {\@glsxtrfmt{#1}{#2}{#3}{}}%
985   }}
```

`\s@@glsxtrfmt` Pick up final optional argument.

```
986 \def\s@@glsxtrfmt#1#2#3[#4]{\@@glsxtrfmt{#1}{#2}{#3}{#4}}
```

`\@@glsxtrfmt` Actual inner working.

```
987 \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).

```
988 \begingroup
989   \def\glslabel{#2}%
990   \glsdoifexistsordo{#2}%
991   {%
992     \ifglshasfield{\GlsXtrFmtField}{#2}%
993     {%
994       \let\do@gls@link@checkfirsthyper\relax
995       \expandafter\gls@link\expandafter[\GlsXtrFmtDefaultOptions,#1]{#2}%
996       {\glsxtrfmtdisplay{\glscurrentfieldvalue}{#3}{#4}}%
997     }%
998     {\glsxtrfmtdisplay{@firstofone}{#3}{#4}}%
999   }%
1000 }
```

Has the default `noindex` been counteracted? If so, this needs `\glsadd` in case `bib2gls` needs to pick up the record.

```

1001 \begingroup
1002   @gls@setdefault@glslink@opts
1003   \setkeys{glslink}{\GlsXtrFmtDefaultOptions,#1}%
1004   \ifKV@glslink@noindex\else\glsadd{\#2}\fi
1005 \endgroup
1006 \glsxtrfmtdisplay{@firstofone}{#3}{#4}%
1007 }%
1008 \endgroup
1009 }
```

`\glsxtrfmtdisplay` The command used internally by `\glsxtrfmt` to do the actual formatting. The first argument is the control sequence name, the second is the control sequence's argument, the third is the inserted material (if starred form used).

```
1010 \newcommand{\glsxtrfmtdisplay}[3]{\csuse{\#1}{\#2}{#3}}
```

`\glsxtryentryfmt` No link or indexing.

```

1011 \ifdef\texorpdfstring
1012 {
1013   \newcommand*\glsxtryentryfmt[2]{%
1014     \texorpdfstring{\glsxtryentryfmt{\#1}{\#2}}{\glsxtrpdfentryfmt{\#1}{\#2}}%
1015   }
1016 }
1017 {
1018   \newcommand*\glsxtryentryfmt{\glsxtryentryfmt}
1019 }
```

`\glsxtrpdfentryfmt` Use for the PDF bookmarks.

```
1020 \newcommand*\glsxtrpdfentryfmt[2]{\#2}
```

`\glsxtryentryfmt`

```
1021 \newrobustcmd*\glsxtryentryfmt[2]{%
```

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

```

1022 {%
1023   \protected@edef\glslabel{\#1}%
1024   \glsdoifexistsordof{\#1}%
1025 {%
1026   \ifglshasfield{\GlsXtrFmtField}{\#1}%
1027   {%
1028     \csuse{\glscurrentfieldvalue}{\#2}%
1029   }%
1030   {\#2}%
1031 }%
1032 {\#2}%
1033 }%
1034 }
```

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.

```
1035 \newcommand*{\glsxtrfieldlistadd}[3]{%
1036   \listcsadd{glo@\glsdetoklabel{#1}@#2}{#3}%
1037 }
```

trfieldlistgadd Similarly but uses `\listcsgadd`.

```
1038 \newcommand*{\glsxtrfieldlistgadd}[3]{%
1039   \listcsgadd{glo@\glsdetoklabel{#1}@#2}{#3}%
1040 }
```

trfieldlisteadd Similarly but uses `\listcseadd`.

```
1041 \newcommand*{\glsxtrfieldlisteadd}[3]{%
1042   \listcseadd{glo@\glsdetoklabel{#1}@#2}{#3}%
1043 }
```

trfieldlistxadd Similarly but uses `\listcsxadd`.

```
1044 \newcommand*{\glsxtrfieldlistxadd}[3]{%
1045   \listcsxadd{glo@\glsdetoklabel{#1}@#2}{#3}%
1046 }
```

Now provide commands to iterate over these lists.

fielddolistloop

```
1047 \newcommand*{\glsxtrfielddolistloop}[2]{%
1048   \dolistcsloop{glo@\glsdetoklabel{#1}@#2}%
1049 }
```

ieldforlistloop

```
1050 \newcommand*{\glsxtrfieldforlistloop}[3]{%
1051   \forlistcsloop{#3}{glo@\glsdetoklabel{#1}@#2}%
1052 }
```

fieldformatlist

```
1053 \newrobustcmd*{\glsxtrfieldformatlist}[2]{%
1054   \begingroup
1055   \def\@dtl@formatlist@itemsep{}%
1056   \def\@dtl@formatlist@lastitem{}%
1057   \def\@dtl@formatlist@prelastitem{}%
1058   \def\@dtl@formatlist@prelastitemsep{}%
1059   \forlistcsloop{\@dtl@formatlist@handler}{glo@\glsdetoklabel{#1}@#2}%
1060   \@dtl@formatlist@prelastitem\@dtl@formatlist@lastitem
1061   \endgroup
1062 }
```

List element tests:

trfieldifinlist First argument label, second argument field, third argument item, fourth true part and fifth false part.

```
1063 \newcommand*{\glsxtrfieldifinlist}[5]{%
1064   \ifinlistcs{#3}{\glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
1065 }
```

rfieldxifinlist Expands item.

```
1066 \newcommand*{\glsxtrfieldxifinlist}[5]{%
1067   \xifinlistcs{#3}{\glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
1068 }
```

sxtrforcsvfield

```
\glsxtrforcsvfield{\label}{\field}{\cs handler}
```

```
1069 \newcommand*{\glsxtrforcsvfield}[3]{%
1070   \glsxtrifhasfield{#2}{#1}%
1071   {%
1072     \let\glsxtrtrendfor\endfortrue
1073     \@for\glsxtr@label:=\glscurrentfieldvalue\do
1074       {\expandafter#3\expandafter{\glsxtr@label}}%
1075   }%
1076 }
```

ldformatcsvlist

```
1077 \newrobustcmd*{\glsxtrfieldformatcsvlist}[2]{%
1078   \glsxtrifhasfield{#2}{#1}%
1079   {\@dtlformatlist\glscurrentfieldvalue}%
1080   {}%
1081 }
```

dValueInCsvList

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

```
1082 \newcommand*{\GlsXtrIfFieldValueInCsvList}{%
1083   \ifstar\s@GlsXtrIfFieldValueInCsvList\@GlsXtrIfFieldValueInCsvList
1084 }
```

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

dValueInCsvList Unstarred version.

```
1085 \newcommand*{\@GlsXtrIfFieldValueInCsvList}[5]{%
1086   \glsxtrifhasfield{#2}{#1}%
1087   {%
1088     \expandafter\DTLifinlist\expandafter{\glscurrentfieldvalue}%
1089 }
```

```

1089     {#3}{#4}{#5}%
1090   }%
1091   {#5}%
1092 }

dValueInCsvList Starred version.
1093 \newcommand*{\s@GlsXtrIfFieldValueInCsvList}[5]{%
1094   \s@glsxtrifhasfield{#2}{#1}%
1095   {%
1096     \expandafter\DTLifinlist\expandafter{\glscurrentfieldvalue}%
1097     {#3}{#4}{#5}%
1098   }%
1099   {#5}%
1100 }

lsxtrifhasfield 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.
1101 \newrobustcmd{\glsxtrifhasfield}{%
1102   \@ifstar{\s@glsxtrifhasfield}{\glsxtrifhasfield}%
1103 }

lsxtrifhasfield Unstarred version adds grouping.
1104 \newcommand{\@glsxtrifhasfield}[4]{%
1105   {\s@glsxtrifhasfield{#1}{#2}{#3}{#4}}%
1106 }

lsxtrifhasfield Starred version omits grouping.
1107 \newcommand{\s@glsxtrifhasfield}[4]{%
1108   \letcs{\glscurrentfieldvalue}{\glo@\glsdetoklabel{#2}@#1}%
1109   \ifundef\glscurrentfieldvalue
1110   {#4}%
1111   {%
1112     \ifdefempty\glscurrentfieldvalue{#4}{#3}%
1113   }%
1114 }

rIfFieldNonZero Designed for numeric fields.
1115 \newcommand{\GlsXtrIfFieldNonZero}{%
1116   \@ifstar\s@GlsXtrIfFieldNonZero\@GlsXtrIfFieldNonZero
1117 }

rIfFieldNonZero
1118 \newcommand{\@GlsXtrIfFieldNonZero}[4]{%
1119   \@GlsXtrIfFieldCmpNum{#1}{#2}{=}{0}{#4}{#3}%
1120 }

```

XtrIfFieldEqNum

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

Designed for numeric fields.

```
1121 \newcommand{\GlsXtrIfFieldEqNum}{%
1122   \@ifstar{s@GlsXtrIfFieldEqNum}@GlsXtrIfFieldEqNum
1123 }
```

XtrIfFieldEqNum

```
1124 \newcommand{\@GlsXtrIfFieldEqNum}[5]{%
1125   \@GlsXtrIfFieldCmpNum{\#1}{\#2}{=}{\#3}{\#4}{\#5}%
1126 }
```

XtrIfFieldEqNum

```
1127 \newcommand{\s@GlsXtrIfFieldEqNum}[5]{%
1128   \s@GlsXtrIfFieldCmpNum{\#1}{\#2}{=}{\#3}{\#4}{\#5}%
1129 }
```

XtrIfFieldCmpNum

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

Designed for numeric fields.

```
1130 \newcommand{\GlsXtrIfFieldCmpNum}{%
1131   \@ifstar{s@GlsXtrIfFieldCmpNum}@GlsXtrIfFieldCmpNum
1132 }
```

XtrIfFieldCmpNum

```
1133 \newcommand{\@GlsXtrIfFieldCmpNum}[6]{%
1134   {%
1135     \letcs{\glscurrentfieldvalue}{glo@\glscurrentlabel{\#2}@{\#1}}%
1136     \ifundefined{\glscurrentfieldvalue}%
1137       {\def{\glscurrentfieldvalue}{0}}%
1138     {%
1139       \ifdefempty{\glscurrentfieldvalue}%
1140         {\def{\glscurrentfieldvalue}{0}}%
1141       {}%
1142     }%
1143     \ifnum{\glscurrentfieldvalue}#3#4\relax #5\else #6\fi
1144   }%
1145 }
```

XtrIfFieldCmpNum

```
1146 \newcommand{\s@GlsXtrIfFieldCmpNum}[6]{%
```

```

1147 \letcs{\glscurrentfieldvalue}{glo@\glscurrentlabel{#2}@#1}%
1148 \ifundefined\glscurrentfieldvalue
1149 {\def\glscurrentfieldvalue{0}}%
1150 {%
1151 \ifdefempty\glscurrentfieldvalue
1152 {\def\glscurrentfieldvalue{0}}%
1153 {}%
1154 }%
1155 \ifnum\glscurrentfieldvalue#3#4\relax #5\else #6\fi
1156 }

```

XtrIfFieldUndef

```
\GlsXtrIfFieldUdef{<field>}{{<label>}}{<(true)>}{<(false)>}
```

Just uses \ifcsundef.

```

1157 \newcommand{\GlsXtrIfFieldUdef}[2]{%
1158   \ifcsundef{glo@\glscurrentlabel{#2}@#1}%
1159 }

```

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

```

1160 \newcommand*\glsxtrusefield[2]{%
1161   \gls@entry@field{#1}{#2}%
1162 }

```

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

```

1163 \ifdef\texorpdfstring
1164 {
1165   \newcommand*\Glsxtrusefield[2]{%
1166     \texorpdfstring
1167     {\gls@entry@field{#1}{#2}}
1168     {\gls@entry@field{#1}{#2}}%
1169   }
1170 }
1171 {
1172   \newcommand*\Glsxtrusefield[2]{%
1173     \Gls@entry@field{#1}{#2}%
1174   }
1175 }

```

\GLSxtrusefield As above but convert to all caps.

```

1176 \ifdef\texorpdfstring
1177 {
1178   \newcommand*\GLSxtrusefield[2]{%
1179     \texorpdfstring
1180     {\glsdoifexists{#1}{\mfirstucMakeUppercase{\gls@entry@field{#1}{#2}}}}%

```

```

1181      {\@gls@entry@field{#1}{#2}}%
1182  }
1183 }
1184 {
1185 \newcommand*{\GLSxtrusefield}[2]{%
1186   \glsdoifexists{#1}{\mfirstucMakeUppercase{\@gls@entry@field{#1}{#2}}}}
1187 }
1188 }

entryparentname
1189 \newcommand*{\glsxtrentryparentname}[1]{%
1190   \ifcsdef{glo@\glsdetoklabel{#1}@parent}%
1191     {\csuse{glo@\csuse{glo@\glsdetoklabel{#1}@parent}@name}}%
1192   {}%
1193 }

\glsxtrdeffield Just use \csdef to provide a field value for the given entry.
1194 \newcommand*{\glsxtrdeffield}[2]{\csdef{glo@\glsdetoklabel{#1}@#2}{}}

\glsxtreffield Just use \csedef to provide a field value for the given entry.
1195 \newcommand*{\glsxtreffield}[2]{\protected@csedef{glo@\glsdetoklabel{#1}@#2}{}}

setfieldifexists
1196 \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.
1197 \newrobustcmd*{\GlsXtrSetField}[3]{%
1198   \glsxtrsetfieldifexists{#1}{#2}%
1199   {\csdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1200 }

\GlsXtrLetField Uses \cslet instead. Third argument should be a macro.
1201 \newrobustcmd*{\GlsXtrLetField}[3]{%
1202   \glsxtrsetfieldifexists{#1}{#2}%
1203   {\cslet{glo@\glsdetoklabel{#1}@#2}{#3}}%
1204 }

\GlsXtrLetField Uses \csletcs instead. Third argument should be a control sequence name.
1205 \newrobustcmd*{\GlsXtrLetField}[3]{%
1206   \glsxtrsetfieldifexists{#1}{#2}%
1207   {\csletcs{glo@\glsdetoklabel{#1}@#2}{#3}}%
1208 }

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.
1209 \newrobustcmd*{\GlsXtrLetFieldToField}[4]{%
1210   \glsxtrsetfieldifexists{#1}{#2}%

```

```
1211 {\csletcs{glo@\glsdetoklabel{#1}@#2}{glo@\glsdetoklabel{#3}@#4}}%  
1212 }
```

gGlsXtrSetField Allow the user to set a field. First argument entry label, second argument field label, third argument value.

```
1213 \newrobustcmd*\gGlsXtrSetField}[3]{%  
1214 \glsxtrsetfieldifexists{#1}{#2}{%  
1215 {\csgdef{glo@\glsdetoklabel{#1}@#2}{#3}}%  
1216 }
```

xGlsXtrSetField

```
1217 \newrobustcmd*\xGlsXtrSetField}[3]{%  
1218 \glsxtrsetfieldifexists{#1}{#2}{%  
1219 {\protected@csxdef{glo@\glsdetoklabel{#1}@#2}{#3}}%  
1220 }
```

eGlsXtrSetField

```
1221 \newrobustcmd*\eGlsXtrSetField}[3]{%  
1222 \glsxtrsetfieldifexists{#1}{#2}{%  
1223 {\protected@csedef{glo@\glsdetoklabel{#1}@#2}{#3}}%  
1224 }
```

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

```
1225 \newcommand*\GlsXtrIfFieldEqStr}{%  
1226 @ifstar\s@GlsXtrIfFieldEqStr@GlsXtrIfFieldEqStr  
1227 }
```

XtrIfFieldEqStr

```
1228 \newrobustcmd*\@GlsXtrIfFieldEqStr}[5]{%  
1229 \glsxtrifhasfield{#1}{#2}{%  
1230 {  
1231 \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}{%  
1232 }%  
1233 {#5}{%  
1234 }
```

XtrIfFieldEqStr

```
1235 \newrobustcmd*\s@GlsXtrIfFieldEqStr}[5]{%  
1236 \s@glsxtrifhasfield{#1}{#2}{%  
1237 {  
1238 \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}{%  
1239 }%  
1240 {#5}{%  
1241 }
```

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

```
1242 \newcommand*\GlsXtrIfFieldEqXpStr}{%
```

```

1243  \@ifstar\s@GlsXtrIfFieldEqXpStr\@GlsXtrIfFieldEqXpStr
1244 }

rIfFieldEqXpStr

1245 \newrobustcmd*\{@GlsXtrIfFieldEqXpStr}[5]{%
1246   \glsxtrifhasfield{#1}{#2}%
1247   {%
1248     \protected@edef\gls@tmp{#3}%
1249     \ifdefequal{\glscurrentfieldvalue}{\gls@tmp}{#4}{#5}%
1250   }%
1251   {#5}%
1252 }

```

rIfFieldEqXpStr

```

1253 \newrobustcmd*\s@GlsXtrIfFieldEqXpStr[5]{%
1254   \s@glsxtrifhasfield{#1}{#2}%
1255   {%
1256     \protected@edef\gls@tmp{#3}%
1257     \ifdefequal{\glscurrentfieldvalue}{\gls@tmp}{#4}{#5}%
1258   }%
1259   {#5}%
1260 }

```

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

```

1261 \newcommand*\GlsXtrIfXpFieldEqXpStr{%
1262   \@ifstar\s@GlsXtrIfXpFieldEqXpStr\@GlsXtrIfXpFieldEqXpStr
1263 }

```

fXpFieldEqXpStr

```

1264 \newrobustcmd*\@GlsXtrIfXpFieldEqXpStr[5]{%
1265   \glsxtrifhasfield{#1}{#2}%
1266   {%
1267     \protected@edef\gls@tmp{\glscurrentfieldvalue}%
1268     \let\glscurrentfieldvalue\gls@tmp
1269     \protected@edef\gls@tmp{#3}%
1270     \ifdefequal{\glscurrentfieldvalue}{\gls@tmp}{#4}{#5}%
1271   }%
1272   {#5}%
1273 }

```

fXpFieldEqXpStr

```

1274 \newrobustcmd*\s@GlsXtrIfXpFieldEqXpStr[5]{%
1275   \s@glsxtrifhasfield{#1}{#2}%
1276   {%
1277     \protected@edef\gls@tmp{\glscurrentfieldvalue}%
1278     \let\glscurrentfieldvalue\gls@tmp
1279     \protected@edef\gls@tmp{#3}%

```

```

1280     \ifdefequal{\glscurrentfieldvalue}{\@gls@tmp}{#4}{#5}%
1281   }%
1282   {#5}%
1283 }

```

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.

```

1284 \ifdef\foreignlanguage
1285 {
1286   \ifdef\GetTrackedDialectFromLanguageTag
1287   {
1288     \newcommand{\GlsXtrForeignText}[2]{%

```

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

```

1289   \let\@glsxtr@org@currentfieldvalue\glscurrentfieldvalue
1290   \glsxtrifhasfield{\GlsXtrForeignTextField}{#1}%
1291   {%
1292     \expandafter\GetTrackedDialectFromLanguageTag\expandafter
1293     {\glscurrentfieldvalue}{\@glsxtr@dialect}%
1294     \let\@glsxtr@locale\glscurrentfieldvalue
1295     \let\glscurrentfieldvalue\@glsxtr@org@currentfieldvalue
1296     \ifdefempty\@glsxtr@dialect
1297   {%

```

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

```

1298   \ifdef\TrackedDialectClosestSubMatch
1299   {%
1300     \GlossariesExtraWarning{Can't obtain dialect label
1301       (tracklang v1.3.6+ required)}%
1302   }%
1303   {\let\@glsxtr@dialect\TrackedDialectClosestSubMatch}%
1304   {%
1305   {}%
1306   \ifdefempty\@glsxtr@dialect
1307   {%

```

No tracked dialect found for the root language.

```

1308   }%
1309   {%

```

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

```

1310   \ifcsundef{captions\@glsxtr@dialect}{}%
1311   {%

```

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

```
1312         \IfTrackedDialectHasMapping{\@glsxtr@dialect}%
1313         {%
1314             \edef\@glsxtr@dialect{%
1315                 \GetTrackedDialectToMapping{\@glsxtr@dialect}}%
```

Does a caption hook exist for this?

```
1316     \ifcsundef{captions \@glsxtr@dialect}{}%
1317     {%
```

No mapping. Try root language label instead.

```
1318         \ifcsundef{captions \@tracklang@lang}{}%
1319         {%
1320             \let\@glsxtr@dialect\@tracklang@lang
1321             }%
1322             }%
1323             }%
1324             {%
```

No mapping. Try root language label instead.

```
1325         \ifcsundef{captions \@tracklang@lang}{}%
1326         {%
1327             \let\@glsxtr@dialect\@tracklang@lang
1328             }%
1329             }%
1330             }%
1331             }%
1332             \ifdefempty\@glsxtr@dialect
1333             {%
1334                 \GlsXtrUnknownDialectWarning{\@glsxtr@locale}{\@tracklang@lang}%
1335                 #2%
1336             }%
1337             {\foreignlanguage{\@glsxtr@dialect}{#2}}%
1338             }%
1339             {#2}%
1340         }%
1341     }%
1342     {%
1343         \newcommand{\GlsXtrForeignText}[2]{%
1344             \GlossariesExtraWarning{Can't encapsulate foreign text:
1345                 tracklang v1.3.6+ required}%
1346             #2%
1347         }%
1348     }%
1349 }
1350 {
```

\foreignlanguage isn't defined so just do *text*.

```
1351 \newcommand{\GlsXtrForeignText}[2]{#2}
1352 }
```

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

```
1353 \newcommand*{\GlsXtrForeignTextField}{userii}
```

`\nDialectWarning`

```
1354 \newcommand*{\GlsXtrUnknownDialectWarning}[2]{%
1355   \GlossariesExtraWarning{Can't determine valid dialect label
1356   for locale '#1' (root language: #2)}%
1357 }
```

`\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.

```
1358 \ifdef{\GlsEntryCounterLabelPrefix}
1359 {%
1360   \newcommand*{\glsxtrpageref}[1]{%
1361     \ifglsentrycounter
1362       \pageref{\GlsEntryCounterLabelPrefix\glsdetoklabel{#1}}%
1363     \else
1364       \ifglssubentrycounter
1365         \pageref{\GlsEntryCounterLabelPrefix\glsdetoklabel{#1}}%
1366       \else
1367         \gls{#1}%
1368       \fi
1369     \fi
1370   }%
1371 }%
1372 {%
1373   \newcommand*{\glsxtrpageref}[1]{%
1374     \ifglsentrycounter
1375       \pageref{glsentry-\glsdetoklabel{#1}}%
1376     \else
1377       \ifglssubentrycounter
1378         \pageref{glsentry-\glsdetoklabel{#1}}%
1379       \else
1380         \gls{#1}%
1381       \fi
1382     \fi
1383   }%
1384 }%
```

`\lossarypreamble`

```
1385 \newcommand{\apptoglossarypreamble}[2][\glsdefaulttype]{%
1386   \ifcsdef{glolist@#1}%
1387   {%
1388     \ifcsundef{@glossarypreamble@#1}%
1389       {\csdef{@glossarypreamble@#1}{}{}}%
1390     {}%
1391     \csappto{@glossarypreamble@#1}{#2}%
1392   }%
```

```

1392 }%
1393 {%
1394     \GlossariesExtraWarning{Glossary '#1' is not defined}%
1395 }%
1396 }

lossarypreamble
1397 \newcommand{\preglossarypreamble}[2][\glsdefaulttype]{%
1398     \ifcsdef{glolist@#1}{%
1399         {%
1400             \ifcsundef{@glossarypreamble@#1}{%
1401                 \csdef{@glossarypreamble@#1}{}{}}{%
1402                 {}{}}{%
1403                 \cspreto{@glossarypreamble@#1}{#2}{}}{%
1404             }{}}{%
1405             {}{}}{%
1406             \GlossariesExtraWarning{Glossary '#1' is not defined}%
1407         }{}}{%
1408 }

```

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`.

```

1409 \ifdef{\gls@entry@field}{%
1410 }{%
1411     \renewcommand*{\gls@entry@field}[2]{\csuse{glo@\glsdetoklabel{#1}@#2}}{%
1412 }{%
1413 }

```

`\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.

```
1414 \renewcommand*{\ifglsused}[3]{%
1415   \glsdoifexists{#1}{\ifbool{glo@\glsdetoklabel{#1}@flag}{#2}{#3}}%
1416 }
```

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

```
1417 \renewcommand*{\longnewglossaryentry}{%
1418   @ifstar\@glsxtr@s@longnewglossaryentry\@glsxtr@longnewglossaryentry
1419 }
```

ewglossaryentry Starred version.

```
1420 \newcommand{\@glsxtr@s@longnewglossaryentry}[3]{%
1421   \glsdoifnoexists{#1}%
1422   {%
1423     \bgroup
1424       \let\@org@newglossaryentryprehook\@newglossaryentryprehook
1425       \long\def\@newglossaryentryprehook{%
1426         \long\def\@glo@desc{#3}%
1427         \@org@newglossaryentryprehook
1428       }%
1429       \renewcommand*{\gls@assign@desc}[1]{%
1430         \global\cslet{glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%
1431         \global\cslet{glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
1432       }
1433       \gls@defglossaryentry{#1}{#2}%
1434     \egroup
1435   }%
1436 }
```

ewglossaryentry Unstarred version.

```
1437 \newcommand{\@glsxtr@longnewglossaryentry}[3]{%
1438   \glsdoifnoexists{#1}%
1439   {%
1440     \bgroup
1441       \let\@org@newglossaryentryprehook\@newglossaryentryprehook
1442       \long\def\@newglossaryentryprehook{%
1443         \long\def\@glo@desc{#3\glsxtrpostlongdescription}%
1444         \@org@newglossaryentryprehook
1445       }%
1446       \renewcommand*{\gls@assign@desc}[1]{%
1447         \global\cslet{glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%
1448       }
```

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

```
1448     \global\cslet{glo@\glsdetoklabel{\#1}@descplural}{\@glo@descplural}%
1449 }
1450     \gls@defglossaryentry{\#1}{\#2}%
1451 \egroup
1452 }%
1453 }
```

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

```
1454 \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.

```
1455 \renewcommand{\newignoredglossary}{%
1456   \@ifstar{\glsxtr@s@newignoredglossary}{\glsxtr@org@newignoredglossary}
1457 }
```

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

```
1458 \newcommand*{\glsxtr@org@newignoredglossary}[1]{%
1459   \ifcsdef{glolist@\#1}{%
1460     {%
1461       \glsxtrundefaction{Glossary type '#1' already exists}{}%
1462     }%
1463   }%
1464   \ifdefempty{\ignored@glossaries}{%
1465     {%
1466       \protected@edef{\ignored@glossaries}{\#1}%
1467     }%
1468   }%
1469   \protected@appto{\ignored@glossaries}{,\#1}%
1470 }%
1471 \csgdef{glolist@\#1}{,}%
1472 \ifcsundef{gls@\#1@entryfmt}{%
1473   {%
1474     \def\glsentryfmt[\#1]{\glsentryfmt}%
1475   }%
1476 }%
1477 \ifdefempty{\gls@nohyperlist}{%
1478   {%
1479     \renewcommand*{\gls@nohyperlist}{\#1}%
1480   }%
1481 }%
1482 \protected@appto{\gls@nohyperlist}{,\#1}%
1483 }%
1484 }%
1485 }
```

`ignoredglossary` Starred form.

```
1486 \newcommand*{\glsxtr@s@newignoredglossary}[1]{%
1487   \ifcsdef{glolist@#1}%
1488   {%
1489     \glsxtrundefaction{Glossary type '#1' already exists}{}}%
1490   }%
1491   {%
1492     \ifdefempty{@ignored@glossaries}%
1493     {%
1494       \protected@edef{@ignored@glossaries{#1}}%
1495     }%
1496     {%
1497       \protected@appto{@ignored@glossaries{, #1}}%
1498     }%
1499     \csgdef{glolist@#1}{, }%
1500     \ifcsundef{gls@#1@entryfmt}%
1501     {%
1502       \def\glsentryfmt[#1]{\glsentryfmt}%
1503     }%
1504     {}%
1505   }%
1506 }
```

`\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.

```
1507 \glsifusetranslator
1508 {%
1509   \renewcommand*{\glssettoctitle}[1]{%
1510     \ifcsdef{gls@tr@set@#1@toctitle}%
1511     {%
1512       \csuse{gls@tr@set@#1@toctitle}%
1513     }%
1514     {%
1515       \ifcsdef{@glotype@#1@title}%
1516         {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1517         {\def\glossarytoctitle{\glossarytitle}}%
1518     }%
1519   }%
1520 }
1521 {
1522   \renewcommand*{\glssettoctitle}[1]{%
1523     \ifcsdef{@glotype@#1@title}%
1524       {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1525       {\def\glossarytoctitle{\glossarytitle}}%
1526   }
1527 }
```

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

```

1528 \newcommand{\provideignoreglossary}{%
1529   @ifstar\glsxtr@s\provideignoreglossary\glsxtr@provideignoreglossary
1530 }

ignoredglossary Unstarred version.

1531 \newcommand*\glsxtr@provideignoreglossary[1]{%
1532   \ifcsdef{glolist@\#1}%
1533   {}%
1534   {}%
1535   \ifdefempty{@ignored@glossaries}%
1536   {}%
1537   \protected@edef{@ignored@glossaries{\#1}}%
1538   {}%
1539   {}%
1540   \protected@eappto{@ignored@glossaries{,\#1}}%
1541   {}%
1542   \csgdef{glolist@\#1}{,}%
1543   \ifcsundef{gls@\#1@entryfmt}%
1544   {}%
1545   \def\glsentryfmt[\#1]{\glsentryfmt}%
1546   {}%
1547   {}%
1548   \ifdefempty{@gls@nohyperlist}%
1549   {}%
1550   \renewcommand*\gls@nohyperlist{\#1}%
1551   {}%
1552   {}%
1553   \protected@eappto{@gls@nohyperlist{,\#1}}%
1554   {}%
1555 }%
1556 }

```

ignoredglossary Starred form.

```

1557 \newcommand*\glsxtr@s\provideignoreglossary[1]{%
1558   \ifcsdef{glolist@\#1}%
1559   {}%
1560   {}%
1561   \ifdefempty{@ignored@glossaries}%
1562   {}%
1563   \protected@edef{@ignored@glossaries{\#1}}%
1564   {}%
1565   {}%
1566   \protected@eappto{@ignored@glossaries{,\#1}}%
1567   {}%
1568   \csgdef{glolist@\#1}{,}%
1569   \ifcsundef{gls@\#1@entryfmt}%
1570   {}%

```

```

1571     \def\glsentryfmt[#1]{\glsentryfmt}%
1572     }%
1573     {}%
1574     }%
1575 }

```

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

```

1576 \newcommand*{\glsxtrcopytoglossary}[2]{%
1577     \glsdoifexists{#1}%
1578     {%
1579         \ifcsdef{glolist@#2}%
1580             {%
1581                 \cseappto{glolist@#2}{#1,}%
1582             }%
1583             {}%
1584             \glsxtrundefaction{Glossary type '#2' doesn't exist}{}%
1585         }%
1586     }%
1587 }

```

1.3.1 Existence Checks

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

```

1588 \renewcommand{\glsdoifexists}[2]{%
1589     \if\glsentryexists{#1}{#2}%
1590     {%

```

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

```

1591     \protected@edef\glslabel{\glsdetoklabel{#1}}%
1592     \glsxtrundefaction{Glossary entry '\glslabel'%
1593     has not been defined}{You need to define a glossary entry before%
1594     you can reference it.}%
1595 }%
1596 }

```

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

```

1597 \renewcommand{\glsdoifnoexists}[2]{%
1598     \if\glsentryexists{#1}{%
1599         \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'%
1600         has already been defined}{}{#2}%
1601     }

```

`\glsdoifexistsordo` 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.

```

1602 \ifdef\glsdoifexistsordo
1603 {%

```

```

1604 \renewcommand{\glsdoifexistsordo}[3]{%
1605   \ifglsentryexists{#1}{#2}%
1606   {%
1607     \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’}
1608     has not been defined}{You need to define a glossary entry
1609     before you can use it.}%
1610   #3%
1611   }%
1612 }%
1613 }%
1614 {%
1615 \glsxtr@warnonexistsordo\glsdoifexistsordo
1616 \newcommand{\glsdoifexistsordo}[3]{%
1617   \ifglsentryexists{#1}{#2}%
1618   {%
1619     \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’}
1620     has not been defined}{You need to define a glossary entry
1621     before you can use it.}%
1622   #3%
1623   }%
1624 }%
1625 }

```

`arynoexistsordo` Similarly for `\doifglossarynoexistsordo`.

```

1626 \ifdef\doifglossarynoexistsordo
1627 {%
1628   \renewcommand{\doifglossarynoexistsordo}[3]{%
1629     \ifglossaryexists*{#1}%
1630     {%
1631       \glsxtrundefaction{Glossary type ‘#1’ already exists}{}%
1632       #3%
1633     }%
1634     {#2}%
1635   }%
1636 }%
1637 {%
1638 \glsxtr@warnonexistsordo\doifglossarynoexistsordo
1639 \newcommand{\doifglossarynoexistsordo}[3]{%
1640   \ifglossaryexists*{#1}%
1641   {%
1642     \glsxtrundefaction{Glossary type ‘#1’ already exists}{}%
1643     #3%
1644   }%
1645   {#2}%
1646 }%
1647 }%
1648

```

There are now three types of cross-references: the `see` key (as original), the `alias` key (from

glossaries-extra v1.12) and the `seealso` 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).

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

```
1649 \appto\@newglossaryentryposthook{%
1650   \ifdefvoid\@glo@see{%
1651     {\csxdef{\glo@\@glo@label}{\@glo@see}}{}}%
1652   {%
1653     \csxdef{\glo@\@glo@label}{\@glo@see}{\@glo@see}%
1654     \if@glstr@autoindex{%
1655       \glstr@autoindexcrossrefs{}}%
1656     \fi{}}%
1657   }%
1658 }%
1659 \appto\@gls@keymap{,{see}{see}}
```

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

```
1660 \newcommand*{\glsxtrusesee}[1]{%
1661   \glsdoifexists{\#1}{%
1662     {%
1663       \letcs{\@glo@see}{\glo@\glsdetoklabel{\#1}{\@glo@see}}{%
1664         \ifdefempty\@glo@see{%
1665           {}{%
1666             \expandafter\glsstr@usesee\@glo@see\@end@glsstr@usesee}}{}}%
1667       }%
1668     }%
1669   }%
1670 }
```

`\glsxtr@usesee`

```
1671 \newcommand*{\glsxtr@usesee}[1][\seenname]{%
1672   \glsxtr@usesee[\#1]{}}%
1673 }
```

`\@glsxtr@usesee`

```
1674 \def\@glsxtr@usesee[\#1]{\end@glsxtr@usesee{%
1675   \glsxtruseseeformat{\#1}{\#2}}{}}%
1676 }
```

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

```
1677 \newcommand*{\glsxtruseseeformat}[2]{%
1678   \glsseeformat[\#1]{\#2}{}}%
1679 }
```

`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.)

```
1680 \renewcommand*{\glsseeitemformat}[1]{%
1681   \ifglshasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1682 }
```

`\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.

```
1683 \newcommand*{\glsxtrhiername}[1]{%
1684   \glsdoifexists{#1}%
1685   {%
1686     \glsxtrifhasfield{parent}{#1}%
1687     {\glsxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1688     {}%
1689     \ifglshasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1690   }%
1691 }
```

`\Glsxtrhiername`

```
\Glsxtrhiername{\label}
```

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

```
1692 \newcommand*{\Glsxtrhiername}[1]{%
1693   \glsdoifexists{#1}%
1694   {%
1695     \glsxtrifhasfield{parent}{#1}%
1696     {%
1697       \Glsxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep
1698       \ifglshasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1699     }%
1700     {\ifglshasshort{#1}{\Glsfmttext{#1}}{\Glsfmtname{#1}}}%
1701   }%
1702 }
```

`\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.)

```
1703 \newcommand*{\GlsXtrhiername}[1]{%
1704   \glsdoifexists{#1}%
1705   {%
1706     \glsxtrifhasfield{parent}{#1}%
1707     {\GlsXtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1708     {}%
1709     \ifglshasshort{#1}{\Glsfmttext{#1}}{\Glsfmtname{#1}}%
1710   }%
1711 }
```

\GLSxtrhiername

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

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

```
1712 \newcommand*{\GLSxtrhiername}[1]{%
1713   \glsdoifexists{#1}%
1714   {%
1715     \glsxtrifhasfield{parent}{#1}%
1716     {%
1717       \GLSxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep
1718       \ifglshasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1719     }%
1720     {\ifglshasshort{#1}{\GLSfmttext{#1}}{\GLSfmtname{#1}}}%
1721   }%
1722 }
```

\GLSXTRhiername

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

As above but displays all names in all-caps.

```
1723 \newcommand*{\GLSXTRhiername}[1]{%
1724   \glsdoifexists{#1}%
1725   {%
1726     \glsxtrifhasfield{parent}{#1}%
1727     {\GLSXTRhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1728     {}%
1729     \ifglshasshort{#1}{\GLSfmttext{#1}}{\GLSfmtname{#1}}%
1730   }%
1731 }
```

`\glsxtrhiernamesep` Separator used in `\glsxtrhiername` and variants.

```
1732 \newcommand*{\glsxtrhiernamesep}{\small$\triangleright$},}
```

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

```
1733 \newcommand*{\glsxtruseseealso}[1]{%
1734   \glsdoifexists{#1}%
1735   {%
1736     \letcs{\glo@see}{\glsdetoklabel{#1}@seealso}%
1737     \ifdefempty{\glo@see}%
1738     {}%
1739     {%
1740       \expandafter\glsxtruseseealsoformat\expandafter{\glo@see}%
1741     }%
1742   }%
1743 }
```

`\glsxtrusealias` 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.

```
1744 \newcommand*{\glsxtrusealias}[1]{%
1745   \glsdoifexists{#1}%
1746   {%
1747     \letcs{\glo@see}{\glsdetoklabel{#1}@alias}%
1748     \ifdefempty{\glo@see}%
1749     {}%
1750     {}%
```

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

```
1751   \glsxtruseseeformat{\seename}{\glo@see}%
1752 }%
1753 }%
1754 }
```

`\glsxtruseseealsoformat` The format used by `\glsxtruseseealso`. The argument is the comma-separated list of cross-referenced labels.

```
1755 \newcommand*{\glsxtruseseealsoformat}[1]{%
1756   \glsseeformat[\seealsoname]{#1}{}%
1757 }
```

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

```
1758 \newrobustcmd{\glsxtrseelist}[1]{%
1759   \protected@edef{\glo@tmp{\noexpand\glsseelist{#1}}}\glo@tmp%
1760 }
```

`\seealsoname` In case this command hasn't been defined. Languages packages actually provide `\alsoname` so use that if it's defined.

```
1761 \ifdef{\alsoname}
```

```
1762 {\providecommand{\seealso}{\alsoname}}
1763 {\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.

```
1764 \ifdef{\xdycrossrefhook}
1765 {
```

Add the cross-reference class definition to the hook.

```
1766 \appto{\xdycrossrefhook}{%
1767   \write\glswrite{(\define-crossref-class \string"seealso\string"
1768     :unverified )}%
1769   \write\glswrite{(\markup-crossref-list
1770     :class \string"seealso\string"^\J\space\space\space
1771     :open \string"\string\glsxtruseealsoformat\glsopenbrace\string"
1772     :close \string"\glsclosebrace\string")}%
1773 }
```

Append to class list.

```
1774 \appto{\xdylocationclassorder}{\space\string"seealso\string"}
```

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

```
1775 \newrobustcmd*{\glsxtrindexseealso}[2]{%
1776   \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
1777     \glsxtr@recordsee{#1}{#2}%
1778   \fi
1779   \glsdoifexists{#1}%
1780   {%
1781     \@@glsxtrwrglossmark
1782     \def\gls@xref{#2}%
1783     \onelevel@sanitize\gls@xref
1784     \gls@checkmkidxchars\gls@xref
1785     \gls@glossary{\csname glo@#1@type\endcsname}{%
1786       (indexentry
1787         :tkey (\csname glo@#1@index\endcsname)
1788         :xref (\string"\gls@xref\string")
1789         :attr \string"seealso\string"
1790       )
1791     }%
1792   }%
1793 }
1794 }
1795 {
```

xindy not in use or glossaries version too old to support this.

```
1796 \newrobustcmd*{\glsxtrindexseealso}{\glssee[\seealso]}
1797 }
```

The alias key should be set to the label of the synonymous entry. The `seealso` key essentially behaves like `see=[\seearsoname]{\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`.

```
1798 \ifdef{\gls@set@xr@key}{%
1799 {
```

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

```
1800 \define@key{glossentry}{alias}{%
1801   \gls@set@xr@key{alias}{\@glo@alias}{#1}%
1802 }
1803 \define@key{glossentry}{seealso}{%
1804   \gls@set@xr@key{seealso}{\@glo@seealso}{#1}%
1805 }
```

Add to the key mappings.

```
1806 \appto{\gls@keymap}{, {alias}{alias}, {seealso}{seealso}}
```

Set the default value.

```
1807 \appto{\newglossaryentryprehook}{\def{\glo@alias}\def{\glo@seealso}}%
```

Assign the field values.

```
1808 \appto{\newglossaryentryposthook}{%
1809   \ifdefvoid{\glo@seealso}{%
1810     \csxdef{\glo@\glo@label}{\glo@seealso}%
1811   }%
1812   \csxdef{\glo@\glo@label}{\glo@seealso}%
1813   \if@glsxtr@autoseeindex
1814     \glsxtr@autoindexcrossrefs
1815   \fi
1816 }
```

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

```
1817 \ifdefvoid{\glo@alias}{%
1818   \csxdef{\glo@\glo@label}{\glo@alias}%
1819 }%
1820 \csxdef{\glo@\glo@label}{\glo@alias}%
1821 }%
1822 }
```

Provide user-level commands to access the values.

```
\glsxtralias
```

```
1823 \newcommand*{\glsxtralias}[1]{\gls@entry@field{#1}{alias}}
```

```
trseealsolabels
```

```
1824 \newcommand*{\glsxtrseealso}{\gls@entry@field{#1}{seealso}}
```

Add to the \glo@autosee hook.

```
1825  \appto{\glo@autosee}{%
1826    \ifdefvoid{\glo@alias}{%
1827      {%
1828        \ifdefvoid{\glo@seealso}{%
1829          {}{%
1830            {%
1831              \protected@edef{\do@glssee}{\noexpand\glsxtrindexseealso{%
1832                {\glo@label}{\glo@seealso}}}{%
1833                  \do@glssee{}}{}}{%
1834                }{}}{%
1835              }{}}{%
1836            }{}}
```

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

```
1837  \ifdefvoid{\glo@see}{%
1838    {%
1839      \protected@edef{\do@glssee}{\noexpand\glssee{\glo@label}{\glo@alias}}{%
1840        \do@glssee{}}{}}{%
1841      }{}}{%
1842    }{}}{%
1843  }{%
1844 }{%
1845 }{%
1846 }
```

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

```
\glsxtralias
1847  \glsaddstoragekey*{\alias}{}{\glsxtralias}
```

```
trseealsoalabels
1848  \glsaddstoragekey*{\seealso}{}{\glsxtrseealsoalabels}
```

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 andseealso keys.

```
1849  \appto{\newglossaryentryposthook}{%
1850    \ifcsvvoid{\glo@\glo@label}{\alias}{%
1851      {%
1852        \ifcsvvoid{\glo@\glo@label}{\seealso}{%
1853          {}{%
1854            {%
1855              \protected@edef{\do@glssee}{\noexpand\glsxtrindexseealso{%
1856                {\glo@label}{\csuse{\glo@\glo@label}{\seealso}}}}{%
1857                  \do@glssee{}}{}}{}}{%
1858                }{}}{%
1859              }{}}{%
1860            }{}}
```

```

1859      }%
1860      {%
1861          \ifdefvoid{\glo@see}%
1862          {%
1863              \protected@edef{\do@glssee}{\noexpand\glssee}%
1864                  {\@glo@label}\{\csuse{\glo@\@glo@label \alias}\}}%
1865              \do@glssee
1866          }%
1867          {}%
1868      }%
1869  }%
1870 }%

```

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

```
1871 \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.

```

1872 \newcommand*{\glsxtraddallcrossrefs}{%
1873     \forallglossaries{\@glo@type}%
1874     {%
1875         \forglsentries[\@glo@type]{\@glo@label}%
1876         {%
1877             \ifglsused{\@glo@label}%
1878                 {\expandafter\glsxtr@addunusedxrefs\expandafter{\@glo@label}}{}%
1879         }%
1880     }%
1881 }

```

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

```

1882 \newcommand*{\@glsxtr@addunusedxrefs}[1]{%
1883     \letcs{\@glo@see}{\glo@\glsdetoklabel{#1}@see}%
1884     \ifdefvoid{\glo@see}%
1885     {}%
1886     {%
1887         \expandafter\glsxtr@addunused\@glo@see\end@glsxtr@addunused
1888     }%
1889     \letcs{\@glo@see}{\glo@\glsdetoklabel{#1}@seealso}%
1890     \ifdefvoid{\glo@see}%
1891     {}%
1892     {%
1893         \expandafter\glsxtr@addunused\@glo@see\end@glsxtr@addunused
1894     }%
1895 }

```

```

lsxtr@addunused Adds all the entries if they haven't been used.
1896 \newcommand*{\glsxtr@addunused}[1] []{%
1897   \glsxtr@addunused
1898 }

lsxtr@addunused Adds all the entries if they haven't been used.
1899 \def\@glsxtr@addunused#1\@end@glsxtr@addunused{%
1900   \for@\glsxtr@label:=#1\do
1901   {%
1902     \ifglsused{\glsxtr@label}{}%
1903     {%
1904       \glsadd[format=glsxtrunusedformat]{\glsxtr@label}%
1905       \glsunset{\glsxtr@label}%
1906       \expandafter\glsxtr@addunusedxrefs\expandafter{\glsxtr@label}%
1907     }%
1908   }%
1909 }

xtrunusedformat
1910 \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.
1911 \ifdef{\gls@begindocdefs}
1912 {%
1913   \renewcommand*{\gls@begindocdefs}{%
1914     \ifnum\glsxtr@docdefval=1\relax
1915       \gls@enablesavenonumberlist
1916       \edef\gls@restoreat{%
1917         \noexpand\catcode`\noexpand\@=\number\catcode`\@}%
1918       \makeatletter
1919       \InputIfFileExists{\jobname.glsdefs}{}{%
1920         \gls@restoreat
1921         \undef\gls@restoreat
1922         \gls@defdocnewglossaryentry
1923       }%
1924     \else
1925       \ifnum\glsxtr@docdefval=3\relax
1926         \gls@enablesavenonumberlist
1927         \let\gls@checkseeallowed\relax
1928         \let\newglossaryentry\new@atom@glossaryentry
1929         \global\newwrite\gls@deffile
1930         \immediate\openout\gls@deffile=\jobname.glsdefs
1931       \fi
1932     \fi
1933   }%
1934 }

```

Write all currently defined entries.

```
1930      \forallglsentries{\@glsentry}{\@gls@writedef{\@glsentry}}%
1931      \fi
1932      \fi
1933  }
1934 }
1935 {%
1936   \ifnum\@glsxtr@docdefval=3\relax
1937     \PackageError{glossaries-extra}{Package option
1938       'docdef=\@glsxtr@docdefsetting' requires at least version 4.37
1939       of the base glossaries.sty package}{}%
1940   \fi
1941 }
```

m@glossaryentry

```
1942 \newrobustcmd{\new@atom@glossaryentry}[2]{%
1943   \gls@defglossaryentry{#1}{#2}%
1944   \gls@writedef{#1}%
1945 }
```

`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.

```
1946 \let\glsxtr@orgmakenoidxglossaries\makenoidxglossaries
1947 \renewcommand{\makenoidxglossaries}{%
1948   \@domakeglossaries
1949   {%
1950     \ifdefequal\glsxtr@record@setting\glsxtr@record@setting@off
1951     {%
1952       \glsxtr@orgmakenoidxglossaries
```

Add marker to `\@do@seeglossary` but don't increment associated counter.

```
1953 \renewcommand{\@do@seeglossary}[2]{%
1954   \@glsxtrwrglossmark
1955   \protected@edef{\gls@label}{\glsdetoklabel{##1}}%
1956   \protected@write{\auxout}{}{%
1957     \string\gls@reference
1958     {\csname glo@\gls@label\space type\endcsname}%
1959     {\gls@label}}%
1960   {%
1961     \string\glsseeformat##2{}%
1962   }%
1963 }%
1964 }
```

Check for `docdefs=restricted`:

```
1965 \if@glsxtrdocdefrestricted
```

If restricted document definitions allowed, adjust `\@gls@reference` so that it doesn't test for existence.

```
1966 \renewcommand*{\@gls@reference}[3]{%
1967   \ifcsundef{@glsref##1}{\csgdef{@glsref##1}{}{}}{%
1968     \ifinlistcs##2{@glsref##1}{%
1969       {}{%
1970         {\listcsgadd{@glsref##1}{##2}}{%
1971           \ifcsundef{glo@\glsdetoklabel##2@loclist}{%
1972             {\csgdef{glo@\glsdetoklabel##2@loclist}{}{}}{%
1973               {}{%
1974                 {\listcsgadd{glo@\glsdetoklabel##2@loclist}{##3}}{%
1975                   {}{%
1976                     \else
```

Disable document definitions.

```
1977   \@glsxtrdocdeffalse
1978   \fi
1979   \disable@keys{glossaries-extra.sty}{docdef}{%
1980   }{%
1981   {}{%
1982     \PackageError{glossaries-extra}{\string\makenoidxglossaries\space
1983       not permitted\MessageBreak
1984       with record=\@glsxtr@record@setting\space package option}{%
1985       {You may only use \string\makenoidxglossaries\ space with the
1986       record=off option}}{%
1987   }{%
1988 }{%
1989 }
```

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

```
1990 \renewcommand*{\gls@defdocnewglossaryentry}{%
1991   \ifcase\@glsxtr@docdefval
1992     docdef=false:
1993       \renewcommand*{\newglossaryentry}[2]{%
1994         \PackageError{glossaries-extra}{Glossary entries must
1995           be \MessageBreak defined in the preamble with \MessageBreak
1996           package option ‘docdef=false’}\MessageBreak(consider using
1997           ‘docdef=restricted’)\{Move your glossary definitions to
1998           the preamble. You can also put them in a \MessageBreak separate file
1999           and load them with \string\loadglsentries.\}%
1999     }{%
2000   \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.

```
2001   \let\gls@checkseeallowed\relax
2002   \let\newglossaryentry\new@glossaryentry
2003 \else
```

Restricted mode just needs to allow the see value.

```
2004     \let\gls@checkseeallowed\relax
2005     \fi
2006 }%
```

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`

```
2007 \newcommand*{\GlsXtrEnableOnTheFly}{%
2008   \@ifstar{\sGlsXtrEnableOnTheFly}{\GlsXtrEnableOnTheFly}
2009 }
```

`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.)

```
2010 \newcommand*{\sGlsXtrEnableOnTheFly}{%
2011   \renewcommand*{\glsdetoklabel}[1]{%
2012     \expandafter{\glsxtr@ifcsstart\string##1\glsxtr@end@%
2013     {%
2014       \expandafter\detokenize\expandafter{##1}%
2015     }%
2016     {\detokenize{##1}}%
2017   }%
2018   \GlsXtrEnableOnTheFly
2019 }
2020 \def\glsxtr@ifcsstart#1#2\glsxtr@end@#3#4{%
2021   \expandafter\if\glsbackslash#1%
2022     #3%
2023   \else
2024     #4%
2025   \fi
2026 }
```

`sxtrstarflywarn`

```
2027 \newcommand*{\glsxtrstarflywarn}{%
2028   \GlossariesExtraWarning{Experimental starred version of
2029   \string\GlsXtrEnableOnTheFly\space in use (please ensure you have
2030   read the warnings in the glossaries-extra user manual)}%
2031 }
```

`rEnableOnTheFly`

```
2032 \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
2033 \newcommand*{\glsxtrcat}{general}

\glsxtr
2034 \newcommand*{\glsxtr}[1][]{%
2035   \def\glsxtr@keylist{##1}%
2036   \glsxtr
2037 }

\glsxtr
2038 \newcommand*{\glsxtr}[2][]{%
2039   \ifglsentryexists{##2}%
2040   {%
2041     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2042   }%
2043   {%
2044     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2045       description={\nopostdesc},##1}%
2046   }%
2047   \expandafter\gls\expandafter[\glsxtr@keylist]{##2}%
2048 }

\Glsxtr
2049 \newcommand*{\Glsxtr}[1][]{%
2050   \def\glsxtr@keylist{##1}%
2051   \glsxtr
2052 }

\glsxtr
2053 \newcommand*{\glsxtr}[2][]{%
2054   \ifglsentryexists{##2}%
2055   {%
2056     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2057   }%
2058   {%
2059     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2060       description={\nopostdesc},##1}%
2061   }%
2062   \expandafter\Gls\expandafter[\glsxtr@keylist]{##2}%
2063 }

\glsxtrpl
2064 \newcommand*{\glsxtrpl}[1][]{%
2065   \def\glsxtr@keylist{##1}%
2066   \glsxtrpl
2067 }

\glsxtrpl

```

```

2068 \newcommand*{\@glsxtrpl}[2] []{%
2069   \ifglsentryexists{##2}%
2070   {%
2071     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2072   }%
2073   {%
2074     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2075       description={\nopostdesc},##1}%
2076   }%
2077   \expandafter\glspl\expandafter[\glsxtr@keylist]{##2}%
2078 }

\Glsxtrpl
2079 \newcommand*{\Glsxtrpl}[1] []{%
2080   \def\glsxtr@keylist{##1}%
2081   \@Glsxtrpl
2082 }

\@Glsxtrpl
2083 \newcommand*{\@Glsxtrpl}[2] []{%
2084   \ifglsentryexists{##2}%
2085   {%
2086     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2087   }%
2088   {%
2089     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2090       description={\nopostdesc},##1}%
2091   }%
2092   \expandafter\Glspl\expandafter[\glsxtr@keylist]{##2}%
2093 }

\GlsXtrWarning
2094 \newcommand*{\GlsXtrWarning}[2]{%
2095   \def\@glsxtr@optlist{##1}%
2096   \onelevel@sanitize\@glsxtr@optlist
2097   \GlossariesExtraWarning{The options ‘\@glsxtr@optlist’ have
2098   been ignored for entry ‘##2’ as it has already been defined}%
2099 }

```

Disable commands after the glossary:

```

2100 \renewcommand{\printglossary}[2]{%
2101   \def\@glsxtr@printglossopts{##1}%
2102   \@glsxtr@orgprintglossary{##1}{##2}%
2103   \def\@glsxtr{\@glsxtr@disabledflycommand\glsxtr}%
2104   \def\@glsxtrpl{\@glsxtr@disabledflycommand\glsxtrpl}%
2105   \def\@Glsxtr{\@glsxtr@disabledflycommand\Glsxtr}%
2106   \def\@Glsxtrpl{\@glsxtr@disabledflycommand\Glsxtrpl}%
2107 }

```

```

abledflycommand
2108 \newcommand*{\@glsxtr@disabledflycommand}[1]{%
2109   \PackageError{glossaries-extra}{%
2110     {\string##1\space can't be used after any of the \MessageBreak
2111       glossaries have been displayed}%
2112     {The on-the-fly commands enabled by
2113       \string\GlsXtrEnableOnTheFly\space may only be used \MessageBreak
2114       before the glossaries. If you want to use any entries \MessageBreak
2115       after any of the glossaries, you must use the standard \MessageBreak
2116       method of first defining the entry and then using the \MessageBreak
2117       entry with commands like \string\gls}%
2118     \@@glsxtr@disabledflycommand
2119   }%
2120 \newcommand*{\@glsxtr@disabledflycommand}[2][]{##2}

```

End of \GlsXtrEnableOnTheFly. Disable since it can only be used once.

```

2121 \let\GlsXtrEnableOnTheFly\relax
2122 }
2123 \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.

```
2124 \newcommand*{\@glsxtr@current@style}{\@glossary@default@style}
```

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

etglossarystyle

```

2125 \renewcommand*{\setglossarystyle}[1]{%
2126   \ifcsundef{@glsstyle##1}%
2127   {%
2128     \PackageError{glossaries-extra}{Glossary style '#1' undefined}{}%
2129   }%
2130   {%
2131     \csname @glsstyle##1\endcsname

```

Only set the current style if it exists.

```

2132   \protected\edef\@glsxtr@current@style{##1}%
2133   }%
2134   \ifx\@glossary@default@style\relax
2135     \protected\edef\@glossary@default@style{##1}%
2136   \fi
2137 }

```

In case we have an old version of glossaries:

```

2138 \ifdef\@glossary@default@style
2139 {}

```

```

2140 {%
2141   \let\@glossary@default@style\relax
2142 }

listdottedwidth If \glslistdottedwidth has been defined and is currently equal to .5\hsize then make
the modification suggested in bug report #92
2143 \ifdef\glslistdottedwidth
2144 {%
2145   \ifdim\glslistdottedwidth=.5\hsize
2146     \setlength{\glslistdottedwidth}{-\dimexpr\maxdimen-1sp\relax}
2147     \AtBeginDocument{%
2148       \ifdim\glslistdottedwidth=-\dimexpr\maxdimen-1sp\relax
2149         \setlength{\glslistdottedwidth}{.5\columnwidth}%
2150       \fi
2151     }%
2152   \fi
2153 }
2154 {}%

```

Similarly for \glsdescwidth:

\glsdescwidth

```

2155 \ifdef\glsdescwidth
2156 {%
2157   \ifdim\glsdescwidth=.6\hsize
2158     \setlength{\glsdescwidth}{-\dimexpr\maxdimen-1sp\relax}
2159     \AtBeginDocument{%
2160       \ifdim\glsdescwidth=-\dimexpr\maxdimen-1sp\relax
2161         \setlength{\glsdescwidth}{.6\columnwidth}%
2162       \fi
2163     }%
2164   \fi
2165 }
2166 {}%

```

and for \glspagelistwidth:

\glspagelistwidth

```

2167 \ifdef\glspagelistwidth
2168 {%
2169   \ifdim\glspagelistwidth=.1\hsize
2170     \setlength{\glspagelistwidth}{-\dimexpr\maxdimen-1sp\relax}
2171     \AtBeginDocument{%
2172       \ifdim\glspagelistwidth=-\dimexpr\maxdimen-1sp\relax
2173         \setlength{\glspagelistwidth}{.1\columnwidth}%
2174       \fi
2175     }%
2176   \fi
2177 }
2178 {}%

```

aryentrynumbers Has the nonumberlist option been used?

```
2179 \def\org@glossaryentrynumbers{\#1{#1\gls@save@numberlist{\#1}}%  
2180 \ifx\org@glossaryentrynumbers\glossaryentrynumbers  
2181   \glsnonumberlistfalse  
2182   \renewcommand*\glossaryentrynumbers[1]{%  
2183     \ifglsentryexists{\glscurrententrylabel}{%  
2184       {}%  
2185       \@glsxtrpreloctag  
2186       \GlsXtrFormatLocationList{\#1}%  
2187       \@glsxtrpostloctag  
2188       \gls@save@numberlist{\#1}%  
2189     }{}%  
2190   }%  
2191 \else  
2192   \glsnonumberlisttrue  
2193   \renewcommand*\glossaryentrynumbers[1]{%  
2194     \ifglsentryexists{\glscurrententrylabel}{%  
2195       {}%  
2196       \gls@save@numberlist{\#1}%  
2197     }{}%  
2198   }%  
2199 \fi
```

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

```
2200 \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

```
2201 \newcommand*\GlsXtrEnablePreLocationTag[2]{%  
2202   \let@\glsxtrpreloctag\@@glsxtrpreloctag  
2203   \let@\glsxtrpostloctag\@@glsxtrpostloctag  
2204   \renewcommand*\glsxtr@pagetag{\#1}%  
2205   \renewcommand*\glsxtr@pagestag{\#2}%  
2206   \renewcommand*\glsxtr@savepreloctag[2]{%  
2207     \csgdef{\glsxtr@preloctag@##1}{##2}%  
2208   }%  
2209   \renewcommand*\glsxtr@doloctag{  
2210     \ifcsundef{\glsxtr@preloctag@\glscurrententrylabel}{%  
2211       {}%  
2212       \GlossariesWarning{Missing pre-location tag for '\glscurrententrylabel'.}  
2213       Rerun required}%  
2214     }%  
2215   }%
```

```
2216      \csuse{@glsxtr@preloctag@\glscurrententrylabel}%
2217      }%
2218  }%
2219 }
2220 \only\GlsXtrEnablePreLocationTag
```

glsxtrpreloctag

```
2221 \newcommand*{\@@glsxtrpreloctag}{%
2222   \let\@glsxtr@org@delimN\delimN
2223   \let\@glsxtr@org@delimR\delimR
2224   \let\@glsxtr@org@glsignore\glsignore
    \gdef is required as the delimiters may occur inside a scope.
2225   \gdef\@glsxtr@thisloctag{\@glsxtr@pagetag}%
2226   \renewcommand*{\delimN}{%
2227     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
2228     \@glsxtr@org@delimN}%
2229   \renewcommand*{\delimR}{%
2230     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
2231     \@glsxtr@org@delimR}%
2232   \renewcommand*{\glsignore}[1]{%
2233     \gdef\@glsxtr@thisloctag{\relax}%
2234     \@glsxtr@org@glsignore{##1}}%
2235   \glsxtr@doloctag
2236 }
```

glsxtrpreloctag

```
2237 \newcommand*{\@glsxtrpreloctag}{}%
```

@glsxtr@pagetag

```
2238 \newcommand*{\@glsxtr@pagetag}{}%
```

glsxtr@pagestag

```
2239 \newcommand*{\@glsxtr@pagestag}{}%
```

lsxtrpostloctag

```
2240 \newcommand*{\@@glsxtrpostloctag}{%
2241   \let\delimN\@glsxtr@org@delimN
2242   \let\delimR\@glsxtr@org@delimR
2243   \let\glsignore\@glsxtr@org@glsignore
2244   \protected@write\@auxout{%
2245     {\string\@glsxtr@savepreloctag{\glscurrententrylabel}\{\@glsxtr@thisloctag\}}%
2246   }}
```

lsxtrpostloctag

```
2247 \newcommand*{\@glsxtrpostloctag}{}%
```

```

lsxtr@preloctag
2248 \newcommand*{\glsxtr@savepreloctag}[2]{}
2249 \protected@write\@auxout{}{%
2250   \string\providecommand\string{\glsxtr@savepreloctag}[2]{}}

glsxtr@doloctag
2251 \newcommand*{\glsxtr@doloctag}{}}

ss@nonumberlist  Modify the nonumberlist key to use \GlsXtrFormatLocationList (and also save the number
list):
2252 \renewcommand*{\KV@printgloss@nonumberlist}[1]{%
2253   \XKV@plfalse
2254   \XKV@sttrue
2255   \XKV@checkchoice[\XKV@resa]{#1}{true, false}%
2256 {%
2257   \csname glsnonumberlist\XKV@resa\endcsname
2258   \ifglsnonumberlist
2259     \def\glossaryentrynumbers##1{\gls@save@numberlist{##1}}%
2260   \else
2261     \def\glossaryentrynumbers##1{%
2262       \glsxtrpreloctag
2263       \GlsXtrFormatLocationList{##1}%
2264       \glsxtrpostloctag
2265       \gls@save@numberlist{##1}}%
2266   \fi
2267 }%
2268 }

```

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.

```

2269 \renewcommand*{\glsentryfmt}{%
2270   \ifglshasshort{\glslabel}{\glssetabrvfmt{\glscategory{\glslabel}}}{}%
2271   \glsifregular{\glslabel}%
2272   {\glsxtrregularfont{\glsentryfmt}}%
2273 {%
2274   \ifglshasshort{\glslabel}%
2275   {\glsxtrabbreviationfont{\glsxtrgenabrvfmt}}%
2276   {\glsxtrregularfont{\glsentryfmt}}%
2277 }%
2278 }

```

`sxtrregularfont` Font used for regular entries.
 2279 `\newcommand*{\glsxtrregularfont}[1]{#1}`

`bbrevglossaryfont` Font used for abbreviation entries.
 2280 `\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.
 2281 `\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).
 2282 `\@glsxtr@record{#2}{#3}{glslink}%`
 2283 `\glsdoifexists{#3}%`
 2284 `{%`
 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).
 2285 `\let\glsxtrorg@ifKV@glslink@hyper\ifKV@glslink@hyper`
 2286 `\let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper`
 2287 `\def\glscustomtext{#4}%`
 2288 `\@glsxtr@field@linkdefs`
 2289 `#1%`
 2290 `\@gls@link[#2]{#3}{#4}%`
 2291 `\let\ifKV@glslink@hyper\glsxtrorg@ifKV@glslink@hyper`
 2292 `}%`
 2293 `\glspostlinkhook`
 2294 `}`

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.
 2295 `\let\@glsxtr@org@gls@\@gls@`
 2296 `\def\@gls@#1#2{%`
 2297 `\@glsxtr@record{#1}{#2}{glslink}%`
 2298 `\@glsxtr@org@gls@{#1}{#2}%`
 2299 `}%`

`\@glspl@` Save the original definition and redefine.
 2300 `\let\@glsxtr@org@glspl@\@glspl@`
 2301 `\def\@glspl@#1#2{%`

```
2302  \@glsxtr@record{#1}{#2}{glslink}%
2303  \glsxtr@org@glspl@{#1}{#2}%
2304 }%
```

\@Gls@ Save the original definition and redefine.

```
2305 \let\glsxtr@org@Gls@\@Gls@
2306 \def\@Gls@#1#2{%
2307  \@glsxtr@record{#1}{#2}{glslink}%
2308  \glsxtr@org@Gls@{#1}{#2}%
2309 }%
```

\@Glspl@ Save the original definition and redefine.

```
2310 \let\glsxtr@org@Glspl@\@Glspl@
2311 \def\@Glspl@#1#2{%
2312  \@glsxtr@record{#1}{#2}{glslink}%
2313  \glsxtr@org@Glspl@{#1}{#2}%
2314 }%
```

\@GLS@ Save the original definition and redefine.

```
2315 \let\glsxtr@org@GLS@\@GLS@
2316 \def\@GLS@#1#2{%
2317  \@glsxtr@record{#1}{#2}{glslink}%
2318  \glsxtr@org@GLS@{#1}{#2}%
2319 }%
```

\@GLSpl@ Save the original definition and redefine.

```
2320 \let\glsxtr@org@GLSpl@\@GLSpl@
2321 \def\@GLSpl@#1#2{%
2322  \@glsxtr@record{#1}{#2}{glslink}%
2323  \glsxtr@org@GLSpl@{#1}{#2}%
2324 }%
```

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

```
2325 \renewcommand*{\glsdisp}[3][]{%
2326  \@glsxtr@record{#1}{#2}{glslink}%
2327  \glsdoifexists{#2}{%
2328   \let\do@gls@link@checkfirsthyper@gls@link@checkfirsthyper
2329   \let\glsifplural@secondoftwo
2330   \let\glscapscase@firstofthree
2331   \def\glscustomtext{#3}%
2332   \def\glsinsert{}%
2333   \def\@glo@text{\csname gls@\glstype @entryfmt\endcsname}%
2334   \gls@link[#1]{#2}{\@glo@text}%
2335   \ifKV@glslink@local
2336     \glslocalunset{#2}%
2337   \else
2338     \glsunset{#2}%
2339 }
```

```

2339     \fi
2340   }%
2341   \glspostlinkhook
2342 }

{@gls@@link@} Redefine to include {@glsxtr@record}
2343 \renewcommand*{@gls@@link}[3] []{%
2344   {@glsxtr@record[#1]{#2}{glslink}}%
2345   \glsdoifexistsord{o}{#2}%
2346   {%
2347     \let\do@gls@link@checkfirsthyper\relax
Post-link hook commands need initialising.
2348   \def\glscustomtext[#3]{%
2349     {@glsxtr@field@linkdefs
2350     {@gls@link[#1]{#2}{#3}}%
2351   }%
2352   {%
2353     \glstextformat[#3]{%
2354   }%
2355   \glspostlinkhook
2356 }

```

`sxtrinitwrgloss` Set the default if the `wrgloss` is omitted.

```

2357 \newcommand*{\glsxtrinitwrgloss}{%
2358   \glsifattribute{\glslabel}{wrgloss}{after}{%
2359   }%
2360   \glsxtrinitwrglossbeforefalse
2361 }%
2362 {%
2363   \glsxtrinitwrglossbeforetrue
2364 }%
2365 }

```

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

```

2366 \newif\ifglsxtrinitwrglossbefore
2367 \glsxtrinitwrglossbeforetrue

```

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

```

2368 \define@choicekey{glslink}{wrgloss}{%
2369   [\@glsxtr@wrglossval\@glsxtr@wrglossnr]{%
2370   {before,after}}%
2371 }%
2372   \ifcase\@glsxtr@wrglossnr\relax
2373     \glsxtrinitwrglossbeforetrue
2374   \or
2375     \glsxtrinitwrglossbeforefalse
2376   \fi
2377 }

```

```

2378 \define@key{glslink}{thevalue}{\def\@glsxtr@thevalue{\#1}}
2379 \define@key{glslink}{theHvalue}{\def\@glsxtr@theHvalue{\#1}}
tr@hyperoutside Define a hyperoutside key to determine whether \hyperlink should be outside \glostextformat.
2380 \define@boolkey{glslink}[\glsxtr@]{hyperoutside}[true]{}
2381 \glsxtr@hyperoutsidetrue

local@textformat Provide a key to locally change the text format.
2382 \define@key{glslink}{textformat}{%
2383   \ifcsdef{\#1}{%
2384     {%
2385       \letcs{\@glsxtr@local@textformat}{\#1}%
2386     }%
2387     {%
2388       \PackageError{glossaries-extra}{Unknown control sequence name '\#1'}{}%
2389     }%
2390   }%
2391 \define@key{glslink}{prefix}{\def\glolinkprefix{\#1}{}}

nithyperoutside Set the default if the hyperoutside is omitted.
2392 \newcommand*{\glsxtrinithyperoutside}{%
2393   \glsifattribute{\glslabel}{hyperoutside}{false}{%
2394     {%
2395       \glsxtr@hyperoutsidefalse
2396     }%
2397     {%
2398       \glsxtr@hyperoutsidetrue
2399     }%
2400   }%
r@inc@linkcount Does nothing by default.
2401 \newcommand*{\glsxtr@inc@linkcount}{}{}

linkpresetkeys User hook performed immediately before options are set. Does nothing by default.
2402 \newcommand*{\glslinkpresetkeys}{}{}

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.
2403 \newrobustcmd*{\GlsXtrExpandedFmt}[2]{%
2404   \protected@edef{\glsxtr@tmp{\#2}}{%
2405     \expandafter{\expandafter{\glsxtr@tmp}}%
2406   }%
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.
2407 \newcommand*{\@glsxtr@use@equation@counter}{%
2408   \glsxtr@ifnum@mmode{\def{\gls@counter{equation}}{}}%
2409 }%

```

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).

```
2410 \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.

```
2411 \newcommand*{\GlsXtrAutoAddOnFormat}[3][\glslabel]{%
2412   \renewcommand*{\glsxtr@do@autoadd}[1]{%
2413     \begingroup
2414       \protected@edef\glsxtr@do@autoadd{%
2415         \noexpand\ifstrequal{##1}{glslink}%
2416         {%
2417           \noexpand\DTLifinlist{\glsnumberformat}{#2}{\noexpand\glsadd[format={\glsnumberformat}}%
2418         }%
2419         {}%
2420       }%
2421       \glsxtr@do@autoadd
2422     \endgroup
2423   }%
2424 }
```

\@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.

```
2425 \def\@gls@link[#1]#2#3{%
2426   \leavevmode
2427   \protected@edef\glslabel{\glsdetoklabel{#2}}%
2428   \def\@gls@link@opts{#1}%
2429   \let\@gls@link@label\glslabel
2430   \let\@glsnumberformat\glsxtr@defaultnumberformat
2431   \protected@edef\@gls@counter{\csname glo@\glslabel @counter\endcsname}%
2432   \protected@edef\glstype{\csname glo@\glslabel @type\endcsname}%
2433   \let\org@ifKV@glslink@hyper\ifKV@glslink@hyper
```

Save current value of \glolinkprefix:

```
2434 \let\@glsxtr@org@glolinkprefix\glolinkprefix
```

Initialise \glsxtr@local@textformat

```
2435 \let\@glsxtr@local@textformat\relax
```

Initialise thevalue and theHvalue (v1.19).

```
2436 \def\@glsxtr@thevalue{}%
2437 \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
```

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

```
2438 \glsxtrinitwrgloss
```

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

```
2439 \glsxtrinithyperoutside
```

Note that the default link options may override \glsxtrinitwrgloss.

```
2440 \gls@setdefault@glslink@opts
```

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

```
2441 \glsxtr@inc@linkcount
```

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

```
2442 \if@glsxtr@equations
2443   \@glsxtr@use@equation@counter
2444 \fi
```

As the original definition.

```
2445 \do@glsdisablehyperinlist
2446 \do@gls@link@checkfirsthyper
```

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

```
2447 \glslinkpresetkeys
```

Set options.

```
2448 \setkeys{glslink}{#1}%
```

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

```
2449 \glsxtr@do@autoadd{glslink}%
```

User hook after options are set:

```
2450 \glslinkpostsetkeys
```

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

```
2451 \ifdefempty{\@glsxtr@thevalue}%
2452 {%
2453   \@gls@saveentrycounter
2454 }%
2455 {%
2456   \let\theglsentrycounter\@glsxtr@thevalue
2457   \def\theHglsentrycounter{\@glsxtr@theHvalue}%
2458 }%
2459 \gls@setsort{\glslabel}%

```

Check if the textformat key has been used.

```
2460 \ifx\@glsxtr@local@textformat\relax
```

Check textformat attribute (new to v1.21).

```
2461 \glshasattribute{\glslabel}{textformat}%
2462 {%
```

```

2463     \protected@edef\@glsxtr@attrval{\glsgetattribute{\glslabel}{textformat}}%
2464     \ifcsdef{\@glsxtr@attrval}%
2465     {%
2466         \letcs{\@glsxtr@textformat}{\@glsxtr@attrval}%
2467     }%
2468     {%
2469         \GlossariesExtraWarning{Unknown control sequence name
2470             '\@glsxtr@attrval' supplied in textformat attribute
2471             for entry '\glslabel'. Reverting to default \string\glstextformat}%
2472         \let\@glsxtr@textformat\glstextformat
2473     }%
2474 }%
2475 {%
2476     \let\@glsxtr@textformat\glstextformat
2477 }%
2478 \else
2479     \let\@glsxtr@textformat\@glsxtr@local@textformat
2480 \fi

```

Do write if it should occur before the link text:

```

2481 \ifglsxtrinitwrglossbefore
2482     \@do@wrglossary{#2}%
2483 \fi

```

Do the link text:

```

2484 \ifKV@glslink@hyper
2485     \ifglsxtr@hyperoutside
2486         \@glslink{\glolinkprefix\glslabel}{\@glsxtr@textformat{#3}}%
2487     \else
2488         \@glsxtr@textformat{\@glslink{\glolinkprefix\glslabel}{#3}}%
2489     \fi
2490 \else
2491     \ifglsxtr@hyperoutside
2492         \glsdonohyperlink{\glolinkprefix\glslabel}{\@glsxtr@textformat{#3}}%
2493     \else
2494         \@glsxtr@textformat{\glsdonohyperlink{\glolinkprefix\glslabel}{#3}}%
2495     \fi
2496 \fi

```

Do write if it should occur after the link text:

```

2497 \ifglsxtrinitwrglossbefore
2498 \else
2499     \@do@wrglossary{#2}%
2500 \fi

```

Restore original value of \glolinkprefix:

```

2501 \let\glolinkprefix\@glsxtr@org@glolinkprefix

```

As the original definition:

```

2502 \let\ifKV@glslink@hyper\org@ifKV@glslink@hyper
2503 }

```

```

2504 \define@key{glossadd}{thevalue}{\def\@glsxtr@thevalue{\#1}}
2505 \define@key{glossadd}{theHvalue}{\def\@glsxtr@theHvalue{\#1}}
lsaddpresetkeys
2506 \newcommand*{\glsaddpresetkeys}{}}

saddpostsetkeys
2507 \newcommand*{\glsaddpostsetkeys}{}}

\glsadd Redefine to include \@glsxtr@record and suppress in headings
2508 \renewrobustcmd*{\glsadd}[2] [] {%
2509   \@glsxtrifinmark
2510   {}%
2511   {}%
2512   \@gls@adjustmode
2513   \begingroup
2514   \@glsxtr@record{\#1}{\#2}{glossadd}%
2515   \glsdoifexists{\#2}%
2516   {}%
2517   \let\@glsnumberformat\@glsxtr@defaultnumberformat
2518   \protected@edef\@gls@counter{\csname glo@\glsdetoklabel{\#2}@counter\endcsname}%
2519   \def\@glsxtr@thevalue{}%
2520   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%

  Implement any default settings (before options are set)
2521   \glsaddpresetkeys
2522   \setkeys{glossadd}{#1}%

  Implement any default settings (after options are set)
2523   \glsaddpostsetkeys
2524   \ifdefempty{\@glsxtr@thevalue}%
2525   {}%
2526   \@gls@saveentrycounter
2527   {}%
2528   {}%
2529   \let\the\glsentrycounter\@glsxtr@thevalue
2530   \def\theHglsentrycounter{\@glsxtr@theHvalue}%
2531   {}%

  Define sort key if necessary (in case of sort=use):
2532   \@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.
2533   \KV@glslink@noindexfalse
2534   \@@do@wrglossary{\#2}%
2535   {}%

```

```
2536     \endgroup
2537 }%
2538 }
```

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

```
2539 \newrobustcmd{\glsaddeach}[2][]{%
2540   \for@gls@thislabel:=#2\do{\glsadd[#1]{\gls@thislabel}}%
2541 }
```

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

```
2542 \newcommand*{\glsxtr@field@linkdefs}{%
2543   \let\glsxtrifwasfirstuse\@secondoftwo
2544   \let\glsifplural\@secondoftwo
2545   \let\glscapscase\@firstofthree
2546   \let\glsinsert\@empty
2547 }
```

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

assignfieldfont

```
2548 \newcommand*{\glsxtrassignfieldfont}[1]{%
2549   \ifglsentryexists{#1}{%
2550     {%
2551       \ifglshasshort{#1}{%
2552         {%
2553           \glssetabbrvfmt{\glscategory{#1}}%
2554           \glsifregular{#1}{%
2555             {\let@\gls@field@font\glsxtrregularfont}%
2556             {\let@\gls@field@font\@firstofone}%
2557           }%
2558         {%
2559           \glsifnotregular{#1}{%
2560             {\let@\gls@field@font\@firstofone}%
2561             {\let@\gls@field@font\glsxtrregularfont}%
2562           }%
2563         }%
2564       {%
2565         \let@\gls@field@font@gobble
2566       }%
2567 }}
```

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

```
2568 \def\@glstext@#1#2[#3]{%
2569   \glsxtrassignfieldfont{#2}%
2570   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccesstext{#2}{#3}}}%
2571 }
```

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

```
2572 \def \@GLStext@#1#2[#3]{%
2573   \glsxtrassignfieldfont{#2}%
2574   \gls@field@link[\let\glscapscase\@thirdofthree]{#1}{#2}%
2575   {\gls@field@font{\GLSaccessstext{#2}\mfirstucMakeUppercase{#3}}}}%
2576 }
```

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

```
2577 \def \@Glstext@#1#2[#3]{%
2578   \glsxtrassignfieldfont{#2}%
2579   \gls@field@link[\let\glscapscase\@secondofthree]{#1}{#2}%
2580   {\gls@field@font{\Glsaccessstext{#2}{#3}}}}%
2581 }
```

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

```
2582 \newcommand*\glsxtrchecknohyperfirst[1]{%
2583   \glsifattribute{#1}{nohyperfirst}{true}{\KV@glslink@hyperfalse}{}%
2584 }
```

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

```
2585 \def \@glsfirst@#1#2[#3]{%
2586   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirst honours the nohyperfirst attribute.

```
2587   \gls@field@link
2588   [\let\glsxtrifwasfirstuse\@firstoftwo
2589     \glsxtrchecknohyperfirst{#2}%
2590   ]{#1}{#2}%
2591   {\gls@field@font{\glsaccessfirst{#2}{#3}}}}%
2592 }
```

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

```
2593 \def \@Glsfirst@#1#2[#3]{%
2594   \glsxtrassignfieldfont{#2}%

```

Ensure that \Glsfirst honours the nohyperfirst attribute.

```
2595   \gls@field@link
2596   [\let\glsxtrifwasfirstuse\@firstoftwo
2597     \let\glscapscase\@secondofthree
2598     \glsxtrchecknohyperfirst{#2}%
2599   ]%
2600   {#1}{#2}{\gls@field@font{\Glsaccessfirst{#2}{#3}}}}%
2601 }
```

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

```
2602 \def \@GLSfirst@#1#2[#3]{%
2603   \glsxtrassignfieldfont{#2}%

```

Ensure that \GLSfirst honours the nohyperfirst attribute.

```
2604 \@gls@field@link
2605 [\let\glsxtrifwasfirstuse\@firstoftwo
2606 \let\glscapscase\@thirdofthree
2607 \glsxtrchecknohyperfirst{#2}%
2608 ]%
2609 {#1}{#2}{\@gls@field@font{\GLSaccessfirst{#2}\mfirstucMakeUppercase{#3}}}}%
2610 }
```

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

```
2611 \def\@glsplural@#1#2[#3]{%
2612 \glsxtrassignfieldfont{#2}%
2613 \@gls@field@link[\let\glsifplural\@firstoftwo]{#1}{#2}%
2614 {\@gls@field@font{\glsaccessplural{#2}#3}}%
2615 }
```

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

```
2616 \def\@Glsplural@#1#2[#3]{%
2617 \glsxtrassignfieldfont{#2}%
2618 \@gls@field@link
2619 [\let\glsifplural\@firstoftwo
2620 \let\glscapscase\@secondofthree
2621 ]%
2622 {#1}{#2}{\@gls@field@font{\Glsaccessplural{#2}#3}}%
2623 }
```

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

```
2624 \def\@GLSplural@#1#2[#3]{%
2625 \glsxtrassignfieldfont{#2}%
2626 \@gls@field@link
2627 [\let\glsifplural\@firstoftwo
2628 \let\glscapscase\@thirdofthree
2629 ]%
2630 {#1}{#2}{\@gls@field@font{\GLSaccessplural{#2}\mfirstucMakeUppercase{#3}}}}%
2631 }
```

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

```
2632 \def\@glsfirstplural@#1#2[#3]{%
2633 \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2634 \@gls@field@link
2635 [\let\glsxtrifwasfirstuse\@firstoftwo
2636 \let\glsifplural\@firstoftwo
2637 \glsxtrchecknohyperfirst{#2}%
2638 ]%
2639 {#1}{#2}{\@gls@field@font{\glsaccessfirstplural{#2}#3}}%
2640 }
```

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

```
2641 \def\@Glsfirstplural[#1#2[#3]{%
2642   \glsxtrassignfieldfont{#2}{%
```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2643   \@gls@field@link
2644   [\let\glsxtrifwasfirstuse\@firstoftwo
2645   \let\glsifplural\@firstoftwo
2646   \let\glscapscase\@secondofthree
2647   \glsxtrchecknohyperfirst{#2}{%
2648   }%
2649   {#1}{#2}{\@gls@field@font{\Glsaccessfirstplural{#2}{#3}}{%
2650 }}
```

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

```
2651 \def\@GLSfirstplural[#1#2[#3]{%
2652   \glsxtrassignfieldfont{#2}{%
```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2653   \@gls@field@link
2654   [\let\glsxtrifwasfirstuse\@firstoftwo
2655   \let\glsifplural\@firstoftwo
2656   \let\glscapscase\@thirdofthree
2657   \glsxtrchecknohyperfirst{#2}{%
2658   }%
2659   {#1}{#2}{%
2660   {\@gls@field@font{\GLSaccessfirstplural{#2}{\mfirstrucMakeUppercase{#3}}}{%
2661 }}
```

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

```
2662 \def\@glsname[#1#2[#3]{%
2663   \glsxtrassignfieldfont{#2}{%
2664   \@gls@field@link{#1}{#2}{\@gls@field@font{\glsaccessname{#2}{#3}}{%
2665 }}
```

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

```
2666 \def\@Glsname[#1#2[#3]{%
2667   \glsxtrassignfieldfont{#2}{%
2668   \@gls@field@link
2669   [\let\glscapscase\@secondoftwo]{#1}{#2}{%
2670   {\@gls@field@font{\Glsaccessname{#2}{#3}}{%
2671 }}
```

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

```
2672 \def\@GLSname[#1#2[#3]{%
2673   \glsxtrassignfieldfont{#2}{%
2674   \@gls@field@link[\let\glscapscase\@thirdoftwo]{%
2675   {#1}{#2}{%
2676   {\@gls@field@font{\GLSaccessname{#2}{\mfirstrucMakeUppercase{#3}}}{%
2677 }}
```

```

\@glsdesc@  

2678 \def\@glsdesc@#1#2[#3]{%  

2679   \glsxtrassignfieldfont{#2}%
2680   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccessdesc{#2}#3}}%
2681 }  

  

\@Glsdesc@ First letter uppercase version.  

2682 \def\@Glsdesc@#1#2[#3]{%  

2683   \glsxtrassignfieldfont{#2}%
2684   \gls@field@link
2685   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2686   {\gls@field@font{\Glsaccessdesc{#2}#3}}%
2687 }  

  

\@GLSdesc@ All uppercase version.  

2688 \def\@GLSdesc@#1#2[#3]{%  

2689   \glsxtrassignfieldfont{#2}%
2690   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2691   {#1}{#2}{\gls@field@font{\GLSaccessdesc{#2}\mfirstucMakeUppercase{#3}}}%
2692 }  

  

@glsdescplural@ No case-changing version.  

2693 \def\@glsdescplural@#1#2[#3]{%  

2694   \glsxtrassignfieldfont{#2}%
2695   \gls@field@link
2696   [\let\glscapscase\@secondoftwo
2697   \let\glsifplural\@firstoftwo
2698   ]{#1}{#2}{\gls@field@font{\glsaccessdescplural{#2}#3}}%
2699 }  

  

@Glsdescplural@ First letter uppercase version.  

2700 \def\@Glsdescplural@#1#2[#3]{%  

2701   \glsxtrassignfieldfont{#2}%
2702   \gls@field@link
2703   [\let\glscapscase\@secondoftwo
2704   \let\glsifplural\@firstoftwo
2705   ]{#1}{#2}{\gls@field@font{\Glsaccessdescplural{#2}#3}}%
2706 }  

  

@GLSdescplural@ All uppercase version.  

2707 \def\@GLSdesc@#1#2[#3]{%  

2708   \glsxtrassignfieldfont{#2}%
2709   \gls@field@link
2710   [\let\glscapscase\@thirdoftwo
2711   \let\glsifplural\@firstoftwo
2712   ]%
2713   {#1}{#2}%
2714   {\gls@field@font{\GLSaccessdescplural{#2}\mfirstucMakeUppercase{#3}}}%
2715 }

```

```

\@glssymbol@  

2716 \def\@glssymbol@#1#2[#3]{%  

2717   \glsxtrassignfieldfont{#2}%
2718   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccesssymbol{#2}#3}}%
2719 }  

  

\@Glssymbol@ First letter uppercase version.  

2720 \def\@Glssymbol@#1#2[#3]{%
2721   \glsxtrassignfieldfont{#2}%
2722   \gls@field@link
2723   [\let\glscapscase\@secondoftwo]%
2724   {#1}{#2}{\gls@field@font{\Glsaccesssymbol{#2}#3}}%
2725 }  

  

\@GLSsymbol@ All uppercase version.  

2726 \def\@GLSsymbol@#1#2[#3]{%
2727   \glsxtrassignfieldfont{#2}%
2728   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2729   {#1}{#2}{\gls@field@font{\GLSaccesssymbol{#2}\mfirstucMakeUppercase{#3}}}%
2730 }  

  

lssymbolplural@ No case-changing version.  

2731 \def\@lssymbolplural@#1#2[#3]{%
2732   \glsxtrassignfieldfont{#2}%
2733   \gls@field@link
2734   [\let\glscapscase\@secondoftwo
2735   \let\glsifplural\@firstoftwo
2736   ]{#1}{#2}{\gls@field@font{\glsaccesssymbolplural{#2}#3}}%
2737 }  

  

lssymbolplural@ First letter uppercase version.  

2738 \def\@Glssymbolplural@#1#2[#3]{%
2739   \glsxtrassignfieldfont{#2}%
2740   \gls@field@link
2741   [\let\glscapscase\@secondoftwo
2742   \let\glsifplural\@firstoftwo
2743   ]{#1}{#2}{\gls@field@font{\Glsaccesssymbolplural{#2}#3}}%
2744 }  

  

LSsymbolplural@ All uppercase version.  

2745 \def\@GLSsymbol@#1#2[#3]{%
2746   \glsxtrassignfieldfont{#2}%
2747   \gls@field@link
2748   [\let\glscapscase\@thirdoftwo
2749   \let\glsifplural\@firstoftwo
2750   ]%
2751   {#1}{#2}%
2752   {\gls@field@font{\GLSaccesssymbolplural{#2}\mfirstucMakeUppercase{#3}}}%
2753 }

```

\@Glsuseri@ First letter uppercase version.

```
2754 \def \@Glsuseri@#1#2[#3]{%
2755   \glsxtrassignfieldfont{#2}%
2756   \gls@field@link
2757   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2758   {\gls@field@font{\Glsentryuseri{#2}{#3}}}{%
2759 }}
```

\@GLSuseri@ All uppercase version.

```
2760 \def \@GLSuseri@#1#2[#3]{%
2761   \glsxtrassignfieldfont{#2}%
2762   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2763   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuseri{#2}{#3}}}}{%
2764 }}
```

\@Glsuserii@ First letter uppercase version.

```
2765 \def \@Glsuserii@#1#2[#3]{%
2766   \glsxtrassignfieldfont{#2}%
2767   \gls@field@link
2768   [\let\glscapscase\@secondoftwo]%
2769   {#1}{#2}{\gls@field@font{\Glsentryuserii{#2}{#3}}}{%
2770 }}
```

\@GLSuserii@ All uppercase version.

```
2771 \def \@GLSuserii@#1#2[#3]{%
2772   \glsxtrassignfieldfont{#2}%
2773   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2774   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuserii{#2}{#3}}}}{%
2775 }}
```

\@Glsuseriii@ First letter uppercase version.

```
2776 \def \@Glsuseriii@#1#2[#3]{%
2777   \glsxtrassignfieldfont{#2}%
2778   \gls@field@link
2779   [\let\glscapscase\@secondoftwo]%
2780   {#1}{#2}{\gls@field@font{\Glsentryuseriii{#2}{#3}}}{%
2781 }}
```

\@GLSuseriii@ All uppercase version.

```
2782 \def \@GLSuseriii@#1#2[#3]{%
2783   \glsxtrassignfieldfont{#2}%
2784   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2785   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuseriii{#2}{#3}}}}{%
2786 }}
```

\@Glsuseriv@ First letter uppercase version.

```
2787 \def \@Glsuseriv@#1#2[#3]{%
2788   \glsxtrassignfieldfont{#2}%

```

```

2789  \@gls@field@link
2790  [\let\glscapscase\@secondoftwo]%
2791  {\#1}{\#2}{\@gls@field@font{\Glsentryuseriv{\#2}{\#3}}}{}
2792 }

\@GLSuseriv@ All uppercase version.

2793 \def\@GLSuseriv{\#1\#2[\#3]{%
2794  \glsxtrassignfieldfont{\#2}%
2795  \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2796  {\#1}{\#2}{%
2797  {\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseriv{\#2}{\#3}}}}{%
2798 }

```

```

\@Glsuserv@ First letter uppercase version.

2799 \def\@Glsuserv{\#1\#2[\#3]{%
2800  \glsxtrassignfieldfont{\#2}%
2801  \@gls@field@link
2802  [\let\glscapscase\@secondoftwo]%
2803  {\#1}{\#2}{\@gls@field@font{\Glsentryuserv{\#2}{\#3}}}{%
2804 }

```

```

\@GLSuserv@ All uppercase version.

2805 \def\@GLSuserv{\#1\#2[\#3]{%
2806  \glsxtrassignfieldfont{\#2}%
2807  \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2808  {\#1}{\#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuserv{\#2}{\#3}}}}{%
2809 }

```

```

\@Glsuservi@ First letter uppercase version.

2810 \def\@Glsuservi{\#1\#2[\#3]{%
2811  \glsxtrassignfieldfont{\#2}%
2812  \@gls@field@link
2813  [\let\glscapscase\@secondoftwo]%
2814  {\#1}{\#2}{\@gls@field@font{\Glsentryuservi{\#2}{\#3}}}{%
2815 }

```

```

\@GLSuservi@ All uppercase version.

2816 \def\@GLSuservi{\#1\#2[\#3]{%
2817  \glsxtrassignfieldfont{\#2}%
2818  \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2819  {\#1}{\#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuservi{\#2}{\#3}}}}{%
2820 }

```

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.

```
2821 \newcommand*{\@glsxtr@base@acrcmd@warn}[2]{%
2822   \GlossariesExtraWarning{Base acronym command \string#1\space
2823     should not be used with new abbreviation definitions. Use
2824     \string#2\space instead}%
2825 }
```

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

```
2826 \let\@glsxtr@base@acrcmd\@glsxtr@base@acrcmd@warn
```

\acrshort No case change.

```
2827 \def\acrshort[#1][#3]{%
2828   \@glsxtr@base@acrcmd\acrshort\glsxtrshort
2829   \glsdoifexists{#2}%
2830   {%
2831     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2832     \let\glsxtrifwasfirstuse\@secondoftwo
2833     \let\glsifplural\@secondoftwo
2834     \let\glscapscase\@firstofthree
2835     \let\glsinsert\@empty
2836     \def\glscustomtext{%
2837       \acronymfont{\glsaccessshort{#2}}#3%
2838     }%
2839     \gls@link[#1][#2]{\csname gls@\glstype @entryfmt\endcsname}%
2840   }%
2841   \glspostlinkhook
2842 }
```

\Acrshort First letter uppercase.

```
2843 \def\@Acrshort[#1][#3]{%
2844   \@glsxtr@base@acrcmd\Acrshort\Glsxtrshort
2845   \glsdoifexists{#2}%
2846   {%
2847     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2848     \let\glsxtrifwasfirstuse\@secondoftwo
2849     \let\glsifplural\@secondoftwo
2850     \let\glscapscase\@secondofthree
2851     \let\glsinsert\@empty
2852     \def\glscustomtext{%
2853       \acronymfont{\Glsaccessshort{#2}}#3%
2854     }%
2855     \gls@link[#1][#2]{\csname gls@\glstype @entryfmt\endcsname}%
2856   }%
2857   \glspostlinkhook
2858 }
```

\ACRshort All uppercase.

```
2859 \def\@ACRshort[#1][#3]{%
2860   \@glsxtr@base@acrcmd\ACRshort\GLSxtrshort
2861   \glsdoifexists{#2}%
```

```

2862 {%
2863   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2864   \let\glsxtrifwasfirstuse\@secondoftwo
2865   \let\glsifplural\@secondoftwo
2866   \let\glscapscase\@thirdofthree
2867   \let\glsinsert\@empty
2868   \def\glscustomtext{%
2869     \mfirstucMakeUppercase{\acronymfont{\glsaccessshort{#2}}}\#3}%
2870   }%
2871   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2872 }%
2873 \glspostlinkhook
2874 }

```

\acrshortpl No case change.

```

2875 \def\@acrshortpl#1#2[#3]{%
2876   \glsxtr@base@acrcmd\acrshortpl\glsxtrshortpl
2877   \glsdoifexists{#2}%
2878   {%
2879     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2880     \let\glsxtrifwasfirstuse\@secondoftwo
2881     \let\glsifplural\@firstoftwo
2882     \let\glscapscase\@firstofthree
2883     \let\glsinsert\@empty
2884     \def\glscustomtext{%
2885       \acronymfont{\glsaccessshortpl{#2}}}\#3}%
2886   }%
2887   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2888 }%
2889 \glspostlinkhook
2890 }

```

\acrshortpl First letter uppercase.

```

2891 \def\@Acrshortpl#1#2[#3]{%
2892   \glsxtr@base@acrcmd\Acrshortpl\Glsxtrshortpl
2893   \glsdoifexists{#2}%
2894   {%
2895     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2896     \let\glsxtrifwasfirstuse\@secondoftwo
2897     \let\glsifplural\@firstoftwo
2898     \let\glscapscase\@secondofthree
2899     \let\glsinsert\@empty
2900     \def\glscustomtext{%
2901       \acronymfont{\Glsaccessshortpl{#2}}}\#3}%
2902   }%
2903   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2904 }%
2905 \glspostlinkhook
2906 }

```

\@ACRshortpl All uppercase.

```
2907 \def\@ACRshortpl#1#2[#3]{%
2908   \glsxtr@base@acrcmd\ACRshortpl\GLSxtrshortpl
2909   \glsdoifexists{#2}%
2910 {%
2911   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2912   \let\glsxtrifwasfirstuse\@secondoftwo
2913   \let\glsifplural\@firstoftwo
2914   \let\glscapscase\@thirdofthree
2915   \let\glsinsert\@empty
2916   \def\glscustomtext{%
2917     \mfirstrucMakeUppercase{\acronymfont{\glsaccessshortpl{#2}}}{#3}%
2918   }%
2919   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2920 }%
2921 \glspostlinkhook
2922 }
```

\@acrlong No case change.

```
2923 \def\@acrlong#1#2[#3]{%
2924   \glsxtr@base@acrcmd\acrlong\glsxtrlong
2925   \glsdoifexists{#2}%
2926 {%
2927   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2928   \let\glsxtrifwasfirstuse\@secondoftwo
2929   \let\glsifplural\@secondoftwo
2930   \let\glscapscase\@firstofthree
2931   \let\glsinsert\@empty
2932   \def\glscustomtext{%
2933     \acronymfont{\glsaccesslong{#2}}{#3}%
2934   }%
2935   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2936 }%
2937 \glspostlinkhook
2938 }
```

\@Acrlong First letter uppercase.

```
2939 \def\@Acrlong#1#2[#3]{%
2940   \glsxtr@base@acrcmd\Acrlong\Glsxtrlong
2941   \glsdoifexists{#2}%
2942 {%
2943   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2944   \let\glsxtrifwasfirstuse\@secondoftwo
2945   \let\glsifplural\@secondoftwo
2946   \let\glscapscase\@secondofthree
2947   \let\glsinsert\@empty
2948   \def\glscustomtext{%
2949     \acronymfont{\Glsaccesslong{#2}}{#3}%
2950   }%
```

```
2951     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2952 }%
2953 \glspostlinkhook
2954 }
```

\@ACRlong All uppercase.

```
2955 \def\@ACRlong#1#2[#3]{%
2956   \glsxtr@base@acrcmd\ACRlong\GLSxtrlong
2957   \glsdoifexists{#2}%
2958 {%
2959   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2960   \let\glsxtrifwasfirstuse\@secondoftwo
2961   \let\glsifplural\@secondoftwo
2962   \let\glscapscase\@thirdofthree
2963   \let\glsinsert\@empty
2964   \def\glscustomtext{%
2965     \mfirstucMakeUppercase{\acronymfont{\glsaccesslong{#2}}#3}%
2966   }%
2967   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2968 }%
2969 \glspostlinkhook
2970 }
```

\@acrlongpl No case change.

```
2971 \def\@acrlongpl#1#2[#3]{%
2972   \glsxtr@base@acrcmd\acrlongpl\glsxtrlongpl
2973   \glsdoifexists{#2}%
2974 {%
2975   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2976   \let\glsxtrifwasfirstuse\@secondoftwo
2977   \let\glsifplural\@firstoftwo
2978   \let\glscapscase\@firstofthree
2979   \let\glsinsert\@empty
2980   \def\glscustomtext{%
2981     \acronymfont{\glsaccesslongpl{#2}}#3}%
2982   }%
2983   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2984 }%
2985 \glspostlinkhook
2986 }
```

\@Acrlongpl First letter uppercase.

```
2987 \def\@Acrlongpl#1#2[#3]{%
2988   \glsxtr@base@acrcmd\Acrlongpl\Glsxtrlongpl
2989   \glsdoifexists{#2}%
2990 {%
2991   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2992   \let\glsxtrifwasfirstuse\@secondoftwo
2993   \let\glsifplural\@firstoftwo
```

```

2994     \let\glscapscase\@secondofthree
2995     \let\glsinsert\@empty
2996     \def\glscustomtext{%
2997         \acronymfont{\Glsaccesslongpl{\#2}}{\#3}%
2998     }%
2999     \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
3000 }%
3001 \glspostlinkhook
3002 }

```

\@ACRlongpl All uppercase.

```

3003 \def\@ACRlongpl#1#2[#3]{%
3004     \@glsxtr@base@acrcmd\ACRlongpl\GLSxtrlongpl
3005     \glsdoifexists{\#2}{%
3006     }{%
3007         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
3008         \let\glsxtrifwasfirstuse\@secondoftwo
3009         \let\glsifplural\@firstoftwo
3010         \let\glscapscase\@thirdofthree
3011         \let\glsinsert\@empty
3012         \def\glscustomtext{%
3013             \mfirstucMakeUppercase{\acronymfont{\glsaccesslongpl{\#2}}{\#3}}%
3014         }%
3015         \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
3016     }%
3017     \glspostlinkhook
3018 }

```

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

```

3019 \def\@acrfull#1#2[#3]{%
3020     \@glsxtr@base@acrcmd\acrfull\glsxtrfull
3021     \acrfullfmt{\#1}{\#2}{\#3}%
3022 }

```

\@Acrfull

```

3023 \def\@Acrfull#1#2[#3]{%
3024     \@glsxtr@base@acrcmd\Acrfull\Glsxtrfull
3025     \Acrfullfmt{\#1}{\#2}{\#3}%
3026 }

```

\@ACRfull

```

3027 \def\@ACRfull#1#2[#3]{%

```

```

3028  \@glsxtr@base@acrcmd\ACRfull\GLSxtrfull
3029  \ACRfullfmt{#1}{#2}{#3}%
3030 }

\@acrfullpl
3031 \def\@acrfullpl#1#2[#3]{%
3032  \@glsxtr@base@acrcmd\acrfullpl\glsxtrfullpl
3033  \acrfullplfmt{#1}{#2}{#3}%
3034 }

\@Acrfullpl
3035 \def\@Acrfullpl#1#2[#3]{%
3036  \@glsxtr@base@acrcmd\Acrfullpl\Glsxtrfullpl
3037  \Acrfullplfmt{#1}{#2}{#3}%
3038 }

\@ACRfullpl
3039 \def\@ACRfullpl#1#2[#3]{%
3040  \@glsxtr@base@acrcmd\ACRfullpl\GLSxtrfullpl
3041  \ACRfullplfmt{#1}{#2}{#3}%
3042 }

```

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

```

\@glsaddkey
3043 \renewcommand*\@glsaddkey}[7]{%
3044  \key@ifundefined{glossentry}{#1}%
3045  {%
3046   \define@key{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
3047   \appto{\gls@keymap}{, #1}{#1}%
3048   \appto{\@newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
3049   \appto{\@newglossaryentryposthook}{%
3050     \letcs{@glo@tmp}{@glo@#1}%
3051     \gls@assign@field{#2}{\glo@label}{#1}{@glo@tmp}%
3052   }%
3053   \newcommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
3054   \newcommand*{#4}[1]{\Gls@entry@field{##1}{#1}}%

```

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

```

3055  \ifcsdef{@gls@user@#1@}%
3056  {%
3057    \PackageError{glossaries}%
3058    {Can't define '\string#5' as helper command}
3059    {\expandafter\string\csname @gls@user@#1@\endcsname' already
3060     exists}%
3061  {}%
3062  }%
3063  {%

```

```

3064 \expandafter\newcommand\expandafter*\expandafter
3065   {\csname @gls@user@\#1\endcsname}[2] []{%
3066     \new@ifnextchar[%
3067       {\csuse{@gls@user@\#1@}{##1}{##2}}%
3068       {\csuse{@gls@user@\#1@}{##1}{##2}[]}}%
3069   \csdef{@gls@user@\#1@}##1##2[##3]{%
3070     \@gls@field@link{##1}{##2}{#3{##2}##3}%
3071   }%
3072   \newrobustcmd*{#5}{%
3073     \expandafter\@gls@hyp@opt\csname @gls@user@\#1\endcsname}%
3074   }%

```

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

```

3075 \ifcsdef{@Gls@user@\#1@}{%
3076   {}%
3077   \PackageError{glossaries}{%
3078     {Can't define '\string#g6' as helper command
3079     '\expandafter\string\csname @Gls@user@\#1\endcsname' already
3080     exists}%
3081   }{}%
3082 }%
3083 {}%
3084 \expandafter\newcommand\expandafter*\expandafter
3085   {\csname @Gls@user@\#1\endcsname}[2] []{%
3086     \new@ifnextchar[%
3087       {\csuse{@Gls@user@\#1@}{##1}{##2}}%
3088       {\csuse{@Gls@user@\#1@}{##1}{##2}[]}}%
3089   \csdef{@Gls@user@\#1@}##1##2[##3]{%
3090     \@gls@field@link[\let\glscapscase\@secondofthree]%
3091     {##1}{##2}{#4{##2}##3}%
3092   }%
3093   \newrobustcmd*{#6}{%
3094     \expandafter\@gls@hyp@opt\csname @Gls@user@\#1\endcsname}%
3095   }%

```

Finally the all caps version (modified):

```

3096 \ifcsdef{@GLS@user@\#1@}{%
3097   {}%
3098   \PackageError{glossaries}{%
3099     {Can't define '\string#g7' as helper command
3100     '\expandafter\string\csname @GLS@user@\#1\endcsname' already
3101     exists}%
3102   }{}%
3103 }%
3104 {}%
3105 \expandafter\newcommand\expandafter*\expandafter
3106   {\csname @GLS@user@\#1\endcsname}[2] []{%
3107     \new@ifnextchar[%
3108       {\csuse{@GLS@user@\#1@}{##1}{##2}}%
3109       {\csuse{@GLS@user@\#1@}{##1}{##2}[]}}%

```

```

3110     \csdef{@GLS@user@#1@}##1##2[##3]{%
3111         \@gls@field@link[\let\glscapscase\@thirdofthree]%
3112             {##1}{##2}{\mfirstucMakeUppercase{#3{##2}##3}}%
3113     }%
3114     \newrobustcmd*{#7}{%
3115         \expandafter\gls@hyp@opt\csname @GLS@user@#1\endcsname}%
3116     }%
3117 }%
3118 {%
3119     \PackageError{glossaries-extra}{Key '#1' already exists}{}%
3120 }%
3121 }

```

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

```
3122 \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.

```

3123 \let\glsxtr@org@checkfirsthyper\gls@link@checkfirsthyper
3124 \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 `\glsdoifexists`).

```

3125 \ifglsused{\glslabel}%
3126   {\let\glsxtrifwasfirstuse\@secondoftwo}
3127   {\let\glsxtrifwasfirstuse\@firstoftwo}%

```

Store the category label for convenience.

```

3128 \protected@edef\glscategorylabel{\glscategory{\glslabel}}%
3129 \ifglsused{\glslabel}%
3130   {%
3131     \glsifcategoryattribute{\glscategorylabel}{nohypernext}{true}%
3132       {\KV@glslink@hyperfalse}{}%
3133   }%
3134   {%
3135     \glsifcategoryattribute{\glscategorylabel}{nohyperfirst}{true}%
3136       {\KV@glslink@hyperfalse}{}%
3137   }%
3138 \glslinkcheckfirsthyperhook
3139 }

```

`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.

```

3140 \ifdef\do@glsdisablehyperinlist
3141 {%
3142   \let\@glsxtr@do@glsdisablehyperinlist\do@glsdisablehyperinlist
3143   \renewcommand*\{\do@glsdisablehyperinlist}{%
3144     \glsxtr@do@glsdisablehyperinlist
3145     \glsifattribute{\glslabel}{nohyper}{true}{\KV@glslink@hyperfalse}{}{}}%
3146 }
3147 }
3148 {}
```

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

```

3149 \define@boolkey{glslink}{noindex}[true]{}
3150 \KV@glslink@noindexfalse
```

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

lt@glslink@opts

```

3151 \ifdef\@gls@setdefault@glslink@opts
3152 {%
3153   \renewcommand*\{\@gls@setdefault@glslink@opts}{%
3154     \KV@glslink@noindexfalse
3155     \glsxtrsetaliasnoindex
3156   }
3157 }
3158 {}
```

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

```

3159 \newcommand*\{\@gls@setdefault@glslink@opts}{%
3160   \KV@glslink@noindexfalse
3161   \glsxtrsetaliasnoindex
3162 }
3163 \preto\do@glsdisablehyperinlist{\@gls@setdefault@glslink@opts}
3164 }
```

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.)

```

3165 \providecommand*\{\glsxtrsetaliasnoindex}{%
3166   \KV@glslink@noindextrue
3167 }
```

setaliasnoindex

```

3168 \newcommand*\{\glsxtrsetaliasnoindex}{%
3169   \s@glsxtrifhasfield{alias}{\glslabel}{%
3170   }{%
3171     \let\glsxtrindexaliased\glsxtrindexaliased
3172     \glsxtrsetaliasnoindex
3173     \let\glsxtrindexaliased\@no@glsxtrindexaliased
3174   }{}}%
```

```

3175  {}%
3176 }

xtrindexaliased
3177 \newcommand{\@glsxtrindexaliased}{%
3178  \ifKV@glslink@noindex
3179  \else
3180    \begingroup
3181    \let@glsnumberformat@glsxtr@defaultnumberformat
3182    \protected@edef@gls@counter{\csname glo@\glsdetoklabel{\glslabel}@counter\endcsname}%
3183    \glsxtr@saveentrycounter
3184    \@@do@wrglossary{\glsxtralias{\glslabel}}%
3185    \endgroup
3186  \fi
3187 }

xtrindexaliased
3188 \newcommand{\@no@glsxtrindexaliased}{%
3189  \PackageError{glossaries-extra}{\string\glsxtrindexaliased\space
3190  not permitted outside definition of \string\glsxtrsetaliasnoindex}%
3191  {}%
3192 }

xtrindexaliased Provide a command to redirect alias indexing, but only allow it to be used within \glsxtrsetaliasnoindex.
3193 \let\glsxtrindexaliased\@no@glsxtrindexaliased

tDefaultGlsOpts Set the default options for \glslink etc.
3194 \newcommand*\GlsXtrSetDefaultGlsOpts}[1]{%
3195  \renewcommand*\@gls@setdefault@glslink@opts}{%
3196  \setkeys{glslink}{#1}%
3197  \glsxtrsetaliasnoindex
3198 }%
3199 }

lsxtrifindexing Provide user level command to access it in \glswriteentry.
3200 \newcommand*\glsxtrifindexing}[2]{%
3201  \ifKV@glslink@noindex #2\else #1\fi
3202 }

\glswriteentry Redefine to test for indexonlyfirst category attribute. This needs to use \GlsXtrIfUnusedOrUndefined instead of \ifglsused to allow it to work with bib2gls.
3203 \renewcommand*\glswriteentry}[2]{%
3204  \glsxtrifindexing
3205  {}%
3206  \ifglsindexonlyfirst
3207    \GlsXtrIfUnusedOrUndefined{#1}
3208    {#2}%

```

```

3209     {\glsxtrdoautoindexname{\#1}{dualindex}}%
3210 \else
3211     \glsifattribute{\#1}{indexonlyfirst}{true}%
3212     {%
3213         \GlsXtrIfUnusedOrUndefined{\#1}%
3214         {\#2}%
3215         {\glsxtrdoautoindexname{\#1}{dualindex}}%
3216     }%
3217     {\#2}%
3218 \fi
3219 }%
3220 {}%
3221 }

```

`@do@@wrglossary` Hook into glossary indexing command so that it can also use `\index` at the same time if required and add user hook.

```

3222 \appto{@do@@wrglossary}{\glsxtr@do@@wrindex
3223   \glsxtrdownrglossaryhook{\gls@label}%
3224 }

```

(The label can be obtained from `\gls@label` at this point.)

Similarly for the “noidx” version:

`s@noidxglossary`

```

3225 \appto{gls@noidxglossary}{\glsxtr@do@@wrindex
3226   \glsxtrdownrglossaryhook{\gls@label}%
3227 }

```

`xtr@do@@wrindex`

```

3228 \newcommand*{\glsxtr@do@@wrindex}{%
3229   \glsxtrdoautoindexname{\gls@label}{dualindex}%
3230 }

```

`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.)

```

3231 \newcommand*{\glsxtrdownrglossaryhook}[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.

```

3232 \newcommand*{\gls@alt@hyp@opt}[1]{%
3233   \let\glslinkvar\@firstofthree
3234   \let\@gls@hyp@opt@cs\relax
3235   \@ifstar{\s@gls@hyp@opt}{%
3236     {\@ifnextchar+{%
3237       {\@firstoftwo{\p@gls@hyp@opt}}%
3238     }{%
3239       \expandafter\@ifnextchar\@gls@alt@hyp@opt@char{%
3240         {\@firstoftwo{\@alt@gls@hyp@opt}}%
3241       }{%
3242     }%
3243   }%
3244 }

```

```

3241      {#1}%
3242    }%
3243  }%
3244 }

alt@gls@hyp@opt User version
3245 \newcommand*{\@alt@gls@hyp@opt}[1] []{%
3246   \let\glslinkvar\@firstofthree
3247   \expandafter\@gls@hyp@opt@cs\expandafter[\@gls@alt@hyp@opt@keys,#1]}

lt@hyp@opt@char Contains the character used as the command modifier.
3248 \newcommand*{\@gls@alt@hyp@opt@char}{}}

lt@hyp@opt@keys Contains the option list used as the command modifier.
3249 \newcommand*{\@gls@alt@hyp@opt@keys}{}}

rSetAltModifier
3250 \newcommand*{\GlsXtrSetAltModifier}[2]{%
3251   \let\@gls@hyp@opt\@gls@alt@hyp@opt
   Check that the supplied character isn't + or *
3252   \ifstreq{\#1}{+}%
3253     {\PackageError{glossaries-extra}%
3254       {Can't use '#1' as modifier (it's already in use)}{}%
3255     }%
3256     \ifstreq{\#1}{*}%
3257       {\PackageError{glossaries-extra}%
3258         {Can't use '#1' as modifier (it's already in use)}{}%
3259       }%
3260     }%
3261   \def\@gls@alt@hyp@opt@char{\#1}%
3262   \def\@gls@alt@hyp@opt@keys{\#2}%
3263   \ifdefeq{\@glsxtr@record@setting}{\@glsxtr@record@setting@off}%
3264   {}%
3265   {}

   Let bib2gls know the modifier.
3266   \protected@write\@auxout{}{\string\providecommand{\string\@glsxtr@altmodifier}[1]{}}
3267   \protected@write\@auxout{}{\string\@glsxtr@altmodifier{\#1}}%
3268 }%
3269 }

org@dohyperlink
3270 \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.

```

```

3271 \ifdef\glsnavhyperlink
3272 {
3273   \renewcommand*\glsnavhyperlink[3][\@glo@type]{%
3274     \protected@edef\gls@grplabel{\#2}\protected@edef\@gls@grptitle{\#3}%

```

Scope:

```

3275   {%
3276     \let\glsxtrdohyperlink\glsxtr@org@dohyperlink
3277     \@glslink{\glsnavhyperlinkname{\#1}{\#2}}{\#3}%
3278   }%
3279 }%
3280 }
3281 {}
```

The redefinition of \glsdohyperlink has been causing problems so introduce a new command instead.

sxtrohyperlink 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.

```

3282 \newcommand*\glsxtrdohyperlink[2]{%
3283   \glshasattribute{\glslabel}{targeturl}%
3284   {%
3285     \glshasattribute{\glslabel}{targetname}%
3286   }%
3287   \glshasattribute{\glslabel}{targetcategory}%
3288   {%
3289     \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
3290       {\glsgetattribute{\glslabel}{targetcategory}}{%
3291         {\glsgetattribute{\glslabel}{targetname}}{%
3292           {{\glsxtrprotectlinks{\#2}}}}}}%
3293   }%
3294   {%
3295     \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
3296       {}{%
3297         {\glsgetattribute{\glslabel}{targetname}}{%
3298           {{\glsxtrprotectlinks{\#2}}}}}}%
3299   }%
3300 }%
3301 {%
3302   \href{\glsgetattribute{\glslabel}{targeturl}}{%
3303     {{\glsxtrprotectlinks{\#2}}}}%
3304 }%
3305 }%
```

```

3306 {%
  Check for alias.

3307   \glsfieldfetch{\glslabel}{alias}{\gloaliaslabel}%
3308   \ifdefvoid\gloaliaslabel
3309   {%
3310     \glsxtrhyperlink{#1}{{\glsxtrprotectlinks#2}}%
3311   }%
3312 {%

```

Redirect link to the alias target.

```

3313   \glsxtrhyperlink
3314     {\glolinkprefix\glsdetoklabel{\gloaliaslabel}}%
3315     {{\glsxtrprotectlinks#2}}%
3316   }%
3317 }%
3318 }

```

`glsxtrhyperlink` Allows integration with the base `glossaries` package's `debug=showtargets` option.

```

3319 \ifdef{@glsshowtarget}
3320 {%
3321   \newcommand{\glsxtrhyperlink}[2]{%
3322     \@glsshowtarget{#1}%
3323     \hyperlink{#1}{#2}%
3324   }%
3325 }
3326 {
3327   \newcommand{\glsxtrhyperlink}[2]{\hyperlink{#1}{#2}}%
3328 }

```

`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.

```

3329 \renewrobustcmd*{\glshyperlink}[2][\glsentrytext{@glo@label}]{%
3330   \glsdoifexists{#2}%
3331   {%
3332     \def{@glo@label}{#2}%
3333     {\protected@edef{\glslabel}{#2}%
3334       \glslink{\glolinkprefix\glslabel}{#1}}%
3335   }%
3336 }

```

`glsdisablehyper` Redefine in case we have an old version of `glossaries`. This now uses `\def` rather than `\let` to allow for redefinitions of `\glsdonohyperlink`.

```

3337 \renewcommand{\glsdisablehyper}{%
3338   \KV@glslink@hyperfalse
3339   \def{\glslink{\glsdonohyperlink}}%

```

```
3340 \let\@glstarget\@secondoftwo
3341 }
```

\glsenablehyper This now uses \def rather than \let to allow for redefinitions of \glsdohypertarget and \glsdohyperlink.

```
3342 \renewcommand{\glsenablehyper}{%
3343   \KV@glslink@hypertrue
3344   \def\@glslink{\glsxtrdohyperlink}%
3345   \def\@glstarget{\glsdohypertarget}%
3346 }
```

\glsdonohyperlink 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).

```
3347 \def\glsdonohyperlink#1#2{\glsxtrprotectlinks #2}
```

\@glslink Reset \glslink with patched versions:

```
3348 \ifcsundef{hyperlink}%
3349 {%
3350   \def\@glslink{\glsdonohyperlink}%
3351 }%
3352 {%
3353   \def\@glslink{\glsxtrdohyperlink}%
3354 }
```

\glsxtrprotectlinks Make \gls (and variants) behave like the corresponding \glstext (and variants) with hyperlinking and indexing off.

```
3355 \newcommand*{\glsxtrprotectlinks}{%
3356   \KV@glslink@hyperfalse
3357   \KV@glslink@noindextrue
3358   \let\@gls@\@glsxtr@p@text@
3359   \let\@Gls@\@Glsxtr@p@text@
3360   \let\@GLS@\@GLSxtr@p@text@
3361   \let\@glspl@\@glsxtr@p@plural@
3362   \let\@Glspl@\@Glsxtr@p@plural@
3363   \let\@GLSpl@\@GLSxtr@p@plural@
3364   \let\@glsxtrshort\@glsxtr@p@short@
3365   \let\@Glsxtrshort\@Glsxtr@p@short@
3366   \let\@GLSxtrshort\@GLSxtr@p@short@
3367   \let\@glsxtrlong\@glsxtr@p@long@
3368   \let\@Glsxtrlong\@Glsxtr@p@long@
3369   \let\@GLSxtrlong\@GLSxtr@p@long@
3370   \let\@glsxtrshortpl\@glsxtr@p@shortpl@
3371   \let\@Glsxtrshortpl\@Glsxtr@p@shortpl@
3372   \let\@GLSxtrshortpl\@GLSxtr@p@shortpl@
3373   \let\@glsxtrlongpl\@glsxtr@p@longpl@
3374   \let\@Glsxtrlongpl\@Glsxtr@p@longpl@}
```

```

3375 \let\@GLSxtrlongpl\@GLSxtr@p@longpl@
3376 \let\@acrshort\@glsxtr@p@acrshort@
3377 \let\@Acrshort\@Glsxtr@p@acrshort@
3378 \let\@ACRshort\@GLSxtr@p@acrshort@
3379 \let\@acrshortpl\@glsxtr@p@acrshortpl@
3380 \let\@Acrshortpl\@Glsxtr@p@acrshortpl@
3381 \let\@ACRshortpl\@GLSxtr@p@acrshortpl@
3382 \let\@acrlong\@glsxtr@p@acrlong@
3383 \let\@Acrlong\@Glsxtr@p@acrlong@
3384 \let\@ACRLong\@GLSxtr@p@acrlong@
3385 \let\@acrlongpl\@glsxtr@p@acrlongpl@
3386 \let\@Acrlongpl\@Glsxtr@p@acrlongpl@
3387 \let\@ACRLongpl\@GLSxtr@p@acrlongpl@
3388 }

```

These protected versions need grouping to prevent the label from getting confused.

```

@glsxtr@p@text@
3389 \def\@glsxtr@p@text@#1#2[#3]{{\@glstext@{#1}{#2}[#3]}}
```

```

@Glsxtr@p@text@
3390 \def\@Glsxtr@p@text@#1#2[#3]{{\@Glstext@{#1}{#2}[#3]}}
```

```

@GLSxtr@p@text@
3391 \def\@GLSxtr@p@text@#1#2[#3]{{\@GLStext@{#1}{#2}[#3]}}
```

```

lsxtr@p@plural@
3392 \def\@glsxtr@p@plural@#1#2[#3]{{\@glsplural@{#1}{#2}[#3]}}
```

```

lsxtr@p@plural@
3393 \def\@Glsxtr@p@plural@#1#2[#3]{{\@Glsplural@{#1}{#2}[#3]}}
```

```

LSxtr@p@plural@
3394 \def\@GLSxtr@p@plural@#1#2[#3]{{\@GLSpplural@{#1}{#2}[#3]}}
```

```

glsxtr@p@short@
3395 \def\@glsxtr@p@short@#1#2[#3]{%
3396 {%
3397 \glssetabbrvfmt{\glscategory{#2}}%
3398 \glsabbrvfont{\glsentryshort{#2}}#3%
3399 }%
3400 }
```

```

Glsxtr@p@short@
3401 \def\@Glsxtr@p@short@#1#2[#3]{%
3402 {%
3403 \glssetabbrvfmt{\glscategory{#2}}%
3404 \glsabbrvfont{\Glsentryshort{#2}}#3%
3405 }%
3406 }
```

```

GLSxtr@p@short@%
3407 \def\@GLSxtr@p@short@#1#2[#3]{%
3408   {%
3409     \glssetabrvfmt{\glscategory{#2}}%
3410     \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshort{#2}}#3}%
3411   }%
3412 }

sxtr@p@shortpl@%
3413 \def\@glsxtr@p@shortpl@#1#2[#3]{%
3414   {%
3415     \glssetabrvfmt{\glscategory{#2}}%
3416     \glsabbrvfont{\glsentryshortpl{#2}}#3}%
3417   }%
3418 }

sxtr@p@shortpl@%
3419 \def\@Glsxtr@p@shortpl@#1#2[#3]{%
3420   {%
3421     \glssetabrvfmt{\glscategory{#2}}%
3422     \glsabbrvfont{\Glsentryshortpl{#2}}#3}%
3423   }%
3424 }

Sxtr@p@shortpl@%
3425 \def\@GLSxtr@p@shortpl@#1#2[#3]{%
3426   {%
3427     \glssetabrvfmt{\glscategory{#2}}%
3428     \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshortpl{#2}}#3}%
3429   }%
3430 }

@glsxtr@p@long@%
3431 \def\@glsxtr@p@long@#1#2[#3]{{{\glsentrylong{#2}}#3}%

@Glsxtr@p@long@%
3432 \def\@Glsxtr@p@long@#1#2[#3]{{{\Glsentrylong{#2}}#3}%

@GLSxtr@p@long@%
3433 \def\@GLSxtr@p@long@#1#2[#3]{%
3434   {\mfirstucMakeUppercase{\glslongfont{\glsentrylong{#2}}#3}}}

lsxtr@p@longpl@%
3435 \def\@glsxtr@p@longpl@#1#2[#3]{{{\glsentrylongpl{#2}}#3}%

lsxtr@p@longpl@%
3436 \def\@Glsxtr@p@longpl@#1#2[#3]{{{\glslongfont{\Glsentrylongpl{#2}}#3}}}

```

```

LSxtr@p@longpl@
 3437 \def\@GLSxtr@p@longpl@#1#2[#3]{%
 3438   {\mfirstucMakeUppercase{\glslongfont{\glsentrylongpl{#2}}#3}}}

xtr@p@acrshort@
 3439 \def\@glsxtr@p@acrshort@#1#2[#3]{{{\acronymfont{\glsentryshort{#2}}#3}}}

xtr@p@acrshort@
 3440 \def\@Glsxtr@p@acrshort@#1#2[#3]{{{\acronymfont{\Glsentryshort{#2}}#3}}}

xtr@p@acrshort@
 3441 \def\@GLSxtr@p@acrshort@#1#2[#3]{%
 3442   {\mfirstucMakeUppercase{\acronymfont{\glsentryshort{#2}}#3}}}

r@p@acrshortpl@
 3443 \def\@glsxtr@p@acrshortpl@#1#2[#3]{{{\acronymfont{\glsentryshortpl{#2}}#3}}}

r@p@acrshortpl@
 3444 \def\@Glsxtr@p@acrshortpl@#1#2[#3]{{{\acronymfont{\Glsentryshortpl{#2}}#3}}}

sxtr@p@acrlong@
 3447 \def\@glsxtr@p@acrlong@#1#2[#3]{{{\glsentrylong{#2}}#3}}}

sxtr@p@acrlong@
 3448 \def\@Glsxtr@p@acrlong@#1#2[#3]{{{\Glsentrylong{#2}}#3}}}

Sxtr@p@acrlong@
 3449 \def\@GLSxtr@p@acrlong@#1#2[#3]{%
 3450   {\mfirstucMakeUppercase{\glsentrylong{#2}}#3}}}

tr@p@acrlongpl@
 3451 \def\@glsxtr@p@acrlongpl@#1#2[#3]{{{\glsentrylongpl{#2}}#3}}}

tr@p@acrlongpl@
 3452 \def\@Glsxtr@p@acrlongpl@#1#2[#3]{{{\Glsentrylongpl{#2}}#3}}}

tr@p@acrlongpl@
 3453 \def\@GLSxtr@p@acrlongpl@#1#2[#3]{%
 3454   {\mfirstucMakeUppercase{\glsentrylongpl{#2}}#3}}}

```

Commands to minimise conflict.

```

\@glsxtrp@opt
 3455 \newcommand*{\@glsxtrp@opt}{hyper=false,noindex}

```

\glsxtrsetpopts Used in glossary to switch hyperlinks on for the \glsxtrp type of commands.

```
3456 \newcommand*{\glsxtrsetpopts}[1]{%
3457   \renewcommand*{\@glsxtrp@opt}{#1}%
3458 }
```

\glossxtrsetpopts Used in glossary to switch hyperlinks on for the \glsxtrp type of commands.

```
3459 \newcommand*{\glossxtrsetpopts}{%
3460   \glsxtrsetpopts{noindex}%
3461 }
```

\@@glsxtrp

```
3462 \newrobustcmd*{\@@glsxtrp}[2]{%
  Add scope.
3463   {%
3464     \let\glspostlinkhook\relax
3465     \csname#1\expandafter\endcsname\expandafter[\@glsxtrp@opt]{#2}[]%
3466   }%
3467 }
```

\@glsxtrp

```
3468 \newrobustcmd*{\@glsxtrp}[2]{%
3469   \ifcsdef{gls#1}%
3470   {%
3471     \@@glsxtrp{gls#1}{#2}%
3472   }%
3473   {%
3474     \ifcsdef{glsxtr#1}%
3475     {%
3476       \@@glsxtrp{glsxtr#1}{#2}%
3477     }%
3478     {%
3479       \PackageError{glossaries-extra}{‘#1’ not recognised by
3480         \string\glsxtrp}{}%
3481     }%
3482   }%
3483 }
```

\@Glsxtrp

```
3484 \newrobustcmd*{\@Glsxtrp}[2]{%
3485   \ifcsdef{Gls#1}%
3486   {%
3487     \@@glsxtrp{Gls#1}{#2}%
3488   }%
3489   {%
3490     \ifcsdef{Glsxtr#1}%
3491     {%
3492       \@@glsxtrp{Glsxtr#1}{#2}%
3493     }%
```

```

3494     {%
3495         \PackageError{glossaries-extra}{‘#1’ not recognised by
3496             \string\Glsxtrp}{}%
3497     }%
3498 }%
3499 }

\@GLSxtrp
3500 \newrobustcmd*\@GLSxtrp}[2]{%
3501     \ifcsdef{GLS#1}{%
3502     {%
3503         \@@glsxtrp{GLS#1}{#2}%
3504     }%
3505     {%
3506         \ifcsdef{GLSxtr#1}{%
3507             {%
3508                 \@@glsxtrp{GLSxtr#1}{#2}%
3509             }%
3510             {%
3511                 \PackageError{glossaries-extra}{‘#1’ not recognised by
3512                     \string\GLSxtrp}{}%
3513             }%
3514         }%
3515     }%
3516 }

\glsxtr@entry@p
3516 \newrobustcmd*\glsxtr@headentry@p}[2]{%
3517     \glsifattribute{#1}{headuc}{true}{%
3518     {%
3519         \mfirstucMakeUppercase{\gls@entry@field{#1}{#2}}%
3520     }%
3521     {%
3522         \gls@entry@field{#1}{#2}%
3523     }%
3524 }

\glsxtrp Not robust as it needs to expand somewhat.
3525 \ifdef\texorpdfstring
3526 {
3527     \newcommand*\glsxtrp}[2]{%
3528         \protect\NoCaseChange
3529     {%
3530         \protect\texorpdfstring
3531     {%
3532         \protect\glsxtrifinmark
3533     {%
3534         \ifcsdef{glsxtrhead#1}{%
3535             {%
3536                 \protect\csuse{glsxtrhead#1}{#2}%

```

```

3537      }%
3538      {%
3539          \glsxstr@headentry@p{#2}{#1}%
3540      }%
3541      }%
3542      {%
3543          \glsxtrp{#1}{#2}%
3544      }%
3545      }%
3546      {%
3547          \protect\gls@entry@field{#2}{#1}%
3548      }%
3549      }%
3550  }
3551 }
3552 {
3553 \newcommand{\glsxtrp}[2]{%
3554     \protect\NoCaseChange
3555     {%
3556         \protect\glsxtrifinmark
3557     }%
3558     \ifcsdef{glsxtrhead#1}%
3559     {%
3560         \protect\csuse{glsxtrhead#1}%
3561     }%
3562     {%
3563         \glsxstr@headentry@p{#2}{#1}%
3564     }%
3565     }%
3566     {%
3567         \glsxtrp{#1}{#2}%
3568     }%
3569     }%
3570 }
3571 }

```

Provide short synonyms for the most common option.

```
\glsps
3572 \newcommand*{\glsps}{\glsxtrp{short}}
```

```
\glspt
3573 \newcommand*{\glspt}{\glsxtrp{text}}
```

\Glsxtrp As above but use first letter upper case (but not for the bookmarks, which can't process `\uppercase`).

```
3574 \ifdef\texorpdfstring
3575 {
3576     \newcommand{\Glsxtrp}[2]{%
```

```

3577 \protect\NoCaseChange
3578 {%
3579   \protect\texorpdfstring
3580   {%
3581     \protect\glsxtrifinmark
3582     {%
3583       \ifcsdef{Glsxtrhead#1}%
3584       {%
3585         {\protect\csuse{Glsxtrhead#1}{#2}}%
3586       }%
3587       {%
3588         \protect{@Gls@entry@field{#2}{#1}}%
3589       }%
3590     }%
3591     {%
3592       \Glsxtrp{#1}{#2}%
3593     }%
3594   }%
3595   {%
3596     \protect{@gls@entry@field{#2}{#1}}%
3597   }%
3598 }
3599 }
3600 }
3601 {
3602 \newcommand{\Glsxtrp}[2]{%
3603   \protect\NoCaseChange
3604   {%
3605     \protect\glsxtrifinmark
3606     {%
3607       \ifcsdef{Glsxtrhead#1}%
3608       {%
3609         {\protect\csuse{Glsxtrhead#1}}%
3610       }%
3611       {%
3612         \protect{@Gls@entry@field{#2}{#1}}%
3613       }%
3614     }%
3615     {%
3616       \Glsxtrp{#1}{#2}%
3617     }%
3618   }%
3619 }
3620 }

```

\GLSxtrp As above but all upper case (but not for the bookmarks, which can't process \uppercase).

```

3621 \ifdef\texorpdfstring
3622 {
3623 \newcommand{\GLSxtrp}[2]{%

```

```

3624 \protect\NoCaseChange
3625 {%
3626   \protect\texorpdfstring
3627   {%
3628     \protect\glsxtrifinmark
3629     {%
3630       \ifcsdef{GLSxtr#1}%
3631       {%
3632         {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
3633       }%
3634     {%
3635       \protect\mfirstucMakeUppercase
3636       {%
3637         \protect\@gls@entry@field{#2}{#1}%
3638       }%
3639     }%
3640   }%
3641   {%
3642     \@GLSxtrp{#1}{#2}%
3643   }%
3644 }%
3645 {%
3646   \protect\@gls@entry@field{#2}{#1}%
3647 }%
3648 }%
3649 }
3650 }
3651 {
3652 \newcommand{\GLSxtrp}[2]{%
3653   \protect\NoCaseChange
3654   {%
3655     \protect\glsxtrifinmark
3656     {%
3657       \ifcsdef{GLSxtr#1}%
3658       {%
3659         {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
3660       }%
3661     {%
3662       \protect\mfirstucMakeUppercase
3663       {%
3664         \protect\@gls@entry@field{#2}{#1}%
3665       }%
3666     }%
3667   }%
3668   {%
3669     \@GLSxtrp{#1}{#2}%
3670   }%
3671 }%
3672 }

```

```
3673 }
```

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.
```

```
3674 \newcommand*{\@glsxtr@unset}[1]{%
3675   \@@glsunset{#1}%
3676   \glsxtrpostunset{#1}%
3677 }%
```

```
\@glsunset Global unset.
```

```
3678 \let\@glsunset\@glsxtr@unset
```

```
glsxtrpostunset
```

```
3679 \newcommand*{\glsxtrpostunset}[1]{}
```

Provide a command to store a list of labels that will need unsetting.

```
tUnsetBuffering
```

```
3680 \newcommand*{\GlsXtrStartUnsetBuffering}{%
3681   \c@ifstar\s@\GlsXtrStartUnsetBuffering\@GlsXtrStartUnsetBuffering
3682 }
```

```
tUnsetBuffering Unstarred version doesn't check for duplicates.
```

```
3683 \newcommand*{\@GlsXtrStartUnsetBuffering}{%
3684   \let\@glsxtr@org@unset@buffer\@glsxtr@unset@buffer
3685   \def\@glsxtr@unset@buffer{}%
3686   \let\@glsunset\@glsxtrbuffer@unset
3687 }
```

```
tUnsetBuffering Starred version checks for duplicates.
```

```
3688 \newcommand*{\s@\GlsXtrStartUnsetBuffering}{%
3689   \let\@glsxtr@org@unset@buffer\@glsxtr@unset@buffer
3690   \def\@glsxtr@unset@buffer{}%
```

```

3691 \let\@glsunset\@glsxtrbuffer@nodup@unset
3692 }

xtrbuffer@unset This must use a global change since \gls may have to be placed inside \mbox (for example,
with soul commands).
3693 \newcommand*{\@glsxtrbuffer@unset}[1]{%
3694   \listxadd\@glsxtr@unset@buffer{#1}%
3695 }

fer@nodup@unset Alternative version that avoids duplicates. One level of expansion is performed on the ar-
gument 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.)
3696 \newcommand*{\@glsxtrbuffer@nodup@unset}[1]{%
3697   \expandafter\ifinlist\expandafter{#1}{\@glsxtr@unset@buffer}{}%
3698   {\listxadd\@glsxtr@unset@buffer{#1}}%
3699 }

pUnsetBuffering
3700 \newcommand*{\GlsXtrStopUnsetBuffering}{%
3701   \c@ifstar{s@\GlsXtrStopUnsetBuffering@\GlsXtrStopUnsetBuffering}
3702 }

pUnsetBuffering Unstarred form (global unset).
3703 \newcommand*{\@GlsXtrStopUnsetBuffering}{%
3704   \let\@glsunset\@glsxtr@unset
3705   \forlistloop\@glsunset\@glsxtr@unset@buffer
3706   \let\@glsxtr@unset@buffer\@glsxtr@org@unset@buffer
3707 }

pUnsetBuffering Starred form (local unset).
3708 \newcommand*{\s@\GlsXtrStopUnsetBuffering}{%
3709   \forlistloop\@glslocalunset@\glsxtr@unset@buffer
3710   \let\@glsunset\@glsxtr@unset
3711 }

dUnsetBuffering Discards pending buffer and restores \glsunset.
3712 \newcommand*{\GlsXtrDiscardUnsetBuffering}{%
3713   \let\@glsunset\@glsxtr@unset
3714   \let\@glsxtr@unset@buffer\@glsxtr@org@unset@buffer
3715 }

setBufferedList Iterate over labels stored in the current buffer. The argument is the handler macro.
3716 \newcommand*{\GlsXtrForUnsetBufferedList}[1]{%
3717   \forlistloop#1\@glsxtr@unset@buffer
3718 }

```

```

\@glslocalunset Local unset.
3719 \renewcommand*{\@glslocalunset}[1]{%
3720   \@@glslocalunset{#1}%
3721   \glsxtrpostlocalunset{#1}%
3722 }%

rpostlocalunset
3723 \newcommand*{\glsxtrpostlocalunset}[1]{}

\@glsreset Global reset.
3724 \renewcommand*{\@glsreset}[1]{%
3725   \@@glsreset{#1}%
3726   \glsxtrpostreset{#1}%
3727 }%

glsxtrpostreset
3728 \newcommand*{\glsxtrpostreset}[1]{}

\@glslocalreset Local reset.
3729 \renewcommand*{\@glslocalreset}[1]{%
3730   \@@glslocalreset{#1}%
3731   \glsxtrpostlocalreset{#1}%
3732 }%

rpostlocalreset
3733 \newcommand*{\glsxtrpostlocalreset}[1]{}

slocalreseteach Locally reset a list of entries.
3734 \newcommand*{\glslocalreseteach}[1]{%
3735   \gls@ifnotmeasuring
3736   {%
3737     \@for\@gls@thislabel:=#1\do{%
3738       \glsdoifexists{\@gls@thislabel}%
3739       {%
3740         \glslocalreset{\@gls@thislabel}%
3741       }%
3742     }%
3743   }%
3744 }

slocalunseteach Locally unset a list of entries.
3745 \newcommand*{\glslocalunseteach}[1]{%
3746   \gls@ifnotmeasuring
3747   {%
3748     \@for\@gls@thislabel:=#1\do{%
3749       \glsdoifexists{\@gls@thislabel}%
3750       {%
3751         \glslocalunset{\@gls@thislabel}%

```

```
3752      }%
3753    }%
3754  }%
3755 }
```

leEntryCounting The first argument is the list of categories and the second argument is the value of the entrycount attribute.

```
3756 \newcommand*{\GlsXtrEnableEntryCounting}[2]{%
```

 Enable entry counting:

```
3757   \glsenableentrycount
```

 Redefine \gls etc:

```
3758   \renewcommand*{\gls}{\cgls}%
3759   \renewcommand*{\Gls}{\cGls}%
3760   \renewcommand*{\glspol}{\cgglspol}%
3761   \renewcommand*{\Glspol}{\cGlspol}%
3762   \renewcommand*{\GLS}{\cGLS}%
3763   \renewcommand*{\GLSpol}{\cGLSpol}%
```

 Set the entrycount attribute:

```
3764   @glsxtr@setentrycountunsetattr{#1}{#2}%
```

 In case this command is used again:

```
3765   \let\GlsXtrEnableEntryCounting@glsxtr@setentrycountunsetattr
3766   \renewcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
3767     \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryUnitCounting\space
3768       can't be used with \string\GlsXtrEnableEntryCounting}%
3769     {Use one or other but not both commands}}%
3770 }
```

ycountunsetattr

```
3771 \newcommand*{@glsxtr@setentrycountunsetattr}[2]{%
3772   @for@glsxtr@cat:=#1\do
3773   {%
3774     \ifdefempty{@glsxtr@cat}{}%
3775     {%
3776       \glssetcategoryattribute{@glsxtr@cat}{entrycount}{#2}%
3777     }%
3778   }%
3779 }
```

Redefine the entry counting commands to take into account the entrycount attribute.

nableentrycount

```
3780 \renewcommand*{\glsenableentrycount}{%
```

 Enable new fields:

```
3781   \appto@newglossaryentry@defcounters{@newglossaryentry@defcounters}%
```

Just in case the user has switched on the docdef option.

```
3782 \renewcommand*\gls@defdocnewglossaryentry}{%
3783   \renewcommand*\newglossaryentry[2]{%
3784     \PackageError{glossaries}{\string\newglossaryentry\space%
3785       may only be used in the preamble when entry counting has%
3786       been activated}{If you use \string\glsenableentrycount\space%
3787       you must place all entry definitions in the preamble not in%
3788       the document environment}%
3789   }%
3790 }%
```

New commands to access new fields:

```
3791 \newcommand*\glsentrycurrcount}[1]{%
3792   \ifcsundef{glo@\glsdetoklabel{\##1}@currcount}%
3793   {0}{\gls@entry@field{\##1}{currcount}}%
3794 }%
3795 \newcommand*\glsentryprevcount}[1]{%
3796   \ifcsundef{glo@\glsdetoklabel{\##1}@prevcount}%
3797   {0}{\gls@entry@field{\##1}{prevcount}}%
3798 }%
```

Adjust post unset and reset:

```
3799 \let\glsxtr@entrycount@org@unset\glsxtrpostunset
3800 \renewcommand*\glsxtrpostunset}[1]{%
3801   \glsxtr@entrycount@org@unset{\##1}%
3802   \gls@increment@currcount{\##1}%
3803 }%
3804 \let\glsxtr@entrycount@org@localunset\glsxtrpostlocalunset
3805 \renewcommand*\glsxtrpostlocalunset}[1]{%
3806   \glsxtr@entrycount@org@localunset{\##1}%
3807   \gls@local@increment@currcount{\##1}%
3808 }%
3809 \let\glsxtr@entrycount@org@reset\glsxtrpostreset
3810 \renewcommand*\glsxtrpostreset}[1]{%
3811   \glsxtr@entrycount@org@reset{\##1}%
3812   \csgdef{glo@\glsdetoklabel{\##1}@currcount}{0}%
3813 }%
3814 \let\glsxtr@entrycount@org@localreset\glsxtrpostlocalreset
3815 \renewcommand*\glsxtrpostlocalreset}[1]{%
3816   \glsxtr@entrycount@org@localreset{\##1}%
3817   \csdef{glo@\glsdetoklabel{\##1}@currcount}{0}%
3818 }%
```

Modifications to take into account the attributes that govern whether the entry should be unset.

```
3819 \let\cglso\cglso
3820 \let\cglsplo\cglsplo
3821 \let\cGls\cGls
3822 \let\cGlspl\cGlspl
3823 \let\cGLS\cGLS
```

```
3824 \let\cGLSp1@\cGLSp1@
```

The rest is as the original definition.

```
3825 \AtEndDocument{\gls@write@entrycounts}%
3826 \renewcommand*{\gls@entry@count}[2]{%
3827   \csgdef{glo@\glsdetoklabel{##1}@prevcount}{##2}%
3828 }%
3829 \let\glsenableentrycount\relax
3830 \renewcommand*{\glsenableentryunitcount}{%
3831   \PackageError{glossaries-extra}{\string\glsenableentryunitcount\space
3832     can't be used with \string\glsenableentrycount}%
3833   {Use one or other but not both commands}%
3834 }%
3835 }
```

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.

```
3836 \renewcommand*{\gls@write@entrycounts}%
3837   \immediate\write\auxout
3838   {\string\providecommand*{\string@gls@entry@count}[2]{}}
3839 \count@=0\relax
3840 \forallglsentries{\glsentry}{%
3841   \glshasattribute{\glsentry}{entrycount}%
3842   {%
3843     \ifglsused{\glsentry}%
3844     {%
3845       \immediate\write\auxout
3846       {\string@gls@entry@count{\glsentry}{\glsentrycurrcount{\glsentry}}}
3847     }%
3848     {}%
3849     \advance\count@ by \one
3850   }%
3851   {}%
3852 }%
3853 \ifnum\count@=0
3854   \GlossariesExtraWarningNoLine{Entry counting has been enabled
3855     \MessageBreak with \string\glsenableentrycount\space but the
3856     \MessageBreak attribute 'entrycount' hasn't
3857     \MessageBreak been assigned to any of the defined
3858     \MessageBreak entries}%
3859 \fi
3860 }
```

rifcounttrigger

```
\glsxtrifcounttrigger{\label}{\triggerformat}{\normal}
```

```

3861 \newcommand*\glsxtrifcounttrigger}[3]{%
3862   \glshasattribute{#1}{entrycount}%
3863   {%
3864     \ifnum\glsentryprevcount{#1}>\glsgetattribute{#1}{entrycount}\relax
3865       #3%
3866     \else
3867       #2%
3868     \fi
3869   }%
3870   {#3}%
3871 }

```

Actual internal definitions of \cglss used when entry counting is enabled.

\@cglss@

```

3872 \def\@cglss@#1#2[#3]{%
3873   \glsxtrifcounttrigger{#2}%
3874   {%
3875     \cglssformat{#2}{#3}%
3876     \glsunset{#2}%
3877   }%
3878   {%
3879     \cglss@{#1}{#2}{#3}%
3880   }%
3881 }

```

\@cglspl@

```

3882 \def\@cglspl@#1#2[#3]{%
3883   \glsxtrifcounttrigger{#2}%
3884   {%
3885     \cglsplformat{#2}{#3}%
3886     \glsunset{#2}%
3887   }%
3888   {%
3889     \cglspl@{#1}{#2}{#3}%
3890   }%
3891 }

```

\@cGls@

```

3892 \def\@cGls@#1#2[#3]{%
3893   \glsxtrifcounttrigger{#2}%
3894   {%
3895     \cGlsformat{#2}{#3}%
3896     \glsunset{#2}%
3897   }%
3898   {%
3899     \cGls@{#1}{#2}{#3}%
3900   }%
3901 }

```

```

\@@cGlsp1@
3902 \def\@@cGlsp1@#1#2[#3]{%
3903   \glsxtrifcounttrigger{#2}%
3904   {%
3905     \cGlsp1format{#2}{#3}%
3906     \glsunset{#2}%
3907   }%
3908   {%
3909     \cGlsp1@{#1}{#2}[#3]%
3910   }%
3911 }%

```

```

\@@cGLS@
3912 \def\@@cGLS@#1#2[#3]{%
3913   \glsxtrifcounttrigger{#2}%
3914   {%
3915     \cGLSformat{#2}{#3}%
3916     \glsunset{#2}%
3917   }%
3918   {%
3919     \cGLS@{#1}{#2}[#3]%
3920   }%
3921 }%

```

```

\@@cGLSp1@
3922 \def\@@cGLSp1@#1#2[#3]{%
3923   \glsxtrifcounttrigger{#2}%
3924   {%
3925     \cGLSp1format{#2}{#3}%
3926     \glsunset{#2}%
3927   }%
3928   {%
3929     \cGLSp1@{#1}{#2}[#3]%
3930   }%
3931 }%

```

Remove default warnings from `\cgl`s etc so that it can be used interchangeable with `\gl`s etc.

```

\@cgl@
3932 \def\@cgl@#1#2[#3]{\@gl@{#1}{#2}[#3]}

\@cGls@
3933 \def\@cGls@#1#2[#3]{\@Gls@{#1}{#2}[#3]}

\@cglspl@
3934 \def\@cglspl@#1#2[#3]{\@glsp1@{#1}{#2}[#3]}

```

```

\@cGlspl@

3935 \def\@cGlspl#1#2[#3]{\@Glspl{#1}{#2}[#3]}

Add all upper case versions not provided by glossaries.

\cGLS

3936 \newrobustcmd*\cGLS{\gls@hyp@opt\cGLS}

\@cGLS Defined the un-starred form. Need to determine if there is a final optional argument
3937 \newcommand*\@cGLS[2][]%
3938   \new@ifnextchar[\@cGLS{#1}{#2}]{\cGLS{#1}{#2}[]}{%
3939 }

\@cGLS@

3940 \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.
3941 \newcommand*\cGLSformat[2]{%
3942   \expandafter\mfirstuc\expandafter{\cGLSformat{#1}{#2}}%
3943 }

\cGLSp1

3944 \newrobustcmd*\cGLSp1{\gls@hyp@opt\cGLSp1}

\@cGLSp1 Defined the un-starred form. Need to determine if there is a final optional argument
3945 \newcommand*\@cGLSp1[2][]%
3946   \new@ifnextchar[\@cGLSp1{#1}{#2}]{\@cGLSp1{#1}{#2}[]}{%
3947 }

\@cGLSp1@

3948 \def\@cGLSp1#1#2[#3]{\@GLSp1{#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.
3949 \newcommand*\cGLSp1format[2]{%
3950   \expandafter\mfirstuc\expandafter{\cGLSp1format{#1}{#2}}%
3951 }

Modify the trigger formats to check for the regular attribute.

\cglformat

3952 \renewcommand*\cglformat[2]{%
3953   \glsifregular{#1}%
3954   {\glsentryfirst{#1}}%
3955   {\ifglslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
3956 }

```

```

\cGlsformat
3957 \renewcommand*{\cGlsformat}[2]{%
3958   \glsifregular{#1}%
3959   {\Glsentryfirst{#1}}%
3960   {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
3961 }

\cglsplformat
3962 \renewcommand*{\cglsplformat}[2]{%
3963   \glsifregular{#1}%
3964   {\glsentryfirstplural{#1}}%
3965   {\ifglshaslong{#1}{\glsentrylongpl{#1}}{\glsentryfirstplural{#1}}}#2%
3966 }

\cGlspformat
3967 \renewcommand*{\cGlspformat}[2]{%
3968   \glsifregular{#1}%
3969   {\Glsentryfirstplural{#1}}%
3970   {\ifglshaslong{#1}{\Glsentrylongpl{#1}}{\Glsentryfirstplural{#1}}}#2%
3971 }

```

New code similar to above for unit counting.

```

defunitcounters
3972 \newcommand*{\@newglossaryentry@defunitcounters}{%
3973   \protected@edef{\glo@countunit}{\csuse{\glsxtr@categoryattr@\glo@category @unitcount}}%
3974   \ifdefvoid{\glo@countunit}%
3975   {}%
3976   {}%
3977   \glsxtr@ifunitcounter{\glo@countunit}%
3978   {}%
3979   {\expandafter\glsxtr@addunitcounter\expandafter{\glo@countunit}}%
3980 }%
3981 }

r@unitcountlist List to keep track of which counters are being used by the entry unit count facility.
3982 \newcommand*{\glsxtr@unitcountlist}{}

@addunitcounter
3983 \newcommand*{\glsxtr@addunitcounter}[1]{%
3984   \listadd{\glsxtr@unitcountlist}{#1}%
3985   \ifcsundef{\glsxtr@theunit@#1}%
3986   {}%
3987   \ifcsdef{\theH#1}%
3988   {\csdef{\glsxtr@theunit@#1}{\csuse{\theH#1}}}%
3989   {\csdef{\glsxtr@theunit@#1}{\csuse{\the#1}}}%
3990 }%
3991 {}%
3992 }

```

```

r@ifunitcounter
 3993 \newcommand*{\@glsxtr@ifunitcounter}[3]{%
 3994   \xifinlist{#1}{\@glsxtr@unitcountlist}{#2}{#3}%
 3995 }

urrentunitcount
 3996 \newcommand*{\glsxtr@currentunitcount}[1]{%
 3997   glo@\glsdetoklabel{#1}@currunit@\glsgetattribute{#1}{unitcount}.%
 3998   \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
 3999 }

eviousunitcount
 4000 \newcommand*{\glsxtr@previousunitcount}[1]{%
 4001   glo@\glsdetoklabel{#1}@prevunit@\glsgetattribute{#1}{unitcount}.%
 4002   \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
 4003 }

t@currunitcount
 4004 \newcommand*{\gls@increment@currunitcount}[1]{%
 4005   \glshasattribute{#1}{unitcount}%
 4006   {%
 4007     \protected@edef{\glsxtr@csname{\glsxtr@currentunitcount{#1}}}{%
 4008       \ifcsundef{\glsxtr@csname}{}%
 4009       {%
 4010         \csgdef{\glsxtr@csname}{1}%
 4011         \listcsxadd{%
 4012           {glo@\glsdetoklabel{#1}@unitlist}%
 4013           {\glsgetattribute{#1}{unitcount}.%
 4014             \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}% }%
 4015         }%
 4016       }%
 4017       {%
 4018         \csxdef{\glsxtr@csname}{%
 4019           \number\numexpr\csname@glsxtr@csname\endcsname+1}%
 4020       }%
 4021     }%
 4022   {}%
 4023 }

t@currunitcount
 4024 \newcommand*{\gls@local@increment@currunitcount}[1]{%
 4025   \glshasattribute{#1}{unitcount}%
 4026   {%
 4027     \protected@edef{\glsxtr@csname{\glsxtr@currentunitcount{#1}}}{%
 4028       \ifcsundef{\glsxtr@csname}{}%
 4029       {%
 4030         \csdef{\glsxtr@csname}{1}%
 4031         \listcseadd{%
 4032           {glo@\glsdetoklabel{#1}@unitlist}}%
 4033         }%
 4034       }%
 4035     }%
 4036   {}%
 4037 }
```

```

4033     {\glsgetattribute{#1}{unitcount}.%
4034     \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
4035   }%
4036 }%
4037 {%
4038   \csedef{\@glsxtr@csname}%
4039   {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
4040 }%
4041 }%
4042 {}%
4043 }

```

r@currunitcount

```

4044 \newcommand*{\@glsxtr@currunitcount}[2]{%
4045   \ifcsundef
4046   {\glo@\glsdetoklabel{#1}@currunit@#2}%
4047   {0}%
4048   {\csuse{\glo@\glsdetoklabel{#1}@currunit@#2}}%
4049 }%

```

r@prevunitcount

```

4050 \newcommand*{\@glsxtr@prevunitcount}[2]{%
4051   \ifcsundef
4052   {\glo@\glsdetoklabel{#1}@prevunit@#2}%
4053   {0}%
4054   {\csuse{\glo@\glsdetoklabel{#1}@prevunit@#2}}%
4055 }%

```

eentryunitcount

```
4056 \newcommand*{\glsenableentryunitcount}{%
```

Enable new fields:

```
4057 \appto{\newglossaryentry@defcounters}{\@newglossaryentry@defunitcounters}%

```

Just in case the user has switched on the docdef option.

```

4058 \renewcommand*{\gls@defdocnewglossaryentry}{%
4059   \renewcommand*{\newglossaryentry}[2]{%
4060     \PackageError{glossaries}{\string\newglossaryentry\space
4061       may only be used in the preamble when entry counting has
4062       been activated}{If you use \string\glsenableentryunitcount\space
4063       you must place all entry definitions in the preamble not in
4064       the document environment}%
4065   }%
4066 }%

```

New commands to access new fields:

```

4067 \newcommand*{\glsentrycurrcount}[1]{%
4068   \@glsxtr@currunitcount{##1}{\glsgetattribute{##1}{unitcount}.%
4069   \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}}%
4070 }%

```

```

4071 \newcommand*{\glsentryprevcount}[1]{%
4072   \@glsxtr@prevunitcount{##1}{\glsgetattribute{##1}{unitcount}.%
4073   \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}}%
4074 }%

```

Access total count:

```

4075 \newcommand*{\glsentryprevtotalcount}[1]{%
4076   \ifcsundef{\glo@\glsdetoklabel{##1}@prevunittotal}%
4077   {}%
4078   {}%
4079   \number\csuse{\glo@\glsdetoklabel{##1}@prevunittotal}%
4080 }%
4081 }%

```

Access max value:

```

4082 \newcommand*{\glsentryprevmaxcount}[1]{%
4083   \ifcsundef{\glo@\glsdetoklabel{##1}@prevunitmax}%
4084   {}%
4085   {}%
4086   \number\csuse{\glo@\glsdetoklabel{##1}@prevunitmax}%
4087 }%
4088 }%

```

Adjust post unset and reset:

```

4089 \let\@glsxtr@entryunitcount@org@unset\glsxtrpostunset
4090 \renewcommand*{\glsxtrpostunset}[1]{%
4091   \@glsxtr@entryunitcount@org@unset{##1}%
4092   \@gls@increment@currunitcount{##1}%
4093 }%
4094 \let\@glsxtr@entryunitcount@org@localunset\glsxtrpostlocalunset
4095 \renewcommand*{\glsxtrpostlocalunset}[1]{%
4096   \@glsxtr@entryunitcount@org@localunset{##1}%
4097   \@gls@local@increment@currunitcount{##1}%
4098 }%
4099 \let\@glsxtr@entryunitcount@org@reset\glsxtrpostreset
4100 \renewcommand*{\glsxtrpostreset}[1]{%
4101   \glshasattribute{##1}{unitcount}%
4102   {}%
4103   \protected@edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
4104   \ifcsundef{\@glsxtr@csname}%
4105   {}%
4106   {\csgdef{\@glsxtr@csname}{0}}%
4107 }%
4108 {}%
4109 }%
4110 \let\@glsxtr@entryunitcount@org@localreset\glsxtrpostlocalreset
4111 \renewcommand*{\glsxtrpostlocalreset}[1]{%
4112   \@glsxtr@entryunitcount@org@localreset{##1}%
4113   \glshasattribute{##1}{unitcount}%
4114 }%

```

```

4115     \protected@edef{\glsxtr@csname}{\glsxtr@currentunitcount{##1}}%
4116     \ifcsundef{\glsxtr@csname}%
4117     {}%
4118     {\csdef{\glsxtr@csname}{0}}%
4119   }%
4120   {}%
4121 }%

```

Modifications to take into account the attributes that govern whether the entry should be unset.

```

4122 \let\cgl@{\cgl@}
4123 \let\cgl@{\cgl@}
4124 \let\cGls@{\cGls@}
4125 \let\cGls@{\cGls@}
4126 \let\cGLS@{\cGLS@}
4127 \let\cGLS@{\cGLS@}

```

Write information to the aux file.

```

4128 \AtEndDocument{\gls@write@entryunitcounts}%
4129 \renewcommand*{\gls@entry@unitcount}[3]{%
4130   \csgdef{\glo@{\glsdetoklabel{##1}@prevunit@##3}{##2}}%
4131   \ifcsundef{\glo@{\glsdetoklabel{##1}@prevunittotal}}%
4132   {\csgdef{\glo@{\glsdetoklabel{##1}@prevunittotal}{##2}}{%
4133     {}%
4134     \csxdef{\glo@{\glsdetoklabel{##1}@prevunittotal}}{%
4135       \number\numexpr\csuse{\glo@{\glsdetoklabel{##1}@prevunittotal}+##2}%
4136     }%
4137     \ifcsundef{\glo@{\glsdetoklabel{##1}@prevunitmax}}%
4138     {\csgdef{\glo@{\glsdetoklabel{##1}@prevunitmax}{##2}}{%
4139       {}%
4140       \ifnum\csuse{\glo@{\glsdetoklabel{##1}@prevunitmax}}<##2
4141         \csgdef{\glo@{\glsdetoklabel{##1}@prevunitmax}{##2}}{%
4142           \fi
4143         }%
4144       }%
4145     \let\glsenableentryunitcount\relax
4146     \renewcommand*{\glsenableentrycount}{%
4147       \PackageError{glossaries-extra}{\string\glsenableentrycount\space
4148         can't be used with \string\glsenableentryunitcount}%
4149       {Use one or other but not both commands}%
4150     }%
4151   }%
4152 \onlypreamble\glsenableentryunitcount

```

`entry@unitcount`

```
4153 \newcommand*{\gls@entry@unitcount}[3]{}%
```

`ryunitcounts@do`

```

4154 \newcommand*{\@gls@write@entryunitcounts@do}[1]{%
4155   \immediate\write\auxout
4156   {\string\@gls@entry@unitcount
4157     {\@glsentry}%
4158     {\@glsxtr@currunitcount{\@glsentry}{#1}}%
4159   }%
4160   {#1}%
4161 }

entryunitcounts
4162 \newcommand*{\@gls@write@entryunitcounts}{%
4163   \immediate\write\auxout
4164   {\string\providecommand*{\string\@gls@entry@unitcount}[3]{}{}}%
4165   \count@=0\relax
4166   \forallglsentries{\@glsentry}{%
4167     \glshasattribute{\@glsentry}{unitcount}%
4168     {%
4169       \ifglsused{\@glsentry}%
4170       {%
4171         \forlistcsloop
4172           {\@gls@write@entryunitcounts@do}%
4173           {glo@\glsdetoklabel{\@glsentry}@unitlist}%
4174       }%
4175       {}%
4176       \advance\count@ by \one
4177     }%
4178     {}%
4179   }%
4180   \ifnum\count@=0
4181     \GlossariesExtraWarning{Entry counting has been enabled
4182       \MessageBreak with \string\glsenableentryunitcount\space but the
4183       \MessageBreak attribute ‘unitcount’ hasn’t
4184       \MessageBreak been assigned to any of the defined
4185       \MessageBreak entries}%
4186 \fi
4187 }

```

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.

```
4188 \newcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
```

Enable entry counting:

```
4189 \glsenableentryunitcount
```

Redefine \gls etc:

```
4190 \renewcommand*{\gls}{\cgls}%
4191 \renewcommand*{\Gls}{\cGls}%
4192 \renewcommand*{\glspol}{\cglspl}%
4193 \renewcommand*{\Glspol}{\cGlspol}%
4194 \renewcommand*{\GLS}{\cGLS}%
```

```

4195 \renewcommand*\GLSp1{\cGLSp1}%
Set the entrycount attribute:
4196 @glsxtr@setentryunitcountunsetattr{#1}{#2}{#3}%
In case this command is used again:
4197 \let\GlsXtrEnableEntryUnitCounting@glsxtr@setentryunitcountunsetattr
4198 \renewcommand*\GlsXtrEnableEntryCounting[2]{%
4199 \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryCounting\space
4200 can't be used with \string\GlsXtrEnableEntryUnitCounting}%
4201 {Use one or other but not both commands}}%
4202 }

```

tcountunsetattr

```

4203 \newcommand*{@glsxtr@setentryunitcountunsetattr}[3]{%
4204 \@for@glsxtr@cat:=#1\do
4205 {%
4206 \ifdefempty{@glsxtr@cat}{}%
4207 {%
4208 \glssetcategoryattribute{@glsxtr@cat}{entrycount}{#2}%
4209 \glssetcategoryattribute{@glsxtr@cat}{unitcount}{#3}%
4210 }%
4211 }%
4212 }

```

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

```

4213 \renewcommand*\SetGenericNewAcronym{}%
Make sure \RestoreAcronyms has been used.
4214 \ifdefequal@addtoacronymlists@glsxtr@org@addtoacronymlists
4215 {}%
4216 {%
4217 \GlossariesWarning{\string\SetGenericNewAcronym\space used
4218 without restoring base acronym functions with
4219 \string\RestoreAcronyms}%
4220 }%
4221 \let@\Gls@entryname@\Gls@acrentryname
Redefine \newacronym:
4222 \renewcommand{\newacronym}[4][]{%
4223 \ifdefempty{@glsacronymlists}{%

```

```

4224  {%
4225      \def\@glo@type{\acronymtype}%
4226      \setkeys{glossentry}{##1}%
4227      \DeclareAcronymList{\@glo@type}%
4228  }%
4229  {}%
4230  \glskeylisttok{##1}%
4231  \glslabeltok{##2}%
4232  \glsshorttok{##3}%
4233  \glslongtok{##4}%
4234  \newacronymhook
4235  \protected@edef\@do@newglossaryentry{%
4236      \noexpand\newglossaryentry{\the\glslabeltok}%
4237  {}%
4238      type=\acronymtype,%
4239      name={\expandonce{\acronymentry{##2}}},%
4240      sort={\acronymsort{\the\glsshorttok}{\the\glslongtok}},%
4241      text={\the\glsshorttok},%
4242      short={\the\glsshorttok},%
4243      shortplural={\the\glsshorttok\noexpand\acrpluralsuffix},%
4244      long={\the\glslongtok},%
4245      longplural={\the\glslongtok\noexpand\acrpluralsuffix},%
4246      category=acronym,
4247      \GenericAcronymFields,%
4248      \the\glskeylisttok
4249  }%
4250  }%
4251  \@do@newglossaryentry
4252 }%
4253 \renewcommand*\acrfullfmt}[3]{%
4254     \glsslink[##1]{##2}{\genacrfullformat{##2}{##3}}}%
4255 \renewcommand*\Acrfullfmt}[3]{%
4256     \glsslink[##1]{##2}{\Genacrfullformat{##2}{##3}}}%
4257 \renewcommand*\ACRfullfmt}[3]{%
4258     \glsslink[##1]{##2}{%
4259         \mfirstucMakeUppercase{\genacrfullformat{##2}{##3}}}%
4260 \renewcommand*\acrfullplfmt}[3]{%
4261     \glsslink[##1]{##2}{\genplacrfullformat{##2}{##3}}}%
4262 \renewcommand*\Acrfullplfmt}[3]{%
4263     \glsslink[##1]{##2}{\Genplacrfullformat{##2}{##3}}}%
4264 \renewcommand*\ACRfullplfmt}[3]{%
4265     \glsslink[##1]{##2}{%
4266         \mfirstucMakeUppercase{\genplacrfullformat{##2}{##3}}}%
4267 \renewcommand*\glsentryfull}[1]{\genacrfullformat{##1}{}}}%
4268 \renewcommand*\Glsentryfull}[1]{\Genacrfullformat{##1}{}}}%
4269 \renewcommand*\glsentryfullpl}[1]{\genplacrfullformat{##1}{}}}%
4270 \renewcommand*\Glsentryfullpl}[1]{\Genplacrfullformat{##1}{}}}%
4271 }

```

This will cause a problem for glossaries that contain a mixture of acronyms and abbrevia-

tions, so redefine `\newacronym` to use the new abbreviation interface.

First save the original definitions:

```
4272 \let\@glsxtr@org@setacronymstyle\setacronymstyle  
4273 \let\@glsxtr@org@newacronymstyle\newacronymstyle
```

Save the list of acronyms in case they are required.

```
tr@acronymlists  
4274 \let\@glsxtr@acronymlists\@glsacronymlists
```

```
dtoacronymlists  
4275 \let\@glsxtr@org@addtoacronymlists\@addtoacronymlists
```

```
setacronymlists  
4276 \let\@glsxtr@org@setacronymlists\SetAcronymLists
```

Need to provide a replacement for `\forallacronyms` since `\@glsacronymlists` isn't available.

```
lsxtr@abbrlists  
4277 \newcommand{\@glsxtr@abbrlists}{}%
```

```
abbreviationlists  
4278 \newcommand*\forallabbreviationlists}[2]{%  
4279   \if@for#1:=\@glsxtr@abbrlists\do{\ifdefempty{#1}{}{#2}}%  
4280 }
```

```
abbreviationlist  
4281 \newcommand*\@glsxtr@addabbreviationlist}[1]{%  
4282   \protected\edef\@glo@type{#1}%  
4283   \ifdefempty\@glsxtr@abbrlists  
4284   {\let\@glsxtr@abbrlists\@glo@type}%  
4285   {  
4286     \ifdefequal\@glsxtr@abbrlists\@glo@type  
4287     {}%  
4288     {}%  
4289     \expandafter\DTLifinlist\expandafter{\@glo@type}{\@glsxtr@abbrlists}{}%  
4290     {\protected\@appto\@glsxtr@abbrlists{,\@glo@type}}%  
4291   }%  
4292 }%  
4293 }
```

`\forallacronyms` Modify to add warning.

```
4294 \renewcommand*\forallacronyms}[2]{%  
4295   \glsxtr@base@acrcmd\forallacronyms\forallabbreviationlists  
4296   \if@for#1:=\glsacronymlists\do{\ifx#1\empty\else#2\fi}-%  
4297 }
```

msAbbreviations Make acronyms use the same interface as abbreviations. Note that \newacronymstyle has a different implementation to \newabbreviationstyle so disable \newacronymstyle and \setacronymstyle.

```
4298 \newcommand*{\MakeAcronymsAbbreviations}{%
  Undo acronym display style:
  4299  \@for\gls@type:=\glsacronymlists\do{%
  4300    \csgdef{\gls@\gls@type}{\entryfmt}{\glsentryfmt}%
  4301  }%
  Save and clear acronym list.
  4302  \let\glsxtr@acronymlists@glsacronymlists
  4303  \let\glsacronymlists@empty
  4304  \let\addtoacronymlists@gobble
  4305  \let\SetAcronymLists@gobble
  Warn if \acrshort etc are used.
  4306  \let\glsxtr@base@acr@cmd@base@glsxtr@base@acr@cmd@warn
  Redefine \newacronym to use same interface as \newabbreviation.
  4307  \renewcommand*{\newacronym}[4][]{%
  4308    \glsxtr@newabbreviation{type=\acronymtype,category=acronym,##1}{##2}{##3}{##4}%
  4309  }%
  4310  \renewcommand*{\firstacronymfont}[1]{\glsfirstabbrvfont{##1}}%
  4311  \renewcommand*{\acronymfont}[1]{\glsabbrvfont{##1}}%
  4312  \renewcommand*{\setacronymstyle}[1]{%
  4313    \PackageError{glossaries-extra}{\string\setacronymstyle{##1}%
  4314      unavailable.%
  4315      Use \string\setabbreviationstyle[acronym]\space instead.%
  4316      The original acronym interface can be restored with%
  4317      \string\RestoreAcronyms}{}%
  4318  }%
  4319  \renewcommand*{\newacronymstyle}[1]{%
  4320    \GlossariesExtraWarning{New acronym style ‘##1’ won’t be%
  4321      available unless you restore the original acronym interface with%
  4322      \string\RestoreAcronyms}%
  4323    \glsxtr@org@newacronymstyle{##1}%
  4324  }%
  4325 }%
```

Switch acronyms to abbreviations:

```
4326 \MakeAcronymsAbbreviations
```

RestoreAcronyms Restore acronyms to glossaries interface.

```
4327 \newcommand*{\RestoreAcronyms}{%
  Restore acronym list.
  4328  \let\glsacronymlists@glsxtr@acronymlists
  4329  \let\addtoacronymlists@glsxtr@org@addtoacronymlists
  4330  \let\SetAcronymLists@glsxtr@org@setacronymlists
```

Suppress warnings if \acrshort etc are used.

```
4331 \let\@glsxtr@base@acrcmd\@gobbletwo
```

Restore acronym display style:

```
4332 \for\@gls@type:=\@glsacronymlists\do{%
4333   \SetDefaultAcronymDisplayStyle{\@gls@type}%
4334 }%
```

Switch to the generic acronym mechanism.

```
4335 \SetGenericNewAcronym
4336 \renewcommand{\firstacronymfont}[1]{\acronymfont{##1}}%
4337 \renewcommand{\acronymfont}[1]{##1}%
4338 \let\setacronymstyle\@glsxtr@org@setacronymstyle
4339 \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.

```
4340 \renewcommand*\@gls@link@checkfirsthyper{%
4341   \ifglsused{\glslabel}{%
4342     {\let\glsxtrifwasfirstuse\@secondoftwo}%
4343     {\let\glsxtrifwasfirstuse\@firstoftwo}%
4344     \glsxtr@org@checkfirsthyper
4345   }%
4346   \glssetcategoryattribute{acronym}{regular}{false}%
4347   \setacronymstyle{long-short}%
4348 }
```

\glsacspace Allow the user to customise the maximum value.

```
4349 \renewcommand*\glsacspace[1]{%
4350   \settowidth{\dimen0}{(\firstacronymfont{\glsentryshort{#1}})}%
4351   \ifdim\dimen0<\glsacsmax\else\space\fi
4352 }
```

\glsacsmax Value used in the above.

```
4353 \newcommand*\glsacsmax{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

```
4354 \newcommand*\@glsxtr@reg@glosslist{}%
```

Save the original definition of \makeglossaries:

```
4355 \let\@glsxtr@org@makeglossaries\makeglossaries
```

`noprintglossary` This command was only introduced to glossaries v4.47 so it may not be defined.

```
4356 \providecommand{\makeglossaries}{\warn@noprintglossary}{%
4357   \ifdefstring{\@glo@types}{,}{%
4358   {%
4359     \GlossariesWarningNoLine{No glossaries have been defined}{%
4360   }%
4361   {%
4362     \GlossariesWarningNoLine{No \string\printglossary\space%
4363       or \string\printglossaries\space%
4364       found. ^J(Remove \string\makeglossaries\space if you%
4365       don't want any glossaries.) ^JThis document will not%
4366       have a glossary}{%
4367   }%
4368 }%
4369 %   \begin{macrocode}%
4370 %\end{macro}%
4371 %
4372 %\begin{macro}{\domakeglossaries}%
4373 %\changes{1.42}{2020-02-03}{provided definition for \cs{\domakeglossaries}}%
4374 % \sty{glossaries} v4.45 introduced \cs{\domakeglossaries} to%
4375 % provide a way of disabling \cs{\makeglossaries}. If it hasn't been%
4376 % defined, define here to do its argument:%
4377 %   \begin{macrocode}%
4378 \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`

```
4379 \renewcommand*{\makeglossaries}[1][]{%
4380   \domakeglossaries
4381   {%
4382     \glsxtr@if@record@only
4383     {%
4384       \PackageError{glossaries-extra}{\string\makeglossaries\space%
4385         not permitted\MessageBreak with record=\glsxtr@record@setting\space%
4386         package option}{%
4387         You may only use \string\makeglossaries\space with%
4388         record=off or record=hybrid options}{%
4389     }%
4390     {%
4391       \ifblank{#1}{%
4392         {%
4393           \glsxtr@org@makeglossaries
4394           \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
4395             \let\warn@noprintglossary\glsxtr@warn@hybrid@noprintglossary
```

```

4396     \fi
4397 }
4398 {%
4399     \ifx\@glsxstr@record@setting\@glsxstr@record@setting@alsoindex
4400         \PackageError{glossaries-extra}{\string\makeglossaries[#1]\space
4401             not permitted\MessageBreak with record=\@glsxstr@record@setting\space package option}%
4402             {You may only use the hybrid \string\makeglossaries[...]\space with
4403                 record=off option}%
4404     \else
4405         \PackageError{@gls@@automake@immediate}{\string\makeglossaries was introduced to glossaries v4.42 so it may not be defined.}%
4406         \ifdef{\gls@@automake@immediate}{\gls@@automake@immediate}{}%
4407         \protected@edef{\glsxstr@reg@glosslist}{\#1}%
4408         \ifundef{\glswrite}{\newwrite\glswrite}{}%
4409         \protected@write{\auxout}{\string\providecommand
4410             \string\@glsorder[1]}{}%
4411         \protected@write{\auxout}{\string\providecommand
4412             \string\@istfilename[1]}{}%
4413         \protected@write{\auxout}{\string\@glsorder{\glsorder}}%
4414         \protected@write{\auxout}{\string\glsxstr@makeglossaries{\#1}}%
4415         \write{\auxout}{\string\providecommand\string@gls@reference[3]}%
4416     \for{\glo@type:=\#1\do{%
4417         \ifempty{\glo@type}{\makeglossary{\glo@type}}{}%
4418     }%
4419     New glossaries must be created before \makeglossaries:
4420     \renewcommand*\newglossary[4][]{%
4421         \PackageError{glossaries}{New glossaries
4422             must be created before \string\makeglossaries}{You need
4423             to move \string\makeglossaries\space after all your
4424             \string\newglossary\space commands}%
4425     Any subsequence instances of this command should have no effect.
4426     \let\makeglossary\gobble
4427     Version 1.42 removed letting \makeglossary to \relax (no kernel redefs may be in effect).
4428     \renewcommand\makeglossaries[1][]{%
4429     Disable all commands that have no effect after \makeglossaries
4430     \disable@onlypremakeg
4431     Allow see key:
4432     \let\gls@checkseeallowed\relax
4433     Adjust \do@seeglossary. This needs to check for the entry's existence but don't increment
4434     associated counter.
4435     \renewcommand*\do@seeglossary[2]{%
4436         \glsdoifexists{\#1}{}%
4437     }%

```

```

4431   \protected@edef{\gls@label}{\glsdetoklabel{##1}}%
4432   \protected@edef{\gls@type}{\csname glo@\gls@label \type\endcsname}%
4433   \expandafter\DTLifinlist\expandafter{\gls@type}{\glsxtr@reg@glosslist}%
4434   {\glsxtr@org@doseeglossary{##1}{##2}}%
4435   {%
4436     \@@glsxtrwrglossmark
4437     \protected@write\auxout{}{%
4438       \string\gls@reference
4439       {\gls@type}{\gls@label}{\string\glsseeformat##2{}}%
4440     }%
4441   }%
4442 }%
4443 }%

```

Adjust \@@do@@wrglossary

```

4444 \let\glsxtr@do@wrglossary\@@do@wrglossary
4445 \def\@@do@wrglossary{%
4446   \protected@edef{\gls@type}{\csname glo@\gls@label \type\endcsname}%
4447   \expandafter\DTLifinlist\expandafter{\gls@type}{\glsxtr@reg@glosslist}%
4448   {\glsxtr@do@wrglossary}%
4449   {\gls@noidxglossary}%
4450 }%

```

Suppress warning about no \makeglossaries

```

4451 \let\warn@nomakeglossaries\relax
4452 \let\warn@noprintglossary\@makeglossaries\warn@noprintglossary

```

Only warn for glossaries not listed.

```

4453 \renewcommand{\gls@noref@warn}[1]{%
4454   \protected@edef{\gls@type}{##1}%
4455   \expandafter\DTLifinlist\expandafter{\gls@type}{\glsxtr@reg@glosslist}%
4456   {%
4457     \GlossariesExtraWarning{Can't use
4458       \string\printnoidxglossary[type={\gls@type}]
4459       when '\gls@type' is listed in the optional argument of
4460       \string\makeglossaries}%
4461   }%
4462 }%
4463   \GlossariesWarning{Empty glossary for
4464     \string\printnoidxglossary[type={##1}].
4465     Rerun may be required (or you may have forgotten to use
4466     commands like \string\gls)}%
4467 }%
4468 }%

```

Adjust display number list to check for type:

```

4469 \renewcommand*\glsdisplaynumberlist[1]{%
4470   \expandafter\DTLifinlist\expandafter{\##1}{\glsxtr@reg@glosslist}%
4471   {\glsxtr@idx@displaynumberlist{\##1}}%

```

```
4472      {\@glsxtr@noidx@displaynumberlist{##1}}%
4473  }%
```

Adjust entry list:

```
4474      \renewcommand*\glsentrynumberlist}[1]{%
4475          \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
4476          {\@glsxtr@idx@entrynumberlist{##1}}%
4477          {\@glsxtr@noidx@entrynumberlist{##1}}%
4478      }%
```

Adjust number list loop

```
4479      \renewcommand*\glsnumberlistloop}[2]{%
4480          \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
4481          {%
4482              \PackageError{glossaries-extra}{\string\glsnumberlistloop\space
4483                  not available for glossary '##1'}{}%
4484          }%
4485          {\@glsxtr@noidx@numberlistloop{##1}{##2}}%
4486      }%
```

Only sanitize sort for normal indexing glossaries.

```
4487      \renewcommand*\glsprestandardsort}[3]{%
4488          \expandafter\DTLifinlist\expandafter{##2}{\@glsxtr@reg@glosslist}%
4489          {%
4490              \glsdosanitizesort
4491          }%
4492          {%
4493              \ifglssanitizesort
4494                  \gls@noidx@sanitizesort
4495              \else
4496                  \gls@noidx@nosanitizesort
4497              \fi
4498          }%
4499      }%
```

Unlike `\makenoidxglossaries` we can't automatically set `sanitizesort=false`. All entries must be defined in the preamble.

```
4500      \renewcommand*\new@glossaryentry}[2]{%
4501          \PackageError{glossaries-extra}{Glossary entries must be defined
4502              in the preamble\MessageBreak when you use the optional argument
4503              of \string\makeglossaries}{Either move your definitions to the
4504              preamble or don't use the optional argument of
4505              \string\makeglossaries}%
4506      }%
```

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).

```
4507      \let\glo@assign@sortkey\glsxtr@mixed@assign@sortkey
4508      \renewcommand*\printgloss@setsort}{%
```

Need to extract just the type value.

```

4509          \expandafter\@glsxtr@gettype\expandafter,\@glsxtr@printglossopts,%
4510          type=\glsdefaulttype,\@end@glsxtr@gettype
4511          \def\@glo@sorttype{\@glo@default@sorttype}%
4512      }%

```

Check automake setting:

```

4513      \ifglsautomake
4514          \renewcommand*\{@gls@doautomake}{%
4515              \@for\@gls@type:=\@glsxtr@reg@glosslist\do{%
4516                  \ifdefempty{\@gls@type}{}{\@gls@automake{\@gls@type}}%
4517              }%
4518          }%
4519      \fi

```

Check the sort setting (glossaries v4.30 onwards):

```

4520          \ifdef\@glo@check@sortallowed{\@glo@check@sortallowed\makeglossaries}{}%
4521      \fi
4522  }%
4523 }%
4524 }%
4525 }

```

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 L^AT_EX 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

```

4526 \ifdef\@printgloss@checkexists
4527 {\newcommand{\glsxtr@printgloss@checkexists}{\@printgloss@checkexists}}
4528 {\newcommand{\glsxtr@printgloss@checkexists}[2]{#2}}

```

rgprintglossary (This command is also used for on-the-fly setting.)

```

4529 \newcommand{\glsxtr@orgprintglossary}[2]{%
4530     \def\@glo@type{\glsdefaulttype}%

```

Add check here.

```

4531 \def\glossarytitle{%
4532     \ifcsdef{@glotype}{\@glo@type}{\@title}%

```

```

4533   {\csuse{@glotype@\glo@type @title}}%
4534   {\glossaryname}}%
4535 \def\glossarytoctitle{\glossarytitle}%
4536 \let\org@glossarytitle\glossarytitle
4537 \def@\glossarystyle{%
4538   \ifx@\glossary@default@style\relax
4539     \GlossariesWarning{No default glossary style provided \MessageBreak
4540       for the glossary '\glo@type'. \MessageBreak
4541       Using deprecated fallback. \MessageBreak
4542       To fix this set the style with \MessageBreak
4543         \string\setglossarystyle\space or use the \MessageBreak
4544       style key=value option}%
4545   \fi
4546 }%
4547 \def\gls@dotocitle{\glssettoctitle{\glo@type}}%
4548 \let\@org@glossaryentrynumbers\glossaryentrynumbers
4549 \bgroup
4550   \@printgloss@setsort
4551   \setkeys{printgloss}{#1}%
4552   \ifx\glossarytitle\org@glossarytitle
4553   \else
4554     \cslet{@glotype@\glo@type @title}{\glossarytitle}%
4555   \fi
4556   \let\currentglossary\glo@type
4557   \let\org@glossaryentrynumbers\glossaryentrynumbers
4558   \let\glsnonextpages\glsnonextpages
4559   \let\glsnextpages\glsnextpages

4560   \glsxtractivenopost
4561   \gls@dotocitle
4562   \@glossarystyle
4563   \let\gls@org@glossaryentryfield\glossentry
4564   \let\gls@org@glossarysubentryfield\subglossentry
4565   \renewcommand{\glossentry}[1]{%
4566     \protected@xdef\glscurrententrylabel{\glsdetoklabel{##1}}%
4567     \gls@org@glossaryentryfield{##1}%
4568   }%
4569   \renewcommand{\subglossentry}[2]{%
4570     \protected@xdef\glscurrententrylabel{\glsdetoklabel{##2}}%
4571     \gls@org@glossarysubentryfield{##1}{##2}%
4572   }%
4573   \@gls@preglossaryhook
4574   \glsxtr@printgloss@checkexists{\glo@type}{#2}%
4575 \egroup
4576 \global\let\glossaryentrynumbers\org@glossaryentrynumbers
4577 \global\let\warn@noprintglossary\relax
4578 }

```

ractivatenopost Change \nopostdesc and \glsxtrnropostpunc to behave as they do in the glossary.
4579 \newcommand*{\glsxtractivenopost}{%

```
4580 \let\nopostdesc\@nopostdesc
4581 \let\glsxtrnopostrpunc\@glsxtr@nopostpunc
4582 }
```

lsxtrnopostrpunc

```
4583 \newrobustcmd*\{\glsxtrnopostrpunc\}{}%
```

sxtr@nopostpunc Provide a command that works like \nopostdesc but only switches off the punctuation without suppressing the post-description hook.

```
4584 \newcommand{\@glsxtr@nopostpunc}{%
4585   \let\@glsxtr@org@postdescription\glspostdescription
4586   \ifglsnopostrdot
4587     \renewcommand{\glspostdescription}{%
4588       \glsnopostrdottrue
4589       \let\glspostdescription\@glsxtr@org@postdescription
4590       \let\glsxtrrestorepostpunc\@glsxtr@restore@postpunc
4591       \glsxtrpostdescription
4592       \@glsxtr@nopostpunc@postdesc}%
4593   \else
4594     \renewcommand{\glspostdescription}{%
4595       \let\glspostdescription\@glsxtr@org@postdescription
4596       \let\glsxtrrestorepostpunc\@glsxtr@restore@postpunc
4597       \glsxtrpostdescription
4598       \@glsxtr@nopostpunc@postdesc}%
4599   \fi
4600   \glsnopostrdotfalse
4601 }
```

stpunc@postdesc

```
4602 \newcommand*\{@glsxtr@nopostpunc@postdesc\}{}%
```

estore@postpunc

```
4603 \newcommand*\{@glsxtr@restore@postpunc\}{%
4604   \def\@glsxtr@nopostpunc@postdesc{%
4605     \glsxtr@org@postdescription
4606     \let\@glsxtr@nopostpunc@postdesc\@empty
4607     \let\glsxtrrestorepostpunc\@empty
4608   }%
4609 }
```

restorepostpunc Does nothing outside of glossary.

```
4610 \newcommand*\glsxtrrestorepostpunc{}%
```

\@printglossary Redefine.

```
4611 \renewcommand{\@printglossary}[2]{%
4612   \def\@glsxtr@printglossopts{\#1}%
4613   \glsxtr@orgprintglossary{\#1}{\#2}%
4614 }
```

Add a key that switches off the entry targets:

```
4615 \define@choicekey{printgloss}{target}%
4616 [\@glsxtr@printglossval\@glsxtr@printglossnr]%
4617 {true,false}[true]%
4618 {%
4619   \ifcase\@glsxtr@printglossnr
4620     \def\@glstarget{\glsdohypertarget}%
4621   \else
4622     \let\@glstarget\@secondoftwo
4623   \fi
4624 }
```

hypernameprefix

```
4625 \newcommand{\@glsxtrhypernameprefix}{}%
```

New to v1.20:

```
4626 \define@key{printgloss}{targetnameprefix}{%
4627   \renewcommand{\@glsxtrhypernameprefix}{#1}%
4628 }
4629 \define@key{printgloss}{prefix}{%
4630   \renewcommand{\glolinkprefix}{#1}%
4631 }
4632 \define@key{printgloss}{label}{%
4633   \glsxtrsetglossarylabel{#1}%
4634 }
```

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.

```
4635 \newcommand{\glsxtrsetglossarylabel}[1]{%
4636   \renewcommand*\{@glossaryseclabel}{%
4637     \protected@edef\@currentlabelname{\glossarytoctitle}%
4638     \label{#1}%
4639   }%
4640 }
```

xtr@leveloffset

```
4641 \newcount\@glsxtr@leveloffset
```

New to v1.44:

```
4642 \define@key{printgloss}{leveloffset}{%
4643   \@glsxtr@assign@leveloffset#1\relax
4644 }
```

ign@leveloffset

```
4645 \newcommand*{\@glsxtr@assign@leveloffset}{%
4646   \@ifnextchar+{\p@glsxtr@assign@leveloffset}{\np@glsxtr@assign@leveloffset}%
4647 }
```

```

ign@leveloffset Discard initial + character.
4648 \newcommand*{\p@glsxtr@assign@leveloffset}[1]{%
4649  \@ifnextchar+{\pp@glsxtr@assign@leveloffset}{\np@glsxtr@assign@leveloffset}%
4650 }

ign@leveloffset
4651 \def\np@glsxtr@assign@leveloffset#1\relax{\glsxtr@leveloffset=#1\relax}

ign@leveloffset
4652 \def\pp@glsxtr@assign@leveloffset#1\relax{\advance\glsxtr@leveloffset by #1\relax}

4653 \define@boolkey{printgloss}{glsxtr@printgloss@}{groups}[true]{}
4654 \glsxtr@printgloss@groupstrue

lsdohypertarget Redefine to insert \glsxtrhypernameprefix before the target name.
4655 \let\@glsxtr@org@glsdohypertarget\glsdohypertarget
4656 \renewcommand{\glsdohypertarget}[2]{%
4657  \glsxtr@org@glsdohypertarget{\glsxtrhypernameprefix#1}{#2}%
4658 }

Update \glstarget to use \def instead being assigned with \let so that it can pick up the
new definition and allow any further redefinitions:
4659 \ifx\glstarget\glsxtr@org@glsdohypertarget
4660  \def\glstarget{\glsdohypertarget}%
4661 \fi

@makeglossaries For the benefit of makeglossaries
4662 \newcommand*{\glsxtr@makeglossaries}[1]{}

@glsxtr@gettype Get just the type.
4663 \def\@glsxtr@gettype#1,type=#2,#3\@end@glsxtr@gettype{%
4664  \def\@glo@type{#2}%
4665 }

@assign@sortkey Assign the sort key.
4666 \newcommand\@glsxtr@mixed@assign@sortkey[1]{%
4667  \protected@edef\@glo@type{\@glo@type}%
4668  \expandafter\DTLifinlist\expandafter{\@glo@type}{\glsxtr@reg@glosslist}%
4669  {%
4670   \glo@no@assign@sortkey{#1}%
4671  }%
4672  {%
4673   \glo@no@assign@sortkey{#1}%
4674  }%
4675 }%

```

Display number list for the regular version:

```
splaynumberlist
4676 \let\@glsxtr@idx@displaynumberlist\glsdisplaynumberlist
```

Display number list for the “noidx” version:

```
splaynumberlist
4677 \newcommand*{\@glsxtr@noidx@displaynumberlist}[1]{%
4678   \letcs{\@gls@loclist}{\glsdetoklabel{#1}@loclist}%
4679   \ifdef{\@gls@loclist}%
4680   {%
4681     \def{\@gls@noidxloclist@sep}{%
4682       \def{\@gls@noidxloclist@sep}{%
4683         \def{\@gls@noidxloclist@sep}{%
4684           \glsnumlistsep
4685         }%
4686         \def{\@gls@noidxloclist@finalsep}{\glsnumlistlastsep}%
4687       }%
4688     }%
4689     \def{\@gls@noidxloclist@finalsep}{%
4690     \def{\@gls@noidxloclist@prev}{%
4691       \forlistloop{\glsnoidxdisplayloclisthandler}{\@gls@loclist}%
4692       \@gls@noidxloclist@finalsep
4693       \@gls@noidxloclist@prev
4694     }%
4695   }%
4696   \glsxtrundeftag
4697   \glsdoifexists{#1}%
4698   {%
4699     \GlossariesWarning{Missing location list for ‘#1’. Either
4700       a rerun is required or you haven’t referenced the entry.}%
4701   }%
4702 }%
4703 }%
4704 }
```

And for the number list loop:

```
@numberlistloop
4705 \newcommand*{\@glsxtr@noidx@numberlistloop}[3]{%
4706   \letcs{\@gls@loclist}{\glsdetoklabel{#1}@loclist}%
4707   \let{\@gls@org@glsnoidxdisplayloc}{\glsnoidxdisplayloc}
4708   \let{\@gls@org@glsseefORMAT}{\glsseefORMAT}
4709   \let{\glsnoidxdisplayloc#2}{\relax}
4710   \let{\glsseefORMAT#3}{\relax}
4711   \ifdef{\@gls@loclist}%
4712   {%
4713     \forlistloop{\glsnoidxnumberlistloophandler}{\@gls@loclist}%
4714   }%
4715 }
```

```

4716     \glsxtrundeftag
4717     \glsdoifexists{#1}%
4718     {%
4719         \GlossariesWarning{Missing location list for ‘##1’. Either
4720             a rerun is required or you haven’t referenced the entry.}%
4721     }%
4722   }%
4723   \let\glsnoidxdisplayloc\@gls@org@glsnoidxdisplayloc
4724   \let\glsseefORMAT\@gls@org@glsseefORMAT
4725 }%

```

Same for entry number list.

entrynumberlist

```

4726 \newcommand*{\@glsxtr@noidx@entrynumberlist}[1]{%
4727   \let\cs{\@gls@locList}{\glo@\glsdetoklabel{#1}@locList}%
4728   \ifdef{\gls@locList}
4729   {%
4730     \glsnoidxlocList{\@gls@locList}%
4731   }%
4732   {%
4733     \glsxtrundeftag
4734     \glsdoifexists{#1}%
4735     {%
4736         \GlossariesWarning{Missing location list for ‘#1’. Either
4737             a rerun is required or you haven’t referenced the entry.}%
4738     }%
4739   }%
4740 }%

```

entrynumberlist

```
4741 \newcommand*{\@glsxtr@idx@entrynumberlist}[1]{\glsentrynumberlist{#1}}
```

x@getgroupTitle Patch.

```

4742 \renewcommand*{\@gls@noidx@getgroupTitle}[2]{%
4743   \protected@edef{\glsxtr@titleLabel}{%
4744     \ifdefvoid{\glsxtr@titleLabel}{}%
4745     {}%
4746     {%
4747       \protected@edef{\glsxtr@titleLabel}{\csuse{\glsxtr@groupTitle@#1}}%
4748     }%
4749   \ifdefvoid{\glsxtr@titleLabel}{}%
4750   {}%
4751   \DTLifint{#1}{%
4752     {}%
4753     \ifnum#1<256\relax
4754       \edef#2{\char#1\relax}%
4755     \else
4756       \edef#2{#1}%

```

```

4757     \fi
4758   }%
4759   {%
4760     \ifcsundef{#1groupname}%
4761       {\def#2{#1}}%
4762       {\letcs#2{#1groupname}}%
4763     }%
4764   }%
4765   {%
4766     \let#2\@glsxtr@titlelabel
4767   }%
4768 }

g@getgroup title Save original definition of \gls@getgroup title
4769 \let\glsxtr@org@gotgroup title\gls@gotgroup title

trgetgroup title 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.
4770 \newrobustcmd{\glsxtrgetgroup title}[2]{%
4771   \protected@edef\@glsxtr@titlelabel{\glsxtr@group title@#1}%
4772   \onelevel@sanitize\@glsxtr@titlelabel
4773   \ifcsdef{\@glsxtr@titlelabel}%
4774     {\letcs{#2}{\@glsxtr@titlelabel}}%
4775     {\glsxtr@org@gotgroup title{#1}{#2}}%
4776 }
4777 \let\@gls@gotgroup title\glsxtrgetgroup title

trsetgroup title Sets the title for the given group label.
4778 \newcommand{\glsxtrsetgroup title}[2]{%
4779   \protected@edef\@glsxtr@titlelabel{\glsxtr@group title@#1}%
4780   \onelevel@sanitize\@glsxtr@titlelabel
4781   \protected@csxdef{\@glsxtr@titlelabel}{#2}%
4782 }

alsetgroup title As above put only locally defines the title.
4783 \newcommand{\glsxtrlocalsetgroup title}[2]{%
4784   \protected@edef\@glsxtr@titlelabel{\glsxtr@group title@#1}%
4785   \onelevel@sanitize\@glsxtr@titlelabel
4786   \protected@csedef{\@glsxtr@titlelabel}{#2}%
4787 }

\glsnavigation Redefine to use new user-level command.
4788 \renewcommand*\glsnavigation{%
4789   \def\@gls@between{}%
4790   \ifcsundef{@gls@hypergroup list@\glo@type}%
4791   {}%
4792   \def\@gls@list{}%
4793 }

```

```

4794  {%
4795    \expandafter\let\expandafter\@gls@list
4796      \csname @gls@hypergrouplist@\@glo@type\endcsname
4797  }%
4798  \@for\@gls@tmp:=\@gls@list\do{%
4799    \@gls@between
4800    \glsxtrgetgrouptitle{\@gls@tmp}{\@gls@grptitle}%
4801    \glsnavhyperlink{\@gls@tmp}{\@gls@grptitle}%
4802    \let\@gls@between\glshypernavsep
4803  }%
4804 }

```

`@noidx@glossary`

```

4805 \renewcommand*{\@print@noidx@glossary}{%
4806   \ifcsdef{@glsref@\@glo@type}%
4807   {%
4808     \ifcsdef{@glo@sortmacro@\@glo@sorttype}%
4809     {%
4810       \csuse{@glo@sortmacro@\@glo@sorttype}{\@glo@type}%
4811     }%
4812     {%
4813       \PackageError{glossaries}{Unknown sort handler '\@glo@sorttype'}{}%
4814     }%
4815     \glossarysection[\glossarytoctitle]{\glossarytitle}%
4816     \glossarypreamble

```

Moved this command definition outside of environment in case of scoping issues (e.g. in tabular-like styles).

```

4817 \def\@gls@currentlettergroup{}%
4818 \begin{theglossary}%
4819 \glossaryheader
4820 \glsresetentrylist
4821 \forlistcsloop{\@gls@noidx@do}{@glsref@\@glo@type}%
4822 \end{theglossary}%
4823 \glossarypostamble
4824 }%
4825 {%

```

Add section header if there are actually entries defined in this glossary as the document is likely pending a re-run.

```

4826 \glsxtrifemptyglossary{\@glo@type}%
4827 {}%
4828 {\glossarysection[\glossarytoctitle]{\glossarytitle}}%
4829 \gls@noref@warn{\@glo@type}%
4830 }%
4831 }

```

`noidxdisplayloc` Patch to check for range formations.

```

4832 \renewcommand*{\glsnoidxdisplayloc}[4]{%
4833   \setentrycounter[#1]{#2}%

```

```
4834 \@glsxtr@display@loc#3\empty\end@glsxtr@display@loc{#4}%
4835 }
```

xtr@display@loc Patch to check for range formations.

```
4836 \def \@glsxtr@display@loc#1#2\end@glsxtr@display@loc#3{%
4837   \ifx#1(\relax
4838     \glsxtrdisplaystartloc{#2}{#3}%
4839   \else
4840     \ifx#1)\relax
4841       \glsxtrdisplayendloc{#2}{#3}%
4842     \else
4843       \glsxtrdisplaysingleloc{#1#2}{#3}%
4844     \fi
4845   \fi
4846 }
```

isplaysingleloc Single location.

```
4847 \newcommand*{\glsxtrdisplaysingleloc}[2]{%
4848   \csuse{#1}{#2}%
4849 }
```

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 \glsxtrlocrengefmt.

displaystartloc Start of a location range.

```
4850 \newcommand*{\glsxtrdisplaystartloc}[2]{%
4851   \protected@edef\glsxtrlocrengefmt{#1}%
4852   \ifx\glsxtrlocrengefmt\empty
4853     \def\glsxtrlocrengefmt{glsnumberformat}%
4854   \fi
4855   \expandafter\glsxtrdisplaysingleloc
4856   \expandafter{\glsxtrlocrengefmt}{#2}%
4857 }
```

trdisplayendloc End of a location range.

```
4858 \newcommand*{\glsxtrdisplayendloc}[2]{%
4859   \protected@edef\@glsxtr@tmp{#1}%
4860   \ifdefempty{\@glsxtr@tmp}{\def\@glsxtr@tmp{glsnumberformat}}{}%
4861   \ifx\glsxtrlocrengefmt\@glsxtr@tmp
4862   \else
4863     \GlossariesExtraWarning{Mismatched end location range
4864     (start=\glsxtrlocrengefmt, end=\@glsxtr@tmp)}%
4865   \fi
4866   \expandafter\glsxtrdisplayendlohook\expandafter{\@glsxtr@tmp}{#2}%
4867   \expandafter\glsxtrdisplaysingleloc
4868   \expandafter{\glsxtrlocrengefmt}{#2}%
4869   \def\glsxtrlocrengefmt{}%
4870 }
```

splayendlochook Allow the user to hook into the end of range command.

```
4871 \newcommand*{\glsxtrdisplayendlochook}[2]{}
```

sxtrlocrangefmt Current range format. Empty if not in a range.

```
4872 \newcommand*{\glsxtrlocrangefmt}{}{}
```

setentrycounter Adjust \setentrycounter to save the original prefix.

```
4873 \renewcommand*{\setentrycounter}[2][]{%
4874   \def\glsxtrcounterprefix{\#1}%
4875   \ifx\glsxtrcounterprefix\empty
4876     \def\@glo@counterprefix{.}%
4877   \else
4878     \def\@glo@counterprefix{.\#1.}%
4879   \fi
4880   \def\glsentrycounter{\#2}%
4881 }
```

ls@removespaces Redefine to allow adjustments to location hyperlink.

```
4882 \def\@gls@removespaces#1 #2@nil{%
4883   \toks@=\expandafter{\the\toks@#1}%
4884   \ifx\\#2\\%
4885     \edef\@glo@tmp{\the\toks@}%
4886     \ifx\@glo@tmp\empty
4887     \else
```

Expand location (just in case \toks@ is needed for something else).

```
4888   \expandafter\glsxtrlocationhyperlink\expandafter
4889     \glsentrycounter\expandafter\@glo@counterprefix\expandafter{\the\toks@}%
4890   \fi
4891 \else
4892   \@gls@ReturnAfterFi{%
4893     \@gls@removespaces#2@nil
4894   }%
4895 \fi
4896 }
```

cationhyperlink

```
\glsxtrlocationhyperlink{\langle counter \rangle}{\langle prefix \rangle}{\langle location \rangle}
```

```
4897 \newcommand*{\glsxtrlocationhyperlink}[3]{%
4898   \ifdefvoid\glsxtrspplocationurl
4899   {%
4900     \GlsXtrInternalLocationHyperlink{\#1}{\#2}{\#3}%
4901   }%
4902 }
```

```

4903     \hyperref{\glsxtrsupplocationurl}{\#1\#2\#3}\#3}%
4904   }%
4905 }

suphypernumber
4906 \newcommand*{\glsxtrsupphypernumber}[1]{%
4907   {%
4908     \glshasattribute{\glscurrententrylabel}{externalallocation}%
4909     {%
4910       \def\glsxtrsupplocationurl{%
4911         \glsgetattribute{\glscurrententrylabel}{externalallocation}}%
4912     }%
4913     {%
4914       \def\glsxtrsupplocationurl{}%
4915     }%
4916     \glshypernumber{\#1}%
4917   }%
4918 }

```

Give a bit of assistance to new users who are confused and don't know how to read transcript messages.

@print@glossary

```

4919 \renewcommand{@print@glossary}{%
4920   \makeatletter
4921   \@input{\jobname.\csname \glotype@\glo@type \in\endcsname}%
4922   \IfFileExists{\jobname.\csname \glotype@\glo@type \in\endcsname}%
4923   {}%
4924   {\glsxtrNoGlossaryWarning{\glo@type}}%
4925   \ifglsxindy
4926     \ifcsundef{\xdy@\glo@type \language}%
4927     {}%
4928     \edef\odo@auxoutstuff{%
4929       \noexpand\AtEndDocument{%
4930         \noexpand\immediate\noexpand\write\auxout{%
4931           \string\providecommand\string\@xdylanguage[2]{}%
4932         \noexpand\immediate\noexpand\write\auxout{%
4933           \string\@xdylanguage{\glo@type}\{\xdy@main@language}}%
4934       }%
4935     }%
4936   }%
4937   {}%
4938   \edef\odo@auxoutstuff{%
4939     \noexpand\AtEndDocument{%
4940       \noexpand\immediate\noexpand\write\auxout{%
4941         \string\providecommand\string\@xdylanguage[2]{}%
4942       \noexpand\immediate\noexpand\write\auxout{%
4943         \string\@xdylanguage{\glo@type}\{\csname \xdy@\glo@type
4944           \language\endcsname}}%

```

```

4945      }%
4946      }%
4947      }%
4948      \cdo@auxoutstuff
4949      \edef\cdo@auxoutstuff{%
4950          \noexpand\AtEndDocument{%
4951              \noexpand\immediate\noexpand\write\cdo@auxout{%
4952                  \string\providetcommand\string\gls@codepage[2]{}{}}%
4953              \noexpand\immediate\noexpand\write\cdo@auxout{%
4954                  \string\gls@codepage{\glo@type}\{\gls@codepage\}}{}}%
4955          }%
4956      }%
4957      \cdo@auxoutstuff
4958  \fi
4959  \renewcommand*\cwarn@nomakeglossaries{%
4960      \GlossariesWarningNoLine{\string\makeglossaries\space
4961      hasn't been used, ^J the glossaries will not be updated}{}}%
4962  }%
4963 }

```

Setup the warning text to display if the external file for the given glossary is missing.

`oGlsWarningHead` Header message.

```

4964 \newcommand{\GlsXtrNoGlsWarningHead}[2]{%
4965 This document is incomplete. The external file associated with
4966 the glossary '#1' (which should be called \texttt{\#2})
4967 hasn't been created.%
4968 }

```

`rningEmptyStart` No entries have been added to the glossary.

```

4969 \newcommand{\GlsXtrNoGlsWarningEmptyStart}{%
4970 This has probably happened because there are no entries defined
4971 in this glossary.%
4972 }

```

`arningEmptyMain` The default “main” glossary is empty.

```

4973 \newcommand{\GlsXtrNoGlsWarningEmptyMain}{%
4974 If you don't want this glossary,
4975 add \texttt{nomain} to your package option list when you load
4976 \texttt{glossaries-extra.sty}. For example:%
4977 }

```

`ingEmptyNotMain` A glossary that isn't the default “main” glossary is empty.

```

4978 \newcommand{\GlsXtrNoGlsWarningEmptyNotMain}[1]{%
4979 Did you forget to use \texttt{type=\#1} when you defined your
4980 entries? If you tried to load entries into this glossary with
4981 \texttt{\string\loadglsentries} did you remember to use
4982 \texttt{\texttt{[#1]}} as the optional argument? If you did, check that
4983 the definitions in the file you loaded all had the type set

```

```
4984 to \texttt{\string\glsdefaulttype}.%
4985 }
```

warningCheckFile Advisory message to check the file contents.

```
4986 \newcommand{\GlsXtrNoGlsWarningCheckFile}[1]{%
4987 Check the contents of the file \texttt{\#1}. If
4988 it's empty, that means you haven't indexed any of your entries in this
4989 glossary (using commands like \texttt{\string\gls} or
4990 \texttt{\string\glsadd}) so this list can't be generated.
4991 If the file isn't empty, the document build process hasn't been
4992 completed.%
```

```
4993 }
```

WarningAutoMake Message when automake option has been used.

```
4994 \newcommand{\GlsXtrNoGlsWarningAutoMake}[1]{%
4995 You may need to rerun \LaTeX. If you already have, it may be that
4996 \TeX's shell escape doesn't allow you to run
4997 \ifglsxindy xindy\else makeindex\fi. Check the
4998 transcript file \texttt{\jobname.log}. If the shell escape is
4999 disabled, try one of the following:
5000
5001 \begin{itemize}
5002     \item Run the external (Lua) application:
5003
5004         \texttt{makeglossaries-lite \jobname}
5005
5006     \item Run the external (Perl) application:
5007
5008         \texttt{makeglossaries \jobname}
5009 \end{itemize}
5010
5011 Then rerun \LaTeX\ on this document.
5012 \GlossariesExtraWarning{Rerun required to build the
5013 glossary '#1' or check TeX's shell escape allows
5014 you to run \ifglsxindy xindy\else makeindex\fi}%
5015 }
```

WarningMisMatch Mismatching \makenoidxglossaries.

```
5016 \newcommand{\GlsXtrNoGlsWarningMisMatch}{%
5017 You need to either replace \texttt{\string\makenoidxglossaries}
5018 with \texttt{\string\makeglossaries} or replace
5019 \texttt{\string\printglossary} (or \texttt{\string\printglossaries}) with
5020 \texttt{\string\printnoidxglossary}
5021 (or \texttt{\string\printnoidxglossaries}) and then rebuild
5022 this document.%
```

```
5023 }
```

warningBuildInfo Build advice.

```

5024 \newcommand{\GlsXtrNoGlsWarningBuildInfo}{%
5025   Try one of the following:
5026   \begin{itemize}
5027     \item Add \texttt{automake} to your package option list when you load
5028           \texttt{glossaries-extra.sty}. For example:
5029
5030           \texttt{\string\usepackage[automake]\{}%
5031           \texttt{glossaries-extra\string\closebrace}%
5032
5033     \item Run the external (Lua) application:
5034
5035           \texttt{\string\makeglossaries-lite.lua \string"\jobname\string"}%
5036
5037     \item Run the external (Perl) application:
5038
5039           \texttt{\string\makeglossaries \string"\jobname\string"}%
5040   \end{itemize}
5041
5042 Then rerun \LaTeX\ on this document.%
5043 }

```

`trRecordWarning` Paragraph for record=only.

```

5044 \newcommand{\GlsXtrRecordWarning}[1]{%
5045   \texttt{\string\printglossary} doesn't work
5046   with the \texttt{record=\@glsxtr@record@setting} package option
5047   use\par\texttt{\string\printunsrtglossary[type=#1]}\par
5048   instead (or change the package option).%
5049 }

```

`oGlsWarningTail` Final paragraph.

```

5050 \newcommand{\GlsXtrNoGlsWarningTail}{%
5051 This message will be removed once the problem has been fixed.%
5052 }

```

`GlsWarningNoOut` No out file created. Build advice.

```

5053 \newcommand{\GlsXtrNoGlsWarningNoOut}[1]{%
5054   The file \texttt{\#1} doesn't exist. This most likely means you haven't used
5055   \texttt{\string\makeglossaries} or you have used
5056   \texttt{\string\nofiles}. If this is just a draft version of the
5057   document, you can suppress this message using the
5058   \texttt{nomissingglostext} package option.%
5059 }

```

`glossarywarning`

```

5060 \newcommand*{\@glsxtr@defaultnoglossarywarning}[1]{%
5061   \glossarysection[\glossarytoctitle]{\glossarytitle}%
5062   \GlsXtrNoGlsWarningHead{\#1}{\jobname.\csname @glo@type @in\endcsname}%
5063   \par
5064   \glsxtrifemptyglossary{\#1}%

```

```

5065  {%
5066    \GlsXtrNoGlsWarningEmptyStart\space
5067    \ifthenelse{\equal{#1}{main}}{\GlsXtrNoGlsWarningEmptyMain\par
5068      \medskip
5069      \noindent\textrtt{\string\usepackage[nomain\ifglsacronym ,acronym\fi]{%
5070        glossaries-extra\glsclosebrace}}
5071      \medskip
5072    }%
5073    {\GlsXtrNoGlsWarningEmptyNotMain{#1}}%
5074  }%
5075  {%
5076    \IfFileExists{\jobname.\csname @glotype@\glo@type @out\endcsname}%
5077    {%
5078      \GlsXtrNoGlsWarningCheckFile
5079      {\jobname.\csname @glotype@\glo@type @out\endcsname}%
5080
5081      \ifglsautomake
5082
5083      \GlsXtrNoGlsWarningAutoMake{#1}
5084
5085    \else
5086
5087      \ifthenelse{\equal{#1}{main}}{%
5088        \GlsXtrNoGlsWarningEmptyMain\par
5089        \medskip
5090        \noindent\textrtt{\string\usepackage[nomain]{%
5091          glossaries-extra\glsclosebrace}}
5092        \medskip
5093      }%
5094    }%
5095    {}%
5096
5097    \ifdefequal{\makeglossaries}{no}{makeglossaries}{%
5098    {%
5099      \GlsXtrNoGlsWarningMisMatch
5100    }%
5101    {%
5102      \GlsXtrNoGlsWarningBuildInfo
5103    }%
5104    \fi
5105  }%
5106  {%
5107    \GlsXtrNoGlsWarningNoOut
5108    {\jobname.\csname @glotype@\glo@type @out\endcsname}%
5109  }%
5110 }%
5111 \par
5112 \GlsXtrNoGlsWarningTail
5113 }

```

glossarywarning Warn about using \printglossary with record

```

5114 \newcommand*{\@glsxtr@record@glossarywarning}[1]{%
5115   \GlossariesExtraWarning{\string\printglossary space doesn't work\MessageBreak
5116   with record=\@glsxtr@record@setting space package option\MessageBreak(use
5117   \string\printunsrtglossary[type=#1])\MessageBreak
5118   instead (or change the package option)}%
5119 \glossarysection[\glossarytoctitle]{\glossarytitle}
5120 \GlsXtrRecordWarning{#1}
5121 \GlsXtrNoGlsWarningTail
5122 }
```

Provide some commands to accompany the record option for use with **bib2gls**.

ResourceOptions Default resource options.

```
5123 \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.

```
5124 \newcommand*{\glsxtrresourcefile}[2][]{%
```

The record option can't be set after this command.

```

5125 \disable@keys{glossaries-extra.sty}{record}%
5126 \glsxtr@writefields
5127 \ifdefempty{\GlsXtrDefaultResourceOptions}%
5128 {%
5129   \protected@write{\auxout}{\glsxtrresourceinit}%
5130   {\string\glsxtr@resource{#1}{#2}}%
5131 }%
5132 {%
5133   \protected@write{\auxout}{\glsxtrresourceinit}%
5134   {\string\glsxtr@resource{\GlsXtrDefaultResourceOptions,#1}{#2}}%
5135 }%
5136 \let{\glsxtr@org@see@noindex}{\gls@see@noindex}
5137 \let{\gls@see@noindex}{\relax}
5138 \IfFileExists{#2.glstex}%
5139 {%
```

Can't scope \@input so save and restore the category code of @ to allow for internal commands in the location list.

```

5140 \edef{\bibgls@restoreat}{\noexpand\catcode\noexpand`@=\number\catcode`\@}%
5141 \makeatletter
5142 \@input{#2.glstex}%
5143 \bibgls@restoreat
```

If the record=nameref option has been set, check if this is supported by the installed version of **bib2gls**.

```

5144 \glsxtr@check@bibgls@nameref
5145 }%
5146 {%
5147 \GlossariesExtraWarning{No file '#2.glstex'}%
```

```

5148 }%
5149 \let\@gls@see@noindex\@glsxtr@org@see@noindex
5150 }
5151 \@onlypreamble\glsxtrresourcefile

@bibgls@nameref This will only warn after bib2gls has created the .glstex file, but there's way to check before.
5152 \newcommand{\@glsxtr@check@bibgls@nameref}{%
5153   \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
5154     \ifdef\bibglshrefchar
5155     {}%
5156     {}%
5157     \GlossariesExtraWarning{record=nameref requires at least
5158       version 1.8 of bib2gls}%
5159   }%
5160 \fi
5161 \let\@glsxtr@check@bibgls@nameref\relax
5162 }

xtrresourceinit Code used during the protected write operation.
5163 \newcommand*\glsxtrresourceinit{}}

trresourcecount
5164 \newcount\glsxtrresourcecount

trLoadResources Short cut that uses \glsxtrresourcefile with \jobname as the mandatory argument.
5165 \newcommand*\GlsXtrLoadResources[1][]{%
5166   \ifnum\glsxtrresourcecount=0\relax
5167     \glsxtrresourcefile[#1]{\jobname}%
5168   \else
5169     \glsxtrresourcefile[#1]{\jobname-\the\glsxtrresourcecount}%
5170   \fi
5171   \advance\glsxtrresourcecount by 1\relax
5172 }

glsxtr@resource
5173 \newcommand*\glsxtr@resource[2]{}}

\glsxtr@fields
5174 \newcommand*\glsxtr@fields[1]{}}

xtr@texencoding
5175 \newcommand*\glsxtr@texencoding[1]{}}

\glsxtr@langtag
5176 \newcommand*\glsxtr@langtag[1]{}}

@pluralsuffixes
5177 \newcommand*\glsxtr@pluralsuffixes[4]{}}

```

```

tr@shortcutsval
5178 \newcommand*{\glsxtr@shortcutsval}[1]{}

sxtr@linkprefix
5179 \newcommand*{\glsxtr@linkprefix}[1]{}

xtr@writefields This information only needs to be written once, so disable it after it's been used.
5180 \newcommand*{\glsxtr@writefields}{%
5181   \protected@write\@auxout{}{%
5182     {\string\providetoken*{\string\glsxtr@fields}[1]{}{}}%
5183   \protected@write\@auxout{}{%
5184     {\string\providetoken*{\string\glsxtr@resource}[2]{}{}}%
5185   \protected@write\@auxout{}{%
5186     {\string\providetoken*{\string\glsxtr@pluralsuffixes}[4]{}{}}%
5187   \protected@write\@auxout{}{%
5188     {\string\providetoken*{\string\glsxtr@shortcutsval}[1]{}{}}%
5189   \protected@write\@auxout{}{%
5190     {\string\providetoken*{\string\glsxtr@linkprefix}[1]{}{}}%
5191   \protected@write\@auxout{}{\string\glsxtr@fields{\@gls@keymap}}{}}%
5192   \protected@write\@auxout{}{%
5193     {\string\providetoken*{\string\glsxtr@record}[5]{}{}}%
5194   \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
5195     \protected@write\@auxout{}{%
5196       {\string\providetoken*{\string\glsxtr@record@nameref}[8]{}{}}%
5197   \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`.

```

5198 \ifdef\CurrentTrackedLanguageTag
5199 {%
5200   \protected@write\@auxout{}{%
5201     {\string\glsxtr@langtag{\CurrentTrackedLanguageTag}}{}}%
5202   }%
5203 {%
5204   \protected@write\@auxout{}{\string\glsxtr@pluralsuffixes
5205     {\glspluralsuffix}{\abbrvpluralsuffix}{\acrpluralsuffix}}{}}%
5206 {%
5207 \ifdef\inputencodingname
5208 {%
5209   \protected@write\@auxout{}{\string\glsxtr@texencoding{\inputencodingname}}{}}%
5210 }%
5211 {%

```

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.)

```

5212     \@ifpackageloaded{fontspec}%
5213     {\protected@write\@auxout{}{\string\glsxtr@texencoding{utf8}}}%
5214     {}%
5215 }%
5216 \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.

```

5217 \AtBeginDocument
5218   {\protected@write\@auxout{}{\string\glsxtr@linkprefix{\glolinkprefix}}}%
5219 \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.

```

5220 \ifglsautomake
5221   \IfFileExists{\jobname.aux}%
5222     {\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.

```

5223 \ifx\@gls@doautomake\@gls@doautomake@err
5224   \let\@gls@doautomake\relax
5225 \fi
5226 \fi

```

Check if order=letter has been used by mistake (but not if record=alsoindex has been used).

```

5227 \@glsxtr@if@record@only
5228 {\ifdefstring{\glsorder}{letter}%
5229   {\GlossariesExtraWarningNoLine{Package option 'order=letter' isn't
5230     supported with 'record=\@glsxtr@record@setting'. Use 'break-at=none'
5231     resource option instead}}%
5232 {}%
5233 }%
5234 {}%
5235 }

```

do@automake@err

```

5236 \newcommand*\@gls@doautomake@err{}%
5237 \PackageError{glossaries}{You must use
5238 \string\makeglossaries\space with automake=true}%
5239 {}%
5240   Either remove the automake=true setting or
5241   add \string\makeglossaries\space to your document preamble.%
5242 }%
5243 }

```

Allow locations specific to a particular counter to be recorded.

```

\glsxtr@record
5244 \newcommand*{\glsxtr@record}[5]{}

@record@nameref Used with record=nameref to include current label information.
5245 \newcommand*{\glsxtr@record@nameref}[8]{}

r@counterrecord Aux file command.
5246 \newcommand*{\glsxtr@counterrecord}[3]{%
5247   \glsxtrfieldlistgadd{#1}{record.#2}{#3}%
5248 }

unterrecordhook Hook used by \glsxtr@dorecord.
5249 \newcommand*{\glsxtr@counterrecordhook}{}{}

trRecordCounter Activate recording for a particular counter (identified in the argument).
5250 \newcommand*{\GlsXtrRecordCounter}[1]{%
5251   \@@glsxtr@recordcounter{#1}%
5252 }
5253 \onlypreamble\GlsXtrRecordCounter

docounterrecord
5254 \newcommand*{\glsxtr@docounterrecord}[1]{%
5255   \protected@write\auxout{}{\string\glsxtr@counterrecord
5256     {\@gls@label}{#1}{\csuse{the#1}}}}%
5257 }

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.
5258 \newcommand*{\glsxtrglossentry}[1]{%
5259   \glsxtrtitleorpdfforheading
5260   {\@glsxtrglossentry{#1}}%
5261   {\glsentryname{#1}}%
5262   {\glsxtrheadname{#1}}%
5263 }

lsxtrglossentry Another test is needed in case \glsxtrglossentry has been written to the table of contents.
5264 \newrobustcmd*{\glsxtrglossentry}[1]{%
5265   \glsxtrtitleorpdfforheading
5266   {%
5267     \glsdoifexists{#1}%
5268     {%
5269       \begingroup

```

```

5270     \protected@edef\glscurrententrylabel{\glsdetoklabel{#1}}%
5271     \protected@edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
5272     \ifglshasparent{#1}%
5273     {\GlsXtrStandaloneSubEntryItem{#1}}%
5274     {\glsentryitem{#1}}%
5275     \GlsXtrStandaloneEntryName{#1}%
5276   \endgroup
5277 }
5278 }%
5279 {\glsentryname{#1}}%
5280 {\glsxtrheadname{#1}}%
5281 }

```

daloneEntryName

```

5282 \newcommand*{\GlsXtrStandaloneEntryName}[1]{%
5283   \glstarget{#1}{\glossentryname{#1}}%
5284 }

```

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.)

```
5285 \newcommand{\GlsXtrStandaloneGlossaryType}{\glsentrytype{\glscurrententrylabel}}
```

oneSubEntryItem Used for sub-entries in standalone format. The argument is the entry's label.

```

5286 \newcommand*{\GlsXtrStandaloneSubEntryItem}[1]{%
5287   \GlsXtrIfFieldEqNum{level}{#1}{1}{\glssubentryitem{#1}}{}%
5288 }

```

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.

```

5289 \newcommand*{\glsxtrglossentryother}[3]{%
5290   \ifstrempty{#1}%
5291   {%
5292     \ifcsdef{glsxtrhead#3}%
5293     {%
5294       \glsxtrtitleorpdfforheading
5295       {\@glsxtrglossentryother{#2}{#3}{#1}}%
5296       {\@gls@entry@field{#2}{#3}}%
5297       {\csuse{glsxtrhead#3}{#2}}%
5298     }%
5299     {%
5300       \glsxtrtitleorpdfforheading
5301       {\@glsxtrglossentryother{#2}{#3}{#1}}%
5302       {\@gls@entry@field{#2}{#3}}%
5303       {\@gls@entry@field{\NoCaseChange{#2}}{#3}}%
5304     }%

```

```

5305 }%
5306 {%
5307   \glsxtrtitleorpdforheading
5308   {\@glsxtrglossentryother{#2}{#3}{#1}}%
5309   {\@gls@entry@field{#2}{#3}}%
5310   {#1}%
5311 }%
5312 }

glossentryother As \@glsxtrglossentry but uses a different field.
5313 \newrobustcmd*\@glsxtrglossentryother[3]{%
5314   \glsxtrtitleorpdforheading
5315 {%
5316   \glsdoifexists{#1}%
5317 {%
5318   \begingroup
5319     \protected@edef\glscurrententrylabel{\glsdetoklabel{#1}}%
5320     \protected@edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
5321     \ifglshasparent{#1}%
5322     {\GlsXtrStandaloneSubEntryItem{#1}}%
5323     {\glsentryitem{#1}}%
5324     \GlsXtrStandaloneEntryOther{#1}%
5325   \endgroup
5326 }%
5327 }%
5328 {\@gls@entry@field{#1}{#2}}%
5329 {#3}%
5330 }

aloneEntryOther
5331 \newcommand*\GlsXtrStandaloneEntryOther[2]{%
5332   \glstarget{#1}{\glossentrynameother{#1}{#2}}%
5333 }

printunsrtglossary 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.
5334 \ifdef{\printgloss@checkexists}
5335 {
5336   \newcommand*\printunsrtglossary{%
5337     \let\printgloss@checkexists\printgloss@checkexists@allowignored
5338     \@ifstar\s@printunsrtglossary\@printunsrtglossary
5339   }
5340 }
5341 {
5342   \newcommand*\printunsrtglossary{%
5343     \@ifstar\s@printunsrtglossary\@printunsrtglossary
5344   }
5345 }

```

```

ntunsrtglossary Unstarred version.
5346 \newcommand*{\@printunsrtglossary}[1][]{%
5347   \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%
5348 }

ntunsrtglossary Starred version.
5349 \newcommand*{\s@printunsrtglossary}[2][]{%
5350   \begingroup
5351   #2%
5352   \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%
5353   \endgroup
5354 }

unsrtglossaries Similar to \printnoidxglossaries but it displays all entries defined for the given glossary without sorting.
5355 \newcommand*{\printunsrtglossaries}{%
5356   \forallglossaries{\@glo@type}{\printunsrtglossary[type=\@glo@type]}%
5357 }

@unsrt@glossary
5358 \newcommand*{\@print@unsrt@glossary}{%
5359   \glossarysection[\glossarytoctitle]{\glossarytitle}%
5360   \glossarypreamble
      check for empty list
5361   \glsxtrifemptyglossary{\@glo@type}%
5362   {%
5363     \GlossariesExtraWarning{No entries defined in glossary '\@glo@type'}%
5364   }%
5365   {%
5366     \key@ifundefined{glossentry}{group}%
5367     {\let\@gls@getgroupname\@gls@noidx@getgroupname}%
5368     {\let\@gls@getgroupname\@glsxtr@unsrt@getgroupname}%
5369     \def\@gls@currentlettergroup{}%
5370   \def\@glsxtr@doglossary{%
5371     \begin{theglossary}%
5372       \glossaryheader
5373       \glsresetentrylist
5374     }%
5375     \expandafter\for\expandafter\glscurrententrylabel\expandafter
5376       :\expandafter=\csname glolist@\@glo@type\endcsname\do{%
5377         \ifdefempty{\glscurrententrylabel}%
5378           {}%
5379         {}%
5380       \let\glsxtr@process\firstofone
      Provide a hook (for example to measure width).
5380       \let\glsxtr@process\firstofone
    }
  }
}

```

```

5381     \let\printunsrtglossaryskipentry
5382         \@glsxtr@printunsrtglossaryskipentry
5383     \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%
Don't check group for child entries.

5384     \@glsxtr@process
5385     {%
5386         \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.)

```

5387     \ifglshasparent{\glscurrententrylabel}{}%
5388     {%
5389         \@glsxtr@checkgroup\glscurrententrylabel
5390         \expandafter\appto\expandafter\@glsxtr@doglossary\expandafter
5391             {\@glsxtr@grouphereading}%
5392     }%
5393     \fi

5394     \protected@appto\@glsxtr@doglossary{%
5395         \noexpand\@printunsrt@glossary@handler{\glscurrententrylabel}}%
5396     }%
5397     }%
5398     }%
5399     \appto\@glsxtr@doglossary{\end{theglossary}}%
5400     \printunsrtglossarypredoglossary
5401     \@glsxtr@doglossary
5402 }%
5403 \glossarypostamble
5404 }

```

`\printunsrtinnerglossary` 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.

```

5405 \newcommand*{\printunsrtinnerglossary}[3] [] {%
5406     \begingroup
5407         \def\@glsxtr@printglossopts{\#1}%
5408         \def\@glo@type{\glsdefaulttype}%
5409         \setkeys{printgloss}{title,toctitle,style,numberedsection,sort,label}[\#1]%
5410         \let\currentglossary\@glo@type
5411         #2%
5412         \appto\@print@unsrt@innerglossary
5413         #3%
5414     \endgroup
5415 }

```

```

srtglossarywrap
5416 \newenvironment{printunsrtglossarywrap}[1] []%
5417 {%
5418   \def\@glsxtr@printglossopts{\#1}%
5419   \def\@glo@type{\glsdefaulttype}%
5420   \def\glossarytitle{\csname @glotype@\@glo@type @title\endcsname}%
5421   \def\glossarytoctitle{\glossarytitle}%
5422   \let\org@glossarytitle\glossarytitle
5423   \def\@glossarystyle{%
5424     \ifx\@glossary@default@style\relax
5425       \GlossariesWarning{No default glossary style provided \MessageBreak
5426         for the glossary '\@glo@type'. \MessageBreak
5427         Using deprecated fallback. \MessageBreak
5428         To fix this set the style with \MessageBreak
5429         \string\setglossarystyle\space or use the \MessageBreak
5430         style key=value option}%
5431     \fi
5432   }%
5433   \def\gls@dotocitle{\glssettoctitle{\@glo@type}}%
5434   \let\@org@glossaryentrynumbers\glossaryentrynumbers
5435   \printgloss@setsort
5436   \setkeys{printgloss}{\#1}%

```

The type key simply allows the title to be set if the title key isn't supplied.

```

5437 \ifglossaryexists*\{@glo@type}%
5438 {%
5439   \ifx\glossarytitle\org@glossarytitle
5440   \else
5441     \expandafter\let\csname @glotype@\@glo@type @title\endcsname
5442       \glossarytitle
5443   \fi
5444   \let\currentglossary\@glo@type
5445 }%
5446 {}%
5447 \let\org@glossaryentrynumbers\glossaryentrynumbers
5448 \let\glsnonextpages\glsnonextpages
5449 \let\glsnextpages\glsnextpages
5450 \let\nopostdesc\nopostdesc
5451 \gls@dotocitle
5452 \glossarystyle
5453 \let\gls@org@glossaryentryfield\glossentry
5454 \let\gls@org@glossarysubentryfield\subglossentry

5455 \renewcommand{\glossentry}[1]{%
5456   \protected@xdef\glscurrententrylabel{\glsdetoklabel{\##1}}%
5457   \gls@org@glossaryentryfield{\##1}%
5458 }%
5459 \renewcommand{\subglossentry}[2]{%
5460   \protected@xdef\glscurrententrylabel{\glsdetoklabel{\##2}}%
5461   \gls@org@glossarysubentryfield{\##1}{\##2}%

```

```

5462 }%
5463 \gls@preglossaryhook
5464 \glossarysection[\glossarytoctitle]{\glossarytitle}%
5465 \glossarypreamble
5466 \begin{theglossary}%
5467 \glossaryheader
5468 \glsresetentrylist
5469 }%
5470 {%
5471 \end{theglossary}%
5472 \glossarypostamble
5473 \global\let\glossaryentrynumbers\org@glossaryentrynumbers
5474 \global\let\warn@noprintglossary\relax
5475 }

```

t@innerglossary This is much like \print@unsrt@innerglossary but only contains what would normally be the content of the theglossary.

```
5476 \newcommand*{\@print@unsrt@innerglossary}{%
```

No section header or preamble.

```

5477 \glsxtrifemptyglossary{\glo@type}%
5478 {%
5479 \GlossariesExtraWarning{No entries defined in glossary '\glo@type'}%
5480 }%
5481 {%
5482 \key@ifundefined{glossentry}{group}%
5483 {\let\gls@getgroupitle\gls@noidx@getgroupitle}%
5484 {\let\gls@getgroupitle\glsxtr@unsrt@getgroupitle}%
5485 \def\gls@currentlettergroup{}%

```

No header or reset.

```

5486 \def\glsxtr@doglossary{}%
5487 \expandafter\for\expandafter\glscurrententrylabel\expandafter
5488 :\expandafter=\csname glolist@\glo@type\endcsname\do{%
5489 \ifdefempty{\glscurrententrylabel}%
5490 {}%
5491 {}%

```

Provide a hook (for example to measure width).

```

5492 \let\glsxtr@process@firstofone
5493 \let\printunsrtglossaryskipentry
5494 \glsxtr@printunsrtglossaryskipentry
5495 \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%

```

Don't check group for child entries.

```

5496 \glsxtr@process
5497 {%
5498 \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.)
```

5499 \ifglshasparent{\glscurrententrylabel}{}%

5500 {%

5501 \@glsxtr@checkgroup\glscurrententrylabel

5502 \expandafter\appto\expandafter\@glsxtr@doglossary\expandafter

5503 {\@\glsxtr@grouphereading}%

5504 }%

5505 \fi

5506 \protected@eappto\@glsxtr@doglossary{%

5507 \noexpand\@printunsrt@glossary@handler{\glscurrententrylabel}{}%

5508 }%

5509 }%

5510 }%

5511 \printunsrtglossarypredoglossary

5512 \@glsxtr@doglossary

5513 }%

No postamble.

5514 }

ntryprocesshook

5515 \newcommand*{\printunsrtglossaryentryprocesshook}[1]{}

ossaryskipentry

5516 \newcommand*{\printunsrtglossaryskipentry}{%

5517 \PackageError{glossaries-extra}{\string\printunsrtglossaryskipentry\space

5518 can only be used within \string\printunsrtglossaryentryprocesshook}{}%

5519 }

ntryprocesshook

5520 \newcommand*{\@glsxtr@printunsrtglossaryskipentry}{%

5521 \let\glsxtr@process\@gobble

5522 }

rypredoglossary

5523 \newcommand*{\printunsrtglossarypredoglossary}{}%

lossary@handler

5524 \newcommand{\@printunsrt@glossary@handler}[1]{%

5525 \protected@xdef\glscurrententrylabel{\#1}%

5526 \printunsrtglossaryhandler\glscurrententrylabel

5527 }

glossaryhandler

5528 \newcommand{\printunsrtglossaryhandler}[1]{%

5529 \glsxtrunsrtdo{\#1}{}%

5530 }

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.

```
5531 \newrobustcmd*\glsxtriflabelinlist}[4]{%
5532   \protected@edef@glsxtr@doiflabelinlist{\noexpand@gls@ifinlist{#1}{#2}}%
5533   \glsxtr@doiflabelinlist{#3}{#4}%
5534 }
```

srtglossaryunit

```
5535 \newcommand{\print@op@unsrtglossaryunit}[2][]{%
5536   \s@printunsrtglossary[type=\glsdefaulttype,#1]{%
5537     \printunsrtglossaryunitsetup[#2]}%
5538 }%
5539 }
```

glossaryunitsetup

```
5540 \newcommand*\printunsrtglossaryunitsetup}[1]{%
5541   \renewcommand*\printunsrtglossaryhandler}[1]{%
5542   \glsxtrfieldxifinlist{##1}{record.#1}{\csuse{the#1}}%
5543   {\glsxtrunsrtdo{##1}}%
5544   {}%
5545 }%
```

Only the target names should have the prefixes adjusted as \gls etc need the original \glolinkprefix. The \gobble part discards \glolinkprefix.

```
5546 \ifcsundef{theH#1}%
5547 {}%
5548   \renewcommand*\@glsxtrhypernameprefix}{record.#1.\csuse{the#1}. \gobble}%
5549 }%
5550 {}%
5551   \renewcommand*\@glsxtrhypernameprefix}{record.#1.\csuse{theH#1}. \gobble}%
5552 }%
5553 \renewcommand*\glossarysection}[2]{}%
5554 \appto\glossarypostamble{\glspar\medskip\glspar}%
5555 }
```

srtglossaryunit

```
5556 \newcommand{\print@noop@unsrtglossaryunit}[2][]{%
5557   \PackageError{glossaries-extra}{\string\printunsrtglossaryunit\space%
5558   requires the record=only or record=alsoindex package option}{}%
5559 }
```

t@getgroupitle

```
5560 \newrobustcmd*\@glsxtr@unsrt@getgroupitle}[2]{%
```

```

5561 \protected@edef{\glsxtr@titlelabel{\glsxtr@grouptitle@\#1}%
5562 \onelevel@sanitize\glsxtr@titlelabel
5563 \ifcsdef{\glsxtr@titlelabel}
5564 {\letcs{\#2}{\glsxtr@titlelabel}}%
5565 {\def#2{\#1}}%
5566 }

```

\glsxtrunsrtdo Provide a user-level call to \glsxtr@noidx@do to make it easier to define a new handler.
5567 \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).
5568 \newcommand*{\glsxtrgroupfield}[group]

The tabular-like glossary styles cause quite a problem with the iterative approach. In particular 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@groupheding, which will be empty if no heading is required.

```

5569 \newcommand*{\glsxtr@checkgroup}[1]{%
5570   \def{\glsxtr@groupheding}{}%
5571   \key@ifundefined{glossentry}{group}{}%
5572   {}%
5573   \letcs{\gls@sort}{\glsdetoklabel{\#1}@sort}%
5574   \expandafter\glo@grabfirst\gls@sort{}{}\@nil
5575 }%
5576 {}%
5577 \protected@edef{\glo@thislettergrp}{%
5578   \csuse{\glo@glsdetoklabel{\#1}@glsxtrgroupfield}%
5579 }%
5580 \ifdefeq{\glo@thislettergrp}{\gls@currentlettergroup}{}%
5581 {}%
5582 {}%
5583 \ifdefempty{\gls@currentlettergroup}{}%
5584 {\def{\glsxtr@groupheding}{\gls@groupskip}%
5585 \protected@eappto{\glsxtr@groupheding}{%
5586   \noexpand\gls@groupheading{\expandonce{\glo@thislettergrp}}%
5587 }%
5588 }%
5589 \let{\gls@currentlettergroup}{\glo@thislettergrp}
5590 }

```

trLocationField Stores the internal name of the location field.

```
5591 \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.

```
5592 \newcommand{\@glsxtr@noidx@do}[1]{%
5593   \ifglsentryexists{#1}%
5594   {%
5595     \global\let\cs{\@gls@loclist}{\glo@glsdetoklabel{#1}@loclist}%
5596     \global\let\cs{\@gls@location}{\glo@glsdetoklabel{#1}@GlsXtrLocationField}%

```

Use level number to determine whether or not this entry has a parent.

```
5597   \gls@level=\numexpr\csuse{\glo@glsdetoklabel{#1}@level}+\@glsxtr@leveloffset\relax
5598   \ifnum\gls@level>0
5599     \let\@glsxtr@ifischild\@firstoftwo
5600   \else
5601     \let\@glsxtr@ifischild\@secondoftwo
5602   \fi

```

Some glossary styles (such as topicmcols) save the level using \def so make sure \gls@level is expanded before being passed to \subglossentry.

```
5603   \@glsxtr@ifischild
5604   {%
5605     \ifdefvoid{\@gls@location}%
5606     {%
5607       \ifdefvoid{\@gls@loclist}%
5608       {%
5609         \expandafter\subglossentry\expandafter{\number\gls@level}{#1}{}%
5610       }%
5611       {%
5612         \expandafter\subglossentry\expandafter{\number\gls@level}{#1}%
5613         {%
5614           \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}%
5615         }%
5616       }%
5617     }%
5618     {%
5619       \expandafter\subglossentry\expandafter
5620       {\number\gls@level}{#1}\{\glossaryentrynumbers{\@gls@location}}%
5621     }%
5622   }%
5623   {%
5624     \ifdefvoid{\@gls@location}%
5625     {%
5626       \ifdefvoid{\@gls@loclist}%
5627       {%
5628         \glossentry{#1}{}%
5629       }%
5630       {%
5631         \glossentry{#1}%
5632       }%
5633       \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}%

```

```

5634      }%
5635      }%
5636      }%
5637      {%
5638      \glossentry{#1}%
5639      {%
5640      \glossaryentrynumbers{\@gls@location}%
5641      }%
5642      }%
5643      }%
5644      }%
5645      {}%
5646 }

```

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
5647 \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
5648 \newcommand*{\@glsxtr@providenewgls}{%
5649   \protected@write\@auxout{}{\string\providecommand{\string\@glsxtr@newglslike}[2]{}{}}%
5650   \let\@glsxtr@providenewgls\relax
5651 }

```

`identifyglslike` Identify the command given in the second argument for the benefit of `bib2gls`.

```

5652 \newcommand{\glsxtridentifyglslike}[2]{%
5653   \ifdef\@glsxtr@record@setting\@glsxtr@record@setting@off
5654   {}%
5655   {}%
5656   \@glsxtr@providenewgls
5657   \protected@write\@auxout{}{\string\@glsxtr@newglslike{#1}{\string#2}}%
5658 }
5659 }

```

`\@glsxtrnewgls`

`\glsxtrnewgls[<options>]{<prefix>}{<cs>}{<inner cs name>}`

```

5660 \newcommand*{\@glsxtrnewgls}[4]{%
5661   \ifdef{\#3}{}

```

```

5662  {%
5663    \PackageError{glossaries-extra}{Command \string#3\space already
5664 defined}{}%
5665  }%
5666  {%

```

Write information to the aux file for bib2gls.

```

5667  \glsxtridentifyglslike{#2}{#3}%
5668  \ifcsdef{@#4like@#2}%
5669  {%
5670    \advance\@glsxtrnewgls@inner by \one
5671    \def\@glsxtrnewgls@innercsname{@#4like\number\@glsxtrnewgls@inner @#2}%
5672  }%
5673  {\def\@glsxtrnewgls@innercsname{@#4like@#2}%
5674  \expandafter\newrobustcmd\expandafter*\expandafter
5675  #3\expandafter{\expandafter\@gls@hyp@opt\csname\@glsxtrnewgls@innercsname\endcsname}%
5676  \ifstrempty{#1}%
5677  {%
5678    \expandafter\newcommand\expandafter*\csname\@glsxtrnewgls@innercsname\endcsname[2] []{%
5679      \new@ifnextchar[%
5680        {\csname @#4@\endcsname{##1}{#2##2}}%
5681        {\csname @#4@\endcsname{##1}{#2##2}[] }%
5682    }%
5683  }%
5684  {%
5685    \expandafter\newcommand\expandafter*\csname\@glsxtrnewgls@innercsname\endcsname[2] []{%
5686      \new@ifnextchar[%
5687        {\csname @#4@\endcsname{#1,##1}{#2##2}}%
5688        {\csname @#4@\endcsname{#1,##1}{#2##2}[] }%
5689    }%
5690  }%
5691 }%
5692 }

```

\glsxtrnewgls

\glsxtrnewgls[*options*]{*prefix*}{{*cs*}}

The first argument prepends to the options and the second argument is the prefix.

```

5693 \newrobustcmd*{\glsxtrnewgls}[3] []{%
5694   \@glsxtrnewgls{#1}{#2}{#3}{gls}%
5695 }

```

glsxtrnewglslike 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.

```

5696 \newrobustcmd*{\glsxtrnewglslike}[6] []{%
5697   \@glsxtrnewgls{#1}{#2}{#3}{gls}%

```

```
5698  \@glsxtrnewgls{#1}{#2}{#4}{glSpl}%
5699  \@glsxtrnewgls{#1}{#2}{#5}{Gls}%
5700  \@glsxtrnewgls{#1}{#2}{#6}{Glspl}%
5701 }
```

`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.

```
5702 \newrobustcmd*\{glsxtrnewGLSlike\}[4] [] {%
5703  \@glsxtrnewgls{#1}{#2}{#3}{GLS}%
5704  \@glsxtrnewgls{#1}{#2}{#4}{GLSpl}%
5705 }
```

`\glsxtrnewrgls` As `\glsxtrnewgls` but for `\rgls`.

```
5706 \newrobustcmd*\{glsxtrnewrgls\}[3] [] {%
5707  \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
5708 }
```

`sxtrnewrglslike` As `\glsxtrnewglslike` but for `\rgls` etc.

```
5709 \newrobustcmd*\{glsxtrnewrglslike\}[6] [] {%
5710  \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
5711  \@glsxtrnewgls{#1}{#2}{#4}{rglSpl}%
5712  \@glsxtrnewgls{#1}{#2}{#5}{rGls}%
5713  \@glsxtrnewgls{#1}{#2}{#6}{rGlspl}%
5714 }
```

`sxtrnewrGLSlike` As `\glsxtrnewGLSlike` but for `\rGLS` etc.

```
5715 \newrobustcmd*\{glsxtrnewrGLSlike\}[4] [] {%
5716  \@glsxtrnewgls{#1}{#2}{#3}{rGLS}%
5717  \@glsxtrnewgls{#1}{#2}{#4}{rGLSpl}%
5718 }
```

Provide easy access to record count fields.

`totalRecordCount` Access total record count. This is designed to be expandable. The argument is the label.

```
5719 \newcommand*\{GlsXtrTotalRecordCount\}[1] {%
5720  \ifcsdef{glo@\glsdetoklabel{#1}@recordcount}%
5721  {\csname glo@\glsdetoklabel{#1}@recordcount\endcsname}%
5722  {0}%
5723 }
```

`sXtrRecordCount` Access record count for a particular counter. The first argument is the label. The second argument is the counter name.

```
5724 \newcommand*\{GlsXtrRecordCount\}[2] {%
5725  \ifcsdef{glo@\glsdetoklabel{#1}@recordcount.#2}%
5726  {\csname glo@\glsdetoklabel{#1}@recordcount.#2\endcsname}%
5727  {0}%
5728 }
```

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.

```
5729 \newcommand*{\GlsXtrLocationRecordCount}[3]{%
5730   \ifcsdef{glo@\glsdetoklabel{#1}@recordcount.\#2.\glsxtrdetoklocation{#3}}{%
5731     {\csname glo@\glsdetoklabel{#1}@recordcount.\#2.\glsxtrdetoklocation{#3}\endcsname}%
5732   {0}%
5733 }
```

trdetoklocation

```
5734 \newcommand*{\glsxtrdetoklocation}[1]{#1}
```

ablerecordcount

```
5735 \newcommand*{\glsxtrenablerecordcount}{%
5736   \renewcommand*{\gls}{\rgls}%
5737   \renewcommand*{\Gls}{\rGls}%
5738   \renewcommand*{\glsp1}{\rglsp1}%
5739   \renewcommand*{\Glspl}{\rGlspl}%
5740   \renewcommand*{\GLS}{\rGLS}%
5741   \renewcommand*{\GLSpl}{\rGLSpl}%
5742 }
```

ordtriggervalue The value used by the record trigger test. The argument is the entry's label.

```
5743 \newcommand*{\glsxtrrecordtriggervalue}[1]{%
5744   \GlsXtrTotalRecordCount{#1}%
5745 }
```

dCountAttribute

```
5746 \newcommand*{\GlsXtrSetRecordCountAttribute}[2]{%
5747   \@for \@glsxtr@cat:=#1\do
5748   {%
5749     \ifdefempty{\@glsxtr@cat}{%
5750       {%
5751         \glssetcategoryattribute{\@glsxtr@cat}{recordcount}{#2}%
5752       }%
5753     }%
5754 }
```

ifrecordtrigger

```
\glsxtrifrecordtrigger{\label}{\trigger format}{\normal}
```

```
5755 \newcommand*{\glsxtrifrecordtrigger}[3]{%
5756   \glshasattribute{#1}{recordcount}%
5757   {%
```

```

5758 \ifnum\glsxtrrecordtriggervalue{#1}>\glsgetattribute{#1}{recordcount}\relax
5759   #3%
5760 \else
5761   #2%
5762 \fi
5763 }%
5764 {#3}%
5765 }

```

trigger@record Still need a record to ensure that bib2gls selects the entry.

```

5766 \newcommand*{\@glsxtr@rgltrigger@record}[3]{%
5767   \protected@edef\glslabel{\glsdetoklabel{#2}}%
5768   \let\@gls@link@label\glslabel
5769   \def\@glsxtr@thevalue{}%
5770   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
5771   \def\@glsnumberformat{\glstriggerrecordformat}%
5772   \protected@edef\gls@counter{\csname glo@\glslabel @counter\endcsname}%
5773   \protected@edef\glstype{\csname glo@\glslabel @type\endcsname}%
5774   \def\@glsxtr@thevalue{}%
5775   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
5776   \glsxtrinitwrgloss
5777   \glslinkpresetkeys
5778   \setkeys{glslink}{#1}%
5779   \glslinkpostsetkeys
5780   \ifdefempty{\@glsxtr@thevalue}{%
5781     {%
5782       \gls@saveentrycounter
5783     }%
5784   }%
5785   \let\the glsentrycounter\@glsxtr@thevalue
5786   \def\theHglsentrycounter{\@glsxtr@theHvalue}%
5787 }%
5788 \ifglsxtrinitwrglossbefore
5789   \do@wrglossary{#2}%
5790 \fi
5791 #3%
5792 \ifglsxtrinitwrglossbefore
5793 \else
5794   \do@wrglossary{#2}%
5795 \fi
5796 \ifKV@glslink@local
5797   \glslocalunset{#2}%
5798 \else
5799   \glsunset{#2}%
5800 \fi
5801 }

```

gerrecordformat Typically won't be used as it should be recognised as a special type of ignored location by bib2gls.

```

5802 \newcommand*{\glstriggerrecordformat}[1]{}

\rgls
5803 \newrobustcmd*{\rgls}{\gls@hyp@opt\rgls}

\@rgls
5804 \newcommand*{\@rgls}[2][]{%
5805   \new@ifnextchar[\{\@rgls@{\#1}{\#2}\}{\@rgls@{\#1}{\#2}[]}]%
5806 }

\@rgls@
5807 \def\@rgls@#1#2[#3]{%
5808   \glsxtrifrecordtrigger{#2}%
5809   {%
5810     \glsxtr@rglstrigger@record{#1}{#2}{\rglsformat{#2}{#3}}%
5811   }%
5812   {%
5813     \gls@{\#1}{\#2}[]%
5814   }%
5815 }%

\rglspl
5816 \newrobustcmd*{\rglspl}{\gls@hyp@opt\rglspl}

\@rglspl
5817 \newcommand*{\@rglspl}[2][]{%
5818   \new@ifnextchar[\{\@rglspl@{\#1}{\#2}\}{\@rglspl@{\#1}{\#2}[]}]%
5819 }

\@rglspl@
5820 \def\@rglspl@#1#2[#3]{%
5821   \glsxtrifrecordtrigger{#2}%
5822   {%
5823     \glsxtr@rglstrigger@record{#1}{#2}{\rglsplformat{#2}{#3}}%
5824   }%
5825   {%
5826     \glspl@{\#1}{\#2}[]%
5827   }%
5828 }%

\rGls
5829 \newrobustcmd*{\rGls}{\gls@hyp@opt\rGls}

\@rGls
5830 \newcommand*{\@rGls}[2][]{%
5831   \new@ifnextchar[\{\@rGls@{\#1}{\#2}\}{\@rGls@{\#1}{\#2}[]}]%
5832 }

```

```

\@rGls@

5833 \def\@rGls@#1#2[#3]{%
5834   \glsxtrifrecordtrigger{#2}%
5835   {%
5836     \glsxtr@rglstrigger@record{#1}{#2}{\rGlsformat{#2}{#3}}%
5837   }%
5838   {%
5839     \Gls@{#1}{#2}{#3}%
5840   }%
5841 }%


\rGlspl

5842 \newrobustcmd*\rGlspl{\gls@hyp@opt\@rGlspl}

\@rGlspl

5843 \newcommand*\@rGlspl[2][]{%
5844   \new@ifnextchar[\@rGlspl@{#1}{#2}]{\@rGlspl@{#1}{#2}[]}{%
5845 }%


\@rGlspl@

5846 \def\@rGlspl@#1#2[#3]{%
5847   \glsxtrifrecordtrigger{#2}%
5848   {%
5849     \glsxtr@rglstrigger@record{#1}{#2}{\rGlsplformat{#2}{#3}}%
5850   }%
5851   {%
5852     \Glspl@{#1}{#2}{#3}%
5853   }%
5854 }%


\rGLS

5855 \newrobustcmd*\rGLS{\gls@hyp@opt\@rGLS}

\@rGLS

5856 \newcommand*\@rGLS[2][]{%
5857   \new@ifnextchar[\@rGLS@{#1}{#2}]{\@rGLS@{#1}{#2}[]}{%
5858 }%


\@rGLS@

5859 \def\@rGLS@#1#2[#3]{%
5860   \glsxtrifrecordtrigger{#2}%
5861   {%
5862     \glsxtr@rglstrigger@record{#1}{#2}{\rGLSformat{#2}{#3}}%
5863   }%
5864   {%
5865     \GLS@{#1}{#2}{#3}%
5866   }%
5867 }%

```

```

\rGLSpl
5868 \newrobustcmd*\rGLSpl{\gls@hyp@opt\rGLSpl}

\@rGLSpl
5869 \newcommand*\@rGLSpl[2][]{%
5870   \new@ifnextchar[\@rGLSpl[#1]{\@rGLSpl[#1]{#2}}[]}{%
5871 }

\@rGLSpl@
5872 \def\@rGLSpl[#1]{#2}[#3]{%
5873   \glsxtrifrecordtrigger{#2}{%
5874     {%
5875       \glsxtr@rglstrigger@record[#1]{#2}{\rGLSplformat{#2}{#3}}{%
5876     }{%
5877     {%
5878       \@GLSpl[#1]{#2}{#3}{%
5879     }{%
5880   }{%
5881 }{%
5882 \glsifregular{#1}{%
5883   {\glsentryfirst{#1}}{%
5884   {\ifglshaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}{#2}{%
5885 }{%
5886 \glsifregular{#1}{%
5887   {\glsentryfirstplural{#1}}{%
5888   {\ifglshaslong{#1}{\glsentrylongplural{#1}}{\glsentryfirstplural{#1}}}{#2}{%
5889 }{%
5890 }{%
5891 \glsifregular{#1}{%
5892   {\Glsentryfirst{#1}}{%
5893   {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}{#2}{%
5894 }{%
5895 }{%
5896 \glsifregular{#1}{%
5897   {\Glsentryfirstplural{#1}}{%
5898   {\ifglshaslong{#1}{\Glsentrylongplural{#1}}{\Glsentryfirstplural{#1}}}{#2}{%
5899 }{%
5900 }

```

```

\rGLSformat
 5901 \newcommand*{\rGLSformat}[2]{%
 5902   \expandafter\mfirstuc\expandafter{\rglsformat{#1}{#2}}%
 5903 }

\rGLSplformat
 5904 \newcommand*{\rGLSplformat}[2]{%
 5905   \expandafter\mfirstuc\expandafter{\rglsplformat{#1}{#2}}%
 5906 }

```

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@\langle label\rangle` where `\langle label\rangle` is the entry’s label. Since this is performed within `\@gls@link` the label can be accessed with `\glslabel`.

```
5907 \newcommand{\glsxtr@do@inc@linkcount}{%
```

Does this entry have the linkcount attribute set?

```
5908 \glsifattribute{\glslabel}{linkcount}{true}%
5909 {%
```

Does the counter exist?

```
5910 \ifcsdef{c@glsxtr@linkcount@\glslabel}{}%
5911 {%
```

Counter doesn’t exist, so define it.

```
5912 \newcounter{glsxtr@linkcount@\glslabel}%
```

If `linkcountmaster` is set, add to counter reset.

```
5913 \glshasattribute{\glslabel}{linkcountmaster}%
5914 {%
```

Need to ensure values are fully expanded.

```
5915 \begingroup
5916   \edef\@glo@tmp{\endgroup\noexpand\@addtoreset{glsxtr@linkcount@\glslabel}%
5917     {\glsgetattribute{\glslabel}{linkcountmaster}}}%
5918   \glsxtr@linkcount@\glslabel
5919 {%
5920 {}%
5921 }%
```

Increment counter:

```
5922 \glsxtrinlinkcounter{glsxtr@linkcount@\glslabel}%
```

```
5923 }%
5924 {}%
5925 }
```

`rinlinkcounter` May be redefined to use `\refstepcounter` if required.
5926 `\newcommand*{\glsxtrinlinkcounter}[1]{\stepcounter{#1}}`

`inkCounterValue` Expands to the associated link counter register or 0 if not defined.
5927 `\newcommand*{\GlsXtrLinkCounterValue}[1]{%`
5928 `\ifcsundef{c@glsxtr@linkcount@#1}{0}{\csname c@glsxtr@linkcount@#1\endcsname}%`
5929 }

`rTheLinkCounter` Expands to the display value of the associated link counter or 0 if not defined.
5930 `\newcommand*{\GlsXtrTheLinkCounter}[1]{%`
5931 `\ifcsundef{theglsxtr@linkcount@#1}{0}{%`
5932 `{\csname theglsxtr@linkcount@#1\endcsname}%`
5933 }

`fLinkCounterDef` Tests if the counter has been defined
5934 `\newcommand*{\GlsXtrIfLinkCounterDef}[3]{%`
5935 `\ifcsundef{theglsxtr@linkcount@#1}{#3}{#2}{%`
5936 }

`LinkCounterName` Expands to the associated link counter name. (No check for existence.)
5937 `\newcommand*{\GlsXtrLinkCounterName}[1]{glsxtr@linkcount@#1}`

`bleLinkCounting`

```
\GlsXtrEnableLinkCounting[<master counter>]{<categories>}
```

Enable link counting for the given categories.

```
5938 \newcommand*{\GlsXtrEnableLinkCounting}[2][]{%
5939   \let\glsxtr@inc@linkcount\@glsxtr@do@inc@linkcount
5940   \@for\@glsxtr@label:=#2\do
5941   {%
5942     \glssetcategoryattribute{\@glsxtr@label}{linkcount}{true}%
5943     \ifstrempty{#1}{%
5944       {%
5945         \ifcsundef{c@#1}{%
5946           {\@nocounterr{#1}}%
5947           {\glssetcategoryattribute{\@glsxtr@label}{linkcountmaster}{#1}}%
5948         }%
5949       }%
5950   }%
5951 \@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.

```
5952 \@ifpackageloaded{glossaries-accsupp}{%
5953 {
```

Define (or redefine) commands to use the accessibility information.

\glsaccessname Display the name value (no link and no check for existence).

```
5954 \newcommand*{\glsaccessname}[1]{%
5955   \glsnameaccessdisplay
5956   {%
5957     \glsentryname{\#1}%
5958   }%
5959   {\#1}%
5960 }
```

\Glsaccessname Display the name value (no link and no check for existence) with the first letter converted to upper case.

```
5961 \newcommand*{\Glsaccessname}[1]{%
5962   \glsnameaccessdisplay
5963   {%
5964     \Glsentryname{\#1}%
5965   }%
5966   {\#1}%
5967 }
```

\GLSaccessname Display the name value (no link and no check for existence) converted to upper case.

```
5968 \newcommand*{\GLSaccessname}[1]{%
5969   \glsnameaccessdisplay
5970   {%
5971     \mfirstucMakeUppercase{\glsentryname{\#1}}%
5972   }%
5973   {\#1}%
5974 }
```

\glsaccesstext Display the text value (no link and no check for existence).

```
5975 \newcommand*{\glsaccesstext}[1]{%
5976   \glstextaccessdisplay
5977   {%
5978     \glsentrytext{\#1}%
5979   }%
5980   {\#1}%
5981 }
```

```

\Glsaccesstext Display the text value (no link and no check for existence) with the first letter converted to
upper case.
5982 \newcommand*{\Glsaccesstext}[1]{%
5983   \glstextaccessdisplay
5984   {%
5985     \Glsentrytext{#1}%
5986   }%
5987   {#1}%
5988 }

\GLSaccesstext Display the text value (no link and no check for existence) converted to upper case.
5989 \newcommand*{\GLSaccesstext}[1]{%
5990   \glstextaccessdisplay
5991   {%
5992     \mfirstucMakeUppercase{\glsentrytext{#1}}%
5993   }%
5994   {#1}%
5995 }

glsaccessplural Display the plural value (no link and no check for existence).
5996 \newcommand*{\glsaccessplural}[1]{%
5997   \glspluralaccessdisplay
5998   {%
5999     \glsentryplural{#1}%
6000   }%
6001   {#1}%
6002 }

Glsaccessplural Display the plural value (no link and no check for existence) with the first letter converted to
upper case.
6003 \newcommand*{\Glsaccessplural}[1]{%
6004   \glspluralaccessdisplay
6005   {%
6006     \Glsentryplural{#1}%
6007   }%
6008   {#1}%
6009 }

GLSaccessplural Display the plural value (no link and no check for existence) converted to upper case.
6010 \newcommand*{\GLSaccessplural}[1]{%
6011   \glspluralaccessdisplay
6012   {%
6013     \mfirstucMakeUppercase{\glsentryplural{#1}}%
6014   }%
6015   {#1}%
6016 }

\glsaccessfirst Display the first value (no link and no check for existence).

```

```
6017 \newcommand*{\glsaccessfirst}[1]{%
6018   \glsfirstaccessdisplay
6019   {%
6020     \glsentryfirst{#1}%
6021   }%
6022   {#1}%
6023 }
```

\Glsaccessfirst Display the first value (no link and no check for existence) with the first letter converted to upper case.

```
6024 \newcommand*{\Glsaccessfirst}[1]{%
6025   \glsfirstaccessdisplay
6026   {%
6027     \Glsentryfirst{#1}%
6028   }%
6029   {#1}%
6030 }
```

\GLSaccessfirst Display the first value (no link and no check for existence) converted to upper case.

```
6031 \newcommand*{\GLSaccessfirst}[1]{%
6032   \glsfirstaccessdisplay
6033   {%
6034     \mfirstucMakeUppercase{\glsentryfirst{#1}}%
6035   }%
6036   {#1}%
6037 }
```

cessfirstplural Display the firstplural value (no link and no check for existence).

```
6038 \newcommand*{\glsaccessfirstplural}[1]{%
6039   \glsfirstpluralaccessdisplay
6040   {%
6041     \glsentryfirstplural{#1}%
6042   }%
6043   {#1}%
6044 }
```

cessfirstplural Display the firstplural value (no link and no check for existence) with the first letter converted to upper case.

```
6045 \newcommand*{\Glsaccessfirstplural}[1]{%
6046   \glsfirstpluralaccessdisplay
6047   {%
6048     \Glsentryfirstplural{#1}%
6049   }%
6050   {#1}%
6051 }
```

cessfirstplural Display the firstplural value (no link and no check for existence) converted to upper case.

```
6052 \newcommand*{\GLSaccessfirstplural}[1]{%
```

```

6053 \glsfirstpluralaccessdisplay
6054 {%
6055   \mfirstucMakeUppercase{\glsentryfirstplural{#1}}%
6056 }%
6057 {#1}%
6058 }

```

`glsaccesssymbol` Display the symbol value (no link and no check for existence).

```

6059 \newcommand*{\glsaccesssymbol}[1]{%
6060   \glssymbolaccessdisplay
6061 {%
6062   \glsentrysymbol{#1}%
6063 }%
6064 {#1}%
6065 }

```

`Glsaccesssymbol` Display the symbol value (no link and no check for existence) with the first letter converted to upper case.

```

6066 \newcommand*{\Glsaccesssymbol}[1]{%
6067   \glssymbolaccessdisplay
6068 {%
6069   \Glsentrysymbol{#1}%
6070 }%
6071 {#1}%
6072 }

```

`GLSaccesssymbol` Display the symbol value (no link and no check for existence) converted to upper case.

```

6073 \newcommand*{\GLSaccesssymbol}[1]{%
6074   \glssymbolaccessdisplay
6075 {%
6076   \mfirstucMakeUppercase{\glsentrysymbol{#1}}%
6077 }%
6078 {#1}%
6079 }

```

`esssymbolplural` Display the symbolplural value (no link and no check for existence).

```

6080 \newcommand*{\glsaccesssymbolplural}[1]{%
6081   \glssymbolpluralaccessdisplay
6082 {%
6083   \glsentrysymbolplural{#1}%
6084 }%
6085 {#1}%
6086 }

```

`esssymbolplural` Display the symbolplural value (no link and no check for existence) with the first letter converted to upper case.

```

6087 \newcommand*{\Glsaccesssymbolplural}[1]{%
6088   \glssymbolpluralaccessdisplay

```

```
6089     {%
6090         \Glsentrysymbolplural{#1}%
6091     }%
6092     {#1}%
6093 }
```

`\esssymbolplural` Display the symbolplural value (no link and no check for existence) converted to upper case.

```
6094 \newcommand*{\GLSaccesssymbolplural}[1]{%
6095     \glssymbolpluralaccessdisplay
6096     {%
6097         \mfirstucMakeUppercase{\glsentrysymbolplural{#1}}%
6098     }%
6099     {#1}%
6100 }
```

`\glsaccessdesc` Display the desc value (no link and no check for existence).

```
6101 \newcommand*{\glsaccessdesc}[1]{%
6102     \glsdescriptionaccessdisplay
6103     {%
6104         \glsentrydesc{#1}%
6105     }%
6106     {#1}%
6107 }
```

`\Glsaccessdesc` Display the desc value (no link and no check for existence) with the first letter converted to upper case.

```
6108 \newcommand*{\Glsaccessdesc}[1]{%
6109     \glsdescriptionaccessdisplay
6110     {%
6111         \Glsentrydesc{#1}%
6112     }%
6113     {#1}%
6114 }
```

`\GLSaccessdesc` Display the desc value (no link and no check for existence) converted to upper case.

```
6115 \newcommand*{\GLSaccessdesc}[1]{%
6116     \glsdescriptionaccessdisplay
6117     {%
6118         \mfirstucMakeUppercase{\glsentrydesc{#1}}%
6119     }%
6120     {#1}%
6121 }
```

`\accessdescplural` Display the descplural value (no link and no check for existence).

```
6122 \newcommand*{\glsaccessdescplural}[1]{%
6123     \glsdescriptionpluralaccessdisplay
6124     {%
6125         \glsentrydescplural{#1}%
6126 }
```

```
6126     }%
6127     {#1}%
6128 }
```

ccessdescplural Display the descplural value (no link and no check for existence) with the first letter converted to upper case.

```
6129 \newcommand*{\Glsaccessdescplural}[1]{%
6130   \glsdescriptionplural\accessdisplay
6131   {%
6132     \Glsentrydescplural{#1}%
6133   }%
6134   {#1}%
6135 }
```

ccessdescplural Display the descplural value (no link and no check for existence) converted to upper case.

```
6136 \newcommand*{\GLSaccessdescplural}[1]{%
6137   \glsdescriptionplural\accessdisplay
6138   {%
6139     \mfirstucMakeUppercase{\glsentrydescplural{#1}}%
6140   }%
6141   {#1}%
6142 }
```

\glsaccessshort Display the short form (no link and no check for existence).

```
6143 \newcommand*{\glsaccessshort}[1]{%
6144   \glsshortaccessdisplay
6145   {%
6146     \glsentryshort{#1}%
6147   }%
6148   {#1}%
6149 }
```

\Glsaccessshort Display the short form with first letter converted to uppercase (no link and no check for existence).

```
6150 \newcommand*{\Glsaccessshort}[1]{%
6151   \glsshortaccessdisplay
6152   {%
6153     \Glsentryshort{#1}%
6154   }%
6155   {#1}%
6156 }
```

\GLSaccessshort Display the short value (no link and no check for existence) converted to upper case.

```
6157 \newcommand*{\GLSaccessshort}[1]{%
6158   \glsshortaccessdisplay
6159   {%
6160     \mfirstucMakeUppercase{\glsentryshort{#1}}%
6161   }%
```

```
6162     {#1}%
6163 }
```

\lsaccessshortpl Display the short plural form (no link and no check for existence).

```
6164 \newcommand*{\glsaccessshortpl}[1]{%
6165   \glsshortpluralaccessdisplay
6166   {%
6167     \glsentryshortpl{#1}%
6168   }%
6169   {#1}%
6170 }
```

\lsaccessshortpl Display the short plural form with first letter converted to uppercase (no link and no check for existence).

```
6171 \newcommand*{\Glsaccessshortpl}[1]{%
6172   \glsshortpluralaccessdisplay
6173   {%
6174     \Glsentryshortpl{#1}%
6175   }%
6176   {#1}%
6177 }
```

\LSaccessshortpl Display the shortplural value (no link and no check for existence) converted to upper case.

```
6178 \newcommand*{\GLSaccessshortpl}[1]{%
6179   \glsshortpluralaccessdisplay
6180   {%
6181     \mfirstucMakeUppercase{\glsentryshortpl{#1}}%
6182   }%
6183   {#1}%
6184 }
```

\glsaccesslong Display the long form (no link and no check for existence).

```
6185 \newcommand*{\glsaccesslong}[1]{%
6186   \glslongaccessdisplay{\glsentrylong{#1}}{#1}%
6187 }
```

\Glsaccesslong Display the long form (no link and no check for existence).

```
6188
6189 \newcommand*{\Glsaccesslong}[1]{%
6190   \glslongaccessdisplay{\Glsentrylong{#1}}{#1}%
6191 }
```

\GLSaccesslong Display the long value (no link and no check for existence) converted to upper case.

```
6192 \newcommand*{\GLSaccesslong}[1]{%
6193   \glslongaccessdisplay
6194   {%
6195     \mfirstucMakeUppercase{\glsentrylong{#1}}%
6196   }%
```

```

6197     {#1}%
6198 }

glsaccesslongpl  Display the long plural form (no link and no check for existence).
6199 \newcommand*{\glsaccesslongpl}[1]{%
6200   \glslongpluralaccessdisplay{\glsentrylongpl{#1}}{#1}%
6201 }

Glsaccesslongpl  Display the long plural form (no link and no check for existence).
6202
6203 \newcommand*{\Glsaccesslongpl}[1]{%
6204   \glslongpluralaccessdisplay{\Glsentrylongpl{#1}}{#1}%
6205 }

GLSaccesslongpl  Display the longplural value (no link and no check for existence) converted to upper case.
6206 \newcommand*{\GLSaccesslongpl}[1]{%
6207   \glslongpluralaccessdisplay
6208   {%
6209     \mfirstucMakeUppercase{\glsentrylongpl{#1}}%
6210   }%
6211   {#1}%
6212 }

```

Keys for accessibility support.

```

6213 \define@key{glsxtrabrv}{access}{%
6214   \def\@gls@nameaccess{#1}%
6215 }
6216 \define@key{glsxtrabrv}{textaccess}{%
6217   \def\@gls@textaccess{#1}%
6218 }
6219 \define@key{glsxtrabrv}{pluralaccess}{%
6220   \def\@gls@pluralaccess{#1}%
6221 }
6222 \define@key{glsxtrabrv}{firstaccess}{%
6223   \def\@gls@firstaccess{#1}%
6224 }
6225 \define@key{glsxtrabrv}{firstpluralaccess}{%
6226   \def\@gls@firstpluralaccess{#1}%
6227 }
6228 \define@key{glsxtrabrv}{shortaccess}{%
6229   \def\@gls@shortaccess{#1}%
6230 }
6231 \define@key{glsxtrabrv}{shortpluralaccess}{%
6232   \def\@gls@shortaccesspl{#1}%
6233 }

```

```

6234 \define@key{glsxtrabbrv}{longaccess}{%
6235   \def\@gls@longaccess{#1}%
6236 }
6237 \define@key{glsxtrabbrv}{shortlonglaccess}{%
6238   \def\@gls@longaccesspl{#1}%
6239 }

```

@initaccesskeys

```

6240 \newcommand*{\@gls@initaccesskeys}{%
6241   \def\@gls@nameaccess{}%
6242   \def\@gls@textaccess{}%
6243   \def\@gls@pluralaccess{}%
6244   \def\@gls@firstaccess{}%
6245   \def\@gls@firstpluralaccess{}%
6246   \def\@gls@shortaccess{}%
6247   \def\@gls@shortaccesspl{}%
6248   \def\@gls@longaccess{}%
6249   \def\@gls@longaccesspl{}%
6250 }

```

ssattribute@set

```
\gls@ifaccessattribute@set{\attribute}{\true}{\false}
```

```

6251 \newcommand*{\@gls@ifaccessattribute@set}[3]{%
6252   \glsifcategoryattribute{\glscategorylabel}{access#1}{true}%
6253   {#2}%
6254   {%
6255     \glsifcategoryattribute{\glscategorylabel}{access#1}{false}%
6256     {#3}%
6257     {%
6258       \glsifcategoryattribute{\glscategorylabel}{#1}{true}%
6259       {#2}%
6260       {#3}%
6261     }%
6262   }%
6263 }

```

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.

```
6264 \def\glsdefaultshortaccess#1#2{#1 (#2)}
```

```
signactualsetup
```

```
6265 \newcommand{\glsxtrassignactualsetup}{%
6266 \let\@empty
6267 \let\emph\@firstofone
6268 \let\textbf\@firstofone
6269 \let\textmd\@firstofone
6270 \let\textit\@firstofone
6271 \let\textsl\@firstofone
6272 \let\textsc\@firstofone
6273 \let\textrm\@firstofone
6274 \let\textsf\@firstofone
6275 \let\texttt\@firstofone
6276 }
```

```
s@assign@actual
```

```
6277 \ifdef\pdfstringdef
6278 {
6279 \newcommand{\@gls@assign@actual}{%
6280 \begingroup
6281 \glsxtrassignactualsetup
6282 \pdfstringdef@gls@actualshort{\glsxtrorgshort}%
6283 \pdfstringdef@gls@actuallong{\glsxtrorglong}%
6284 \pdfstringdef@gls@actualshortpl{\@gls@shortpl}%
6285 \pdfstringdef@gls@actuallongpl{\@gls@longpl}%
6286 \protected@edef@\gls@tmp{\endgroup
6287 \def\noexpand@gls@actualshort{\expandonce@gls@actualshort}%
6288 \def\noexpand@gls@actuallong{\expandonce@gls@actuallong}%
6289 \def\noexpand@gls@actualshortpl{\expandonce@gls@actualshortpl}%
6290 \def\noexpand@gls@actuallongpl{\expandonce@gls@actuallongpl}%
6291 }%
6292 \@gls@tmp
6293 }
6294 }
6295 {
6296 \newcommand{\@gls@assign@actual}{%
6297 \begingroup
6298 \glsxtrassignactualsetup
6299 \protected@edef@\gls@tmp{\endgroup
6300 \def\noexpand@gls@actualshort{\glsxtrorgshort}%
6301 \def\noexpand@gls@actuallong{\glsxtrorglong}%
6302 \def\noexpand@gls@actualshortpl{\@gls@shortpl}%
6303 \def\noexpand@gls@actuallongpl{\@gls@longpl}%
6304 }%
6305 \@gls@tmp
```

```

6306      }
6307  }

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.

6308  \newcommand{\@gls@setup@default@access}{%
6309    \@gls@assign@actual
6310    \ifdefempty{\gls@shortaccess}
6311    {%
6312      \CheckIfAccessInsertDots{%
6313        \expandafter\glsxtrinsertdots\expandafter\gls@actualshort\expandafter{%
6314          \expandafter\gls@actualshort}%
6315        }%
6316      }%
6317      {}%
6318      \ifdefempty{\gls@longaccess}
6319      {%
6320        \protected@edef{\gls@shortaccess}{\glsdefaultshortaccess
6321          {\expandonce{\gls@actuallong}}{\expandonce{\gls@actualshort}}}%
6322      }%
6323      {}%
6324      \protected@edef{\gls@shortaccess}{\glsdefaultshortaccess
6325          {\expandonce{\gls@longaccess}}{\expandonce{\gls@actualshort}}}%
6326      }%
6327      \appto{\ExtraCustomAbbreviationFields}{shortaccess={\gls@shortaccess},}%
6328
6329  If shortaccessplural hasn't been set, assign plural form.

6330  \ifdefempty{\gls@shortaccesspl}
6331  {%
6332    \CheckIfAccessAttribute{%
6333      \expandafter\def\expandafter\gls@shortaccesspl\expandafter{%
6334        \gls@actualshort'\glsxtrabbrvpluralsuffix}%
6335      }%
6336      \CheckIfAccessAttribute{%
6337        \expandonce{\gls@shortaccesspl}{\gls@shortaccess}
6338        }%
6339        {}%
6340        {}%
6341        \expandonce{\gls@shortaccesspl}{\gls@actualshortpl}
6342        }%
6343      }%
6344  \ifdefempty{\gls@longaccesspl}
6345  {%

```

```

6346     \protected@edef\@gls@shortaccesspl{\glsdefaultshortaccess
6347         {\expandonce\@gls@actuallongpl}{\expandonce\@gls@actualshortpl}}%
6348     }%
6349     {%
6350         \protected@edef\@gls@shortaccesspl{\glsdefaultshortaccess
6351             {\expandonce\@gls@longaccesspl}{\expandonce\@gls@actualshort}}%
6352     }%
6353     \eappto\ExtraCustomAbbreviationFields{shortpluralaccess={\@gls@shortaccesspl},}%
6354     }%
6355     {}%
6356     }%
6357     {%
6358         \ifdefempty\@gls@shortaccesspl
6359             {\let\@gls@shortaccesspl\@gls@shortaccess}%
6360             {}%
6361     }%

```

If access key hasn't been set, check if the nameshortaccess attribute has been set.

```

6362     \ifdefempty\@gls@nameaccess
6363     {%
6364         \glsifcategoryattribute{\glscategorylabel}{nameshortaccess}{true}}%
6365     }%
6366     \eappto\ExtraCustomAbbreviationFields{access={\@gls@shortaccess},}%
6367     }%
6368     {}%
6369     }%
6370     {}%

```

If textaccess key hasn't been set, check if the textshortaccess attribute has been set.

```

6371     \ifdefempty\@gls@textaccess
6372     {%
6373         \glsifcategoryattribute{\glscategorylabel}{textshortaccess}{true}}%
6374     }%
6375     \eappto\ExtraCustomAbbreviationFields{textaccess={\@gls@shortaccess},}%
6376     }%
6377     {}%
6378     }%
6379     {}%
6380     \ifdefempty\@gls@pluralaccess
6381     {%
6382         \glsifcategoryattribute{\glscategorylabel}{textshortaccess}{true}}%
6383     }%
6384     \eappto\ExtraCustomAbbreviationFields{%
6385         pluralaccess={\@gls@shortaccesspl},}%
6386     }%
6387     }%
6388     {}%
6389     }%
6390     {}%

```

If `firstaccess` key hasn't been set, check if the `firstshortaccess` attribute has been set.

```
6391 \ifdefempty{@gls@firstaccess}
6392 {%
6393   \glscategoryattribute{\glscategorylabel}{firstshortaccess}{true}%
6394   {%
6395     \eappto\ExtraCustomAbbreviationFields{firstaccess={\@gls@shortaccess},}%
6396   }%
6397   {}%
6398 }%
6399 {}%
6400 \ifdefempty{@gls@firstpluralaccess}
6401 {%
6402   \glscategoryattribute{\glscategorylabel}{firstshortaccess}{true}%
6403   {%
6404     \eappto\ExtraCustomAbbreviationFields{%
6405       firstpluralaccess={\@gls@shortaccesspl},%
6406     }%
6407   }%
6408   {}%
6409 }%
6410 {}%
6411 }
```

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.

`provideaccsuppcmd`

```
6412 \newcommand*{\glsxtrprovideaccsuppcmd}[2]{%
6413   \ifcsundef{\glsxtr#1#2accsupp}%
6414   {\csdef{\glsxtr#1#2accsupp}{\glsshortaccsupp}}%
6415   {}%
6416 }
```

`rSetNoLongAttrs` For styles where the name, `first` and `text` are just the abbreviation.

```
6417 \newcommand*{\glsxtrAccSuppAbbrSetNoLongAttrs}[1]{%
6418   \glscategoryattribute{#1}{nameshortaccess}{true}%
6419   \glscategoryattribute{#1}{firstshortaccess}{true}%
6420   \glscategoryattribute{#1}{textshortaccess}{true}%
6421   \glsxtrprovideaccsuppcmd{#1}{name}%
6422   \glsxtrprovideaccsuppcmd{#1}{first}%
6423   \glsxtrprovideaccsuppcmd{#1}{firstpl}%
6424   \glsxtrprovideaccsuppcmd{#1}{text}%
6425   \glsxtrprovideaccsuppcmd{#1}{plural}%
6426 }
```

`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.

```

6427 \newcommand*{\glsxtrAccSuppAbbrSetFirstLongAttrs}[1]{%
6428   \glssetcategoryattribute{#1}{nameshortaccess}{true}%
6429   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6430   \glsxtrprovideaccsuppcmd{#1}{name}%
6431   \glsxtrprovideaccsuppcmd{#1}{text}%
6432   \glsxtrprovideaccsuppcmd{#1}{plural}%
6433 }

```

`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.

```

6434 \newcommand*{\glsxtrAccSuppAbbrSetTextShortAttrs}[1]{%
6435   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6436   \glsxtrprovideaccsuppcmd{#1}{text}%
6437   \glsxtrprovideaccsuppcmd{#1}{plural}%
6438 }

```

`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.

```

6439 \newcommand*{\glsxtrAccSuppAbbrSetNameShortAttrs}[1]{%
6440   \glssetcategoryattribute{#1}{nameshortaccess}{true}%
6441   \glsxtrprovideaccsuppcmd{#1}{name}%
6442 }

```

`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.

```

6443 \newcommand*{\glsxtrAccSuppAbbrSetNameLongAttrs}[1]{%
6444   \glssetcategoryattribute{#1}{firstshortaccess}{true}%
6445   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6446   \glsxtrprovideaccsuppcmd{#1}{first}%
6447   \glsxtrprovideaccsuppcmd{#1}{firstpl}%
6448   \glsxtrprovideaccsuppcmd{#1}{text}%
6449   \glsxtrprovideaccsuppcmd{#1}{plural}%
6450 }

```

End of if accsupp part

```

6451 }
6452 {

```

No accessibility support. Just define these commands to do `\glsentry<xxx>`

`\glsaccessname` Display the name value (no link and no check for existence).

```

6453 \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.

```

6454 \newcommand*{\Glsaccessname}[1]{\Glsentryname{#1}}

```

```

\GLSaccessname  Display the name value (no link and no check for existence). converted to upper case.
6455  \newcommand*{\GLSaccessname}[1]{%
6456    \protect\mfirstucMakeUppercase{\glsentryname{#1}}}

\glsaccesstext  Display the text value (no link and no check for existence).
6457  \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.
6458  \newcommand*{\Glsaccesstext}[1]{\Glsentrytext{#1}}

\GLSaccesstext  Display the text value (no link and no check for existence). converted to upper case.
6459  \newcommand*{\GLSaccesstext}[1]{%
6460    \protect\mfirstucMakeUppercase{\glsentrytext{#1}}}

glsaccessplural  Display the plural value (no link and no check for existence).
6461  \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.
6462  \newcommand*{\Glsaccessplural}[1]{\Glsentryplural{#1}}

GLSaccessplural  Display the plural value (no link and no check for existence). converted to upper case.
6463  \newcommand*{\GLSaccessplural}[1]{%
6464    \protect\mfirstucMakeUppercase{\glsentryplural{#1}}}

\glsaccessfirst  Display the first value (no link and no check for existence).
6465  \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.
6466  \newcommand*{\Glsaccessfirst}[1]{\Glsentryfirst{#1}}

\GLSaccessfirst  Display the first value (no link and no check for existence). converted to upper case.
6467  \newcommand*{\GLSaccessfirst}[1]{%
6468    \protect\mfirstucMakeUppercase{\glsentryfirst{#1}}}

cessfirstplural  Display the firstplural value (no link and no check for existence).
6469  \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.
6470  \newcommand*{\Glsaccessfirstplural}[1]{\Glsentryfirstplural{#1}}

cessfirstplural  Display the firstplural value (no link and no check for existence). converted to upper case.
6471  \newcommand*{\GLSaccessfirstplural}[1]{%
6472    \protect\mfirstucMakeUppercase{\glsentryfirstplural{#1}}}

```

`glsaccesssymbol` Display the symbol value (no link and no check for existence).
6473 \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.
6474 \newcommand*{\Glsaccesssymbol}[1]{\Glsentrysymbol{#1}}

`GLSaccesssymbol` Display the symbol value (no link and no check for existence). converted to upper case.
6475 \newcommand*{\GLSaccesssymbol}[1]{%
6476 \protect\mfirstucMakeUppercase{\glsentrysymbol{#1}}}

`esssymbolplural` Display the symbolplural value (no link and no check for existence).
6477 \newcommand*{\glsaccesssymbolplural}[1]{\glsentrysymbolplural{#1}}

`esssymbolplural` Display the symbolplural value (no link and no check for existence) with the first letter converted to upper case.
6478 \newcommand*{\Glsaccesssymbolplural}[1]{\Glsentrysymbolplural{#1}}

`esssymbolplural` Display the symbolplural value (no link and no check for existence). converted to upper case.
6479 \newcommand*{\GLSaccesssymbolplural}[1]{%
6480 \protect\mfirstucMakeUppercase{\glsentrysymbolplural{#1}}}

`\glsaccessdesc` Display the desc value (no link and no check for existence).
6481 \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.
6482 \newcommand*{\Glsaccessdesc}[1]{\Glsentrydesc{#1}}

`\GLSaccessdesc` Display the desc value (no link and no check for existence). converted to upper case.
6483 \newcommand*{\GLSaccessdesc}[1]{%
6484 \protect\mfirstucMakeUppercase{\glsentrydesc{#1}}}

`ccessdescplural` Display the descplural value (no link and no check for existence).
6485 \newcommand*{\glsaccessdescplural}[1]{\glsentrydescplural{#1}}

`ccessdescplural` Display the descplural value (no link and no check for existence) with the first letter converted to upper case.
6486 \newcommand*{\Glsaccessdescplural}[1]{\Glsentrydescplural{#1}}

`ccessdescplural` Display the descplural value (no link and no check for existence). converted to upper case.
6487 \newcommand*{\GLSaccessdescplural}[1]{%
6488 \protect\mfirstucMakeUppercase{\glsentrydescplural{#1}}}

`\glsaccessshort` Display the short form (no link and no check for existence).
6489 \newcommand*{\glsaccessshort}[1]{\glsentryshort{#1}}

```

\Glsaccessshort  Display the short form with first letter converted to uppercase (no link and no check for existence).
6490  \newcommand*{\Glsaccessshort}[1]{\Glsentryshort{\#1}}


\GLSaccessshort  Display the short value (no link and no check for existence). converted to upper case.
6491  \newcommand*{\GLSaccessshort}[1]{%
6492    \protect\mfirstucMakeUppercase{\glsentryshort{\#1}}}

\lsaccessshortpl  Display the short plural form (no link and no check for existence).
6493  \newcommand*{\lsaccessshortpl}[1]{\glsentryshortpl{\#1}}


\lsaccessshortpl  Display the short plural form with first letter converted to uppercase (no link and no check for existence).
6494  \newcommand*{\Glsaccessshortpl}[1]{\Glsentryshortpl{\#1}}


\LSaccessshortpl  Display the shortplural value (no link and no check for existence). converted to upper case.
6495  \newcommand*{\LSaccessshortpl}[1]{%
6496    \protect\mfirstucMakeUppercase{\glsentryshortpl{\#1}}}

\glsaccesslong  Display the long form (no link and no check for existence).
6497  \newcommand*{\glsaccesslong}[1]{\glsentrylong{\#1}}


\Glsaccesslong  Display the long form (no link and no check for existence).
6498  \newcommand*{\Glsaccesslong}[1]{\Glsentrylong{\#1}}


\GLSaccesslong  Display the long value (no link and no check for existence). converted to upper case.
6499  \newcommand*{\GLSaccesslong}[1]{%
6500    \protect\mfirstucMakeUppercase{\glsentrylong{\#1}}}

\glsaccesslongpl  Display the long plural form (no link and no check for existence).
6501  \newcommand*{\glsaccesslongpl}[1]{\glsentrylongpl{\#1}}


\Glsaccesslongpl  Display the long plural form (no link and no check for existence).
6502  \newcommand*{\Glsaccesslongpl}[1]{\Glsentrylongpl{\#1}}


\GLSaccesslongpl  Display the longplural value (no link and no check for existence). converted to upper case.
6503  \newcommand*{\GLSaccesslongpl}[1]{%
6504    \protect\mfirstucMakeUppercase{\glsentrylongpl{\#1}}}

@initaccesskeys  This does nothing if there's no accessibility support.
6505  \newcommand*{\@gls@initaccesskeys}{}

@default@access  This does nothing if there's no accessibility support.
6506  \newcommand{\@gls@setup@default@access}{}

rSetNoLongAttrs  This does nothing if there's no accessibility support.
6507  \newcommand*{\glsxtrAccSuppAbbrSetNoLongAttrs}[1]{}

```

```
tFirstLongAttrs This does nothing if there's no accessibility support.
6508 \newcommand*{\glsxtrAccSuppAbbrSetFirstLongAttrs}[1]{}

tTextShortAttrs This does nothing if there's no accessibility support.
6509 \newcommand*{\glsxtrAccSuppAbbrSetTextShortAttrs}[1]{}

tNameShortAttrs This does nothing if there's no accessibility support.
6510 \newcommand*{\glsxtrAccSuppAbbrSetNameShortAttrs}[1]{}

etNameLongAttrs This does nothing if there's no accessibility support.
6511 \newcommand*{\glsxtrAccSuppAbbrSetNameLongAttrs}[1]{}
    End of else part
6512 }
```

1.6 Categories

```
\glscategory Add a new storage key that can be used to indicate a category. The default category is general.
6513 \glsaddstoragekey{category}{general}{\glscategory}

\glsifcategory Convenient shortcut to determine if an entry has the given category.
6514 \newcommand{\glsifcategory}[4]{%
6515 \ifglsfieldeq{\#1}{category}{\#2}{\#3}{\#4}%
6516 }
```

Categories can have attributes.

tegoryattribute

`\glssetcategoryattribute{\<category>}{\<attribute-label>}{\<value>}`

Set (or override if already set) an attribute for the given category.

```
6517 \newcommand*{\glssetcategoryattribute}[3]{%
6518 \csdef{@glsxtr@categoryattr@@#1@#2}{\#3}%
6519 }
```

tegoryattribute

`\glsgetcategoryattribute{\<category>}{\<attribute-label>}`

Get the value of the given attribute for the given category. Does nothing if the attribute isn't defined.

```
6520 \newcommand*{\glsgetcategoryattribute}[2]{%
6521 \csuse{@glsxtr@categoryattr@@#1@#2}%
6522 }
```

categoryattribute

```
\glshascategoryattribute{\category}{\attribute-label}{\true}{\false}
```

Tests if the category has the given attribute set.

```
6523 \newcommand*\glshascategoryattribute[4]{%
6524   \ifcsvoid{\glsxtr@categoryattr@0#1@#2}{#4}{#3}%
6525 }
```

glssetattribute

```
\glssetattribute{\entry-label}{\attribute-label}{\value}
```

Short cut where the category label is obtained from the entry information.

```
6526 \newcommand*\glssetattribute[3]{%
6527   \glssetcategoryattribute{\glscategory{#1}}{#2}{#3}%
6528 }
```

glsgetattribute

```
\glsgetattribute{\entry-label}{\attribute-label}
```

Short cut where the category label is obtained from the entry information.

```
6529 \newcommand*\glsgetattribute[2]{%
6530   \glsgetcategoryattribute{\glscategory{#1}}{#2}%
6531 }
```

glshasattribute

```
\glshasattribute{\entry-label}{\attribute-label}{\true}{\false}
```

Short cut to test if the given attribute has been set where the category label is obtained from the entry information.

```
6532 \newcommand*\glshasattribute[4]{%
6533   \ifglsentryexists{#1}%
6534     {\glshascategoryattribute{\glscategory{#1}}{#2}{#3}{#4}}%
6535   {#4}%
6536 }
```

categoryattribute

```
\glsifcategoryattribute{\category}{\attribute-label}{\value}{\true part}{\false part}
```

True if category has the attribute with the given value.

```
6537 \newcommand{\glsifcategoryattribute}[5]{%
6538   \ifcsundef{@glsxtr@categoryattr@@#1@#2}%
6539   {#5}%
6540   {\ifcsstring{@glsxtr@categoryattr@@#1@#2}{#3}{#4}{#5}}%
6541 }
```

\glsifattribute

```
\glsifattribute{\entry label}{\attribute-label}{\value}{\true part}{\false part}
```

Short cut to determine if the given entry has a category with the given attribute set.

```
6542 \newcommand{\glsifattribute}[5]{%
6543   \ifglsentryexists{#1}%
6544   {\glsifcategoryattribute{\glscategory{#1}{#2}{#3}{#4}{#5}}{#5}%
6545   {#5}%
6546 }
```

Set attributes for the default general category:

```
6547 \glssetcategoryattribute{general}{regular}{true}
```

Acronyms are regular by default, since they're typically just treated like normal words.

```
6548 \glssetcategoryattribute{acronym}{regular}{true}
```

regularcategory Convenient shortcut to add the regular attribute.

```
6549 \newcommand*\glssetregularcategory[1]{%
6550   \glssetcategoryattribute{#1}{regular}{true}%
6551 }
```

regularcategory

```
\glsifregularcategory{\category}{\true part}{\false part}
```

Short cut to determine if a category has the regular attribute explicitly set to true.

```
6552 \newcommand{\glsifregularcategory}[3]{%
6553   \glsifcategoryattribute{#1}{regular}{true}{#2}{#3}%
6554 }
```

regularcategory

```
\glsifnotregularcategory{\category}{\truepart}{\falsepart}
```

Short cut to determine if a category has the regular attribute explicitly set to false.

```
6555 \newcommand{\glsifnotregularcategory}[3]{%
6556   \glsifcategoryattribute{\#1}{regular}{false}{\#2}{\#3}%
6557 }
```

\glsifregular

```
\glsifregular{\entrylabel}{\truepart}{\falsepart}
```

Short cut to determine if an entry has a regular attribute set to true.

```
6558 \newcommand{\glsifregular}[3]{%
6559   \glsifregularcategory{\glscategory{\#1}}{\#2}{\#3}%
6560 }
```

\glsifnotregular

```
\glsifnotregular{\entrylabel}{\truepart}{\falsepart}
```

Short cut to determine if an entry has a regular attribute set to false.

```
6561 \newcommand{\glsifnotregular}[3]{%
6562   \glsifnotregularcategory{\glscategory{\#1}}{\#2}{\#3}%
6563 }
```

reachincategory

```
\glsforeachincategory[<glossary labels>]{<category-label>}{<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.

```
6564 \newcommand{\glsforeachincategory}[5][\@glo@types]{%
6565   \forallglossaries[#1]{\#3}%
6566   {%
6567     \forglsentries[\#3]{\#4}%
6568     {%
6569       \glsifcategory{\#4}{\#2}{\#5}{}%
6570     }%
6571   }%
6572 }
```

```
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.

```
6573 \newcommand{\glsforeachwithattribute}[6][\@glo@types]{%
6574   \forallglossaries[#1]{#4}%
6575   {%
6576     \forglsentries[#4]{#5}%
6577     {%
6578       \glsifattribute{#5}{#2}{#3}{#6}{}%
6579     }%
6580   }%
6581 }
```

If `\newterm` has been defined, redefine it so that it automatically sets the category label to `index` and add `\glsxtrpostdescription`.

```
6582 \ifdef\newterm
6583 {%
```

```
\newterm
```

```
6584 \renewcommand*\newterm[2][]{%
6585   \newglossaryentry{#2}%
6586   {type={index},category=index,name={#2},%
6587    description={\glsxtrpostdescription\nopostdesc},#1}%
6588 }
```

Indexed terms are regular by default.

```
6589 \glssetcategoryattribute{index}{regular}{true}
```

```
trpostdescindex
```

```
6590 \newcommand*\glsxtrpostdescindex(){}
6591 {}
6592 {}
```

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.

```
6593 \ifdef\printsymbols
6594 {%
```

`glsxtrnewsymbol` Unlike `\newterm`, this has a separate argument for the label (since the symbol will likely contain commands).

```
6595 \newcommand*{\glsxtrnewsymbol}[3] []{%
6596   \newglossaryentry{\#2}{name=\#3,sort=\#2,type=symbols,category=symbol,\#1}%
6597 }
```

Symbols are regular by default.

```
6598 \glssetcategoryattribute{symbol}{regular}{true}
```

`rpostdescsymbol`

```
6599 \newcommand*{\glsxtrpostdescsymbol}{}%
```

```
6600 }%
6601 {}
```

Similar for the numbers option.

```
6602 \ifdef\printnumbers
6603 {%
```

`glsxtrnewnumber`

```
6604 \ifdef\printnumbers
6605 \newcommand*{\glsxtrnewnumber}[3] []{%
6606   \newglossaryentry{\#2}{name=\#3,sort=\#2,type=numbers,category=number,\#1}%
6607 }
```

Numbers are regular by default.

```
6608 \glssetcategoryattribute{number}{regular}{true}
```

`rpostdescnumber`

```
6609 \newcommand*{\glsxtrpostdescnumber}{}%
```

```
6610 }%
6611 {}
```

`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.

```
6612 \newcommand*{\glsxtrsetcategory}[2]{%
6613   \cfor{\glsxtr@label}{\#1}{\do{%
6614     {%
6615       \glsfieldxdef{\glsxtr@label}{category}{\#2}%
6616     }%
6617 }}
```

`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.

```
6618 \newcommand*{\glsxtrsetcategoryforall}[2]{%
6619   \forallglossaries[\#1]{\glsxtr@type}{%
6620     \forglsentries[\glsxtr@type]{\glsxtr@label}{}}
```

```

6621     {%
6622         \glsfieldxdef{\@glsxtr@label}{category}{#2}%
6623     }%
6624 }%
6625 }

```

rfieldtitlecase

```
\glsxtrfieldtitlecase{\label}{\field}
```

Apply title casing to the contents of the given field.

```

6626 \newcommand*{\glsxtrfieldtitlecase}[2]{%
6627     \expandafter\glsxtrfieldtitlecasecs\expandafter
6628     {\csname glo@\glsdetoklabel{#1}@#2\endcsname}%
6629 }

```

fieldtitlecasecs The command used by \glsxtrfieldtitlecase. May be redefined to use a different command, for example, \xcapitalisefmtwords.

```
6630 \newcommand*{\glsxtrfieldtitlecasecs}[1]{\xcapitalisewords{#1}}
```

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.

```

6631 \@ifpackageloaded{glossaries-accsupp}
6632 {
6633     \renewcommand*{\glossentrydesc}[1]{%
6634         \glsdoifexistsorwarn{#1}%
6635     }%
6636     \glssetabbrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the glossdescfont attribute to determine the font applied.

```

6637     \glshasattribute{#1}{glossdescfont}%
6638     {%
6639         \protected@edef{\glsxtr@attrval}{\glsgetattribute{#1}{glossdescfont}}%
6640         \ifcsdef{\glsxtr@attrval}%
6641             {%
6642                 \letcs{\glsxtr@glossdescfont}{\glsxtr@attrval}%
6643             }%
6644             {%
6645                 \GlossariesExtraWarning{Unknown control sequence name
6646                     '\glsxtr@attrval' supplied in glossdescfont attribute
6647                     for entry '#1'. Ignoring}%
6648                 \let{\glsxtr@glossdescfont}{\firstofone}%
6649             }%
6650         }%
6651     {\let{\glsxtr@glossdescfont}{\firstofone}}%

```

```

6652     \glsifattribute{#1}{glossdesc}{firstuc}%
6653     {%
6654         \@glsxtr@glossdescfont{\Glsaccessdesc{#1}}%
6655     }%
6656     {%
6657         \glsifattribute{#1}{glossdesc}{title}%
6658         {%
6659             \@glsxtr@do@titlecaps@warn
6660             \glsdescriptionaccessdisplay
6661             {%
6662                 \@glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
6663             }%
6664             {#1}%
6665         }%
6666         {%
6667             \@glsxtr@glossdescfont{\glsaccessdesc{#1}}%
6668         }%
6669     }%
6670     {#1}%
6671 }
6672 }
6673 {
6674 \renewcommand*\glossentrydesc[1]{%
6675     \glsdoifexistsorwarn{#1}%
6676     {%
6677         \glssetabbrvfmt{\glscategory{#1}}%
6678         \glshasattribute{#1}{glossdescfont}%
6679     }%
6680     \protected@edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%
6681     \ifcsdef\@glsxtr@attrval{%
6682     {%
6683         \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}%
6684     }%
6685     {%
6686         \GlossariesExtraWarning{Unknown control sequence name
6687             '\@glsxtr@attrval' supplied in glossdescfont attribute
6688             for entry '#1'. Ignoring}%
6689         \let\@glsxtr@glossdescfont@\firstofone
6690     }%
6691     }%
6692     {\let\@glsxtr@glossdescfont@\firstofone}%
6693     \glsifattribute{#1}{glossdesc}{firstuc}%
6694     {%
6695         \@glsxtr@glossdescfont{\Glsentrydesc{#1}}%
6696     }%
6697     {%
6698         \glsifattribute{#1}{glossdesc}{title}%
6699         {%
6700             \@glsxtr@do@titlecaps@warn

```

```

6701      \glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
6702  }%
6703  {%
6704      \glsxtr@glossdescfont{\glsentrydesc{#1}}%
6705  }%
6706  }%
6707  }%
6708 }
6709 }
```

\glossentryname If the glossname attribute is “firstuc” convert first letter to upper case. If the attribute is “title” use title case.

```

6710 \@ifpackageloaded{glossaries-accsupp}
6711 {
6712 \renewcommand*\glossentryname[1]{%
6713     \glsdoifexistsorwarn{#1}%
6714     {%
6715         \glssetabbrvfmt{\glscategory{#1}}%
```

As from version 1.04, allow the glossnamefont attribute to determine the font applied.

```

6716 \glshasattribute{#1}{glossnamefont}%
6717 {%
6718     \protected@edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6719     \ifcsdef\glsxtr@attrval{%
6720     {%
6721         \letcs\glossnamefont{\glsxtr@attrval}%
6722     }%
6723     {%
6724         \GlossariesExtraWarning{Unknown control sequence name
6725             '\glsxtr@attrval' supplied in glossnamefont attribute
6726             for entry '#1'. Reverting to default \string\glossnamefont}%
6727         \let\glossnamefont\glsnamefont
6728     }%
6729     }%
6730     {\let\glossnamefont\glsnamefont}%
6731     \glsifattribute{#1}{glossname}{firstuc}%
6732     {%
6733         \glsnameaccessdisplay
6734     {%
6735         \glsxtr@glossnamefont{\Glossentryname{#1}}%
6736     }%
6737     {#1}%
6738     }%
6739     {%
6740         \glsifattribute{#1}{glossname}{title}%
6741     {%
6742         \glsxtr@do@titlecaps@warn
6743         \glsnameaccessdisplay
6744     {%
6745         \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
```

```

6746      }%
6747      {#1}%
6748  }%
6749  {%
6750    \glsifattribute{#1}{glossname}{uc}%
6751    {%
6752      \glsnameaccessdisplay
6753    }%

```

Hide the label from the upper-casing command.

```

6754      \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6755      @glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
6756      }%
6757      {#1}%
6758  }%
6759  {%
6760    \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6761    \glsnameaccessdisplay
6762    {%
6763      \expandafter@glsxtr@glossnamefont\expandafter{\glo@name}%
6764    }%
6765    {#1}%
6766  }%
6767  }%
6768 }%

```

Do post-name hook:

```

6769      \glsxtrpostnamehook{#1}%
6770      }%
6771  }
6772 }
6773 {
6774 \renewcommand*\glossentryname[1]{%
6775   \@glsdoifexistsorwarn{#1}%
6776   {%
6777     \glssetabbrvfmt{\glscategory{#1}}%
6778     \glshasattribute{#1}{glossnamefont}%
6779   }%
6780   \protected@edef@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6781   \ifcsdef{@glsxtr@attrval}%
6782   {%
6783     \letcs{@glsxtr@glossnamefont}{@glsxtr@attrval}%
6784   }%
6785   {%
6786     \GlossariesExtraWarning{Unknown control sequence name
6787       '\@glsxtr@attrval' supplied in glossnamefont attribute
6788       for entry '#1'. Reverting to default \string\glsnamefont}%
6789     \let@glsxtr@glossnamefont\glsnamefont
6790   }%
6791 }%

```

```

6792     {\let\@glsxstr@glossnamefont\glsnamefont}%
6793     \glsifattribute{#1}{glossname}{firstuc}%
6794     {%
6795         \glsxtr@glossnamefont{\Glossentryname{#1}}%
6796     }%
6797     {%
6798         \glsifattribute{#1}{glossname}{title}%
6799         {%
6800             \glsxtr@do@titlecaps@warn
6801             \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
6802         }%
6803         {%
6804             \glsifattribute{#1}{glossname}{uc}%
6805         }%

```

Hide the label from the upper-casing command.

```

6806     \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6807     \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
6808     }%
6809     {%

```

This little trick is used by glossaries to allow the user to redefine \glossnamefont to use \makefirstuc. Support it even though they can now use the firstuc attribute.

```

6810     \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6811     \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
6812     }%
6813     {%
6814     }%

```

Do post-name hook.

```

6815     \glsxtrpostnamehook{#1}%
6816     }%
6817 }
6818 }

```

\Glossentryname Redefine to set the abbreviation format and accessibility support.

```

6819 \ifpackageloaded{glossaries-accsupp}
6820 {
6821     \renewcommand*\Glossentryname[1]{%
6822         \glsdoifexistsorwarn{#1}%
6823         {%
6824             \glsetabbrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the glossnamefont attribute to determine the font applied.

```

6825     \glshasattribute{#1}{glossnamefont}%
6826     {%
6827         \protected@edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6828         \ifcsdef{\glsxtr@attrval}%
6829         {%
6830             \letcs{\glsxtr@glossnamefont}{\glsxtr@attrval}%

```

```

6831      }%
6832      {%
6833          \GlossariesExtraWarning{Unknown control sequence name
6834              '\@glsxtr@attrval' supplied in glossnamefont attribute
6835              for entry '#1'. Reverting to default \string\glsnamefont}%
6836          \let\@glsxtr@glossnamefont\glsnamefont
6837      }%
6838  }%
6839  {\let\@glsxtr@glossnamefont\glsnamefont}%
6840  \glsnameaccessdisplay
6841  {%
6842      \@glsxtr@glossnamefont{\Glsentryname{#1}}%
6843  }%
6844  {#1}%

Do post-name hook:
6845      \glsxtrpostnamehook{#1}%
6846  }%
6847 }
6848 }
6849 {
6850 \renewcommand*\{\Glossentryname}[1]{%
6851     \@glsdoifexistsorwarn{#1}%
6852     {%
6853         \glssetabbrvfmt{\glscategory{#1}}%
6854         \glshasattribute{#1}{glossnamefont}%
6855     }%
6856     \protected@edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6857     \ifcsdef{\@glsxtr@attrval}%
6858     {%
6859         \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6860     }%
6861     {%
6862         \GlossariesExtraWarning{Unknown control sequence name
6863             '\@glsxtr@attrval' supplied in glossnamefont attribute
6864             for entry '#1'. Reverting to default \string\glsnamefont}%
6865         \let\@glsxtr@glossnamefont\glsnamefont
6866     }%
6867 }%
6868 {\let\@glsxtr@glossnamefont\glsnamefont}%
6869 \@glsxtr@glossnamefont{\Glsentryname{#1}}%


Do post-name hook:
6870      \glsxtrpostnamehook{#1}%
6871  }%
6872 }
6873 }


```

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.

```
6874 \newcommand*{\glsxtrpostnamehook}[1]{%
6875   \let\@glsnumberformat\@glsxtr@defaultnumberformat
6876   \glsxtrdoautoindexname{#1}{indexname}}%
```

Allow additional code regardless of category:

```
6877 \glsextrapostnamehook{#1}%
```

Allow categories to hook in here.

```
6878 \csuse{glsxtrpostname}\glscategory{#1}%
6879 }
```

trapostnamehook

```
6880 \newcommand*{\glsextrapostnamehook}[1]{}%
```

\glsdefpostname Provide a convenient command for defining the post-name hook for the given category.

```
6881 \newcommand*{\glsdefpostname}[2]{%
6882   \csdef{glsxtrpostname#1}{#2}%
6883 }
```

etaccessdisplay

```
6884 @ifpackageloaded{glossaries-accsupp}
6885 {
6886   \newcommand*{\glsxtr@setaccessdisplay}[1]{%
6887     \ifcsdef{gls#1accessdisplay}%
6888       {\letcs{\glsxtr@accessdisplay}{gls#1accessdisplay}}%
6889     {}%
```

This is essentially the reverse of \gls@fetchfield, since the field supplied to \glossentryname has to be the internal label, but the \gls<field>accessdisplay commands use the key name.

```
6890   \protected@edef{\gls@thisval{#1}}%
6891   @for@\gls@map:=@\gls@keymap\do{%
6892     \protected@edef{@this@key{\expandafter\@secondoftwo@\gls@map}}%
6893     \ifdefequal{@this@key}{@\gls@thisval}%
6894     {}%
6895     \protected@edef{\gls@thisval{\expandafter\@firstoftwo@\gls@map}}%
6896     \endfortrue
6897   }%
6898   {}%
6899 }%
6900 \ifcsdef{gls@\gls@thisval accessdisplay}%
6901   {\letcs{\glsxtr@accessdisplay}{gls@\gls@thisval accessdisplay}}%
6902   {\let@\glsxtr@accessdisplay\@firstoftwo}%
6903 }%
6904 }
6905 }
6906 {}%
```

```

6907 \newcommand*{\glsxtr@setaccessdisplay}[1]{%
6908   \let\@glsxtr@accessdisplay\@firstoftwo}
6909 }

sentrynameother Provide a command that works like \glossentryname but accesses a different field (which
must be supplied using its internal field label).
6910 \newrobustcmd*{\glossentrynameother}[2]{%
6911   \glsdoifexistsorwarn{#1}%
6912   {%
      Accessibility support:
6913   \glsxtr@setaccessdisplay{#2}%
      Set the abbreviation format:
6914   \glssetabrvfmt{\glscategory{#1}}%
6915   \glshasattribute{#1}{glossnamefont}%
6916   {%
6917     \protected@edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6918     \ifcsdef{\glsxtr@attrval}%
6919     {%
6920       \letcs{\glsxtr@glossnamefont}{\glsxtr@attrval}%
6921     }%
6922     {%
6923       \GlossariesExtraWarning{Unknown control sequence name
6924         '@glsxtr@attrval' supplied in glossnamefont attribute
6925         for entry '#1'. Reverting to default \string\glsnamefont}%
6926       \let\glsxtr@glossnamefont\glsnamefont
6927     }%
6928   }%
6929   {\let\glsxtr@glossnamefont\glsnamefont}%
6930   \glsifattribute{#1}{glossname}{firstuc}%
6931   {%
6932     \glsxtr@accessdisplay
6933     {\glsxtr@glossnamefont{\Gls@entry@field{#1}{#2}}}%
6934     {#1}%
6935   }%
6936   {%
6937     \glsifattribute{#1}{glossname}{title}%
6938   }%
6939   {\glsxtr@do@titlecaps@warn
6940     \glsxtr@accessdisplay
6941     {\glsxtr@glossnamefont{\glsxtr@fieldtitlecase{#1}{#2}}}%
6942     {#1}%
6943   }%
6944   {%
6945     \glsifattribute{#1}{glossname}{uc}%
6946   }%
6947   {\letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
6948     \glsxtr@accessdisplay
6949     {\glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}}%

```

```

6950      {#1}%
6951      }%
6952      {%
6953      \letcs{\glo@name}{\glsdetoklabel{#1}@#2}%
6954      \@glsxtr@accessdisplay
6955      {\expandafter\@glsxtr@glossnamefont\expandafter{\glo@name}}%
6956      {#1}%
6957      }%
6958      }%
6959      }%

```

Do post-name hook.

```

6960      \glsxtrpostnamehook{#1}%
6961      }%
6962 }

```

`format@override` Determines if the `format` key should override the `indexing` attribute value.

```

6963 \newif\if@glsxtr@format@override
6964 \@glsxtr@format@overridetfalse

```

If overriding is enabled, the `\glshypernumber` command will have to be redefined in the index to use `\hyperpage` instead.

`xFormatOverride`

```

6965 \@ifpackagelloaded{hyperref}
6966 {

```

If `hyperref`'s `hyperindex` option is on, then `hyperref` will automatically add `\hyperpage`, so don't add it.

```

6967 \ifHy@hyperindex
6968   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
6969     \@glsxtr@format@overridettrue
6970     \appto\theindex{\let\glshypernumber\@firstofone}%
6971   }
6972 \else
6973   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
6974     \@glsxtr@format@overridettrue
6975     \appto\theindex{\let\glshypernumber\hyperpage}%
6976   }
6977 \fi
6978 }
6979 {
6980   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
6981     \@glsxtr@format@overridettrue
6982   }
6983 }
6984 \onlypreamble\GlsXtrEnableIndexFormatOverride

```

`doautoindexname`

```

6985 \newcommand*{\glsxtrdoautoindexname}[2]{%

```

```

6986 \glshasattribute{#1}{#2}%
6987 {%
    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.
6988     \@glsxtr@autoindex@setname{#1}%
    If the attribute value is simply "true" don't add an encap, otherwise use the value as the encap.
6989     \protected@edef\@glsxtr@attrval{\glsgetattribute{#1}{#2}}%
6990     \if@glsxtr@format@override
6991         \ifx\@glsnumberformat\@glsxtr@defaultnumberformat
6992             \else
6993                 \let\@glsxtr@attrval\@glsnumberformat
6994             \fi
6995         \fi
6996     \ifdefstring{\@glsxtr@attrval}{true}%
6997     {}%
6998     {\protected@eappto\@glo@name{\@glsxtr@autoindex@encap\@glsxtr@attrval}}%
6999     \expandafter\glsxtrautoindex\expandafter{\@glo@name}%
7000 }%
7001 {}%
7002 }

```

`glsxtrautoindex`
 7003 `\newcommand*{\glsxtrautoindex}{\index}`

`xtrautoindexesc`
 7004 `\newcommand{\glsxtrautoindexesc}{%`
 7005 `\@gls@checkmkidxchars\@glo@sort`
 7006 `\@glsxtr@autoindex@doextra@esc\@glo@sort`
 7007 `}`

`toindex@setname` Assign `\@glo@name` for use with indexname attribute.
 7008 `\newcommand*{\@glsxtr@autoindex@setname}[1]{%`
 7009 `\protected@edef\@glo@name{\glsxtrautoindexentry{#1}}%`
 7010 `\glsxtrautoindexassingsort{\@glo@sort}{#1}%`
 7011 `\glsxtrautoindexesc`
 7012 `\epreto\@glo@name{\@glo@sort\@glsxtr@autoindex@at}%`
 7013 `}`

`rautoindexentry` Command used for the actual part when auto-indexing.
 7014 `\newcommand*{\glsxtrautoindexentry}[1]{\string\glsentryname{#1}}`

`indexassingsort` Used to assign the sort value when auto-indexing.
 7015 `\newcommand*{\glsxtrautoindexassingsort}[2]{%`
 7016 `\glsletentryfield{#1}{#2}{sort}%`
 7017 `}`

```

dex@doextra@esc

7018 \newcommand*{\@glsxtr@autoindex@doextra@esc}[1]{%
    Escape the escape character unless it has already been escaped.

7019  \ifx\@glsxtr@autoindex@esc\@gls@quotechar
7020  \else
7021      \def\@gls@checkedmkidx{}%
7022      \edef\@glsxtr@checkspch{%
7023          \noexpand\@glsxtr@autoindex@escquote\expandonce{\#1}%
7024          \noexpand\@empty\@glsxtr@autoindex@esc\noexpand\@nnil
7025          \@glsxtr@autoindex@esc\noexpand\@empty\noexpand\@glsxtr@endescspch}%
7026      \@@glsxtr@checkspch
7027      \let#1\@gls@checkedmkidx\relax
7028  \fi

    Escape actual character unless it has already been escaped.

7029  \ifx\@glsxtr@autoindex@at\@gls@actualchar
7030  \else
7031      \def\@gls@checkedmkidx{}%
7032      \edef\@glsxtr@checkspch{%
7033          \noexpand\@glsxtr@autoindex@escat\expandonce{\#1}%
7034          \noexpand\@empty\@glsxtr@autoindex@at\noexpand\@nnil
7035          \@glsxtr@autoindex@at\noexpand\@empty\noexpand\@glsxtr@endescspch}%
7036      \@@glsxtr@checkspch
7037      \let#1\@gls@checkedmkidx\relax
7038  \fi

    Escape level character unless it has already been escaped.

7039  \ifx\@glsxtr@autoindex@level\@gls@levelchar
7040  \else
7041      \def\@gls@checkedmkidx{}%
7042      \edef\@glsxtr@checkspch{%
7043          \noexpand\@glsxtr@autoindex@escllevel\expandonce{\#1}%
7044          \noexpand\@empty\@glsxtr@autoindex@level\noexpand\@nnil
7045          \@glsxtr@autoindex@level\noexpand\@empty\noexpand\@glsxtr@endescspch}%
7046      \@@glsxtr@checkspch
7047      \let#1\@gls@checkedmkidx\relax
7048  \fi

    Escape encap character unless it has already been escaped.

7049  \ifx\@glsxtr@autoindex@encap\@gls@encapchar
7050  \else
7051      \def\@gls@checkedmkidx{}%
7052      \edef\@glsxtr@checkspch{%
7053          \noexpand\@glsxtr@autoindex@escencap\expandonce{\#1}%
7054          \noexpand\@empty\@glsxtr@autoindex@encap\noexpand\@nnil
7055          \@glsxtr@autoindex@encap\noexpand\@empty\noexpand\@glsxtr@endescspch}%
7056      \@@glsxtr@checkspch
7057      \let#1\@gls@checkedmkidx\relax
7058  \fi
7059 }

```

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.

```
7060 \newcommand*{\glsxtr@autoindex@at}{}{}
```

trSetActualChar Set the actual character.

```
7061 \newcommand*{\GlsXtrSetActualChar}[1]{%
7062   \gdef\@glsxtr@autoindex@at{\#1}%
7063   \def\@glsxtr@autoindex@escat##1##2##3\@glsxtr@endescspch{%
7064     \@@glsxtr@autoindex@escspch{\#1}{\@glsxtr@autoindex@escat}{##1}{##2}{##3}%
7065   }%
7066 }
7067 \@onlypreamble\GlsXtrSetActualChar
7068 \makeatother
7069 \GlsXtrSetActualChar{0}
7070 \makeatletter
```

autoindex@encap Encap character for use with \index.

```
7071 \newcommand*{\glsxtr@autoindex@encap}{}{}
```

XtrSetEncapChar Set the encap character.

```
7072 \newcommand*{\GlsXtrSetEncapChar}[1]{%
7073   \gdef\@glsxtr@autoindex@encap{\#1}%
7074   \def\@glsxtr@autoindex@escencap##1##2##3\@glsxtr@endescspch{%
7075     \@@glsxtr@autoindex@escspch{\#1}{\@glsxtr@autoindex@escencap}{##1}{##2}{##3}%
7076   }%
7077 }
7078 \GlsXtrSetEncapChar{}{}
7079 \@onlypreamble\GlsXtrSetEncapChar
```

autoindex@level Level character for use with \index.

```
7080 \newcommand*{\glsxtr@autoindex@level}{}{}
```

XtrSetLevelChar Set the encap character.

```
7081 \newcommand*{\GlsXtrSetLevelChar}[1]{%
7082   \gdef\@glsxtr@autoindex@level{\#1}%
7083   \def\@glsxtr@autoindex@esclevel##1##2##3\@glsxtr@endescspch{%
7084     \@@glsxtr@autoindex@escspch{\#1}{\@glsxtr@autoindex@esclevel}{##1}{##2}{##3}%
7085   }%
7086 }
7087 \GlsXtrSetLevelChar{}{}
7088 \@onlypreamble\GlsXtrSetLevelChar
```

r@autoindex@esc Escape character for use with \index.

```
7089 \newcommand*{\glsxtr@autoindex@esc}{"}{}
```

lsXtrSetEscChar Set the escape character.

```
7090 \newcommand*{\GlsXtrSetEscChar}[1]{%
7091   \gdef\@glsxtr@autoindex@esc{#1}%
7092   \def\@glsxtr@autoindex@escquote##1##2##3\@glsxtr@endescspch{%
7093     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escquote}{##1}{##2}{##3}%
7094   }%
7095 }
7096 \GlsXtrSetEscChar{`}
7097 \onlypreamble\GlsXtrSetEscChar
```

Set if defined. (For example, if doc package has been loaded.) Actual character \actualchar:

```
7098 \ifdef\actualchar
7099   {\expandafter\GlsXtrSetActualChar\expandafter{\actualchar}}
7100 }
```

Quote character \quotechar:

```
7101 \ifdef\quotechar
7102   {\expandafter\GlsXtrSetEscChar\expandafter{\quotechar}}
7103 }
```

Level character \levelchar:

```
7104 \ifdef\levelchar
7105   {\expandafter\GlsXtrSetLevelChar\expandafter{\levelchar}}
7106 }
```

Encap character \encapchar:

```
7107 \ifdef\encapchar
7108   {\expandafter\GlsXtrSetEncapChar\expandafter{\encapchar}}
7109 }
```

leto@endescspch

```
7110 \def\@glsxtr@gobbleto@endescspch#1\@glsxtr@endescspch{}
```

oindex@esc@spch

```
\@@glsxtr@autoindex@escspch{<char>}{<cs>}{{<pre>}}{<mid>}{{<post>}}
```

```
7111 \newcommand*{\@@glsxtr@autoindex@escspch}[5]{%
7112   \@gls@tmpb=\expandafter{\@gls@checkedmidx}%
7113   \toks@={#3}%
7114   \ifx\@nnil#3\relax
7115     \def\@@glsxtr@checkspch{\@glsxtr@gobbleto@endescspch#5\@glsxtr@endescspch}%
7116   \else
7117     \ifx\@nnil#4\relax
7118       \edef\@gls@checkedmidx{\the\@gls@tmpb\the\toks@}%
7119       \def\@@glsxtr@checkspch{\@glsxtr@gobbleto@endescspch
7120         #4#5\@glsxtr@endescspch}%
7121     \else
```

```

7122     \edef\@gls@checkedmidx{\the\@gls@tmpb\the\toks@%
7123         \@glsxtr@autoindex@esc#1}%
7124     \def\@@glsxtr@checkspch{\#2#5#1\@nnil#1\@glsxtr@endescspch}%
7125     \fi
7126 \fi
7127 \@@glsxtr@checkspch
7128 }

```

\Glossentrydesc Redefine to set the abbreviation format and accessibility support.

```

7129 \renewcommand*\Glossentrydesc[1]{%
7130     \glsdoifexistsorwarn{#1}%
7131     {%
7132         \glssetabbrvfmt{\glscategory{#1}}%
7133         \Glsaccessdesc{#1}%
7134     }%
7135 }

```

\lossentrysymbol Redefine to set the format and accessibility support. Allow for the possibility of being used in a section heading for standalone entry definitions.

```

7136 \ifdef\texorpdfstring
7137 {
7138     \renewcommand*\glossentrysymbol[1]{%
7139         \texorpdfstring{\glossentrysymbol{#1}}{\glsentrypdfsymbol{#1}}%
7140     }
7141 }
7142 {
7143     \renewcommand*\glossentrysymbol[1]{\glossentrysymbol{#1}}
7144 }

```

\sentrypdfsymbol May be redefined to a field that expands to a value that's more suitable for PDF bookmarks.

```
7145 \newcommand{\glsentrypdfsymbol}[1]{\glsentrysymbol{#1}}
```

\lossentrysymbol There are no case-changing attributes as it's less usual for symbols.

```

7146 \newrobustcmd*\glossentrysymbol[1]{%
7147     \glsdoifexistsorwarn{#1}%
7148     {%
7149         \begingroup
7150             \glssetabbrvfmt{\glscategory{#1}}%
7151             \glshasattribute{#1}{glosssymbolfont}%
7152         {%
7153             \protected@edef\@glsxtr@attrval{\glsgetattribute{#1}{glosssymbolfont}}%
7154             \ifcsdef{\@glsxtr@attrval}%
7155             {%
7156                 \letcs{\@glsxtr@glosssymbolfont}{\@glsxtr@attrval}%
7157             }%
7158             {%
7159                 \GlossariesExtraWarning{Unknown control sequence name
7160                     '\@glsxtr@attrval' supplied in glosssymbolfont attribute
7161                     for entry '#1'. Ignoring}%

```

```

7162      \let\@glsxtr@glosssymbolfont\@firstofone
7163      }%
7164      }%
7165      {\let\@glsxtr@glosssymbolfont\@firstofone}%
7166      \@glsxtr@glosssymbolfont{\glsaccesssymbol{#1}}%
7167      \endgroup
7168  }%
7169 }

```

`lossentrysymbol` Redefine to set the abbreviation format and accessibility support.

```

7170 \renewcommand*{\Glossentrysymbol}[1]{%
7171   \glsdoifexistsorwarn{#1}%
7172   {%
7173     \glssetabrvfmt{\glscategory{#1}}%
7174     \Glsaccesssymbol{#1}%
7175   }%
7176 }

```

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.

```

7177 \newcommand*{\GlsXtrEnableInitialTagging}{%
7178   \@ifstar\s@glsxtr@enabletagging\@glsxtr@enabletagging
7179 }
7180 \onlypreamble\GlsXtrEnableInitialTagging

```

`r@enabletagging` Starred version undefines command.

```

7181 \newcommand*{\s@glsxtr@enabletagging}[2]{%
7182   \undef#2%
7183   \@glsxtr@enabletagging{#1}{#2}%
7184 }

```

`r@enabletagging` Internal command.

```

7185 \newcommand*{\@glsxtr@enabletagging}[2]{%
  Set attributes for categories given in the first argument.
7186   \foreach\@glsxtr@cat:=#1\do
7187   {%
7188     \ifdefempty\@glsxtr@cat
7189     {}%
7190     {\glssetcategoryattribute{\@glsxtr@cat}{tagging}{true}}%
7191   }%
7192   \newrobustcmd*#2[1]{##1}%
7193   \def\@glsxtr@taggingcs{#2}%
7194   \renewcommand*{\glsxtr@activate@initialtagging}{%
7195     \let#2\@glsxtr@tag
7196   }%
}

```

```

7197 \ifundef\@gls@preglossaryhook
7198 {\GlossariesExtraWarning{Initial tagging requires at least
7199   glossaries.sty v4.19 to work correctly}{}%
7200 {}%
7201 }

```

Are we using an old version of `mfirstruc` 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 `mfirstruc`

```

7202 \ifundef\mfu@checkword@do
7203 {
7204   \newcommand*\{\mfu@checkword@do}[1]{%
7205     \ifdefstring{\mfu@checkword@arg}{#1}{%
7206       {%
7207         \let\@mfu@domakefirstruc\@firstofone
7208         \listbreak
7209       }%
7210     {}%
7211   }

```

`\mfu@checkword` `\capitalisewords` was introduced in `mfirstruc` v1.06. If `\mfu@checkword` hasn't been defined `mfirstruc` is too old to support the title case attribute.

```

7212 \ifundef\mfu@checkword
7213 {
7214   \newcommand{\@glsxtr@do@titlecaps@warn}{%
7215     \GlossariesExtraWarning{mfirstruc.sty too old. Title Caps
7216       support not available}%

```

One warning should suffice.

```

7217   \let\@glsxtr@do@titlecaps@warn\relax
7218 }
7219 }
7220 {
7221   \renewcommand*\{\mfu@checkword}[1]{%
7222     \def\mfu@checkword@arg{\#1}%
7223     \let\@mfu@domakefirstruc\makefirstruc
7224     \forlistloop\mfu@checkword@do\@mfu@nocaplist
7225   }
7226 }
7227 }
7228 {}% no patch required

```

`@titlecaps@warn` Do warning if title case not supported.

```
7229 \newcommand*\{\@glsxtr@do@titlecaps@warn}{}%
```

`@initialtagging` Used in `\printglossary` but at least v4.19 of `glossaries` required.

```
7230 \newcommand*\{\glsxtr@activate@initialtagging}{}%
```

\@glsxtr@tag Definition of tagging command when used in glossary.

```
7231 \newrobustcmd*{\@glsxtr@tag}[1]{%
7232   \glsifattribute{\glscurrententrylabel}{tagging}{true}%
7233   {\glsxtrtagfont{#1}}{#1}%
7234 }
```

\glsxtrtagfont Used in the glossary.

```
7235 \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.

```
7236 \ifdef{\gls@preglossaryhook}{%
7237 }{%
7238   \renewcommand*{\gls@preglossaryhook}{%
7239     \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.

```
7240 \ifundef{\glsxtr@org@postdescription}{%
7241 }{%
7242   \let{\glsxtr@org@postdescription}{\glsxtrpostdescription}
7243   \renewcommand*{\glsxtrpostdescription}{%
7244     \ifglsentryexists{\glscurrententrylabel}{%
7245       \glsxtrpostdescription
7246       \glsxtr@org@postdescription
7247     }{%
7248     }%
7249   }%
7250 }%
7251 }%
7252 }%
```

Enable the options used by @@glsxtrp:

```
7253 \glossxtrsetopts
7254 }%
7255 }
7256 {}
```

postdescription This command will only be used if \gls@preglossaryhook is available *and* the glossary style uses \glsxtrpostdescription 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.

```
7257 \newcommand*{\glsxtrpostdescription}{%
7258   \csuse{\glsxtrpostdesc}{\glscategory{\glscurrententrylabel}}%
7259 }
```

```

postdescgeneral
7260 \newcommand*{\glsxtrpostdescgeneral}{}}

xtrpostdescterm
7261 \newcommand*{\glsxtrpostdescterm}{}}

postdescacronym
7262 \newcommand*{\glsxtrpostdescacronym}{}}

escabbreviation
7263 \newcommand*{\glsxtrpostdescabbreviation}{}}

\glsdefpostdesc Provide a convenient command for defining the post-description hook for the given category.
7264 \newcommand*{\glsdefpostdesc}[2]{%
7265   \csdef{glsxtrpostdesc#1}{\#2}%
7266 }

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.
7267 \renewcommand*{\glspostlinkhook}{%
7268   \ifglsentryexists{\glslabel}{\glsxtrpostlinkhook}{}%
7269 }

xtrpostlinkhook The entry label should already be stored in \glslabel by \gls@link.
7270 \newcommand*{\glsxtrpostlinkhook}{}%
7271   \glsxtrdiscardperiod{\glslabel}%
7272   {\glsxtrpostlinkendsentence}%
7273   {\glsxtrifcustomdiscardperiod
7274     {\glsxtrifperiod{\glsxtrpostlinkendsentence}{\glsxtrpostlink}}%
7275     {\glsxtrpostlink}%
7276   }%
7277 }

omdiscardperiod Allow user to provide a custom check. Should expand to #2 if no check is required otherwise expand to #1.
7278 \newcommand*{\glsxtrifcustomdiscardperiod}[2]{#2}

\glsxtrpostlink
7279 \newcommand*{\glsxtrpostlink}{}%
7280   \csuse{glsxtrpostlink}{\glscategory{\glslabel}}%
7281 }

\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.
7282 \newcommand*{\glsdefpostlink}[2]{%
```

\ifthenelse is used to ensure that the expanded value is tested. (The category label must be fully expandable.)

```
7283 \ifthenelse{\equal{#1}{}}{%
7284 {\PackageError{glossaries-extra}%
7285 {Invalid empty category label in \string\glsdefpostlink}{}%
7286 {\csdef{glsxtrpostlink#1}{#2}}%
7287 }%
```

linkendsentence Done by \glsxtrpostlinkhook if a full stop is discarded.

```
7288 \newcommand*{\glsxtrpostlinkendsentence}{%
7289 \ifcsdef{glsxtrpostlink}{\glscategory{\glslabel}}{%
7290 {}%
7291 \csuse{glsxtrpostlink}{\glscategory{\glslabel}}%
7292 Put the full stop back.%
```

```
7293 .\spacefactor\sfcodes`.\relax%
7294 {}%
```

Assume the full stop was discarded because the entry ends with a period, so adjust the space-factor.

```
7295 \spacefactor\sfcodes`.\relax%
7296 {}%
7297 }
```

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.

```
7298 \newcommand*{\glsxtrpostlinkAddDescOnFirstUse}{%
7299 \glsxtrifwasfirstuse{\space\glsxtrparen{\glsaccessdesc{\glslabel}}}{}%
7300 }%
```

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.

```
7301 \newcommand*{\glsxtrpostlinkAddSymbolOnFirstUse}{%
7302 \glsxtrifwasfirstuse%
7303 {}%
7304 \ifglshassymbol{\glslabel}{%
7305 {\space\glsxtrparen{\glsaccesssymbol{\glslabel}}}{}%
7306 {}%
7307 }%
7308 {}%
7309 }%
```

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.

```
7310 \newcommand*{\glsxtrpostlinkAddSymbolDescOnFirstUse}{%
7311 \glsxtrifwasfirstuse%
7312 {}%
7313 \space\glsxtrparen
```

```

7314  {%
7315      \ifglshassymbol{\glslabel}{%
7316          {\glsaccesssymbol{\glslabel}, }%
7317          {}%
7318          \glsaccessdesc{\glslabel}%
7319      }%
7320  }%
7321  {}%
7322 }

```

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).

```

7323 \newcommand*{\glsxtrdiscardperiod}[3]{%
7324   \glsxtrifwasfirstuse
7325   {%
7326     \glsifattribute{#1}{retainfirstuseperiod}{true}%
7327     {#3}%
7328     {%
7329       \glsifattribute{#1}{discardperiod}{true}%
7330       {%
7331         \glsifplural
7332         {%
7333           \glsifattribute{#1}{pluraldiscardperiod}{true}%
7334           {\glsxtrifperiod{#2}{#3}}%
7335           {#3}%
7336         }%
7337         {%
7338           \glsxtrifperiod{#2}{#3}%
7339         }%
7340       }%
7341       {#3}%
7342     }%
7343   }%
7344   {}%
7345   \glsifattribute{#1}{discardperiod}{true}%
7346   {%
7347     \glsifplural
7348     {%
7349       \glsifattribute{#1}{pluraldiscardperiod}{true}%
7350       {\glsxtrifperiod{#2}{#3}}%
7351       {#3}%
7352     }%
7353     {%
7354       \glsxtrifperiod{#2}{#3}%
7355     }%
7356   }%
7357   {#3}%

```

```

7358 }%
7359 }

\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
7360 \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 ' ').

```
7361 \newcommand*\glsxtr@punclist{.,;?!}
```

`punctuationmark` Add character to punctuation list.

```
7362 \newcommand*\glsxtraddpunctuationmark[1]{\appto\glsxtr@punclist{#1}}
```

`unctuationmarks` Reset the punctuation list.

```
7363 \newcommand*\glsxtrsetpunctuationmarks[1]{\def\glsxtr@punclist{#1}}
```

`\glsxtrifpunc`

`\glsxtrifnextpunc{\(true part\)}{\(false part\)}`

Test if this is followed by a punctuation mark. (Adapted from \new@ifnextchar.)

```

7364 \newcommand*\glsxtrifnextpunc[2]{%
7365   \def\reserved@a{#1}%
7366   \def\reserved@b{#2}%
7367   \futurelet\glspunc@token\glsxtr@ifnextpunc
7368 }

```

`sxtr@ifnextpunc`

```

7369 \newcommand*\glsxtr@ifnextpunc{}%
7370 \glsxtr@ifpunctoken{\glspunc@token}{\let\reserved@b\reserved@a}{}%
7371 \reserved@b
7372 }

```

`xtr@ifpunctoken` Test if the token given in the first argument is in the punctuation list.

```

7373 \newcommand*\glsxtr@ifpunctoken[1]{%
7374   \expandafter\glsxtr@ifpunctoken\expandafter#1\glsxtr@punclist\@nnil
7375 }

```

`xtr@ifpunctoken`

```

7376 \def\@glsxtr@ifpunctoken#1#2{%
7377   \let\reserved@d=#2%
7378   \ifx\reserved@d\@nnil
7379     \let\glsxtr@next\@glsxtr@notfoundinlist
7380   \else

```

```

7381   \ifx#1\reserved@d
7382     \let\glsxtr@next\@glsxtr@foundinlist
7383   \else
7384     \let\glsxtr@next\@glsxtr@ifpunctoken
7385   \fi
7386 \fi
7387 \glsxtr@next#1%
7388 }

xtr@foundinlist
7389 \def\@glsxtr@foundinlist#1{\@nil{\@firstoftwo}

@notfoundinlist
7390 \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.

```

7391 \newcommand{\glsxtrdopostpunc}[1]{%
7392   \glsxtrifnextpunc{\@glsxtr@swaptwo{#1}}{#1}%
7393 }

```

@glsxtr@swaptwo

```
7394 \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.

```

7395 \define@key{glsxtrabbrv}{category}{%
7396   \protected@edef\glscategorylabel{#1}%
7397 }

```

Save the short plural form. This may be needed before the entry is defined.

```

7398 \define@key{glsxtrabbrv}{shortplural}{%
7399   \def\@gls@shortpl{#1}%
7400 }

```

Similarly for the long plural form.

```
7401 \define@key{glsxtrabbrv}{longplural}{%
7402   \def\@gls@longpl{\#1}%
7403 }
```

Token registers for the short plural and long plural, provided for use in the abbreviation style definitions.

```
\glsshortpltok
7404 \newtoks\glsshortpltok

\glslongpltok
7405 \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.

```
7406 \newcommand*{\@glsxtr@insertdots}[2]{%
7407   \def#1{}%
7408   \@glsxtr@insert@dots#1#2\@nnil
7409 }
```

```
xtr@insert@dots
7410 \newcommand*{\@glsxtr@insert@dots}[2]{%
7411   \ifx\@nnil#2\relax
7412     \let\@glsxtr@insert@dots@next\gobble
7413   \else
7414     \ifx\relax#2\relax
7415       \else
7416         \appto#1{#2.}%
7417       \fi
7418     \let\@glsxtr@insert@dots@next\@glsxtr@insert@dots
7419   \fi
7420   \@glsxtr@insert@dots@next#1%
7421 }
```

Similarly provide a way of replacing spaces with \glsxtrwordsep, which first needs to be defined:

```
\glsxtrwordsep
7422 \newcommand*{\glsxtrwordsep}{\space}
```

Each word is marked with

```
\glsxtrword
7423 \newcommand*{\glsxtrword}[1]{#1}
```

```
tr@markwordseps
7424 \newcommand*{\glsxtr@markwordseps}[2]{%
7425   \def#1{}%
7426   \glsxtr@mark@wordseps#1#2 \cnnil
7427 }
```

```
r@mark@wordseps
7428 \def\glsxtr@mark@wordseps#1#2 #3{%
7429   \ifdefempty{#1}{%
7430     {\def#1{\protect\glsxtrword{#2}}}{%
7431       {\appto#1{\protect\glsxtrwordsep\protect\glsxtrword{#2}}}{%
7432         \ifx\cnnil#3\relax
7433           \let\glsxtr@mark@wordseps@next\relax
7434         \else
7435           \def\glsxtr@mark@wordseps@next{%
7436             \glsxtr@mark@wordseps#1#3}{%
7437           \fi
7438           \glsxtr@mark@wordseps@next
7439 }}
```

`newabbreviation` Define a new generic abbreviation.

```
7440 \newcommand*{\newabbreviation}[4][]{%
7441   \glsxtr@newabbreviation{#1}{#2}{#3}{#4}}
7442 }
```

`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.)

```
7443 \newcommand*{\glsxtr@newabbreviation}[4]{%
7444   \glskeylisttok{#1}%
7445   \glslabeltok{#2}%
7446   \glsshorttok{#3}%
7447   \glslongtok{#4}}
```

Save the original short and long values (before attribute settings modify them).

```
7448 \def\glsxtrorgshort{#3}%
7449 \def\glsxtrorglong{#4}%
```

Provide extra settings for hooks (if modified, this command must end with a comma).

```
7450 \def\ExtraCustomAbbreviationFields{}%
```

Initialise accessibility settings if required.

```
7451 \gls@initaccesskeys
```

Get the category.

```
7452 \def\glscategorylabel{abbreviation}%
```

Ignore the shortplural and longplural keys.

```
7453 \setkeys*{\glsxtrabbrv}[shortplural,longplural]{#1}%
```

Set the abbreviation style.

```
7454 \ifcsdef@glsabbrv@current@\glscategorylabel{}%
7455 {}%
```

Warning should already have been issued.

```
7456   \let\@glsxtr@orgwarndep\GlsXtrWarnDeprecatedAbbrStyle
7457   \let\GlsXtrWarnDeprecatedAbbrStyle\@gobbletwo
7458   \glsxtr@applyabbrvstyle{\csname @glsabbrv@current@\glscategorylabel\endcsname}%
7459   \let\GlsXtrWarnDeprecatedAbbrStyle\@glsxtr@orgwarndep
7460 }%
7461 {%
```

If no style has been associated with this category, fallback on the style for the abbreviation category.

```
7462   \glsxtr@applyabbrvstyle{@glsabbrv@current@abbreviation}%
7463 }%
```

Set the default long plural

```
7464 \def@gls@longpl{#4\glspluralsuffix}%
7465 \let@gls@default@longpl@gls@longpl
```

Has the markwords attribute been set?

```
7466 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
7467 {%
7468   \@glsxtr@markwordseps@gls@long{#4}%
7469   \expandafter\def\expandafter\@gls@longpl\expandafter
7470     {\@gls@long\glspluralsuffix}%
7471 \let@gls@default@longpl@gls@longpl
```

Update \glslongtok.

```
7472 \expandafter\glslongtok\expandafter{@gls@long}%
7473 }%
7474 {}%
```

Has the markshortwords attribute been set? (Not compatible with insertdots.)

```
7475 \glsifcategoryattribute{\glscategorylabel}{markshortwords}{true}%
7476 {%
7477   \@glsxtr@markwordseps@gls@short{#3}%
7478 }%
7479 {}%
```

Has the insertdots attribute been set?

```
7480 \glsifcategoryattribute{\glscategorylabel}{insertdots}{true}%
7481 {%
7482   \@glsxtr@insertdots@gls@short{#3}%
7483   \appto@gls@short{\@}%
7484 }%
7485 {\def@gls@short{#3}}%
7486 }%
```

Has the aposplural attribute been set? (Not compatible with noshortplural.)

```
7487 \glsifcategoryattribute{\glscategorylabel}{aposplural}{true}%
7488 {%
7489   \expandafter\def\expandafter\@gls@shortpl\expandafter{@gls@short
7490     '\abrvpluralsuffix}%
```

```

7491  }%
7492  {%
    Has the noshortplural attribute been set?
7493  \glsifcategoryattribute{\glscategorylabel}{noshortplural}{true}%
7494  {%
7495      \let\@gls@shortpl\@gls@short
7496  }%
7497  {%
7498      \expandafter\def\expandafter\@gls@shortpl\expandafter{\@gls@short
7499          \abbrvpluralsuffix}%
7500  }%
7501 }%

    Update \glsshorttok:
7502 \expandafter\glsshorttok\expandafter{\@gls@short}%

    Hook for further customisation if required:
7503 \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).
7504 \setkeys*{\glsxtrabbrv}[category]{#1}%

    Save in case required.
7505 \let\@gls@org@longpl\@gls@longpl
7506 \let\@gls@org@shortpl\@gls@shortpl

    Has the plural been explicitly set?
7507 \ifx\@gls@default@longpl\@gls@longpl
7508 \else

    Has the markwords attribute been set?
7509 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
7510 {%
7511     \expandafter\glsxtr@markwordseps\expandafter\@gls@longpl\expandafter
7512         {\@gls@longpl}%
7513 }%
7514 {}%
7515 \fi

    Set the plural token registers so the values can be accessed by the abbreviation styles.
7516 \expandafter\glsshortpltok\expandafter{\@gls@shortpl}%
7517 \expandafter\glslongpltok\expandafter{\@gls@longpl}%

    Hook for accessibility support (does nothing if glossaries-accsupp hasn't been loaded).
7518 \gls@setup@default@access

    Do any extra setup provided by hook:
7519 \newabbreviationhook

    Define this entry:
7520 \protected@edef\@do@newglossaryentry{%

```

```

7521 \noexpand\newglossaryentry{\the\glslabeltok}%
7522 {%
7523   type=\glsxtrabbrvtype,%
7524   category=abbreviation,%
7525   short={\the\glsshorttok},%
7526   shortplural={\the\glsshortpltok},%
7527   long={\the\glslongtok},%
7528   longplural={\the\glslongpltok},%
7529   name={\the\glsshorttok},%
7530   \CustomAbbreviationFields,%

```

Hook may override abbreviation style default settings (this hook must end with a comma if set).

```
7531 \ExtraCustomAbbreviationFields
```

Any explicit fields set in the optional argument override all other settings.

```

7532   \the\glskeylisttok
7533   }%
7534 }%
7535 \do@newglossaryentry

```

Obtain the type and add it to the list of abbreviations.

```

7536 \glsxtr@addabbreviationlist{\glsentrytype{\the\glslabeltok}}%
7537 \GlsXtrPostNewAbbreviation
7538 }

```

`evpresetkeyhook` Hook for extra stuff in `\newabbreviation`

```
7539 \newcommand*{\glsxtrnewabbrevpresethook}[3]{}
```

`NewAbbreviation` Hook used by abbreviation styles.

```
7540 \newcommand*{\GlsXtrPostNewAbbreviation}{}}

```

`bbreviationhook` Hook for use with `\newabbreviation`.

```
7541 \newcommand*{\newabbreviationhook}{}}

```

`reviationFields`

```
7542 \newcommand*{\CustomAbbreviationFields}{}}

```

`\glsxtrparen` For the parenthetical styles.

```
7543 \newcommand*{\glsxtrparen}[1]{(#1)}

```

`lsxtrfullformat` Full format without case change.

```

7544 \newcommand*{\glsxtrfullformat}[2]{%
7545   \glsfirstlongfont{\glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
7546   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
7547 }

```

`lsxtrfullformat` Full format with case change.

```
7548 \newcommand*{\GlsXtrfullformat}[2]{%
```

```
7549 \glsfirstlongfont{\Glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
7550 \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
7551 }
```

xtrfullplformat Plural full format without case change.

```
7552 \newcommand*{\glsxtrfullplformat}[2]{%
7553 \glsfirstlongfont{\glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
7554 \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}%
7555 }
```

xtrfullplformat Plural full format with case change.

```
7556 \newcommand*{\Glsxtrfullplformat}[2]{%
7557 \glsfirstlongfont{\Glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
7558 \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}%
7559 }
```

\glsxtrfullsep Separator used by full format is a space by default. The argument is the entry's label.

```
7560 \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).

nlnefullformat Full format without case change.

```
7561 \newcommand*{\glsxtrinlnefullformat}{\glsxtrfullformat}
```

nlnefullformat Full format with case change.

```
7562 \newcommand*{\Glsxtrinlnefullformat}{\Glsxtrfullformat}
```

xtrfullplformat Plural full format without case change.

```
7563 \newcommand*{\glsxtrinlnefullplformat}{\glsxtrfullplformat}
```

inefullplformat Plural full format with case change.

```
7564 \newcommand*{\Glsxtrinlnefullplformat}{\Glsxtrfullplformat}
```

Redefine \glsentryfull etc to use the inline format. Since these commands as 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

```
7565 \renewcommand*{\glsentryfull}[1]{\glsxtrinlnefullformat{#1}{}}
```

\Glsentryfull

```
7566 \renewcommand*{\Glsentryfull}[1]{\Glsxtrinlnefullformat{#1}{}}
```

\glsentryfullpl

```
7567 \renewcommand*{\glsentryfullpl}[1]{\glsxtrinlnefullplformat{#1}{}}
```

```

\Glsentryfullpl
 7568 \renewcommand*{\Glsentryfullpl}[1]{\Glsxtrinlinefullplformat{#1}{}}
```

sfirstabrvfont Font changing command used for the abbreviation on first use or in the full format.
 7569 \newcommand*{\glsfirstabrvfont}[1]{\glsfirstabrvdefaultfont{#1}}

bbrvdefaultfont Font changing command used for the abbreviation on first use or in the full format.
 7570 \newcommand*{\glsfirstabrvdefaultfont}[1]{\glsabrvdefaultfont{#1}}

\glsabrvfont Font changing command used for the abbreviation on subsequent use. This is redefined by the abbreviation styles, as appropriate.
 7571 \newcommand*{\glsabrvfont}[1]{\glsabrvdefaultfont{#1}}

bbrvdefaultfont
 7572 \newcommand*{\glsabrvdefaultfont}[1]{#1}

\glslongfont Font changing command used for the long form in commands like \glsxtrlong.
 7573 \newcommand*{\glslongfont}[1]{\glslongdefaultfont{#1}}

longdefaultfont Default font changing command used for the long form in commands like \glsxtrlong.
 7574 \newcommand*{\glslongdefaultfont}[1]{#1}

lsfirstlongfont Font changing command used for the long form on first use or in the full format.
 7575 \newcommand*{\glsfirstlongfont}[1]{\glslongfont{#1}}

longdefaultfont
 7576 \newcommand*{\glsfirstlongdefaultfont}[1]{\glslongdefaultfont{#1}}

brvpluralsuffix Default plural suffix. Allow an alternative default suffix for abbreviations.
 7577 \newcommand*{\glsxtrabbrvpluralsuffix}{\glspluralsuffix}

brvpluralsuffix Default plural suffix.
 7578 \newcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}

\glsxtrfull Full form (no case-change).
 7579 \newrobustcmd*{\glsxtrfull}{\@gls@hyp@opt\ns@glsxtrfull}
 7580 \newcommand*\ns@glsxtrfull[2][]{%
 7581 \new@ifnextchar[\{\@glsxtr@full{#1}{#2}\}%
 7582 {\@glsxtr@full{#1}{#2}[]}%
 7583 }

\@glsxtr@full Low-level macro:
 7584 \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).

```

7585  \glsxstr@record{#1}{#2}{\glslink}%
7586  \glsdoifexists{#2}%
7587  {%
7588  \glssetabrvfmt{\glscategory{#2}}%
7589  \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7590  \let\glsifplural@\secondoftwo
7591  \let\glscapscase@\firstofthree
7592  \let\glsinsert@\empty
7593  \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.

```

7594  \glsxtrsetupfulldefs
7595  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7596  }%
7597 \glspostlinkhook
7598 }

```

trsetupfulldefs

```

7599 \newcommand*{\glsxtrsetupfulldefs}{%
7600  \let\glsxtrifwasfirstuse@\firstoftwo
7601 }

```

\Glsxtrfull Full form (first letter uppercase).

```

7602 \newrobustcmd*{\Glsxtrfull}{\gls@hyp@opt\ns@Glsxtrfull}
7603 \newcommand*\ns@Glsxtrfull[2][]{%
7604  \new@ifnextchar[\{@Glsxtr@full{#1}{#2}}%
7605          {\@Glsxtr@full{#1}{#2}[]}%
7606 }

```

\@Glsxtr@full Low-level macro:

```

7607 \def\@Glsxtr@full#1#2[#3]{%
7608  \glsdoifexists{#2}%
7609  {%
7610  \glssetabrvfmt{\glscategory{#2}}%
7611  \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7612  \let\glsifplural@\secondoftwo
7613  \let\glscapscase@\secondofthree
7614  \let\glsinsert@\empty
7615  \def\glscustomtext{\Glsxtrinlinefullformat{#2}{#3}}%
7616  \glsxtrsetupfulldefs
7617  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7618  }%
7619 \glspostlinkhook
7620 }

```

\GLSxtrfull Full form (all uppercase).

```
7621 \newrobustcmd*\{\GLSxtrfull\}{\gls@hyp@opt\ns@GLSxtrfull}
7622 \newcommand*\ns@GLSxtrfull[2][]{%
7623   \new@ifnextchar[\{\glscategory{#1}{#2}\}]{%
7624     \glscategory{#1}{#2}[] }%
7625 }
```

\@GLSxtr@full Low-level macro:

```
7626 \def\@GLSxtr@full#1#2[#3]{%
7627   \glsdoifexists{#2}{%
7628     {%
7629       \glssetabrvfmt{\glscategory{#2}}{%
7630         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7631         \let\glsifplural\@secondoftwo
7632         \let\glscapscase\@thirdofthree
7633         \let\glsinsert\@empty
7634         \def\glscustomtext{\mfirstrucMakeUppercase{\glsxtrinlinefullformat{#2}{#3}}}{%
7635           \glsxtrsetupfulldefs
7636           \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}{%
7637             }%
7638           \glspostlinkhook
7639 }}
```

\glsxtrfullpl Plural full form (no case-change).

```
7640 \newrobustcmd*\{\glsxtrfullpl\}{\gls@hyp@opt\ns@glsxtrfullpl}
7641 \newcommand*\ns@glsxtrfullpl[2][]{%
7642   \new@ifnextchar[\{\glsxtrfullpl{#1}{#2}\}]{%
7643     \glsxtrfullpl{#1}{#2}[] }%
7644 }
```

\@glsxtr@fullpl Low-level macro:

```
7645 \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).

```
7646   \glsxtr@record{#1}{#2}{\glslink}{%
7647     \glsdoifexists{#2}{%
7648       {%
7649         \glssetabrvfmt{\glscategory{#2}}{%
7650           \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7651           \let\glsifplural\@firstoftwo
7652           \let\glscapscase\@firstofthree
7653           \let\glsinsert\@empty
7654           \def\glscustomtext{\glsxtrinlinefullplformat{#2}{#3}}{%
7655             \glsxtrsetupfulldefs
7656             \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}{%
7657               }%
7658             \glspostlinkhook
7659 }}
```

```
\Glsxtrfullpl Plural full form (first letter uppercase).
```

```
7660 \newrobustcmd*\Glsxtrfullpl{\gls@hyp@opt\ns@Glsxtrfullpl}
7661 \newcommand*\ns@Glsxtrfullpl[2][]{%
7662   \new@ifnextchar[\{@Glsxtr@fullpl{#1}{#2}}%
7663           {\@Glsxtr@fullpl{#1}{#2}[]}%
7664 }
```

```
\@Glsxtr@fullpl Low-level macro:
```

```
7665 \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).

```
7666 \@glsxtr@record{#1}{#2}{glslink}%
7667 \glsdoifexists{#2}%
7668 {%
7669   \glssetabrvfmt{\glscategory{#2}}%
7670   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7671   \let\glsifplural@\firstoftwo
7672   \let\glscapscase@\secondofthree
7673   \let\glsinsert@\empty
7674   \def\glscustomtext{\Glsxtrinlinefullplformat{#2}{#3}}%
7675   \glsxtrsetupfulldefs
7676   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7677 }%
7678 \glspostlinkhook
7679 }
```

```
\GLSxtrfullpl Plural full form (all upper case).
```

```
7680 \newrobustcmd*\GLSxtrfullpl{\gls@hyp@opt\ns@GLSxtrfullpl}
7681 \newcommand*\ns@GLSxtrfullpl[2][]{%
7682   \new@ifnextchar[\{@GLSxtr@fullpl{#1}{#2}}%
7683           {\@GLSxtr@fullpl{#1}{#2}[]}%
7684 }
```

```
\@GLSxtr@fullpl Low-level macro:
```

```
7685 \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).

```
7686 \@glsxtr@record{#1}{#2}{glslink}%
7687 \glsdoifexists{#2}%
7688 {%
7689   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7690   \let\glsifplural@\firstoftwo
7691   \let\glscapscase@\thirdofthree
7692   \let\glsinsert@\empty
7693   \def\glscustomtext{%
7694     \mfirstrucMakeUppercase{\glsxtrinlinefullplformat{#2}{#3}}%
7695   \glsxtrsetupfulldefs
```

```

7696     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7697   }%
7698   \glspostlinkhook
7699 }

```

The short and long forms work in a similar way to acronyms.

\glsxtrshort

```
7700 \newrobustcmd*\glsxtrshort{\gls@hyp@opt\ns@glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7701 \newcommand*\ns@glsxtrshort[2][]{%
7702   \new@ifnextchar{@\glsxtrshort[#1]{#2}}{\glsxtrshort[#1]{#2}[]}%
7703 }

```

Read in the final optional argument:

```
7704 \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).

```

7705   \glsxtr@record[#1]{#2}{\glslink}%
7706   \glsdoifexists[#2]%
7707   {%

```

Need to make sure \glsabrvfont is set correctly.

```

7708   \glssetabrvfmt{\glscategory{#2}}%
7709   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7710   \let\glsxtrifwasfirstuse\@secondoftwo
7711   \let\glsifplural\@secondoftwo
7712   \let\glscapscase\@firstofthree
7713   \let\glsinsert\@empty
7714   \def\glscustomtext{%
7715     \glsabrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
7716     \ifglsxtrinsertinside\else#3\fi
7717   }%
7718   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7719 }%
7720   \glspostlinkhook
7721 }

```

\Glsxtrshort

```
7722 \newrobustcmd*\Glsxtrshort{\gls@hyp@opt\ns@Glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7723 \newcommand*\ns@Glsxtrshort[2][]{%
7724   \new@ifnextchar{@\Glsxtrshort[#1]{#2}}{\Glsxtrshort[#1]{#2}[]}%
7725 }

```

Read in the final optional argument:

```
7726 \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).

```

7727  \@glsxtr@record{\#1}{\#2}{\glslink}%
7728  \glsdoifexists{\#2}%
7729  {%
7730    \glssetabrvfmt{\glscategory{\#2}}%
7731    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7732    \let\glsxtrifwasfirstuse@secondoftwo
7733    \let\glsifplural@secondoftwo
7734    \let\glscapscase@secondofthree
7735    \let\glsinsert@\empty
7736    \def\glscustomtext{%
7737      \glsabbrvfont{\Glsaccessshort{\#2}\ifglsxtrinsertinside#3\fi}%
7738      \ifglsxtrinsertinside\else#3\fi
7739    }%
7740    \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
7741  }%
7742  \glspostlinkhook
7743 }

```

\GLSxtrshort

```
7744 \newrobustcmd*\GLSxtrshort{\gls@hyp@opt\ns@GLSxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7745 \newcommand*\ns@GLSxtrshort[2][]{%
7746   \new@ifnextchar[\ns@GLSxtrshort{\#1}{\#2}]{\ns@GLSxtrshort{\#1}{\#2}[]}{%
7747 }

```

Read in the final optional argument:

```
7748 \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).

```

7749  \@glsxtr@record{\#1}{\#2}{\glslink}%
7750  \glsdoifexists{\#2}%
7751  {%
7752    \glssetabrvfmt{\glscategory{\#2}}%
7753    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7754    \let\glsxtrifwasfirstuse@secondoftwo
7755    \let\glsifplural@secondoftwo
7756    \let\glscapscase@thirdofthree
7757    \let\glsinsert@\empty
7758    \def\glscustomtext{%
7759      \mfistucMakeUppercase
7760      \glsabbrvfont{\Glsaccessshort{\#2}\ifglsxtrinsertinside#3\fi}%
7761      \ifglsxtrinsertinside\else#3\fi
7762    }%
7763  }%
7764  \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
7765 }

```

```

7766 \glspostlinkhook
7767 }

\glsxtrlong
7768 \newrobustcmd*{\glsxtrlong}{\gls@hyp@opt\ns@glsxtrlong}
    Define the un-starred form. Need to determine if there is a final optional argument
7769 \newcommand*{\ns@glsxtrlong}[2][]{%
7770   \new@ifnextchar[{\glsxtrlong[#1]{#2}}{\glsxtrlong[#1]{#2}[]}%
7771 }

    Read in the final optional argument:
7772 \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).
7773   \glsxtr@record[#1]{#2}{glslink}%
7774   \glsdoifexists{#2}%
7775   {%
7776     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7777     \let\glsxtrifwasfirstuse\secondoftwo
7778     \let\glsifplural\secondoftwo
7779     \let\glscapscase\firstofthree
7780     \let\glsinsert\empty
7781     \def\glscustomtext{%
7782       \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7783       \ifglsxtrinsertinside\else#3\fi
7784     }%
7785     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7786   }%
7787   \glspostlinkhook
7788 }

```

\Glsxtrlong

```

7789 \newrobustcmd*{\Glsxtrlong}{\gls@hyp@opt\ns@Glsxtrlong}
    Define the un-starred form. Need to determine if there is a final optional argument
7790 \newcommand*{\ns@Glsxtrlong}[2][]{%
7791   \new@ifnextchar[{\Glsxtrlong[#1]{#2}}{\Glsxtrlong[#1]{#2}[]}%
7792 }

    Read in the final optional argument:
7793 \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).
7794   \glsxtr@record[#1]{#2}{glslink}%
7795   \glsdoifexists{#2}%
7796   {%
7797     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7798     \let\glsxtrifwasfirstuse\secondoftwo

```

```

7799   \let\glsifplural\@secondoftwo
7800   \let\glscapscase\@secondofthree
7801   \let\glsinsert\@empty
7802   \def\glscustomtext{%
7803     \glslongfont{\Glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7804     \ifglsxtrinsertinside\else#3\fi
7805   }%
7806   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7807 }%
7808 \glspostlinkhook
7809 }

```

\GLSxtrlong

```
7810 \newrobustcmd*{\GLSxtrlong}{\gls@hyp@opt\ns@GLSxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7811 \newcommand*{\ns@GLSxtrlong}[2][]{%
7812   \new@ifnextchar[\{@GLSxtrlong{#1}{#2}\}{@GLSxtrlong{#1}{#2}}[]}%
7813 }

```

Read in the final optional argument:

```
7814 \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).

```

7815  \@glsxtr@record{#1}{#2}{\glslink}%
7816  \glsdoifexists{#2}%
7817  {%
7818    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7819    \let\glsxtrifwasfirstuse\@secondoftwo
7820    \let\glsifplural\@secondoftwo
7821    \let\glscapscase\@thirdofthree
7822    \let\glsinsert\@empty
7823    \def\glscustomtext{%
7824      \mfirstrucMakeUppercase
7825      \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7826      \ifglsxtrinsertinside\else#3\fi
7827    }%
7828  }%
7829  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7830 }%
7831 \glspostlinkhook
7832 }

```

Plural short forms:

\glsxtrshortpl

```
7833 \newrobustcmd*{\glsxtrshortpl}{\gls@hyp@opt\ns@glsxtrshortpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7834 \newcommand*{\ns@glsxtrshortpl}[2][]{%
```

```
7835 \new@ifnextchar[{\@glsxtrshortpl{#1}{#2}}{\@glsxtrshortpl{#1}{#2}[]}]%
7836 }
```

Read in the final optional argument:

```
7837 \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).

```
7838 \@glsxtr@record{#1}{#2}{glslink}%
7839 \glsdoifexists{#2}%
7840 {%
7841   \glssetabrvfmt{\glscategory{#2}}%
7842   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7843   \let\glsxtrifwasfirstuse\@secondoftwo
7844   \let\glsifplural\@firstoftwo
7845   \let\glscapscase\@firstofthree
7846   \let\glsinsert\@empty
7847   \def\glscustomtext{%
7848     \glsabbrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7849     \ifglsxtrinsertinside\else#3\fi
7850   }%
7851   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7852 }%
7853 \glspostlinkhook
7854 }
```

\Glsxtrshortpl

```
7855 \newrobustcmd*\Glsxtrshortpl{\gls@hyp@opt\ns@Glsxtrshortpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7856 \newcommand*\ns@Glsxtrshortpl[2][]{%
7857   \new@ifnextchar[{\@Glsxtrshortpl{#1}{#2}}{\@Glsxtrshortpl{#1}{#2}[]}]%
7858 }
```

Read in the final optional argument:

```
7859 \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).

```
7860 \@glsxtr@record{#1}{#2}{glslink}%
7861 \glsdoifexists{#2}%
7862 {%
7863   \glssetabrvfmt{\glscategory{#2}}%
7864   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7865   \let\glsxtrifwasfirstuse\@secondoftwo
7866   \let\glsifplural\@firstoftwo
7867   \let\glscapscase\@secondofthree
7868   \let\glsinsert\@empty
7869   \def\glscustomtext{%
7870     \glsabbrvfont{\Glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7871     \ifglsxtrinsertinside\else#3\fi
    }}
```

```

7872    }%
7873    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7874  }%
7875  \glspostlinkhook
7876 }

\GLSxtrshortpl
7877 \newrobustcmd*\{\GLSxtrshortpl\}{\gls@hyp@opt\ns@GLSxtrshortpl}
    Define the un-starred form. Need to determine if there is a final optional argument
7878 \newcommand*\{\ns@GLSxtrshortpl\}[2][]{%
7879   \new@ifnextchar[{\@GLSxtrshortpl{#1}{#2}}{\@GLSxtrshortpl{#1}{#2}}[]}{%
7880 }

    Read in the final optional argument:
7881 \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).
7882 \glsxtr@record{#1}{#2}{\glslink}%
7883 \glsdoifexists{#2}%
7884 {%
7885   \glssetabrvfmt{\glscategory{#2}}%
7886   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7887   \let\glsxtrifwasfirstuse\@secondoftwo
7888   \let\glsifplural\@firstoftwo
7889   \let\glscapscase\@thirdofthree
7890   \let\glsinsert\@empty
7891   \def\glscustomtext{%
7892     \mfirstrucMakeUppercase
7893     {\glsabrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7894       \ifglsxtrinsertinside\else#3\fi
7895     }%
7896   }%
7897   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7898 }%
7899 \glspostlinkhook
7900 }

```

Plural long forms:

```

\glsxtrlongpl
7901 \newrobustcmd*\{\glsxtrlongpl\}{\gls@hyp@opt\ns@glsxtrlongpl}
    Define the un-starred form. Need to determine if there is a final optional argument
7902 \newcommand*\{\ns@glsxtrlongpl\}[2][]{%
7903   \new@ifnextchar[{\glsxtrlongpl{#1}{#2}}{\glsxtrlongpl{#1}{#2}}[]}{%
7904 }

    Read in the final optional argument:
7905 \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).

```

7906  \glsxstr@record{#1}{#2}{glslink}%
7907  \glsdoifexists{#2}%
7908  {%
7909      \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7910      \let\glsxtrifwasfirstuse\secondoftwo
7911      \let\glsifplural\firstoftwo
7912      \let\glscapscase\firstofthree
7913      \let\glsinsert\empty
7914      \def\glscustomtext{%
7915          \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7916          \ifglsxtrinsertinside\else#3\fi
7917      }%
7918      \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7919  }%
7920  \glspostlinkhook
7921 }
```

\Glsxtrlongpl

```
7922 \newrobustcmd*\Glsxtrlongpl{\gls@hyp@opt\ns@Glsxtrlongpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7923 \newcommand*\ns@Glsxtrlongpl[2][]{%
7924     \new@ifnextchar{`}{\Glsxtrlongpl{#1}{#2}}{\Glsxtrlongpl{#1}{#2}[]}%
```

7925 }

Read in the final optional argument:

```
7926 \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).

```

7927  \glsxstr@record{#1}{#2}{glslink}%
7928  \glsdoifexists{#2}%
7929  {%
7930      \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7931      \let\glsxtrifwasfirstuse\secondoftwo
7932      \let\glsifplural\firstoftwo
7933      \let\glscapscase\secondofthree
7934      \let\glsinsert\empty
7935      \def\glscustomtext{%
7936          \glslongfont{\Glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7937          \ifglsxtrinsertinside\else#3\fi
7938      }%
7939      \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7940  }%
7941  \glspostlinkhook
7942 }
```

\GLSxtrlongpl

```

7943 \newrobustcmd*{\GLSxtrlongpl}{\gls@hyp@opt\ns@GLSxtrlongpl}
    Define the un-starred form. Need to determine if there is a final optional argument
7944 \newcommand*{\ns@GLSxtrlongpl}[2][]{%
7945   \new@ifnextchar[{\@\GLSxtrlongpl{#1}{#2}}{\@\GLSxtrlongpl{#1}{#2}[]}%}
7946 }

    Read in the final optional argument:
7947 \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).
7948  \glsxtr@record{#1}{#2}{\glslink}%
7949  \glsdoifexists{#2}%
7950  {%
7951    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7952    \let\glsxtrifwasfirstuse\@secondoftwo
7953    \let\glsifplural\@firstoftwo
7954    \let\glscapscase\@thirdofthree
7955    \let\glsinsert\@empty
7956    \def\glscustomtext{%
7957      \mfirstrucMakeUppercase
7958      {\glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7959       \ifglsxtrinsertinside\else#3\fi
7960     }%
7961   }%
7962   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7963 }%
7964 \glspostlinkhook
7965 }

\glssetabbrvfmt Set the current format for the given category (or the abbreviation category if unset).
7966 \newcommand*{\glssetabbrvfmt}[1]{%
7967  \ifcsdef{\glsabrv@current@#1}{%
7968    {\glsxtr@applyabbrvfmt{\csname \glsabrv@current@#1\endcsname}}%
7969    {\glsxtr@applyabbrvfmt{\glsabrv@current@abbreviation}}%
7970  }}

\glsuseabbrvfont Provide a way to use the abbreviation font for a given category for arbitrary text.
7971 \newrobustcmd*{\glsuseabbrvfont}[2]{{\glssetabbrvfmt{#2}\glsabrvfont{#1}}}

\glsuselongfont Provide a way to use the long font for a given category for arbitrary text.
7972 \newrobustcmd*{\glsuselongfont}[2]{{\glssetabbrvfmt{#2}\glslongfont{#1}}}

\sxtrogenabbrvfmt Similar to \glsgenacfmt, but for abbreviations.
7973 \newcommand*{\glsxtrgenabbrvfmt}{%
7974  \ifdefempty\glscustomtext{%
7975  {%
7976    \ifglsused\glslabel{%
7977      {%

```

Subsequent use:

```
7978      \glsifplural  
7979      {%
```

Subsequent plural form:

```
7980      \glscapscase  
7981      {%
```

Subsequent plural form, don't adjust case:

```
7982      \glsxtrsubsequentplfmt{\glslabel}{\glsinsert} %  
7983      }%  
7984      {%
```

Subsequent plural form, make first letter upper case:

```
7985      \Glsxtrsubsequentplfmt{\glslabel}{\glsinsert} %  
7986      }%  
7987      {%
```

Subsequent plural form, all caps:

```
7988      \mfirstucMakeUppercase  
7989      {\glsxtrsubsequentplfmt{\glslabel}{\glsinsert}} %  
7990      }%  
7991      }%  
7992      {%
```

Subsequent singular form

```
7993      \glscapscase  
7994      {%
```

Subsequent singular form, don't adjust case:

```
7995      \glsxtrsubsequentfmt{\glslabel}{\glsinsert} %  
7996      }%  
7997      {%
```

Subsequent singular form, make first letter upper case:

```
7998      \Glsxtrsubsequentfmt{\glslabel}{\glsinsert} %  
7999      }%  
8000      {%
```

Subsequent singular form, all caps:

```
8001      \mfirstucMakeUppercase  
8002      {\glsxtrsubsequentfmt{\glslabel}{\glsinsert}} %  
8003      }%  
8004      }%  
8005      }%  
8006      {%
```

First use:

```
8007      \glsifplural  
8008      {%
```

First use plural form:

```
8009      \glscapscase  
8010      {%
```

First use plural form, don't adjust case:

```
8011      \glsxtrfullplformat{\glslabel}{\glsinsert}%
8012      }%
8013      {%
```

First use plural form, make first letter upper case:

```
8014      \Glsxtrfullplformat{\glslabel}{\glsinsert}%
8015      }%
8016      {%
```

First use plural form, all caps:

```
8017      \mfirstucMakeUppercase
8018      {\glsxtrfullplformat{\glslabel}{\glsinsert}}%
8019      }%
8020      }%
8021      {%
```

First use singular form

```
8022      \glscapscase
8023      {%
```

First use singular form, don't adjust case:

```
8024      \glsxtrfullformat{\glslabel}{\glsinsert}%
8025      }%
8026      {%
```

First use singular form, make first letter upper case:

```
8027      \Glsxtrfullformat{\glslabel}{\glsinsert}%
8028      }%
8029      {%
```

First use singular form, all caps:

```
8030      \mfirstucMakeUppercase
8031      {\glsxtrfullformat{\glslabel}{\glsinsert}}%
8032      }%
8033      }%
8034      }%
8035      }%
8036      {%
```

User supplied text.

```
8037      \glscustomtext
8038      }%
8039 }
```

`trsubsequentfmt` Subsequent use format (singular no case change).

```
8040 \newcommand*{\glsxtrsubsequentfmt}[2]{%
8041   \glsabbrvfont{\glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
8042   \ifglsxtrinsertinside \else#2\fi
8043 }
8044 \let\glsxtrdefaultsubsequentfmt\glsxtrsubsequentfmt
```

```

subsequentplfmt Subsequent use format (plural no case change).
8045 \newcommand*{\glsxtrsubsequentplfmt}[2]{%
8046   \glsabbrvfont{\glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
8047   \ifglsxtrinsertinside \else#2\fi
8048 }
8049 \let\glsxtrdefaultsubsequentplfmt\glsxtrsubsequentplfmt

trsubsequentfmt Subsequent use format (singular, first letter uppercase).
8050 \newcommand*{\Glsxtrsubsequentfmt}[2]{%
8051   \glsabbrvfont{\Glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
8052   \ifglsxtrinsertinside \else#2\fi
8053 }
8054 \let\Glsxtrdefaultsubsequentfmt\Glsxtrsubsequentfmt

subsequentplfmt Subsequent use format (plural, first letter uppercase).
8055 \newcommand*{\Glsxtrsubsequentplfmt}[2]{%
8056   \glsabbrvfont{\Glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
8057   \ifglsxtrinsertinside \else#2\fi
8058 }
8059 \let\Glsxtrdefaultsubsequentplfmt\Glsxtrsubsequentplfmt

```

1.7.1 Abbreviation Styles Setup

```

abbreviationstyle
8060 \newcommand*{\setabbreviationstyle}[2][abbreviation]{%
8061   \ifcsundef{@glsabbrv@disestyle@setup@#2}%
8062   {%
8063     \PackageError{glossaries-extra}{Undefined abbreviation style '#2'}{}%
8064   }%
8065   {%
8066     Have abbreviations already been defined for this category?
8067     \ifcsstring{@glsabbrv@current@#1}{#2}%
8068     }%
8069     {%
8070       \def@glsxtr@dostylewarn{}%
8071       \glsforeachincategory{#1}{\@gls@type}{\@gls@label}%
8072       {%
8073         \def@glsxtr@dostylewarn{\GlossariesWarning{Abbreviation
8074           style has been switched \MessageBreak
8075           for category '#1', \MessageBreak
8076           but there have already been entries \MessageBreak
8077           defined for this category. Unwanted \MessageBreak
8078           side-effects may result}}%
8079       }%
8080     }%
8081     \@glsxtr@dostylewarn

```

Set up the style for the given category.

```
8082     \csdef{@glsabrv@current@#1}{#2}%
8083     \protected@edef\glscategorylabel{#1}%
8084     \glsxtr@applyabbrvstyle{#2}%
8085   }%
8086 }%
8087 }
```

applyabbrvstyle Apply the abbreviation style without existence check.

```
8088 \newcommand*{\glsxtr@applyabbrvstyle}[1]{%
8089   \csuse{@glsabrv@dispstyle@setup@#1}%
8090   \csuse{@glsabrv@dispstyle@fmts@#1}%
8091 }
```

r@applyabbrvfmt Only apply the style formats.

```
8092 \newcommand*{\glsxtr@applyabbrvfmt}[1]{%
8093   \csuse{@glsabrv@dispstyle@fmts@#1}%
8094 }
```

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.

```
8095 \newcommand*{\newabbreviationstyle}[3]{%
8096   \ifcsdef{@glsabrv@dispstyle@setup@#1}%
8097   {}%
8098   \PackageError{glossaries-extra}{Abbreviation style '#1' already%
8099   defined}{}%
8100 }%
8101 {}%
8102   \csdef{@glsabrv@dispstyle@setup@#1}{%
```

Initialise hook to do nothing. The style may change this.

```
8103   \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
8104   #2}%
8105   \csdef{@glsabrv@dispstyle@fmts@#1}{%
```

Assume in-line form is the same as first use. The style may change this.

```
8106   \renewcommand*{\glsxtrinlinetfullformat}{\glsxtrfullformat}%
8107   \renewcommand*{\GlsXtrInLineFullFormat}{\GlsXtrFullFormat}%
8108   \renewcommand*{\glsxtrinlinetplformat}{\glsxtrfulltplformat}%
8109   \renewcommand*{\GlsXtrInLineFullPlFormat}{\GlsXtrFullPlFormat}%
```

Reset \glsxtrsubsequentfmt etc in case a style changes this.

```
8110   \let\glsxtrsubsequentfmt\glsxtrdefaultsubsequentfmt
8111   \let\glsxtrsubsequentplfmt\glsxtrdefaultsubsequentplfmt
8112   \let\GlsXtrSubsequentFormat\GlsXtrDefaultSubsequentFormat
8113   \let\GlsXtrSubsequentPlFormat\GlsXtrDefaultSubsequentPlFormat
8114   #3}%
8115 }%
8116 }
```

```

abbreviationstyle
8117 \newcommand*{\renewabbreviationstyle}[3]{%
8118   \ifcsundef{@glsabrv@dispstyle@setup@#1}%
8119   {%
8120     \PackageError{glossaries-extra}{Abbreviation style '#1' not defined}{}%
8121   }%
8122   {%
8123     \csdef{@glsabrv@dispstyle@setup@#1}{%

```

Initialise hook to do nothing. The style may change this.

```

8124   \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
8125   #2}%
8126   \csdef{@glsabrv@dispstyle@fmts@#1}{%

```

Assume in-line form is the same as first use. The style may change this.

```

8127   \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}%
8128   \renewcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}%
8129   \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}%
8130   \renewcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}%
8131   #3}%
8132 }%
8133 }

```

abbreviationstyle Define a synonym for an abbreviation style. The first argument is the new name. The second argument is the original style's name.

```

8134 \newcommand*{\letabbreviationstyle}[2]{%
8135   \csletcs{@glsabrv@dispstyle@setup@#1}{@glsabrv@dispstyle@setup@#2}%
8136   \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
8137 }

```

cated@abbrstyle

```
\@glsxtr@deprecated@abbrstyle{<old-name>}{<new-name>}
```

Define a synonym for a deprecated abbreviation style.

```

8138 \newcommand*{\@glsxtr@deprecated@abbrstyle}[2]{%
8139   \csdef{@glsabrv@dispstyle@setup@#1}{%
8140     \GlsXtrWarnDeprecatedAbbrStyle{#1}{#2}%
8141     \csuse{@glsabrv@dispstyle@setup@#2}%
8142   }%
8143   \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
8144 }

```

ecatedAbbrStyle Generate warning for deprecated style use.

```

8145 \newcommand*{\GlsXtrWarnDeprecatedAbbrStyle}[2]{%
8146   \GlossariesExtraWarning{Deprecated abbreviation style name '#1',%
8147   use '#2' instead}%
8148 }

```

```

eAbbrStyleSetup
8149 \newcommand*{\GlsXtrUseAbbrStyleSetup}[1]{%
8150   \ifcsundef{@glsabbrv@dispstyle@setup@#1}{%
8151     {%
8152       \PackageError{glossaries-extra}{%
8153         Unknown abbreviation style definitions '#1'}{}%
8154     }%
8155   {%
8156     \csname @glsabbrv@dispstyle@setup@#1\endcsname
8157   }%
8158 }

```

```

seAbbrStyleFmts
8159 \newcommand*{\GlsXtrUseAbbrStyleFmts}[1]{%
8160   \ifcsundef{@glsabbrv@dispstyle@fmts@#1}{%
8161     {%
8162       \PackageError{glossaries-extra}{%
8163         Unknown abbreviation style formats '#1'}{}%
8164     }%
8165   {%
8166     \csname @glsabbrv@dispstyle@fmts@#1\endcsname
8167   }%
8168 }

```

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.

```

8169 \newif\ifglsxtrinsertinside
8170 \glsxtrinsertinsidefalse

```

```

trlongshortname
8171 \newcommand*{\glsxtrlongshortname}{%
8172   \protect\glsabbrvfont{\the\glsshorttok}%
8173 }

```

```

long-short
8174 \newabbreviationstyle{long-short}{%
8175 {%

```

Set accessibility attributes if enabled.

```
8176 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
8177 \renewcommand*\CustomAbbreviationFields{%
8178   name={\glsxtrlongshortname},
8179   sort={\the\glsshorttok},
8180   first={\protect\glsfirstlongfont{\the\glslongtok}%
8181     \protect\glsxtrfullsep{\the\glslabeltok}%
8182     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
8183   firstplural={\protect\glsfirstlongfont{\the\glslongpltok}%
8184     \protect\glsxtrfullsep{\the\glslabeltok}%
8185     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%
8186   plural={\protect\glsabbrvfont{\the\glsshortpltok}},%
8187   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8188   description={\the\glslongtok}}%
```

Unset the regular attribute if it has been set.

```
8189 \renewcommand*\GlsXtrPostNewAbbreviation{%
8190   \glshasattribute{\the\glslabeltok}{regular}%
8191   {%
8192     \glssetattribute{\the\glslabeltok}{regular}{false}%
8193   }%
8194   {}%
8195 }%
8196 }%
8197 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
8198 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
8199 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
8200 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
8201 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8202 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
8203 \renewcommand*\glsxtrfullformat[2]{%
8204   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8205   \ifglsxtrinsertinside\else##2\fi
8206   \glsxtrfullsep{##1}%
8207   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
8208 }%
8209 \renewcommand*\glsxtrfullplformat[2]{%
8210   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8211   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8212   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
8213 }%
8214 \renewcommand*\Glsxtrfullformat[2]{%
8215   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8216   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
```

```

8217     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
8218   }%
8219   \renewcommand*{\Glsxtrfullplformat}[2]{%
8220     \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8221     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8222     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
8223   }%
8224 }

```

Set this as the default style for general abbreviations:

```
8225 \setabbreviationstyle{long-short}
```

ngshortdescsort

```

8226 \newcommand*{\glsxtrlongshortdescsort}{%
8227   \expandonce\glsxtrorglong\space (\expandonce\glsxtrorgshort)%
8228 }

```

ngshortdescname

```

8229 \newcommand*{\glsxtrlongshortdescname}{%
8230   \protect\glslongfont{\the\glslongtok}%
8231   \glsxtrparen{\protect\glsabbrvfont{\the\glsshorttok}}%
8232 }

```

long-short-desc User supplies description. The long form is included in the name.

```
8233 \newabbreviationstyle{long-short-desc}%
8234 {%
```

Set accessibility attributes if enabled.

```
8235 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

8236 \renewcommand*{\CustomAbbreviationFields}{%
8237   name={\glsxtrlongshortdescname},%
8238   sort={\glsxtrlongshortdescsort},%
8239   first={\protect\glsfirstlongfont{\the\glslongtok}%
8240     \protect\glsxtrfullsep{\the\glslabeltok}%
8241     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
8242   firstplural={\protect\glsfirstlongfont{\the\glslongpltok}%
8243     \protect\glsxtrfullsep{\the\glslabeltok}%
8244     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%

```

The text key should only have the short form.

```
8245   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8246   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
8247 }%
```

Unset the regular attribute if it has been set.

```
8248 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8249   \glshasattribute{\the\glslabeltok}{regular}%

```

```

8250     {%
8251         \glssetattribute{\the\glslabeltok}{regular}{false}%
8252     }%
8253     {}%
8254 }%
8255 }%
8256 {%
8257     \GlsXtrUseAbbrStyleFmts{long-short}%
8258 }

```

trshortlongname

```

8259 \newcommand*\glsxtrshortlongname{%
8260     \protect\glsabbrvfont{\the\glsshorttok}%
8261 }

```

short-long Short form followed by long form in parenthesis on first use.

```

8262 \newabbreviationstyle{short-long}%
8263 {%

```

Set accessibility attributes if enabled.

```

8264     \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel

```

Setup the default fields.

```

8265     \renewcommand*\CustomAbbreviationFields{%
8266         name={\glsxtrshortlongname},
8267         sort={\the\glsshorttok},
8268         description={\the\glslongtok},%
8269         first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
8270             \protect\glsxtrfullsep{\the\glslabeltok}%
8271             \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
8272         firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
8273             \protect\glsxtrfullsep{\the\glslabeltok}%
8274             \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
8275         text={\protect\glsabbrvfont{\the\glsshorttok}},%
8276         plural={\protect\glsabbrvfont{\the\glsshortpltok}}}}

```

Unset the regular attribute if it has been set.

```

8277     \renewcommand*\GlsXtrPostNewAbbreviation{%
8278         \glshasattribute{\the\glslabeltok}{regular}%
8279     }%
8280         \glssetattribute{\the\glslabeltok}{regular}{false}%
8281     }%
8282     {}%
8283 }%
8284 }%
8285 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8286     \renewcommand*\abrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
8287     \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%

```

```

8288 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8289 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8290 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8291 \renewcommand*{\glsxtrfullformat}[2]{%
8292   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8293   \ifglsxtrinsertinside\else##2\fi
8294   \glsxtrfullsep{##1}%
8295   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8296 }%
8297 \renewcommand*{\glsxtrfullplformat}[2]{%
8298   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8299   \ifglsxtrinsertinside\else##2\fi
8300   \glsxtrfullsep{##1}%
8301   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
8302 }%
8303 \renewcommand*{\Glsxtrfullformat}[2]{%
8304   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8305   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8306   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8307 }%
8308 \renewcommand*{\Glsxtrfullplformat}[2]{%
8309   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8310   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8311   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
8312 }%
8313 }

```

ortlongdescsort

```
8314 \newcommand*{\glsxtrshortlongdescsort}{\the\glsshorttok}
```

ortlongdescname

```

8315 \newcommand*{\glsxtrshortlongdescname}{%
8316   \protect\glsabbrvfont{\the\glsshorttok}%
8317   \glsxtrparen{\protect\glslongfont{\the\glslongtok}}}%
8318 }

```

short-long-desc User supplies description. The long form is included in the name.

```

8319 \newabbreviationstyle{short-long-desc}%
8320 {%

```

Set accessibility attributes if enabled.

```
8321 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

8322 \renewcommand*{\CustomAbbreviationFields}{%
8323   name={\glsxtrshortlongdescname},%
8324   sort={\glsxtrshortlongdescsort},%
8325   first={\protect\glsfirstabbrvfont{\the\glsshorttok}}%

```

```

8326     \protect\glsxtrfullsep{\the\glslabeltok}%
8327     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
8328     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
8329     \protect\glsxtrfullsep{\the\glslabeltok}%
8330     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
8331     text={\protect\glsabbrvfont{\the\glsshorttok}},%
8332     plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%
8333 }%

```

Unset the regular attribute if it has been set.

```

8334 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8335   \glshasattribute{\the\glslabeltok}{regular}%
8336   {%
8337     \glssetattribute{\the\glslabeltok}{regular}{false}%
8338   }%
8339   {}%
8340 }%
8341 }%
8342 {%
8343 \GlsXtrUseAbbrStyleFmts{short-long}%
8344 }%

```

`ongfootnotefont` Only used by the “footnote” styles.

```
8345 \newcommand*{\glsfirstlongfootnotefont}[1]{\glslongfootnotefont{\#1}}%
```

`ongfootnotefont` Only used by the “footnote” styles.

```
8346 \newcommand*{\glslongfootnotefont}[1]{\glslongdefaultfont{\#1}}%
```

`trabbrvfootnote`

`\glsxtrabbrvfootnote{\langle label \rangle}{\langle long \rangle}`

Command used by footnote abbreviation styles. The default definition ignores the first argument. The second argument `\langle long \rangle` includes the font changing command and may be the singular or plural form, depending on the command that was used (for example, `\gls` or `\glspl`).

```
8347 \newcommand*{\glsxtrabbrvfootnote}[2]{\footnote{\#2}}
```

`xtrfootnotename`

```

8348 \newcommand*{\glsxtrfootnotename}{%
8349   \protect\glsabbrvfont{\the\glsshorttok}%
8350 }%

```

`footnote` Short form followed by long form in footnote on first use.

```

8351 \newabbreviationstyle{footnote}{%
8352 }%

```

Set accessibility attributes if enabled. (Add `firstshortaccess` since long form is hidden in a footnote on first use.)

```
8353 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
8354 \renewcommand*\CustomAbbreviationFields{%
8355   name={\glsxtrfootnotename},
8356   sort={\the\glsshorttok},
8357   description={\the\glslongtok},%
8358   first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
8359     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8360       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8361   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
8362     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8363       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
8364   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8365   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.

```
8366 \renewcommand*\GlsXtrPostNewAbbreviation{%
8367   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8368   \glshasattribute{\the\glslabeltok}{regular}%
8369   {%
8370     \glssetattribute{\the\glslabeltok}{regular}{false}%
8371   }%
8372   {}%
8373 }%
8374 }%
8375 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
8376 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
8377 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{\##1}}%
8378 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{\##1}}%
8379 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{\##1}}%
8380 \renewcommand*\glslongfont[1]{\glslongfootnotefont{\##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```
8381 \renewcommand*\glsxtrfullformat}[2]{%
8382   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
8383   \ifglsxtrinsertinside\else{\##2}\fi
8384   {\protect\glsxtrabbrvfootnote{\##1}%
8385     {\glsfirstlongfootnotefont{\glsaccesslong{\##1}}}}%
8386 }%
8387 \renewcommand*\glsxtrfullplformat}[2]{%
8388   \glsfirstabbrvfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside{\##2}\fi}%
8389   \ifglsxtrinsertinside\else{\##2}\fi
8390   {\protect\glsxtrabbrvfootnote{\##1}}%
```

```

8391     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8392   }%
8393 \renewcommand*{\Glsxtrfullformat}[2]{%
8394   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8395   \ifglsxtrinsertinside\else##2\fi
8396   \protect\glsxtrabrvfootnote{##1}%
8397     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8398   }%
8399 \renewcommand*{\Glsxtrfullplformat}[2]{%
8400   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8401   \ifglsxtrinsertinside\else##2\fi
8402   \protect\glsxtrabrvfootnote{##1}%
8403     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8404 }

```

The first use full form and the inline full form use the short (long) style.

```

8405 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8406   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8407   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8408   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8409 }%
8410 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8411   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8412   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8413   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8414 }%
8415 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8416   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8417   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8418   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8419 }%
8420 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8421   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8422   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8423   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8424 }%
8425 }

```

short-footnote

```
8426 \letabbreviationstyle{short-footnote}{footnote}
```

ootnotedescname

```

8427 \newcommand*{\glsxtrfootnotedescname}{%
8428   \protect\glsabbrvfont{\the\glsshorttok}%
8429   \protect\glsxtrfullsep{\the\glslabeltok}%
8430   \protect\glsxtrparen{\protect\glslongfont{\the\glslongtok}}%
8431 }

```

ootnotedescsort

```
8432 \newcommand*{\glsxtrfootnotedescsort}{\the\glsshorttok}
```

t-footnote-desc Like short-footnote but with user supplied description.

```
8433 \newabbreviationstyle{short-footnote-desc}{%
8434 {%
  Set accessibility attributes if enabled
  8435 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
  Setup the default fields.
  8436 \renewcommand*\CustomAbbreviationFields{%
  8437   name={\glsxtrfootnotedescname},
  8438   sort={\glsxtrfootnotedescsort},
  8439   first={\protect\glsfirstabbrvfont{\the\glsshorttok}\%
  8440     \protect\glsxtrabbrvfootnote{\the\glslabeltok}\%
  8441       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
  8442   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}\%
  8443     \protect\glsxtrabbrvfootnote{\the\glslabeltok}\%
  8444       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
  8445   text={\protect\glsabbrvfont{\the\glsshorttok}},%
  8446   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.
  8447 \renewcommand*\GlsXtrPostNewAbbreviation{%
  8448   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}\%
  8449   \glshasattribute{\the\glslabeltok}{regular}\%
  8450   {%
  8451     \glssetattribute{\the\glslabeltok}{regular}{false}\%
  8452   }%
  8453   {}%
  8454 }%
  8455 }%
  8456 {%
  8457 \GlsXtrUseAbbrStyleFmts{footnote}\%
  8458 }
```

footnote-desc Synonym.

```
8459 \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.

```
8460 \newabbreviationstyle{postfootnote}{%
8461 {%
  Set accessibility attributes if enabled. (Add firstshortaccess since long form is hidden in a
  footnote on first use.)
  8462 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
  Setup the default fields.
  8463 \renewcommand*\CustomAbbreviationFields{%
```

```

8464     name={\glsxtrfootnotename},
8465     sort={\the\glsshorttok},
8466     description={\the\glslongtok},%
8467     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
8468     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
8469     text={\protect\glsabbrvfont{\the\glsshorttok}},%
8470     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.

```

8471 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8472   \csdef{glsxtrpostlink\glscategorylabel}{%
8473     \glsxtrifwasfirstuse
8474   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

8475   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8476   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
8477 }%
8478 {}%
8479 }%
8480 \glshasattribute{\the\glslabeltok}{regular}%
8481 {}%
8482   \glssetattribute{\the\glslabeltok}{regular}{false}%
8483 }%
8484 {}%
8485 }%

```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```

8486 \renewcommand*{\glsxtrsetupfulldefs}{%
8487   \let\glsxtrifwasfirstuse\@secondoftwo
8488 }%
8489 }%
8490 {}%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8491 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8492 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{\##1}}%
8493 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{\##1}}%
8494 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{\##1}}%
8495 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{\##1}}%

```

The full format displays the short form. The long form is deferred.

```

8496 \renewcommand*{\glsxtrfullformat}[2]{%
8497   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
8498   \ifglsxtrinsertinside\else##2\fi
8499 }%
8500 \renewcommand*{\glsxtrfullplformat}[2]{%

```

```

8501   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8502   \ifglsxtrinsertinside\else##2\fi
8503 }
8504 \renewcommand*\{\Glsxtrfullformat}[2]{%
8505   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8506   \ifglsxtrinsertinside\else##2\fi
8507 }
8508 \renewcommand*\{\Glsxtrfullplformat}[2]{%
8509   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8510   \ifglsxtrinsertinside\else##2\fi
8511 }

The first use full form and the inline full form use the short (long) style.

8512 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
8513   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8514   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8515   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8516 }
8517 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
8518   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8519   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8520   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8521 }
8522 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
8523   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8524   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8525   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8526 }
8527 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
8528   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8529   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8530   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8531 }
8532 }

```

rt-postfootnote

```
8533 \letabbreviationstyle{short-postfootnote}{postfootnote}
```

stfootnote-desc

Like short-postfootnote but with user supplied description.

```
8534 \newabbreviationstyle{short-postfootnote-desc}%
8535 {%
```

Set accessibility attributes if enabled.

```
8536 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
8537 \renewcommand*\{\CustomAbbreviationFields}{%
8538   name={\glsxtrfootnotedescname},
8539   sort={\glsxtrfootnotedescsort},
8540   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
8541   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
```

```
8542     text={\protect\glsabbrvfont{\the\glsshorthtok}},%
8543     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.

```
8544 \renewcommand*\GlsXtrPostNewAbbreviation{%
8545   \csdef{glsxtrpostlink\glscategorylabel}{%
8546     \glsxtrifwasfirstuse
8547   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
8548   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8549   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
8550 }%
8551 {}%
8552 }%
8553 \glshasattribute{\the\glslabeltok}{regular}%
8554 {%
8555   \glssetattribute{\the\glslabeltok}{regular}{false}%
8556 }%
8557 {}%
8558 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
8559 \renewcommand*\glsxtrsetupfulldefs{%
8560   \let\glsxtrifwasfirstuse\@secondoftwo
8561 }%
8562 }%
8563 {}%
8564 \GlsXtrUseAbbrStyleFmts{postfootnote}%
8565 }
```

stfootnote-desc

```
8566 \letabbreviationstyle{postfootnote-desc}{short-postfootnote-desc}
```

shortnolongname

```
8567 \newcommand*\glsxtrshortnolongname{%
8568   \protect\glsabbrvfont{\the\glsshorthtok}%
8569 }
```

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.

```
8570 \newabbreviationstyle{short}%
8571 {}
```

Set accessibility attributes if enabled.

```
8572 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
8573 \renewcommand*\CustomAbbreviationFields{%
8574   name={\glsxtrshortno longname},
8575   sort={\the\glsshorttok},
8576   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
8577   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
8578   text={\protect\glsabbrvfont{\the\glsshorttok}},
8579   plural={\protect\glsabbrvfont{\the\glsshortpltok}},
8580   description={\the\glslongtok}}%
8581 \renewcommand*\GlsXtrPostNewAbbreviation{%
8582   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8583 }%
8584 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
8585 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
8586 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
8587 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
8588 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8589 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short form followed by the long form in parentheses.

```
8590 \renewcommand*\glsxtrinlinefullformat}[2]{%
8591   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
8592   \ifglsxtrinsertinside##2\fi}%
8593 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8594 \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8595 }%
8596 \renewcommand*\glsxtrinlinefullplformat}[2]{%
8597   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
8598   \ifglsxtrinsertinside##2\fi}%
8599 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8600 \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
8601 }%
8602 \renewcommand*\Glsxtrinlinefullformat}[2]{%
8603   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
8604   \ifglsxtrinsertinside##2\fi}%
8605 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8606 \glsxtrparen{\glsfirstlongfont{\Glsaccesslong{##1}}}%
8607 }%
8608 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
8609   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
8610   \ifglsxtrinsertinside##2\fi}%
8611 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8612 \glsxtrparen{\glsfirstlongfont{\Glsaccesslongpl{##1}}}%
8613 }%
```

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.

```
8614 \renewcommand*{\glsxtrfullformat}[2]{%
8615   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8616   \ifglsxtrinsertinside\else##2\fi
8617 }%
8618 \renewcommand*{\glsxtrfullplformat}[2]{%
8619   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8620   \ifglsxtrinsertinside\else##2\fi
8621 }%
8622 \renewcommand*{\Glsxtrfullformat}[2]{%
8623   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8624   \ifglsxtrinsertinside\else##2\fi
8625 }%
8626 \renewcommand*{\Glsxtrfullplformat}[2]{%
8627   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8628   \ifglsxtrinsertinside\else##2\fi
8629 }%
8630 }
```

Set this as the default style for acronyms:

```
8631 \setabbreviationstyle[acronym]{short}
```

`short-nolong`

```
8632 \letabbreviationstyle{short-nolong}{short}
```

`rt-nolong-noreg` Like `short-nolong` but doesn't set the regular attribute.

```
8633 \newabbreviationstyle{short-nolong-noreg}%
8634 {%
8635   \GlsXtrUseAbbrStyleSetup{short-nolong}%

```

Unset the regular attribute if it has been set.

```
8636 \renewcommand*{\GlsXtrPostNewAbbreviation}%
8637   \glshasattribute{\the\glslabeltok}{regular}%
8638 {%
8639   \glssetattribute{\the\glslabeltok}{regular}{false}%
8640 }%
8641 {}%
8642 }%
8643 }%
8644 {}%
8645 \GlsXtrUseAbbrStyleFmts{short-nolong}%
8646 }
```

`trshortdescname`

```
8647 \newcommand*{\glsxtrshortdescname}%
8648   \protect\glsabbrvfont{\the\glsshorttok}%
8649   \protect\glsxtrfullsep{\the\glslabeltok}%
8650   \protect\glsxtrparen{\protect\glslongfont{\the\glslongtok}}%
8651 }
```

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.

```
8652 \newabbreviationstyle{short-desc}%
8653 {%
```

Set accessibility attributes if enabled.

```
8654 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
8655 \renewcommand*\CustomAbbreviationFields{%
8656   name={\glsxtrshortdescname},
8657   sort={\the\glsshorttok},
8658   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
8659   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
8660   text={\protect\glsabbrvfont{\the\glsshorttok}},
8661   plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%
8662 \renewcommand*\GlsXtrPostNewAbbreviation{%
8663   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8664 }%
8665 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
8666 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
8667 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
8668 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
8669 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8670 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short format followed by the long form in parentheses.

```
8671 \renewcommand*\glsxtrinlinefullformat[2]{%
8672   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8673   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8674   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8675 }%
8676 \renewcommand*\glsxtrinlinefullplformat[2]{%
8677   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8678   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8679   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8680 }%
8681 \renewcommand*\Glsxtrinlinefullformat[2]{%
8682   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8683   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8684   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8685 }%
8686 \renewcommand*\Glsxtrinlinefullplformat[2]{%
8687   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8688   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8689   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8690 }%
```

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.

```
8691 \renewcommand*{\glsxtrfullformat}[2]{%
8692   \glsfirstabbrvfont{\glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
8693   \ifglsxtrinsertinside\else##2\fi
8694 }%
8695 \renewcommand*{\glsxtrfullplformat}[2]{%
8696   \glsfirstabbrvfont{\glsaccessshortpl{\#1}\ifglsxtrinsertinside##2\fi}%
8697   \ifglsxtrinsertinside\else##2\fi
8698 }%
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 }
```

short-nolong-desc

```
8708 \letabbreviationstyle{short-nolong-desc}{short-desc}
```

long-desc-noreg

Like short-nolong-desc but doesn't set the regular attribute.

```
8709 \newabbreviationstyle{short-nolong-desc-noreg}%
8710 {%
8711   \GlsXtrUseAbbrStyleSetup{short-nolong-desc}%

```

Unset the regular attribute if it has been set.

```
8712 \renewcommand*{\GlsXtrPostNewAbbreviation}%
8713   \glshasattribute{\the\glslabeltok}{regular}%
8714 {%
8715   \glssetattribute{\the\glslabeltok}{regular}{false}%
8716 }%
8717 {%
8718 }%
8719 }%
8720 {%
8721   \GlsXtrUseAbbrStyleFmts{short-nolong-desc}%
8722 }
```

nolong-short

Similar to short-nolong but the full form shows the long form followed by the short form in parentheses.

```
8723 \newabbreviationstyle{nolong-short}%
8724 {%
8725   \GlsXtrUseAbbrStyleSetup{short-nolong}%
8726 }%
8727 {%
8728   \GlsXtrUseAbbrStyleFmts{short-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```
8729 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8730   \protect\glsfirstlongfont{\glsaccesslong{##1}%
8731     \ifglsxtrinsertinside##2\fi}%
8732   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8733   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
8734 }%
8735 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8736   \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
8737     \ifglsxtrinsertinside##2\fi}%
8738   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8739   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
8740 }%
8741 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8742   \protect\glsfirstlongfont{\glsaccesslong{##1}%
8743     \ifglsxtrinsertinside##2\fi}%
8744   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8745   \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshort{##1}}}}%
8746 }%
8747 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8748   \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
8749     \ifglsxtrinsertinside##2\fi}%
8750   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8751   \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshortpl{##1}}}}%
8752 }%
8753 }
```

ong-short-noreg Like `nolong-short` but doesn't set the `regular` attribute.

```
8754 \newabbreviationstyle{nolong-short-noreg}{%
8755 }%
8756 \GlsXtrUseAbbrStyleSetup{nolong-short}
```

Unset the `regular` attribute if it has been set.

```
8757 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8758   \glshasattribute{\the\glslabeltok}{regular}%
8759   {%
8760     \glssetattribute{\the\glslabeltok}{regular}{false}%
8761   }%
8762   {}%
8763 }%
8764 }%
8765 {%
8766 \GlsXtrUseAbbrStyleFmts{nolong-short}%
8767 }
```

noshortdescname

```
8768 \newcommand*{\glsxtrlongnoshortdescname}{%
8769   \protect\glslongfont{\the\glslongtok}%
8770 }
```

`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.

```

8771 \newabbreviationstyle{long-desc}%
8772 {%
8773   \renewcommand*{\CustomAbbreviationFields}{%
8774     name={\glsxtrlongnoshortdescname},
8775     sort={\the\glslongtok},
8776     first={\protect\glsfirstlongfont{\the\glslongtok}},
8777     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
8778     text={\glslongfont{\the\glslongtok}},
8779     plural={\glslongfont{\the\glslongpltok}}%
8780   }%
8781   \renewcommand*{\GlsXtrPostNewAbbreviation}%
8782   {\glssetattribute{\the\glslabeltok}{regular}{true}}%
8783 }%
8784 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8785 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8786 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
8787 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8788 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8789 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8790 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8791   \glslongfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8792   \ifglsxtrinsertinside \else##2\fi
8793 }%
8794 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8795   \glslongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8796   \ifglsxtrinsertinside \else##2\fi
8797 }%
8798 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8799   \glslongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8800   \ifglsxtrinsertinside \else##2\fi
8801 }%
8802 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8803   \glslongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8804   \ifglsxtrinsertinside \else##2\fi
8805 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8806 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8807   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8808   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8809 \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
8810 }%

```

```

8811 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8812   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8813   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8814   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
8815 }%
8816 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8817   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8818   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8819   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
8820 }%
8821 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8822   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8823   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8824   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
8825 }%

```

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.

```

8826 \renewcommand*{\glsxtrfullformat}[2]{%
8827   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8828   \ifglsxtrinsertinside\else##2\fi
8829 }%
8830 \renewcommand*{\glsxtrfullplformat}[2]{%
8831   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8832   \ifglsxtrinsertinside\else##2\fi
8833 }%
8834 \renewcommand*{\Glsxtrfullformat}[2]{%
8835   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8836   \ifglsxtrinsertinside\else##2\fi
8837 }%
8838 \renewcommand*{\Glsxtrfullplformat}[2]{%
8839   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8840   \ifglsxtrinsertinside\else##2\fi
8841 }%
8842 }

```

`ng-noshort-desc` Provide a synonym that matches similar styles.

```
8843 \letabbreviationstyle{long-noshort-desc}{long-desc}
```

`hort-desc-noreg` Like `long-noshort-desc` but doesn't set the regular attribute.

```

8844 \newabbreviationstyle{long-noshort-desc-noreg}%
8845 {%
8846   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%

```

Unset the regular attribute if it has been set.

```

8847 \renewcommand*{\GlsXtrPostNewAbbreviation}%
8848   \glshasattribute{\the\glslabeltok}{regular}%
8849 {%
8850   \glssetattribute{\the\glslabeltok}{regular}{false}%
8851 }%

```

```
8852     {}%
8853   }%
8854 }%
8855 {%
8856   \GlsXtrUseAbbrStyleFmts{long-noshort-desc}%
8857 }
```

longnoshortname

```
8858 \newcommand*{\glsxtrlongnoshortname}{%
8859   \protect\glsabbrvfont{\the\glsshorttok}%
8860 }
```

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.

```
8861 \newabbreviationstyle{long}%
8862 {%
```

Set accessibility attributes if enabled.

```
8863   \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
```

Setup the default fields.

```
8864   \renewcommand*{\CustomAbbreviationFields}{%
8865     name={\glsxtrlongnoshortname},
8866     sort={\the\glsshorttok},
8867     first={\protect\glsfirstlongfont{\the\glslongtok}},
8868     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
8869     text={\glslongfont{\the\glslongtok}},
8870     plural={\glslongfont{\the\glslongpltok}},%
8871     description={\the\glslongtok}%
8872 }%
8873   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8874     \glssetattribute{\the\glslabeltok}{regular}{true}%
8875 }%
8876 {%
8877   \GlsXtrUseAbbrStyleFmts{long-desc}%
8878 }
```

long-noshort Provide a synonym that matches similar styles.

```
8879 \letabbreviationstyle{long-noshort}{long}
```

g-noshort-noreg Like **long-noshort** but doesn't set the **regular** attribute.

```
8880 \newabbreviationstyle{long-noshort-noreg}%
8881 {%
8882   \GlsXtrUseAbbrStyleSetup{long-noshort}%

Unset the regular attribute if it has been set.
```

```
8883   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8884     \glshasattribute{\the\glslabeltok}{regular}%
8885     {%
```

```

8886     \glssetattribute{\the\glslabeltok}{regular}{false}%
8887     }%
8888     {}%
8889     }%
8890 }%
8891 {%
8892   \GlsXtrUseAbbrStyleFmts{long-noshort}%
8893 }

```

1.7.3 Predefined Styles (Small Capitals)

These styles use `\textsc` for the short form.

`\glsxtrscfont` Maintained for backward-compatibility.

```
8894 \newcommand*{\glsxtrscfont}[1]{\textsc{#1}}
```

`\glsabbrvscfont` Added for consistent naming.

```
8895 \newcommand*{\glsabbrvscfont}{\glsxtrscfont}
```

`\sxtrfirstscfont` Maintained for backward-compatibility.

```
8896 \newcommand*{\sxtrfirstscfont}[1]{\glsabbrvscfont{#1}}
```

`\irstabbrvscfont` Added for consistent naming.

```
8897 \newcommand*{\irstabbrvscfont}{\sxtrfirstscfont}
```

and for the default short form suffix:

`\glsxtrscsuffix` \protect needs to come inside \s to avoid interfering with all caps.

```
8898 \newcommand*{\glsxtrscsuffix}{\protect\glsxtrfullsep{\glsxtrabbrypluralsuffix}}
```

`long-short-sc`

```
8899 \newabbreviationstyle{long-short-sc}{%
8900 }%
```

Set accessibility attributes if enabled.

```
8901 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```

8902 \renewcommand*{\CustomAbbreviationFields}{%
8903   name={\glsxtrlongshortname},%
8904   sort={\the\glsshorttok},%
8905   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
8906   \protect\glsxtrfullsep{\the\glslabeltok}%
8907   \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
8908   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
8909   \protect\glsxtrfullsep{\the\glslabeltok}%
8910   \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
8911   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8912   plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%

```

```

8913     description={\the\glslongtok}}%
8914 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8915     \glshasattribute{\the\glslabeltok}{regular}}%
8916     {%
8917         \glssetattribute{\the\glslabeltok}{regular}{false}}%
8918     }%
8919     {}%
8920 }%
8921 }%
8922 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8923 \renewcommand*{\abbrvpluralsuffix}{\glsxtrscsuffix}%
8924 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8925 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%

```

Use the default long fonts.

```

8926 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8927 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8928 \renewcommand*{\glsxtrfullformat}[2]{%
8929     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8930     \ifglsxtrinsertinside\else##2\fi
8931     \glsxtrfullsep{##1}%
8932     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8933 }%
8934 \renewcommand*{\glsxtrfullplformat}[2]{%
8935     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8936     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8937     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8938 }%
8939 \renewcommand*{\Glsxtrfullformat}[2]{%
8940     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8941     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8942     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8943 }%
8944 \renewcommand*{\Glsxtrfullplformat}[2]{%
8945     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8946     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8947     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8948 }%
8949 }

```

g-short-sc-desc

```

8950 \newabbreviationstyle{long-short-sc-desc}%
8951 {%

```

Set accessibility attributes if enabled.

```

8952 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```
8953 \renewcommand*{\CustomAbbreviationFields}{%
8954   name={\glsxtrlongshortdescname},
8955   sort={\glsxtrlongshortdescsort},%
8956   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
8957     \protect\glsxtrfullsep{\the\glslabeltok}%
8958     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
8959   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
8960     \protect\glsxtrfullsep{\the\glslabeltok}%
8961     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
8962   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8963   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%
8964 }%
```

Unset the regular attribute if it has been set.

```
8965 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8966   \glshasattribute{\the\glslabeltok}{regular}%
8967   {%
8968     \glssetattribute{\the\glslabeltok}{regular}{false}%
8969   }%
8970   {}%
8971 }%
8972 }%
8973 {%
```

As long-short-sc style:

```
8974 \GlsXtrUseAbbrStyleFmts{long-short-sc}%
8975 }
```

short-sc-long Now the short (long) version

```
8976 \newabbreviationstyle{short-sc-long}%
8977 {%
```

Set accessibility attributes if enabled.

```
8978 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
8979 \renewcommand*{\CustomAbbreviationFields}{%
8980   name={\glsxtrshortlongname},
8981   sort={\the\glsshorttok},
8982   description={\the\glslongtok},%
8983   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
8984     \protect\glsxtrfullsep{\the\glslabeltok}%
8985     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8986   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
8987     \protect\glsxtrfullsep{\the\glslabeltok}%
8988     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8989   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8990   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```

8991 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8992   \glshasattribute{\the\glslabeltok}{regular}{}
8993   {%
8994     \glssetattribute{\the\glslabeltok}{regular}{false}{}
8995   }%
8996   {}{%
8997 }%
8998 }%
8999 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9000 \renewcommand*\abbrvpluralsuffix}{\glsxtrscsuffix}{%
9001 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}{%
9002 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}{%
9003 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}{%
9004 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}{%

```

The first use full form and the inline full form are the same for this style.

```

9005 \renewcommand*\glsxtrfullformat}[2]{%
9006   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}{%
9007   \ifglsxtrinsertinside\else##2\fi
9008   \glsxtrfullsep{##1}{%
9009     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}{%
9010   }{%
9011 \renewcommand*\glsxtrfullplformat}[2]{%
9012   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}{%
9013   \ifglsxtrinsertinside\else##2\fi
9014   \glsxtrfullsep{##1}{%
9015     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}{%
9016   }{%
9017 \renewcommand*\Glsxtrfullformat}[2]{%
9018   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}{%
9019   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{%
9020   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}{%
9021 }{%
9022 \renewcommand*\Glsxtrfullplformat}[2]{%
9023   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}{%
9024   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{%
9025   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}{%
9026 }{%
9027 }

```

`rt-sc-long-desc` As before but user provides description

```

9028 \newabbreviationstyle{short-sc-long-desc}{%
9029 }{%

```

Set accessibility attributes if enabled.

```

9030 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

9031 \renewcommand*\CustomAbbreviationFields}{%

```

```

9032     name={\glsxtrshortlongdescname},
9033     sort={\glsxtrshortlongdescsort},
9034     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
9035       \protect\glsxtrfullsep{\the\glslabeltok}%
9036       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9037     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
9038       \protect\glsxtrfullsep{\the\glslabeltok}%
9039       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9040     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9041     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
9042   }%

```

Unset the regular attribute if it has been set.

```

9043   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9044     \glshasattribute{\the\glslabeltok}{regular}%
9045     {%
9046       \glssetattribute{\the\glslabeltok}{regular}{false}%
9047     }%
9048   }%
9049 }%
9050 }%
9051 {%

```

As short-sc-long style:

```

9052   \GlsXtrUseAbbrStyleFmts{short-sc-long}%
9053 }

```

short-sc

```

9054 \newabbreviationstyle{short-sc}%
9055 {%

```

Set accessibility attributes if enabled.

```

9056   \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel

```

Setup the default fields.

```

9057   \renewcommand*{\CustomAbbreviationFields}{%
9058     name={\glsxtrshortnolongname},
9059     sort={\the\glsshorttok},
9060     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
9061     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
9062     text={\protect\glsabbrvscfont{\the\glsshorttok}},
9063     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},
9064     description={\the\glslongtok}}%
9065   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9066     \glssetattribute{\the\glslabeltok}{regular}{true}}%
9067 }%
9068 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9069   \renewcommand*{\abbrvpluralsuffix}{\glsxtrscsuffix}%
9070   \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%

```

```

9071 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9072 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9073 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

9074 \renewcommand*\glsxtrinlinefullformat}[2]{%
9075   \protect\glsfirstabbrvscfont{\glsaccessshort{##1}}%
9076   \ifglsxtrinsertinside##2\fi}%
9077   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9078   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9079 }%
9080 \renewcommand*\glsxtrinlinefullplformat}[2]{%
9081   \protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}%
9082   \ifglsxtrinsertinside##2\fi}%
9083   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9084   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9085 }%
9086 \renewcommand*\Glsxtrinlinefullformat}[2]{%
9087   \protect\glsfirstabbrvscfont{\Glsaccessshort{##1}}%
9088   \ifglsxtrinsertinside##2\fi}%
9089   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9090   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9091 }%
9092 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
9093   \protect\glsfirstabbrvscfont{\Glsaccessshortpl{##1}}%
9094   \ifglsxtrinsertinside##2\fi}%
9095   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9096   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9097 }%

```

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.

```

9098 \renewcommand*\glsxtrfullformat}[2]{%
9099   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9100   \ifglsxtrinsertinside\else##2\fi
9101 }%
9102 \renewcommand*\glsxtrfullplformat}[2]{%
9103   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9104   \ifglsxtrinsertinside\else##2\fi
9105 }%
9106 \renewcommand*\Glsxtrfullformat}[2]{%
9107   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9108   \ifglsxtrinsertinside\else##2\fi
9109 }%
9110 \renewcommand*\Glsxtrfullplformat}[2]{%
9111   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9112   \ifglsxtrinsertinside\else##2\fi
9113 }%
9114 }

```

```

short-sc-nolong
9115 \letabbreviationstyle{short-sc-nolong}{short-sc}

short-sc-desc
9116 \newabbreviationstyle{short-sc-desc}%
9117 {%
  Set accessibility attributes if enabled.
9118 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
  Setup the default fields.
9119 \renewcommand*\CustomAbbreviationFields{%
9120   name={\glsxtrshortdescname},
9121   sort={\the\glsshorttok},
9122   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
9123   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
9124   text={\protect\glsabbrvscfont{\the\glsshorttok}},
9125   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%
9126 \renewcommand*\GlsXtrPostNewAbbreviation{%
9127   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9128 }%
9129 {%
  Use smallcaps and adjust the plural suffix to revert to upright.
9130 \renewcommand*\abbrvpluralsuffix{\glsxtrscsuffix}%
9131 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\#1}}%
9132 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\#1}}%
9133 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\#1}}%
9134 \renewcommand*\glslongfont[1]{\glslongdefaultfont{\#1}}%
  The inline full form displays the short format followed by the long form in parentheses.
9135 \renewcommand*\glsxtrinlinefullformat[2]{%
9136   \glsfirstabbrvscfont{\glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
9137   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9138   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
9139 }%
9140 \renewcommand*\glsxtrinlinefullplformat[2]{%
9141   \glsfirstabbrvscfont{\glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
9142   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9143   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
9144 }%
9145 \renewcommand*\Glsxtrinlinefullformat[2]{%
9146   \glsfirstabbrvscfont{\Glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
9147   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9148   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
9149 }%
9150 \renewcommand*\Glsxtrinlinefullplformat[2]{%
9151   \glsfirstabbrvscfont{\Glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
9152   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9153   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
9154 }%

```

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.

```
9155 \renewcommand*{\glsxtrfullformat}[2]{%
9156   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9157   \ifglsxtrinsertinside\else##2\fi
9158 }%
9159 \renewcommand*{\glsxtrfullplformat}[2]{%
9160   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9161   \ifglsxtrinsertinside\else##2\fi
9162 }%
9163 \renewcommand*{\Glsxtrfullformat}[2]{%
9164   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9165   \ifglsxtrinsertinside\else##2\fi
9166 }%
9167 \renewcommand*{\Glsxtrfullplformat}[2]{%
9168   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9169   \ifglsxtrinsertinside\else##2\fi
9170 }%
9171 }
```

-sc-nolong-desc

```
9172 \letabbreviationstyle{short-sc-nolong-desc}{short-sc-desc}
```

nolong-short-sc

```
9173 \newabbreviationstyle{nolong-short-sc}%
9174 {%
9175   \GlsXtrUseAbbrStyleSetup{short-sc-nolong}%
9176 }%
9177 {%
9178   \GlsXtrUseAbbrStyleFmts{short-sc-nolong}%
}
```

The inline full form displays the long form followed by the short form in parentheses.

```
9179 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9180   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
9181   \ifglsxtrinsertinside##2\fi}%
9182   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9183   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
9184 }%
9185 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9186   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
9187   \ifglsxtrinsertinside##2\fi}%
9188   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9189   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
9190 }%
9191 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9192   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
9193   \ifglsxtrinsertinside##2\fi}%
9194   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9195   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
```

```

9196 }%
9197 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
9198   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
9199   \ifglsxtrinsertinside##2\fi}%
9200   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9201   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
9202 }%
9203 }

```

`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.

```

9204 \newabbreviationstyle{long-noshort-sc}{%
9205 }%
9206 \renewcommand*\CustomAbbreviationFields}{%
9207   name={\glsxtrlongnoshortname},
9208   sort={\the\glsshorttok},
9209   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
9210   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
9211   text={\protect\glslongdefaultfont{\the\glslongtok}},
9212   plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
9213   description={\the\glslongtok}%
9214 }%
9215 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9216   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9217 }%
9218 }%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9219 \renewcommand*\abbrvpluralsuffix}{\glsxtrscsuffix}%
9220 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9221 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9222 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9223 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9224 \renewcommand*\glsxtrsubsequentfmt}[2]{%
9225   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9226   \ifglsxtrinsertinside \else##2\fi
9227 }%
9228 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
9229   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9230   \ifglsxtrinsertinside \else##2\fi
9231 }%
9232 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
9233   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9234   \ifglsxtrinsertinside \else##2\fi
9235 }%
9236 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
9237   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9238   \ifglsxtrinsertinside \else##2\fi

```

```
9239 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9240 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9241   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9242   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9243   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
9244 }%
9245 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9246   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9247   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9248   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
9249 }%
9250 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9251   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9252   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9253   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
9254 }%
9255 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9256   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9257   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9258   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
9259 }%
```

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.

```
9260 \renewcommand*{\glsxtrfullformat}[2]{%
9261   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9262   \ifglsxtrinsertinside\else##2\fi
9263 }%
9264 \renewcommand*{\glsxtrfullplformat}[2]{%
9265   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9266   \ifglsxtrinsertinside\else##2\fi
9267 }%
9268 \renewcommand*{\Glsxtrfullformat}[2]{%
9269   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9270   \ifglsxtrinsertinside\else##2\fi
9271 }%
9272 \renewcommand*{\Glsxtrfullplformat}[2]{%
9273   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9274   \ifglsxtrinsertinside\else##2\fi
9275 }%
9276 }
```

long-sc Backward compatibility:

```
9277 \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`.

```
9278 \newabbreviationstyle{long-noshort-sc-desc}{}
```

```

9279 {%
9280   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
9281 }%
9282 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9283 \renewcommand*{\abbrvpluralsuffix}{\glsxtrscsuffix}%
9284 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9285 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9286 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9287 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9288 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9289   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9290   \ifglsxtrinsertinside \else##2\fi
9291 }%
9292 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9293   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9294   \ifglsxtrinsertinside \else##2\fi
9295 }%
9296 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9297   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9298   \ifglsxtrinsertinside \else##2\fi
9299 }%
9300 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9301   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9302   \ifglsxtrinsertinside \else##2\fi
9303 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9304 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9305   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9306   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9307   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
9308 }%
9309 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9310   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9311   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9312   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
9313 }%
9314 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9315   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9316   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9317   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
9318 }%
9319 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9320   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9321   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9322   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
9323 }%

```

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.

```
9324 \renewcommand*{\glsxtrfullformat}[2]{%
9325   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9326   \ifglsxtrinsertinside\else##2\fi
9327 }%
9328 \renewcommand*{\glsxtrfullplformat}[2]{%
9329   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9330   \ifglsxtrinsertinside\else##2\fi
9331 }%
9332 \renewcommand*{\Glsxtrfullformat}[2]{%
9333   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9334   \ifglsxtrinsertinside\else##2\fi
9335 }%
9336 \renewcommand*{\Glsxtrfullplformat}[2]{%
9337   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9338   \ifglsxtrinsertinside\else##2\fi
9339 }%
9340 }
```

long-desc-sc Backward compatibility:

```
9341 \glsxtr@deprecated@abbrstyle{long-desc-sc}{long-noshort-sc-desc}
```

short-sc-footnote

```
9342 \newabbreviationstyle{short-sc-footnote}%
9343 {%
```

Set accessibility attributes if enabled.

```
9344 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
9345 \renewcommand*{\CustomAbbreviationFields}{%
9346   name={\glsxtrfootnotename},
9347   sort={\the\glsshorthttok},
9348   description={\the\glslongtok},%
9349   first={\protect\glsfirstabbrvscfont{\the\glsshorthttok}%
9350     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9351       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9352   firstplural={\protect\glsfirstabbrvscfont{\the\glsshorthplttok}%
9353     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9354       {\protect\glsfirstlongfootnotefont{\the\glslongplttok}}},%
9355   text={\protect\glsabbrvscfont{\the\glsshorthttok}},%
9356   plural={\protect\glsabbrvscfont{\the\glsshorthplttok}}}}
```

Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute if it has been set.

```
9357 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9358   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9359   \glsresetattribute{\the\glslabeltok}{regular}%
9360 }%
```

```

9361      \glssetattribute{\the\glslabeltok}{regular}{false}%
9362      }%
9363      {}%
9364      }%
9365 }%
9366 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9367 \renewcommand*{\abbrvpluralsuffix}{\glsxtrscsuffix}%
9368 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9369 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9370 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
9371 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

9372 \renewcommand*{\glsxtrfullformat}[2]{%
9373   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9374   \ifglsxtrinsertinside\else##2\fi
9375   \protect\glsxtrabrvfootnote{##1}%
9376   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9377 }%
9378 \renewcommand*{\glsxtrfullplformat}[2]{%
9379   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9380   \ifglsxtrinsertinside\else##2\fi
9381   \protect\glsxtrabrvfootnote{##1}%
9382   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9383 }%
9384 \renewcommand*{\Glsxtrfullformat}[2]{%
9385   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9386   \ifglsxtrinsertinside\else##2\fi
9387   \protect\glsxtrabrvfootnote{##1}%
9388   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9389 }%
9390 \renewcommand*{\Glsxtrfullplformat}[2]{%
9391   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9392   \ifglsxtrinsertinside\else##2\fi
9393   \protect\glsxtrabrvfootnote{##1}%
9394   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9395 }%

```

The first use full form and the inline full form use the short (long) style.

```

9396 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9397   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9398   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9399   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9400 }%
9401 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9402   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9403   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9404   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9405 }%

```

```

9406 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9407   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9408   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9409   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9410 }%
9411 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9412   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9413   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9414   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9415 }%
9416 }

```

`footnote-sc` Backward compatibility:

```
9417 @glsxtr@deprecated@abbrstyle{footnote-sc}{short-sc-footnote}
```

`c-footnote-desc` Like `short-sc-footnote` but with user supplied description.

```

9418 \newabbreviationstyle{short-sc-footnote-desc}%
9419 {%

```

Set accessibility attributes if enabled.

```
9420 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```

9421 \renewcommand*{\CustomAbbreviationFields}{%
9422   name={\glsxtrfootnotedescname},
9423   sort={\glsxtrfootnotedescsort},
9424   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
9425     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9426     {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9427   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
9428     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9429     {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9430   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9431   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.

```

9432 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9433   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9434   \glshasattribute{\the\glslabeltok}{regular}%
9435   {%
9436     \glssetattribute{\the\glslabeltok}{regular}{false}%
9437   }%
9438   {}%
9439 }%
9440 }%
9441 {%
9442 \GlsXtrUseAbbrStyleFmts{short-sc-footnote}%
9443 }

```

```
sc-postfootnote
```

```
9444 \newabbreviationstyle{short-sc-postfootnote}%
9445 {%
```

Set accessibility attributes if enabled.

```
9446 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
9447 \renewcommand*\CustomAbbreviationFields{%
9448   name={\glsxtrfootnotename},
9449   sort={\the\glsshorttok},
9450   description={\the\glslongtok},%
9451   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
9452   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
9453   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9454   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.

```
9455 \renewcommand*\GlsXtrPostNewAbbreviation{%
9456   \csdef{glsxtrpostlink\glscategorylabel}{%
9457     \glsxtrifwasfirstuse
9458   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
9459   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9460   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}%
9461 }%
9462 {}%
9463 }%
9464 \glshasattribute{\the\glslabeltok}{regular}%
9465 {}%
9466   \glssetattribute{\the\glslabeltok}{regular}{false}%
9467 }%
9468 {}%
9469 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
9470 \renewcommand*\glsxtrsetupfulldefs{%
9471   \let\glsxtrifwasfirstuse\@secondoftwo
9472 }%
9473 }%
9474 {}
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
9475 \renewcommand*\abbrvpluralsuffix{\glsxtrscsuffix}%
9476 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\##1}}%
9477 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\##1}}%
9478 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{\##1}}%
9479 \renewcommand*\glslongfont[1]{\glslongfootnotefont{\##1}}%
```

The full format displays the short form. The long form is deferred.

```
9480 \renewcommand*{\glsxtrfullformat}[2]{%
9481   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9482   \ifglsxtrinsertinside\else##2\fi
9483 }%
9484 \renewcommand*{\glsxtrfullplformat}[2]{%
9485   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9486   \ifglsxtrinsertinside\else##2\fi
9487 }%
9488 \renewcommand*{\Glsxtrfullformat}[2]{%
9489   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9490   \ifglsxtrinsertinside\else##2\fi
9491 }%
9492 \renewcommand*{\Glsxtrfullplformat}[2]{%
9493   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9494   \ifglsxtrinsertinside\else##2\fi
9495 }%
```

The first use full form and the inline full form use the short (long) style.

```
9496 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9497   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9498   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9499   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9500 }%
9501 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9502   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9503   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9504   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9505 }%
9506 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9507   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9508   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9509   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9510 }%
9511 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9512   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9513   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9514   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9515 }%
9516 }
```

postfootnote-sc Backward compatibility:

```
9517 @glsxtr@deprecated@abbrstyle{postfootnote-sc}{short-sc-postfootnote}
```

stfootnote-desc Like short-sc-footnote but with user supplied description.

```
9518 \newabbreviationstyle{short-sc-postfootnote-desc}%
9519 {%
```

Set accessibility attributes if enabled.

```
9520 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
9521 \renewcommand*{\CustomAbbreviationFields}{%
9522   name={\glsxtrfootnotedescname},
9523   sort={\glsxtrfootnotedescsort},
9524   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
9525   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
9526   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9527   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.

```
9528 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9529   \csdef{glsxtrpostlink\glscategorylabel}{%
9530     \glsxtrifwasfirstuse
9531   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
9532   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9533   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
9534 }%
9535 {}%
9536 }%
9537 \glshasattribute{\the\glslabeltok}{regular}%
9538 {}%
9539   \glssetattribute{\the\glslabeltok}{regular}{false}%
9540 }%
9541 {}%
9542 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
9543 \renewcommand*{\glsxtrsetupfulldefs}{%
9544   \let\glsxtrifwasfirstuse\@secondoftwo
9545 }%
9546 }%
9547 {}%
9548 \GlsXtrUseAbbrStyleFmts{short-sc-postfootnote}%
9549 }
```

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.
9550 \newcommand*{\glsxtrsmfont}[1]{\textsmaller{#1}}
```

```
\glsabbrvsmfont Added for consistent naming.
9551 \newcommand*{\glsabbrvsmfont}{\glsxtrsmfont}
```

```

sxtrfirstsmfont Maintained for backward compatibility.
9552 \newcommand*\glsxtrfirstsmfont[1]{\glsabbrvsmfont{#1}}


irstabbrvsmfont Added for consistent naming.
9553 \newcommand*\glsfirstabbrvsmfont{\glsxtrfirstsmfont}

and for the default short form suffix:

\glsxtrsmsuffix
9554 \newcommand*\glsxtrsmsuffix{\glsxtrabbrvpluralsuffix}

long-short-sm
9555 \newabbreviationstyle{long-short-sm}%
9556 {%

Set accessibility attributes if enabled.
9557 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel

Setup the default fields.

9558 \renewcommand*\CustomAbbreviationFields{%
9559   name={\glsxtrlongshortname},
9560   sort={\the\glsshorttok},
9561   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
9562     \protect\glsxtrfullsep{\the\glslabeltok}%
9563     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
9564   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
9565     \protect\glsxtrfullsep{\the\glslabeltok}%
9566     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
9567   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9568   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},%
9569   description={\the\glslongtok}}%
9570 \renewcommand*\GlsXtrPostNewAbbreviation{%
9571   \glshasattribute{\the\glslabeltok}{regular}%
9572   {%
9573     \glssetattribute{\the\glslabeltok}{regular}{false}%
9574   }%
9575   {}%
9576 }%
9577 }%
9578 {%

9579 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9580 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9581 \renewcommand*\abbrvpluralsuffix{\glsxtrsmsuffix}

```

Use the default long fonts.

```

9582 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9583 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```
9584 \renewcommand*{\glsxtrfullformat}[2]{%
9585   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9586   \ifglsxtrinsertinside\else##2\fi
9587   \glsxtrfullsep{##1}%
9588   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9589 }%
9590 \renewcommand*{\glsxtrfullplformat}[2]{%
9591   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9592   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9593   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9594 }%
9595 \renewcommand*{\Glsxtrfullformat}[2]{%
9596   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9597   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9598   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9599 }%
9600 \renewcommand*{\Glsxtrfullplformat}[2]{%
9601   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9602   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9603   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9604 }%
9605 }
```

g-short-sm-desc

```
9606 \newabbreviationstyle{long-short-sm-desc}%
9607 {%
```

Set accessibility attributes if enabled.

```
9608 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
9609 \renewcommand*{\CustomAbbreviationFields}{%
9610   name={\glsxtrlongshortdescname},
9611   sort={\glsxtrlongshortdescsort},%
9612   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
9613   \protect\glsxtrfullsep{\the\glslabeltok}%
9614   \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
9615   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
9616   \protect\glsxtrfullsep{\the\glslabeltok}%
9617   \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
9618   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9619   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}}%
9620 }%
```

Unset the regular attribute if it has been set.

```
9621 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9622   \glshasattribute{\the\glslabeltok}{regular}%
9623   {%
9624     \glssetattribute{\the\glslabeltok}{regular}{false}}%
```

```
9625    }%
9626    {}%
9627  }%
9628 }%
9629 {%
```

As long-short-sm style:

```
9630  \GlsXtrUseAbbrStyleFmts{long-short-sm}%
9631 }
```

short-sm-long Now the short (long) version

```
9632 \newabbreviationstyle{short-sm-long}%
9633 {}%
```

Set accessibility attributes if enabled.

```
9634 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
9635 \renewcommand*\{\CustomAbbreviationFields}{%
9636   name={\glsxtrshortlongname},
9637   sort={\the\glsshorttok},
9638   description={\the\glslongtok},%
9639   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
9640     \protect\glsxtrfullsep{\the\glslabeltok}%
9641     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9642   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
9643     \protect\glsxtrfullsep{\the\glslabeltok}%
9644     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9645   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9646   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
9647 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
9648   \glshasattribute{\the\glslabeltok}{regular}%
9649   {}%
9650   \glssetattribute{\the\glslabeltok}{regular}{false}%
9651   {}%
9652   {}%
9653 }%
9654 }%
9655 {}%
```



```
9656 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9657 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9658 \renewcommand*\{\abbrvpluralsuffix}{\glsxtrmssuffix}%
9659 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9660 \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
9661 \renewcommand*\{\glsxtrfullformat}[2]{%
9662   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9663 }
```

```

9663   \ifglsxtrinsertinside\else##2\fi
9664   \glsxtrfullsep{##1}%
9665   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9666 }%
9667 \renewcommand*{\glsxtrfullplformat}[2]{%
9668   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9669   \ifglsxtrinsertinside\else##2\fi
9670   \glsxtrfullsep{##1}%
9671   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9672 }%
9673 \renewcommand*{\Glsxtrfullformat}[2]{%
9674   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9675   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9676   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9677 }%
9678 \renewcommand*{\Glsxtrfullplformat}[2]{%
9679   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9680   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9681   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9682 }%
9683 }

```

`rt-sm-long-desc` As before but user provides description

```

9684 \newabbreviationstyle{short-sm-long-desc}{%
9685 }%

```

Set accessibility attributes if enabled.

```

9686 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

9687 \renewcommand*{\CustomAbbreviationFields}{%
9688   name={\glsxtrshortlongdescname},
9689   sort={\glsxtrshortlongdescsort},
9690   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
9691     \protect\glsxtrfullsep{\the\glslabeltok}%
9692     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9693   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
9694     \protect\glsxtrfullsep{\the\glslabeltok}%
9695     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9696   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9697   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}%
9698 }%

```

Unset the regular attribute if it has been set.

```

9699 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9700   \glshasattribute{\the\glslabeltok}{regular}%
9701   {%
9702     \glssetattribute{\the\glslabeltok}{regular}{false}%
9703   }%
9704 {}%

```

```

9705  }%
9706 }%
9707 {%
    As short-sm-long style:
9708 \GlsXtrUseAbbrStyleFmts{short-sm-long}%
9709 }

short-sm
9710 \newabbreviationstyle{short-sm}{%
9711 {%
    Set accessibility attributes if enabled.
9712 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
    Setup the default fields.
9713 \renewcommand*{\CustomAbbreviationFields}{%
9714     name={\glsxtrshortnolongname},
9715     sort={\the\glsshorttok},
9716     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
9717     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
9718     text={\protect\glsabbrvsmfont{\the\glsshorttok}},
9719     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
9720     description={\the\glslongtok}}%
9721 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9722     \glssetattribute{\the\glslabeltok}{regular}{true}}%
9723 }%
9724 {%
9725 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9726 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9727 \renewcommand*{\abbrvpluralsuffix}{\glsxtrsnsuffix}%
9728 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9729 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

9730 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9731     \protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}%
9732     \ifglsxtrinsertinside##2\fi}%
9733 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9734 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9735 }%
9736 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9737     \protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}%
9738     \ifglsxtrinsertinside##2\fi}%
9739 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9740 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9741 }%
9742 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9743     \protect\glsfirstabbrvsmfont{\Glsaccessshort{##1}}%

```

```

9744     \ifglsxtrinsertinside##2\fi}%
9745     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9746     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9747 }%
9748 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
9749     \protect\glsfirstabbrvsmfont{\Glsaccessshortpl{##1}}%
9750     \ifglsxtrinsertinside##2\fi}%
9751     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9752     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9753 }%

```

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.

```

9754 \renewcommand*\{\glsxtrfullformat}[2]{%
9755     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9756     \ifglsxtrinsertinside\else##2\fi
9757 }%
9758 \renewcommand*\{\glsxtrfullplformat}[2]{%
9759     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9760     \ifglsxtrinsertinside\else##2\fi
9761 }%
9762 \renewcommand*\{\Glsxtrfullformat}[2]{%
9763     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9764     \ifglsxtrinsertinside\else##2\fi
9765 }%
9766 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9767     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9768     \ifglsxtrinsertinside\else##2\fi
9769 }%
9770 }

```

short-sm-nolong

```
9771 \letabbreviationstyle{short-sm-nolong}{short-sm}
```

short-sm-desc

```
9772 \newabbreviationstyle{short-sm-desc}%
9773 {%
```

Set accessibility attributes if enabled.

```
9774 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

9775 \renewcommand*\{\CustomAbbreviationFields}{%
9776     name={\glsxtrshortdescname},
9777     sort={\the\glsshorttok},
9778     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
9779     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
9780     text={\protect\glsabbrvsmfont{\the\glsshorttok}},
9781     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%
9782 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%

```

```

9783     \glssetattribute{\the\glslabeltok}{regular}{true}}%
9784 }%
9785 {%
9786 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9787 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9788 \renewcommand*\{\abrvpluralsuffix}{\glsxtrsuffix}%
9789 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9790 \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

9791 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
9792   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9793   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9794   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9795 }%
9796 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
9797   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9798   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9799   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9800 }%
9801 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
9802   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9803   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9804   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9805 }%
9806 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
9807   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9808   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9809   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9810 }%

```

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.

```

9811 \renewcommand*\{\glsxtrfullformat}[2]{%
9812   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9813   \ifglsxtrinsertinside\else##2\fi
9814 }%
9815 \renewcommand*\{\glsxtrfullplformat}[2]{%
9816   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9817   \ifglsxtrinsertinside\else##2\fi
9818 }%
9819 \renewcommand*\{\Glsxtrfullformat}[2]{%
9820   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9821   \ifglsxtrinsertinside\else##2\fi
9822 }%
9823 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9824   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9825   \ifglsxtrinsertinside\else##2\fi
9826 }%

```

```
9827 }  
  
-sm-nolong-desc  
9828 \letabbreviationstyle{short-sm-nolong-desc}{short-sm-desc}
```

```
nolong-short-sm  
9829 \newabbreviationstyle{nolong-short-sm} %  
9830 { %  
9831   \GlsXtrUseAbbrStyleSetup{short-sm-nolong} %  
9832 } %  
9833 { %  
9834   \GlsXtrUseAbbrStyleFmts{short-sm-nolong} %
```

The inline full form displays the long form followed by the short form in parentheses.

```
9835 \renewcommand*{\glsxtrinlinefullformat}[2]{ %  
9836   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}} %  
9837   \ifglsxtrinsertinside##2\fi} %  
9838   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1} %  
9839   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}} %  
9840 } %  
9841 \renewcommand*{\glsxtrinlinefullplformat}[2]{ %  
9842   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}} %  
9843   \ifglsxtrinsertinside##2\fi} %  
9844   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1} %  
9845   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}} %  
9846 } %  
9847 \renewcommand*{\Glsxtrinlinefullformat}[2]{ %  
9848   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}} %  
9849   \ifglsxtrinsertinside##2\fi} %  
9850   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1} %  
9851   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}} %  
9852 } %  
9853 \renewcommand*{\Glsxtrinlinefullplformat}[2]{ %  
9854   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}} %  
9855   \ifglsxtrinsertinside##2\fi} %  
9856   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1} %  
9857   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}} %  
9858 } %  
9859 }
```

long-noshort-sm The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```
9860 \newabbreviationstyle{long-noshort-sm} %  
9861 { %
```

Set accessibility attributes if enabled.

```
9862 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
```

Setup the default fields.

```
9863 \renewcommand*{\CustomAbbreviationFields}{ %
```

```

9864     name={\glsxtrlongnoshortname},
9865     sort={\the\glsshorttok},
9866     first=\protect\glsfirstlongdefaultfont{\the\glslongtok},
9867     firstplural=\protect\glsfirstlongdefaultfont{\the\glslongpltok},
9868     text=\protect\glslongdefaultfont{\the\glslongtok},
9869     plural=\protect\glslongdefaultfont{\the\glslongpltok},%
9870     description=\the\glslongtok}%
9871 }%
9872 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9873   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9874 }%
9875 {%
9876 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9877 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9878 \renewcommand*{\abbrvpluralsuffix}{\glsxtrmssuffix}%
9879 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9880 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9881 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9882   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9883   \ifglsxtrinsertinside \else##2\fi
9884 }%
9885 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9886   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9887   \ifglsxtrinsertinside \else##2\fi
9888 }%
9889 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9890   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9891   \ifglsxtrinsertinside \else##2\fi
9892 }%
9893 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9894   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9895   \ifglsxtrinsertinside \else##2\fi
9896 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9897 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9898   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9899   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9900 \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9901 }%
9902 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9903   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9904   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9905 \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9906 }%
9907 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9908   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}}%

```

```

9909      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9910      \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9911  }%
9912  \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9913      \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9914      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9915      \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9916  }%

```

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.

```

9917  \renewcommand*{\glsxtrfullformat}[2]{%
9918      \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9919      \ifglsxtrinsertinside\else##2\fi
9920  }%
9921  \renewcommand*{\glsxtrfullplformat}[2]{%
9922      \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9923      \ifglsxtrinsertinside\else##2\fi
9924  }%
9925  \renewcommand*{\Glsxtrfullformat}[2]{%
9926      \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9927      \ifglsxtrinsertinside\else##2\fi
9928  }%
9929  \renewcommand*{\Glsxtrfullplformat}[2]{%
9930      \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9931      \ifglsxtrinsertinside\else##2\fi
9932  }%
9933 }

```

long-sm Backward compatibility:

```
9934 @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`.

```

9935 \newabbreviationstyle{long-noshort-sm-desc}%
9936 {%
9937     \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
9938 }%
9939 {%
9940     \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9941     \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9942     \renewcommand*{\abbrvpluralsuffix}{\glsxtrmsuffix}%
9943     \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9944     \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9945 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9946     \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9947     \ifglsxtrinsertinside \else##2\fi

```

```

9948 }%
9949 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9950   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9951   \ifglsxtrinsertinside \else##2\fi
9952 }%
9953 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9954   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9955   \ifglsxtrinsertinside \else##2\fi
9956 }%
9957 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9958   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9959   \ifglsxtrinsertinside \else##2\fi
9960 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9961 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9962   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9963   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9964   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9965 }%
9966 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9967   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9968   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9969   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9970 }%
9971 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9972   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9973   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9974   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9975 }%
9976 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9977   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9978   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9979   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9980 }%

```

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.

```

9981 \renewcommand*{\glsxtrfullformat}[2]{%
9982   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9983   \ifglsxtrinsertinside\else##2\fi
9984 }%
9985 \renewcommand*{\glsxtrfullplformat}[2]{%
9986   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9987   \ifglsxtrinsertinside\else##2\fi
9988 }%
9989 \renewcommand*{\Glsxtrfullformat}[2]{%
9990   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9991   \ifglsxtrinsertinside\else##2\fi
9992 }%

```

```

9993 \renewcommand*\Glsxtrfullplformat}[2]{%
9994   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9995   \ifglsxtrinsertinside\else##2\fi
9996 }%
9997 }

long-desc-sm Backward compatibility:
9998 @glsxtr@deprecated@abbrstyle{long-desc-sm}{long-noshort-sm-desc}

short-sm-footnote
9999 \newabbreviationstyle{short-sm-footnote}%
10000 {%

  Set accessibility attributes if enabled.
10001 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel

  Setup the default fields.
10002 \renewcommand*\CustomAbbreviationFields}{%
10003   name={\glsxtrfootnotename},
10004   sort={\the\glsshorttok},
10005   description={\the\glslongtok},%
10006   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
10007     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10008       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
10009   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
10010     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10011       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
10012   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
10013   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.
10014 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10015   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
10016   \glshasattribute{\the\glslabeltok}{regular}%
10017   {%
10018     \glssetattribute{\the\glslabeltok}{regular}{false}%
10019   }%
10020   {}%
10021 }%
10022 }%
10023 {%

10024 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
10025 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
10026 \renewcommand*\abbrvpluralsuffix{\glsxtrmsuffix}%
10027 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
10028 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

10029 \renewcommand*{\glsxtrfullformat}[2]{%
10030   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10031   \ifglsxtrinsertinside\else##2\fi
10032   \protect\glsxtrabrvfootnote{##1}%
10033   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10034 }%
10035 \renewcommand*{\glsxtrfullplformat}[2]{%
10036   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10037   \ifglsxtrinsertinside\else##2\fi
10038   \protect\glsxtrabrvfootnote{##1}%
10039   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10040 }%
10041 \renewcommand*{\Glsxtrfullformat}[2]{%
10042   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10043   \ifglsxtrinsertinside\else##2\fi
10044   \protect\glsxtrabrvfootnote{##1}%
10045   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10046 }%
10047 \renewcommand*{\Glsxtrfullplformat}[2]{%
10048   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10049   \ifglsxtrinsertinside\else##2\fi
10050   \protect\glsxtrabrvfootnote{##1}%
10051   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10052 }%

```

The first use full form and the inline full form use the short (long) style.

```

10053 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10054   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10055   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10056   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10057 }%
10058 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10059   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10060   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10061   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10062 }%
10063 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10064   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10065   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10066   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10067 }%
10068 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10069   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10070   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10071   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10072 }%
10073 }%

```

footnote-sm Backward compatibility:

```
10074 \@glsxtr@deprecated@abbrstyle{footnote-sm}{short-sm-footnote}
```

m-footnote-desc Like short-footnote but with user supplied description.

```
10075 \newabbreviationstyle{short-sm-footnote-desc}%
10076 {%
```

Set accessibility attributes if enabled.

```
10077 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
10078 \renewcommand*\CustomAbbreviationFields{%
10079   name={\glsxtrfootnotedescname},
10080   sort={\glsxtrfootnotedescsort},
10081   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
10082     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10083       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
10084   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
10085     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10086       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
10087   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
10088   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.

```
10089 \renewcommand*\GlsXtrPostNewAbbreviation{%
10090   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
10091   \glshasattribute{\the\glslabeltok}{regular}%
10092   {}%
10093   \glssetattribute{\the\glslabeltok}{regular}{false}%
10094   {}%
10095   {}%
10096 }%
10097 }%
10098 {%
10099 \GlsXtrUseAbbrStyleFmts{short-sm-footnote}%
10100 }
```

sm-postfootnote

```
10101 \newabbreviationstyle{short-sm-postfootnote}%
10102 {%
```

Set accessibility attributes if enabled.

```
10103 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
10104 \renewcommand*\CustomAbbreviationFields{%
10105   name={\glsxtrfootnotename},
10106   sort={\the\glsshorttok},
10107   description={\the\glslongtok},%
10108   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
10109   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
10110   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
10111   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.

```
10112 \renewcommand*\GlsXtrPostNewAbbreviation{%
10113   \csdef{glsxtrpostlink\glscategorylabel}{%
10114     \glsxtrifwasfirstuse
10115   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
10116   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
10117   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
10118 }%
10119 {}%
10120 }%
10121 \glshasattribute{\the\glslabeltok}{regular}%
10122 {}%
10123   \glssetattribute{\the\glslabeltok}{regular}{false}%
10124 }%
10125 {}%
10126 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
10127 \renewcommand*\glsxtrsetupfulldefs{%
10128   \let\glsxtrifwasfirstuse\@secondoftwo
10129 }%
10130 }%
10131 {}%

10132 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
10133 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
10134 \renewcommand*\abrvpluralsuffix{\glsxtrmssuffix}%
10135 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
10136 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form. The long form is deferred.

```
10137 \renewcommand*\glsxtrfullformat}[2]{%
10138   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10139   \ifglsxtrinsertinside\else##2\fi
10140 }%
10141 \renewcommand*\glsxtrfullplformat}[2]{%
10142   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10143   \ifglsxtrinsertinside\else##2\fi
10144 }%
10145 \renewcommand*\Glsxtrfullformat}[2]{%
10146   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10147   \ifglsxtrinsertinside\else##2\fi
10148 }%
10149 \renewcommand*\Glsxtrfullplformat}[2]{%
10150   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

10151     \ifglsxtrinsertinside\else##2\fi
10152 }%

```

The first use full form and the inline full form use the short (long) style.

```

10153 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10154   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10155   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10156   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10157 }%
10158 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10159   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10160   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10161   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10162 }%
10163 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10164   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10165   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10166   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10167 }%
10168 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10169   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10170   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10171   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10172 }%
10173 }

```

postfootnote-sm Backward compatibility:

```
10174 \glsxtr@deprecated@abbrstyle{postfootnote-sm}{short-sm-postfootnote}
```

stfootnote-desc Like short-sm-postfootnote but with user supplied description.

```
10175 \newabbreviationstyle{short-sm-postfootnote-desc}{%
10176 }%
```

Set accessibility attributes if enabled.

```
10177 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
10178 \renewcommand*{\CustomAbbreviationFields}{%
10179   name={\glsxtrfootnotedescname},
10180   sort={\glsxtrfootnotedescsort},
10181   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
10182   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
10183   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
10184   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.

```
10185 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10186   \csdef{glsxtrpostlink\glscategorylabel}{%
10187     \glsxtrifwasfirstuse
10188   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
10189      \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
10190      {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}%
10191      }%
10192      {}%
10193      }%
10194      \glshasattribute{\the\glslabeltok}{regular}%
10195      {}%
10196      \glssetattribute{\the\glslabeltok}{regular}{false}%
10197      }%
10198      {}%
10199      }%
```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```
10200  \renewcommand*{\glsxtrsetupfulldefs}{%
10201    \let\glsxtrifwasfirstuse\@secondoftwo
10202  }%
10203 }%
10204 {%
10205  \GlsXtrUseAbbrStyleFmts{short-sm-postfootnote}%
10206 }
```

1.7.5 Predefined Styles (Emphasized)

These styles use `\emph` for the short form.

```
\glsabbrvemfont
10207 \newcommand*{\glsabbrvemfont}[1]{\emph{#1}}%
\irstabbrvemfont
10208 \newcommand*{\glsfirstabbrvemfont}[1]{\glsabbrvemfont{#1}}%
```

The default short form suffix:

```
\glsxtremsuffix
10209 \newcommand*{\glsxtremsuffix}{\glsxtrabbrvpluralsuffix}
```

`firstlongemfont` Only used by the “long-em” styles.

```
10210 \newcommand*{\glsfirstlongemfont}[1]{\glslongemfont{#1}}%
```

`\glslongemfont` Only used by the “long-em” styles.

```
10211 \newcommand*{\glslongemfont}[1]{\emph{#1}}%
```

`long-short-em` The long form is just set in the default long font.

```
10212 \newabbreviationstyle{long-short-em}%
10213 {}%
```

Set accessibility attributes if enabled.

```
10214 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
10215 \renewcommand*\CustomAbbreviationFields{%
10216   name={\glsxtrlongshortname},
10217   sort={\the\glsshorttok},
10218   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
10219     \protect\glsxtrfullsep{\the\glslabeltok}%
10220     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
10221   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
10222     \protect\glsxtrfullsep{\the\glslabeltok}%
10223     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
10224   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10225   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
10226   description={\the\glslongtok}}%
10227 \renewcommand*\GlsXtrPostNewAbbreviation{%
10228   \glshasattribute{\the\glslabeltok}{regular}%
10229   {%
10230     \glssetattribute{\the\glslabeltok}{regular}{false}%
10231   }%
10232   {}%
10233 }%
10234 }%
10235 {%
10236 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10237 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10238 \renewcommand*\abbrvpluralsuffix{\glsxtremsuffix}%
```

Use the default long fonts.

```
10239 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
10240 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
10241 \renewcommand*\glsxtrfullformat[2]{%
10242   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10243   \ifglsxtrinsertinside\else##2\fi
10244   \glsxtrfullsep{##1}%
10245   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10246 }%
10247 \renewcommand*\glsxtrfullplformat[2]{%
10248   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10249   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10250   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10251 }%
10252 \renewcommand*\Glsxtrfullformat[2]{%
10253   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10254   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10255   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
```

```

10256 }%
10257 \renewcommand*{\Glsxtrfullplformat}[2]{%
10258   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10259   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10260   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10261 }%
10262 }

```

g-short-em-desc

```

10263 \newabbreviationstyle{long-short-em-desc}{%
10264 {%
  Set accessibility attributes if enabled.
10265 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
  Setup the default fields.

```

```

10266 \renewcommand*{\CustomAbbreviationFields}{%
10267   name={\glsxtrlongshortdescname},%
10268   sort={\glsxtrlongshortdescsort},%
10269   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
10270   \protect\glsxtrfullsep{\the\glslabeltok}%
10271   \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
10272   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
10273   \protect\glsxtrfullsep{\the\glslabeltok}%
10274   \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
10275   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10276   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
10277 }%

```

Unset the regular attribute if it has been set.

```

10278 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10279   \glshasattribute{\the\glslabeltok}{regular}%
10280   {%
10281     \glssetattribute{\the\glslabeltok}{regular}{false}%
10282   }%
10283   {}%
10284 }%
10285 }%
10286 {%

```

As long-short-em style:

```

10287 \GlsXtrUseAbbrStyleFmts{long-short-em}%
10288 }

```

long-em-short-em

```

10289 \newabbreviationstyle{long-em-short-em}{%
10290 {%
  Set accessibility attributes if enabled.
10291 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel

```

Setup the default fields. `\glslongemfont` is used in the description since `\glsdesc` doesn't set the style.

```

10292 \renewcommand*{\CustomAbbreviationFields}{%
10293   name={\glsxtrlongshortname},
10294   sort={\the\glsshorttok},
10295   first={\protect\glsfirstlongemfont{\the\glslongtok}%
10296     \protect\glsxtrfullsep{\the\glslabeltok}%
10297     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
10298   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
10299     \protect\glsxtrfullsep{\the\glslabeltok}%
10300     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
10301   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10302   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
10303   description={\protect\glslongemfont{\the\glslongtok}}}

```

Unset the regular attribute if it has been set.

```

10304 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10305   \glshasattribute{\the\glslabeltok}{regular}%
10306   {%
10307     \glssetattribute{\the\glslabeltok}{regular}{false}%
10308   }%
10309   {}%
10310 }%
10311 }%
10312 {%
10313 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
10314 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
10315 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10316 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
10317 \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10318 \renewcommand*{\glsxtrfullformat}[2]{%
10319   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10320   \ifglsxtrinsertinside\else##2\fi
10321   \glsxtrfullsep{##1}%
10322   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
10323 }%
10324 \renewcommand*{\glsxtrfullplformat}[2]{%
10325   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10326   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10327   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
10328 }%
10329 \renewcommand*{\GlsXtrfullformat}[2]{%
10330   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10331   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10332   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
10333 }%

```

```

10334 \renewcommand*\Glsxtrfullplformat}[2]{%
10335   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10336   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10337   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10338 }%
10339 }

```

m-short-em-desc

```

10340 \newabbreviationstyle{long-em-short-em-desc}{%
10341 }%

```

Set accessibility attributes if enabled.

```
10342 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

10343 \renewcommand*\CustomAbbreviationFields}{%
10344   name={\glsxtrlongshortdescname},%
10345   sort={\glsxtrlongshortdescsort},%
10346   first={\protect\glsfirstlongemfont{\the\glslongtok}%
10347     \protect\glsxtrfullsep{\the\glslabeltok}%
10348     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
10349   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
10350     \protect\glsxtrfullsep{\the\glslabeltok}%
10351     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
10352   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10353   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
10354 }%

```

Unset the regular attribute if it has been set.

```

10355 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10356   \glshasattribute{\the\glslabeltok}{regular}%
10357   {%
10358     \glssetattribute{\the\glslabeltok}{regular}{false}%
10359   }%
10360   {}%
10361 }%
10362 }%
10363 }%
10364 \GlsXtrUseAbbrStyleFmts{long-em-short-em}%
10365 }

```

short-em-long Now the short (long) version

```

10366 \newabbreviationstyle{short-em-long}{%
10367 }%

```

Set accessibility attributes if enabled.

```
10368 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```

10369 \renewcommand*\CustomAbbreviationFields}{%
10370   name={\glsxtrshortlongname},%

```

```

10371     sort={\the\glsshorttok},
10372     description={\the\glslongtok},%
10373     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10374       \protect\glsxtrfullsep{\the\glslabeltok}%
10375       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
10376     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10377       \protect\glsxtrfullsep{\the\glslabeltok}%
10378       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
10379     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10380     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}

```

Unset the regular attribute if it has been set.

```

10381 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10382   \glshasattribute{\the\glslabeltok}{regular}%
10383   {%
10384     \glssetattribute{\the\glslabeltok}{regular}{false}%
10385   }%
10386   {}%
10387 }%
10388 }%
10389 {%

```

Mostly as short-long style:

```

10390 \renewcommand*{\abbrvpluralsuffix}{\glsxtrsuffix}%
10391 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10392 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10393 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
10394 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10395 \renewcommand*{\glsxtrfullformat}[2]{%
10396   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10397   \ifglsxtrinsertinside\else##2\fi
10398   \glsxtrfullsep{##1}%
10399   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%
10400 }%
10401 \renewcommand*{\glsxtrfullplformat}[2]{%
10402   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10403   \ifglsxtrinsertinside\else##2\fi
10404   \glsxtrfullsep{##1}%
10405   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%
10406 }%
10407 \renewcommand*{\Glsxtrfullformat}[2]{%
10408   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10409   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10410   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%
10411 }%
10412 \renewcommand*{\Glsxtrfullplformat}[2]{%
10413   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10414   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10415   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%

```

```
10416  }%
10417 }
```

rt-em-long-desc As before but user provides description

```
10418 \newabbreviationstyle{short-em-long-desc}%
10419 {%
```

Set accessibility attributes if enabled.

```
10420  \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
10421  \renewcommand*{\CustomAbbreviationFields}{%
10422    name={\glsxtrshortlongdescname},
10423    sort={\glsxtrshortlongdescsort},
10424    first={\protect\glsfirstabbrvemfont{\the\glsshorttok}\%
10425      \protect\glsxtrfullsep{\the\glslabeltok}\%
10426      \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
10427    firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}\%
10428      \protect\glsxtrfullsep{\the\glslabeltok}\%
10429      \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
10430    text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10431    plural={\protect\glsabbrvemfont{\the\glsshortpltok}}\%
10432  }%
```

Unset the regular attribute if it has been set.

```
10433  \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10434    \glshasattribute{\the\glslabeltok}{regular}\%
10435    {%
10436      \glssetattribute{\the\glslabeltok}{regular}{false}\%
10437    }%
10438    {}%
10439  }%
10440 }%
10441 {%
10442  \GlsXtrUseAbbrStyleFmts{short-em-long}%
10443 }
```

hort-em-long-em

```
10444 \newabbreviationstyle{short-em-long-em}%
10445 {%
```

Set accessibility attributes if enabled.

```
10446  \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields. \glslongemfont is used in the description since \glsdesc doesn't set the style.

```
10447  \renewcommand*{\CustomAbbreviationFields}{%
10448    name={\glsxtrshortlongname},
10449    sort={\the\glsshorttok},
10450    description={\protect\glslongemfont{\the\glslongtok}},%
10451    first={\protect\glsfirstabbrvemfont{\the\glsshorttok}\%
```

```

10452 \protect\glsxtrfullsep{\the\glslabeltok}%
10453 \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
10454 firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10455 \protect\glsxtrfullsep{\the\glslabeltok}%
10456 \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
10457 text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10458 plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}}

```

Unset the regular attribute if it has been set.

```

10459 \renewcommand*\GlsXtrPostNewAbbreviation{%
10460   \glshasattribute{\glslabeltok}{regular}%
10461   {%
10462     \glssetattribute{\glslabeltok}{regular}{false}%
10463   }%
10464   {}%
10465 }%
10466 }%
10467 {%
10468 \renewcommand*\abrvpluralsuffix{\glsxtremsuffix}%
10469 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
10470 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{\##1}}%
10471 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongemfont{\##1}}%
10472 \renewcommand*\glslongfont[1]{\glslongemfont{\##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10473 \renewcommand*\glsxtrfullformat[2]{%
10474   \glsfirstabbrvemfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
10475   \ifglsxtrinsertinside\else##2\fi
10476   \glsxtrfullsep{\##1}%
10477   \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{\##1}}}%
10478 }%
10479 \renewcommand*\glsxtrfullplformat[2]{%
10480   \glsfirstabbrvemfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
10481   \ifglsxtrinsertinside\else##2\fi
10482   \glsxtrfullsep{\##1}%
10483   \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{\##1}}}%
10484 }%
10485 \renewcommand*\Glsxtrfullformat[2]{%
10486   \glsfirstabbrvemfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
10487   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\##1}%
10488   \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{\##1}}}%
10489 }%
10490 \renewcommand*\Glsxtrfullplformat[2]{%
10491   \glsfirstabbrvemfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
10492   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\##1}%
10493   \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{\##1}}}%
10494 }%
10495 }

```

em-long-em-desc

```
10496 \newabbreviationstyle{short-em-long-em-desc}%
10497 {%
    Set accessibility attributes if enabled.
10498 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
    Setup the default fields.
10499 \renewcommand*{\CustomAbbreviationFields}{%
10500     name={\glsxtrshortlongdescname},%
10501     sort={\glsxtrshortlongdescsort},%
10502     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10503         \protect\glsxtrfullsep{\the\glslabeltok}%
10504         \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
10505     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10506         \protect\glsxtrfullsep{\the\glslabeltok}%
10507         \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
10508     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10509     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
10510 }%
```

Unset the regular attribute if it has been set.

```
10511 \renewcommand*{\GlsXtrPostNewAbbreviation}%
10512     \glshasattribute{\the\glslabeltok}{regular}%
10513     {%
10514         \glssetattribute{\the\glslabeltok}{regular}{false}%
10515     }%
10516     {}%
10517 }%
10518 }%
10519 {%
10520 \GlsXtrUseAbbrStyleFmts{short-em-long-em}%
10521 }
```

short-em

```
10522 \newabbreviationstyle{short-em}%
10523 {%
```

Set accessibility attributes if enabled.

```
10524 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
10525 \renewcommand*{\CustomAbbreviationFields}{%
10526     name={\glsxtrshortnolongname},
10527     sort={\the\glsshorttok},
10528     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
10529     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
10530     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10531     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
10532     description={\the\glslongtok}}%
10533 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
```

```

10534     \glssetattribute{\the\glslabeltok}{regular}{true}}%
10535 }%
10536 {%
10537 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
10538 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10539 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10540 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
10541 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

10542 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10543   \protect\glsfirstabbrvemfont{\glsaccessshort{##1}}%
10544   \ifglsxtrinsertinside##2\fi}%
10545   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10546   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10547 }%
10548 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10549   \protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}%
10550   \ifglsxtrinsertinside##2\fi}%
10551   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10552   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10553 }%
10554 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10555   \protect\glsfirstabbrvemfont{\Glsaccessshort{##1}}%
10556   \ifglsxtrinsertinside##2\fi}%
10557   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10558   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10559 }%
10560 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10561   \protect\glsfirstabbrvemfont{\Glsaccessshortpl{##1}}%
10562   \ifglsxtrinsertinside##2\fi}%
10563   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10564   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10565 }%

```

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.

```

10566 \renewcommand*{\glsxtrfullformat}[2]{%
10567   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10568   \ifglsxtrinsertinside\else##2\fi
10569 }%
10570 \renewcommand*{\glsxtrfullplformat}[2]{%
10571   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10572   \ifglsxtrinsertinside\else##2\fi
10573 }%
10574 \renewcommand*{\Glsxtrfullformat}[2]{%
10575   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10576   \ifglsxtrinsertinside\else##2\fi

```

```

10577 }%
10578 \renewcommand*\Glsxtrfullplformat}[2]{%
10579   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10580   \ifglsxtrinsertinside\else##2\fi
10581 }%
10582 }

short-em-nolong
10583 \letabbreviationstyle{short-em-nolong}{short-em}

short-em-desc
10584 \newabbreviationstyle{short-em-desc}%
10585 {%

  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.

10586 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel

  Setup the default fields.

10587 \renewcommand*\CustomAbbreviationFields}{%
10588   name={\glsxtrshortdescname},
10589   sort={\the\glsshorttok},
10590   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
10591   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
10592   text={\protect\glsabbrvemfont{\the\glsshorttok}},
10593   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
10594 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10595   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10596 }%
10597 {%

10598 \renewcommand*\abbrvpluralsuffix}{\glsxtremsuffix}%
10599 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10600 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10601 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
10602 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

  The inline full form displays the short format followed by the long form in parentheses.

10603 \renewcommand*\glsxtrinlinefullformat}[2]{%
10604   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10605   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10606   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10607 }%
10608 \renewcommand*\glsxtrinlinefullplformat}[2]{%
10609   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10610   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10611   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10612 }%
10613 \renewcommand*\Glsxtrinlinefullformat}[2]{%
10614   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%

```

```

10615   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10616   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10617 }%
10618 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10619   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10620   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10621   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10622 }%

```

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.

```

10623 \renewcommand*{\glsxtrfullformat}[2]{%
10624   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10625   \ifglsxtrinsertinside\else##2\fi
10626 }%
10627 \renewcommand*{\glsxtrfullplformat}[2]{%
10628   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10629   \ifglsxtrinsertinside\else##2\fi
10630 }%
10631 \renewcommand*{\Glsxtrfullformat}[2]{%
10632   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10633   \ifglsxtrinsertinside\else##2\fi
10634 }%
10635 \renewcommand*{\Glsxtrfullplformat}[2]{%
10636   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10637   \ifglsxtrinsertinside\else##2\fi
10638 }%
10639 }

```

-em-nolong-desc

```
10640 \letabbreviationstyle{short-em-nolong-desc}{short-em-desc}
```

nolong-short-em

```

10641 \newabbreviationstyle{nolong-short-em}%
10642 {%
10643   \GlsXtrUseAbbrStyleSetup{short-em-nolong}%
10644 }%
10645 {%
10646   \GlsXtrUseAbbrStyleFmts{short-em-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

10647 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10648   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}}%
10649   \ifglsxtrinsertinside##2\fi}%
10650   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10651   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10652 }%
10653 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10654   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}%
10655   \ifglsxtrinsertinside##2\fi}%

```

```

10656     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10657     \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10658 }%
10659 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10660     \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}}%
10661     \ifglsxtrinsertinside##2\fi}%
10662 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10663 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10664 }%
10665 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10666     \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
10667     \ifglsxtrinsertinside##2\fi}%
10668 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10669 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10670 }%
10671 }

```

long-noshort-em The short form is explicitly invoked through commands like \glsshort.

```

10672 \newabbreviationstyle{long-noshort-em}%
10673 {%

```

Set accessibility attributes if enabled.

```

10674 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel

```

Setup the default fields.

```

10675 \renewcommand*{\CustomAbbreviationFields}{%
10676     name={\glsxtrlongnoshortname},
10677     sort={\the\glsshorttok},
10678     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
10679     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
10680     text={\protect\glslongdefaultfont{\the\glslongtok}},
10681     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
10682     description={\the\glslongtok}%
10683 }%
10684 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10685     \glssetattribute{\the\glslabeltok}{regular}{true}}%
10686 }%
10687 {%
10688 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
10689 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10690 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10691 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
10692 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10693 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10694     \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10695     \ifglsxtrinsertinside \else##2\fi
10696 }%
10697 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%

```

```

10698   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10699   \ifglsxtrinsertinside \else##2\fi
10700 }
10701 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10702   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10703   \ifglsxtrinsertinside \else##2\fi
10704 }
10705 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10706   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10707   \ifglsxtrinsertinside \else##2\fi
10708 }

```

The inline full form displays the long format followed by the short form in parentheses.

```

10709 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10710   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10711   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10712   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10713 }
10714 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10715   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10716   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10717   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10718 }
10719 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10720   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10721   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10722   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10723 }
10724 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10725   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10726   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10727   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10728 }

```

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.

```

10729 \renewcommand*{\glsxtrfullformat}[2]{%
10730   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10731   \ifglsxtrinsertinside\else##2\fi
10732 }
10733 \renewcommand*{\glsxtrfullplformat}[2]{%
10734   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10735   \ifglsxtrinsertinside\else##2\fi
10736 }
10737 \renewcommand*{\Glsxtrfullformat}[2]{%
10738   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10739   \ifglsxtrinsertinside\else##2\fi
10740 }
10741 \renewcommand*{\Glsxtrfullplformat}[2]{%
10742   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```
10743     \ifglsxtrinsertinside\else##2\fi
10744   }%
10745 }
```

long-em Backward compatibility:

```
10746 @glsxtr@deprecated@abbrstyle{long-em}{long-noshort-em}
```

g-em-noshort-em The short form is explicitly invoked through commands like \glsshort.

```
10747 \newabbreviationstyle{long-em-noshort-em}%
10748 {%
```

Set accessibility attributes if enabled.

```
10749 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
```

Setup the default fields.

```
10750 \renewcommand*\CustomAbbreviationFields{%
10751   name={\glsxtrlongnoshortname},
10752   sort={\the\glsshorttok},
10753   first={\protect\glsfirstlongemfont{\the\glslongtok}},
10754   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
10755   text={\protect\glslongemfont{\the\glslongtok}},
10756   plural={\protect\glslongemfont{\the\glslongpltok}},%
10757   description={\protect\glslongemfont{\the\glslongtok}}%
10758 }%
10759 \renewcommand*\GlsXtrPostNewAbbreviation{%
10760   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10761 }%
10762 {%
10763 \renewcommand*\abrvpluralsuffix}{\glsxtremsuffix}%
10764 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10765 \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10766 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
10767 \renewcommand*\glslongfont}[1]{\glslongemfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
10768 \renewcommand*\glsxtrsubsequentfmt}[2]{%
10769   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10770   \ifglsxtrinsertinside \else##2\fi
10771 }%
10772 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
10773   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10774   \ifglsxtrinsertinside \else##2\fi
10775 }%
10776 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
10777   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10778   \ifglsxtrinsertinside \else##2\fi
10779 }%
10780 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
10781   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%

```

```

10782     \ifglsxtrinsertinside \else##2\fi
10783   }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

10784   \renewcommand*{\glsxtrinlinefullformat}[2]{%
10785     \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10786     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10787     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
10788   }%
10789   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10790     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10791     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10792     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
10793   }%
10794   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10795     \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10796     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10797     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
10798   }%
10799   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10800     \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10801     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10802     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
10803   }%

```

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.

```

10804   \renewcommand*{\glsxtrfullformat}[2]{%
10805     \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10806     \ifglsxtrinsertinside\else##2\fi
10807   }%
10808   \renewcommand*{\glsxtrfullplformat}[2]{%
10809     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10810     \ifglsxtrinsertinside\else##2\fi
10811   }%
10812   \renewcommand*{\Glsxtrfullformat}[2]{%
10813     \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10814     \ifglsxtrinsertinside\else##2\fi
10815   }%
10816   \renewcommand*{\Glsxtrfullplformat}[2]{%
10817     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10818     \ifglsxtrinsertinside\else##2\fi
10819   }%
10820 }

```

`oshort-em-noreg` Like `long-em-noshort-em` but doesn't set the regular attribute.

```

10821 \newabbreviationstyle{long-em-noshort-em-noreg}{%
10822 }%

```

Set accessibility attributes if enabled.

```

10823 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel

```

Setup the default fields.

```
10824 \GlsXtrUseAbbrStyleSetup{long-em-noshort-em}%
    Unset the regular attribute if it has been set.
10825 \renewcommand*\GlsXtrPostNewAbbreviation{%
10826     \glshasattribute{\the\glslabeltok}{regular}%
10827     {%
10828         \glssetattribute{\the\glslabeltok}{regular}{false}%
10829     }%
10830     {}%
10831 }%
10832 }%
10833 {%
10834 \GlsXtrUseAbbrStyleFmts{long-em-noshort-em}%
10835 }
```

noshort-em-desc The emphasized font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```
10836 \newabbreviationstyle{long-noshort-em-desc}%
10837 {%
10838 \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
10839 }%
10840 {%
10841 \renewcommand*\abbrvpluralsuffix{\glsxtremsuffix}%
10842 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10843 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10844 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
10845 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
10846 \renewcommand*\glsxtrsubsequentfmt[2]{%
10847     \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10848     \ifglsxtrinsertinside \else##2\fi
10849 }%
10850 \renewcommand*\glsxtrsubsequentplfmt[2]{%
10851     \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10852     \ifglsxtrinsertinside \else##2\fi
10853 }%
10854 \renewcommand*\Glsxtrsubsequentfmt[2]{%
10855     \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10856     \ifglsxtrinsertinside \else##2\fi
10857 }%
10858 \renewcommand*\Glsxtrsubsequentplfmt[2]{%
10859     \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10860     \ifglsxtrinsertinside \else##2\fi
10861 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
10862 \renewcommand*\glsxtrinlinefullformat[2]{%
```

```

10863   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10864     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10865     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10866   }%
10867   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10868     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10869       \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10870       \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10871   }%
10872   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10873     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10874       \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10875       \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10876   }%
10877   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10878     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10879       \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10880       \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10881   }%

```

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.

```

10882   \renewcommand*{\glsxtrfullformat}[2]{%
10883     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10884       \ifglsxtrinsertinside\else##2\fi
10885   }%
10886   \renewcommand*{\glsxtrfullplformat}[2]{%
10887     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10888       \ifglsxtrinsertinside\else##2\fi
10889   }%
10890   \renewcommand*{\Glsxtrfullformat}[2]{%
10891     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10892       \ifglsxtrinsertinside\else##2\fi
10893   }%
10894   \renewcommand*{\Glsxtrfullplformat}[2]{%
10895     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10896       \ifglsxtrinsertinside\else##2\fi
10897   }%
10898 }

```

long-desc-em Backward compatibility:

```
10899 \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.

```

10900 \newabbreviationstyle{long-em-noshort-em-desc}%
10901 {%
10902   \renewcommand*{\CustomAbbreviationFields}{%
10903     name={\glsxtrlongnoshortdescname},

```

```

10904     sort={\the\glslongtok},
10905     first=\protect\glsfirstlongemfont{\the\glslongtok},
10906     firstplural=\protect\glsfirstlongemfont{\the\glslongpltok},
10907     text=\glslongemfont{\the\glslongtok},
10908     plural=\glslongemfont{\the\glslongpltok}%
10909 }%
10910 \renewcommand*\GlsXtrPostNewAbbreviation{%
10911   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10912 }%
10913 {%
10914 \renewcommand*\abbrvpluralsuffix{\glsxtremsuffix}%
10915 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10916 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10917 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongemfont{##1}}%
10918 \renewcommand*\glslongfont[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10919 \renewcommand*\glsxtrsubsequentfmt[2]{%
10920   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10921   \ifglsxtrinsertinside \else##2\fi
10922 }%
10923 \renewcommand*\glsxtrsubsequentplfmt[2]{%
10924   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10925   \ifglsxtrinsertinside \else##2\fi
10926 }%
10927 \renewcommand*\Glsxtrsubsequentfmt[2]{%
10928   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10929   \ifglsxtrinsertinside \else##2\fi
10930 }%
10931 \renewcommand*\Glsxtrsubsequentplfmt[2]{%
10932   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10933   \ifglsxtrinsertinside \else##2\fi
10934 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

10935 \renewcommand*\glsxtrinlinefullformat[2]{%
10936   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10937   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10938   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10939 }%
10940 \renewcommand*\glsxtrinlinefullplformat[2]{%
10941   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10942   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10943   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10944 }%
10945 \renewcommand*\Glsxtrinlinefullformat[2]{%
10946   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10947   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10948   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%

```

```

10949 }%
10950 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10951   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10952   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10953   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
10954 }%

```

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.

```

10955 \renewcommand*{\glsxtrfullformat}[2]{%
10956   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10957   \ifglsxtrinsertinside\else##2\fi
10958 }%
10959 \renewcommand*{\glsxtrfullplformat}[2]{%
10960   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10961   \ifglsxtrinsertinside\else##2\fi
10962 }%
10963 \renewcommand*{\Glsxtrfullformat}[2]{%
10964   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10965   \ifglsxtrinsertinside\else##2\fi
10966 }%
10967 \renewcommand*{\Glsxtrfullplformat}[2]{%
10968   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10969   \ifglsxtrinsertinside\else##2\fi
10970 }%
10971 }

```

t-em-desc-noreg Like long-em-noshort-em-desc but doesn't set the regular attribute.

```

10972 \newabbreviationstyle{long-em-noshort-em-desc-noreg}{%
10973 {%
10974   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em-desc}}%

```

Unset the regular attribute if it has been set.

```

10975 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10976   \glshasattribute{\the\glslabeltok}{regular}}%
10977 {%
10978   \glssetattribute{\the\glslabeltok}{regular}{false}}%
10979 }%
10980 {%
10981 }%
10982 }%
10983 {%
10984 \GlsXtrUseAbbrStyleFmts{long-em-noshort-em-desc}}%
10985 }

```

ort-em-footnote

```

10986 \newabbreviationstyle{short-em-footnote}{%
10987 {%
10988   \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel

```

Setup the default fields.

```
10989 \renewcommand*\CustomAbbreviationFields{%
10990   name={\glsxtrfootnotename},
10991   sort={\the\glsshorttok},
10992   description={\the\glslongtok},%
10993   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10994     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10995       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
10996   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10997     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10998       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
10999   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
11000   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.

```
11001 \renewcommand*\GlsXtrPostNewAbbreviation{%
11002   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
11003   \glshasattribute{\the\glslabeltok}{regular}%
11004   {%
11005     \glssetattribute{\the\glslabeltok}{regular}{false}%
11006   }%
11007   {}%
11008 }%
11009 }%
11010 {%

11011 \renewcommand*\abbrvpluralsuffix{\glsxtremsuffix}%
11012 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
11013 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
11014 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
11015 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```
11016 \renewcommand*\glsxtrfullformat}[2]{%
11017   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11018   \ifglsxtrinsertinside\else##2\fi
11019   \protect\glsxtrabbrvfootnote{##1}%
11020     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
11021 }%
11022 \renewcommand*\glsxtrfullplformat}[2]{%
11023   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11024   \ifglsxtrinsertinside\else##2\fi
11025   \protect\glsxtrabbrvfootnote{##1}%
11026     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11027 }%
11028 \renewcommand*\GlsXtrfullformat}[2]{%
11029   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11030   \ifglsxtrinsertinside\else##2\fi
11031   \protect\glsxtrabbrvfootnote{##1}%
11032 }
```

```

11032     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
11033 }
11034 \renewcommand*{\Glsxtrfullplformat}[2]{%
11035     \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11036     \ifglsxtrinsertinside\else##2\fi
11037     \protect\glsxtrabrvfootnote{##1}%
11038     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11039 }

```

The first use full form and the inline full form use the short (long) style.

```

11040 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11041     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11042     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11043     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
11044 }
11045 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11046     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11047     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11048     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11049 }
11050 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11051     \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11052     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11053     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
11054 }
11055 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11056     \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11057     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11058     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11059 }
11060 }

```

`footnote-em` Backward compatibility:

```
11061 \glsxtr@deprecated@abbrstyle{footnote-em}{short-em-footnote}
```

`m-footnote-desc` Like `short-em-footnote` but with user supplied description.

```

11062 \newabbreviationstyle{short-em-footnote-desc}%
11063 {%

```

Set accessibility attributes if enabled.

```
11064 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```

11065 \renewcommand*{\CustomAbbreviationFields}{}%
11066     name={\glsxtrfootnotedescname},
11067     sort={\glsxtrfootnotedescsort},
11068     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
11069     \protect\glsxtrabrvfootnote{\the\glslabeltok}%
11070     {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
11071     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}%

```

```

11072     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
11073         {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
11074     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
11075     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.

```

11076 \renewcommand*\GlsXtrPostNewAbbreviation{%
11077     \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
11078     \glshasattribute{\the\glslabeltok}{regular}%
11079     {}%
11080     \glssetattribute{\the\glslabeltok}{regular}{false}%
11081     }%
11082     {}%
11083     }%
11084 }%
11085 {%
11086 \GlsXtrUseAbbrStyleFmts{short-em-footnote}%
11087 }

```

em-postfootnote

```

11088 \newabbreviationstyle{short-em-postfootnote}%
11089 {%

```

Set accessibility attributes if enabled.

```
11090 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

11091 \renewcommand*\CustomAbbreviationFields{%
11092     name={\glsxtrfootnotename},
11093     sort={\the\glsshorttok},
11094     description={\the\glslongtok},%
11095     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
11096     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
11097     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
11098     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.

```

11099 \renewcommand*\GlsXtrPostNewAbbreviation{%
11100     \csdef{glsxtrpostlink\glscategorylabel}{%
11101         \glsxtrifwasfirstuse
11102     }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

11103     \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
11104         {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
11105     }%
11106     {}%
11107     }%

```

```

11108 \glshasattribute{\the\glslabeltok}{regular}%
11109 {%
11110   \glssetattribute{\the\glslabeltok}{regular}{false}%
11111 }%
11112 {}%
11113 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

11114 \renewcommand*{\glsxtrsetupfulldefs}{%
11115   \let\glsxtrifwasfirstuse\@secondoftwo
11116 }%
11117 }%
11118 {}%

11119 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
11120 \renewcommand*{\glsabbrvfont[1]}{\glsabbrvemfont{##1}}%
11121 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
11122 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
11123 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

11124 \renewcommand*{\glsxtrfullformat}[2]{%
11125   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11126   \ifglsxtrinsertinside\else##2\fi
11127 }%
11128 \renewcommand*{\glsxtrfullplformat}[2]{%
11129   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11130   \ifglsxtrinsertinside\else##2\fi
11131 }%
11132 \renewcommand*{\Glsxtrfullformat}[2]{%
11133   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11134   \ifglsxtrinsertinside\else##2\fi
11135 }%
11136 \renewcommand*{\Glsxtrfullplformat}[2]{%
11137   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11138   \ifglsxtrinsertinside\else##2\fi
11139 }%

```

The first use full form and the inline full form use the short (long) style.

```

11140 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11141   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11142   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11143   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
11144 }%
11145 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11146   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11147   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11148   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11149 }%
11150 \renewcommand*{\Glsxtrinlinefullformat}[2]{%

```

```

11151   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11152     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11153     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
11154   }%
11155   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11156     \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11157     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11158     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11159   }%
11160 }

```

postfootnote-em Backward compatibility:

```
11161 \@glsxtr@deprecated@abbrstyle{postfootnote-em}{short-em-postfootnote}
```

stfootnote-desc Like short-em-postfootnote but with user supplied description.

```

11162 \newabbreviationstyle{short-em-postfootnote-desc}{%
11163 }%

```

Set accessibility attributes if enabled.

```
11164 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```

11165 \renewcommand*{\CustomAbbreviationFields}{%
11166   name={\glsxtrfootnotedescname},%
11167   sort={\glsxtrfootnotedescsort},%
11168   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
11169   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
11170   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
11171   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.

```

11172 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11173   \csdef{glsxtrpostlink\glscategorylabel}{%
11174     \glsxtrifwasfirstuse
11175   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

11176   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
11177     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
11178   }%
11179   {}%
11180 }%
11181 \glshasattribute{\the\glslabeltok}{regular}%
11182 {}%
11183   \glssetattribute{\the\glslabeltok}{regular}{false}%
11184 }%
11185 {}%
11186 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```
11187 \renewcommand*{\glsxtrsetupfulldefs}{%
11188   \let\glsxtrifwasfirstuse\@secondoftwo
11189 }%
11190 }%
11191 {%
11192 \GlsXtrUseAbbrStyleFmts{short-em-postfootnote}%
11193 }
```

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.

```
11194 \newcommand*{\glsxtruserfield}{useri}
```

`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.

```
11195 \ifdef\glscurrentfieldvalue
11196 {
11197   \newcommand*{\glsxtruserparen}[2]{%
11198     \glsxtrfullsep{\#2}%
11199     \glsxtrparen
11200     {\#1\ifglsishasfield{\glsxtruserfield}{\#2}{, \glscurrentfieldvalue}{}}
11201   }
11202 }
11203 {
11204   \newcommand*{\glsxtruserparen}[2]{%
11205     \glsxtrfullsep{\#2}%
11206     \glsxtrparen
11207     {\#1\ifglsishasfield{\glsxtruserfield}{\#2}{, \glo@thisvalue}{}}
11208   }
11209 }
```

Font used for short form:

`lsabbrvuserfont`

```
11210 \newcommand*{\glsabbrvuserfont}[1]{\glsabbrvdefaultfont{\#1}}
```

Font used for short form on first use:

`stabbrvuserfont`

```
11211 \newcommand*{\glsfirststabbrvuserfont}[1]{\glsabbrvuserfont{\#1}}
```

Font used for long form:

```
glslonguserfont  
11212 \newcommand*{\glslonguserfont}[1]{\glslongdefaultfont{#1}}
```

Font used for long form on first use:

```
rstlonguserfont  
11213 \newcommand*{\glsfirstlonguserfont}[1]{\glslonguserfont{#1}}
```

The default short form suffix:

```
lsxtrusersuffix  
11214 \newcommand*{\glsxtrusersuffix}{\glsxtrabbrvpluralsuffix}
```

Description encapsulator.

```
userdescription The first argument is the description. The second argument is the label.  
11215 \newcommand*{\glsuserdescription}[2]{\glslonguserfont{#1}}
```

long-short-user

```
11216 \newabbreviationstyle{long-short-user}{%  
11217 {%
```

Set accessibility attributes if enabled.

```
11218 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11219 \renewcommand*{\CustomAbbreviationFields}{%  
11220   name={\glsxtrlongshortname},  
11221   sort={\the\glsshorttok},  
11222   first={\protect\glsfirstlonguserfont{\the\glslongtok}}%  
11223   \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%  
11224   {\the\glslabeltok},%  
11225   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}}%  
11226   \protect\glsxtruserparen  
11227   {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok},%  
  
11228   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%  
11229   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%  
11230   description={\protect\glsuserdescription{\the\glslongtok}}%  
11231   {\the\glslabeltok}}}%
```

Unset the regular attribute if it has been set.

```
11232 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  
11233   \glshasattribute{\the\glslabeltok}{regular}}%  
11234   {}%  
11235   \glssetattribute{\the\glslabeltok}{regular}{false}}%  
11236   {}%  
11237   {}%  
11238 }%  
11239 }%  
11240 {}%
```

In case the user wants to mix and match font styles, these are redefined here.

```
11241 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
11242 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
11243 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
11244 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
11245 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
11246 \renewcommand*{\glsxtrfullformat}[2]{%
11247   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11248   \ifglsxtrinsertinside\else##2\fi
11249   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11250 }%
11251 \renewcommand*{\glsxtrfullplformat}[2]{%
11252   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11253   \ifglsxtrinsertinside\else##2\fi
11254   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11255 }%
11256 \renewcommand*{\Glsxtrfullformat}[2]{%
11257   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11258   \ifglsxtrinsertinside\else##2\fi
11259   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11260 }%
11261 \renewcommand*{\Glsxtrfullplformat}[2]{%
11262   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11263   \ifglsxtrinsertinside\else##2\fi
11264   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11265 }%
11266 }
```

-postshort-user Like long-short-user but defers the parenthetical matter to after the link.

```
11267 \newabbreviationstyle{long-postshort-user}%
11268 {%
```

Set accessibility attributes if enabled.

```
11269 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11270 \renewcommand*{\CustomAbbreviationFields}{%
11271   name={\glsxtrlongshortname},
11272   sort={\the\glsshorttok},
11273   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11274   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11275   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11276   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
11277   description={\protect\glsuserdescription{\the\glslongtok}%
11278   {\the\glslabeltok}}}%
11279 \renewcommand*{\GlsXtrPostNewAbbreviation}%
11280   \csdef{glsxtrpostlink\glscategorylabel}{%
```

```

11281     \glsxtrifwasfirstuse
11282     {%
11283         \glsxtruserparen
11284             {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}{%
11285                 {\glslabel}%
11286             }%
11287             {}%
11288         }%
11289         \glshasattribute{\the\glslabeltok}{regular}%
11290         {%
11291             \glssetattribute{\the\glslabeltok}{regular}{false}%
11292         }%
11293         {}%
11294     }%
11295 }%
11296 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11297 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
11298 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
11299 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
11300 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
11301 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

11302 \renewcommand*{\glsxtrfullformat}[2]{%
11303     \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11304     \ifglsxtrinsertinside\else##2\fi
11305 }%
11306 \renewcommand*{\glsxtrfullplformat}[2]{%
11307     \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11308     \ifglsxtrinsertinside\else##2\fi
11309 }%
11310 \renewcommand*{\Glsxtrfullformat}[2]{%
11311     \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11312     \ifglsxtrinsertinside\else##2\fi
11313 }%
11314 \renewcommand*{\Glsxtrfullplformat}[2]{%
11315     \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11316     \ifglsxtrinsertinside\else##2\fi
11317 }%

```

In-line format:

```

11318 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11319     \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11320     \ifglsxtrinsertinside\else##2\fi
11321     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11322 }%
11323 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11324     \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

11325   \ifglsxtrinsertinside\else##2\fi
11326   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11327 }%
11328 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11329   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11330   \ifglsxtrinsertinside\else##2\fi
11331   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11332 }%
11333 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11334   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11335   \ifglsxtrinsertinside\else##2\fi
11336   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11337 }%
11338 }

```

ortuserdescname

```

11339 \newcommand*{\glsxtrlongshortuserdescname}{%
11340   \protect\glslonguserfont{\the\glslongtok}%
11341   \protect\glsxtruserparen
11342   {\protect\glsabbrvuserfont{\the\glsshorttok}}{\the\glslabeltok}%
11343 }

```

short-user-desc Like **long-postshort-user** but the user supplies the description.

```

11344 \newabbreviationstyle{long-postshort-user-desc}%
11345 {%

```

Set accessibility attributes if enabled.

```

11346 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11347 \renewcommand*{\CustomAbbreviationFields}{%
11348   name={\glsxtrlongshortuserdescname},
11349   sort={\the\glslongtok},
11350   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11351   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11352   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11353   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
11354 }%
11355 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11356   \csdef{glsxtrpostlink\glscategorylabel}{%
11357     \glsxtrifwasfirstuse
11358     {%
11359       \glsxtruserparen
11360       {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}%
11361       {\glslabel}%
11362     }%
11363     {}%
11364   }%
11365   \glshasattribute{\the\glslabeltok}{regular}%

```

```

11366     {%
11367         \glssetattribute{\the\glslabeltok}{regular}{false}%
11368     }%
11369     {}%
11370 }%
11371 }%
11372 {%
11373     \GlsXtrUseAbbrStyleFmts{long-postshort-user}%
11374 }

```

t-postlong-user Like short-long-user but defers the parenthetical matter to after the link.

```

11375 \newabbreviationstyle{short-postlong-user}%
11376 {%

```

Set accessibility attributes if enabled.

```
11377 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```

11378 \renewcommand*{\CustomAbbreviationFields}{%
11379     name={\glsxtrshortlongname},
11380     sort={\the\glsshorttok},
11381     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11382     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11383     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11384     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
11385     description={\protect\glsuserdescription{\the\glslongtok}}%
11386     {\the\glslabeltok}}}}%
11387 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11388     \csdef{\glsxtrpostlink\glscategorylabel}{%
11389         \glsxtrifwasfirstuse
11390         {%
11391             \glsxtruserparen
11392                 {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}%
11393                 {\glslabel}}%
11394         }%
11395     }%
11396 }%
11397     \glshasattribute{\the\glslabeltok}{regular}%
11398     {}%
11399     \glssetattribute{\the\glslabeltok}{regular}{false}%
11400     }%
11401     {}%
11402 }%
11403 }%
11404 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11405 \renewcommand*{\abrvpluralsuffix}{\glsxtrusersuffix}%
11406 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
11407 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%

```

```

11408 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
11409 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

11410 \renewcommand*{\glsxtrfullformat}[2]{%
11411   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11412   \ifglsxtrinsertinside\else##2\fi
11413 }%
11414 \renewcommand*{\glsxtrfullplformat}[2]{%
11415   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11416   \ifglsxtrinsertinside\else##2\fi
11417 }%
11418 \renewcommand*{\Glsxtrfullformat}[2]{%
11419   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11420   \ifglsxtrinsertinside\else##2\fi
11421 }%
11422 \renewcommand*{\Glsxtrfullplformat}[2]{%
11423   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11424   \ifglsxtrinsertinside\else##2\fi
11425 }%

```

In-line format:

```

11426 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11427   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11428   \ifglsxtrinsertinside\else##2\fi
11429   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11430 }%
11431 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11432   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11433   \ifglsxtrinsertinside\else##2\fi
11434   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11435 }%
11436 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11437   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11438   \ifglsxtrinsertinside\else##2\fi
11439   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11440 }%
11441 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11442   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11443   \ifglsxtrinsertinside\else##2\fi
11444   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11445 }%
11446 }

```

onguserdescname

```

11447 \newcommand*{\glsxtrshortlonguserdescname}{%
11448 \protect\glsabbrvuserfont{\the\glsshorttok}%
11449 \protect\glsxtruserparen
11450 {\protect\glslonguserfont{\the\glslongpltok}}%
11451 {\the\glslabeltok}%

```

```

11452 }

tlong-user-desc Like short-postlong-user but leaves the user to specify the description.
11453 \newabbreviationstyle{short-postlong-user-desc}{%
11454 {%
    Set accessibility attributes if enabled.
11455 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
    Setup the default fields.
11456 \renewcommand*{\CustomAbbreviationFields}{%
11457     name={\glsxtrshortlonguserdescname},
11458     sort={\the\glsshorttok},%
11459     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11460     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11461     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11462     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
11463 }%
11464 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11465     \csdef{\glsxtrpostlink\glscategorylabel}{%
11466         \glsxtrifwasfirstuse
11467     }%
11468         \glsxtruserparen
11469             {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}%
11470             {\glslabel}%
11471     }%
11472     {}%
11473 }%
11474     \glshasattribute{\the\glslabeltok}{regular}%
11475     {}%
11476         \glssetattribute{\the\glslabeltok}{regular}{false}%
11477     }%
11478     {}%
11479 }%
11480 }%
11481 {%
11482     \GlsXtrUseAbbrStyleFmts{short-postlong-user}%
11483 }

```

short-user-desc

```

11484 \newabbreviationstyle{long-short-user-desc}{%
11485 {%
    Set accessibility attributes if enabled.
11486 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
    Setup the default fields.
11487 \renewcommand*{\CustomAbbreviationFields}{%
11488     name={\glsxtrlongshortuserdescname},
11489     sort={\glsxtrlongshortdescsort},%

```

```

11490     first={\protect\glsfirstlonguserfont{\the\glslongtok}%
11491         \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
11492             {\the\glslabeltok}},%
11493     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}%
11494         \protect\glsxtruserparen%
11495             {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%
11496     text={\protect\glsabbrvfont{\the\glsshorttok}},%
11497     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
11498 }%

```

Unset the regular attribute if it has been set.

```

11499 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11500     \glshasattribute{\the\glslabeltok}{regular}%
11501     {%
11502         \glssetattribute{\the\glslabeltok}{regular}{false}%
11503     }%
11504     {}%
11505 }%
11506 }%
11507 {%
11508     \GlsXtrUseAbbrStyleFmts{long-short-user}%
11509 }

```

short-long-user

```

11510 \newabbreviationstyle{short-long-user}%
11511 {%

```

Set accessibility attributes if enabled.

```
11512 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

\glslonguserfont is used in the description since \glsdesc doesn't set the style. (Now in \glsuserdescription.)

```

11513 \renewcommand*{\CustomAbbreviationFields}{%
11514     name={\glsxtrshortlongname},%
11515     sort={\the\glsshorttok},%
11516     description={\protect\glsuserdescription{\the\glslongtok}%
11517         {\the\glslabeltok}},%
11518     first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
11519         \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
11520             {\the\glslabeltok}},%
11521     firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
11522         \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
11523             {\the\glslabeltok}},%
11524     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11525     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```
11526 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
```

```

11527 \glshasattribute{\the\glslabeltok}{regular}%
11528 {%
11529   \glssetattribute{\the\glslabeltok}{regular}{false}%
11530 }%
11531 {}%
11532 }%
11533 }%
11534 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11535 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
11536 \renewcommand*\glsabbrvfont[1]{\glsabbrvuserfont{##1}}%
11537 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
11538 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
11539 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

11540 \renewcommand*{\glsxtrfullformat}[2]{%
11541   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11542   \ifglsxtrinsertinside\else##2\fi
11543   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11544 }%
11545 \renewcommand*{\glsxtrfullplformat}[2]{%
11546   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11547   \ifglsxtrinsertinside\else##2\fi
11548   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11549 }%
11550 \renewcommand*{\Glsxtrfullformat}[2]{%
11551   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11552   \ifglsxtrinsertinside\else##2\fi
11553   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11554 }%
11555 \renewcommand*{\Glsxtrfullplformat}[2]{%
11556   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11557   \ifglsxtrinsertinside\else##2\fi
11558   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11559 }%
11560 }

```

-long-user-desc

```

11561 \newabbreviationstyle{short-long-user-desc}%
11562 {%

```

Set accessibility attributes if enabled.

```

11563 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11564 \renewcommand*{\CustomAbbreviationFields}{%
11565   name={\glsxtrshortlonguserdescname},%
11566   sort={\glsxtrshortlongdescsort},%

```

```

11567   first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
11568     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
11569       {\the\glslabeltok}},%
11570   firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
11571     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
11572       {\the\glslabeltok}},%
11573   text={\protect\glsabbrvfont{\the\glsshorttok}},%
11574   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
11575 }%

```

Unset the regular attribute if it has been set.

```

11576 \renewcommand*\GlsXtrPostNewAbbreviation{%
11577   \glshasattribute{\the\glslabeltok}{regular}%
11578   {%
11579     \glssetattribute{\the\glslabeltok}{regular}{false}%
11580   }%
11581   {}%
11582 }%
11583 }%
11584 {%
11585   \GlsXtrUseAbbrStyleFmts{short-long-user}%
11586 }

```

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.

```

11587 \newrobustcmd*\glsxtrifhyphenstart}[3]{%
11588   \ifx\glsinsert\relax
11589     \expandafter\@glsxtrifhyphenstart\relax\relax
11590     \end\@glsxtrifhyphenstart{#2}{#3}%
11591   \else
11592     \glsxtrifhyphenstart\relax\relax\end\@glsxtrifhyphenstart{#2}{#3}%
11593   \fi
11594 }

```

trifhyphenstart

```

11595 \def\@glsxtrifhyphenstart#1#2\end\@glsxtrifhyphenstart#3#4{%
11596   \ifx-#1\relax#3\else #4\fi
11597 }

```

longhyphenshort

```
\glsxtrlonghyphenshort{\label}{\long}{\short}{\insert}
```

The `\long` and `\short` arguments may be the plural form. The `\long` argument may also be the first letter uppercase form.

```
11598 \newcommand*\glsxtrlonghyphenshort}[4]{%
```

Grouping is needed to localise the redefinitions.

```
11599 {%
```

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.

```
11600 \glsxtrifhyphenstart[#4]{\def\glsxtrwordsep{-}}{}%
11601 \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside[#4]\fi}%
11602 \ifglsxtrinsertinside\else[#4]\fi
11603 \glsxtrfullsep{#1}%
11604 \glsxtrparen{\glsfirstabbrvhyphenfont{#3\ifglsxtrinsertinside[#4]\fi}%
11605 \ifglsxtrinsertinside\else[#4]\fi}%
11606 }%
11607 }
```

abbrvhypenfont

```
11608 \newcommand*\glsabbrvhypenfont}{\glsabbrvdefaultfont}%
```

abbrvhypenfont

```
11609 \newcommand*\glsfirstabbrvhypenfont}{\glsabbrvhypenfont}%
```

slonghypenfont

```
11610 \newcommand*\glslonghypenfont}{\glslongdefaultfont}%
```

tlonghypenfont

```
11611 \newcommand*\glsfirstlonghypenfont}{\glslonghypenfont}%
```

The default short form suffix:

xtrhypensuffix

```
11612 \newcommand*\glsxtrhypensuffix}{\glsxtrabbrvpluralsuffix}%
```

en-short-hyphen Designed for use with the `markwords` attribute.

```
11613 \newabbreviationstyle{long-hyphen-short-hyphen}{}%
```

```
11614 {%
```

Set accessibility attributes if enabled.

```
11615 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11616 \renewcommand*\CustomAbbreviationFields{}%
11617   name={\glsxtrlongshortname},
11618   sort={\the\glsshorttok},
```

```

11619   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}%
11620     \protect\glsxtrfullsep{\the\glslabeltok}%
11621     \glsxtrparen{\protect\glsfirststabrvhyphenfont{\the\glsshorttok}}},%
11622   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}%
11623     \protect\glsxtrfullsep{\the\glslabeltok}%
11624     \glsxtrparen{\protect\glsfirststabrvhyphenfont{\the\glsshortpltok}}},%
11625   text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
11626   plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}},%
11627   description={\protect\glslonghyphenfont{\the\glslongtok}}}

```

Unset the regular attribute if it has been set.

```

11628   \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
11629     \glshasattribute{\the\glslabeltok}{regular}%
11630     {%
11631       \glssetattribute{\the\glslabeltok}{regular}{false}%
11632     }%
11633     {}%
11634   }%
11635 }%
11636 {%
11637   \renewcommand*\{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
11638   \renewcommand*\{\glsabbrvfont}[1]{\glsabbrvhyphenfont{##1}}%
11639   \renewcommand*\{\glsfirststabrvfont}[1]{\glsfirststabrvhyphenfont{##1}}%
11640   \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
11641   \renewcommand*\{\glslongfont}[1]{\glslonghyphenfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

11642   \renewcommand*\{\glsxtrfullformat}[2]{%
11643     \glsxtrlonghyphenshort{##1}{\glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
11644   }%
11645   \renewcommand*\{\glsxtrfullplformat}[2]{%
11646     \glsxtrlonghyphenshort{##1}{\glsaccesslongpl{##1}}%
11647     {\glsaccessshortpl{##1}}{##2}%
11648   }%
11649   \renewcommand*\{\GlsXtrfullformat}[2]{%
11650     \glsxtrlonghyphenshort{##1}{\Glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
11651   }%
11652   \renewcommand*\{\GlsXtrfullplformat}[2]{%
11653     \glsxtrlonghyphenshort{##1}{\Glsaccesslongpl{##1}}%
11654     {\glsaccessshortpl{##1}}{##2}%
11655   }%
11656 }

```

ort-hyphen-desc Like long-hyphen-short-hyphen but the description must be supplied by the user.

```

11657 \newabbreviationstyle{long-hyphen-short-hyphen-desc}%
11658 {%

```

Set accessibility attributes if enabled.

```

11659 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11660 \renewcommand*{\CustomAbbreviationFields}{%
11661   name={\glsxtrlongshortdescname},
11662   sort={\glsxtrlongshortdescsort},
11663   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}%
11664     \protect\glsxtrfullsep{\the\glslabeltok}%
11665     \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
11666   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}%
11667     \protect\glsxtrfullsep{\the\glslabeltok}%
11668     \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}}},%
11669   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11670   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
11671 }%

```

Unset the regular attribute if it has been set.

```

11672 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11673   \glshasattribute{\the\glslabeltok}{regular}%
11674   {%
11675     \glssetattribute{\the\glslabeltok}{regular}{false}%
11676   }%
11677   {}%
11678 }%
11679 }%
11680 {}%
11681 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%
11682 }

```

nghyphennoshort

```
\glsxtrlonghyphennoshort{\<label>}{\<long>}{\<insert>}
```

```
11683 \newcommand*{\glsxtrlonghyphennoshort}[3]{%
```

Grouping is needed to localise the redefinitions.

```
11684 {%
```

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.

```

11685   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
11686   \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#3}\fi}%
11687   \ifglsxtrinsertinside\else{#3}\fi
11688 }%
11689 }

```

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.

```

11690 \newabbreviationstyle{long-hyphen-noshort-desc-noreg}%
11691 {%
11692   \renewcommand*{\CustomAbbreviationFields}{%
11693     name={\glsxtrlongnoshortdescname},
11694     sort={\expandonce\glsxtrorglong},
11695     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
11696     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
11697     text={\protect\glslonghyphenfont{\the\glslongtok}},%
11698     plural={\protect\glslonghyphenfont{\the\glslongpltok}}%
11699   }%

```

Unset the regular attribute if it has been set.

```

11700 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11701   \glshasattribute{\the\glslabeltok}{regular}%
11702   {%
11703     \glssetattribute{\the\glslabeltok}{regular}{false}%
11704   }%
11705   {}%
11706 }%
11707 }%
11708 {%
11709 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11710 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
11711 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
11712 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
11713 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
11714 \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

11715 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
11716   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
11717 }%
11718 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
11719   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
11720 }%
11721 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
11722   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
11723 }%
11724 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
11725   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
11726 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

11727 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11728   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
11729   \glsxtrfullsep{##1}%
11730   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
11731 }%
11732 \renewcommand*{\glsxtrinlinefullplformat}[2]{%

```

```

11733   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
11734   \glsxtrfullsep{##1}%
11735   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
11736 }%
11737 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11738   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
11739   \glsxtrfullsep{##1}%
11740   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
11741 }%
11742 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11743   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
11744   \glsxtrfullsep{##1}%
11745   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
11746 }%

```

The first use full form only displays the long form.

```

11747 \renewcommand*{\glsxtrfullformat}[2]{%
11748   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
11749 }%
11750 \renewcommand*{\glsxtrfullplformat}[2]{%
11751   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
11752 }%
11753 \renewcommand*{\Glsxtrfullformat}[2]{%
11754   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
11755 }%
11756 \renewcommand*{\Glsxtrfullplformat}[2]{%
11757   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
11758 }%
11759 }

```

`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.

```

11760 \newabbreviationstyle{long-hyphen-noshort-noreg}%
11761 {%

```

Set accessibility attributes if enabled.

```

11762 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel

```

Setup the default fields.

```

11763 \renewcommand*{\CustomAbbreviationFields}{%
11764   name={\glsxtrlongnoshortname},
11765   sort={\the\glsshorttok},
11766   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
11767   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
11768   text={\protect\glslonghyphenfont{\the\glslongtok}},%
11769   plural={\protect\glslonghyphenfont{\the\glslongpltok}},%
11770   description={\the\glslongtok}%
11771 }%

```

Unset the regular attribute if it has been set.

```
11772 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11773   \glshasattribute{\the\glslabeltok}{regular}%
11774   {%
11775     \glssetattribute{\the\glslabeltok}{regular}{false}%
11776   }%
11777   {}%
11778 }%
11779 }%
11780 {}%
11781 \GlsXtrUseAbbrStyleFmts{long-hyphen-noshort-desc-noreg}%
11782 }
```

lsxtrlonghyphen

```
\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.

```
11783 \newcommand*{\glsxtrlonghyphen}[3]{%
```

Grouping is needed to localise the redefinitions.

```
11784 {}%
11785   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
11786   \glsfirstlonghyphenfont{#1}%
11787 }%
11788 }
```

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.

```
11789 \newcommand*{\glsxtrposthyphenshort}[2]{%
11790 {}%
11791   \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
11792   \ifglsxtrinsertinside{\glsfirstlonghyphenfont{#2}}{\else{#2}\fi}%
11793   \glsxtrfullsep{#1}%
11794   \glsxtrparen%
11795   {\glsfirstabbrvhyphenfont{\glsentryshort{#1}\ifglsxtrinsertinside{#2}\fi}}%
11796   \ifglsxtrinsertinside{\else{#2}\fi}%
11797 }%
11798 }%
11799 }
```

yphensubsequent

```
\glsxtrposthyphensubsequent{\label}{\insert}
```

Format in the post-link hook for subsequent use. The label is ignored by default.

```
11800 \newcommand*{\glsxtrposthyphensubsequent}[2]{%
11801   \glsabbrvfont{\ifglsxtrinsertinside {\#2}\fi}%
11802   \ifglsxtrinsertinside \else{\#2}\fi
11803 }
```

ostshort-hyphen Like long-hyphen-short-hyphen but shifts the insert and parenthetical material to the post-link hook.

```
11804 \newabbreviationstyle{long-hyphen-postshort-hyphen}%
11805 {%
```

Set accessibility attributes if enabled.

```
11806 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11807 \renewcommand*{\CustomAbbreviationFields}{%
11808   name={\glsxtrlongshortname},
11809   sort={\the\glsshorttok},
11810   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
11811   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
11812   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11813   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
11814   description={\protect\glslonghyphenfont{\the\glslongtok}}%
11815 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11816   \csdef{glsxtrpostlink\glscategorylabel}{%
11817     \glsxtrifwasfirstuse
11818     {%
11819       \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
11820     }%
11821     {%
11822       \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11823     }%
11824   }%
11825   \glshasattribute{\the\glslabeltok}{regular}%
11826   {%
11827     \glssetattribute{\the\glslabeltok}{regular}{false}%
11828   }%
11829   {}%
11830 }%
11831 }%
11832 {%
```

Put the insertion into the post-link:

```
11822   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11823 }%
11824 }%
11825 \glshasattribute{\the\glslabeltok}{regular}%
11826 {%
11827   \glssetattribute{\the\glslabeltok}{regular}{false}%
11828 }%
11829 {}%
11830 }%
11831 }%
11832 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
11833 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
11834 }
```

```

11834 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
11835 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
11836 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
11837 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

Subsequent use needs to omit the insertion:

```

11838 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
11839   \glsabbrvfont{\glsaccessshort{##1}}%
11840 }%
11841 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
11842   \glsabbrvfont{\glsaccessshortpl{##1}}%
11843 }%
11844 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
11845   \glsabbrvfont{\Glsaccessshort{##1}}%
11846 }%
11847 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
11848   \glsabbrvfont{\Glsaccessshortpl{##1}}%
11849 }%

```

First use full form:

```

11850 \renewcommand*{\glsxtrfullformat}[2]{%
11851   \glsxtrlonghypen{\glsaccesslong{##1}{##1}{##2}}%
11852 }%
11853 \renewcommand*{\glsxtrfullplformat}[2]{%
11854   \glsxtrlonghypen{\glsaccesslongpl{##1}{##1}{##2}}%
11855 }%
11856 \renewcommand*{\Glsxtrfullformat}[2]{%
11857   \glsxtrlonghypen{\Glsaccesslong{##1}{##1}{##2}}%
11858 }%
11859 \renewcommand*{\Glsxtrfullplformat}[2]{%
11860   \glsxtrlonghypen{\Glsaccesslongpl{##1}{##1}{##2}}%
11861 }%

```

In-line format.

```

11862 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11863   \glsfirstlonghypenfont{\glsaccesslong{##1}}%
11864   \ifglsxtrinsertinside{##2}\fi}%
11865   \ifglsxtrinsertinside \else{##2}\fi
11866 }%
11867 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11868   \glsfirstlonghypenfont{\glsaccesslongpl{##1}}%
11869   \ifglsxtrinsertinside{##2}\fi}%
11870   \ifglsxtrinsertinside \else{##2}\fi
11871 }%
11872 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11873   \glsfirstlonghypenfont{\Glsaccesslong{##1}}%
11874   \ifglsxtrinsertinside{##2}\fi}%
11875   \ifglsxtrinsertinside \else{##2}\fi
11876 }%
11877 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11878   \glsfirstlonghypenfont{\Glsaccesslongpl{##1}}%

```

```

11879      \ifglsxtrinsertinside{##2}\fi}%
11880      \ifglsxtrinsertinside \else{##2}\fi
11881  }%
11882 }

short-hyphen-desc Like long-hyphen-postshort-hyphen but the description must be supplied by the user.
11883 \newabbreviationstyle{long-hyphen-postshort-hyphen-desc}{%
11884 {%

    Set accessibility attributes if enabled.
11885 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

    Setup the default fields.
11886 \renewcommand*\CustomAbbreviationFields{%
11887     name={\glsxtrlongshortdescname},%
11888     sort={\glsxtrlongshortdescsort},%
11889     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
11890     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
11891     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11892     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
11893 }%
11894 \renewcommand*\GlsXtrPostNewAbbreviation{%
11895     \csdef{\glsxtrpostlink\glscategorylabel}{%
11896         \glsxtrifwasfirstuse
11897         {%
11898             \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
11899         }%
11900     }%
}

    Put the insertion into the post-link:
11901     \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11902     }%
11903 }%
11904 \glshasattribute{\the\glslabeltok}{regular}%
11905 {%
11906     \glssetattribute{\the\glslabeltok}{regular}{false}%
11907 }%
11908 {%
11909 }%
11910 }%
11911 {%
11912 \GlsXtrUseAbbrStyleFmts{long-hyphen-postshort-hyphen}%
11913 }

```

short-hyphenlong

$\glsxtrshorthypenlong{\langle label \rangle}{\langle short \rangle}{\langle long \rangle}{\langle insert \rangle}$

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.

```

11914 \newcommand*{\glsxtrshorthyphenlong}[4]{%
  Grouping is needed to localise the redefinitions.
11915  {%
  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 precaution-
  ary measure.)
11916  \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
11917  \glsfirstabbrvhypenfont{#2\ifglsxtrinsertinside{#4}\fi}%
11918  \ifglsxtrinsertinside\else{#4}\fi
11919  \glsxtrfullsep{#1}%
11920  \glsxtrparen{\glsfirstlonghypenfont{#3\ifglsxtrinsertinside{#4}\fi}%
11921  \ifglsxtrinsertinside\else{#4}\fi}%
11922 }%
11923 }

```

hen-long-hyphen Designed for use with the markwords attribute.

```

11924 \newabbreviationstyle{short-hyphen-long-hyphen}%
11925 {%

```

Set accessibility attributes if enabled.

```

11926 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel

```

Setup the default fields.

```

11927 \renewcommand*{\CustomAbbreviationFields}{%
11928   name={\glsxtrshortlongname},
11929   sort={\the\glsshorttok},
11930   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
11931     \protect\glsxtrfullsep{\the\glslabeltok}%
11932     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
11933   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
11934     \protect\glsxtrfullsep{\the\glslabeltok}%
11935     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
11936   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11937   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
11938   description={\protect\glslonghypenfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```

11939 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11940   \glshasattribute{\the\glslabeltok}{regular}%
11941   {%
11942     \glssetattribute{\the\glslabeltok}{regular}{false}%
11943   }%
11944   {}%
11945 }%
11946 }%
11947 {%
11948 \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
11949 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
11950 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%

```

```

11951 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
11952 \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

11953 \renewcommand*{\glsxtrfullformat}[2]{%
11954   \glsxtrshorthyphenlong{##1}{\glsaccessshort{##1}}{\glsaccesslong{##1}}{##2}%
11955 }%
11956 \renewcommand*{\glsxtrfullplformat}[2]{%
11957   \glsxtrshorthyphenlong{##1}%
11958   {\glsaccessshortpl{##1}}{\glsaccesslongpl{##1}}{##2}%
11959 }%
11960 \renewcommand*{\Glsxtrfullformat}[2]{%
11961   \glsxtrshorthyphenlong{##1}{\glsaccessshort{##1}}{\Glsaccesslong{##1}}{##2}%
11962 }%
11963 \renewcommand*{\Glsxtrfullplformat}[2]{%
11964   \glsxtrshorthyphenlong{##1}%
11965   {\glsaccessshortpl{##1}}{\Glsaccesslongpl{##1}}{##2}%
11966 }%
11967 }

```

`ong-hyphen-desc` Like short-hyphen-long-hyphen but the description must be supplied by the user.

```

11968 \newabbreviationstyle{short-hyphen-long-hyphen-desc}%
11969 {%

```

Set accessibility attributes if enabled.

```

11970 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11971 \renewcommand*{\CustomAbbreviationFields}{%
11972   name={\glsxtrshortlongdescname},%
11973   sort={\glsxtrshortlongdescsort},%
11974   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
11975   \protect\glsxtrfullsep{\the\glslabeltok}%
11976   \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
11977   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
11978   \protect\glsxtrfullsep{\the\glslabeltok}%
11979   \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
11980   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11981   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
11982 }%

```

Unset the regular attribute if it has been set.

```

11983 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11984   \glshasattribute{\the\glslabeltok}{regular}%
11985   {%
11986     \glssetattribute{\the\glslabeltok}{regular}{false}%
11987   }%
11988   {}%
11989 }%
11990 }%
11991 {%

```

```
11992 \GlsXtrUseAbbrStyleFmts{short-hyphen-long-hyphen}%
11993 }
```

sxtrshorthypen

```
\glsxtrshorthypen{\langle short \rangle}{\langle label \rangle}{\langle insert \rangle}
```

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.

```
11994 \newcommand*{\glsxtrshorthypen}[3]{%
```

Grouping is needed to localise the redefinitions.

```
11995 {%
11996   \glsxtrifhyphenstart{\#3}{\def\glsxtrwordsep{-}}{}%
11997   \glsfirstabbrvhyphenfont{\#1}%
11998 }%
11999 }
```

rposthypenlong

```
\glsxtrposthypenlong{\langle label \rangle}{\langle insert \rangle}
```

Used in the post-link hook for the short-hyphen-postlong-hyphen style. Much like `\glsxtrshorthypenlong` but omits the *⟨short⟩* part. This always uses the singular long form.

```
12000 \newcommand*{\glsxtrposthypenlong}[2]{%
12001 {%
12002   \glsxtrifhyphenstart{\#2}{\def\glsxtrwordsep{-}}{}%
12003   \ifglsxtrinsertinside{\glsfirstabbrvhyphenfont{\#2}}{\else{\#2}\fi}%
12004   \glsxtrfullsep{\#1}%
12005   \glsxtrparens%
12006   {\glsfirstlonghyphenfont{\glsentrylong{\#1}}\ifglsxtrinsertinside{\#2}\fi}%
12007   \ifglsxtrinsertinside{\else{\#2}\fi}%
12008 }%
12009 }%
12010 }
```

postlong-hyphen Like short-hyphen-long-hyphen but shifts the insert and parenthetical material to the post-link hook.

```
12011 \newabbreviationstyle{short-hyphen-postlong-hyphen}%
12012 {%
```

Set accessibility attributes if enabled.

```
12013 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
12014 \renewcommand*{\CustomAbbreviationFields}{%
12015   name={\glsxtrshortlongname},
```

```

12016     sort={\the\glsshorttok},
12017     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
12018     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
12019     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
12020     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
12021     description={\protect\glslonghypenfont{\the\glslongtok}}}%
12022 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
12023     \csdef{glsxtrpostlink\glscategorylabel}{%
12024         \glsxtrifwasfirstuse
12025     }%
12026         \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
12027     }%
12028     }%

```

Put the insertion into the post-link:

```

12029     \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
12030     }%
12031 }%
12032 \glshasattribute{\the\glslabeltok}{regular}%
12033 {%
12034     \glssetattribute{\the\glslabeltok}{regular}{false}%
12035 }%
12036 {}%
12037 }%
12038 }%
12039 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

12040 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
12041 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
12042 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
12043 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
12044 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

Subsequent use needs to omit the insertion:

```

12045 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
12046     \glsabbrvfont{\glsaccessshort{##1}}%
12047 }%
12048 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
12049     \glsabbrvfont{\glsaccessshortpl{##1}}%
12050 }%
12051 \renewcommand*{\GlsXtrSubsequentFmt}[2]{%
12052     \glsabbrvfont{\GlsAccessShort{##1}}%
12053 }%
12054 \renewcommand*{\GlsXtrSubsequentPlFmt}[2]{%
12055     \glsabbrvfont{\GlsAccessShortPl{##1}}%
12056 }%

```

First use full form:

```

12057 \renewcommand*{\glsxtrfullformat}[2]{%
12058     \glsxtrshorthypen{\glsaccessshort{##1}}{##1}{##2}%

```

```

12059 }%
12060 \renewcommand*{\glsxtrfullplformat}[2]{%
12061   \glsxtrshorthypen{\glsaccessshortpl{##1}}{##1}{##2}%
12062 }%
12063 \renewcommand*{\Glsxtrfullformat}[2]{%
12064   \glsxtrshorthypen{\Glsaccessshort{##1}}{##1}{##2}%
12065 }%
12066 \renewcommand*{\Glsxtrfullplformat}[2]{%
12067   \glsxtrshorthypen{\Glsaccessshortpl{##1}}{##1}{##2}%
12068 }%

```

In-line format. Commands like \glsxtrfull set \glsinsert to empty. The entire link-text (provided by the following commands) is stored in \glscustomtext.

```

12069 \renewcommand*{\glsxtrinlinefullformat}[2]{%
12070   \glsfirstabbrvhyphenfont{\glsaccessshort{##1}}%
12071     \ifglsxtrinsertinside{##2}\fi}%
12072   \ifglsxtrinsertinside \else{##2}\fi
12073 }%
12074 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
12075   \glsfirstabbrvhyphenfont{\glsaccessshortpl{##1}}%
12076     \ifglsxtrinsertinside{##2}\fi}%
12077   \ifglsxtrinsertinside \else{##2}\fi
12078 }%
12079 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
12080   \glsfirstabbrvhyphenfont{\Glsaccessshort{##1}}%
12081     \ifglsxtrinsertinside{##2}\fi}%
12082   \ifglsxtrinsertinside \else{##2}\fi
12083 }%
12084 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
12085   \glsfirstabbrvhyphenfont{\Glsaccessshortpl{##1}}%
12086     \ifglsxtrinsertinside{##2}\fi}%
12087   \ifglsxtrinsertinside \else{##2}\fi
12088 }%
12089 }

```

`ong-hyphen-desc` Like `short-hyphen-postlong-hyphen` but the description must be supplied by the user.

```

12090 \newabbreviationstyle{short-hyphen-postlong-hyphen-desc}{%
12091 }%

```

Set accessibility attributes if enabled.

```
12092 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

12093 \renewcommand*{\CustomAbbreviationFields}{%
12094   name={\glsxtrshortlongdescname},%
12095   sort={\glsxtrshortlongdescsort},%
12096   first={\protect\glsfirstabbrvhyphenfont{\the\glsshorttok}},%
12097   firstplural={\protect\glsfirstabbrvhyphenfont{\the\glsshortpltok}},%
12098   text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
12099   plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}}%

```

```

12100  }%
12101  \renewcommand*{\GlsXtrPostNewAbbreviation}{%
12102    \csdef{glsxtrpostlink}{\glscategorylabel}{%
12103      \glsxtrifwasfirstuse
12104      {%
12105        \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
12106      }%
12107      {%

```

Put the insertion into the post-link:

```

12108      \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
12109      }%
12110    }%
12111    \glshasattribute{\the\glslabeltok}{regular}%
12112    {%
12113      \glssetattribute{\the\glslabeltok}{regular}{false}%
12114    }%
12115    {}%
12116  }%
12117 }%
12118 {%
12119   \GlsXtrUseAbbrStyleFmts{short-hyphen-postlong-hyphen}%
12120 }

```

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
12121 \newcommand*{\glsabbrvonlyfont}{\glsabbrvdefaultfont}%

stabbrvonlyfont
12122 \newcommand*{\glsfirstabbrvonlyfont}{\glsabbrvonlyfont}%

glslongonlyfont
12123 \newcommand*{\glslongonlyfont}{\glslongdefaultfont}%

rstlongonlyfont
12124 \newcommand*{\glsfirstlongonlyfont}{\glslongonlyfont}%

```

The default short form suffix:

```

lsxtronlysuffix
12125 \newcommand*{\glsxtronlysuffix}{\glsxtrabbrvpluralsuffix}%

\glsxtronlyname The default name format for this style.
12126 \newcommand*{\glsxtronlyname}{%
12127   \protect\glsabbrvonlyfont{\the\glsshorttok}%
12128 }

```

only-short-only

```
12129 \newabbreviationstyle{long-only-short-only}%
12130 {%
    Set accessibility attributes if enabled.
12131 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
    Setup the default fields.
12132 \renewcommand*\CustomAbbreviationFields{%
12133     name={\glsxtronlyname},
12134     sort={\the\glsshorttok},
12135     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
12136     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
12137     text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
12138     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}},%
12139     description={\protect\glslongonlyfont{\the\glslongtok}}}%
    Unset the regular attribute if it has been set.
12140 \renewcommand*\GlsXtrPostNewAbbreviation{%
12141     \glshasattribute{\the\glslabeltok}{regular}}%
12142 {%
12143     \glssetattribute{\the\glslabeltok}{regular}{false}}%
12144 }%
12145 {}%
12146 }%
12147 }%
12148 {%
12149 \renewcommand*\abrvpluralsuffix}{\glsxtronlysuffix}%
12150 \renewcommand*\glsabbrvfont}[1]{\glsabbrvonlyfont{##1}}%
12151 \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvonlyfont{##1}}%
12152 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongonlyfont{##1}}%
12153 \renewcommand*\glslongfont}[1]{\glslongonlyfont{##1}}%
```

The first use full form doesn't show the short form.

```
12154 \renewcommand*\glsxtrfullformat}[2]{%
12155     \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}}%
12156     \ifglsxtrinsertinside\else##2\fi
12157 }%
12158 \renewcommand*\glsxtrfullplformat}[2]{%
12159     \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}}%
12160     \ifglsxtrinsertinside\else##2\fi
12161 }%
12162 \renewcommand*\Glsxtrfullformat}[2]{%
12163     \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}}%
12164     \ifglsxtrinsertinside\else##2\fi
12165 }%
12166 \renewcommand*\Glsxtrfullplformat}[2]{%
12167     \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}}%
12168     \ifglsxtrinsertinside\else##2\fi
12169 }%
```

The inline full form does show the short form.

```
12170 \renewcommand*{\glsxtrinlinefullformat}[2]{%
12171   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
12172   \ifglsxtrinsertinside\else##2\fi
12173   \glsxtrfullsep{##1}%
12174   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshort{##1}}}%
```

12175 }%

```
12176 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
12177   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
12178   \ifglsxtrinsertinside\else##2\fi
12179   \glsxtrfullsep{##1}%
12180   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
```

12181 }%

```
12182 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
12183   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
12184   \ifglsxtrinsertinside\else##2\fi
12185   \glsxtrfullsep{##1}%
12186   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
```

12187 }%

```
12188 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
12189   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
12190   \ifglsxtrinsertinside\else##2\fi
12191   \glsxtrfullsep{##1}%
12192   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\Glsaccessshortpl{##1}}}%
```

12193 }%

12194 }

xtronlydescsort

```
12195 \newcommand*{\glsxtronlydescsort}{\the\glslongtok}
```

xtronlydescname

```
12196 \newcommand*{\glsxtronlydescname}{%
12197   \protect\glslongfont{\the\glslongtok}}%
```

12198 }

short-only-desc

```
12199 \newabbreviationstyle{long-only-short-only-desc}{%
12200 {}}
```

Set accessibility attributes if enabled.

```
12201 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
12202 \renewcommand*{\CustomAbbreviationFields}{%
12203   name={\glsxtronlydescname},
12204   sort={\glsxtronlydescsort},%
12205   first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
12206   firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
12207   text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
```

```

12208     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}}%
12209   }%
    Unset the regular attribute if it has been set.
12210 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
12211   \glshasattribute{\the\glslabeltok}{regular}%
12212   {%
12213     \glssetattribute{\the\glslabeltok}{regular}{false}%
12214   }%
12215   {}%
12216 }%
12217 }%
12218 {%
12219 \GlsXtrUseAbbrStyleFmts{long-only-short-only}%
12220 }

```

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:

```
12221 \let\@glsxtr@org@markright\markright
```

Redefine (grouping not added in case it interferes with the original code):

```
12222 \renewcommand*{\markright}[1]{%
12223   \glsxtrmarkhook
```

```
12224 \@glsxtr@org@markright{\@glsxtrinmark#1\@glsxtrnotinmark}%
12225 \glsxtrrestoremarkhook
12226 }
```

\markboth Save original definition:

```
12227 \let\@glsxtr@org@markboth\markboth
```

Redefine (grouping not added in case it interferes with the original code):

```
12228 \renewcommand*\markboth[2]{%
12229 \glsxtrmarkhook
12230 \@glsxtr@org@markboth
12231 {\@glsxtrinmark#1\@glsxtrnotinmark}%
12232 {\@glsxtrinmark#2\@glsxtrnotinmark}%
12233 \glsxtrrestoremarkhook
12234 }
```

Also do this for \@starttoc

\@starttoc Save original definition:

```
12235 \let\@glsxtr@org@@starttoc\@starttoc
```

Redefine:

```
12236 \renewcommand*\@starttoc[1]{%
12237 \glsxtrmarkhook
12238 \@glsxtrinmark
12239 \@glsxtr@org@@starttoc{#1}%
12240 \@glsxtrnotinmark
12241 \glsxtrrestoremarkhook
12242 }
```

If this causes a problem provide a simple way of switching back to the original definitions:

sxtrRevertMarks

```
12243 \newcommand*\glsxtrRevertMarks{%
12244 \let\markright\@glsxtr@org@markright
12245 \let\markboth\@glsxtr@org@markboth
12246 \let\@starttoc\@glsxtr@org@@starttoc
12247 }
```

rRevertTocMarks Just restores \@starttoc.

```
12248 \newcommand*\glsxtrRevertTocMarks{%
12249 \let\@starttoc\@glsxtr@org@@starttoc
12250 }
```

\glsxtrifinmark

```
12251 \newcommand*\glsxtrifinmark[2]{#2}
```

\@glsxtrinmark

```
12252 \newrobustcmd*\@glsxtrinmark{%
12253 \let\glsxtrifinmark\@firstoftwo
12254 }
```

```

glsxtrnotinmark
12255 \newrobustcmd*{\glsxtrnotinmark}{%
12256   \let\glsxtrinmark\@secondoftwo
12257 }

eorpdfforheading
12258 \ifdef\texorpdfstring
12259 {
12260   \newcommand*{\glsxtrtitleorpdfforheading}[3]{\texorpdfstring{#1}{#2}}
12261 }
12262 {
12263   \newcommand*{\glsxtrtitleorpdfforheading}[3]{#1}
12264 }

\glsxtrmarkhook Hook used in new definition of \markboth and \markright to make some changes to apply
to the marks:
12265 \newcommand*{\glsxtrmarkhook}{%}

Save current definitions:
12266 \let\@glsxtr@org@MakeUppercase\MakeUppercase
12267 \let\@glsxtr@org@glsxtrtitleorpdfforheading\glsxtrtitleorpdfforheading
12268 \let\@glsxtr@org@glsxtrtitleshort\glsxtrtitleshort
12269 \let\@glsxtr@org@glsxtrtitleshortpl\glsxtrtitleshortpl
12270 \let\@glsxtr@org@Glsxtrtitleshort\Glsxtrtitleshort
12271 \let\@glsxtr@org@Glsxtrtitleshortpl\Glsxtrtitleshortpl
12272 \let\@glsxtr@org@glsxtrtitlename\glsxtrtitlename
12273 \let\@glsxtr@org@Glsxtrtitlename\Glsxtrtitlename
12274 \let\@glsxtr@org@glsxtrtitletext\glsxtrtitletext
12275 \let\@glsxtr@org@Glsxtrtitletext\Glsxtrtitletext
12276 \let\@glsxtr@org@glsxtrtitleplural\glsxtrtitleplural
12277 \let\@glsxtr@org@Glsxtrtitleplural\Glsxtrtitleplural
12278 \let\@glsxtr@org@glsxtrtitlefirst\glsxtrtitlefirst
12279 \let\@glsxtr@org@Glsxtrtitlefirst\Glsxtrtitlefirst
12280 \let\@glsxtr@org@glsxtrtitlefirstplural\glsxtrtitlefirstplural
12281 \let\@glsxtr@org@Glsxtrtitlefirstplural\Glsxtrtitlefirstplural
12282 \let\@glsxtr@org@glsxtrtitlelong\glsxtrtitlelong
12283 \let\@glsxtr@org@glsxtrtitlelongpl\glsxtrtitlelongpl
12284 \let\@glsxtr@org@Glsxtrtitlelong\Glsxtrtitlelong
12285 \let\@glsxtr@org@Glsxtrtitlelongpl\Glsxtrtitlelongpl
12286 \let\@glsxtr@org@glsxtrtitlefull\glsxtrtitlefull
12287 \let\@glsxtr@org@glsxtrtitlefullpl\glsxtrtitlefullpl
12288 \let\@glsxtr@org@Glsxtrtitlefull\Glsxtrtitlefull
12289 \let\@glsxtr@org@Glsxtrtitlefullpl\Glsxtrtitlefullpl

New definitions
12290 \let\glsxtrinmark\@firstoftwo
12291 \let\MakeUppercase\MakeTextUppercase
12292 \let\glsxtrtitleorpdfforheading\@thirdofthree
12293 \let\glsxtrtitleshort\glsxtrheadshort
12294 \let\glsxtrtitleshortpl\glsxtrheadshortpl

```

```

12295 \let\Glsxtrtitleshort\Glsxtrheadshort
12296 \let\Glsxtrtitleshortpl\Glsxtrheadshortpl
12297 \let\glsxtrtitlename\glsxtrheadname
12298 \let\Glsxtrtitlename\Glsxtrheadname
12299 \let\glsxtrtitletext\glsxtrheadtext
12300 \let\Glsxtrtitletext\Glsxtrheadtext
12301 \let\glsxtrtitleplural\glsxtrheadplural
12302 \let\Glsxtrtitleplural\Glsxtrheadplural
12303 \let\glsxtrtitlefirst\glsxtrheadfirst
12304 \let\Glsxtrtitlefirst\Glsxtrheadfirst
12305 \let\glsxtrtitlefirstplural\glsxtrheadfirstplural
12306 \let\Glsxtrtitlefirstplural\Glsxtrheadfirstplural
12307 \let\glsxtrtitlelong\glsxtrheadlong
12308 \let\glsxtrtitlelongpl\glsxtrheadlongpl
12309 \let\Glsxtrtitlelong\Glsxtrheadlong
12310 \let\Glsxtrtitlelongpl\Glsxtrheadlongpl
12311 \let\glsxtrtitlefull\glsxtrheadfull
12312 \let\glsxtrtitlefullpl\glsxtrheadfullpl
12313 \let\Glsxtrtitlefull\Glsxtrheadfull
12314 \let\Glsxtrtitlefullpl\Glsxtrheadfullpl
12315 }

```

`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.)

```

12316 \newcommand*\glsxtrrestoremarkhook}{%
12317 \let\glsxtrifinmark\@secondoftwo
12318 \let\MakeUppercase\@glsxtr@org@MakeUppercase
12319 \let\glsxtrtitleorpdforheading\@glsxtr@org@glsxtrtitleorpdforheading
12320 \let\glsxtrtitleshort\@glsxtr@org@glsxtrtitleshort
12321 \let\glsxtrtitleshortpl\@glsxtr@org@glsxtrtitleshortpl
12322 \let\Glsxtrtitleshort\@glsxtr@org@Glsxtrtitleshort
12323 \let\Glsxtrtitleshortpl\@glsxtr@org@Glsxtrtitleshortpl
12324 \let\glsxtrtitlename\@glsxtr@org@glsxtrtitlename
12325 \let\Glsxtrtitlename\@glsxtr@org@Glsxtrtitlename
12326 \let\glsxtrtitletext\@glsxtr@org@glsxtrtitletext
12327 \let\Glsxtrtitletext\@glsxtr@org@Glsxtrtitletext
12328 \let\glsxtrtitleplural\@glsxtr@org@glsxtrtitleplural
12329 \let\Glsxtrtitleplural\@glsxtr@org@Glsxtrtitleplural
12330 \let\glsxtrtitlefirst\@glsxtr@org@glsxtrtitlefirst
12331 \let\Glsxtrtitlefirst\@glsxtr@org@Glsxtrtitlefirst
12332 \let\glsxtrtitlefirstplural\@glsxtr@org@glsxtrtitlefirstplural
12333 \let\Glsxtrtitlefirstplural\@glsxtr@org@Glsxtrtitlefirstplural
12334 \let\glsxtrtitlelong\@glsxtr@org@glsxtrtitlelong
12335 \let\glsxtrtitlelongpl\@glsxtr@org@glsxtrtitlelongpl
12336 \let\Glsxtrtitlelong\@glsxtr@org@Glsxtrtitlelong
12337 \let\Glsxtrtitlelongpl\@glsxtr@org@Glsxtrtitlelongpl
12338 \let\glsxtrtitlefull\@glsxtr@org@glsxtrtitlefull

```

```

12339 \let\glsxtrtitlefullpl\@glsxtr@org@glsxtrtitlefullpl
12340 \let\Glsxtrtitlefull\@glsxtr@org@Glsxtrtitlefull
12341 \let\Glsxtrtitlefullpl\@glsxtr@org@Glsxtrtitlefullpl
12342 }

```

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.

```

12343 \newcommand*\glsxtrheadshort[1]{%
12344 \protect\NoCaseChange
12345 {%
12346 \glsifattribute{#1}{headuc}{true}{%
12347 {%
12348 \GLSxtrshort [noindex,hyper=false]{#1}[]%
12349 }%
12350 {%
12351 \glsxtrshort [noindex,hyper=false]{#1}[]%
12352 }%
12353 }%
12354 }

```

`glsxtrtitleshort` Command to display short form of abbreviation in section title and table of contents.

```

12355 \newrobustcmd*\glsxtrtitleshort[1]{%
12356 \glsxtrshort [noindex,hyper=false]{#1}[]%
12357 }

```

`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.

```

12358 \newcommand*\glsxtrheadshortpl[1]{%
12359 \protect\NoCaseChange
12360 {%
12361 \glsifattribute{#1}{headuc}{true}{%
12362 {%
12363 \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
12364 }%
12365 {%
12366 \glsxtrshortpl [noindex,hyper=false]{#1}[]%
12367 }%
12368 }%
12369 }

```

`xtrtitleshortpl` Command to display plural short form of abbreviation in section title and table of contents.

```

12370 \newrobustcmd*\glsxtrtitleshortpl[1]{%
12371 \glsxtrshortpl [noindex,hyper=false]{#1}[]%
12372 }

```

Glsxtrheadshort Command used to display short form in the page header with the first letter converted to upper case.

```
12373 \newcommand*{\Glsxtrheadshort}[1]{%
12374   \protect\NoCaseChange
12375   {%
12376     \glsifattribute{#1}{headuc}{true}{%
12377       \GLSxtrshort [noindex,hyper=false]{#1}[]%
12378     }%
12379   }%
12380   {%
12381     \Glsxtrshort [noindex,hyper=false]{#1}[]%
12382   }%
12383 }%
12384 }
```

lsxtrtitleshort Command to display short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
12385 \newrobustcmd*{\Glsxtrtitleshort}[1]{%
12386   \Glsxtrshort [noindex,hyper=false]{#1}[]%
12387 }
```

LSxtrtitleshort Command to display short form of abbreviation in section title and table of contents in all upper case.

```
12388 \newrobustcmd*{\GLSxtrtitleshort}[1]{%
12389   \GLSxtrshort [noindex,hyper=false]{#1}[]%
12390 }
```

sxtrheadshortpl Command used to display plural short form in the page header with the first letter converted to upper case.

```
12391 \newcommand*{\Glsxtrheadshortpl}[1]{%
12392   \protect\NoCaseChange
12393   {%
12394     \glsifattribute{#1}{headuc}{true}{%
12395       \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
12396     }%
12397   }%
12398   {%
12399     \Glsxtrshortpl [noindex,hyper=false]{#1}[]%
12400   }%
12401 }%
12402 }
```

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
12403 \newrobustcmd*{\Glsxtrtitleshortpl}[1]{%
12404   \Glsxtrshortpl [noindex,hyper=false]{#1}[]%
12405 }
```

`xtrtitleshortpl` Command to display plural short form of abbreviation in section title and table of contents in all upper case.

```
12406 \newrobustcmd*\{\GLSxtrtitleshortpl\}[1]{%
12407   \GLSxtrshortpl[noindex,hyper=false]{#1}[]%
12408 }
```

`\glsxtrheadname` As above but for the name value.

```
12409 \newcommand*\{\glsxtrheadname\}[1]{%
12410   \protect\NoCaseChange
12411   {%
12412     \glsifattribute{#1}{headuc}{true}{%
12413       {%
12414         \GLSname[noindex,hyper=false]{#1}[]%
12415       }%
12416       {%
12417         \glsname[noindex,hyper=false]{#1}[]%
12418       }%
12419     }%
12420 }
```

`glsxtrtitlename` Command to display name value in section title and table of contents.

```
12421 \newrobustcmd*\{\glsxtrtitlename\}[1]{%
12422   \glsname[noindex,hyper=false]{#1}[]%
12423 }
```

`\Glsxtrheadname` First letter converted to upper case

```
12424 \newcommand*\{\Glsxtrheadname\}[1]{%
12425   \protect\NoCaseChange
12426   {%
12427     \glsifattribute{#1}{headuc}{true}{%
12428       {%
12429         \GLSname[noindex,hyper=false]{#1}[]%
12430       }%
12431       {%
12432         \Glsname[noindex,hyper=false]{#1}[]%
12433       }%
12434     }%
12435 }
```

`Glsxtrtitlename` Command to display name value in section title and table of contents with the first letter changed to upper case.

```
12436 \newrobustcmd*\{\Glsxtrtitlename\}[1]{%
12437   \Glsname[noindex,hyper=false]{#1}[]%
12438 }
```

`GLSxtrtitlename` Command to display name value in section title and table of contents in all upper case.

```
12439 \newrobustcmd*\{\GLSxtrtitlename\}[1]{%
12440   \GLSname[noindex,hyper=false]{#1}[]%
12441 }
```

\glsxtrheadtext As above but for the text value.

```
12442 \newcommand*{\glsxtrheadtext}[1]{%
12443   \protect\NoCaseChange
12444   {%
12445     \glsifattribute{#1}{headuc}{true}{%
12446       {%
12447         \GLStext[noindex,hyper=false]{#1}[]%
12448       }%
12449     {%
12450       \glstext[noindex,hyper=false]{#1}[]%
12451     }%
12452   }%
12453 }
```

\glsxtrtitletext Command to display text value in section title and table of contents.

```
12454 \newrobustcmd*{\glsxtrtitletext}[1]{%
12455   \glstext[noindex,hyper=false]{#1}[]%
12456 }
```

\Glsxtrheadtext First letter converted to upper case

```
12457 \newcommand*{\Glsxtrheadtext}[1]{%
12458   \protect\NoCaseChange
12459   {%
12460     \glsifattribute{#1}{headuc}{true}{%
12461       {%
12462         \GLStext[noindex,hyper=false]{#1}[]%
12463       }%
12464     {%
12465       \Glstext[noindex,hyper=false]{#1}[]%
12466     }%
12467   }%
12468 }
```

\Glsxtrtitletext Command to display text value in section title and table of contents with the first letter changed to upper case.

```
12469 \newrobustcmd*{\Glsxtrtitletext}[1]{%
12470   \Glstext[noindex,hyper=false]{#1}[]%
12471 }
```

\GLSxtrtitletext Command to display text value in section title and table of contents in all upper case.

```
12472 \newrobustcmd*{\GLSxtrtitletext}[1]{%
12473   \GLStext[noindex,hyper=false]{#1}[]%
12474 }
```

\sxtrheadplural As above but for the plural value.

```
12475 \newcommand*{\glsxtrheadplural}[1]{%
12476   \protect\NoCaseChange
12477   {%
```

```

12478 \glsifattribute{#1}{headuc}{true}%
12479 {%
12480   \GLSplural[noindex,hyper=false]{#1}[]%
12481 }%
12482 {%
12483   \glsplural[noindex,hyper=false]{#1}[]%
12484 }%
12485 }%
12486 }

```

`sxtrtitleplural` Command to display plural value in section title and table of contents.

```

12487 \newrobustcmd*\{\glsxtrtitleplural\}[1]{%
12488   \glsplural[noindex,hyper=false]{#1}[]%
12489 }

```

`lsxtrheadplural` Convert first letter to upper case.

```

12490 \newcommand*\{\Glsxtrheadplural\}[1]{%
12491   \protect\NoCaseChange
12492 {%
12493   \glsifattribute{#1}{headuc}{true}%
12494 }%
12495   \GLSplural[noindex,hyper=false]{#1}[]%
12496 }%
12497 {%
12498   \Glsplural[noindex,hyper=false]{#1}[]%
12499 }%
12500 }%
12501 }

```

`sxtrtitleplural` Command to display plural value in section title and table of contents with the first letter changed to upper case.

```

12502 \newrobustcmd*\{\Glsxtrtitleplural\}[1]{%
12503   \Glsplural[noindex,hyper=false]{#1}[]%
12504 }

```

`Sxtrtitleplural` Command to display plural value in section title and table of contents in all upper case.

```

12505 \newrobustcmd*\{\GLSxtrtitleplural\}[1]{%
12506   \GLSplural[noindex,hyper=false]{#1}[]%
12507 }

```

`glsxtrheadfirst` As above but for the first value.

```

12508 \newcommand*\{\glsxtrheadfirst\}[1]{%
12509   \protect\NoCaseChange
12510 {%
12511   \glsifattribute{#1}{headuc}{true}%
12512 }%
12513   \GLSfirst[noindex,hyper=false]{#1}[]%
12514 }%

```

```
12515     {%
12516         \glsfirst [noindex,hyper=false]{#1} []
12517     }%
12518 }%
12519 }
```

lsxtrtitlefirst Command to display first value in section title and table of contents.

```
12520 \newrobustcmd*\{\glsxtrtitlefirst\}[1]{%
12521     \glsfirst [noindex,hyper=false]{#1} []
12522 }
```

Glsxtrheadfirst First letter converted to upper case

```
12523 \newcommand*\{\Glsxtrheadfirst\}[1]{%
12524     \protect\NoCaseChange
12525     {%
12526         \glsifattribute{#1}{headuc}{true}%
12527     }%
12528         \GLSfirst [noindex,hyper=false]{#1} []
12529     }%
12530     {%
12531         \Glsfirst [noindex,hyper=false]{#1} []
12532     }%
12533 }%
12534 }
```

lsxtrtitlefirst Command to display first value in section title and table of contents with the first letter changed to upper case.

```
12535 \newrobustcmd*\{\Glsxtrtitlefirst\}[1]{%
12536     \Glsfirst [noindex,hyper=false]{#1} []
12537 }
```

LSxtrtitlefirst Command to display first value in section title and table of contents in all upper case.

```
12538 \newrobustcmd*\{\GLSxtrtitlefirst\}[1]{%
12539     \GLSfirst [noindex,hyper=false]{#1} []
12540 }
```

headfirstplural As above but for the firstplural value.

```
12541 \newcommand*\{\glsxtrheadfirstplural\}[1]{%
12542     \protect\NoCaseChange
12543     {%
12544         \glsifattribute{#1}{headuc}{true}%
12545     }%
12546         \GLSfirstplural [noindex,hyper=false]{#1} []
12547     }%
12548     {%
12549         \glsfirstplural [noindex,hyper=false]{#1} []
12550     }%
12551 }%
12552 }
```

`titlefirstplural` Command to display `firstplural` value in section title and table of contents.

```
12553 \newrobustcmd*{\glsxrttitlefirstplural}[1]{%
12554   \glsfirstplural[noindex,hyper=false]{#1}[]%
12555 }
```

`headfirstplural` First letter converted to upper case

```
12556 \newcommand*{\Glsxtrheadfirstplural}[1]{%
12557   \protect\NoCaseChange
12558 {%
12559   \glsifattribute{#1}{headuc}{true}%
12560   {%
12561     \GLSfirstplural[noindex,hyper=false]{#1}[]%
12562   }%
12563   {%
12564     \Glsfirstplural[noindex,hyper=false]{#1}[]%
12565   }%
12566 }%
12567 }
```

`titlefirstplural` Command to display first value in section title and table of contents with the first letter changed to upper case.

```
12568 \newrobustcmd*{\Glsxrttitlefirstplural}[1]{%
12569   \Glsfirstplural[noindex,hyper=false]{#1}[]%
12570 }
```

`titlefirstplural` Command to display first value in section title and table of contents in all upper case.

```
12571 \newrobustcmd*{\GLSxrttitlefirstplural}[1]{%
12572   \GLSfirstplural[noindex,hyper=false]{#1}[]%
12573 }
```

`\glsxtrheadlong` Command used to display long form in the page header.

```
12574 \newcommand*{\glsxtrheadlong}[1]{%
12575   \protect\NoCaseChange
12576 {%
12577   \glsifattribute{#1}{headuc}{true}%
12578   {%
12579     \GLSxtrlong[noindex,hyper=false]{#1}[]%
12580   }%
12581   {%
12582     \glsxtrlong[noindex,hyper=false]{#1}[]%
12583   }%
12584 }%
12585 }
```

`glsxrttitlelong` Command to display long form of abbreviation in section title and table of contents.

```
12586 \newrobustcmd*{\glsxrttitlelong}[1]{%
12587   \glsxtrlong[noindex,hyper=false]{#1}[]%
12588 }
```

`\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.

```
12589 \newcommand*\glsxtrheadlongpl[1]{%
12590   \protect\noCaseChange
12591   {%
12592     \glsifattribute{#1}{headuc}{true}{%
12593       {%
12594         \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
12595       }%
12596     {%
12597       \glsxtrlongpl[noindex,hyper=false]{#1}[]%
12598     }%
12599   }%
12600 }
```

`\sxttitlelongpl` Command to display plural long form of abbreviation in section title and table of contents.

```
12601 \newrobustcmd*\glsxtrtitlelongpl[1]{%
12602   \glsxtrlongpl[noindex,hyper=false]{#1}[]%
12603 }
```

`\Glsxtrheadlong` Command used to display long form in the page header with the first letter converted to upper case.

```
12604 \newcommand*\Glsxtrheadlong[1]{%
12605   \protect\noCaseChange
12606   {%
12607     \glsifattribute{#1}{headuc}{true}{%
12608       {%
12609         \GLSxtrlong[noindex,hyper=false]{#1}[]%
12610       }%
12611     {%
12612       \Glsxtrlong[noindex,hyper=false]{#1}[]%
12613     }%
12614   }%
12615 }
```

`\Glsxtrtitlelong` Command to display long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
12616 \newrobustcmd*\Glsxtrtitlelong[1]{%
12617   \Glsxtrlong[noindex,hyper=false]{#1}[]%
12618 }
```

`\GLSxtrtitlelong` Command to display long form of abbreviation in section title and table of contents in all upper case.

```
12619 \newrobustcmd*\GLSxtrtitlelong[1]{%
12620   \GLSxtrlong[noindex,hyper=false]{#1}[]%
12621 }
```

`lsxtrheadlongpl` Command used to display plural long form in the page header with the first letter converted to upper case.

```
12622 \newcommand*{\Glsxtrheadlongpl}[1]{%
12623   \protect\NoCaseChange
12624   {%
12625     \glsifattribute{#1}{headuc}{true}%
12626     {%
12627       \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
12628     }%
12629     {%
12630       \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
12631     }%
12632   }%
12633 }
```

`sxttitlelongpl` Command to display plural long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
12634 \newrobustcmd*{\Glsxtrtitlelongpl}[1]{%
12635   \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
12636 }
```

`Sxttitlelongpl` Command to display plural long form of abbreviation in section title and table of contents in all upper case.

```
12637 \newrobustcmd*{\GLSxtrtitlelongpl}[1]{%
12638   \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
12639 }
```

`\glsxtrheadfull` Command used to display full form in the page header.

```
12640 \newcommand*{\glsxtrheadfull}[1]{%
12641   \protect\NoCaseChange
12642   {%
12643     \glsifattribute{#1}{headuc}{true}%
12644     {%
12645       \GLSxtrfull[noindex,hyper=false]{#1}[]%
12646     }%
12647     {%
12648       \glsxtrfull[noindex,hyper=false]{#1}[]%
12649     }%
12650   }%
12651 }
```

`glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents.

```
12652 \newrobustcmd*{\glsxtrtitlefull}[1]{%
12653   \glsxtrfull[noindex,hyper=false]{#1}[]%
12654 }
```

`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.

```

12655 \newcommand*{\glsxtrheadfullpl}[1]{%
12656   \protect\noCaseChange
12657   {%
12658     \glsifattribute{#1}{headuc}{true}{%
12659       {%
12660         \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
12661       }%
12662     {%
12663       \glsxtrfullpl[noindex,hyper=false]{#1}[]%
12664     }%
12665   }%
12666 }

```

`sxtrtitlefullpl` Command to display plural full form of abbreviation in section title and table of contents.

```

12667 \newrobustcmd*{\sxtrtitlefullpl}[1]{%
12668   \glsxtrfullpl[noindex,hyper=false]{#1}[]%
12669 }

```

`\Glsxtrheadfull` Command used to display full form in the page header with the first letter converted to upper case.

```

12670 \newcommand*{\Glsxtrheadfull}[1]{%
12671   \protect\noCaseChange
12672   {%
12673     \glsifattribute{#1}{headuc}{true}{%
12674       {%
12675         \GLSxtrfull[noindex,hyper=false]{#1}[]%
12676       }%
12677     {%
12678       \Glsxtrfull[noindex,hyper=false]{#1}[]%
12679     }%
12680   }%
12681 }

```

`Glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

12682 \newrobustcmd*{\Glsxtrtitlefull}[1]{%
12683   \Glsxtrfull[noindex,hyper=false]{#1}[]%
12684 }

```

`GLSxtrtitlefull` Command to display full form of abbreviation in section title and table of contents in all upper case.

```

12685 \newrobustcmd*{\GLSxtrtitlefull}[1]{%
12686   \GLSxtrfull[noindex,hyper=false]{#1}[]%
12687 }

```

`lsxtrheadfullpl` Command used to display plural full form in the page header with the first letter converted to upper case.

```

12688 \newcommand*{\Glsxtrheadfullpl}[1]{%

```

```

12689 \protect\NoCaseChange
12690 {%
12691   \glsifattribute{#1}{headuc}{true}{%
12692     {%
12693       \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
12694     }%
12695     {%
12696       \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
12697     }%
12698   }%
12699 }

```

`sxtrtitlefullpl` Command to display plural full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

12700 \newrobustcmd*\{\Glsxtrtitlefullpl\}[1]{%
12701   \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
12702 }

```

`Sxtrtitlefullpl` Command to display plural full form of abbreviation in section title and table of contents in all upper case.

```

12703 \newrobustcmd*\{\GLSxtrtitlefullpl\}[1]{%
12704   \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
12705 }

```

`\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.

```

12706 \ifdef\texorpdfstring
12707 {
12708   \newcommand*\{\glsfmtshort\}[1]{%
12709     \texorpdfstring
12710     {\glsxtrtitleshort{#1}}%
12711     {\glsentryshort{#1}}%
12712   }
12713 }
12714 {
12715   \newcommand*\{\glsfmtshort\}[1]{%
12716     \glsxtrtitleshort{#1}%
12717 }

```

Similarly for the plural version.

```

\glsfmtshortpl
12718 \ifdef\texorpdfstring
12719 {
12720   \newcommand*\{\glsfmtshortpl\}[1]{%
12721     \texorpdfstring
12722     {\glsxtrtitleshortpl{#1}}%
12723     {\glsentryshortpl{#1}}%
12724 }

```

```

12725 }
12726 {
12727 \newcommand*{\glsfmtshortpl}[1]{%
12728   \glsxtrtitleshortpl{#1}%
12729 }

```

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).

```

12730 \ifdef\textorpdfstring
12731 {
12732 \newcommand*{\Glsfmtshort}[1]{%
12733   \textorpdfstring
12734     {\Glsxtrtitleshort{#1}}%
12735     {\glsentryshort{#1}}%
12736 }
12737 }
12738 {
12739 \newcommand*{\Glsfmtshort}[1]{%
12740   \Glsxtrtitleshort{#1}%
12741 }

```

\Glsfmtshortpl Plural form (first letter uppercase).

```

12742 \ifdef\textorpdfstring
12743 {
12744 \newcommand*{\Glsfmtshortpl}[1]{%
12745   \textorpdfstring
12746     {\Glsxtrtitleshortpl{#1}}%
12747     {\glsentryshortpl{#1}}%
12748 }
12749 }
12750 {
12751 \newcommand*{\Glsfmtshortpl}[1]{%
12752   \Glsxtrtitleshortpl{#1}%
12753 }

```

\glsfmtname As above but for the name value.

```

12754 \ifdef\textorpdfstring
12755 {
12756 \newcommand*{\glsfmtname}[1]{%
12757   \textorpdfstring
12758     {\glsxtrtitlename{#1}}%
12759     {\glsentryname{#1}}%
12760 }
12761 }
12762 {
12763 \newcommand*{\glsfmtname}[1]{%
12764   \glsxtrtitlename{#1}%
12765 }

```

\Glsfmtname First letter converted to upper case.

```
12766 \ifdef\textorpdfstring
12767 {
12768   \newcommand*\{\Glsfmtname}[1]{%
12769     \textorpdfstring
12770     {\Glsxtrtitlename{\#1}}%
12771     {\glsentryname{\#1}}%
12772   }
12773 }
12774 {
12775   \newcommand*\{\Glsfmtname}[1]{%
12776     \Glsxtrtitlename{\#1}}
12777 }
```

\GLSfmtname All upper case.

```
12778 \ifdef\textorpdfstring
12779 {
12780   \newcommand*\{\GLSfmtname}[1]{%
12781     \textorpdfstring
12782     {\GLSxtrtitlename{\#1}}%
12783     {\glsentryname{\#1}}%
12784   }
12785 }
12786 {
12787   \newcommand*\{\GLSfmtname}[1]{%
12788     \GLSxtrtitlename{\#1}}
12789 }
```

\glsfmttext As above but for the text value.

```
12790 \ifdef\textorpdfstring
12791 {
12792   \newcommand*\{\glsfmttext}[1]{%
12793     \textorpdfstring
12794     {\glsxtrtitletext{\#1}}%
12795     {\glsentrytext{\#1}}%
12796   }
12797 }
12798 {
12799   \newcommand*\{\glsfmttext}[1]{%
12800     \glsxtrtitletext{\#1}}
12801 }
```

\Glsfmttext First letter converted to upper case.

```
12802 \ifdef\textorpdfstring
12803 {
12804   \newcommand*\{\Glsfmttext}[1]{%
12805     \textorpdfstring
12806     {\Glsxtrtitletext{\#1}}%
12807     {\glsentrytext{\#1}}%
```

```

12808 }
12809 }
12810 {
12811 \newcommand*{\Glsfmttext}[1]{%
12812   \Glsxrttitletext{#1}}
12813 }

```

\GLSfmttext All upper case.

```

12814 \ifdef\txorpdfstring
12815 {
12816   \newcommand*{\GLSfmttext}[1]{%
12817     \txorpdfstring
12818     {\Glsxrttitletext{#1}}%
12819     {\glsentrytext{#1}}%
12820   }
12821 }
12822 {
12823   \newcommand*{\GLSfmttext}[1]{%
12824     \Glsxrttitletext{#1}}
12825 }

```

\glsfmtplural As above but for the plural value.

```

12826 \ifdef\txorpdfstring
12827 {
12828   \newcommand*{\glsfmtplural}[1]{%
12829     \txorpdfstring
12830     {\glsxrttitleplural{#1}}%
12831     {\glsentryplural{#1}}%
12832   }
12833 }
12834 {
12835   \newcommand*{\glsfmtplural}[1]{%
12836     \glsxrttitleplural{#1}}
12837 }

```

\Glsfmtplural First letter converted to upper case.

```

12838 \ifdef\txorpdfstring
12839 {
12840   \newcommand*{\Glsfmtplural}[1]{%
12841     \txorpdfstring
12842     {\Glsxrttitleplural{#1}}%
12843     {\glsentryplural{#1}}%
12844   }
12845 }
12846 {
12847   \newcommand*{\Glsfmtplural}[1]{%
12848     \Glsxrttitleplural{#1}}
12849 }

```

\GLSfmtplural All upper case.

```
12850 \ifdef\textorpdfstring
12851 {
12852   \newcommand*\{\GLSfmtplural}[1]{%
12853     \textorpdfstring
12854     {\GLSxrttitleplural{\#1}}%
12855     {\glsentryplural{\#1}}%
12856   }
12857 }
12858 {
12859   \newcommand*\{\GLSfmtplural}[1]{%
12860     \GLSxrttitleplural{\#1}}
12861 }
```

\glsfmtfirst As above but for the first value.

```
12862 \ifdef\textorpdfstring
12863 {
12864   \newcommand*\{\glsfmtfirst}[1]{%
12865     \textorpdfstring
12866     {\glsxrttitlefirst{\#1}}%
12867     {\glsentryfirst{\#1}}%
12868   }
12869 }
12870 {
12871   \newcommand*\{\glsfmtfirst}[1]{%
12872     \glsxrttitlefirst{\#1}}
12873 }
```

\Glsfmtfirst First letter converted to upper case.

```
12874 \ifdef\textorpdfstring
12875 {
12876   \newcommand*\{\Glsfmtfirst}[1]{%
12877     \textorpdfstring
12878     {\Glsxrttitlefirst{\#1}}%
12879     {\glsentryfirst{\#1}}%
12880   }
12881 }
12882 {
12883   \newcommand*\{\Glsfmtfirst}[1]{%
12884     \Glsxrttitlefirst{\#1}}
12885 }
```

\GLSfmtfirst All upper case.

```
12886 \ifdef\textorpdfstring
12887 {
12888   \newcommand*\{\GLSfmtfirst}[1]{%
12889     \textorpdfstring
12890     {\GLSxrttitlefirst{\#1}}%
12891     {\glsentryfirst{\#1}}%
```

```

12892 }
12893 }
12894 {
12895 \newcommand*{\GLSfmtfirst}[1]{%
12896   \Glsxrttitlefirst{#1}%
12897 }
```

\glsfmtfirstpl As above but for the firstplural value.

```

12898 \ifdef\textorpdfstring
12899 {
12900   \newcommand*{\glsfmtfirstpl}[1]{%
12901     \textorpdfstring
12902       {\Glsxrttitlefirstplural{#1}}%
12903       {\glsentryfirstplural{#1}}%
12904   }
12905 }
12906 {
12907   \newcommand*{\glsfmtfirstpl}[1]{%
12908     \Glsxrttitlefirstplural{#1}%
12909 }
```

\Glsfmtfirstpl First letter converted to upper case.

```

12910 \ifdef\textorpdfstring
12911 {
12912   \newcommand*{\Glsfmtfirstpl}[1]{%
12913     \textorpdfstring
12914       {\Glsxrttitlefirstplural{#1}}%
12915       {\glsentryfirstplural{#1}}%
12916   }
12917 }
12918 {
12919   \newcommand*{\Glsfmtfirstpl}[1]{%
12920     \Glsxrttitlefirstplural{#1}%
12921 }
```

\GLSfmtfirstpl All upper case.

```

12922 \ifdef\textorpdfstring
12923 {
12924   \newcommand*{\GLSfmtfirstpl}[1]{%
12925     \textorpdfstring
12926       {\GLSxrttitlefirstplural{#1}}%
12927       {\glsentryfirstplural{#1}}%
12928   }
12929 }
12930 {
12931   \newcommand*{\GLSfmtfirstpl}[1]{%
12932     \GLSxrttitlefirstplural{#1}%
12933 }
```

\glsfmtlong As above but for the long value.

```
12934 \ifdef\textorpdfstring
12935 {
12936   \newcommand*\glsfmtlong[1]{%
12937     \textorpdfstring
12938     {\glsxtrtitlelong{\#1}}%
12939     {\glsentrylong{\#1}}%
12940   }
12941 }
12942 {
12943   \newcommand*\glsfmtlong[1]{%
12944     \glsxtrtitlelong{\#1}%
12945 }
```

\Glsfmtlong First letter converted to upper case.

```
12946 \ifdef\textorpdfstring
12947 {
12948   \newcommand*\Glsfmtlong[1]{%
12949     \textorpdfstring
12950     {\Glsxtrtitlelong{\#1}}%
12951     {\glsentrylong{\#1}}%
12952   }
12953 }
12954 {
12955   \newcommand*\Glsfmtlong[1]{%
12956     \Glsxtrtitlelong{\#1}%
12957 }
```

\GLSfmtlong All upper case.

```
12958 \ifdef\textorpdfstring
12959 {
12960   \newcommand*\GLSfmtlong[1]{%
12961     \textorpdfstring
12962     {\GLSxtrtitlelong{\#1}}%
12963     {\glsentrylong{\#1}}%
12964   }
12965 }
12966 {
12967   \newcommand*\GLSfmtlong[1]{%
12968     \GLSxtrtitlelong{\#1}%
12969 }
```

\glsfmtlongpl As above but for the longplural value.

```
12970 \ifdef\textorpdfstring
12971 {
12972   \newcommand*\glsfmtlongpl[1]{%
12973     \textorpdfstring
12974     {\glsxtrtitlelongpl{\#1}}%
12975     {\glsentrylongpl{\#1}}%
```

```

12976  }
12977 }
12978 {
12979   \newcommand*{\glsfmtlongpl}[1]{%
12980     \glsxtrtitlelongpl{#1}%
12981 }

```

\Glsfmtlongpl First letter converted to upper case.

```

12982 \ifdef\texorpdfstring
12983 {
12984   \newcommand*{\Glsfmtlongpl}[1]{%
12985     \texorpdfstring
12986       {\Glsxtrtitlelongpl{#1}}%
12987       {\glsentrylongpl{#1}}%
12988   }
12989 }
12990 {
12991   \newcommand*{\Glsfmtlongpl}[1]{%
12992     \Glsxtrtitlelongpl{#1}%
12993 }

```

\GLSfmtlongpl All upper case.

```

12994 \ifdef\texorpdfstring
12995 {
12996   \newcommand*{\GLSfmtlongpl}[1]{%
12997     \texorpdfstring
12998       {\GLSxtrtitlelongpl{#1}}%
12999       {\glsentrylongpl{#1}}%
13000   }
13001 }
13002 {
13003   \newcommand*{\GLSfmtlongpl}[1]{%
13004     \GLSxtrtitlelongpl{#1}%
13005 }

```

\glspdffmtfull Can't use \glsxtrinlinefullformat in PDF bookmarks as it's not fully expandable. This command is for the PDF part of \texorpdfstring for the full form.

```
13006 \newcommand*{\glspdffmtfull}[1]{\glsentrylong{#1} (\glsentryshort{#1})}%
```

\glspdffmtfullpl Likewise for plural.

```
13007 \newcommand*{\glspdffmtfullpl}[1]{\glsentrylongpl{#1} (\glsentryshortpl{#1})}%
```

\glsfmtfull In-line full format.

```

13008 \ifdef\texorpdfstring
13009 {
13010   \newcommand*{\glsfmtfull}[1]{%
13011     \texorpdfstring
13012       {\glsxtrtitlefull{#1}}%

```

```

13013     {\glspdffmtfull{#1}}%
13014 }
13015 }
13016 {
13017 \newcommand*{\glsfmtfull}[1]{%
13018   \glsxrttitlefull{#1}%
13019 }

```

\Glsfmtfull First letter converted to upper case.

```

13020 \ifdef\texorpdfstring
13021 {
13022 \newcommand*{\Glsfmtfull}[1]{%
13023   \texorpdfstring
13024     {\Glsxrttitlefull{#1}}%
13025     {\glspdffmtfull{#1}{}}%
13026 }
13027 }
13028 {
13029 \newcommand*{\Glsfmtfull}[1]{%
13030   \Glsxrttitlefull{#1}%
13031 }

```

\GLSfmtfull All upper case.

```

13032 \ifdef\texorpdfstring
13033 {
13034 \newcommand*{\GLSfmtfull}[1]{%
13035   \texorpdfstring
13036     {\GLSxrttitlefull{#1}}%
13037     {\glspdffmtfull{#1}}%
13038 }
13039 }
13040 {
13041 \newcommand*{\GLSfmtfull}[1]{%
13042   \GLSxrttitlefull{#1}%
13043 }

```

\glsfmtfullpl In-line full plural format.

```

13044 \ifdef\texorpdfstring
13045 {
13046 \newcommand*{\glsfmtfullpl}[1]{%
13047   \texorpdfstring
13048     {\glsxrttitlefullpl{#1}}%
13049     {\glspdffmtfullpl{#1}}%
13050 }
13051 }
13052 {
13053 \newcommand*{\glsfmtfullpl}[1]{%
13054   \glsxrttitlefullpl{#1}%
13055 }

```

```
\Glsfmtfullpl First letter converted to upper case.
```

```
13056 \ifdef\texorpdfstring
13057 {
13058   \newcommand*{\Glsfmtfullpl}[1]{%
13059     \texorpdfstring
13060     {\Glsxrttitlefullpl{\#1}}%
13061     {\glspdffmtfullpl{\#1}{}}%
13062   }
13063 }
13064 {
13065   \newcommand*{\Glsfmtfullpl}[1]{%
13066     \Glsxrttitlefullpl{\#1}%
13067 }
```

```
\GLSfmtfullpl All upper case.
```

```
13068 \ifdef\texorpdfstring
13069 {
13070   \newcommand*{\GLSfmtfullpl}[1]{%
13071     \texorpdfstring
13072     {\GLSxrttitlefullpl{\#1}}%
13073     {\glspdffmtfullpl{\#1}{}}%
13074   }
13075 }
13076 {
13077   \newcommand*{\GLSfmtfullpl}[1]{%
13078     \GLSxrttitlefullpl{\#1}%
13079 }
```

1.9 Multi-Lingual Support

Add the facility to load language modules, if they are installed, but none are provided with this package.

```
sariesExtraLang
```

```
13080 \newcommand*{\RequireGlossariesExtraLang}[1]{%
13081   \@ifundefined{ver@glossariesxtr-\#1.ldf}{\input{glossariesxtr-\#1.ldf}}{}%
13082 }
```

```
sariesExtraLang
```

```
13083 \newcommand*{\ProvidesGlossariesExtraLang}[1]{%
13084   \ProvidesFile{glossariesxtr-\#1.ldf}%
13085 }
```

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.

```
13086 \newcommand{\glsxtr@loaddialect}{%
13087   \IfTrackedLanguageFileExists{\this@dialect}%
13088   {glossariesxtr-}%
13089   {.ldf}%
13090   {%
13091     \RequireGlossariesExtraLang{\CurrentTrackedTag}%
13092   }%
13093   {}% not found
```

If glossaries-extra-bib2gls has been loaded, \@glsxtrdialecthook will check for the associated script, otherwise it will do nothing.

```
13094   \@glsxtrdialecthook
13095 }
```

```
13096 \@ifpackageloaded{tracklang}%
13097 {%
13098   \AnyTrackedLanguages
13099   {%
13100     \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
13101   }%
13102   {}%
13103 }
13104 {}
```

Load glossaries-extra-stylemods if required.

```
13105 \@glsxtr@redefstyles
```

and set the style:

```
13106 \@glsxtr@do@style
```

1.10 glossaries-extra-bib2gls.sty

This package provides additional support for bib2gls and is automatically loaded by the record option.

```
13107 \NeedsTeXFormat{LaTeX2e}
13108 \ProvidesPackage{glossaries-extra-bib2gls}[2021/09/20 v1.46 (NLCT)]
```

Provide convenient shortcut commands for predefined glossary types.

ntunsrtacronyms

```
13109 \ifglsacronym
13110   \providecommand*\printunsrtacronyms[1][]{%
13111     \printunsrtglossary[type=\acronymtype,#1]}%
13112 \fi
```

printunsrtindex

```
13113 \ifglossaryexists{index}
13114 {
```

```

13115  \providecommand*\printunsrtindex}[1] []{%
13116    \printunsrtglossary[type=index,#1]}%
13117 }{}}

intunsrtsymbols
13118 \ifglossaryexists{symbols}
13119 {
13120  \providecommand*\printunsrtsymbols}[1] []{%
13121    \printunsrtglossary[type=symbols,#1]}%
13122 }{}}

intunsrtnumbers
13123 \ifglossaryexists{numbers}
13124 {
13125  \providecommand*\printunsrtnumbers}[1] []{%
13126    \printunsrtglossary[type=numbers,#1]}%
13127 }{}}

rtabbreviations
13128 \ifglossaryexists{abbreviations}
13129 {
13130  \providecommand*\printunsrtabbreviations}[1] []{%
13131    \printunsrtglossary[type=abbreviations,#1]}%
13132 }{}}

splaynumberlist Allow \glsdisplaynumberlist and make it robust.
13133 \renewcommand*\glsdisplaynumberlist}[1]{%
13134   \glsdoifexists{\#1}{%
13135     {%
13136       {\let\bibglstodelim\glsnumlistsep
13137         \let\bibglstlastDelim\glsnumlistlastsep
13138         \glsxtrusefield{\#1}{location}}%
13139     }%
13140   }%
13141 }
13142 \robustify\glsdisplaynumberlist

entrynumberlist
13143 \renewcommand*\glsentrynumberlist}[1]{\glsxtrusefield{\#1}{location}{}}

These are some convenient macros for use with custom rules.
```

```

\glshex
13144 \newcommand*\glshex}{\string\u}

lscapturedgroup
13145 \newcommand*\glscapturedgroup}{\string\$}
```

nZeroChildCount For use with bib2gls's save-child-count resource option.

```
13146 \newcommand*{\GlsXtrIfHasNonZeroChildCount}[3]{%
13147   \GlsXtrIfFieldNonZero{childcount}{#1}{#2}{#3}%
13148 }
```

rprovidecommand For use in @preamble, this behaves like \providecommand in the document but like \renewcommand in bib2gls.

```
13149 \newcommand*{\glsxtrprovidecommand}{\providecommand}
```

glsrenewcommand Like \renewcommand but only generates a warning rather than an error if the command isn't defined.

```
13150 \newcommand*{\glsrenewcommand}{\@star@or@long\glsxtr@renewcommand}
```

tr@renewcommand

```
13151 \newcommand*{\glsxtr@renewcommand}[1]{%
13152   \begingroup \escapechar\m@ne\xdef\@gtempa{\string#1}\endgroup
13153   \expandafter\@ifundefined\@gtempa
13154   {%
13155     \GlossariesExtraWarning{can't redefine \noexpand#1(not already defined)}%
13156   }%
13157   \relax
13158   \relax
13159   \let\@ifdefinable\@rc@ifdefinable
13160   \new@command#1%
13161 }
```

lossarylocation For use with indexcounter and bib2gls.

```
13162 \newcommand*{\glsxtr@wrglossarylocation}[2]{#1}
```

indexCounterLink

```
\GlsXtrIndexCounterLink{\text}{\label}
```

For use with indexcounter and bib2gls.

```
13163 \ifdef\hyperref
13164 {%
13165   \newcommand*{\GlsXtrIndexCounterLink}[2]{%
13166     \glsxtrifhasfield{indexcounter}{#2}%
13167     {\hyperref[wrglossary.\glscurrentfieldvalue]{#1}}%
13168     {#1}%
13169   }
13170 }
13171 {
13172   \newcommand*{\GlsXtrIndexCounterLink}[2]{#1}
13173 }
```

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.

```
13174 \newcommand*{\GlsXtrDualField}[1]{\ifx#1\empty%
```

XtrDualBackLink

```
\GlsXtrDualBackLink[<text>][<label>]
```

Adds a hyperlink to the dual entry.

```
13175 \newcommand*{\GlsXtrDualBackLink}[2]{%
13176   \glsxtrifhasfield{\GlsXtrDualField}{#2}%
13177   {\glshyperlink[#1]{\glscurrentfieldvalue}}%
13178   {#2}%
13179 }
```

TeXEntryAliases Convenient shortcut for use with entry-type-aliases to alias standard BIB_TE_X entry types to @bibtexentry.

```
13180 \newcommand*{\GlsXtrBibTeXEntryAliases}[0]{%
13181   article=bibtexentry,
13182   book=bibtexentry,
13183   booklet=bibtexentry,
13184   conference=bibtexentry,
13185   inbook=bibtexentry,
13186   incollection=bibtexentry,
13187   inproceedings=bibtexentry,
13188   manual=bibtexentry,
13189   mastersthesis=bibtexentry,
13190   misc=bibtexentry,
13191   phdthesis=bibtexentry,
13192   proceedings=bibtexentry,
13193   techreport=bibtexentry,
13194   unpublished=bibtexentry
13195 }
```

ideBibTeXFields Convenient shortcut to define the standard BIB_TE_X fields.

```
13196 \newcommand*{\GlsXtrProvideBibTeXFields}[0]{%
13197   \glsaddstoragekey{address}{}{\glsxtrbibaddress}%
13198   \glsaddstoragekey{author}{}{\glsxtrbibauthor}%
13199   \glsaddstoragekey{booktitle}{}{\glsxtrbibbooktitle}%
13200   \glsaddstoragekey{chapter}{}{\glsxtrbibchapter}%
13201   \glsaddstoragekey{edition}{}{\glsxtrbibedition}%
13202   \glsaddstoragekey{howpublished}{}{\glsxtrbibhowpublished}%
13203   \glsaddstoragekey{institution}{}{\glsxtrbibinstitution}%
}
```

```

13204 \glsaddstoragekey{journal}{}{\glsxtrbibjournal}%
13205 \glsaddstoragekey{month}{}{\glsxtrbibmonth}%
13206 \glsaddstoragekey{note}{}{\glsxtrbibnote}%
13207 \glsaddstoragekey{number}{}{\glsxtrbibnumber}%
13208 \glsaddstoragekey{organization}{}{\glsxtrbiborganization}%
13209 \glsaddstoragekey{pages}{}{\glsxtrbibpages}%
13210 \glsaddstoragekey{publisher}{}{\glsxtrbibpublisher}%
13211 \glsaddstoragekey{school}{}{\glsxtrbibschool}%
13212 \glsaddstoragekey{series}{}{\glsxtrbibseries}%
13213 \glsaddstoragekey{title}{}{\glsxtrbibtitle}%
13214 \glsaddstoragekey{bibtexttype}{}{\glsxtrbibtype}%
13215 \glsaddstoragekey{volume}{}{\glsxtrbibvolume}%
13216 }

```

Multiple supplementary references are only supported with `bib2gls`.

`ltisupplocation` This is like `\glsxtrsupsphypernumber` 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 encapsulation in case it's required.

```

13217 \newcommand*\glsxtrmultisupplocation[3]{%
13218 {%
13219   \def\glsxtrsupplocationurl{#2}%
13220   \glshypernumber{#1}%
13221 }%
13222 }

```

`rdisplaysupploc`

`\glsxtrdisplaysupploc{<prefix>}{<counter>}{<format>}{<src>}{<location>}`

This is like `\glsnoidxdisplayloc` but is used for supplementary locations and so requires an extra argument.

```

13223 \newcommand*\glsxtrdisplaysupploc[5]{%
13224   \setentrycounter[#1]{#2}%
13225   \glsxtrmultisupplocation{#5}{#4}{#3}%
13226 }

```

`splaylocnameref` `\glsxtrdisplaylocnameref{<prefix>}{<counter>}{<format>}{<location>}{<name>}{<href>}{<hcounter>}{<external file>}` Used with the [nameref] record package option. The `<href>` argument was obtained from `\@currentHref` and the `<hcounter>` argument was obtained from `\theHentrycounter`, which is more reliable. If `hyperref` hasn't been loaded, this just behaves like `\glsnoidxdisplayloc`.

```

13227 \ifundefined\hyperlink
13228 {%
13229   \newcommand*\glsxtrdisplaylocnameref[8]{%
13230     \glsnoidxdisplayloc{#1}{#2}{#3}{#4}%

```

```
13231 }
13232 }
13233 {
```

Default action uses `<hcounter>`. 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.

```
13234 \newcommand*{\glsxtrdisplaylocnameref}[8]{%
13235   \ifcsdef{glsxtr#2locfmt}{%
13236     {\glsxtrnamereflink{\#3}{\csuse{glsxtr#2locfmt}{\#4}{\#5}}{\#2.\#7}{\#8}}{%
13237       {%
13238         \ifstrempty{\#5}{%
13239           {%
```

No title, so just use the location as the link text.

```
13240       \glsxtrnamereflink{\#3}{\#4}{\#2.\#7}{\#8}{%
13241     }{%
13242     {%
13243       \ifstrequal{\#2}{page}{%
13244         {\glsxtrnamereflink{\#3}{\#4}{\#2.\#7}{\#8}}{%
13245           {\glsxtrnamereflink{\#3}{\#5}{\#2.\#7}{\#8}}{%
13246             {%
13247           }{%
13248         }{%
13249       }}
```

requestionlocfmt

```
\glsxtrequestionlocfmt{\location}{\title}
```

```
13250 \newcommand*{\glsxtrequestionlocfmt}[2]{(#1)}
```

sxtrnamereflink

```
\glsxtrfmtnamereflink{\format}{\title}{\href}{\externalfile}
```

```
13251 \newcommand*{\glsxtrnamereflink}[4]{%
```

Locally change `\glshypernumber` to `\@firstofone` to remove the normal location hyperlink.

```
13252 \begingroup
13253   \let\glshypernumber\@firstofone
```

If the `\externalfile` argument is empty, an internal link is used, otherwise an external one is needed.

```
13254   \ifstrempty{\#4}{%
13255     {\glsxtrfmtinternalnameref{\#3}{\#1}{\#2}}{%
```

```

13256     {\glsxtrfmtexternalnameref{#3}{#1}{#2}{#4}}%
13257     \endgroup
13258 }
```

sxtrnameloclink

```
\glsxtrnamerefloclink{\<prefix>}{\<counter>}{\<format>}{\<location>}{\<text>}
{\<external file>}
```

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.

```

13259 \newcommand{\glsxtrnameloclink}[6]{%
13260   \begingroup
13261   \setentrycounter[#1]{#2}%
13262   \def\glsxtr@locationhypertext{#5}%
13263   \let\glshypernumber\@firstofone
13264   \def\@glsnumberformat{#3}%
13265   \def\glsxtrsupplocationurl{#6}%
13266   \toks@={}%
13267   \glsxtr@bibgls@removespaces#4 \@nil
13268   \endgroup
13269 }
```

ls@removespaces

```

13270 \def\@glsxtr@bibgls@removespaces#1 #2\@nil{%
13271   \toks@=\expandafter{\the\toks@#1}%
13272   \ifx\\#2\\%
13273     \edef\@glo@tmp{\the\toks@}%
13274     \ifx\@glo@tmp\empty
13275     \else
13276       \protected@edef\@glo@tmp{\glsentrycounter\@glo@counterprefix\the\toks@}%
13277       \ifdefvoid\glsxtrsupplocationurl
13278       {%
13279         \expandafter\glsxtrfmtinternalnameref\expandafter{\@glo@tmp}%
13280         {\@glsnumberformat}{\glsxtr@locationhypertext}%
13281       }%
13282       {%
13283         \expandafter\glsxtrfmtexternalnameref\expandafter{\@glo@tmp}%
13284         {\@glsnumberformat}{\glsxtr@locationhypertext}{\glsxtrsupplocationurl}%
13285       }%
13286     \fi
13287   \else
13288     \gls@ReturnAfterFi{%
13289       \glsxtr@bibgls@removespaces#2\@nil
13290     }%
13291   \fi
```

```
13292 }
```

internalnameref

```
\glsxtrfmtinternalnameloc{\langle target \rangle}{\langle format \rangle}{\langle title \rangle}
```

```
13293 \newcommand*\glsxtrfmtinternalnameref}[3]{%
13294   \csuse{#2}{\glsdohyperlink{#1}{#3}}%
13295 }
```

externalnameref

```
\glsxtrfmtexternalnameloc{\langle target \rangle}{\langle format \rangle}{\langle title \rangle}{\langle file \rangle}
```

```
13296 \newcommand*\glsxtrfmtexternalnameref}[4]{%
13297   \csuse{#2}{\hyperref[#4]{\#1}{#3}}%
13298 }
```

glsxtrSetWidest

```
\glsxtrSetWidest{\langle type \rangle}{\langle level \rangle}{\langle text \rangle}
```

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.

```
13299 \newcommand*\glsxtrSetWidest}[3]{%
```

Check which style options have been provided. (The style packages may not have been loaded.)

```
13300 \ifdef\glsupdatewidest
13301 {%
13302   \ifdef\glslongextraUpdateWidest
13303 {%
```

Relevant style packages all loaded. If the `\langle type \rangle` has been given, append to glossary preamble.

```
13304   \ifstrempty{#1}
13305     {%
13306       \glsupdatewidest[#2]{#3}%
13307       \ifnum#2=0\relax
13308         \glslongextraUpdateWidest{#3}%
13309       \else
13310         \glslongextraUpdateWidestChild[#2]{#3}%
13311       \fi
13312     }%
13313     {%
13314       \apptoglossarypreamble[#1]{\glsupdatewidest[#2]{#3}}%
```

```

13315     \ifnum#2=0\relax
13316         \apptoglossarypreamble[#1]{\glslongextraUpdateWidest[#3]}%
13317     \else
13318         \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild[#2]{#3}}%
13319     \fi
13320     }%
13321 }%
13322 {%

```

Only alttree.

```

13323     \ifstrempty{#1}
13324     {%
13325         \glsupdatewidest[#2]{#3}%
13326     }%
13327     {%
13328         \apptoglossarypreamble[#1]{\glsupdatewidest[#2]{#3}}%
13329     }%
13330     }%
13331 }%
13332 {%

```

\glsupdatewidest hasn't been defined. This could just mean that the glossaries-extra-stylemods package hasn't been loaded.

```

13333     \ifdef\glssetwidest
13334     {%
13335         \ifdef\glslongextraUpdateWidest
13336     }%

```

Relevant glossary-tree and glossary-longextra have been loaded. If the *<type>* has been given, append to glossary preamble.

```

13337     \ifstrempty{#1}
13338     {%
13339         \glssetwidest[#2]{#3}%
13340         \ifnum#2=0\relax
13341             \glslongextraUpdateWidest{#3}%
13342         \else
13343             \glslongextraUpdateWidestChild[#2]{#3}%
13344         \fi
13345     }%
13346     {%
13347         \apptoglossarypreamble[#1]{\glssetwidest[#2]{#3}}%
13348         \ifnum#2=0\relax
13349             \apptoglossarypreamble[#1]{\glslongextraUpdateWidest{#3}}%
13350         \else
13351             \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild[#2]{#3}}%
13352         \fi
13353     }%
13354 }%
13355 {%

```

Only alttree.

```

13356     \ifstrempty{#1}
13357     {%
13358         \glssetwidest[#2]{#3}%
13359     }%
13360     {%
13361         \apptoglossarypreamble[#1]{\glssetwidest[#2]{#3}}%
13362     }%
13363     }%
13364 }%
13365 {%
13366     \ifdef{\glslongextraUpdateWidest}
13367     {%
glossary-longextra has been loaded.
13368     \ifstrempty{#1}
13369     {%
13370         \ifnum#2=0\relax
13371             \glslongextraUpdateWidest{#3}%
13372         \else
13373             \glslongextraUpdateWidestChild{#2}{#3}%
13374         \fi
13375     }%
13376     {%
13377         \ifnum#2=0\relax
13378             \apptoglossarypreamble[#1]{\glslongextraUpdateWidest{#3}}%
13379         \else
13380             \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild{#2}{#3}}%
13381         \fi
13382     }%
13383     }%
Neither glossary-tree nor glossary-longextra have been loaded. Do nothing.
13384     {}%
13385 }%
13386 }%
13387 }

```

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).

```

13388 \newcommand*{\glsxtrSetWidestFallback}[2]{%
13389     \ifnum#1=0\relax
13390     \ifdef{\glsFindWidestTopLevelName}
13391     {%

```

```

13392     \glsFindWidestTopLevelName[#2]%
13393 }
13394 {%
13395     \GlossariesExtraWarning{You need stylemods={tree} to
13396         provide a fallback for set-widest}%
13397 }%
13398 \else
13399 \ifdef\glsFindWidestLevelTwo
13400 {%
13401     \glsFindWidestLevelTwo[#2]%
13402     \ifdef\glslongextraUpdateWidestChild
13403     {%
13404         \glslongextraUpdateWidestChild[#1]{\csuse{@glswidestnamei}}%
13405         \glslongextraUpdateWidestChild[#1]{\csuse{@glswidestnameii}}%
13406     }%
13407     {}%
13408 }%
13409 {%
13410     \GlossariesExtraWarning{You need stylemods={tree} to
13411         provide a fallback for set-widest}%
13412 }%
13413 \fi
13414 }

```

r@labelprefixes List of label prefixes.

```
13415 \newcommand*{\@glsxtr@labelprefixes}{}%
```

arlabelprefixes List of label prefixes.

```

13416 \newcommand*{\glsxtrclearlabelprefixes}{%
13417     \renewcommand*{\@glsxtr@labelprefixes}{}%
13418 }
```

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.

```

13419 \newcommand*{\glsxtrraddlabelprefix}[1]{%
13420     \ifstrempty{#1}%
13421     {\glsxtrraddlabelprefix{\empty}}%
13422     {%
13423         \ifdefempty{\glsxtr@labelprefixes}
13424             {\def\glsxtr@labelprefixes{#1}}%
13425             {\appto{\glsxtr@labelprefixes}{, #1}}%
13426     }%
13427 }
```

pendlabelprefix Inserts at the start of the list.

```

13428 \newcommand*{\glsxtrprependlabelprefix}[1]{%
13429     \ifstrempty{#1}%

```

```

13430  {\glsxtrprependlabelprefix{\empty}}%
13431  {%
13432    \ifdefempty{\glsxtr@labelprefixes}%
13433      {\def{\glsxtr@labelprefixes}{\#1}}%
13434      {\preto{\glsxtr@labelprefixes}{\#1,}}%
13435  }%
13436 }

```

`labelprefixlist`

`\glsxtrifinlabelprefixlist{<prefix>}{{<true>}}{{<false>}}`

Test if the given prefix is in the list.

```

13437 \newcommand*{\glsxtrifinlabelprefixlist}[3]{%
13438   \ifstrempty{\#1}{%
13439     {\glsxtrifinlabelprefixlist{\empty}{\#2}{\#3}}%
13440   {%
13441     \DTLifinlist{\#1}{\glsxtr@labelprefixes}{\#2}{\#3}}%
13442 }%
13443 }

```

`prefixlabellist` 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`.

```

13444 \AtBeginDocument{%
13445   \protected@write\auxout{}{\string\providecommand{\string@glsxtr@prefixlabellist}[1]{}{}}%
13446   \protected@write\auxout{}{\string@glsxtr@prefixlabellist{\glsxtr@labelprefixes}}%
13447 }

```

`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.

```

13448 \newcommand*{\@glsxtr@get@prefixedlabel}[1]{%
13449   \begingroup

```

Initialise to the unprefixed label in the event that the list is empty.

```

13450   \protected@edef{\gls@thislabel}{\#1}%
13451   \for{\glsxtr@prefix}{\glsxtr@labelprefixes}{\do{%
13452     {%
13453       \protected@edef{\gls@thislabel}{\glsxtr@prefix\#1}%
13454       \ifglsentryexists{\gls@thislabel}{\endfortrue}{}}%
13455   }%
13456   \edef{\glo@tmp}{\endgroup\noexpand\def\noexpand\gls@thislabel{\gls@thislabel}}\glo@tmp
13457 }

```

`\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".

```

13458 \newrobustcmd*{\dgls}{\gls@hyp@opt{\dgls}}

```

```

{@dgls
13459 \newcommand*{\@dgls}[2] []{%
13460   \glsxtr@get@prefixedlabel{#2}%
13461   \new@ifnextchar[{\@gls@{#1}{\gls@thislabel}}{\@gls@{#1}{\gls@thislabel}[]}%
13462 }

@dglsp
13463 \newrobustcmd*{\dglsp}{\gls@hyp@opt\dglsp}

{@dglsp
13464 \newcommand*{\@dglsp}[2] []{%
13465   \glsxtr@get@prefixedlabel{#2}%
13466   \new@ifnextchar[{\@glspl@{#1}{\gls@thislabel}}{\@glspl@{#1}{\gls@thislabel}[]}%
13467 }

@dGls
13468 \newrobustcmd*{\dGls}{\gls@hyp@opt\dGls}

{@dGls
13469 \newcommand*{\@dGls}[2] []{%
13470   \glsxtr@get@prefixedlabel{#2}%
13471   \new@ifnextchar[{\@Gls@{#1}{\gls@thislabel}}{\@Gls@{#1}{\gls@thislabel}[]}%
13472 }

@dGlspl
13473 \newrobustcmd*{\dGlspl}{\gls@hyp@opt\dGlspl}

{@dGlspl
13474 \newcommand*{\@dGlspl}[2] []{%
13475   \glsxtr@get@prefixedlabel{#2}%
13476   \new@ifnextchar[{\@Glspl@{#1}{\gls@thislabel}}{\@Glspl@{#1}{\gls@thislabel}[]}%
13477 }

@dGLS
13478 \newrobustcmd*{\dGLS}{\gls@hyp@opt\dGLS}

{@dGLS
13479 \newcommand*{\@dGLS}[2] []{%
13480   \glsxtr@get@prefixedlabel{#2}%
13481   \new@ifnextchar[{\@GLS@{#1}{\gls@thislabel}}{\@GLS@{#1}{\gls@thislabel}[]}%
13482 }

@dGLSp
13483 \newrobustcmd*{\dGLSp}{\gls@hyp@opt\dGLSp}

```

```
\@dGLSp1
13484 \newcommand*{\@dGLSp1}[2] []{%
13485   \glsxtr@get@prefixedlabel{#2}%
13486   \new@ifnextchar[{\@GLSp1@{#1}{\gls@thislabel}}{\@GLSp1@{#1}{\gls@thislabel}[]}]{%
13487 }
```

\dglslink Like \glslink but tries the prefixes.

```
13488 \newrobustcmd*{\dglslink}[3] []{%
13489   \glsxtr@get@prefixedlabel{#2}%
13490   \glslink[#1]{\gls@thislabel}{#3}%
13491 }
```

\dglsdisp Like \glsdisp but tries the prefixes.

```
13492 \newrobustcmd*{\dglsdisp}[3] []{%
13493   \glsxtr@get@prefixedlabel{#2}%
13494   \glsdisp[#1]{\gls@thislabel}{#3}%
13495 }
```

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
13496 \providecommand*{\Alpha}{\mathrm{A}}
```

```
\Beta
13497 \providecommand*{\Beta}{\mathrm{B}}
```

```
\Epsilon
13498 \providecommand*{\Epsilon}{\mathrm{E}}
```

```
\Zeta
13499 \providecommand*{\Zeta}{\mathrm{Z}}
```

```
\Eta
13500 \providecommand*{\Eta}{\mathrm{H}}
```

```
\Iota
13501 \providecommand*{\Iota}{\mathrm{I}}
```

```
\Kappa
13502 \providecommand*{\Kappa}{\mathrm{K}}
```

```
\Mu
13503 \providecommand*{\Mu}{\mathrm{M}}
```

```

\Nu
13504 \providecommand*\Nu{\mathrm{N}}

\Omicron
13505 \providecommand*\Omicron{\mathrm{O}^{\circ}}

\Rho
13506 \providecommand*\Rho{\mathrm{P}^{\circ}}

\Tau
13507 \providecommand*\Tau{\mathrm{T}^{\circ}}

\Chi
13508 \providecommand*\Chi{\mathrm{X}^{\circ}>

\Digamma
13509 \providecommand*\Digamma{\mathrm{F}^{\circ}>

\omicron
13510 \providecommand*\omicron{\mathit{o}>

Provide corresponding upright characters if upgreek has been loaded. (The upper case
characters are the same as above.)
13511 \@ifpackageloaded{upgreek}%
13512 {>

\Upalpha
13513 \providecommand*\Upalpha{\mathrm{A}^{\circ}>

\Upbeta
13514 \providecommand*\Upbeta{\mathrm{B}^{\circ}>

\Upsilon
13515 \providecommand*\Upsilon{\mathrm{E}^{\circ}>

\Upzeta
13516 \providecommand*\Upzeta{\mathrm{Z}^{\circ}>

\Upeta
13517 \providecommand*\Upeta{\mathrm{H}^{\circ}>

\Upiota
13518 \providecommand*\Upiota{\mathrm{I}^{\circ}>

\Upkappa
13519 \providecommand*\Upkappa{\mathrm{K}^{\circ}>


```

```

\Upmu
13520 \providecommand*\Upmu{\mathrm{M}}
\Upnu
13521 \providecommand*\Upnu{\mathrm{N}}
\Upomicron
13522 \providecommand*\Upomicron{\mathrm{O}}
\Uprho
13523 \providecommand*\Uprho{\mathrm{P}}
\Uptau
13524 \providecommand*\Uptau{\mathrm{T}}
\Upchi
13525 \providecommand*\Upchi{\mathrm{X}}
\upomicron
13526 \providecommand*\upomicron{\mathrm{o}}
13527 }%
13528 {}% 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
<\glsxtrdigitrules
<\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.

```
13529 \newcommand*{\glsxtrcontrolrules}{%
13530   \string'\glshex 200B\string'\string=\glshex 200C\string=\glshex 200D
13531   \string=\glshex 200E\string=\glshex 200F\string=\glshex 0000\string=\glshex 0001
13532   \string=\glshex 0002\string=\glshex 0003\string=\glshex 0004\string=\glshex 0005
13533   \string=\glshex 0006\string=\glshex 0007\string=\glshex 0008
13534   \string=\string'\glshex 0009\string'\string=\string'\glshex 000B\string',
13535   \string=\glshex 000E\string=\glshex 000F\string=\string'\glshex
13536 0010\string'\string=\glshex 0011
13537   \string=\glshex 0012\string=\glshex 0013\string=\glshex 0014\string=\glshex 0015
13538   \string=\glshex 0016\string=\glshex 0017\string=\glshex 0018\string=\glshex 0019
13539   \string=\glshex 001A\string=\glshex 001B\string=\glshex 001C\string=\glshex 001D
13540   \string=\glshex 001E\string=\glshex 001F\string=\glshex 007F\string=\glshex 0080
13541   \string=\glshex 0081\string=\glshex 0082\string=\glshex 0083\string=\glshex 0084
13542   \string=\glshex 0085\string=\glshex 0086\string=\glshex 0087\string=\glshex 0088
13543   \string=\glshex 0089\string=\glshex 008A\string=\glshex 008B\string=\glshex 008C
13544   \string=\glshex 008D\string=\glshex 008E\string=\glshex 008F\string=\glshex 0090
13545   \string=\glshex 0091\string=\glshex 0092\string=\glshex 0093\string=\glshex 0094
13546   \string=\glshex 0095\string=\glshex 0096\string=\glshex 0097\string=\glshex 0098
13547   \string=\glshex 0099\string=\glshex 009A\string=\glshex 009B\string=\glshex 009C
13548   \string=\glshex 009D\string=\glshex 009E\string=\glshex 009F
13549 }
```

lsxtrspacerules These are space characters.

```
13550 \newcommand*{\glsxtrspacerules}{%
13551   \string' \string'\string;
13552   \string'\glshex 00A0\string'\string;
13553   \string'\glshex 2000\string'\string;
13554   \string'\glshex 2001\string'\string;
13555   \string'\glshex 2002\string'\string;
13556   \string'\glshex 2003\string'\string;
13557   \string'\glshex 2004\string'\string;
13558   \string'\glshex 2005\string'\string;
13559   \string'\glshex 2006\string'\string;
13560   \string'\glshex 2007\string'\string;
13561   \string'\glshex 2008\string'\string;
13562   \string'\glshex 2009\string'\string;
13563   \string'\glshex 200A\string'\string;
13564   \string'\glshex 3000\string'
13565 }
```

nprintablerules These are non-printable characters (BOM, tabs, line feed and carriage return).

```
13566 \newcommand*{\glsxtrnonprintablerules}{%
13567   \string'\glshex FFFF\string'\string;
13568   \string'\glshex 000A\string'\string;
13569   \string'\glshex 0009\string'\string;
```

```
13570 \string'\glshex 000C\string'\string;
13571 \string'\glshex 000B\string'
13572 }
```

gdiacriticrules Combining diacritic marks. This is split into multiple macros.

```
13573 \newcommand*{\glsxtrcombiningdiacriticrules}{%
13574 \glsxtrcombiningdiacriticIrules\string;
13575 \glsxtrcombiningdiacriticIIrules\string;
13576 \glsxtrcombiningdiacriticIIIrules\string;
13577 \glsxtrcombiningdiacriticIVrules
13578 }
```

diacriticIrules First set of combining diacritic marks.

```
13579 \newcommand*{\glsxtrcombiningdiacriticIrules}{%
13580 \glshex 0301\string;% combining acute
13581 \glshex 0300\string;% combining grave
13582 \glshex 0306\string;% combining breve
13583 \glshex 0302\string;% combining circumflex
13584 \glshex 030C\string;% combining caron
13585 \glshex 030A\string;% combining ring
13586 \glshex 030D\string;% combining vertical line above
13587 \glshex 0308\string;% combining diaeresis
13588 \glshex 030B\string;% combining double acute
13589 \glshex 0303\string;% combining tilde
13590 \glshex 0307\string;% combining dot above
13591 \glshex 0304% combining macron
13592 }
```

diacriticIIrules Second set of combining diacritic marks.

```
13593 \newcommand*{\glsxtrcombiningdiacriticIIrules}{%
13594 \glshex 0337\string;% combining short solidus overlay
13595 \glshex 0327\string;% combining cedilla
13596 \glshex 0328\string;% combining ogonek
13597 \glshex 0323\string;% combining dot below
13598 \glshex 0332\string;% combining low line
13599 \glshex 0305\string;% combining overline
13600 \glshex 0309\string;% combining hook above
13601 \glshex 030E\string;% combining double vertical line above
13602 \glshex 030F\string;% combining double grave accent
13603 \glshex 0310\string;% combining candrabindu
13604 \glshex 0311\string;% combining inverted breve
13605 \glshex 0312\string;% combining turned comma above
13606 \glshex 0313\string;% combining comma above
13607 \glshex 0314\string;% combining reversed comma above
13608 \glshex 0315\string;% combining comma above right
13609 \glshex 0316\string;% combining grave accent below
13610 \glshex 0317% combining acute accent below
13611 }
```

acriticIIIrules Third set of combining diacritic marks.

```
13612 \newcommand*\glsxtrcombiningdiacriticIIIrules}{%
13613 \glshex 0318\string;% combining left tack below
13614 \glshex 0319\string;% combining right tack below
13615 \glshex 031A\string;% combining left angle above
13616 \glshex 031B\string;% combining horn
13617 \glshex 031C\string;% combining left half ring below
13618 \glshex 031D\string;% combining up tack below
13619 \glshex 031E\string;% combining down tack below
13620 \glshex 031F\string;% combining plus sign below
13621 \glshex 0320\string;% combining minus sign below
13622 \glshex 0321\string;% combining palatalized hook below
13623 \glshex 0322\string;% combining retroflex hook below
13624 \glshex 0324\string;% combining diaresis below
13625 \glshex 0325\string;% combining ring below
13626 \glshex 0326\string;% combining comma below
13627 \glshex 0329\string;% combining vertical line below
13628 \glshex 032A\string;% combining bridge below
13629 \glshex 032B\string;% combining inverted double arch below
13630 \glshex 032C\string;% combining caron below
13631 \glshex 032D\string;% combining circumflex accent below
13632 \glshex 032E\string;% combining breve below
13633 \glshex 032F\string;% combining inverted breve below
13634 \glshex 0330\string;% combining tilde below
13635 \glshex 0331\string;% combining macron below
13636 \glshex 0333\string;% combining double low line
13637 \glshex 0334\string;% combining tilde overlay
13638 \glshex 0335\string;% combining short stroke overlay
13639 \glshex 0336\string;% combining long stroke overlay
13640 \glshex 0338\string;% combining long solidus overlay
13641 \glshex 0339\string;% combining combining right half ring below
13642 \glshex 033A\string;% combining inverted bridge below
13643 \glshex 033B\string;% combining square below
13644 \glshex 033C\string;% combining seagull below
13645 \glshex 033D\string;% combining x above
13646 \glshex 033E\string;% combining vertical tilde
13647 \glshex 033F\string;% combining double overline
13648 \glshex 0342\string;% combining Greek perispomeni
13649 \glshex 0344\string;% combining Greek dialytika tonos
13650 \glshex 0345\string;% combining Greek ypogegrammeni
13651 \glshex 0360\string;% combining double tilde
13652 \glshex 0361\string;% combining double inverted breve
13653 \glshex 0483\string;% combining Cyrillic titlo
13654 \glshex 0484\string;% combining Cyrillic palatalization
13655 \glshex 0485\string;% combining Cyrillic dasia pneumata
13656 \glshex 0486% combining Cyrillic psili pneumata
13657 }
```

iacriticIVrules Fourth set of combining diacritic marks.

```

13658 \newcommand*{\glsxtrcombiningdiacriticIVrules}{%
13659  \glshex 20D0\string;% combining left harpoon above
13660  \glshex 20D1\string;% combining right harpoon above
13661  \glshex 20D2\string;% combining long vertical line overlay
13662  \glshex 20D3\string;% combining short vertical line overlay
13663  \glshex 20D4\string;% combining anticlockwise arrow above
13664  \glshex 20D5\string;% combining clockwise arrow above
13665  \glshex 20D6\string;% combining left arrow above
13666  \glshex 20D7\string;% combining right arrow above
13667  \glshex 20D8\string;% combining ring overlay
13668  \glshex 20D9\string;% combining clockwise ring overlay
13669  \glshex 20DA\string;% combining anticlockwise ring overlay
13670  \glshex 20DB\string;% combining three dots above
13671  \glshex 20DC\string;% combining four dots above
13672  \glshex 20DD\string;% combining enclosing circle
13673  \glshex 20DE\string;% combining enclosing square
13674  \glshex 20DF\string;% combining enclosing diamond
13675  \glshex 20E0\string;% combining enclosing circle backslash
13676  \glshex 20E1% combining left right arrow above
13677 }

```

sxtrhyphenrules Hyphens.

```

13678 \newcommand*{\glsxtrhyphenrules}{%
13679  \string'\string-\string'\string%; ASCII hyphen
13680  \glshex 00AD\string;% soft hyphen
13681  \glshex 2010\string;% hyphen
13682  \glshex 2011\string;% non-breaking hyphen
13683  \glshex 2012\string;% figure dash
13684  \glshex 2013\string;% en dash
13685  \glshex 2014\string;% em dash
13686  \glshex 2015\string;% horizontal bar
13687  \glshex 2212\string=\glshex 207B\string=\glshex 208B% minus sign
13688 }

```

eneralpuncrules General punctuation.

```

13689 \newcommand*{\glsxtrgeneralpuncrules}{%
13690  \glsxtrgeneralpuncIrules
13691  \string<\glsxtrcurrencyrules
13692  \string<\glsxtrgeneralpuncIIrules
13693 }

```

eralpuncIrules First set of general punctuation.

```

13694 \newcommand*{\glsxtrgeneralpuncIrules}{%
13695  \string'\glshex 005F\string'% underscore
13696  \string<\glshex 00AF% macron
13697  \string<\string'\glshex 002C\string'% comma
13698  \string<\string'\glshex 003B\string'% semi-colon
13699  \string<\string'\glshex 003A\string'% colon
13700  \string<\string'\glshex 0021\string'% exclamation mark

```

```

13701 \string<\glshex 00A1% inverted exclamation mark
13702 \string<\string'\glshex 003F\string'% question mark
13703 \string<\glshex 00BF% inverted question mark
13704 \string<\string'\glshex 002F\string'% solidus
13705 \string<\string'\glshex 002E\string'% full stop
13706 \string<\glshex 00B4% acute accent
13707 \string<\string'\glshex 0060\string'% grave accent
13708 \string<\string'\glshex 005E\string'% circumflex accent
13709 \string<\glshex 00A8% diaersis
13710 \string<\string'\glshex 007E\string'% tilde
13711 \string<\glshex 00B7% middle dot
13712 \string<\glshex 00B8% cedilla
13713 \string<\string'\glshex 0027\string'% straight apostrophe
13714 \string<\string'\glshex 0022\string'% straight double quote
13715 \string<\glshex 00AB% left guillemet
13716 \string<\glshex 00BB% right guillemet
13717 \string<\string'\glshex 0028\string'% left parenthesis
13718 \string=\glshex 207D\string=\glshex 208D% super/subscript left parenthesis
13719 \string<\string'\glshex 0029\string'% right parenthesis
13720 \string=\glshex 207E\string=\glshex 208E% super/subscript right parenthesis
13721 \string<\string'\glshex 005B\string'% left square bracket
13722 \string<\string'\glshex 005D\string'% right square bracket
13723 \string<\string'\glshex 007B\string'% left curly bracket
13724 \string<\string'\glshex 007D\string'% right curly bracket
13725 \string<\glshex 00A7% section sign
13726 \string<\glshex 00B6% pilcrow sign
13727 \string<\glshex 00A9% copyright sign
13728 \string<\glshex 00AE% registered sign
13729 \string<\string'\glshex 0040\string'% at sign
13730 }

```

trcurrencyrules General punctuation.

```

13731 \newcommand*\{\glsxtrcurrencyrules}{%
13732 \glshex 00A4% currency sign
13733 \string<\glshex 0E3F% Thai currency symbol baht
13734 \string<\glshex 00A2% cent sign
13735 \string<\glshex 20A1% colon sign
13736 \string<\glshex 20A2% cruzeiro sign
13737 \string<\string'\glshex 0024\string'% dollar sign
13738 \string<\glshex 20AB% dong sign
13739 \string<\glshex 20AC% euro sign
13740 \string<\glshex 20A3% French franc sign
13741 \string<\glshex 20A4% lira sign
13742 \string<\glshex 20A5% mill sign
13743 \string<\glshex 20A6% naira sign
13744 \string<\glshex 20A7% peseta sign
13745 \string<\glshex 00A3% pound sign
13746 \string<\glshex 20A8% rupee sign
13747 \string<\glshex 20AA% new sheqel sign

```

```
13748 \string<\glshex 20A9% won sign
13749 \string<\glshex 00A5% yen sign
13750 }
```

eralpuncIIrules Second set of general punctuation.

```
13751 \newcommand*{\glsxtrgeneralpuncIIrules}{%
13752 \string'\glshex 002A\string'% asterisk
13753 \string<\string'\glshex 005C\string'% backslash
13754 \string<\string'\glshex 0026\string'% ampersand
13755 \string<\string'\glshex 0023\string'% hash sign
13756 \string<\string'\glshex 0025\string'% percent sign
13757 \string<\string'\glshex 002B\string'% plus sign
13758 \string=\glshex 207A\string=\glshex 208A% super/subscript plus sign
13759 \string<\glshex 00B1% plus-minus sign
13760 \string<\glshex 00F7% division sign
13761 \string<\glshex 00D7% multiplication sign
13762 \string<\string'\glshex 003C\string'% less-than sign
13763 \string<\string'\glshex 003D\string'% equals sign
13764 \string<\string'\glshex 003E\string'% greater-than sign
13765 \string<\glshex 00AC% not sign
13766 \string<\string'\glshex 007C\string'% vertical bar (pipe)
13767 \string<\glshex 00A6% broken bar
13768 \string<\glshex 00B0% degree sign
13769 \string<\glshex 00B5% micron sign
13770 }
```

eralLatinIrules Basic Latin alphabet.

```
13771 \newcommand*{\glsxtrGeneralLatinIrules}{%
13772 \glsxtrLatinA
13773 \string< b,B%
13774 \string< c,C%
13775 \string< d,D%
13776 \string<\glsxtrLatinE
13777 \string< f,F%
13778 \string< g,G%
13779 \string<\glsxtrLatinH
13780 \string<\glsxtrLatinI
13781 \string< j,J%
13782 \string<\glsxtrLatinK
13783 \string<\glsxtrLatinL
13784 \string<\glsxtrLatinM
13785 \string<\glsxtrLatinN
13786 \string<\glsxtrLatinO
13787 \string<\glsxtrLatinP
13788 \string< q,Q%
13789 \string< r,R%
13790 \string<\glsxtrLatinS
13791 \string<\glsxtrLatinT
13792 \string< u,U%
```

```

13793 \string<v,V%
13794 \string<w,W%
13795 \string<\glsxtrLatinX
13796 \string<y,Y%
13797 \string<z,Z
13798 }

```

`ralLatinIIrules` General Latin alphabet (eth between D and E, ß treated as SS).

```

13799 \newcommand*{\glsxtrGeneralLatinIIrules}{%
13800 \glsxtrLatinA
13801 \string<b,B%
13802 \string<c,C%
13803 \string<d,D%
13804 \string<\glsxtrLatinEth
13805 \string<\glsxtrLatinE
13806 \string<f,F%
13807 \string<g,G%
13808 \string<\glsxtrLatinH
13809 \string<\glsxtrLatinI
13810 \string<j,J%
13811 \string<\glsxtrLatinK
13812 \string<\glsxtrLatinL
13813 \string<\glsxtrLatinM
13814 \string<\glsxtrLatinN
13815 \string<\glsxtrLatinO
13816 \string<\glsxtrLatinP
13817 \string<q,Q%
13818 \string<r,R%
13819 \string<\glsxtrLatinS
13820 \string& SS \string, \glsxtrLatinEszettSs
13821 \string<\glsxtrLatinT
13822 \string<u,U%
13823 \string<v,V%
13824 \string<w,W%
13825 \string<\glsxtrLatinX
13826 \string<y,Y%
13827 \string<z,Z%
13828 }

```

`allLatinIIIrules` General Latin alphabet (eth between D and E, ß treated as SZ).

```

13829 \newcommand*{\glsxtrGeneralLatinIIIrules}{%
13830 \glsxtrLatinA
13831 \string<b,B%
13832 \string<c,C%
13833 \string<d,D%
13834 \string<\glsxtrLatinEth
13835 \string<\glsxtrLatinE
13836 \string<f,F%
13837 \string<g,G%

```

```

13838 \string<\glsxtrLatinH
13839 \string<\glsxtrLatinI
13840 \string<j,J%
13841 \string<\glsxtrLatinK
13842 \string<\glsxtrLatinL
13843 \string<\glsxtrLatinM
13844 \string<\glsxtrLatinN
13845 \string<\glsxtrLatinO
13846 \string<\glsxtrLatinP
13847 \string<q,Q%
13848 \string<r,R%
13849 \string<\glsxtrLatinS
13850 \string& SZ, \glsxtrLatinEszettSz
13851 \string<\glsxtrLatinT
13852 \string<u,U%
13853 \string<v,V%
13854 \string<w,W%
13855 \string<\glsxtrLatinX
13856 \string<y,Y%
13857 \string<z,Z%
13858 }

```

General Latin IV rules General Latin alphabet (Æ treated as AE and œ treated as OE, Þ treated as TH, ß treated as SS, eth between D and E).

```

13859 \newcommand*\glsxtrGeneralLatinIVrules}{%
13860 \glsxtrLatinA
13861 \string& AE , \glsxtrLatinAEligature
13862 \string<b,B%
13863 \string<c,C%
13864 \string<d,D%
13865 \string<\glsxtrLatinEth
13866 \string<\glsxtrLatinE
13867 \string<f,F%
13868 \string<g,G%
13869 \string<\glsxtrLatinH
13870 \string<\glsxtrLatinI
13871 \string<j,J%
13872 \string<\glsxtrLatinK
13873 \string<\glsxtrLatinL
13874 \string<\glsxtrLatinM
13875 \string<\glsxtrLatinN
13876 \string<\glsxtrLatinO
13877 \string& OE , \glsxtrLatinOEligature
13878 \string<\glsxtrLatinP
13879 \string<q,Q%
13880 \string<r,R%
13881 \string<\glsxtrLatinS
13882 \string& SS , \glsxtrLatinEszettSs
13883 \string<\glsxtrLatinT

```

```

13884 \string& th =\glshex 00DE
13885 \string& TH =\glshex 00FE
13886 \string<u,U%
13887 \string<v,V%
13888 \string<w,W%
13889 \string<\glsxtrLatinX
13890 \string<y,Y%
13891 \string<z,Z%
13892 }

```

eralLatinVrules General Latin alphabet (eth between D and E, ß treated as SS, Þ treated as TH).

```

13893 \newcommand*\{\glsxtrGeneralLatinVrules\}{%
13894 \glsxtrLatinA
13895 \string<b,B%
13896 \string<c,C%
13897 \string<d,D%
13898 \string<\glsxtrLatinEth
13899 \string<\glsxtrLatinE
13900 \string<f,F%
13901 \string<g,G%
13902 \string<\glsxtrLatinH
13903 \string<\glsxtrLatinI
13904 \string<j,J%
13905 \string<\glsxtrLatinK
13906 \string<\glsxtrLatinL
13907 \string<\glsxtrLatinM
13908 \string<\glsxtrLatinN
13909 \string<\glsxtrLatinO
13910 \string<\glsxtrLatinP
13911 \string<q,Q%
13912 \string<r,R%
13913 \string<\glsxtrLatinS
13914 \string& SS , \glsxtrLatinEszettSs
13915 \string<\glsxtrLatinT
13916 \string& th =\glshex 00DE
13917 \string& TH =\glshex 00FE
13918 \string<u,U%
13919 \string<v,V%
13920 \string<w,W%
13921 \string<\glsxtrLatinX
13922 \string<y,Y%
13923 \string<z,Z%
13924 }

```

ralLatinVIrules General Latin alphabet (eth between D and E, ß treated as SZ, Þ treated as TH).

```

13925 \newcommand*\{\glsxtrGeneralLatinVIrules\}{%
13926 \glsxtrLatinA
13927 \string<b,B%
13928 \string<c,C%

```

```

13929 \string<d,D%
13930 \string<\glsxtrLatinEth
13931 \string<\glsxtrLatinE
13932 \string<f,F%
13933 \string<g,G%
13934 \string<\glsxtrLatinH
13935 \string<\glsxtrLatinI
13936 \string<j,J%
13937 \string<\glsxtrLatinK
13938 \string<\glsxtrLatinL
13939 \string<\glsxtrLatinM
13940 \string<\glsxtrLatinN
13941 \string<\glsxtrLatinO
13942 \string<\glsxtrLatinP
13943 \string<q,Q%
13944 \string<r,R%
13945 \string<\glsxtrLatinS
13946 \string& SZ , \glsxtrLatinEszettSz
13947 \string<\glsxtrLatinT
13948 \string& th =\glshex 0ODE
13949 \string& TH =\glshex OOF
13950 \string<u,U%
13951 \string<v,V%
13952 \string<w,W%
13953 \string<\glsxtrLatinX
13954 \string<y,Y%
13955 \string<z,Z%
13956 }

```

`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).

```

13957 \newcommand*\glsxtrGeneralLatinVIIrules}{%
13958 \glsxtrLatinA
13959 \string<\glsxtrLatinAEligature
13960 \string<b,B%
13961 \string<c,C%
13962 \string<d,D%
13963 \string<\glsxtrLatinEth
13964 \string<\glsxtrLatinE
13965 \string<f,F%
13966 \string<\glsxtrLatinInsularG
13967 \string<\glsxtrLatinH
13968 \string<\glsxtrLatinI
13969 \string<j,J%
13970 \string<\glsxtrLatinK
13971 \string<\glsxtrLatinL
13972 \string<\glsxtrLatinM
13973 \string<\glsxtrLatinN
13974 \string<\glsxtrLatinO

```

```

13975 \string<\glsxtrLatinOELigature
13976 \string<\glsxtrLatinP
13977 \string<q,Q%
13978 \string<r,R%
13979 \string<\glshex 017F=\glsxtrLatinS % s and long s
13980 \string<\glsxtrLatinT
13981 \string<\glsxtrLatinThorn
13982 \string<u,U%
13983 \string<v,V%
13984 \string< w\string=\glshex 01BF, W\string=\glshex 01F7
13985 \string<\glsxtrLatinX
13986 \string<y,Y%
13987 \string<z,Z%
13988 }

```

LatinVIIIRules 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).

```

13989 \newcommand*\glsxtrGeneralLatinVIIIRules}{%
13990 \glsxtrLatinA
13991 \string& AE , \glsxtrLatinAELigature
13992 \string<b,B%
13993 \string<c,C%
13994 \string<\glshex 00F0\string;d,\glshex 00D0\string;D% D and eth
13995 \string<\glsxtrLatinE
13996 \string<f,F%
13997 \string<g,G%
13998 \string<\glsxtrLatinH
13999 \string<\glsxtrLatinI
14000 \string<j,J%
14001 \string<\glsxtrLatinK
14002 \string<\glshex 0142\string=\glsxtrLatinL\string=\glshex 0141% L and \L
14003 \string<\glsxtrLatinM
14004 \string<\glsxtrLatinN
14005 \string<\glshex 00F8\string=\glsxtrLatinO\string=\glshex 00D8% O and \O
14006 \string& OE , \glsxtrLatinOELigature
14007 \string<\glsxtrLatinP
14008 \string<q,Q%
14009 \string<r,R%
14010 \string<\glsxtrLatinS
14011 \string& SS , \glsxtrLatinEszettSs
14012 \string<\glsxtrLatinT
14013 \string& th =\glshex 00DE
14014 \string& TH =\glshex 00FE
14015 \string<u,U%
14016 \string<v,V%
14017 \string<w,W%
14018 \string<\glsxtrLatinX
14019 \string<y,Y%
14020 \string<z,Z%

```

```

14021 }

\glsxtrLatinA
14022 \newcommand*{\glsxtrLatinA}{%
14023   a\string=\glshex 00AA\string=\glshex 2090,A
14024 }

\glsxtrLatinE
14025 \newcommand*{\glsxtrLatinE}{%
14026   e\string=\glshex 2091,E
14027 }

\glsxtrLatinH
14028 \newcommand*{\glsxtrLatinH}{%
14029   h\string=\glshex 2095,H
14030 }

\glsxtrLatinI
14031 \newcommand*{\glsxtrLatinI}{%
14032   i\string=\glshex 2071,I
14033 }

\glsxtrLatinK
14034 \newcommand*{\glsxtrLatinK}{%
14035   k\string=\glshex 2096,K
14036 }

\glsxtrLatinL
14037 \newcommand*{\glsxtrLatinL}{%
14038   l\string=\glshex 2097,L
14039 }

\glsxtrLatinM
14040 \newcommand*{\glsxtrLatinM}{%
14041   m\string=\glshex 2098,M
14042 }

\glsxtrLatinN
14043 \newcommand*{\glsxtrLatinN}{%
14044   n\string=\glshex 207F\string=\glshex 2099,N
14045 }

\glsxtrLatinO
14046 \newcommand*{\glsxtrLatinO}{%
14047   o\string=\glshex 00BA\string=\glshex 2092,O
14048 }

```

```

\glsxtrLatinP
14049 \newcommand*{\glsxtrLatinP}{%
14050   p\string=\glshex{209A,P}
14051 }

\glsxtrLatinS
14052 \newcommand*{\glsxtrLatinS}{%
14053   s\string=\glshex{209B,S}
14054 }

\glsxtrLatinT
14055 \newcommand*{\glsxtrLatinT}{%
14056   t\string=\glshex{209C,T}
14057 }

\glsxtrLatinX
14058 \newcommand*{\glsxtrLatinX}{%
14059   x\string=\glshex{2093,X}
14060 }

lsxtrLatinSchwa Latin schwa (lower case, subscript and upper case).
14061 \newcommand*{\glsxtrLatinSchwa}{%
14062   \glshex{0259}\string=\glshex{2094},\glshex{018F}
14063 }

trLatinEszettSs
14064 \newcommand*{\glsxtrLatinEszettSs}{%
14065   \glshex{00DF}\% eszett
14066   \string=\glshex{017Fs} % long S s
14067 }

trLatinEszettSz
14068 \newcommand*{\glsxtrLatinEszettSz}{%
14069   \glshex{00DF}\% eszett
14070   \string=\glshex{017Fz} % long S z
14071 }

\glsxtrLatinEth
14072 \newcommand*{\glsxtrLatinEth}{%
14073   \glshex{00F0},\glshex{00D0}\% eth
14074 }

lsxtrLatinThorn
14075 \newcommand*{\glsxtrLatinThorn}{%
14076   \glshex{00FE},\glshex{00DE}\% thorn
14077 }

```

```

LatinAELigature
14078 \newcommand*{\glsxtrLatinAELigature}{%
14079  \glshex 00E6,\glshex 00C6% AE-ligature
14080 }

LatinOELigature
14081 \newcommand*{\glsxtrLatinOELigature}{%
14082  \glshex 0153,\glshex 0152% OE-ligature
14083 }

\glsxtrLatinAA
14084 \newcommand*{\glsxtrLatinAA}{%
14085  \glshex 00E5=a\glshex 030A,% \aa
14086  \glshex 00C5=A\glshex 030A% \AA
14087 }

glsxtrLatinWynn
14088 \newcommand*{\glsxtrLatinWynn}{%
14089  \glshex 01BF,\glshex 01F7% wynn
14090 }

trLatinInsularG
14091 \newcommand*{\glsxtrLatinInsularG}{%
14092  \glshex 1D79,\glshex A77D% insular G
14093  \string; g, G
14094 }

sxtrLatinOslash
14095 \newcommand*{\glsxtrLatinOslash}{%
14096  \glshex 00F8,\glshex 00D8% \o, \O
14097 }

sxtrLatinLslash
14098 \newcommand*{\glsxtrLatinLslash}{%
14099  \glshex 0142,\glshex 0141% \l, \L
14100 }

thUpGreekIrules Includes digamma between epsilon and zeta.
14101 \newcommand*{\glsxtrMathUpGreekIrules}{%
14102  \glsxtrUpAlpha
14103  \string<\glsxtrUpBeta
14104  \string<\glsxtrUpGamma
14105  \string<\glsxtrUpDelta
14106  \string<\glsxtrUpEpsilon
14107  \string<\glsxtrUpDigamma
14108  \string<\glsxtrUpZeta
14109  \string<\glsxtrUpEta
14110  \string<\glsxtrUpTheta

```

```

14111 \string<\glsxtrUpIota
14112 \string<\glsxtrUpKappa
14113 \string<\glsxtrUpLambda
14114 \string<\glsxtrUpMu
14115 \string<\glsxtrUpNu
14116 \string<\glsxtrUpXi
14117 \string<\glsxtrUpOmicron
14118 \string<\glsxtrUpPi
14119 \string<\glsxtrUpRho
14120 \string<\glsxtrUpSigma
14121 \string<\glsxtrUpTau
14122 \string<\glsxtrUpUpsilon
14123 \string<\glsxtrUpPhi
14124 \string<\glsxtrUpChi
14125 \string<\glsxtrUpPsi
14126 \string<\glsxtrUpOmega
14127 }

```

`hUpGreekIIrules` Doesn't include digamma.

```

14128 \newcommand*{\glsxtrMathUpGreekIIrules}{%
14129 \glsxtrUpAlpha
14130 \string<\glsxtrUpBeta
14131 \string<\glsxtrUpGamma
14132 \string<\glsxtrUpDelta
14133 \string<\glsxtrUpEpsilon
14134 \string<\glsxtrUpZeta
14135 \string<\glsxtrUpEta
14136 \string<\glsxtrUpTheta
14137 \string<\glsxtrUpIota
14138 \string<\glsxtrUpKappa
14139 \string<\glsxtrUpLambda
14140 \string<\glsxtrUpMu
14141 \string<\glsxtrUpNu
14142 \string<\glsxtrUpXi
14143 \string<\glsxtrUpOmicron
14144 \string<\glsxtrUpPi
14145 \string<\glsxtrUpRho
14146 \string<\glsxtrUpSigma
14147 \string<\glsxtrUpTau
14148 \string<\glsxtrUpUpsilon
14149 \string<\glsxtrUpPhi
14150 \string<\glsxtrUpChi
14151 \string<\glsxtrUpPsi
14152 \string<\glsxtrUpOmega
14153 }

```

`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.

```
14154 \newcommand*{\glsxtrMathItalicGreekIrules}{%
```

```

14155 \glsxtrMathItalicAlpha
14156 \string<\glsxtrMathItalicBeta
14157 \string<\glsxtrMathItalicGamma
14158 \string<\glsxtrMathItalicDelta
14159 \string<\glsxtrMathItalicEpsilon
14160 \string<\glsxtrUpDigamma
14161 \string<\glsxtrMathItalicZeta
14162 \string<\glsxtrMathItalicEta
14163 \string<\glsxtrMathItalicTheta
14164 \string<\glsxtrMathItalicIota
14165 \string<\glsxtrMathItalicKappa
14166 \string<\glsxtrMathItalicLambda
14167 \string<\glsxtrMathItalicMu
14168 \string<\glsxtrMathItalicNu
14169 \string<\glsxtrMathItalicXi
14170 \string<\glsxtrMathItalicOmicron
14171 \string<\glsxtrMathItalicPi
14172 \string<\glsxtrMathItalicRho
14173 \string<\glsxtrMathItalicSigma
14174 \string<\glsxtrMathItalicTau
14175 \string<\glsxtrMathItalicUpsilon
14176 \string<\glsxtrMathItalicPhi
14177 \string<\glsxtrMathItalicChi
14178 \string<\glsxtrMathItalicPsi
14179 \string<\glsxtrMathItalicOmega
14180 }

```

licGreekIIrules Doesn't include digamma.

```

14181 \newcommand*\glsxtrMathItalicGreekIIrules}{%
14182 \glsxtrMathItalicAlpha
14183 \string<\glsxtrMathItalicBeta
14184 \string<\glsxtrMathItalicGamma
14185 \string<\glsxtrMathItalicDelta
14186 \string<\glsxtrMathItalicEpsilon
14187 \string<\glsxtrMathItalicZeta
14188 \string<\glsxtrMathItalicEta
14189 \string<\glsxtrMathItalicTheta
14190 \string<\glsxtrMathItalicIota
14191 \string<\glsxtrMathItalicKappa
14192 \string<\glsxtrMathItalicLambda
14193 \string<\glsxtrMathItalicMu
14194 \string<\glsxtrMathItalicNu
14195 \string<\glsxtrMathItalicXi
14196 \string<\glsxtrMathItalicOmicron
14197 \string<\glsxtrMathItalicPi
14198 \string<\glsxtrMathItalicRho
14199 \string<\glsxtrMathItalicSigma
14200 \string<\glsxtrMathItalicTau
14201 \string<\glsxtrMathItalicUpsilon

```

```

14202 \string<\glsxtrMathItalicPhi
14203 \string<\glsxtrMathItalicChi
14204 \string<\glsxtrMathItalicPsi
14205 \string<\glsxtrMathItalicOmega
14206 }

```

`upperGreekIrules` Upper case only (includes upright digamma).

```

14207 \newcommand*{\glsxtrMathItalicUpperGreekIrules}{%
14208 \glshex 1D6E2% upper case alpha (maths italic)
14209 \string<\glshex 1D6E3% upper case beta (maths italic)
14210 \string<\glshex 1D6E4% upper case gamma (maths italic)
14211 \string<\glshex 1D6E5% upper case delta (maths italic)
14212 \string<\glshex 1D6E6% upper case epsilon (maths italic)
14213 \string<\glshex 03DC% upper case digamma
14214 \string<\glshex 1D6E7% upper case zeta (maths italic)
14215 \string<\glshex 1D6E8% upper case eta (maths italic)
14216 \string<\glshex 1D6E9% upper case theta (maths italic)
14217 \string=\glshex 1D6F3% upper case theta variant (maths italic)
14218 \string<\glshex 1D6EA% upper case iota (maths italic)
14219 \string<\glshex 1D6EB% upper case kappa (maths italic)
14220 \string<\glshex 1D6EC% upper case lambda (maths italic)
14221 \string<\glshex 1D6ED% upper case mu (maths italic)
14222 \string<\glshex 1D6EE% upper case nu (maths italic)
14223 \string<\glshex 1D6EF% upper case xi (maths italic)
14224 \string<\glshex 1D6F0% upper case omicron (maths italic)
14225 \string<\glshex 1D6F1% upper case pi (maths italic)
14226 \string<\glshex 1D6F2% upper case rho (maths italic)
14227 \string<\glshex 1D6F4% upper case sigma (maths italic)
14228 \string<\glshex 1D6F5% upper case tau (maths italic)
14229 \string<\glshex 1D6F6% upper case upsilon (maths italic)
14230 \string<\glshex 1D6F7% upper case phi (maths italic)
14231 \string<\glshex 1D6F8% upper case chi (maths italic)
14232 \string<\glshex 1D6F9% upper case psi (maths italic)
14233 \string<\glshex 1D6FA% upper case omega (maths italic)
14234 }

```

`perGreekIIrules` Upper case only (doesn't include upright digamma).

```

14235 \newcommand*{\glsxtrMathItalicUpperGreekIIrules}{%
14236 \glshex 1D6E2% upper case alpha (maths italic)
14237 \string<\glshex 1D6E3% upper case beta (maths italic)
14238 \string<\glshex 1D6E4% upper case gamma (maths italic)
14239 \string<\glshex 1D6E5% upper case delta (maths italic)
14240 \string<\glshex 1D6E6% upper case epsilon (maths italic)
14241 \string<\glshex 1D6E7% upper case zeta (maths italic)
14242 \string<\glshex 1D6E8% upper case eta (maths italic)
14243 \string<\glshex 1D6E9% upper case theta (maths italic)
14244 \string=\glshex 1D6F3% upper case theta variant (maths italic)
14245 \string<\glshex 1D6EA% upper case iota (maths italic)
14246 \string<\glshex 1D6EB% upper case kappa (maths italic)

```

```

14247 \string<\glshex 1D6EC% upper case lambda (maths italic)
14248 \string<\glshex 1D6ED% upper case mu (maths italic)
14249 \string<\glshex 1D6EE% upper case nu (maths italic)
14250 \string<\glshex 1D6EF% upper case xi (maths italic)
14251 \string<\glshex 1D6F0% upper case omicron (maths italic)
14252 \string<\glshex 1D6F1% upper case pi (maths italic)
14253 \string<\glshex 1D6F2% upper case rho (maths italic)
14254 \string<\glshex 1D6F4% upper case sigma (maths italic)
14255 \string<\glshex 1D6F5% upper case tau (maths italic)
14256 \string<\glshex 1D6F6% upper case upsilon (maths italic)
14257 \string<\glshex 1D6F7% upper case phi (maths italic)
14258 \string<\glshex 1D6F8% upper case chi (maths italic)
14259 \string<\glshex 1D6F9% upper case psi (maths italic)
14260 \string<\glshex 1D6FA% upper case omega (maths italic)
14261 }

```

`owerGreekIrules` Lower case only (includes upright digamma).

```

14262 \newcommand*\{ \glsxtrMathItalicLowerGreekIrules\}{%
14263 \glshex 1D6FC% lower case alpha (maths italic)
14264 \string<\glshex 1D6FD% lower case beta (maths italic)
14265 \string<\glshex 1D6FE% lower case gamma (maths italic)
14266 \string<\glshex 1D6FF% lower case delta (maths italic)
14267 \string<\glshex 1D700% lower case epsilon (maths italic)
14268 \string=\glshex 1D716% lower case epsilon variant (maths italic)
14269 \string<\glshex 03DD% lower case digamma
14270 \string<\glshex 1D701% lower case zeta (maths italic)
14271 \string<\glshex 1D702% lower case eta (maths italic)
14272 \string<\glshex 1D703% lower case theta (maths italic)
14273 \string=\glshex 1D717% lower case theta variant (maths italic)
14274 \string<\glshex 1D704% lower case iota (maths italic)
14275 \string<\glshex 1D705% lower case kappa (maths italic)
14276 \string=\glshex 1D718% lower case kappa variant (maths italic)
14277 \string<\glshex 1D706% lower case lambda (maths italic)
14278 \string<\glshex 1D707% lower case mu (maths italic)
14279 \string<\glshex 1D708% lower case nu (maths italic)
14280 \string<\glshex 1D709% lower case xi (maths italic)
14281 \string<\glshex 1D70A% lower case omicron (maths italic)
14282 \string<\glshex 1D70B% lower case pi (maths italic)
14283 \string=\glshex 1D71B% lower case pi variant (maths italic)
14284 \string<\glshex 1D70C% lower case rho (maths italic)
14285 \string=\glshex 1D71A% lower case rho variant (maths italic)
14286 \string<\glshex 1D70D% lower case final sigma (maths italic)
14287 \string=\glshex 1D70E% lower case sigma (maths italic)
14288 \string<\glshex 1D70F% lower case tau (maths italic)
14289 \string<\glshex 1D710% lower case upsilon (maths italic)
14290 \string<\glshex 1D711% lower case phi (maths italic)
14291 \string=\glshex 1D719% lower case phi variant (maths italic)
14292 \string<\glshex 1D712% lower case chi (maths italic)
14293 \string<\glshex 1D713% lower case psi (maths italic)

```

```
14294 \string<\glshex 1D714% lower case omega (maths italic)
14295 }
```

werGreekIIrules Lower case only (doesn't includes upright digamma).

```
14296 \newcommand*\glsxtrMathItalicLowerGreekIIrules}{%
14297 \glshex 1D6FC% lower case alpha (maths italic)
14298 \string<\glshex 1D6FD% lower case beta (maths italic)
14299 \string<\glshex 1D6FE% lower case gamma (maths italic)
14300 \string<\glshex 1D6FF% lower case delta (maths italic)
14301 \string<\glshex 1D700% lower case epsilon (maths italic)
14302 \string=\glshex 1D716% lower case epsilon variant (maths italic)
14303 \string<\glshex 1D701% lower case zeta (maths italic)
14304 \string<\glshex 1D702% lower case eta (maths italic)
14305 \string<\glshex 1D703% lower case theta (maths italic)
14306 \string=\glshex 1D717% lower case theta variant (maths italic)
14307 \string<\glshex 1D704% lower case iota (maths italic)
14308 \string<\glshex 1D705% lower case kappa (maths italic)
14309 \string=\glshex 1D718% lower case kappa variant (maths italic)
14310 \string<\glshex 1D706% lower case lambda (maths italic)
14311 \string<\glshex 1D707% lower case mu (maths italic)
14312 \string<\glshex 1D708% lower case nu (maths italic)
14313 \string<\glshex 1D709% lower case xi (maths italic)
14314 \string<\glshex 1D70A% lower case omicron (maths italic)
14315 \string<\glshex 1D70B% lower case pi (maths italic)
14316 \string=\glshex 1D71B% lower case pi variant (maths italic)
14317 \string<\glshex 1D70C% lower case rho (maths italic)
14318 \string=\glshex 1D71A% lower case rho variant (maths italic)
14319 \string<\glshex 1D70D% lower case final sigma (maths italic)
14320 \string=\glshex 1D70E% lower case sigma (maths italic)
14321 \string<\glshex 1D70F% lower case tau (maths italic)
14322 \string<\glshex 1D710% lower case upsilon (maths italic)
14323 \string<\glshex 1D711% lower case phi (maths italic)
14324 \string=\glshex 1D719% lower case phi variant (maths italic)
14325 \string<\glshex 1D712% lower case chi (maths italic)
14326 \string<\glshex 1D713% lower case psi (maths italic)
14327 \string<\glshex 1D714% lower case omega (maths italic)
14328 }
```

MathGreekIrules Includes both upright and italic with digamma between epsilon and zeta.

```
14329 \newcommand*\glsxtrMathGreekIrules}{%
14330 \glsxtrMathItalicAlpha
14331 \string;\glsxtrUpAlpha
14332 \string<\glsxtrMathItalicBeta
14333 \string;\glsxtrUpBeta
14334 \string<\glsxtrMathItalicGamma
14335 \string;\glsxtrUpGamma
14336 \string<\glsxtrMathItalicDelta
14337 \string;\glsxtrUpDelta
14338 \string<\glsxtrMathItalicEpsilon
```

```

14339 \string;\glsxtrUpEpsilon
14340 \string<\glsxtrUpDigamma
14341 \string<\glsxtrMathItalicZeta
14342 \string;\glsxtrUpZeta
14343 \string<\glsxtrMathItalicEta
14344 \string;\glsxtrUpEta
14345 \string<\glsxtrMathItalicTheta
14346 \string;\glsxtrUpTheta
14347 \string<\glsxtrMathItalicIota
14348 \string;\glsxtrUpIota
14349 \string<\glsxtrMathItalicKappa
14350 \string;\glsxtrUpKappa
14351 \string<\glsxtrMathItalicLambda
14352 \string;\glsxtrUpLambda
14353 \string<\glsxtrMathItalicMu
14354 \string;\glsxtrUpMu
14355 \string<\glsxtrMathItalicNu
14356 \string;\glsxtrUpNu
14357 \string<\glsxtrMathItalicXi
14358 \string;\glsxtrUpXi
14359 \string<\glsxtrMathItalicOmicron
14360 \string;\glsxtrUpOmicron
14361 \string<\glsxtrMathItalicPi
14362 \string;\glsxtrUpPi
14363 \string<\glsxtrMathItalicRho
14364 \string;\glsxtrUpRho
14365 \string<\glsxtrMathItalicSigma
14366 \string;\glsxtrUpSigma
14367 \string<\glsxtrMathItalicTau
14368 \string;\glsxtrUpTau
14369 \string<\glsxtrMathItalicUpsilon
14370 \string;\glsxtrUpUpsilon
14371 \string<\glsxtrMathItalicPhi
14372 \string;\glsxtrUpPhi
14373 \string<\glsxtrMathItalicChi
14374 \string;\glsxtrUpChi
14375 \string<\glsxtrMathItalicPsi
14376 \string;\glsxtrUpPsi
14377 \string<\glsxtrMathItalicOmega
14378 \string;\glsxtrUpOmega
14379 }

```

`athGreekIIrules` Includes both upright and italic (digamma not included).

```

14380 \newcommand*\glsxtrMathGreekIIrules{\%
14381 \glsxtrMathItalicAlpha
14382 \string;\glsxtrUpAlpha
14383 \string<\glsxtrMathItalicBeta
14384 \string;\glsxtrUpBeta
14385 \string<\glsxtrMathItalicGamma

```

```

14386 \string;\glsxtrUpGamma
14387 \string<\glsxtrMathItalicDelta
14388 \string;\glsxtrUpDelta
14389 \string<\glsxtrMathItalicEpsilon
14390 \string;\glsxtrUpEpsilon
14391 \string<\glsxtrMathItalicZeta
14392 \string;\glsxtrUpZeta
14393 \string<\glsxtrMathItalicEta
14394 \string;\glsxtrUpEta
14395 \string<\glsxtrMathItalicTheta
14396 \string;\glsxtrUpTheta
14397 \string<\glsxtrMathItalicIota
14398 \string;\glsxtrUpIota
14399 \string<\glsxtrMathItalicKappa
14400 \string;\glsxtrUpKappa
14401 \string<\glsxtrMathItalicLambda
14402 \string;\glsxtrUpLambda
14403 \string<\glsxtrMathItalicMu
14404 \string;\glsxtrUpMu
14405 \string<\glsxtrMathItalicNu
14406 \string;\glsxtrUpNu
14407 \string<\glsxtrMathItalicXi
14408 \string;\glsxtrUpXi
14409 \string<\glsxtrMathItalicOmicron
14410 \string;\glsxtrUpOmicron
14411 \string<\glsxtrMathItalicPi
14412 \string;\glsxtrUpPi
14413 \string<\glsxtrMathItalicRho
14414 \string;\glsxtrUpRho
14415 \string<\glsxtrMathItalicSigma
14416 \string;\glsxtrUpSigma
14417 \string<\glsxtrMathItalicTau
14418 \string;\glsxtrUpTau
14419 \string<\glsxtrMathItalicUpsilon
14420 \string;\glsxtrUpUpsilon
14421 \string<\glsxtrMathItalicPhi
14422 \string;\glsxtrUpPhi
14423 \string<\glsxtrMathItalicChi
14424 \string;\glsxtrUpChi
14425 \string<\glsxtrMathItalicPsi
14426 \string;\glsxtrUpPsi
14427 \string<\glsxtrMathItalicOmega
14428 \string;\glsxtrUpOmega
14429 }

```

\glsxtrUpAlpha

```

14430 \newcommand*\glsxtrUpAlpha}{%
14431 \glshex 03B1,% lower case alpha
14432 \glshex 0391% upper case alpha

```

```

14433 }

\glsxtrUpBeta
14434 \newcommand*{\glsxtrUpBeta}{%
14435 \glshex{03B2},% lower case beta
14436 \glshex{0392}% upper case beta
14437 }

\glsxtrUpGamma
14438 \newcommand*{\glsxtrUpGamma}{%
14439 \glshex{03B3},% lower case gamma
14440 \glshex{0393}% upper case gamma
14441 }

\glsxtrUpDelta
14442 \newcommand*{\glsxtrUpDelta}{%
14443 \glshex{03B4},% lower case delta
14444 \glshex{0394}% upper case delta
14445 }

glsxtrUpEpsilon
14446 \newcommand*{\glsxtrUpEpsilon}{%
14447 \glshex{03B5},% lower case epsilon
14448 \string=\glshex{03F5},% lower case epsilon variant
14449 \glshex{0395}% upper case epsilon
14450 }

glsxtrUpDigamma
14451 \newcommand*{\glsxtrUpDigamma}{%
14452 \glshex{03DD},% lower case digamma
14453 \glshex{03DC}% upper case digamma
14454 }

\glsxtrUpZeta
14455 \newcommand*{\glsxtrUpZeta}{%
14456 \glshex{03B6},% lower case zeta
14457 \glshex{0396}% upper case zeta
14458 }

\glsxtrUpEta
14459 \newcommand*{\glsxtrUpEta}{%
14460 \glshex{03B7},% lower case eta
14461 \glshex{0397}% upper case eta
14462 }

\glsxtrUpTheta
14463 \newcommand*{\glsxtrUpTheta}{%
14464 \glshex{03B8}% lower case theta

```

```

14465 \string=\glshex 03D1,% lower case theta variant
14466 \glshex 0398% upper case theta
14467 }

\glsxtrUpIota
14468 \newcommand*\glsxtrUpIota{%
14469 \glshex 03B9,% lower case iota
14470 \glshex 0399% upper case iota
14471 }

\glsxtrUpKappa
14472 \newcommand*\glsxtrUpKappa{%
14473 \glshex 03BA% lower case kappa
14474 \string=\glshex 03F0,% lower case kappa variant
14475 \glshex 039A% upper case kappa
14476 }

\glsxtrUpLambda
14477 \newcommand*\glsxtrUpLambda{%
14478 \glshex 03BB,% lower lambda
14479 \glshex 039B% upper case lambda
14480 }

\glsxtrUpMu
14481 \newcommand*\glsxtrUpMu{%
14482 \glshex 03BC,% lower case mu
14483 \glshex 039C% upper case mu
14484 }

\glsxtrUpNu
14485 \newcommand*\glsxtrUpNu{%
14486 \glshex 03BD,% lower case nu
14487 \glshex 039D% upper case nu
14488 }

\glsxtrUpXi
14489 \newcommand*\glsxtrUpXi{%
14490 \glshex 03BE,% lower case xi
14491 \glshex 039E% upper case xi
14492 }

glsxtrUpOmicron
14493 \newcommand*\glsxtrUpOmicron{%
14494 \glshex 03BF,% lower case omicron
14495 \glshex 039F% upper case omicron
14496 }

```

```

\glsxtrUpPi
14497 \newcommand*{\glsxtrUpPi}{%
14498  \glshex 03C0% lower case pi
14499  \string=\glshex 03D6,% lower case pi variant
14500  \glshex 03A0% upper case pi
14501 }

\glsxtrUpRho
14502 \newcommand*{\glsxtrUpRho}{%
14503  \glshex 03C1% lower case rho
14504  \string=\glshex 03F1,% lower case rho variant
14505  \glshex 03A1% upper case rho
14506 }

\glsxtrUpSigma
14507 \newcommand*{\glsxtrUpSigma}{%
14508  \glshex 03C2% lower case sigma
14509  \string=\glshex 03C3,% lower case sigma
14510  \glshex 03A3% upper case sigma
14511 }

\glsxtrUpTau
14512 \newcommand*{\glsxtrUpTau}{%
14513  \glshex 03C4,% lower case tau
14514  \glshex 03A4% upper case tau
14515 }

glsxtrUpUpsilon
14516 \newcommand*{\glsxtrUpUpsilon}{%
14517  \glshex 03C5,% lower case epsilon
14518  \glshex 03A5% upper case epsilon
14519 }

\glsxtrUpPhi
14520 \newcommand*{\glsxtrUpPhi}{%
14521  \glshex 03C6% lower case phi
14522  \string=\glshex 03D5,% lower case phi variant
14523  \glshex 03A6% upper case phi
14524 }

\glsxtrUpChi
14525 \newcommand*{\glsxtrUpChi}{%
14526  \glshex 03C7,% lower case chi
14527  \glshex 03A7% upper case chi
14528 }

\glsxtrUpPsi
14529 \newcommand*{\glsxtrUpPsi}{%

```

```

14530 \glshex 03C8,% lower case psi
14531 \glshex 03A8% upper case psi
14532 }

\glsxtrUpOmega
14533 \newcommand*\glsxtrUpOmega{%
14534 \glshex 03C9,% lower case omega
14535 \glshex 03A9% upper case omega
14536 }

MathItalicAlpha
14537 \newcommand*\glsxtrMathItalicAlpha{%
14538 \glshex 1D6FC,% lower case alpha (maths italic)
14539 \glshex 1D6E2% upper case alpha (maths italic)
14540 }

rMathItalicBeta
14541 \newcommand*\glsxtrMathItalicBeta{%
14542 \glshex 1D6FD,% lower case beta (maths italic)
14543 \glshex 1D6E3% upper case beta (maths italic)
14544 }

MathItalicGamma
14545 \newcommand*\glsxtrMathItalicGamma{%
14546 \glshex 1D6FE,% lower case gamma (maths italic)
14547 \glshex 1D6E4% upper case gamma (maths italic)
14548 }

MathItalicDelta
14549 \newcommand*\glsxtrMathItalicDelta{%
14550 \glshex 1D6FF,% lower case delta (maths italic)
14551 \glshex 1D6E5% upper case delta (maths italic)
14552 }

thItalicEpsilon
14553 \newcommand*\glsxtrMathItalicEpsilon{%
14554 \glshex 1D700% lower case epsilon (maths italic)
14555 \string=\glshex 1D716,% lower case epsilon variant (maths italic)
14556 \glshex 1D6E6% upper case epsilon (maths italic)
14557 }

rMathItalicZeta
14558 \newcommand*\glsxtrMathItalicZeta{%
14559 \glshex 1D701,% lower case zeta (maths italic)
14560 \glshex 1D6E7% upper case zeta (maths italic)
14561 }

```

```

trMathItalicEta
14562 \newcommand*{\glsxtrMathItalicEta}{%
14563  \glshex 1D702,% lower case eta (maths italic)
14564  \glshex 1D6E8% upper case eta (maths italic)
14565 }

MathItalicTheta
14566 \newcommand*{\glsxtrMathItalicTheta}{%
14567  \glshex 1D703% lower case theta (maths italic)
14568  \string=\glshex 1D717,% lower case theta variant (maths italic)
14569  \glshex 1D6E9% upper case theta (maths italic)
14570  \string=\glshex 1D6F3% upper case theta variant (maths italic)
14571 }

rMathItalicIota
14572 \newcommand*{\glsxtrMathItalicIota}{%
14573  \glshex 1D704,% lower case iota (maths italic)
14574  \glshex 1D6EA% upper case iota (maths italic)
14575 }

MathItalicKappa
14576 \newcommand*{\glsxtrMathItalicKappa}{%
14577  \glshex 1D705% lower case kappa (maths italic)
14578  \string=\glshex 1D718,% lower case kappa variant (maths italic)
14579  \glshex 1D6EB% upper case kappa (maths italic)
14580 }

athItalicLambda
14581 \newcommand*{\glsxtrMathItalicLambda}{%
14582  \glshex 1D706,% lower case lambda (maths italic)
14583  \glshex 1D6EC% upper case lambda (maths italic)
14584 }

xtrMathItalicMu
14585 \newcommand*{\glsxtrMathItalicMu}{%
14586  \glshex 1D707,% lower case mu (maths italic)
14587  \glshex 1D6ED% upper case mu (maths italic)
14588 }

xtrMathItalicNu
14589 \newcommand*{\glsxtrMathItalicNu}{%
14590  \glshex 1D708,% lower case nu (maths italic)
14591  \glshex 1D6EE% upper case nu (maths italic)
14592 }

xtrMathItalicXi
14593 \newcommand*{\glsxtrMathItalicXi}{%
14594  \glshex 1D709,% lower case xi (maths italic)

```

```

14595 \glshex 1D6EF% upper case xi (maths italic)
14596 }

thItalicOmicron

14597 \newcommand*{\glsxtrMathItalicOmicron}{%
14598 \glshex 1D70A,% lower case omicron (maths italic)
14599 \glshex 1D6F0% upper case omicron (maths italic)
14600 }

xtrMathItalicPi

14601 \newcommand*{\glsxtrMathItalicPi}{%
14602 \glshex 1D70B% lower case pi (maths italic)
14603 \string=\glshex 1D71B,% lower case pi variant (maths italic)
14604 \glshex 1D6F1% upper case pi (maths italic)
14605 }

trMathItalicRho

14606 \newcommand*{\glsxtrMathItalicRho}{%
14607 \glshex 1D70C% lower case rho (maths italic)
14608 \string=\glshex 1D71A,% lower case rho variant (maths italic)
14609 \glshex 1D6F2% upper case rho (maths italic)
14610 }

MathItalicSigma

14611 \newcommand*{\glsxtrMathItalicSigma}{%
14612 \glshex 1D70D% lower case final sigma (maths italic)
14613 \string=\glshex 1D70E,% lower case sigma (maths italic)
14614 \glshex 1D6F4% upper case sigma (maths italic)
14615 }

trMathItalicTau

14616 \newcommand*{\glsxtrMathItalicTau}{%
14617 \glshex 1D70F,% lower case tau (maths italic)
14618 \glshex 1D6F5% upper case tau (maths italic)
14619 }

thItalicUpsilon

14620 \newcommand*{\glsxtrMathItalicUpsilon}{%
14621 \glshex 1D710,% lower case upsilon (maths italic)
14622 \glshex 1D6F6% upper case upsilon (maths italic)
14623 }

trMathItalicPhi

14624 \newcommand*{\glsxtrMathItalicPhi}{%
14625 \glshex 1D711% lower case phi (maths italic)
14626 \string=\glshex 1D719,% lower case phi variant (maths italic)
14627 \glshex 1D6F7% upper case phi (maths italic)
14628 }

```

```
trMathItalicChi
14629 \newcommand{\glsxtrMathItalicChi}{%
14630 \glshex{1D712},% lower case chi (maths italic)
14631 \glshex{1D6F8}% upper case chi (maths italic)
14632 }
```

```
trMathItalicPsi
14633 \newcommand{\glsxtrMathItalicPsi}{%
14634 \glshex{1D713},% lower case psi (maths italic)
14635 \glshex{1D6F9}% upper case psi (maths italic)
14636 }
```

```
MathItalicOmega
14637 \newcommand{\glsxtrMathItalicOmega}{%
14638 \glshex{1D714},% lower case omega (maths italic)
14639 \glshex{1D6FA}% upper case omega (maths italic)
14640 }
```

```
thItalicPartial
14641 \newcommand{\glsxtrMathItalicPartial}{%
14642 \glshex{1D715}% partial differential (maths italic)
14643 }
```

```
MathItalicNabla
14644 \newcommand{\glsxtrMathItalicNabla}{%
14645 \glshex{1D6FB}% nabla (maths italic)
14646 }
```

lsxtrdigirules Digits from the Basic Latin set and subscript and superscript digit rules.

```
14647 \newcommand{\glsxtrdigirules}{%
14648 0\string=\glshex{2080}\string=\glshex{2070}
14649 \string<1\string=\glshex{2081}\string=\glshex{00B9}
14650 \string<2\string=\glshex{2082}\string=\glshex{00B2}
14651 \string<3\string=\glshex{2083}\string=\glshex{00B3}
14652 \string<4\string=\glshex{2084}\string=\glshex{2074}
14653 \string<5\string=\glshex{2085}\string=\glshex{2075}
14654 \string<6\string=\glshex{2086}\string=\glshex{2076}
14655 \string<7\string=\glshex{2087}\string=\glshex{2077}
14656 \string<8\string=\glshex{2088}\string=\glshex{2078}
14657 \string<9\string=\glshex{2089}\string=\glshex{2079}
14658 }
```

BasicDigirules Digits from the Basic Latin set.

```
14659 \newcommand{\glsxtrBasicDigirules}{%
14660 0\string<1\string<2\string<3\string<4%
14661 \string<5\string<6\string<7\string<8\string<9%
14662 }
```

criptDigitrules Subscript digits.

```
14663 \newcommand{\glsxtrSubScriptDigitrules}{%
14664 \glshex 2080% subscript 0
14665 \string<\glshex 2081% subscript 1
14666 \string<\glshex 2082% subscript 2
14667 \string<\glshex 2083% subscript 3
14668 \string<\glshex 2084% subscript 4
14669 \string<\glshex 2085% subscript 5
14670 \string<\glshex 2086% subscript 6
14671 \string<\glshex 2087% subscript 7
14672 \string<\glshex 2088% subscript 8
14673 \string<\glshex 2089% subscript 9
14674 }
```

criptDigitrules Superscript digits.

```
14675 \newcommand{\glsxtrSuperScriptDigitrules}{%
14676 \glshex 2070% superscript 0
14677 \string<\glshex 00B9% superscript 1
14678 \string<\glshex 00B2% superscript 2
14679 \string<\glshex 00B3% superscript 3
14680 \string<\glshex 2074% superscript 4
14681 \string<\glshex 2075% superscript 5
14682 \string<\glshex 2076% superscript 6
14683 \string<\glshex 2077% superscript 7
14684 \string<\glshex 2078% superscript 8
14685 \string<\glshex 2079% superscript 9
14686 }
```

trfractionrules Vulgar fractions.

```
14687 \newcommand{\glsxtrfractionrules}{%
14688 \glshex 215F% fraction numerator one (1/)
14689 \string<\glshex 2189% zero thirds (0/3 = 0)
14690 \string<\glshex 2152% one tenth (1/10 = 0.1)
14691 \string<\glshex 2151% one ninth (1/9 ~ 0.111)
14692 \string<\glshex 215B% one eighth (1/8 = 0.125)
14693 \string<\glshex 2150% one seventh (1/7 ~ 0.143)
14694 \string<\glshex 2159% one sixth (1/6 ~ 0.167)
14695 \string<\glshex 2155% one fifth (1/5 = 0.2)
14696 \string<\glshex 00BC% one quarter (1/4 = 0.25)
14697 \string<\glshex 2153% one third (1/3 ~ 0.333)
14698 \string<\glshex 215C% three eighths (3/8 = 0.375)
14699 \string<\glshex 2156% two fifths (2/5 = 0.4)
14700 \string<\glshex 00BD% one half (1/2 = 0.5)
14701 \string<\glshex 2157% three fifths (3/5 = 0.6)
14702 \string<\glshex 215D% five eighths (5/8 = 0.625)
14703 \string<\glshex 2154% two thirds (2/3 ~ 0.667)
14704 \string<\glshex 00BE% three quarters (3/4 = 0.75)
14705 \string<\glshex 2158% four fifths (4/5 = 0.8)
14706 \string<\glshex 215A% five sixths (5/6 ~ 0.833)
```

```

14707 \string<\glshex 215E% seven eighths (7/8 = 0.875)
14708 }

sxtrdialecthook Check for scripts associated with the document dialects.
14709 \renewcommand{\@glsxtrdialecthook}{%
14710 \ifundef\CurrentTrackedScript
14711 {%
14712 \TrackLangIfHasDefaultScript{\CurrentTrackedLanguage}%
14713 {%
14714 \edef\CurrentTrackedScript{%
14715 \TrackLangGetDefaultScript\CurrentTrackedLanguage}%
14716 {%
14717 {}}%
14718 }%
14719 {}}%
14720 \ifdef\CurrentTrackedScript
14721 {%
14722 \let\gls@orgTrackLangRequireDialectPrefix\TrackLangRequireDialectPrefix
14723 \def\TrackLangRequireDialectPrefix{glossariesxtr-}%
14724 \let\CurrentTrackedTag\CurrentTrackedScript
14725 \IfExists{\TrackLangRequireDialectPrefix\CurrentTrackedTag.ldf}
14726 {\RequireGlossariesExtraLang{\CurrentTrackedTag}}%
14727 {}}%
14728 \let\TrackLangRequireDialectPrefix\gls@orgTrackLangRequireDialectPrefix
14729 {%
14730 {}}%
14731 }

```

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.

```

14732 \ifdef\glsxtr@loaddialect
14733 {%
14734 \c@ifpackageloaded{tracklang}%
14735 {%
14736 \AnyTrackedLanguages
14737 {%
14738 \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
14739 {}}%
14740 {}}%
14741 }%
14742 {}%
14743 }%
14744 {}

```

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:

```
14745 \NeedsTeXFormat{LaTeX2e}
14746 \ProvidesPackage{glossaries-extra-stylemods}[2021/09/20 v1.46 (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
14747 \newcommand*\{@glsxtr@loadstyles}{}%
```

all Provide all known styles.

```
14748 \DeclareOption{all}{%
14749   \appto\@glsxtr@loadstyles{%
14750     \RequirePackage{glossary-inline}%
14751     \RequirePackage{glossary-list}%
14752     \RequirePackage{glossary-tree}%
14753     \RequirePackage{glossary-mcols}%
14754     \RequirePackage{glossary-long}%
14755     \RequirePackage{glossary-longragged}%
14756     \RequirePackage{glossary-longbooktabs}%
14757     \RequirePackage{glossary-super}%
14758     \RequirePackage{glossary-superragged}%
14759     \RequirePackage{glossary-bookindex}%
14760     \RequirePackage{glossary-longextra}%
14761     \RequirePackage{glossary-topic}%
14762   }%
14763 }

14764 \DeclareOption*{%
14765   \IfFileExists{glossary-\CurrentOption.sty}%
14766   {\appto\@glsxtr@loadstyles{%
14767     \noexpand\RequirePackage{glossary-\CurrentOption}}%
14768   }%
```

```

14769   {%
14770     \PackageError{glossaries-extra-styles}{%
14771       {Unknown option '\CurrentOption'}{}%
14772     }%
14773 }

```

Process the package options:

```
14774 \ProcessOptions
```

Load the required packages:

```
14775 \@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`.

```
14776 \providecommand*\{\glsxtrprelocation}\{\space}
```

In case we have an old version of `glossaries`:

`ewglossarystyle`

```

14777 \providecommand{\renewglossarystyle}[2]{%
14778   \ifcsundef{@glsstyle@#1}{%
14779     {%
14780       \PackageError{glossaries-extra}{Glossary style '#1' isn't already defined}{}%
14781     }%
14782     {%
14783       \csdef{@glsstyle@#1}{#2}%
14784     }%
14785 }

```

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.

```

14786 \ifdef{\@glsstyle@listdotted}{%
14787   {%
14788     \renewglossarystyle{listdotted}{%
14789       \setglossarystyle{list}{%
14790         \renewcommand*\{\glossentry}[2]{%
14791           \item[]\makebox[\glslistdottedwidth][1]{%
14792             \glsentryitem{##1}{%
14793               \glstarget{##1}{\glossentryname{##1}}{%
14794                 \unskip\leaders\hbox to 2.9mm{\hss.\hfill\strut}%
14795               \glossentrydesc{##1}\glspostdescription}%
14796             \renewcommand*\{\subglossentry}[3]{%
14797               \item[]\makebox[\glslistdottedwidth][1]{%
14798                 \glssubentryitem{##2}{%
14799                   \glstarget{##2}{\glossentryname{##2}}{%
14800                     \unskip\leaders\hbox to 2.9mm{\hss.\hfill\strut}%

```

```
14801     \glossentrydesc{##2}\glspostdescription}%
14802 }
14803 }
14804 {%
```

Assume the style isn't required if it hasn't already been defined.

```
14805 }
```

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.

```
14806 \ifdef{\@glsstyle@list}
14807 {%
```

listprelocation Space before number list for top-level entries.

```
14808 \newcommand{\glslistprelocation}{\glsxtrprelocation}
```

childprelocation Space before number list for child entries.

```
14809 \newcommand{\glslistchildprelocation}{\glslistprelocation}
```

childpostlocation Full stop after number list.

```
14810 \newcommand{\glslistchildpostlocation}{.}
```

\glslistdesc

```
14811 \newcommand{\glslistdesc}[1]{\glossentrydesc{#1}\glspostdescription}
```

listgroupskip

```
14812 \newcommand{\glslistgroupskip}{\nobreak\indexspace\nobreak}
```

Redefine list to use these commands.

```
14813 \renewglossarystyle{list}{%
14814     \renewenvironment{theglossary}{%
14815         {\begin{description}}{\end{description}}%
14816         \renewcommand*{\glossaryheader}{\%}%
14817         \renewcommand*{\glsgroupheading}[1]{\%}%
14818         \renewcommand*{\glossentry}[2]{\%
14819             \item[\glsentryitem{##1}\%
14820                 \glstarget{##1}{\glossentryname{##1}}]%
14821                 \glslistdesc{##1}\glslistprelocation ##2\%}%
14822             \renewcommand*{\subglossentry}[3]{\%
14823                 \glssubentryitem{##2}\%
14824                 \glstarget{##2}{\strut}\space%
14825                 \glslistdesc{##2}\%
14826                 \glslistchildprelocation ##3\glslistchildpostlocation\%}%
14827             \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glslistgroupskip\fi}\%
14828         }%
14829     }%
14830 }
```

Similarly for altlist. Since it requires list, the new commands should have been defined above.

```
14831 \ifdef{@glsstyle@altlist}{%
14832 {%
14833   \renewglossarystyle{altlist}{%
14834     \setglossarystyle{list}{%
14835       \renewcommand*\glossentry[2]{%
14836         \item[\glsentryitem{##1}{%
14837           \glstarget{##1}{\glossentryname{##1}}}]%
14838           \mbox{}\par\nobreak\@afterheading}%
14839         \glslistdesc{##1}\glslistprelocation ##2}%
14840       \renewcommand*\subglossentry[3]{%
14841         \par
14842         \glssubentryitem{##2}{%
14843           \glstarget{##2}{\strut}\glslistdesc{##2}{%
14844             \glslistchildprelocation ##3}}%
14845     }%
14846   }%
14847 }}
```

Redefine listgroup so that it discourages a break after group headings.

```
14848 \ifdef{@glsstyle@listgroup}{%
14849 {%
14850   \renewglossarystyle{listgroup}{%
14851     \setglossarystyle{list}{%
14852       \renewcommand*\glsgroupheading[1]{%
14853         \item[\glslistgroupheaderfmt{\glsgetgroup{##1}}]%
14854           \mbox{}\par\nobreak\@afterheading}%
14855     }%
14856   }%
14857 }%
14858 }}
```

Similarly for listhypergroup.

```
14859 \ifdef{@glsstyle@listhypergroup}{%
14860 {%
14861   \renewglossarystyle{listhypergroup}{%
14862     \setglossarystyle{list}{%
14863       \renewcommand*\glossaryheader{%
14864         \glslistnavigationitem{\glsnavigation}}{%
14865       \renewcommand*\glsgroupheading[1]{%
14866         \item[\glslistgroupheaderfmt{%
14867           \glsnavhypertarget{##1}{\glsgetgroup{##1}}}]%
14868           \mbox{}\par\nobreak\@afterheading}%
14869     }%
14870   }%
14871 }%
14872 }}
```

Similarly for altlistgroup.

```
14873 \ifdef{@glsstyle@altlistgroup}{%
```

```

14874 {%
14875   \renewglossarystyle{altlistgroup}{%
14876     \setglossarystyle{altlist}%
14877     \renewcommand*{\glsgroupheading}[1]{%
14878       \item[\glsgroupheaderfmt{\glsgetgrouptitle{##1}}]%
14879       \mbox{}\par\nobreak\@afterheading
14880     }%
14881   }
14882 }
14883 {}
```

Similarly for `altlisthypergroup`.

```

14884 \ifdef{@glsstyle@altlisthypergroup}
14885 {%
14886   \renewglossarystyle{altlisthypergroup}{%
14887     \setglossarystyle{altlist}%
14888     \renewcommand*{\glossaryheader}{%
14889       \glstlistnavigationitem{\glsnavigation}}%
14890     \renewcommand*{\glsgroupheading}[1]{%
14891       \item[\glsgroupheaderfmt
14892         {\glshavhypertarget{##1}{\glsgetgrouptitle{##1}}}]%
14893       \mbox{}\par\nobreak\@afterheading
14894     }%
14895   }
14896 }
14897 {}
```

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`.

```

14898 \ifcsdef@glsstyle@long}
14899 {%
14900   \renewglossarystyle{long}{%
14901     \renewenvironment{theglossary}%
14902       {\begin{longtable}{lp{\glsdescwidth}}}%
14903       {\end{longtable}}%
14904     \renewcommand*{\glossaryheader}{}%
14905     \renewcommand*{\glsgroupheading}[1]{}%
14906     \renewcommand{\glossentry}[2]{%
14907       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14908       \glossentrydesc{##1}\glspostdescription
14909       \glsxtrprelocation ##2\tabularnewline
14910     }%
14911     \renewcommand{\subglossentry}[3]{%
14912       &
14913       \glssubentryitem{##2}%
14914       \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription}
```

```

14915     \glsxtrprelocation ##3\tabularnewline
14916 }
14917 \ifglsnogroupskip
14918   \renewcommand*\glsgroupskip{}%
14919 \else
14920   \renewcommand*\glsgroupskip{\& \tabularnewline}%
14921 \fi
14922 }
14923 }
14924 {}

```

Three column style:

```

14925 \ifcsdef{@glsstyle@long3col}
14926 {%
14927   \renewglossarystyle{long3col}{%
14928     \renewenvironment{theglossary}{%
14929       {\begin{longtable}{lp{\glsdescwidth}p{\glspagelistwidth}}}%
14930       {\end{longtable}}%
14931     \renewcommand*\glossaryheader{}%
14932     \renewcommand*\glsgroupheading[1]{}%
14933     \renewcommand*\glossentry[2]{%
14934       \glsentryitem{\#1}\glstarget{\#1}{\glossentryname{\#1}} \&
14935       \glossentrydesc{\#1}\glspostdescription \& ##2\tabularnewline
14936     }%
14937     \renewcommand*\subglossentry[3]{%
14938       \&
14939       \glssubentryitem{\#2}%
14940       \glstarget{\#2}{\strut}\glossentrydesc{\#2}\glspostdescription \&
14941       ##3\tabularnewline
14942     }%

```

Conditional needs to be outside of \glsgroupskip otherwise it can cause “Incomplete \iftrue” errors.

```

14943 \ifglsnogroupskip
14944   \renewcommand*\glsgroupskip{}%
14945 \else
14946   \renewcommand*\glsgroupskip{\& \tabularnewline}%
14947 \fi
14948 }
14949 }
14950 {}

```

Four column style:

```

14951 \ifcsdef{@glsstyle@long4col}
14952 {%
14953   \renewglossarystyle{long4col}{%
14954     \renewenvironment{theglossary}{%
14955       {\begin{longtable}{llll}}%
14956       {\end{longtable}}%
14957     \renewcommand*\glossaryheader{}%
14958     \renewcommand*\glsgroupheading[1]{}%

```

```

14959 \renewcommand{\glossentry}[2]{%
14960   \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14961   \glossentrydesc{##1}\glspostdescription &
14962   \glossentrysymbol{##1} &
14963   ##2\tabularnewline
14964 }%
14965 \renewcommand{\subglossentry}[3]{%
14966   &
14967   \glssubentryitem{##2}%
14968   \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
14969   \glossentrysymbol{##2} & ##3\tabularnewline
14970 }%
14971 \ifglsnogroupskip
14972   \renewcommand*\glsgroupskip{}%
14973 \else
14974   \renewcommand*\glsgroupskip{& & &\tabularnewline}%
14975 \fi
14976 }
14977 }
14978 {}
```

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`.

```

14979 \ifcsdef@glsstyle@longragged}%
14980 }%
14981 \renewglossarystyle{longragged}{%
14982   \renewenvironment{theglossary}%
14983     {\begin{longtable}{l>\raggedright p{\glsdescwidth}}}%
14984     {\end{longtable}}%
14985   \renewcommand*\glossaryheader{}%
14986   \renewcommand*\glsgroupheading[1]{}%
14987   \renewcommand{\glossentry}[2]{%
14988     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14989     \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
14990     \tabularnewline
14991 }%
14992   \renewcommand{\subglossentry}[3]{%
14993     &
14994     \glssubentryitem{##2}%
14995     \glstarget{##2}{\strut}\glossentrydesc{##2}%
14996     \glspostdescription\glsxtrprelocation ##3%
14997     \tabularnewline
```

```

14998    }%
14999    \ifglsnogroupskip
15000        \renewcommand*\glsgroupskip{}%
15001    \else
15002        \renewcommand*\glsgroupskip{\& \tabularnewline}%
15003    \fi
15004 }
15005 }
15006 {}

```

Three and four column styles don't use \glsxtrprelocation since the number list is in its own column.

```

15007 \ifcsdef{@glsstyle@longragged3col}
15008 {%
15009     \renewglossarystyle{longragged3col}{%
15010         \renewenvironment{theglossary}{%
15011             {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}{%
15012                 >{\raggedright}p{\glspagelistwidth}}}%
15013             {\end{longtable}}%
15014         \renewcommand*\glossaryheader{}%
15015         \renewcommand*\glsgroupheading[1]{}%
15016         \renewcommand*\glossentry[2]{%
15017             \glsentryitem{\#\#1}\glstarget{\#\#1}{\glossentryname{\#\#1}} &
15018             \glossentrydesc{\#\#1}\glspostdescription & ##2\tabularnewline
15019         }%
15020         \renewcommand*\subglossentry[3]{%
15021             &
15022             \glssubentryitem{\#\#2}%
15023             \glstarget{\#\#2}{\strut}\glossentrydesc{\#\#2}\glspostdescription &
15024             ##3\tabularnewline
15025         }%
15026     \ifglsnogroupskip
15027         \renewcommand*\glsgroupskip{}%
15028     \else
15029         \renewcommand*\glsgroupskip{\& \tabularnewline}%
15030     \fi
15031 }
15032 }
15033 {}

```

Four column style:

```

15034 \ifcsdef{@glsstyle@altlongragged4col}
15035 {%
15036     \renewglossarystyle{altlongragged4col}{%
15037         \renewenvironment{theglossary}{%
15038             {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}}{%
15039                 >{\raggedright}p{\glspagelistwidth}}}%
15040             {\end{longtable}}%
15041         \renewcommand*\glossaryheader{}%

```

```

15042 \renewcommand*\glsgroupheading}[1]{%
15043 \renewcommand{\glossentry}[2]{%
15044     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
15045     \glossentrydesc{##1}\glspostdescription & \glossentrysymbol{##1} &
15046     ##2\tabularnewline
15047 }%
15048 \renewcommand{\subglossentry}[3]{%
15049     &
15050     \glssubentryitem{##2}%
15051     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
15052     \glossentrysymbol{##2} & ##3\tabularnewline
15053 }%
15054 \ifglsnogroupskip
15055     \renewcommand*\glsgroupskip}{}%
15056 \else
15057     \renewcommand*\glsgroupskip}{\& \& \tabularnewline}%
15058 \fi
15059 }
15060 }
15061 {}
```

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`.

```

15062 \ifcsdef{glsstyle@super}%
15063 {%
15064     \renewglossarystyle{super}{%
15065         \renewenvironment{theglossary}{%
15066             {\tablehead{}\tabletail{}%
15067             \begin{supertabular}{lp{\glsdescwidth}}}}%
15068             \end{supertabular}}%
15069     \renewcommand*\glossaryheader}{}%
15070     \renewcommand*\glsgroupheading}[1]{%
15071     \renewcommand{\glossentry}[2]{%
15072         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
15073         \glossentrydesc{##1}\glspostdescription
15074         \glsxtrprelocation ##2\tabularnewline
15075 }%
15076     \renewcommand{\subglossentry}[3]{%
15077         &
15078         \glssubentryitem{##2}%
15079         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
15080         \glsxtrprelocation ##3\tabularnewline
15081 }%
15082 \ifglsnogroupskip
15083     \renewcommand*\glsgroupskip}{}%
```

```

15084     \else
15085         \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
15086     \fi
15087 }
15088 }
15089 {}

```

Three column style:

```

15090 \ifcsdef{@glsstyle@super3col}
15091 {%
15092     \renewglossarystyle{super3col}{%
15093         \renewenvironment{theglossary}{%
15094             {\tablehead{}\tabletail{}}%
15095             \begin{supertabular}{lp{\glsdescwidth}p{\glspagelistwidth}}}%
15096             {\end{supertabular}}%
15097             \renewcommand*{\glossaryheader}{\%}
15098             \renewcommand*{\glsgroupheading}[1]{\%}
15099             \renewcommand{\glossentry}[2]{\%
15100                 \glsentryitem{\#\#1}\glstarget{\#\#1}{\glossentryname{\#\#1}} &
15101                 \glossentrydesc{\#\#1}\glspostdescription & \tabularnewline
15102             }%
15103             \renewcommand{\subglossentry}[3]{\%
15104                 &
15105                 \glssubentryitem{\#\#2}%
15106                 \glstarget{\#\#2}{\strut}\glossentrydesc{\#\#2}\glspostdescription &
15107                 \#\#3\tabularnewline
15108             }%
15109             \ifglsnogroupskip
15110                 \renewcommand*{\glsgroupskip}{\%}%
15111             \else
15112                 \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
15113             \fi
15114 }
15115 }
15116 {}

```

Four column styles:

```

15117 \ifcsdef{@glsstyle@super4col}
15118 {%
15119     \renewglossarystyle{super4col}{%
15120         \renewenvironment{theglossary}{%
15121             {\tablehead{}\tabletail{}}%
15122             \begin{supertabular}{llll}\%}
15123             {\end{supertabular}}%
15124             \renewcommand*{\glossaryheader}{\%}
15125             \renewcommand*{\glsgroupheading}[1]{\%}
15126             \renewcommand{\glossentry}[2]{\%
15127                 \glsentryitem{\#\#1}\glstarget{\#\#1}{\glossentryname{\#\#1}} &
15128                 \glossentrydesc{\#\#1}\glspostdescription \&

```

```

15129     \glossentrysymbol{##1} & ##2\tabularnewline
15130   }%
15131   \renewcommand{\subglossentry}[3]{%
15132     &
15133     \glssubentryitem{##2}%
15134     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
15135     \glossentrysymbol{##2} & ##3\tabularnewline
15136   }%
15137   \ifglsnogroupskip
15138     \renewcommand*{\glsgroupskip}{}%
15139   \else
15140     \renewcommand*{\glsgroupskip}{\& \&\tabularnewline}%
15141   \fi
15142 }
15143 }
15144 {}
```

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`.

```

15145 \ifcsdef{@glsstyle@superragged}
15146 {%
15147   \renewglossarystyle{superragged}{%
15148     \renewenvironment{theglossary}{%
15149       {\tablehead{}\tabletail{}}%
15150       \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}}{}}%
15151       \end{supertabular}}%
15152     \renewcommand*{\glossaryheader}{}%
15153     \renewcommand*{\glsgroupheading}[1]{}%
15154     \renewcommand{\glossentry}[2]{%
15155       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
15156       \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
15157       \tabularnewline
15158     }%
15159     \renewcommand{\subglossentry}[3]{%
15160       &
15161       \glssubentryitem{##2}%
15162       \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
15163       \glsxtrprelocation ##3%
15164       \tabularnewline
15165     }%
15166     \ifglsnogroupskip
15167       \renewcommand*{\glsgroupskip}{}%
15168     \else
15169       \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
15170     \fi
15171   }%
```

```
15170     \fi
15171 }
15172 }
15173 {}
```

Three column style:

```
15174 \ifcsdef{@glsstyle@superragged3col}{%
15175 }%
15176   \renewglossarystyle{superragged3col}{%
15177     \renewenvironment{theglossary}{%
15178       {\tablehead{}\tabletail{}%
15179         \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}%
15180           >{\raggedright}p{\glspagelistwidth}}}}%
15181       {\end{supertabular}}%
15182     \renewcommand*\glossaryheader{}%
15183     \renewcommand*\glsgroupheading[1]{%
15184       \renewcommand{\glossentry}[2]{%
15185         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
15186         \glossentrydesc{##1}\glspostdescription &
15187         ##2\tabularnewline
15188       }%
15189     \renewcommand{\subglossentry}[3]{%
15190       &
15191       \glssubentryitem{##2}%
15192       \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
15193       ##3\tabularnewline
15194     }%
15195   \ifglsnogroupskip
15196     \renewcommand*\glsgroupskip{}%
15197   \else
15198     \renewcommand*\glsgroupskip{ & &\tabularnewline}%
15199   \fi
15200 }
15201 }
15202 {}
```

Four columns:

```
15203 \ifcsdef{@glsstyle@altsuperragged4col}{%
15204 }%
15205   \renewglossarystyle{altsuperragged4col}{%
15206     \renewenvironment{theglossary}{%
15207       {\tablehead{}\tabletail{}%
15208         \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}}}}%
15209       {\end{supertabular}}%
15210     \renewcommand*\glossaryheader{}%
15211     \renewcommand{\glossentry}[2]{%
15212       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
15213       \glossentrydesc{##1}\glspostdescription &
```

```

15215     \glossentrysymbol{##1} & ##2\tabularnewline
15216   }%
15217   \renewcommand{\subglossentry}[3]{%
15218     &
15219     \glssubentryitem{##2}%
15220     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
15221     \glossentrysymbol{##2} & ##3\tabularnewline
15222   }%
15223   \ifglsnogroupskip
15224     \renewcommand*{\glsgroupskip}{}%
15225   \else
15226     \renewcommand*{\glsgroupskip}{\& \& \&\tabularnewline}%
15227   \fi
15228 }
15229 }
15230 {}

```

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`.

```

15231 \ifdef{@glsstyle@inline}
15232 {%
15233   \renewcommand*{\glspostinline}{.\spacefactor\sfcodespace}%
Just use \glsxtrpostdescription instead of \glspostdescription.
15234   \renewcommand*{\glsinlinedescformat}[3]{%
15235     \space#1\glsxtrpostdescription}
15236   \renewcommand*{\glsinlinesubdescformat}[3]{%
15237     #1\glsxtrpostdescription}

```

The default settings don't show the location lists, so there's no adjustment for `\glsxtrprelocation`.

```

15238 }
15239 {}

```

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.

```

15240 \ifdef{\glstreenamefmt}
15241 {
edefaultnamefmt
15242   \newcommand{\glstreedefaultnamefmt}[1]{\textbf{#1}}

```

```
\glstreenamefmt
15243 \renewcommand{\glstreenamefmt}[1]{\glstreedefaultnamefmt{#1}}


\groupheaderfmt This command was only introduced to glossary-tree v4.22, so it may not be defined.
15244 \def\glstreegroupheaderfmt#1{\glstreedefaultnamefmt{#1}}


\enavigationfmt This command was only introduced to glossary-tree v4.22, so it may not be defined.
15245 \def\glstreenavigationfmt#1{\glstreedefaultnamefmt{#1}}


\lstreePreHeader Takes the label as the first argument and title as the second argument so this can be modified to add a bookmark.
15246 \newcommand{\glstreePreHeader}[2]{}

15247 }
15248 {}

The index style is redefined so that the space before the number list isn't hard coded.
15249 \ifdef{\@glsstyle@index}
15250 {


\treeprelocation The space before the number list for top-level entries. This is shared by the other tree styles.
15251 \newcommand*{\glstreeprelocation}{\glsxtrprelocation}

\childprelocation The space before the number list for child entries. This is shared by the other tree styles.
15252 \newcommand*{\glstreechildprelocation}{\glstreeprelocation}

Don't prohibit a page break at the start of a new group if there's no header.

\lstreegroupskip
15253 \newcommand{\glstreegroupskip}{\indexspace}

\groupheaderskip This doesn't include \afterheading as it can cause interference with some styles.
15254 \newcommand{\glstreegroupheaderskip}{\nopagebreak\glstreegroupskip\nobreak}

Modify the index style.
15255 \renewglossarystyle{index}{%
15256   \renewenvironment{theglossary}{%
15257     \setlength{\parindent}{0pt}%
15258     \setlength{\parskip}{0pt plus 0.3pt}%
15259     \let\item\glstreeitem
15260     \let\subitem\glstreesubitem
15261     \let\subsubitem\glstreesubsubitem
15262   }%
15263   {\par}%
15264   \renewcommand*{\glossaryheader}{%
15265     \renewcommand*{\glsgroupheading}[1]{%
15266       \renewcommand*{\glossentry}[2]{%
15267         \item\glsentryitem{##1}%
15268       }%
15269     }%
15270   }%
15271   \renewcommand*{\glossary}{%
15272     \renewcommand*{\glossarylist}{%
15273       \renewcommand*{\glossaryentry}{%
15274         \glossentry{##1}%
15275       }%
15276     }%
15277   }%
15278 }%
```

```

15268     \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
15269     \glstreesymbol{##1}%
15270     \glstreeDescLoc{##1}{##2}%
15271 }%
15272 \renewcommand{\subglossentry}[3]{%
15273     \ifcase##1\relax
15274         \item
15275     \or
15276         \subitem
15277         \glssubentryitem{##2}%
15278     \else
15279         \subsubitem
15280     \fi
15281     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
15282     \glstreechildsymbol{##2}%
15283     \glstreeChildDescLoc{##2}{##3}%
15284 }%
15285 \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glstreegroupskip\fi}%
15286 }
15287 }
15288 {}
```

The `indexgroup` style is redefined to discourage a page break after the heading.

```

15289 \ifdef{\@glsstyle@indexgroup}
15290 {%
15291     \renewglossarystyle{indexgroup}{%
15292         \setglossarystyle{index}%
15293         \renewcommand*{\glsgroupheading}[1]{%
15294             \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
15295             \glstreePreHeader{##1}{\glsxtr@grptitle}%
15296             \item\glstreegroupheaderfmt{\glsxtr@grptitle}%
15297             \glstreegroupheaderskip\@afterheading
15298         }%
15299     }
15300 }
15301 {}
```

Similarly for `indexhypergroup`.

```

15302 \ifdef{\@glsstyle@indexhypergroup}
15303 {%
15304     \renewglossarystyle{indexhypergroup}{%
15305         \setglossarystyle{index}%
15306         \renewcommand*{\glossaryheader}{%
15307             \item\glstreenavigationfmt{\glsnavigation}%
15308             \glstreegroupheaderskip\@afterheading}%
15309         \renewcommand*{\glsgroupheading}[1]{%
15310             \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
15311             \glstreePreHeader{##1}{\glsxtr@grptitle}%
15312             \item\glstreegroupheaderfmt
15313                 {\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
```

```
15314     \glstreegroupheaderskip{@afterheading}%
15315 }%
15316 }
15317 {}
```

Adjust tree style to remove hard coded space before number list.

```
15318 \ifdef{\@glsstyle@tree}
15319 {%
```

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

```
15320 \newcommand{\glsxtrtreepredesc}{\glstreepredesc}
```

reechildpredesc

```
15321 \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`

```
15322 \newcommand{\glstreedesc}[1]{%
15323   \glsxtrtreepredesc\glossentrydesc{#1}\glspostdescription
15324 }
```

`\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.

```
15325 \newcommand{\glstreeDescLoc}[2]{%
15326   \ifglshasdesc{#1}%
15327     {\glstreedesc{#1}\glstreeprelocation}%
15328     {\ifglshassymbol{#1}{\glstreeprelocation}{\glstreeNoDescSymbolPreLocation}}%
15329     #2%
15330 }
```

`\glstreeNoDescSymbolPreLocation`

```
\glstreeNoDescSymbolPreLocation
```

```
15331 \newcommand{\glstreeNoDescSymbolPreLocation}{\space}
```

Similarly for the symbol.

```
\glstreesymbol  
15332 \newcommand{\glstreesymbol}[1]{%  
15333   \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{}}%  
15334 }%
```

And for the child entries:

```
lstreechilddesc  
15335 \newcommand{\glstreechilddesc}[1]{%  
15336   \glsxtrtreechildpredesc\glossentrydesc{#1}\glspostdescription  
15337 }%
```

```
treeChildDescLoc  
15338 \newcommand{\glstreeChildDescLoc}[2]{%  
15339   \ifglshasdesc{#1}{%  
15340     {\glstreechilddesc{#1}\glstreechildprelocation}{%  
15341     {\ifglshassymbol{#1}{\glstreechildprelocation}{%  
15342       {\glstreeNoDescSymbolPreLocation}{%  
15343     }%  
15344     #2%  
15345   }%
```

treechildsymbol This just behaves in the same way as the top-level.

```
15346 \newcommand{\glstreechildsymbol}[1]{%  
15347   \glstreesymbol{#1}{%  
15348 }%  
  
15349 \renewglossarystyle{tree}{%  
15350   \renewenvironment{theglossary}{%  
15351     {\setlength{\parindent}{0pt}{%  
15352       \setlength{\parskip}{0pt plus 0.3pt}{}}%  
15353     }%  
15354   \renewcommand*{\glossaryheader}{}}%  
15355   \renewcommand*{\glsgroupheading}[1]{}}%  
15356   \renewcommand{\glossentry}[2]{%  
15357     \hangindent0pt\relax  
15358     \parindent0pt\relax  
15359     \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}{}}%  
15360     \glstreesymbol{##1}{%  
15361     \glstreeDescLoc{##1}{##2}\par  
15362   }%  
15363   \renewcommand{\subglossentry}[3]{%  
15364     \hangindent##1\glstreeindent\relax  
15365     \parindent##1\glstreeindent\relax  
15366     \ifnum##1=1\relax  
15367       \glssubentryitem{##2}{%  
15368     \fi  
15369     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}{}}%
```

```

15370      \glstreechildsymbol{##2}%
15371      \glstreeChildDescLoc{##2}{##3}\par
15372  }%
15373  \renewcommand*\{\glsgroupskip}{\ifglsnogroupskip\else\glstreegroupskip\fi}%
15374 }%
15375 }
15376 {}
```

The treegroup style is redefined to discourage a page break after the heading.

```

15377 \ifdef{\@glsstyle@treegroup}
15378 {%
15379  \renewglossarystyle{treegroup}{%
15380    \setglossarystyle{tree}%
15381    \renewcommand{\glsgroupheading}[1]{%
15382      \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15383      \glstreePreHeader{##1}{\glsxtr@grptitle}%
15384      \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}%
15385      \glstreegroupheaderskip\@afterheading}%
15386  }
15387 }
15388 {}
```

Similarly for treehypergroup

```

15389 \ifdef{\@glsstyle@treehypergroup}
15390 {%
15391  \renewglossarystyle{treehypergroup}{%
15392    \setglossarystyle{tree}%
15393    \renewcommand*\{\glossaryheader}{%
15394      \par\noindent\glstreenavigationfmt{\glsnavigation}%
15395      \glstreegroupheaderskip\@afterheading}%
15396    \renewcommand*\{\glsgroupheading}[1]{%
15397      \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15398      \glstreePreHeader{##1}{\glsxtr@grptitle}%
15399      \par\noindent
15400      \glstreegroupheaderfmt
15401      {\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
15402      \glstreegroupheaderskip\@afterheading}%
15403  }
15404 }
15405 {}
```

Adjust treenoname style to remove hard coded space before number list.

```

15406 \ifdef{\@glsstyle@treenoname}
15407 {%
```

Provide a command for use with the treenoname styles that displays the pre-description separator, the description and post-description hook.

`treenonamedesc`

```

15408 \newcommand{\glstreenonamedesc}[1]{%
15409   \glstreepredesc\glossentrydesc{#1}\glspostdescription
```

```
15410  }%
```

Similarly for the symbol.

```
reenonamesymbol
```

```
15411  \newcommand{\glstreenonamesymbol}[1]{%
15412      \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{}%
15413  }%
```

```
eenonameDescLoc
```

```
15414  \newcommand{\glstreenonameDescLoc}[2]{%
15415      \glstreenonamedesc{#1}\glstreeprelocation#2%
15416  }
```

nonamechilddesc The child entry doesn't have the pre-description separator as the name isn't displayed.

```
15417  \newcommand{\glstreenonamechilddesc}[1]{%
15418      \glossentrydesc{#1}\glspostdescription
15419  }%
```

```
ameChildDescLoc
```

```
15420  \newcommand{\glstreenonameChildDescLoc}[2]{%
15421      \glstreenonamechilddesc{#1}\glstreechildprelocation#2%
15422  }

15423  \renewglossarystyle{treenoname}{%
15424      \renewenvironment{theglossary}{%
15425          \setlength{\parindent}{0pt}%
15426          \setlength{\parskip}{0pt plus 0.3pt}}{%
15427      }%
15428  \renewcommand*{\glossaryheader}{%
15429  \renewcommand*{\glsgroupheading}[1]{%
15430  \renewcommand{\glossentry}[2]{%
15431      \hangindent0pt\relax
15432      \parindent0pt\relax
15433      \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
15434      \glstreenonamesymbol{##1}%

15435      \glstreenonameDescLoc{##1}{##2}\par
15436  }%
15437  \renewcommand{\subglossentry}[3]{%
15438      \hangindent##1\glstreeindent\relax
15439      \parindent##1\glstreeindent\relax
15440      \ifnum##1=1\relax
15441          \glssubentryitem{##2}%
15442      \fi
15443      \glstarget{##2}{\strut}%
15444      \glstreenonameChildDescLoc{##2}{##3}\par
15445  }%
15446  \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glstreegroupskip\fi}%
15447  }
```

```
15448 }  
15449 {}
```

The `treenonamegroup` style is redefined to discourage a page break after the heading.

```
15450 \ifdef{\@glsstyle@treenonamegroup}  
15451 {  
15452   \renewglossarystyle{treenonamegroup}{%  
15453     \setglossarystyle{treenoname}{%  
15454     \renewcommand{\glsgroupheading}[1]{%  
15455       \glsxtrgetgroup{##1}{\glsxtr@grptitle}{%  
15456       \glstreePreHeader{##1}{\glsxtr@grptitle}{%  
15457       \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}{%  
15458       \glstreegroupheaderskip\@afterheading  
15459     }%  
15460   }  
15461 }  
15462 {}
```

Similarly for `treenonamehypergroup`

```
15463 \ifdef{\@glsstyle@treenonamehypergroup}  
15464 {  
15465   \renewglossarystyle{treenonamehypergroup}{%  
15466     \setglossarystyle{treenoname}{%  
15467     \renewcommand*{\glossaryheader}{%  
15468       \par\noindent\glstreenavigationfmt{\glsnavigation}{%  
15469       \glstreegroupheaderskip\@afterheading}{%  
15470     \renewcommand*{\glsgroupheading}[1]{%  
15471       \glsxtrgetgroup{##1}{\glsxtr@grptitle}{%  
15472       \glstreePreHeader{##1}{\glsxtr@grptitle}{%  
15473       \par\noindent  
15474       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}{%  
15475       \glstreegroupheaderskip\@afterheading}{%  
15476   }  
15477 }  
15478 {}
```

The `alttree` style is redefined to make it easier to made minor adjustments.

```
15479 \ifdef{\@glsstyle@alttree}  
15480 {%
```

Only redefine this style if it's already been defined.

```
salttreepredesc  
15481 \newcommand{\glsalttreepredesc}{}{}
```

```
reechildpredesc  
15482 \newcommand{\glsalttreechildpredesc}{\glsalttreepredesc}
```

```
boldDescLocation
```

```
\glsxtralttreeSymbolDescLocation{\label}{\location list}
```

Layout the symbol, description and location for top-level entries.

```
15483 \newcommand{\glsxtralttreeSymbolDescLocation}[2]{%
15484   {%
15485     \let\par\glsxtrAltTreePar
15486     \let\glsxtrtreepredesc\glsalttreepredesc
15487     \let\glsxtrtreechildpredesc\glsalttreechildpredesc
15488     \ifglshassymbol{#1}{(\glossentrysymbol{#1})\space}{}%
15489     \glstreeDescLoc{#1}{#2}\par
15490   }%
15491 }
```

`trAltTreeIndent` Paragraph indent for subsequent paragraphs in multi-paragraph descriptions.

```
15492 \newlength\glsxtrAltTreeIndent
```

`lsxtrAltTreePar` Multi-paragraph descriptions need to keep the hanging indent.

```
15493 \newcommand{\glsxtrAltTreePar}{%
15494   \@@par
15495   \glsxtrAltTreeSetHangIndent
15496   \setlength{\parindent}{\dimexpr\hangindent+\glsxtrAltTreeIndent}%
15497 }
```

`boldDescLocation`

```
\glsxtralttreeSubSymbolDescLocation{\level}{\label}{\location list}
```

Layout the symbol, description and location for sub-entries. Defaults to the same as the top-level.

```
15498 \newcommand{\glsxtralttreeSubSymbolDescLocation}[3]{%
15499   \glsxtralttreeSymbolDescLocation{#2}{#3}%
15500 }
```

`trreetopindent` 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.

```
15501 \newlength\glsxtrtreeTopindent
```

`sxtralttreeInit` User-level initialisation for the `alttree` style.

```
15502 \newcommand*{\glsxtralttreeInit}{%
15503   \settowidth{\glsxtrtreeTopindent}{\glstreeNamefmt{\glsgetwidestname\space}}%
15504   \glsxtrAltTreeIndent=\parindent
15505 }
```

\glssetwidest The original \glssetwidest only uses \def. This uses \gdef.

```
15506 \newcommand*{\glssetwidest}[2][0]{%
15507   \csgdef{@glswidestname\romannumeral#1}{#2}%
15508 }
```

\eglssetwidest The original \glssetwidest only uses \def. This uses \protected@csedef.

```
15509 \newcommand*{\eglssetwidest}[2][0]{%
15510   \protected@csedef{@glswidestname\romannumeral#1}{#2}%
15511 }
```

\xglssetwidest Like the above but uses \protected@csxdef.

```
15512 \newcommand*{\xglssetwidest}[2][0]{%
15513   \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
15514 }
```

\glsupdatewidest Only sets if new value is wider than old value.

```
15515 \newcommand*{\glsupdatewidest}[2][0]{%
15516   \ifcsundef{@glswidestname\romannumeral#1}%
15517     {\csdef{@glswidestname\romannumeral#1}{#2}}%
15518   {%
15519     \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
15520     \settowidth{\dimen@ii}{#2}%
15521     \ifdim\dimen@ii>\dimen@
15522       \csdef{@glswidestname\romannumeral#1}{#2}%
15523     \fi
15524   }%
15525 }
```

\glsupdatewidest As above but global definition.

```
15526 \newcommand*{\gglsupdatewidest}[2][0]{%
15527   \ifcsundef{@glswidestname\romannumeral#1}%
15528     {\csgdef{@glswidestname\romannumeral#1}{#2}}%
15529   {%
15530     \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
15531     \settowidth{\dimen@ii}{#2}%
15532     \ifdim\dimen@ii>\dimen@
15533       \csgdef{@glswidestname\romannumeral#1}{#2}%
15534     \fi
15535   }%
15536 }
```

\glsupdatewidest As \glsupdatewidest but expands value.

```
15537 \newcommand*{\eglsupdatewidest}[2][0]{%
15538   \ifcsundef{@glswidestname\romannumeral#1}%
15539     {\protected@csedef{@glswidestname\romannumeral#1}{#2}}%
15540   {%
15541     \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
15542     \settowidth{\dimen@ii}{#2}%
15543 }
```

```

15543     \ifdim\dimen@ii>\dimen@
15544         \protected@csedef{@glswidestname\romannumeral#1}{#2}%
15545         \fi
15546     }%
15547 }

```

`glsupdatewidest` As above but global.

```

15548 \newcommand*{\xglsupdatewidest}[2][0]{%
15549     \ifcsundef{@glswidestname\romannumeral#1}%
15550     {\protected@csxdef{@glswidestname\romannumeral#1}{#2}}%
15551     {%
15552         \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
15553         \settowidth{\dimen@ii}{#2}%
15554         \ifdim\dimen@ii>\dimen@
15555             \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
15556             \fi
15557     }%
15558 }

```

`lsgetwidestname` Provide a user-level macro to obtain the widest top-level name.

```
15559 \newcommand*{\lsgetwidestname}{\@glswidestname}
```

`etwidestsubname` Provide a user-level macro to obtain the widest sub-entry name.

```

15560 \newcommand*{\lsgetwidestsubname}[1]{%
15561     \ifcsundef{@glswidestname\romannumeral#1}%
15562     {@glswidestname}%
15563     {\csuse{@glswidestname\romannumeral#1}}%
15564 }

```

`estTopLevelName` CamelCase is easier for long command names. Provide a CamelCase synonym of `\glsfindwidesttoplevelname`

```
15565 \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.

```

15566 \newrobustcmd*{\glsFindWidestUsedTopLevelName}[1][\@glo@types]{%
15567     \dimen@=0pt\relax
15568     \gls@tmp@len=0pt\relax
15569     \forall@glossaries[#1]{\@gls@type}%
15570     {%
15571         \for@glsentries[\@gls@type]{\@glo@label}%
15572         {%
15573             \ifglsused{\@glo@label}%
15574             {%
15575                 \ifglshasparent{\@glo@label}%
15576                 {}%
15577             {%

```

```

15578     \settowidth{\dimen@}%
15579     {\glstreenamefmt{\glsentryname{\glo@label}}}%%
15580     \ifdim\dimen@>\gls@tmpplen
15581         \gls@tmpplen=\dimen@
15582         \eglssetwidest{\glsentryname{\glo@label}}%
15583     \fi
15584     }%
15585     }%
15586     {}%
15587     }%
15588     }%
15589 }

```

`destUsedAnyName` Like the above but doesn't check the parent key. Useful if all levels should have the same width for the name.

```

15590 \newrobustcmd*{\glsFindWidestUsedAnyName}[1][\glo@types]{%
15591     \dimen@=0pt\relax
15592     \gls@tmpplen=0pt\relax
15593     \forallglossaries[#1]{\gls@type}%
15594     {}%
15595     \forglsentries[\gls@type]{\glo@label}%
15596     {}%
15597     \ifglsused{\glo@label}%
15598     {}%
15599     \settowidth{\dimen@}%
15600     {\glstreenamefmt{\glsentryname{\glo@label}}}%%
15601     \ifdim\dimen@>\gls@tmpplen
15602         \gls@tmpplen=\dimen@
15603         \eglssetwidest{\glsentryname{\glo@label}}%
15604     \fi
15605     }%
15606     {}%
15607     }%
15608     }%
15609 }

```

`ndWidestAnyName` Like the above but doesn't check if the entry has been used.

```

15610 \newrobustcmd*{\glsFindWidestAnyName}[1][\glo@types]{%
15611     \dimen@=0pt\relax
15612     \gls@tmpplen=0pt\relax
15613     \forallglossaries[#1]{\gls@type}%
15614     {}%
15615     \forglsentries[\gls@type]{\glo@label}%
15616     {}%
15617     \settowidth{\dimen@}%
15618     {\glstreenamefmt{\glsentryname{\glo@label}}}%%
15619     \ifdim\dimen@>\gls@tmpplen
15620         \gls@tmpplen=\dimen@
15621         \eglssetwidest{\glsentryname{\glo@label}}%

```

```

15622     \fi
15623   }%
15624 }%
15625 }

```

`estUsedLevelTwo` This is like `\glsFindWidestUsedTopLevelName` but also sets the first two sub-levels as well.
Any entry that has a great-grandparent is ignored.

```

15626 \newrobustcmd*\glsFindWidestUsedLevelTwo}[1][\glo@types]{%
15627   \dimen@=0pt\relax
15628   \dimen@i=0pt\relax
15629   \dimen@ii=0pt\relax
15630   \forallglossaries[#1]{\gls@type}%
15631 {%
15632   \forglsentries[\gls@type]{\glo@label}%
15633 {%
15634   \ifglsused{\glo@label}%
15635   {%
15636     \ifglshasparent{\glo@label}%
15637     {%
15638       \protected@edef@glo@parent{\csuse{glo@\glsdetoklabel{\glo@label}}@parent}%
15639       \ifglshasparent{\glo@parent}%
15640       {%
15641         \protected@edef@glo@parent{\csuse{glo@\glsdetoklabel{\glo@parent}}@parent}%
15642         \ifglshasparent{\glo@parent}%
15643         {%
15644           \settowidth{\gls@tmp[1]}%
15645             {\glstreenamefmt{\glsentryname{\glo@label}}}%
15646             \ifdim\gls@tmp[1]>\dimen@ii
15647               \dimen@ii=\gls@tmp[1]
15648               \eglssetwidest[2]{\glsentryname{\glo@label}}%
15649             \fi
15650           }%
15651         }%
15652       }%
15653     {%
15654       \settowidth{\gls@tmp[1]}%
15655         {\glstreenamefmt{\glsentryname{\glo@label}}}%
15656         \ifdim\gls@tmp[1]>\dimen@i
15657           \dimen@i=\gls@tmp[1]
15658           \eglssetwidest[1]{\glsentryname{\glo@label}}%
15659         \fi
15660       }%
15661     }%
15662   {%
15663     \settowidth{\gls@tmp[1]}%
15664       {\glstreenamefmt{\glsentryname{\glo@label}}}%
15665       \ifdim\gls@tmp[1]>\dimen@
15666         \dimen@=\gls@tmp[1]
15667         \eglssetwidest{\glsentryname{\glo@label}}%

```

```

15668          \fi
15669      }%
15670      }%
15671      {}%
15672      }%
15673      {}%
15674 }

```

dWidestLevelTwo This is like \glsFindWidestUsedLevelTwo but doesn't check if the entry has been used.

```

15675 \newrobustcmd*{\glsFindWidestLevelTwo}[1][\@glo@types]{%
15676     \dimen@=0pt\relax
15677     \dimen@i=0pt\relax
15678     \dimen@ii=0pt\relax
15679     \forallglossaries[#1]{\gls@type}%
15680     {%
15681         \forglsentries[\gls@type]{\glo@label}%
15682         {%
15683             \ifglshasparent{\glo@label}%
15684             {%
15685                 \protected@edef@glo@parent{\csuse{glo@\glsdetoklabel{\glo@label}}@parent}%
15686                 \ifglshasparent{\glo@parent}%
15687                 {%
15688                     \protected@edef@glo@parent{\csuse{glo@\glsdetoklabel{\glo@parent}}@parent}%
15689                     \ifglshasparent{\glo@parent}%
15690                     {%
15691                         {%
15692                             \settowidth{\gls@tmp[1]}%
15693                             {\glstreenamefmt{\glsentryname{\glo@label}}}%
15694                             \ifdim\gls@tmp[1]>\dimen@i
15695                             \dimen@i=\gls@tmp[1]
15696                             \eglssetwidest[2]{\glsentryname{\glo@label}}%
15697                             \fi
15698                         }%
15699                     }%
15700                 }%
15701                 \settowidth{\gls@tmp[1]}%
15702                 {\glstreenamefmt{\glsentryname{\glo@label}}}%
15703                 \ifdim\gls@tmp[1]>\dimen@i
15704                 \dimen@i=\gls@tmp[1]
15705                 \eglssetwidest[1]{\glsentryname{\glo@label}}%
15706                 \fi
15707             }%
15708         }%
15709     }%
15710     \settowidth{\gls@tmp[1]}%
15711     {\glstreenamefmt{\glsentryname{\glo@label}}}%
15712     \ifdim\gls@tmp[1]>\dimen@i
15713     \dimen@i=\gls@tmp[1]
15714     \eglssetwidest{\glsentryname{\glo@label}}%

```

```

15715      \fi
15716      }%
15717      }%
15718      }%
15719  }

```

`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.

```

15720  \newrobustcmd*\{\glsFindWidestUsedAnyNameSymbol\}[2] [\\@glo@types]{%
15721      \dimen@=0pt\relax
15722      \gls@tmp@len=0pt\relax
15723      #2=0pt\relax
15724      \forallglossaries[#1]{\gls@type}{%
15725          {%
15726              \forglseentries[\gls@type]{\glo@label}{%
15727                  {%
15728                      \ifglsused{\glo@label}{%
15729                          {%
15730                              \settowidth{\dimen@}{%
15731                                  {\glsentryname{\glo@label}}}}%
15732                              \ifdim\dimen@>\gls@tmp@len
15733                                  \gls@tmp@len=\dimen@
15734                                  \glssetwidest{\glsentryname{\glo@label}}{%
15735                                      \fi
15736                                      \settowidth{\dimen@}{%
15737                                          {\glsentrysymbol{\glo@label}}}}%
15738                                      \ifdim\dimen@>#2\relax
15739                                          #2=\dimen@
15740                                      \fi
15741                                  }%
15742                                  {}%
15743                          }%
15744                      }%
15745                  }

```

`stAnyNameSymbol` Like the above but doesn't check if the entry has been used.

```

15746  \newrobustcmd*\{\glsFindWidestAnyNameSymbol\}[2] [\\@glo@types]{%
15747      \dimen@=0pt\relax
15748      \gls@tmp@len=0pt\relax
15749      #2=0pt\relax
15750      \forallglossaries[#1]{\gls@type}{%
15751          {%
15752              \forglseentries[\gls@type]{\glo@label}{%
15753                  {%
15754                      \settowidth{\dimen@}{%
15755                          {\glsentryname{\glo@label}}}}%
15756                      \ifdim\dimen@>\gls@tmp@len
15757                          \gls@tmp@len=\dimen@
15758                          \glssetwidest{\glsentryname{\glo@label}}{%

```

```

15759         \fi
15760         \settowidth{\dimen@}%
15761             {\glsentrysymbol{\glo@label}}%
15762             \ifdim\dimen@>\relax
15763                 #2=\dimen@
15764             \fi
15765         }%
15766     }%
15767 }

```

`\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.

```

15768 \newrobustcmd*\glsFindWidestUsedAnyNameSymbolLocation}[3][\glo@types]{%
15769     \dimen@=0pt\relax
15770     \gls@tmpplen=0pt\relax
15771     #2=0pt\relax
15772     #3=0pt\relax
15773     \forallglossaries[#1]{\gls@type}{%
15774         \{%
15775             \forallglsentries[\gls@type]{\glo@label}{%
15776                 \{%
15777                     \ifglsused{\glo@label}{%
15778                         \{%
15779                             \settowidth{\dimen@}{%
15780                                 {\glsentryname{\glo@label}}}}%
15781                             \ifdim\dimen@>\gls@tmpplen
15782                                 \gls@tmpplen=\dimen@
15783                                 \glssetwidest{\glsentryname{\glo@label}}%
15784                             \fi
15785                             \settowidth{\dimen@}{%
15786                                 {\glsentrysymbol{\glo@label}}}}%
15787                             \ifdim\dimen@>\relax
15788                                 #2=\dimen@
15789                             \fi
15790                             \settowidth{\dimen@}{%
15791                                 {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}}%
15792                             \ifdim\dimen@>\relax
15793                                 #3=\dimen@
15794                             \fi
15795                         \}%
15796                         \{}}%
15797                     \}%
15798                 \}%
15799 }

```

`\glsFindWidestAnyNameSymbolLocation` Like the `\glsFindWidestUsedAnyNameSymbol` but doesn't check if the entry has been used.

```
15800 \newrobustcmd*\glsFindWidestAnyNameSymbolLocation}[3][\glo@types]{%
```

```

15801 \dimen@=0pt\relax
15802 \gls@tmp@len=0pt\relax
15803 #2=0pt\relax
15804 #3=0pt\relax
15805 \forall glossaries[#1]{\gls@type}%
15806 {%
15807   \for glsentries[\gls@type]{\glo@label}%
15808   {%
15809     \settowidth{\dimen@}%
15810     {\glstreenamefmt{\glsentryname{\glo@label}}}%
15811     \ifdim\dimen@>\gls@tmp@len
15812       \gls@tmp@len=\dimen@
15813       \eglssetwidest{\glsentryname{\glo@label}}%
15814     \fi
15815     \settowidth{\dimen@}%
15816     {\glsentrysymbol{\glo@label}}%
15817     \ifdim\dimen@>#2\relax
15818       #2=\dimen@
15819     \fi
15820     \settowidth{\dimen@}%
15821     {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}%
15822     \ifdim\dimen@>#3\relax
15823       #3=\dimen@
15824     \fi
15825   }%
15826 }%
15827 }

```

`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.

```

15828 \newrobustcmd*{\glsFindWidestUsedAnyNameLocation}[2][\glo@types]{%
15829   \dimen@=0pt\relax
15830   \gls@tmp@len=0pt\relax
15831   #2=0pt\relax
15832   \forall glossaries[#1]{\gls@type}%
15833   {%
15834     \for glsentries[\gls@type]{\glo@label}%
15835     {%
15836       \if glsused{\glo@label}%
15837       {%
15838         \settowidth{\dimen@}%
15839         {\glstreenamefmt{\glsentryname{\glo@label}}}%
15840         \ifdim\dimen@>\gls@tmp@len
15841           \gls@tmp@len=\dimen@
15842           \eglssetwidest{\glsentryname{\glo@label}}%
15843         \fi
15844         \settowidth{\dimen@}%
15845         {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}%

```

```

15846      \ifdim\dimen@>#2\relax
15847          #2=\dimen@
15848      \fi
15849  }%
15850  {}%
15851  }%
15852  {}%
15853 }

```

`AnyNameLocation` Like the `\glsFindWidestAnyNameLocation` but doesn't check the **first use** flag.

```

15854 \newrobustcmd*\{\glsFindWidestAnyNameLocation}[2][\@glo@types]{%
15855     \dimen@=0pt\relax
15856     \gls@tmp@len=0pt\relax
15857     #2=0pt\relax
15858     \forall@glossaries[#1]{\gls@type}%
15859     {%
15860         \for@glsentries[\gls@type]{\glo@label}%
15861         {%
15862             \settowidth{\dimen@}%
15863             {\glstreeentryname{\glsentryname{\glo@label}}}}%
15864             \ifdim\dimen@>\gls@tmp@len
15865                 \gls@tmp@len=\dimen@
15866                 \eglssetwidest{\glsentryname{\glo@label}}%
15867             \fi
15868             \settowidth{\dimen@}%
15869             {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}}%
15870             \ifdim\dimen@>#2\relax
15871                 #2=\dimen@
15872             \fi
15873         }%
15874     }%
15875 }

```

`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`.

```

15876 \newcommand*\{\glsxtrComputeTreeIndent}[1]{%
15877     \glstreeindent=\glsxtrtreeopindent\relax
15878 }

```

`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.

```

15879 \newcommand*{\glsxtrComputeTreeSubIndent}[3]{%
15880   \ifcsundef{@glswidestname\romannumeral#1}%
15881   {%
15882     \settowidth{#3}{\glstreenamefmt{\@glswidestname\space}}%
15883   }%
15884   {%
15885     \settowidth{#3}{\glstreenamefmt{%
15886       \csname @glswidestname\romannumeral#1\endcsname\space}}%
15887   }%
15888 }

```

eeSetHangIndent Set \hangindent for top-level entries:

```

15889 \newcommand*{\glsxtrAltTreeSetHangIndent}{\hangindent\glstreeindent}

```

etSubHangIndent Set \hangindent for sub-entries:

```

15890 \newcommand*{\glsxtrAltTreeSetSubHangIndent}[1]{\hangindent\glstreeindent}

```

Redefine alttree:

```

15891 \renewglossarystyle{alttree}{%
15892   \renewenvironment{theglossary}{%
15893   {%
15894     \glsxtralttreeInit
15895     \def\@gls@prevlevel{-1}%
15896     \mbox{}\par}%
15897     {\par}%
15898   \renewcommand*{\glossaryheader}{}%
15899   \renewcommand*{\glsgroupheading}[1]{}%
15900   \renewcommand{\glossentry}[2]{%
15901     \ifnum\@gls@prevlevel=0\relax
15902     \else
15903       \glsxtrComputeTreeIndent{##1}%
15904     \fi
15905     \parindent\glstreeindent
15906     \glsxtrAltTreeSetHangIndent
15907     \makebox[0pt][r]%
15908   {%
15909     \glstreenamebox{\glstreeindent}%
15910   {%
15911     \glsentryitem{##1}%
15912     \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
15913   }%
15914 }%
15915   \glsxtralttreeSymbolDescLocation{##1}{##2}%
15916   \def\@gls@prevlevel{0}%
15917 }
15918 \renewcommand{\subglossentry}[3]{%
15919   \ifnum##1=1\relax
15920     \glssubentryitem{##2}%
15921   \fi

```

```

15922 \ifnum\@gls@prevlevel=##1\relax
15923 \else
15924   \glsxtrComputeTreeSubIndent{##1}{##2}{\gls@tmpplen}%
15925   \ifnum\@gls@prevlevel<##1\relax
15926     \setlength\glstreeindent\gls@tmpplen
15927     \addtolength\glstreeindent\parindent
15928     \parindent\glstreeindent
15929   \else
15930     \ifnum\@gls@prevlevel=0\relax
15931       \glsxtrComputeTreeIndent{##2}%
15932     \else
15933       \glsxtrComputeTreeSubIndent{\@gls@prevlevel}{##2}{\glstreeindent}%
15934     \fi
15935     \addtolength\parindent{-\glstreeindent}%
15936     \setlength\glstreeindent\parindent
15937   \fi
15938 \fi
15939 \glsxtrAltTreeSetSubHangIndent{##1}%
15940 \makebox[0pt][r]{\glstreenamebox{\gls@tmpplen}%
15941   \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}}}%
15942 \glsxtralttreeSubSymbolDescLocation{##1}{##2}{##3}%
15943 \def\@gls@prevlevel{##1}%
15944 }%
15945 \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\glstreegroupskip\fi}%
15946 }%
15947 }%
15948 {%
15949 }

```

Redefine `alttreegroup` so that it discourages a break after group headings.

```

15950 \ifdef{@glsstyle@alttreegroup}%
15951 {%
15952   \renewglossarystyle{alttreegroup}{%
15953     \setglossarystyle{alttree}%
15954     \renewcommand{\glsgroupheading}[1]{\par
15955       \def\@gls@prevlevel{-1}%
15956       \hangindent0pt\relax
15957       \parindent0pt\relax
15958       \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
15959       \glstreePreHeader{##1}{\glsxtr@grptitle}%
15960       \glstreegroupheaderfmt{\glsxtr@grptitle}%
}

```

Can't use `\@afterheading` here as it messes with the first item of the group.

```

15961   \glstreegroupheaderskip
15962 }%
15963 }%
15964 }%
15965 {%
15966 }

```

Similarly for `alttreehypergroup`.

```

15967 \ifdef{@glsstyle@alttreehypergroup}
15968 {%
15969   \renewglossarystyle{alttreehypergroup}{%
15970     \setglossarystyle{alttree}{%
15971       \renewcommand*{\glossaryheader}{%
15972         \par
15973         \def\@gls@prevlevel{-1}%
15974         \hangindent0pt\relax
15975         \parindent0pt\relax
15976         \glstreenavigationfmt{\glsnavigation}}%

```

Can't use \@afterheading here as it messes with the first item of the group.

```

15977   \glstreegroupheaderskip
15978 }%
15979 \renewcommand*{\glsgroupheading}[1]{%
15980   \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15981   \glstreePreHeader{##1}{\glsxtr@grptitle}%
15982   \par
15983   \def\@gls@prevlevel{-1}%
15984   \hangindent0pt\relax
15985   \parindent0pt\relax
15986   \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%

```

Can't use \@afterheading here as it messes with the first item of the group.

```

15987   \glstreegroupheaderskip
15988 }%
15989 }
15990 }%
15991 {%
15992 }%

```

2.9 Multicolumn Styles

Adjust mcolindexgroup to discourage page breaks after the group headings.

```

15993 \ifdef{@glsstyle@mcolindexgroup}
15994 {%
15995   \renewglossarystyle{mcolindexgroup}{%
15996     \setglossarystyle{mcolindex}{%
15997       \renewcommand*{\glsgroupheading}[1]{%
15998         \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15999         \glstreePreHeader{##1}{\glsxtr@grptitle}%
16000         \item\glstreegroupheaderfmt{\glsxtr@grptitle}}%
16001       \glstreegroupheaderskip\@afterheading
16002     }%
16003   }
16004 }%
16005 {%
16006 }%

```

Similarly for mcolindexhypergroup.

```
16007 \ifdef{@glsstyle@mcolindexhypergroup}
16008 {%
16009   \renewglossarystyle{mcolindexhypergroup}{%
16010     \setglossarystyle{mcolindex}{%
16011     \renewcommand*{\glossaryheader}{%
16012       \item\glstreenavigationfmt{\glsnavigation}{%
16013         \glstreegroupheaderskip\@afterheading
16014     }%
16015     \renewcommand*{\glsgroupheading}[1]{%
16016       \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
16017       \glstreePreHeader{##1}{\glsxtr@grptitle}%
16018       \item\glstreegroupheaderfmt
16019         {\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
16020       \glstreegroupheaderskip\@afterheading
16021     }%
16022   }%
16023 }%
16024 {%
16025 }
```

Similarly for mcolindexspannav.

```
16026 \ifdef{@glsstyle@mcolindexspannav}
16027 {%
16028   \renewglossarystyle{mcolindexspannav}{%
16029     \setglossarystyle{index}{%
16030     \renewenvironment{theglossary}{%
16031       {%
16032         \begin{multicols}{\glsmcols}[\noindent\glstreenavigationfmt{\glsnavigation}]%
16033         \setlength{\parindent}{0pt}%
16034         \setlength{\parskip}{0pt plus 0.3pt}%
16035         \let\item\glstreeitem}%
16036       {\end{multicols}}%
16037     \renewcommand*{\glsgroupheading}[1]{%
16038       \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
16039       \glstreePreHeader{##1}{\glsxtr@grptitle}%
16040       \item\glstreegroupheaderfmt
16041         {\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
16042       \glstreegroupheaderskip\@afterheading
16043     }%
16044   }%
16045 }%
16046 {%
16047 }
```

Similarly for mcoltreegroup.

```
16048 \ifdef{@glsstyle@mcoltreegroup}
16049 {%
16050   \renewglossarystyle{mcoltreegroup}{%
```

```

16051 \setglossarystyle{mcoltree}%
16052 \renewcommand{\glsgroupheding}[1]{%
16053   \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
16054   \glstreePreHeader{##1}{\glsxtr@grptitle}%
16055   \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}%
16056   \glstreegroupheaderskip\@afterheading
16057 }%
16058 }
16059 }%
16060 {%
16061 }

```

Similarly for mcoltreehypergroup.

```

16062 \ifdef{@glsstyle@mcoltreehypergroup}%
16063 {%
16064   \renewglossarystyle{mcoltreehypergroup}{%
16065     \setglossarystyle{mcoltree}%
16066     \renewcommand*\glossaryheader{%
16067       \par\noindent\glstreenavigationfmt{\glsnavigation}%
16068       \glstreegroupheaderskip
16069     }%
16070     \renewcommand*\glsgroupheading[1]{%
16071       \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
16072       \glstreePreHeader{##1}{\glsxtr@grptitle}%
16073       \par\noindent
16074       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
16075       \glstreegroupheaderskip\@afterheading
16076     }%
16077   }
16078 }%
16079 {%
16080 }

```

Similarly for mcoltreespannav.

```

16081 \ifdef{@glsstyle@mcoltreespannav}%
16082 {%
16083   \renewglossarystyle{mcoltreespannav}{%
16084     \setglossarystyle{tree}%
16085     \renewenvironment{theglossary}%
16086     {%
16087       \begin{multicols}{\glsmcols}%
16088         [\noindent\glstreenavigationfmt{\glsnavigation}]%
16089         \setlength{\parindent}{0pt}%
16090         \setlength{\parskip}{0pt plus 0.3pt}%
16091     }%
16092     {\end{multicols}}%
16093     \renewcommand*\glsgroupheading[1]{%
16094       \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
16095       \glstreePreHeader{##1}{\glsxtr@grptitle}%
16096       \par\noindent

```

```

16097      \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
16098      \glstreegroupheaderskip@afterheading
16099  }%
16100 }
16101 }%
16102 {%
16103 }

```

Similarly for mcoltreenonamegroup.

```

16104 \ifdef{@glsstyle@mcoltreenonamegroup}%
16105 {%
16106  \renewglossarystyle{mcoltreenonamegroup}{%
16107    \setglossarystyle{mcoltreenoname}%
16108    \renewcommand{\glsgroupheading}[1]{%
16109      \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
16110      \glstreePreHeader{##1}{\glsxtr@grptitle}%
16111      \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}%
16112      \glstreegroupheaderskip@afterheading
16113    }%
16114  }%
16115 }%
16116 {%
16117 }

```

Similarly for mcoltreenonamehypergroup.

```

16118 \ifdef{@glsstyle@mcoltreenonamehypergroup}%
16119 {%
16120  \renewglossarystyle{mcoltreenonamehypergroup}{%
16121    \setglossarystyle{mcoltreenoname}%
16122    \renewcommand*{\glossaryheader}{%
16123      \par\noindent\glstreenavigationfmt{\glsnavigation}%
16124      \glstreegroupheaderskip
16125    }%
16126    \renewcommand*{\glsgroupheading}[1]{%
16127      \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
16128      \glstreePreHeader{##1}{\glsxtr@grptitle}%
16129      \par\noindent
16130      \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
16131      \glstreegroupheaderskip@afterheading
16132  }%
16133 }%
16134 {%
16135 }

```

Similarly for mcoltreenonamespannav.

```

16136 \ifdef{@glsstyle@mcoltreenonamespannav}%
16137 {%
16138  \renewglossarystyle{mcoltreenonamespannav}{%
16139    \setglossarystyle{treenoname}%
16140    \renewenvironment{theglossary}%
16141    {%

```

```

16142     \begin{multicols}{\glsmcols}%
16143         [ \noindent \glstreenavigationfmt{\glsnavigation} ] %
16144         \setlength{\parindent}{0pt}%
16145         \setlength{\parskip}{0pt plus 0.3pt}%
16146     }%
16147     { \end{multicols} }%
16148     \renewcommand*{\glsgroupheading}[1]{%
16149         \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
16150         \glstreePreHeader{##1}{\glsxtr@grptitle}%
16151         \par\noindent
16152         \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
16153         \glstreegroupheaderskip@\afterheading}%
16154     }%
16155 }%
16156 {%
16157 }

```

mcolalttree needs adjusting so that it uses \glsxtralttreeInit This doesn't use \mbox{} \par which would unbalance the top of the columns.

```

16158 \ifdef{@glsstyle@mcolalttree}%
16159 {%
16160     \renewglossarystyle{mcolalttree}{%
16161         \setglossarystyle{alttree}%
16162         \renewenvironment{theglossary}%
16163     }%
16164         \glsxtralttreeInit
16165         \def@gls@prevlevel{-1}%
16166         \begin{multicols}{\glsmcols}%
16167     }%
16168     { \par \end{multicols} }%
16169 }%
16170 }%
16171 {%
16172 }

```

Redefine mcolalttreegroup to discourage page breaks after the group headings.

```

16173 \ifdef{@glsstyle@mcolalttreegroup}%
16174 {%
16175     \renewglossarystyle{mcolalttreegroup}{%
16176         \setglossarystyle{mcolalttree}%
16177         \renewcommand{\glsgroupheading}[1]{%
16178             \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
16179             \glstreePreHeader{##1}{\glsxtr@grptitle}%
16180             \par
16181             \def@gls@prevlevel{-1}%
16182             \hangindent0pt\relax
16183             \parindent0pt\relax
16184             \glstreegroupheaderfmt{\glsxtr@grptitle}%
16185             \glstreegroupheaderskip
16186         }%

```

```
16187 }
16188 }%
16189 {%
16190 }
```

Similarly for mcolalttreehypergroup.

```
16191 \ifdef{@glsstyle@mcolalttreehypergroup}%
16192 {%
16193   \renewglossarystyle{mcolalttreehypergroup}{%
16194     \setglossarystyle{mcolalttree}{%
16195       \renewcommand*\glossaryheader{%
16196         \par
16197         \def\@gls@prevlevel{-1}%
16198         \hangindent0pt\relax
16199         \parindent0pt\relax
16200         \glstreenavigationfmt{\glsnavigation}%
16201         \glstreegroupheaderskip
16202       }%
16203       \renewcommand*\glsgroupheading[1]{%
16204         \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
16205         \glstreePreHeader{##1}{\glsxtr@grptitle}%
16206         \par
16207         \def\@gls@prevlevel{-1}%
16208         \hangindent0pt\relax
16209         \parindent0pt\relax
16210         \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
16211         \glstreegroupheaderskip
16212       }%
16213     }%
16214   }%
16215 {%
16216 }}
```

Similarly for mcolalttreespannav.

```
16217 \ifdef{@glsstyle@mcolalttreespannav}%
16218 {%
16219   \renewglossarystyle{mcolalttreespannav}{%
16220     \setglossarystyle{alttree}{%
16221       \renewenvironment{theglossary}{%
16222         \%
16223         \glsxtralttreeInit
16224         \def\@gls@prevlevel{-1}%
16225         \begin{multicols}{\glsmcols}%
16226           [\noindent\glstreenavigationfmt{\glsnavigation}]%
16227         }%
16228         \end{multicols}%
16229       \renewcommand*\glsgroupheading[1]{%
16230         \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
16231         \glstreePreHeader{##1}{\glsxtr@grptitle}%
16232         \par
```

```
16233     \def\@gls@prevlevel{-1}%
16234     \hangindent0pt\relax
16235     \parindent0pt\relax
16236     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
16237     \glstreegroupheaderskip
16238   }%
16239 }
16240 }%
16241 {%
16242 }
```

Reset the default style

```
16243 \ifx\@glossary@default@style\relax
16244 \else
16245   \setglossarystyle{\@glsxtr@current@style}
16246 \fi
```

3 bookindex style (glossary-bookindex.sty)

3.1 Package Initialisation and Options

```
16247 \NeedsTeXFormat{LaTeX2e}
16248 \ProvidesPackage{glossary-bookindex}[2021/09/20 v1.46 (NLCT)]
    Load required packages.
16249 \RequirePackage{multicol}
16250 \RequirePackage{glossary-tree}

trbookindexcols Number of columns.
16251 \newcommand{\glsxtrbookindexcols}{2}

trbookindexname Format used for top-level entries. (Argument is the label.)
16252 \newcommand*{\glsxtrbookindexname}[1]{\glossentryname{#1}}

bookindexsubname Format used for sub entries.
16253 \newcommand*{\glsxtrbookindexsubname}[1]{\glsxtrbookindexname{#1}>

sxtrprelocation Provide in case glossaries-stylemods isn't loaded.
16254 \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.
16255 \newcommand*{\glsxtrbookindexprelocation}[1]{%
16256   \glsxtrifhasfield{location}{#1}%
16257   {,\glsxtrprelocation}%
16258   {\glsxtrprelocation}%
16259 }

xsubprelocation Separator used before location list for sub-entries.
16260 \newcommand*{\glsxtrbookindexsubprelocation}[1]{%
16261   \glsxtrbookindexprelocation{#1}%
16262 }
```

okindexlocation

```
\glsxtrbookindexlocation{<label>}{<location>}
```

Displays the location.

```
16263 \newcommand*{\glsxtrbookindexlocation}[2]{#2}
```

ndexsublocation

```
\glsxtrbookindexlocation{\label}{\location}
```

Displays the location for sub-entries.

```
16264 \newcommand*{\glsxtrbookindexsublocation}{\glsxtrbookindexlocation}
```

xparentchildsep Separator used between top-level parent and child entry.

```
16265 \newcommand{\glsxtrbookindexparentchildsep}{\nopagebreak}
```

rentsubchildsep Separator used between sub-level parent and child entry.

```
16266 \newcommand{\glsxtrbookindexparentsubchildsep}{\glsxtrbookindexparentchildsep}
```

ookindexbetween Between two top-level entries identified by the labels in the arguments.

```
16267 \newcommand{\glsxtrbookindexbetween}[2]{}
```

indexsubbetween Between two level 1 entries identified by the labels in the arguments.

```
16268 \newcommand{\glsxtrbookindexsubbetween}[2]{}
```

exsubsubbetween Between two level 2 entries identified by the labels in the arguments.

```
16269 \newcommand{\glsxtrbookindexsubsubbetween}[2]{}
```

indexatendgroup At the end of a letter group. The argument is the index of the last top-level entry.

```
16270 \newcommand{\glsxtrbookindexatendgroup}[1]{}
```

exsubatendgroup At the end of a letter group. The argument is the index of the last level 1 entry.

```
16271 \newcommand{\glsxtrbookindexsubatendgroup}[1]{}
```

ubsubatendgroup At the end of a letter group. The argument is the index of the last level 2 entry.

```
16272 \newcommand{\glsxtrbookindexsubsubatendgroup}[1]{}
```

kindexgroupskip Group separator.

```
16273 \newcommand{\glsxtrbookindexgroupskip}{\ifglsnogroupskip\else\indexspace\fi}
```

Format group title.

dexformatheader Group separator.

```
16274 \newcommand*{\glsxtrbookindexformatheader}[1]{%
16275   \par{\centering\glstreegroupheaderfmt{\#1}\par}%
16276 }
```

okindexbookmark Book mark group heading if supported.

```
16277 \ifdef\pdfbookmark
16278 {%
16279   \newcommand*{\glsxtrbookindexbookmark}[2]{%
16280     \ifdefstring{\@glossarysec}{chapter}%
16281       {\pdfbookmark[1]{\#1}{\#2}}%
```

```

16282     {\pdfbookmark[2]{#1}{#2}}%
16283 }
16284 }
16285 {%
16286 \newcommand*{\glsxtrbookindexbookmark}[2]{}
16287 }

xbookmarkprefix Make the bookmark label prefix used for letter groups depend on the glossary label (instead
of original hardcoded “index.”).
16288 \newcommand*{\glsxtrbookindexbookmarkprefix}{\currentglossary.}


```

kindexcolspread

```

16289 \newcommand*{\glsxtrbookindexcolspread}{}
```

dexmulticolsenv

```

16290 \newcommand*{\glsxtrbookindexmulticolsenv}{multicols}
```

Define the style.

```

16291 \newglossarystyle{bookindex}{%
16292   \setglossarystyle{index}%
16293   \renewenvironment{theglossary}%
16294 {%
16295   \ifnum\glsxtrbookindexcols>1\relax
16296     \ifempty{\glsxtrbookindexcolspread}%
16297     {%
16298       \edef\glsxtr@beginbookindex{%
16299         \noexpand\begin{\glsxtrbookindexmulticolsenv}%
16300           {\glsxtrbookindexcols}%
16301         }%
16302     }%
16303     {%
16304       \edef\glsxtr@beginbookindex{%
16305         \noexpand\begin{\glsxtrbookindexmulticolsenv}%
16306           {\glsxtrbookindexcols}[\glsxtrbookindexcolspread]%
16307         }%
16308     }%
16309   \else
16310     \def\glsxtr@beginbookindex{}%
16311   \fi
16312   \glsxtr@beginbookindex
16313   \setlength{\parindent}{0pt}%
16314   \setlength{\parskip}{0pt plus 0.3pt}%
16315   \let@\glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
16316   \let@\glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
16317   \let@\glsxtr@bookindex@between@gobble
16318   \let@\glsxtr@bookindex@subbetween@gobble
16319   \let@\glsxtr@bookindex@subsubbetween@gobble
16320   \let@\glsxtr@bookindex@atendgroup\relax
16321   \let@\glsxtr@bookindex@subatendgroup\relax

```

```

16322     \let\@glsxtr@bookindex@subsubatendgroup\relax
16323     \let\@glsxtr@bookindexgroupskip\relax
16324   }%
16325   {%
Do end group hooks.
16326     \@glsxtr@bookindex@subsubatendgroup
16327     \@glsxtr@bookindex@subatendgroup
16328     \@glsxtr@bookindex@atendgroup
End multicols environment.
16329     \ifnum\glsxtrbookindexcols>1\relax
16330       \edef\glsxtr@endbookindex{%
16331         \noexpand\end{\glsxtrbookindexmulticolsenv}%
16332       }%
16333     \else
16334       \def\glsxtr@endbookindex{}%
16335     \fi
16336     \glsxtr@endbookindex
16337   }%
Use ragged right as columns are likely to be narrow and indexes tend not to be fully justified.
16338   \renewcommand*{\glossaryheader}{\raggedright}%
Top level entry format.
16339   \renewcommand*{\glossentry}[2]{%
Do separator.
16340     \@glsxtr@bookindex@between{##1}%
Update separators.
16341     \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
16342     \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentschildsep
16343     \let\@glsxtr@bookindex@subbetween\@gobble
16344     \let\@glsxtr@bookindex@subsubbetween\@gobble
16345     \edef\@glsxtr@bookindex@between{%
16346       \noexpand\glsxtrbookindexbetween{##1}%
16347     }%
16348     \edef\@glsxtr@bookindex@atendgroup{%
16349       \noexpand\glsxtrbookindexatendgroup{##1}%
16350     }%
16351     \let\@glsxtr@bookindex@subatendgroup\relax
16352     \let\@glsxtr@bookindex@subsubatendgroup\relax
Format entry.
16353   \glstreeitem
16354     \glsentryitem{##1}%
16355     \glstarget{##1}{\glsxtrbookindexname{##1}}%
16356     \glsxtrbookindexprelocation{##1}%
16357     \glsxtrbookindexlocation{##1}{##2}%
16358   }%
16359   \renewcommand{\subglossentry}[3]{%
16360     \ifcase##1\relax

```

Level 0 (shouldn't happen as that's formatted with \glossentry).

```
16361      \glstreeitem  
16362      \or
```

Level 1.

```
16363      \@glsxtr@bookindex@sep  
16364      \@glsxtr@bookindex@subbetween{##2} %  
16365      \let\@glsxtr@bookindex@sep\relax
```

Update separators.

```
16366      \let\@glsxtr@bookindex@subsubbetween\@obble  
16367      \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep  
16368      \edef\@glsxtr@bookindex@subbetween{ %  
16369          \noexpand\glsxtrbookindexsubbetween{##2} %  
16370      } %  
16371      \edef\@glsxtr@bookindex@atsubendgroup{ %  
16372          \noexpand\glsxtrbookindexatsubendgroup{##1} %  
16373      } %
```

Start sub-item.

```
16374      \glstreesubitem  
16375      \glssubentryitem{##2} %  
16376      \else
```

All other levels.

```
16377      \@glsxtr@bookindex@subsep  
16378      \@glsxtr@bookindex@subsubbetween{##2} %
```

Update separators.

```
16379      \let\@glsxtr@bookindex@subsep\relax  
16380      \edef\@glsxtr@bookindex@subsubbetween{ %  
16381          \noexpand\glsxtrbookindexsubsubbetween{##2} %  
16382      } %  
16383      \edef\@glsxtr@bookindex@atsubsubendgroup{ %  
16384          \noexpand\glsxtrbookindexatsubsubendgroup{##1} %  
16385      } %
```

Start sub-sub-item.

```
16386      \glstreesubsubitem  
16387      \fi
```

Format entry.

```
16388      \glstarget{##2}{\glsxtrbookindexsubname{##2}} %  
16389      \glsxtrbookindexsubprelocation{##2} %  
16390      \glsxtrbookindexsublocation{##2}{##3} %  
16391  } %
```

The group skip is moved to the group heading to avoid interfering with the end letter group hooks.

```
16392  \renewcommand*\glsgroupskip{} %
```

Group heading format.

```
16393  \renewcommand*\glsgroupheading[1]{%
```

Do end group hooks.

```
16394  \glsxtr@bookindex@subsubatendgroup
16395  \glsxtr@bookindex@subatendgroup
16396  \glsxtr@bookindex@atendgroup
16397  \glsxtr@bookindexgroupskip
```

Update separators.

```
16398  \let\glsxtr@bookindexgroupskip\glsxtrbookindexgroupskip
16399  \let\glsxtr@bookindex@between\gobble
16400  \let\glsxtr@bookindex@atendgroup\relax
16401  \let\glsxtr@bookindex@subatendgroup\relax
16402  \let\glsxtr@bookindex@subsubatendgroup\relax
```

Fetch the group title from the label supplied in #1.

```
16403  \glsxtrgetgroup{##1}{\glsxtrcurrentgrptitle}%
```

Do the PDF bookmark if supported.

```
16404  \glsxtrbookindexbookmark{\glsxtrcurrentgrptitle}{\glsxtrbookindexbookmarkprefix##1}%
```

Format the group title.

```
16405  \glsxtrbookindexformatheader{\glsxtrcurrentgrptitle}%
16406  \nopagebreak\indexspace\nopagebreak\@afterheading
16407 }%
16408 }
```

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.

```
16409 \newcommand{\glsxtrbookindexthepage}{%
16410 \ifdef\currentglossary{\currentglossary.\arabic{page}}{\arabic{page}}%
16411 }
```

`\bookindexmarkentry` Writes entry information to the .aux file. The argument is the entry label.

```
16412 \newcommand*\glsxtrbookindexmarkentry[1]{%
16413 \protected@write\auxout
16414 {\let\glsxtrbookindexthepage\relax}%
16415 {\string\glsxtr@setbookindexmark{\glsxtrbookindexthepage}{#1}}%
16416 }
```

`\etbookindexmark`

```
16417 \newcommand*\glsxtr@setbookindexmark[2]{%
16418 \ifcsundef{\glsxtr@idxfirstmark@#1}%
16419 {\csgdef{\glsxtr@idxfirstmark@#1}{#2}}%
16420 {}%
16421 \csgdef{\glsxtr@idxlastmark@#1}{#2}%
16422 }
```

```
dexfirstmarkfmt
16423 \newcommand*{\glsxtrbookindexfirstmarkfmt}[1]{%
16424   \glsentryname{#1}%
16425 }

kindexfirstmark
16426 \newcommand*{\glsxtrbookindexfirstmark}{%
16427   \letcs{\glsxtr@label}{\glsxtr@idxfirstmark@\glsxtrbookindexthe page}%
16428   \ifdef{\glsxtr@label}%
16429     {\glsxtrbookindexfirstmarkfmt{\glsxtr@label}}%
16430   {}%
16431 }

ndexlastmarkfmt
16432 \newcommand*{\glsxtrbookindexlastmarkfmt}[1]{%
16433   \glsentryname{#1}%
16434 }

okindexlastmark
16435 \newcommand*{\glsxtrbookindexlastmark}{%
16436   \letcs{\glsxtr@label}{\glsxtr@idxlastmark@\glsxtrbookindexthe page}%
16437   \ifdef{\glsxtr@label}%
16438     {\glsxtrbookindexlastmarkfmt{\glsxtr@label}}%
16439   {}%
16440 }
```

4 longextra styles (glossary-longextra.sty)

4.1 Package Initialisation and Options

Provides additional long styles.

```
16441 \NeedsTeXFormat{LaTeX2e}
16442 \ProvidesPackage{glossary-longextra}[2021/09/20 v1.46 (NLCT)]
Load required packages.
16443 \RequirePackage{glossary-longbooktabs}
```

ongextraNameFmt

```
\glslongextraNameFmt{\label}
```

Governs the way the name is displayed.

```
16444 \newcommand{\glslongextraNameFmt}[1]{%
16445   \glsentryitem{\#1}\glstarget{\#1}{\glossentryname{\#1}}%
16446 }
```

ongextraDescFmt

```
\glslongextraDescFmt{\label}
```

Governs the way the description is displayed.

```
16447 \newcommand{\glslongextraDescFmt}[1]{%
16448   \glossentrydesc{\#1}\glspostdescription
16449 }
```

gextraSymbolFmt

```
\glslongextraSymbolFmt{\label}
```

Governs the way the symbol is displayed.

```
16450 \newcommand{\glslongextraSymbolFmt}[1]{\glossentrysymbol{\#1}}
```

xtraLocationFmt

```
\glslongextraLocationFmt{\label}{\location list}
```

Governs the way the location is displayed.

```
16451 \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.

```
16452 \newcommand{\glslongextraSubNameFmt}[2]{%
16453   \glssubentryitem{#2}\glstarget{#2}{\strut}%
16454 }
```

extraSubDescFmt

```
\glslongextraSubDescFmt{\level}{\label}
```

Governs the way the child description is displayed.

```
16455 \newcommand{\glslongextraSubDescFmt}[2]{%
16456   \glslongextraDescFmt{#2}%
16457 }
```

traSubSymbolFmt

```
\glslongextraSubSymbolFmt{\level}{\label}
```

Governs the way the child symbol is displayed.

```
16458 \newcommand{\glslongextraSubSymbolFmt}[2]{%
16459   \glslongextraSymbolFmt{#2}%
16460 }
```

aSubLocationFmt

```
\glslongextraSubLocationFmt{\level}{\label}{\location list}
```

Governs the way the child location list is displayed.

```
16461 \newcommand{\glslongextraSubLocationFmt}[3]{#3}
```

```

gextraNameAlign Alignment for the name column.
16462 \newcommand{\glslongextraNameAlign}{l}

gextraDescAlign Alignment for the description column.
16463 \newcommand{\glslongextraDescAlign}{>{\raggedright}p{\glsdescwidth} }

gextraSymbolAlign Alignment for the symbol column.
16464 \newcommand{\glslongextraSymbolAlign}{c}

gextraLocationAlign Alignment for the location column.
16465 \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).
16466 \newcommand{\glslongextraGroupHeading}[2]{}

gextraHeaderFormat Format for the column headers.
16467 \newcommand{\glslongextraHeaderFmt}[1]{\textbf{#1} }

gextraNameDescHeader
16468 \newcommand{\glslongextraNameDescHeader}{%
16469  \glslongextraNameDescTabularHeader\endhead
16470  \glslongextraNameDescTabularFooter\endfoot
16471 }

gextraTabularHeader
16472 \newcommand{\glslongextraNameDescTabularHeader}{%
16473  \toprule
16474  \glslongextraHeaderFmt\entryname &
16475  \glslongextraHeaderFmt\descriptionname\tabularnewline
16476  \midrule
16477 }

gextraTabularFooter
16478 \newcommand{\glslongextraNameDescTabularFooter}{%
16479  \bottomrule
16480 }

    Unlike the altree style, there aren't different widths for the hierarchical levels.

gextraSetWidest Provide in case the tree styles haven't been loaded.
16481 \newcommand*{\glslongextraSetWidest}[1]{%
16482  \def\@glslongextrawidestname{\#1}%
16483 }

gextrawidestname Pick up the widest name from the altree style if it has been set. (Will expand to nothing
otherwise.)
16484 \newcommand*{\@glslongextrawidestname}{\csuse{@glswidestname}}

```

```

traUpdateWidest
16485 \newcommand*{\glslongextraUpdateWidest}[1]{%
16486   \ifundef\@glslongextrawidestname
16487   {\def\@glslongextrawidestname{\#1}}%
16488   {%
16489     \settowidth{\dimen@}{\@glslongextrawidestname}%
16490     \settowidth{\dimen@ii}{\#1}%
16491     \ifdim\dimen@ii>\dimen@
16492       \def\@glslongextrawidestname{\#1}%
16493     \fi
16494   }%
16495 }

```

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`.

```
16496 \newcommand*{\glslongextraUpdateWidestChild}[2]{}
```

`traSetDescWidth` Computes the value of `\glsdescwidth` for the styles that only have name and description columns.

```
16497 \newcommand{\glslongextraSetDescWidth}{%
16498   \settowidth{\gls@tmp@len}{\glslongextraHeaderFmt\entryname}%

```

Has the widest name been set.

```
16499   \settowidth{\dimen@}{\glsnamefont{\@glslongextrawidestname}}%
16500   \ifdim\dimen@>\gls@tmp@len
16501     \gls@tmp@len=\dimen@
16502   \fi
```

Description width is `\linewidth` less `4\tabcolsep` less the width of the name column.

```
16503   \setlength{\glsdescwidth}{\dimexpr\linewidth-4\tabcolsep-\gls@tmp@len}%
16504 }
```

`SymSetDescWidth` Computes the value of `\glsdescwidth` for the styles that only have name, symbol and description columns.

```
16505 \newcommand{\glslongextraSymSetDescWidth}{%
```

Work out the size for just the name and description style.

```
16506   \glslongextraSetDescWidth
```

Now work out the symbol column width. This is assuming that the column title will be the widest text in the column.

```
16507   \settowidth{\gls@tmp@len}{\glslongextraHeaderFmt\symbolname}%
```

Subtract 2\tabcolsep and the symbol header width.

```
16508 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\gls@tmp{len}}%
16509 }
```

LocSetDescWidth Computes the value of \glsdescwidth for the styles that only have name, location and description columns.

```
16510 \newcommand{\glslongextraLocSetDescWidth}{%
```

Work out the size for just the name and description style.

```
16511 \glslongextraSetDescWidth
```

Subtract 2\tabcolsep and the location list column width.

```
16512 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\glspagelistwidth}%
16513 }
```

LocSetDescWidth Computes the value of \glsdescwidth for the styles that have name, symbol, location and description columns.

```
16514 \newcommand{\glslongextraSymLocSetDescWidth}{%
```

Work out the size for just the name, symbol and description style.

```
16515 \glslongextraSymSetDescWidth
```

Subtract 2\tabcolsep and the location list column width.

```
16516 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\glspagelistwidth}%
16517 }
```

ExtraUseTabular If true use tabular instead of longtable. Obviously only intended for short glossaries that can fit into a single page.

```
16518 \newif\ifGlsLongExtraUseTabular
16519 \GlsLongExtraUseTabularfalse
```

raTabularVAlign Only used with the tabular setting.

```
16520 \newcommand*\glslongextraTabularVAlign{c}
```

long-name-desc Two column style with multi-lined descriptions and header. This is similar to the longragged-booktabs style.

```
16521 \newglossarystyle{long-name-desc}{%
16522 {%
16523 \ifGlsLongExtraUseTabular
16524 \renewenvironment{theglossary}{%
16525 {%
16526 \glslongextraSetDescWidth
16527 \edef\@glslongextra@begintab{%
16528 \noexpand\begin{tabular}[{\glslongextraTabularVAlign}]{%
16529 \expandonce\glslongextraNameAlign
16530 \expandonce\glslongextraDescAlign}}%
16531 \@glslongextra@begintab
16532 }%
16533 {%
```

```

16534     \glslongextraNameDescTabularFooter
16535     \end{tabular}%
16536   }%
16537 \renewcommand*{\glossaryheader}{\glslongextraNameDescTabularHeader}%
16538 \else
16539   \renewenvironment{theglossary}%
16540   {%
16541     \glspatchLToutput
16542     \glslongextraSetDescWidth
16543     \edef\@glslongextra@begintab{%
16544       \noexpand\begin{longtable}{%
16545         \expandonce\glslongextraNameAlign
16546         \expandonce\glslongextraDescAlign}}%
16547       \glslongextra@begintab
16548     }%
16549     {\end{longtable}}%
16550 \renewcommand*{\glossaryheader}{\glslongextraNameDescHeader}%
16551 \fi
16552 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{2}{##1}}%
16553 \renewcommand{\glossentry}[2]{%
16554   \glslongextraNameFmt{##1} %
16555   \glslongextraDescFmt{##1}\tabularnewline
16556 }%
16557 \renewcommand{\subglossentry}[3]{%
16558   \glslongextraSubNameFmt{##1}{##2}%
16559   &
16560   \glslongextraSubDescFmt{##1}{##2}%
16561   \tabularnewline
16562 }%
16563 \ifglsnogroupskip
16564   \renewcommand*{\glsgroupskip}{}%
16565 \else
16566   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16567 \fi
16568 }

```

cLocationHeader

```

16569 \newcommand{\glslongextraNameDescLocationHeader}{%
16570   \glslongextraNameDescLocationTabularHeader\endhead
16571   \glslongextraNameDescLocationTabularFooter\endfoot
16572 }

```

onTabularHeader

```

16573 \newcommand{\glslongextraNameDescLocationTabularHeader}{%
16574   \toprule
16575   \glslongextraHeaderFmt\entryname %
16576   \glslongextraHeaderFmt\descriptionname %
16577   \glslongextraHeaderFmt\pagelistname\tabularnewline
16578   \midrule

```

```

16579 }

onTabularFooter
16580 \newcommand{\glslongextraNameDescLocationTabularFooter}{%
16581   \bottomrule
16582 }

g-name-desc-loc Three columns: name, description and location list.
16583 \newglossarystyle{long-name-desc-loc}{%
16584 {%
16585   \ifGlsLongExtraUseTabular
16586     \renewenvironment{theglossary}{%
16587       {%
16588         \glslongextraLocSetDescWidth
16589         \edef\@glslongextra@begintab{%
16590           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16591             \expandonce\glslongextraNameAlign
16592             \expandonce\glslongextraDescAlign
16593             \expandonce\glslongextraLocationAlign
16594           }{%
16595             \glslongextra@begintab
16596           }{%
16597             {%
16598               \glslongextraNameDescLocationTabularFooter
16599               \end{tabular}}{%
16600             }{%
16601             \renewcommand*\glossaryheader{\glslongextraNameDescLocationTabularHeader}{%
16602           \else
16603             \renewenvironment{theglossary}{%
16604               {%
16605                 \glspatchLToutput
16606                 \glslongextraLocSetDescWidth
16607                 \edef\@glslongextra@begintab{%
16608                   \noexpand\begin{longtable}{%
16609                     \expandonce\glslongextraNameAlign
16610                     \expandonce\glslongextraDescAlign
16611                     \expandonce\glslongextraLocationAlign
16612                   }{%
16613                     \glslongextra@begintab
16614                   }{%
16615                     {\end{longtable}}{%
16616                     \renewcommand*\glossaryheader{\glslongextraNameDescLocationHeader}{%
16617                       \fi
16618                     \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}{%
16619                     \renewcommand{\glossentry}[2]{%
16620                       \glslongextraNameFmt{##1} &
16621                       \glslongextraDescFmt{##1} &
16622                       \glslongextraLocationFmt{##1}{##2}\tabularnewline
16623                     }{%

```

```

16624 \renewcommand{\subglossentry}[3]{%
16625   \glslongextraSubNameFmt{##1}{##2}&
16626   \glslongextraSubDescFmt{##1}{##2}&
16627   \glslongextraSubLocationFmt{##1}{##2}{##3}%
16628   \tabularnewline
16629 }%
16630 \ifglsnogroupskip
16631   \renewcommand*{\glsgroupskip}{}%
16632 \else
16633   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16634 \fi
16635 }

```

aDescNameHeader

```

16636 \newcommand{\glslongextraDescNameHeader}{%
16637   \glslongextraDescNameTabularHeader\endhead
16638   \glslongextraDescNameTabularFooter\endfoot
16639 }

```

meTabularHeader

```

16640 \newcommand{\glslongextraDescNameTabularHeader}{%
16641   \toprule
16642   \glslongextraHeaderFmt\descriptionname&
16643   \glslongextraHeaderFmt\entryname \tabularnewline
16644   \midrule
16645 }

```

meTabularFooter

```

16646 \newcommand{\glslongextraDescNameTabularFooter}{%
16647   \bottomrule
16648 }

```

long-desc-name Like name-desc but swaps the columns.

```

16649 \newglossarystyle{long-desc-name}{%
16650 }%
16651 \ifGlsLongExtraUseTabular
16652 \renewenvironment{theglossary}{%
16653 }%
16654   \glslongextraSetDescWidth
16655   \edef\@glslongextra@begintab{%
16656     \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16657       \expandonce\glslongextraDescAlign
16658       \expandonce\glslongextraNameAlign}}%
16659   \@\glslongextra@begintab
16660 }%
16661 }%
16662   \glslongextraDescNameTabularFooter
16663   \end{tabular}%
16664 }%

```

```

16665 \renewcommand{\glossaryheader}{\glslongextraDescNameTabularHeader}%
16666 \else
16667 \renewenvironment{theglossary}%
16668 {%
16669   \glspatchLToutput
16670   \glslongextraSetDescWidth
16671   \edef\@glslongextra@begintab{%
16672     \noexpand\begin{longtable}{%
16673       \expandonce\glslongextraDescAlign
16674       \expandonce\glslongextraNameAlign}}%
16675     \@glslongextra@begintab
16676   }%
16677   {\end{longtable}}%
16678 \renewcommand{\glossaryheader}{\glslongextraDescNameHeader}%
16679 \fi
16680 \renewcommand{\glsgroupheading}[1]{\glslongextraGroupHeading{2}{##1}}%
16681 \renewcommand{\glossentry}[2]{%
16682   \glslongextraDescFmt{##1} &
16683   \glslongextraNameFmt{##1}\tabularnewline
16684 }%
16685 \renewcommand{\subglossentry}[3]{%
16686   \glslongextraSubDescFmt{##1}{##2} &
16687   \glslongextraSubNameFmt{##1}{##2}\tabularnewline
16688 }%
16689 \ifglsnogroupskip
16690   \renewcommand{\glsgroupskip}{}%
16691 \else
16692   \renewcommand{\glsgroupskip}{\glspenaltygroupskip}%
16693 \fi
16694 }

```

nDescNameHeader

```

16695 \newcommand{\glslongextraLocationDescNameHeader}%
16696   \glslongextraLocationDescNameTabularHeader\endhead
16697   \glslongextraLocationDescNameTabularFooter\endfoot
16698 }

```

meTabularHeader

```

16699 \newcommand{\glslongextraLocationDescNameTabularHeader}%
16700   \toprule
16701   \glslongextraHeaderFmt\pagelistname&
16702   \glslongextraHeaderFmt\descriptionname&
16703   \glslongextraHeaderFmt\entryname \tabularnewline
16704   \midrule
16705 }

```

meTabularFooter

```

16706 \newcommand{\glslongextraLocationDescNameTabularFooter}%
16707   \bottomrule

```

```

16708 }

g-loc-desc-name Three columns: location, description and name.
16709 \newglossarystyle{long-loc-desc-name}{%
16710 {%
16711   \ifGlsLongExtraUseTabular
16712   {%
16713     \glslongextraLocSetDescWidth
16714     \edef\@glslongextra@begintab{%
16715       \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16716         \expandonce\glslongextraLocationAlign
16717         \expandonce\glslongextraDescAlign
16718         \expandonce\glslongextraNameAlign}}%
16719     \@glslongextra@begintab
16720   }%
16721   {%
16722     \glslongextraLocationDescNameTabularFooter
16723     \end{tabular}%
16724   }%
16725   \renewcommand*\glossaryheader{\glslongextraLocationDescNameTabularHeader}%
16726 \else
16727 \renewenvironment{theglossary}{%
16728   {%
16729     \glspatchLToutput
16730     \glslongextraLocSetDescWidth
16731     \edef\@glslongextra@begintab{%
16732       \noexpand\begin{longtable}{%
16733         \expandonce\glslongextraLocationAlign
16734         \expandonce\glslongextraDescAlign
16735         \expandonce\glslongextraNameAlign}}%
16736     \@glslongextra@begintab
16737   }%
16738   {\end{longtable}}%
16739   \renewcommand*\glossaryheader{\glslongextraLocationDescNameHeader}%
16740 \fi
16741 \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}%
16742 \renewcommand{\glossentry}[2]{%
16743   \glslongextraLocationFmt{##1}{##2} %
16744   \glslongextraDescFmt{##1} %
16745   \glslongextraNameFmt{##1}\tabularnewline
16746 }%
16747 \renewcommand{\subglossentry}[3]{%
16748   \glslongextraSubLocationFmt{##1}{##2}{##3} %
16749   \glslongextraSubDescFmt{##1}{##2} %
16750   \glslongextraSubNameFmt{##1}{##2}\tabularnewline
16751 }%
16752 \ifglsnogroupskip
16753   \renewcommand*\glsgroupskip{}%
16754 \else

```

```

16755     \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16756     \fi
16757 }

meDescSymHeader
16758 \newcommand{\glslongextraNameDescSymHeader}{%
16759   \glslongextraNameDescSymTabularHeader\endhead
16760   \glslongextraNameDescSymTabularFooter\endfoot
16761 }

ymTabularHeader
16762 \newcommand{\glslongextraNameDescSymTabularHeader}{%
16763   \toprule
16764   \glslongextraHeaderFmt\entryname &
16765   \glslongextraHeaderFmt\descriptionname &
16766   \glslongextraHeaderFmt\symbolname\tabularnewline
16767   \midrule
16768 }

ymTabularFooter
16769 \newcommand{\glslongextraNameDescSymTabularFooter}{%
16770   \bottomrule
16771 }

```

g-name-desc-sym Three column style with symbol in the third column.

```

16772 \newglossarystyle{long-name-desc-sym}{%
16773 {%
16774   \ifGlsLongExtraUseTabular
16775     \renewenvironment{theglossary}{%
16776       {%
16777         \glslongextraSymSetDescWidth
16778         \edef\@glslongextra@begintab{%
16779           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16780             \expandonce\glslongextraNameAlign
16781             \expandonce\glslongextraDescAlign
16782             \expandonce\glslongextraSymbolAlign
16783           }{}}%
16784         \@glslongextra@begintab
16785       }%
16786       {%
16787         \glslongextraNameDescSymTabularFooter
16788         \end{tabular}%
16789       }%
16790     \renewcommand*{\glossaryheader}{\glslongextraNameDescSymTabularHeader}%
16791   \else
16792     \renewenvironment{theglossary}{%
16793       {%
16794         \glspatchLToutput
16795         \glslongextraSymSetDescWidth

```

```

16796     \edef\@glslongextra@begintab{%
16797         \noexpand\begin{longtable}{%
16798             \expandonce\glslongextraNameAlign
16799             \expandonce\glslongextraDescAlign
16800             \expandonce\glslongextraSymbolAlign
16801         }{}}%
16802     \glslongextra@begintab
16803     }%
16804     {\end{longtable}}%
16805     \renewcommand*\glossaryheader{\glslongextraNameDescSymHeader}%
16806     \fi
16807     \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}%
16808     \renewcommand*\glossentry[2]{%
16809         \glslongextraNameFmt{##1} %
16810         \glslongextraDescFmt{##1} %
16811         \glslongextraSymbolFmt{##1}\tabularnewline
16812     }%
16813     \renewcommand*\subglossentry[3]{%
16814         \glslongextraSubNameFmt{##1}{##2} %
16815         \glslongextraSubDescFmt{##1}{##2} %
16816         \glslongextraSubSymbolFmt{##1}{##2}%
16817         \tabularnewline
16818     }%
16819     \ifglsnogroupskip
16820         \renewcommand*\glsgroupskip{}%
16821     \else
16822         \renewcommand*\glsgroupskip{\glspenaltygroupskip}%
16823     \fi
16824 }

```

mLocationHeader

```

16825 \newcommand{\glslongextraNameDescSymLocationHeader}{%
16826     \glslongextraNameDescSymLocationTabularHeader\endhead
16827     \glslongextraNameDescSymLocationTabularFooter\endfoot
16828 }

```

onTabularHeader

```

16829 \newcommand{\glslongextraNameDescSymLocationTabularHeader}{%
16830     \toprule
16831     \glslongextraHeaderFmt\entryname %
16832     \glslongextraHeaderFmt\descriptionname %
16833     \glslongextraHeaderFmt\symbolname %
16834     \glslongextraHeaderFmt\pagelistname\tabularnewline
16835     \midrule
16836 }

```

onTabularFooter

```

16837 \newcommand{\glslongextraNameDescSymLocationTabularFooter}{%
16838     \bottomrule

```

```

16839 }

me-desc-sym-loc Four columns: name, description and location
16840 \newglossarystyle{long-name-desc-sym-loc}%
16841 {%
16842   \ifGlsLongExtraUseTabular
16843     \renewenvironment{theglossary}%
16844     {%
16845       \glslongextraSymLocSetDescWidth
16846       \edef\@glslongextra@begintab{%
16847         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16848           \expandonce\glslongextraNameAlign
16849           \expandonce\glslongextraDescAlign
16850           \expandonce\glslongextraSymbolAlign
16851           \expandonce\glslongextraLocationAlign
16852         }{}}%
16853       \@glslongextra@begintab
16854     }%
16855     {%
16856       \glslongextraNameDescSymLocationTabularFooter
16857       \end{tabular}%
16858     }%
16859     \renewcommand*{\glossaryheader}{\glslongextraNameDescSymLocationTabularHeader}%
16860   \else
16861     \renewenvironment{theglossary}%
16862     {%
16863       \glspatchLToutput
16864       \glslongextraSymLocSetDescWidth
16865       \edef\@glslongextra@begintab{%
16866         \noexpand\begin{longtable}{%
16867           \expandonce\glslongextraNameAlign
16868           \expandonce\glslongextraDescAlign
16869           \expandonce\glslongextraSymbolAlign
16870           \expandonce\glslongextraLocationAlign
16871         }{}}%
16872       \@glslongextra@begintab
16873     }%
16874     {\end{longtable}}%
16875     \renewcommand*{\glossaryheader}{\glslongextraNameDescSymLocationHeader}%
16876   \fi
16877 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{4}{##1}}%
16878 \renewcommand{\glossentry}[2]{%
16879   \glslongextraNameFmt{##1} &
16880   \glslongextraDescFmt{##1} &
16881   \glslongextraSymbolFmt{##1}&
16882   \glslongextraLocationFmt{##1}{##2}\tabularnewline
16883 }%
16884 \renewcommand{\subglossentry}[3]{%
16885   \glslongextraSubNameFmt{##1}{##2} &

```

```

16886     \glslongextraSubDescFmt{##1}{##2} &
16887     \glslongextraSubSymbolFmt{##1}{##2}&
16888     \glslongextraSubLocationFmt{##1}{##2}{##3}%
16889     \tabularnewline
16890 }%
16891 \ifglsnogroupskip
16892   \renewcommand*\glsgroupskip{}%
16893 \else
16894   \renewcommand*\glsgroupskip{\glspenaltygroupskip}%
16895 \fi
16896 }

meSymDescHeader
16897 \newcommand{\glslongextraNameSymDescHeader}{%
16898   \glslongextraNameSymDescTabularHeader\endhead
16899   \glslongextraNameSymDescTabularFooter\endfoot
16900 }

scTabularHeader
16901 \newcommand{\glslongextraNameSymDescTabularHeader}{%
16902   \toprule
16903   \glslongextraHeaderFmt\entryname &
16904   \glslongextraHeaderFmt\symbolname &
16905   \glslongextraHeaderFmt\descriptionname\tabularnewline
16906   \midrule
16907 }

scTabularFooter
16908 \newcommand{\glslongextraNameSymDescTabularFooter}{%
16909   \bottomrule
16910 }

g-name-sym-desc Three column style with symbol in the second column.
16911 \newglossarystyle{long-name-sym-desc}{%
16912 }%
16913   \ifGlsLongExtraUseTabular
16914     \renewenvironment{theglossary}{%
16915       {%
16916         \glslongextraSymSetDescWidth
16917         \edef\@glslongextra@begintab{%
16918           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16919             \expandonce\glslongextraNameAlign
16920             \expandonce\glslongextraSymbolAlign
16921             \expandonce\glslongextraDescAlign
16922           }{}}%
16923         \@glslongextra@begintab
16924       }%
16925       {%
16926         \glslongextraNameSymDescTabularFooter

```

```

16927     \end{tabular}%
16928   }%
16929   \renewcommand*{\glossaryheader}{\glslongextraNameSymDescTabularHeader}%
16930 \else
16931 \renewenvironment{theglossary}%
16932 {%
16933   \glspatchLToutput
16934   \glslongextraSymSetDescWidth
16935   \edef\@glslongextra@begintab{%
16936     \noexpand\begin{longtable}{%
16937       \expandonce\glslongextraNameAlign
16938       \expandonce\glslongextraSymbolAlign
16939       \expandonce\glslongextraDescAlign
16940     }}%
16941   \glslongextra@begintab
16942 }%
16943 { \end{longtable} }%
16944 \renewcommand*{\glossaryheader}{\glslongextraNameSymDescHeader}%
16945 \fi
16946 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}}%
16947 \renewcommand{\glossentry}[2]{%
16948   \glslongextraNameFmt{##1} &
16949   \glslongextraSymbolFmt{##1} &
16950   \glslongextraDescFmt{##1}\tabularnewline
16951 }%
16952 \renewcommand{\subglossentry}[3]{%
16953   \glslongextraSubNameFmt{##1}{##2} &
16954   \glslongextraSubSymbolFmt{##1}{##2} &
16955   \glslongextraSubDescFmt{##1}{##2}\tabularnewline
16956 }%
16957 \ifglsnogroupskip
16958   \renewcommand*{\glsgroupskip}{}%
16959 \else
16960   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16961 \fi
16962 }

```

cLocationHeader

```

16963 \newcommand{\glslongextraNameSymDescLocationHeader}{%
16964   \glslongextraNameSymDescLocationTabularHeader\endhead
16965   \glslongextraNameSymDescLocationTabularFooter\endfoot
16966 }

```

onTabularHeader

```

16967 \newcommand{\glslongextraNameSymDescLocationTabularHeader}{%
16968   \toprule
16969   \glslongextraHeaderFmt\entryname &
16970   \glslongextraHeaderFmt\symbolname &
16971   \glslongextraHeaderFmt\descriptionname &

```

```

16972 \glslongextraHeaderFmt\pagelistname\tabularnewline
16973 \midrule
16974 }

onTabularFooter
16975 \newcommand{\glslongextraNameSymDescLocationTabularFooter}{%
16976 \bottomrule
16977 }

```

me-sym-desc-loc Four column style with symbol in the second column.

```

16978 \newglossarystyle{long-name-sym-desc-loc}%
16979 {%
16980   \ifGlsLongExtraUseTabular
16981     \renewenvironment{theglossary}%
16982     {%
16983       \glslongextraSymLocSetDescWidth
16984       \edef\@glslongextra@begintab{%
16985         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16986           \expandonce\glslongextraNameAlign
16987           \expandonce\glslongextraSymbolAlign
16988           \expandonce\glslongextraDescAlign
16989           \expandonce\glslongextraLocationAlign
16990         }{}}%
16991       \glslongextra@begintab
16992     }%
16993     {%
16994       \glslongextraNameSymDescLocationTabularFooter
16995       \end{tabular}%
16996     }%
16997     \renewcommand*\glossaryheader{\glslongextraNameSymDescLocationTabularHeader}%
16998 \else
16999   \renewenvironment{theglossary}%
17000   {%
17001     \glspatchLToutput
17002     \glslongextraSymLocSetDescWidth
17003     \edef\@glslongextra@begintab{%
17004       \noexpand\begin{longtable}[%}
17005         \expandonce\glslongextraNameAlign
17006         \expandonce\glslongextraSymbolAlign
17007         \expandonce\glslongextraDescAlign
17008         \expandonce\glslongextraLocationAlign
17009       }{}}%
17010     \glslongextra@begintab
17011   }%
17012   {\end{longtable}%
17013   \renewcommand*\glossaryheader{\glslongextraNameSymDescLocationHeader}%
17014 \fi
17015 \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{4}{##1}}%
17016 \renewcommand{\glossentry}[2]{%

```

```

17017     \glslongextraNameFmt{##1} &
17018     \glslongextraSymbolFmt{##1} &
17019     \glslongextraDescFmt{##1} &
17020     \glslongextraLocationFmt{##1}{##2}\tabularnewline
17021 }%
17022 \renewcommand{\subglossentry}[3]{%
17023     \glslongextraSubNameFmt{##1}{##2} &
17024     \glslongextraSubSymbolFmt{##1}{##2} &
17025     \glslongextraSubDescFmt{##1}{##2} &
17026     \glslongextraSubLocationFmt{##1}{##2}{##3}\tabularnewline
17027 }%
17028 \ifglsnogroupskip
17029     \renewcommand*{\glsgroupskip}{}%
17030 \else
17031     \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
17032 \fi
17033 }

mDescNameHeader
17034 \newcommand{\glslongextraSymDescNameHeader}{%
17035 \glslongextraSymDescNameTabularHeader\endhead
17036 \glslongextraSymDescNameTabularFooter\endfoot
17037 }

meTabularHeader
17038 \newcommand{\glslongextraSymDescNameTabularHeader}{%
17039 \toprule
17040 \glslongextraHeaderFmt\symbolname &
17041 \glslongextraHeaderFmt\descriptionname &
17042 \glslongextraHeaderFmt\entryname\tabularnewline
17043 \midrule
17044 }

meTabularFooter
17045 \newcommand{\glslongextraSymDescNameTabularFooter}{%
17046 \bottomrule
17047 }

g-sym-desc-name Three column style with symbol in the first column, description in the second and name in the third.

```

```

17048 \newglossarystyle{long-sym-desc-name}{%
17049 }%
17050 \ifGlsLongExtraUseTabular
17051 \renewenvironment{theglossary}{%
17052 }%
17053 \glslongextraSymSetDescWidth
17054 \edef\@glslongextra@begintab{%
17055 \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
17056 \expandonce\glslongextraSymbolAlign

```

```

17057      \expandonce\glslongextraDescAlign
17058      \expandonce\glslongextraNameAlign
17059  } } %
17060  \glslongextra@begintab
17061 } %
17062 { %
17063  \glslongextraSymDescNameTabularFooter
17064  \end{tabular} %
17065 } %
17066 \renewcommand*{\glossaryheader}{\glslongextraSymDescNameTabularHeader} %
17067 \else
17068 \renewenvironment{theglossary}%
17069 { %
17070  \glspatchLToutput
17071  \glslongextraSymSetDescWidth
17072  \edef\@glslongextra@begintab{%
17073   \noexpand\begin{longtable}{%
17074     \expandonce\glslongextraSymbolAlign
17075     \expandonce\glslongextraDescAlign
17076     \expandonce\glslongextraNameAlign
17077   } } %
17078   \glslongextra@begintab
17079 } %
17080 { \end{longtable} } %
17081 \renewcommand*{\glossaryheader}{\glslongextraSymDescNameHeader} %
17082 \fi
17083 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}} %
17084 \renewcommand{\glossentry}[2]{%
17085   \glslongextraSymbolFmt{##1} &
17086   \glslongextraDescFmt{##1} &
17087   \glslongextraNameFmt{##1}\tabularnewline
17088 } %
17089 \renewcommand{\subglossentry}[3]{%
17090   \glslongextraSubSymbolFmt{##1}{##2} &
17091   \glslongextraSubDescFmt{##1}{##2} &
17092   \glslongextraSubNameFmt{##1}{##2}\tabularnewline
17093 } %
17094 \ifglsnogroupskip
17095 \renewcommand*{\glsgroupskip}{} %
17096 \else
17097 \renewcommand*{\glsgroupskip}{\glspenaltygroupskip} %
17098 \fi
17099 }

mDescNameHeader
17100 \newcommand{\glslongextraLocationSymDescNameHeader}{%
17101 \glslongextraLocationSymDescNameTabularHeader\endhead
17102 \glslongextraLocationSymDescNameTabularFooter\endfoot
17103 }

```

```

meTabularHeader
17104 \newcommand{\glslongextraLocationSymDescNameTabularHeader}{%
17105   \toprule
17106   \glslongextraHeaderFmt\pagelistname &
17107   \glslongextraHeaderFmt\symbolname &
17108   \glslongextraHeaderFmt\descriptionname &
17109   \glslongextraHeaderFmt\entryname\tabularnewline
17110   \midrule
17111 }

meTabularFooter
17112 \newcommand{\glslongextraLocationSymDescNameTabularFooter}{%
17113   \bottomrule
17114 }

c-sym-desc-name Four column style with location list, symbol, description and name.
17115 \newglossarystyle{long-loc-sym-desc-name}{%
17116 {%
17117   \ifGlsLongExtraUseTabular
17118     \renewenvironment{theglossary}{%
17119       {%
17120         \glslongextraSymLocSetDescWidth
17121         \edef\@glslongextra@begintab{%
17122           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
17123             \expandonce\glslongextraLocationAlign
17124             \expandonce\glslongextraSymbolAlign
17125             \expandonce\glslongextraDescAlign
17126             \expandonce\glslongextraNameAlign
17127           }{}}%
17128         \@glslongextra@begintab
17129       }%
17130       {%
17131         \glslongextraLocationSymDescNameTabularFooter
17132         \end{tabular}%
17133       }%
17134     \renewcommand*\glossaryheader{\glslongextraLocationSymDescNameTabularHeader}%
17135   \else
17136     \renewenvironment{theglossary}{%
17137       {%
17138         \glspatchLToutput
17139         \glslongextraSymLocSetDescWidth
17140         \edef\@glslongextra@begintab{%
17141           \noexpand\begin{longtable}{{%
17142             \expandonce\glslongextraLocationAlign
17143             \expandonce\glslongextraSymbolAlign
17144             \expandonce\glslongextraDescAlign
17145             \expandonce\glslongextraNameAlign
17146           }{}}%
17147         \@glslongextra@begintab

```

```

17148    }%
17149    {\end{longtable}}%
17150    \renewcommand*{\glossaryheader}{\glslongextraLocationSymDescNameHeader}%
17151    \fi
17152    \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{4}{##1}}%
17153    \renewcommand{\glossentry}[2]{%
17154        \glslongextraLocationFmt{##1}{##2} &
17155        \glslongextraSymbolFmt{##1} &
17156        \glslongextraDescFmt{##1} &
17157        \glslongextraNameFmt{##1}\tabularnewline
17158    }%
17159    \renewcommand{\subglossentry}[3]{%
17160        \glslongextraSubLocationFmt{##1}{##2}{##3} &
17161        \glslongextraSubSymbolFmt{##1}{##2} &
17162        \glslongextraSubDescFmt{##1}{##2} &
17163        \glslongextraSubNameFmt{##1}{##2}\tabularnewline
17164    }%
17165    \ifglsnogroupskip
17166        \renewcommand*{\glsgroupskip}{}%
17167    \else
17168        \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
17169    \fi
17170 }

```

scSymNameHeader

```

17171 \newcommand{\glslongextraDescSymNameHeader}{%
17172 \glslongextraDescSymNameTabularHeader\endhead
17173 \glslongextraDescSymNameTabularFooter\endfoot
17174 }

```

meTabularHeader

```

17175 \newcommand{\glslongextraDescSymNameTabularHeader}{%
17176 \toprule
17177 \glslongextraHeaderFmt\descriptionname &
17178 \glslongextraHeaderFmt\symbolname &
17179 \glslongextraHeaderFmt\entryname\tabularnewline
17180 \midrule
17181 }

```

meTabularFooter

```

17182 \newcommand{\glslongextraDescSymNameTabularFooter}{%
17183 \bottomrule
17184 }

```

g-desc-sym-name Three column style with description in the first column, symbol in the second and name in the third.

```

17185 \newglossarystyle{long-desc-sym-name}{%
17186 {%
17187     \ifGlsLongExtraUseTabular

```

```

17188 \renewenvironment{theglossary}%
17189 {%
17190   \glslongextraSymSetDescWidth
17191   \edef\@glslongextra@begintab{%
17192     \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
17193       \expandonce\glslongextraDescAlign
17194       \expandonce\glslongextraSymbolAlign
17195       \expandonce\glslongextraNameAlign
17196     }{}}%
17197   \glslongextra@begintab
17198 }%
17199 {%
17200   \glslongextraDescSymNameTabularFooter
17201   \end{tabular}%
17202 }%
17203 \renewcommand*\glossaryheader{\glslongextraDescSymNameTabularHeader}%
17204 \else
17205 \renewenvironment{theglossary}%
17206 {%
17207   \glspatchLToutput
17208   \glslongextraSymSetDescWidth
17209   \edef\@glslongextra@begintab{%
17210     \noexpand\begin{longtable}{%
17211       \expandonce\glslongextraDescAlign
17212       \expandonce\glslongextraSymbolAlign
17213       \expandonce\glslongextraNameAlign
17214     }{}}%
17215   \glslongextra@begintab
17216 }%
17217 {\end{longtable}}%
17218 \renewcommand*\glossaryheader{\glslongextraDescSymNameHeader}%
17219 \fi
17220 \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}%
17221 \renewcommand{\glossentry}[2]{%
17222   \glslongextraDescFmt{##1} &
17223   \glslongextraSymbolFmt{##1} &
17224   \glslongextraNameFmt{##1}\tabularnewline
17225 }%
17226 \renewcommand{\subglossentry}[3]{%
17227   \glslongextraSubDescFmt{##1}{##2} &
17228   \glslongextraSubSymbolFmt{##1}{##2} &
17229   \glslongextraSubNameFmt{##1}{##2}\tabularnewline
17230 }%
17231 \ifglsnogroupskip
17232   \renewcommand*\glsgroupskip{}%
17233 \else
17234   \renewcommand*\glsgroupskip{\glspenaltygroupskip}%
17235 \fi
17236 }

```

```

scSymNameHeader
17237 \newcommand{\glslongextraLocationDescSymNameHeader}{%
17238   \glslongextraLocationDescSymNameTabularHeader\endhead
17239   \glslongextraLocationDescSymNameTabularFooter\endfoot
17240 }

meTabularHeader
17241 \newcommand{\glslongextraLocationDescSymNameTabularHeader}{%
17242   \toprule
17243   \glslongextraHeaderFmt\pagelistname &
17244   \glslongextraHeaderFmt\descriptionname &
17245   \glslongextraHeaderFmt\symbolname &
17246   \glslongextraHeaderFmt\entryname\tabularnewline
17247   \midrule
17248 }

meTabularFooter
17249 \newcommand{\glslongextraLocationDescSymNameTabularFooter}{%
17250   \bottomrule
17251 }

c-desc-sym-name Four column style with location list, description, symbol and name.
17252 \newglossarystyle{long-loc-desc-sym-name}%
17253 {%
17254   \ifGlsLongExtraUseTabular
17255     \renewenvironment{theglossary}%
17256     {%
17257       \glslongextraSymLocSetDescWidth
17258       \edef\@glslongextra@begintab{%
17259         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
17260           \expandonce\glslongextraLocationAlign
17261           \expandonce\glslongextraDescAlign
17262           \expandonce\glslongextraSymbolAlign
17263           \expandonce\glslongextraNameAlign
17264         }{}}%
17265       \@glslongextra@begintab
17266     }%
17267     {%
17268       \glslongextraLocationDescSymNameTabularFooter
17269       \end{tabular}%
17270     }%
17271     \renewcommand*\{\glossaryheader}{\glslongextraLocationDescSymNameTabularHeader}%
17272   \else
17273     \renewenvironment{theglossary}%
17274     {%
17275       \glspatchLToutput
17276       \glslongextraSymLocSetDescWidth
17277       \edef\@glslongextra@begintab{%
17278         \noexpand\begin{longtable}{%
```

```

17279      \expandonce\glslongextraLocationAlign
17280      \expandonce\glslongextraDescAlign
17281      \expandonce\glslongextraSymbolAlign
17282      \expandonce\glslongextraNameAlign
17283  } } %
17284  \glslongextra@begintab
17285 } %
17286 { \end{longtable} } %
17287 \renewcommand*{\glossaryheader}{\glslongextraLocationDescSymNameHeader}%
17288 \fi
17289 \renewcommand*{\glsgrouphheading}[1]{\glslongextraGroupHeading{4}{##1}}%
17290 \renewcommand{\glossentry}[2]{%
17291   \glslongextraLocationFmt{##1}{##2} &
17292   \glslongextraDescFmt{##1} &
17293   \glslongextraSymbolFmt{##1} &
17294   \glslongextraNameFmt{##1}\tabularnewline
17295 } %
17296 \renewcommand{\subglossentry}[3]{%
17297   \glslongextraSubLocationFmt{##1}{##2}{##3} &
17298   \glslongextraSubDescFmt{##1}{##2} &
17299   \glslongextraSubSymbolFmt{##1}{##2} &
17300   \glslongextraSubNameFmt{##1}{##2}\tabularnewline
17301 } %
17302 \ifglsnogroupskip
17303   \renewcommand*{\glsgroupskip}{}%
17304 \else
17305   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
17306 \fi
17307 }

```

5 topic styles (glossary-topic.sty)

5.1 Package Initialisation and Options

Provides “topic” styles where top-level entries are considered a topic.

```
17308 \NeedsTeXFormat{LaTeX2e}
17309 \ProvidesPackage{glossary-topic}[2021/09/20 v1.46 (NLCT)]
```

Load required package.

```
17310 \RequirePackage{multicol}
```

The top-level entries act like headers. If the top-level entry has a description it's placed below the name.

topic

```
17311 \newglossarystyle{topic}{%
17312   \renewenvironment{theglossary}%
17313   {%
17314     \glstopicInit
17315     \def\glstopic@prechildren{}%
17316     \def\glstopic@prevlevel{-1}%
17317   }%
17318   {\par}%
17319   \renewcommand*\glossaryheader{}%
17320   \renewcommand*\glsgroupheading[1]{%
17321     \def\glstopic@prevlevel{-1}%
17322     \glstopicGroupHeading{\#1}%
17323   }%
17324   \renewcommand*\glossentry[2]{%
17325     \hangindent0pt\relax
17326     \parindent\glstopicParIndent\relax
17327     \glstopicItem{\#1}{\#2}}%
```

If there isn't a description, penalise a page break.

```
17328   \ifglshasdesc{\#1}%
17329   {%
17330     \def\glstopic@prechildren{}%
17331   }%
17332   {%
17333     \def\glstopic@prechildren{\nopagebreak}%
17334   }%
17335 }%
17336 \renewcommand*\subglossentry[3]{%
17337   \ifnum\glstopic@prevlevel=0\relax\glstopic@prechildren\fi
17338   \def\glstopic@prevlevel{\#1}%

```

Grouping is added to scope the effect of \everypar.

```
17339  \begingroup
17340  \glstopicAssignSubIndent{##1}%
17341  \glstopicSubItem{##1}{##2}{##3}%
17342  \par
17343  \endgroup
17344 }%
17345 \renewcommand*\glsgroupskip{}%
17346 }
```

\glstopicGroupHeading

```
\glstopicGroupHeading{\langle group_label \rangle}
```

May be redefined if letter group headings are required. For example:

```
\renewcommand*\glstopicGroupHeading[1]{%
  \glsxtrgetgroup{#1}{\thisgrp{}}%
  \section*\thisgrp{}%
}
17347 \newcommand*\glstopicGroupHeading[1]{}
```

\glstopicItem

```
\glstopicItem{\langle label \rangle}{\langle location_list \rangle}
```

```
17348 \newcommand*\glstopicItem[2]{%
17349  \glspar\glstopicPreSkip\glspar\noindent
17350  \glstopicMarker{#1}%
17351  \glstopicTitleFont
17352  {%
17353    \glsentryitem{#1}\glstarget{#1}{\glstopicTitle{#1}}%
17354  }%
17355  \ifglshasdesc{#1}%
17356  {\glspar\nobreak\glstopicMidSkip\glspar\nobreak
17357    \afterheading\glstopicDesc{#1}\glspar\glstopicPostSkip}%
17358  {\glspar\nobreak\glstopicPostSkip}%
17359  \glstopicLoc{#1}{#2}%
17360 }
```

\glstopicMarker May be used to insert a bookmark etc if required.

```
17361 \newcommand*\glstopicMarker[1]{}
```

\glstopicName

```
17362 \newcommand*\glstopicTitle[1]{\Glossentryname{#1}%
17363  \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{}%
17364 }
```

```

topicTitleFont
 17365 \newcommand*{\glstopicTitleFont}[1]{\textbf{\large #1}}


\glstopicDesc
 17366 \newcommand*{\glstopicDesc}[1]{\Glossentrydesc{#1}\glspostdescription}

\glstopicLoc
 17367 \newcommand*{\glstopicLoc}[2]{}

topicParIndent
 17368 \newlength\glstopicParIndent
 17369 \setlength\glstopicParIndent{20pt}

topicSubIndent
 17370 \newlength\glstopicSubIndent
 17371 \setlength\glstopicSubIndent{20pt}

\glstopicInit
 17372 \newcommand{\glstopicInit}{} 

AssignSubIndent
  \glstopicAssignSubIndent{\langle level \rangle}

Used to set the indentation for sub-levels.

17373 \newcommand*{\glstopicAssignSubIndent}[1]{%
 17374   \par
 17375   \parindent\dimexpr#1\glstopicSubIndent-\glstopicSubIndent\relax
 17376   \glstopicAssignWidest{#1}%
 17377   \glstopicsubitemhangindent=\dimexpr\parindent+\glstopicwidest\relax
 17378   \hangindent\glstopicsubitemhangindent\relax
 17379   \everypar{\hangindent\glstopicsubitemhangindent\relax
 17380     \parindent\dimexpr\glstopicSubItemParIndent+\glstopicsubitemhangindent\relax}%
 17381 }

bitemhangindent
 17382 \newlength\glstopicsubitemhangindent

ubItemParIndent
 17383 \newlength\glstopicSubItemParIndent
 17384 \glstopicSubItemParIndent\parindent

\glstopicwidest
 17385 \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.

```
17386 \newcommand*\glstopicAssignWidest[1]{%
17387   \ifcsundef{@glswidestlength\romannumeral#1}%
17388   {%
17389     \ifcsdef{@glswidestname\romannumeral#1}%
17390     {%
17391       \settowidth{\glstopicwidest}{%
17392         \glstopicSubNameFont{\csuse{@glswidestname\romannumeral#1}}%
17393         \glstopicSubItemSep
17394       }%
17395     }%
17396     {\setlength{\glstopicwidest}{0pt}}%
```

Save the value so that it doesn't have to keep being recalculated.

```
17397   \csedef{@glswidestlength\romannumeral#1}{\the\glstopicwidest}%
17398 }%
17399 {\setlength{\glstopicwidest}{\csuse{@glswidestlength\romannumeral#1}}}%
17400 }
```

glstopicPreSkip

```
17401 \newcommand*\glstopicPreSkip{\medskip}
```

glstopicMidSkip

```
17402 \newcommand*\glstopicMidSkip{\smallskip}
```

lstopicPostSkip

```
17403 \newcommand*\glstopicPostSkip{\smallskip}
```

glstopicSubItem

```
\glstopicSubItem{\level}{\label}{\location list}
```

```
17404 \newcommand*\glstopicSubItem[3]{%
17405   \glstopicSubItemBox{#1}{\glstopicSubNameFont{\glsentryitem{#2}}%
17406     \glstarget{#2}{\glossentryname{#2}}}}%
17407   \glstopicSubItemSep
17408 }%
17409 \ifglsassymbol{#2}{(\glosstrysymbol{#2})\space}{}%
17410 \ifglsdesc{#2}{%
17411   {\glossentrydesc{#2}\glspostdescription\glstopicSubPreLocSep}{}%
17412 \glstopicSubLoc{#2}{#3}}%
17413 }
```

```

topicSubItemSep
17414 \newcommand*{\glstopicSubItemSep}{\quad}

topicSubItemBox
\glstopicSubItemBox{\langle level \rangle}{\langle text \rangle}

17415 \newcommand*{\glstopicSubItemBox}[2]{%
17416   \ifdim\glstopicwidest>0pt\relax\makebox[\glstopicwidest][1]{#2}\else#2\fi
17417 }

topicSubNameFont
17418 \newcommand*{\glstopicSubNameFont}[1]{\textbf{#1} }

topicSubPreLocSep
17419 \newcommand*{\glstopicSubPreLocSep}{\space}

\glstopicSubLoc
17420 \newcommand*{\glstopicSubLoc}[2]{#2}

\glstopicCols
17421 \newcommand*{\glstopicCols}{2}

glstopicColsEnv
17422 \newcommand*{\glstopicColsEnv}{multicols}

topicmccols
17423 \newglossarystyle{topicmccols}{%
17424   \renewenvironment{theglossary}{%
17425     {%
17426       \glstopicInit
17427       \def\glstopic@prechildren{}%
17428       \def\glstopic@postchildren{}%
17429       \def\glstopic@prevlevel{-1}%
17430     }%
17431     {%
17432       \ifnum\glstopic@prevlevel>0\relax\glstopic@postchildren\fi
17433       \par
17434     }%
17435     \renewcommand*{\glossaryheader}{%
17436       \renewcommand*{\glsgroupheading}[1]{%
17437         \ifnum\glstopic@prevlevel>0\relax\glstopic@postchildren\fi
17438         \def\glstopic@prevlevel{-1}%
17439         \glstopicGroupHeading{##1}%
17440       }%
17441       \renewcommand{\glossentry}[2]{%

```

```

17442 \ifnum\glstopic@prevlevel>0\relax\glstopic@postchildren\fi
17443 \def\glstopic@prevlevel{0}%
17444 \hangindent0pt\relax
17445 \parindent\glstopicParIndent\relax
17446 \glstopicItem{##1}{##2}%
17447 \ifnum\glstopicCols>1\relax

```

If there isn't a description, penalise a page break.

```

17448 \ifglshasdesc{##1}%
17449 {%
17450   \edef\glstopic@prechildren{%
17451     \noexpand\begin{\glstopicColsEnv}{\glstopicCols}%
17452   }%
17453 }%
17454 {%
17455   \edef\glstopic@prechildren{%
17456     \noexpand\nopagebreak
17457     \noexpand\begin{\glstopicColsEnv}{\glstopicCols}%
17458   }%
17459 }%
17460   \edef\glstopic@postchildren{\noexpand\end{\glstopicColsEnv}}%
17461 \fi
17462 }%
17463 \renewcommand{\subglossentry}[3]{%
17464   \ifnum\glstopic@prevlevel=0\relax\glstopic@prechildren\fi
17465   \def\glstopic@prevlevel{##1}%
17466   \glstopicAssignSubIndent{##1}%
17467   \glstopicSubItem{##1}{##2}{##3}%
17468 }%
17469 \renewcommand*\glsgroupskip{}%
17470 }

```

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

\glsaccessshortpl: new	184	\@cGLSpl: new	121
\glsaccesssymbol: new	181	\@cGLSpl@: new	121
\glsaccesssymbolplural: new	181	\@glsxtr@setentrycountunsetattr:	
\glsaccesstext: new	178	new	116
\glsentryfmt: added check for short ..	73	\cGLS: new	121
\glslongpltok: new	223	\cGLSformat: new	121
\glsshortpltok: new	223	\cGLSpl: new	121
\glsxtr@newabbreviation: fixed family		\cGLSplformat: new	121
name in \setkeys	224	\GlossariesExtraWarningNoLine:	
\glsxtrdiscardperiod: added check		new	19
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