

# **glossaries-extra.sty v1.45: 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}[2020/04/01 v1.45 (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   \edef\@glo@list{\csname glolist@\#\#\!endcsname}%
51   \ifdefstring{\@glo@list}{,}{}%
52   {}%
53   \GlossariesExtraWarning{No entries defined in glossary '\#\!\!'}%
54 }%
55 {}%
56 \for##2:=\@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<sup>A</sup>T<sub>E</sub>X 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     \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
109     \glsxtr@inc@wrglossaryctr{#1}%
110     \@@do@@wrglossary
111     \fi
112   }%
113   \fi
114 \endgroup
115 }
```

index@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 \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 is used, then \glslocref may have been escaped, but this isn't appropriate here.

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

```

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

```

Protect against non-expandable commands occurring in the location.

```

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

```

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

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

```

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

```

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

```

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

```

```

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

```

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

```

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

```

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

```

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

```

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

```

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

```

```

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

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

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

p@recordcounter
255 \newcommand*{\@glsxtr@op@recordcounter}[1]{%
256   \appto{\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}
```

`tting@alsoindex`

```
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}

@cord@only@setup Initialisation code for record=only and record=nameref
325 \newcommand*{\@glsxtr@record@only@setup}{%
326   \def\glsxtr@setup@record{%
327     \glsxtr@autoseeindexfalse
328     \let\@do@seeglossary\glsxtr@recordsee
329     \let\@glsxtr@record\@glsxtr@record
330     \let\@do@wrglossary\glsxtr@do@record@wrglossary
331     \let\@gls@saveentrycounter\relax
332     \let\glsxtrundefaction\glsxtr@warn@undefaction
333     \let\glsxtr@warnnonexistsordo\glsxtr@warn@onexistsordo
334     \glsxtr@addloclistfield
335     \renewcommand*{\@glsxtr@autoindexcrossrefs}{}%
336     \let\@glsxtr@recordcounter\glsxtr@op@recordcounter
337     \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}%
338   }
339   \def\glsxtrsetaliasnoindex{}%
340   \gls@setupsort@none was only introduced to glossaries v4.30, so it may not be available.
341   If it's defined, use it to remove the unnecessary overhead of escaping and sanitizing the sort
342   value.
343   \ifdef{\gls@setupsort@none}{\gls@setupsort@none}{}%
344   Warn about using \printglossary:
345   \def\glsxtrNoGlossaryWarning{\glsxtr@record@noglossarywarning}%
346   Load glossaries-extra-bib2gls:
347   \RequirePackage{glossaries-extra-bib2gls}%
348 }

record Now define the record package option.
349 \define@choicekey{glossaries-extra.sty}{record}
350   [\@glsxtr@record@setting\glsxtr@record@nr]%

```

```

346 {off,only,alsoindex,nameref}%
347 [only]%
348 {%
349 \ifcase\glsxtr@record@nr\relax

```

Don't record.

```

350 \def\glsxtr@setup@record{%
351     \renewcommand*{\do@seeglossary}{\glsxtr@doseeglossary}%
352     \renewcommand*{\glsxtr@record}[3]{}%
353     \let\do@seeglossary\glsxtr@do@seeglossary
354     \let\gls@saveentrycounter\glsxtr@indexonly@saveentrycounter
355     \let\glsxtrundefaction\glsxtr@err@undefaction
356     \let\glsxtr@warnonexistsordo@gobble
357     \let\glsxtr@recordcounter\glsxtr@noop@recordcounter
358     \def\printunsrtglossaryunit{\print@noop@unsrtglossaryunit}%
359     \undef\glsxtrsetaliasnoindex
360 }%
361 \or

```

Only record (don't index).

```

362     \glsxtr@record@only@setup
363 \or

```

Record and index. This option doesn't load `glossaries-extra-bib2gls` as the sorting is performed by `xindy` or `makeindex`.

```

364 \def\glsxtr@setup@record{%
365     \renewcommand*{\do@seeglossary}{\glsxtr@dosee@alsoindex@glossary}%
366     \let\glsxtr@record\glsxtr@record
367     \let\do@seeglossary\glsxtr@do@alsoindex@wrglossary
368     \let\gls@saveentrycounter\glsxtr@indexonly@saveentrycounter
369     \let\glsxtrundefaction\glsxtr@warn@undefaction
370     \let\glsxtr@warnonexistsordo\glsxtr@warn@onexistsordo
371     \glsxtr@addloclistfield
372     \let\glsxtr@recordcounter\glsxtr@op@recordcounter
373     \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}%
374     \undef\glsxtrsetaliasnoindex
375 }%
376 \or

```

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

```

377     \glsxtr@record@only@setup
378     \ifundefined\hyperlink
379     {\GlossariesExtraWarning{You have requested record=nameref but
380         the document doesn't support hyperlinks}}%
381     {}%
382     \fi
383 }

```

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).  
384 \newcommand\*{\glsxtr@docdefval}{0}

Need to provide conditional commands that are backward compatible:

```
if@glsxtrdocdef  
385 \newcommand*{\if@glsxtrdocdef}{\ifnum\glsxtr@docdefval>0 }  
  
lsxtrdocdeftrue  
386 \newcommand*{\@glsxtrdocdeftrue}{\def\glsxtr@docdefval{1}}  
  
sxtrdocdeffalse  
387 \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.

```
388 \define@choicekey{glossaries-extra.sty}{docdef}  
389 [\glsxtr@docdefsetting\glsxtr@docdefval] %  
390 {false,true,restricted,atom}[true] %  
391 {  
392 \ifnum\glsxtr@docdefval>1\relax  
393 \renewcommand*{\glsdoifexistsorwarn}{\glsdoifexists} %  
394 \else  
395 \renewcommand*{\glsdoifexistsorwarn}{\glsdoifexistsorwarn} %  
396 \fi  
397 }
```

ocdefrestricted  
398 \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).

```
399 \newcommand*{\glsdoifexistsorwarn}{\glsdoifexistsorwarn}
```

indexcrossrefs Automatically index cross references at the end of the document

```
400 \define@boolkey{glossaries-extra.sty}[@glsxtr]{indexcrossrefs}[true]{%  
401 \if@glsxtrindexcrossrefs  
402 \else  
403 \renewcommand*{\glsxtr@autoindexcrossrefs}{}%  
404 \fi  
405 }
```

Switch off since this can increase the build time.

```
406 \glsxtrindexcrossrefsfalse
```

But allow see key to switch it on automatically.

```

oindexcrossrefs
 407 \newcommand*{\@glsxtr@autoindexcrossrefs}{\@glsxtr@indexcrossrefstrue}

autoseeindex Provide a boolean option to allow the user to prevent the automatic indexing of the cross-
referencing keys see, seealso and alias.
 408 \define@boolkey{glossaries-extra.sty}[@glsxtr@]{autoseeindex}[true]{%
 409 }
 410 \@glsxtr@autoseeindextrue

equations Provide a boolean option to automatically switch to the equation counter when in a num-
bered maths environment.
 411 \define@boolkey{glossaries-extra.sty}[@glsxtr@]{equations}[true]{%
 412 }
 413 \@glsxtr@equationsfalse

\glsxtr@float
 414 \let\glsxtr@float\@float

glsxtr@dblfloat
 415 \let\glsxtr@dblfloat\@dblfloat

floats Provide a boolean option to automatically switch to the the corresponding counter when in
a float.
 416 \define@boolkey{glossaries-extra.sty}[@glsxtr@]{floats}[true]{%
 417   \if@glsxtr@floats
 418     \renewcommand*{\@float}[1]{\renewcommand{\glscounter}{##1}\glsxtr@float{##1}}%
 419     \renewcommand*{\@dblfloat}[1]{\renewcommand{\glscounter}{##1}\glsxtr@dblfloat{##1}}%
 420   \else
 421     \let\@float\glsxtr@float
 422     \let\@dblfloat\glsxtr@dblfloat
 423   \fi
 424 }
 425 \@glsxtr@floatsfalse

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

raWarningNoLine Allow users to suppress warnings.
 427 \newcommand*{\GlossariesExtraWarningNoLine}[1]{%
 428   \PackageWarningNoLine{glossaries-extra}{#1}

 429 \@glsxtr@declareoption{nowarn}{%
 430   \let\GlossariesExtraWarning\@gobble
 431   \let\GlossariesExtraWarningNoLine\@gobble
 432   \glsxtr@dooption{nowarn}%
 433 }

```

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

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

postdot Shortcut for nopostdot=false

```
435 \@glsxtr@declareoption{postdot}{%
436   \glsxtr@dooption{nopostdot=false}%
437   \renewcommand*{\glsxtr@defpostpunc}{%
438     \renewcommand*{\glspostdescription}{%
439       \ifglsnopostdot\else.\spacefactor\sfcodespace\fi}%
440   }%
441 }
```

nopostdot Needs to redefine \glsxtr@defpostpunc

```
442 \define@choicekey{glossaries-extra.sty}{nopostdot}{true, false}[true]{%
443   \glsxtr@dooption{nopostdot=#1}%
444   \renewcommand*{\glsxtr@defpostpunc}{%
445     \renewcommand*{\glspostdescription}{%
446       \ifglsnopostdot\else.\spacefactor\sfcodespace\fi}%
447   }%
448 }
```

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

```
449 \define@key{glossaries-extra.sty}{postpunc}{%
450   \glsxtr@dooption{nopostdot=false}%
451   \ifstrequal{#1}{dot}%
452   {%
453     \renewcommand*{\glsxtr@defpostpunc}{%
454       \renewcommand*{\glspostdescription}{.\spacefactor\sfcodespace\fi}%
455     }%
456   }%
457   {%
458     \ifstrequal{#1}{comma}%
459     {%
460       \renewcommand*{\glsxtr@defpostpunc}{%
461         \renewcommand*{\glspostdescription}{,}%
462       }%
463     }%
464     {%
465       \ifstrequal{#1}{none}%
466       {%
467         \glsxtr@dooption{nopostdot=true}%
468         \renewcommand*{\glsxtr@defpostpunc}{%
469           \renewcommand*{\glspostdescription}{}%
470         }%
471       }%
472     }%
473 }
```

```
473     \renewcommand*{\@glsxstr@defpostpunc}{%
474         \renewcommand*{\glspostdescription}{\#1}%
475     }%
476     }%
477     }%
478 }%
479 }
```

`\glsxtrabrvtype` Glossary type for abbreviations.  
`480 \newcommand*{\glsxtrabrvtype}{\glsdefaulttype}`

`\newcommand*{\@glsxtr@abbreviationsdef}{}`

```
bbrevisionsdef
    482 \newcommand*{\@glsxstr@doabbreviationsdef}{%
    483   \@ifpackageloaded{babel}{%
    484     {\providecommand{\abbreviationsname}{\acronymname}}%
    485     {\providecommand{\abbreviationsname}{Abbreviations}}%
    486     \newglossary[glg-abr]{abbreviations}{gls-abr}{glo-abr}{\abbreviationsname}%
    487     \renewcommand*{\glsxtrabbrvtype}{abbreviations}%
    488     \newcommand*{\printabbreviations}[1][]{%
    489       \printglossary[type=\glsxtrabbrvtype,##1]%
    490     }%
    491     \disable@keys{glossaries-extra.sty}{abbreviations}%
    }
```

If the acronym option hasn't been used, change \acronymtype to \glsxtrabbrvtype.

```
492 \ifglsacronym  
493 \else  
494 \renewcommand*\acronymtype{\glsxtrabbrvtype}%  
495 \fi  
496 }%
```

**abbreviations** If abbreviations, create a new glossary type for abbreviations.

```
497 \@glsxtr@declareoption{abbreviations}{%
498   \let\@glsxtr@abbreviationsdef\@glsxtr@doabbreviationsdef
499 }
```

`iationShortcuts` Enable shortcut commands for the abbreviations. Unlike the analogous command provided by `glossaries`, this uses `\newcommand` instead of `\let` as a safety feature (except for `\newabbr` which is also provided with `\GlsXtrDefineAcShortcuts`).

```
500 \newcommand*{\GlsXtrDefineAbbreviationShortcuts}{%
501   \newcommand*{\ab}{\cgls}%
502   \newcommand*{\abp}{\cglsp}%
503   \newcommand*{\as}{\glsxtrshort}%
504   \newcommand*{\asp}{\glsxtrshortp}%
505   \newcommand*{\al}{\glsxtrlong}%
506   \newcommand*{\alp}{\glsxtrlongp}%
507   \newcommand*{\af}{\glsxtrfull}%
}
```

```

508 \newcommand*{\afp}{\glsxtrfullpl}%
509 \newcommand*{\Ab}{\cGls}%
510 \newcommand*{\Abp}{\cGlspl}%
511 \newcommand*{\As}{\Glsxtrshort}%
512 \newcommand*{\Asp}{\Glsxtrshortpl}%
513 \newcommand*{\Al}{\Glsxtrlong}%
514 \newcommand*{\Alp}{\Glsxtrlongpl}%
515 \newcommand*{\Af}{\Glsxtrfull}%
516 \newcommand*{\Afp}{\Glsxtrfullpl}%
517 \newcommand*{\AB}{\cGLS}%
518 \newcommand*{\ABP}{\cGLSpl}%
519 \newcommand*{\AS}{\GLSxtrshort}%
520 \newcommand*{\ASP}{\GLSxtrshortpl}%
521 \newcommand*{\AL}{\GLSxtrlong}%
522 \newcommand*{\ALP}{\GLSxtrlongpl}%
523 \newcommand*{\AF}{\GLSxtrfull}%
524 \newcommand*{\AFP}{\GLSxtrfullpl}%

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

```

Disable this command after it's been used.

```

526 \let\GlsXtrDefineAbbreviationShortcuts\relax
527 }

```

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

```

528 \newcommand*{\GlsXtrDefineAcShortcuts}{%
529   \newcommand*{\ac}{\cgls}%
530   \newcommand*{\acp}{\cglspl}%
531   \newcommand*{\acs}{\glsxtrshort}%
532   \newcommand*{\acsp}{\glsxtrshortpl}%
533   \newcommand*{\acl}{\glsxtrlong}%
534   \newcommand*{\aclp}{\glsxtrlongpl}%
535   \newcommand*{\acf}{\glsxtrfull}%
536   \newcommand*{\acfp}{\glsxtrfullpl}%
537   \newcommand*{\Ac}{\cGls}%
538   \newcommand*{\Acp}{\cGlspl}%
539   \newcommand*{\Acs}{\Glsxtrshort}%
540   \newcommand*{\Acsp}{\Glsxtrshortpl}%
541   \newcommand*{\Acl}{\Glsxtrlong}%
542   \newcommand*{\Aclp}{\Glsxtrlongpl}%
543   \newcommand*{\Acf}{\Glsxtrfull}%
544   \newcommand*{\Acfp}{\Glsxtrfullpl}%
545   \newcommand*{\AC}{\cGLS}%
546   \newcommand*{\ACP}{\cGLSpl}%
547   \newcommand*{\ACS}{\GLSxtrshort}%
548   \newcommand*{\ACSP}{\GLSxtrshortpl}%
549   \newcommand*{\ACL}{\GLSxtrlong}%
550   \newcommand*{\ACLP}{\GLSxtrlongpl}%
551   \newcommand*{\ACF}{\GLSxtrfull}%

```

```

552 \newcommand*\ACFP{\GLSxtrfullpl}%
553 \providecommand*\newabbr{\newabbreviation}%
    Disable this command after it's been used.
554 \let\GlsXtrDefineAcShortcuts\relax
555 }

eOtherShortcuts Similarly provide shortcut versions for the commands provided by the symbols and numbers options.
556 \newcommand*\GlsXtrDefineOtherShortcuts{%
557 \newcommand*\newentry{\newglossaryentry}%
558 \ifdef\printsymbols
559 {%
560 \newcommand*\newsym{\glsxtrnewsymbol}%
561 }{}%
562 \ifdef\printnumbers
563 {%
564 \newcommand*\newnum{\glsxtrnewnumber}%
565 }{}%
566 \let\GlsXtrDefineOtherShortcuts\relax
567 }

```

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.

```
568 \newcommand*\@glsxtr@setupshortcuts{}
```

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

```
569 \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).

```

570 \define@choicekey{glossaries-extra.sty}{shortcuts}%
571 [\@glsxtr@shortcutsval\@glsxtr@shortcutsnr]%
572 {acronyms,acro,abbreviations,abbr,other,all,true,ac,none,false}[true]{%
573 \ifcase\@glsxtr@shortcutsnr\relax % acronyms
574 \renewcommand*\@glsxtr@setupshortcuts{%
575 \glsacrshortcutstrue
576 \DefineAcronymSynonyms
577 }%
578 \or % acro
579 \renewcommand*\@glsxtr@setupshortcuts{%
580 \glsacrshortcutstrue

```

```

581      \DefineAcronymSynonyms
582  }%
583 \or % abbreviations
584   \renewcommand*{\@glsxtr@setupshortcuts}{%
585     \GlsXtrDefineAbbreviationShortcuts
586   }%
587 \or % abbr
588   \renewcommand*{\@glsxtr@setupshortcuts}{%
589     \GlsXtrDefineAbbreviationShortcuts
590   }%
591 \or % other
592   \renewcommand*{\@glsxtr@setupshortcuts}{%
593     \GlsXtrDefineOtherShortcuts
594   }%
595 \or % all
596   \renewcommand*{\@glsxtr@setupshortcuts}{%
597     \glsacrshortcutstrue
598     \GlsXtrDefineAcShortcuts
599     \GlsXtrDefineAbbreviationShortcuts
600     \GlsXtrDefineOtherShortcuts
601   }%
602 \or % true
603   \renewcommand*{\@glsxtr@setupshortcuts}{%
604     \glsacrshortcutstrue
605     \GlsXtrDefineAcShortcuts
606     \GlsXtrDefineAbbreviationShortcuts
607     \GlsXtrDefineOtherShortcuts
608   }%
609 \or % ac
610   \renewcommand*{\@glsxtr@setupshortcuts}{%
611     \glsacrshortcutstrue
612     \GlsXtrDefineAcShortcuts
613   }%

```

Leave none and false as last option.

```

614 \else % none, false
615   \renewcommand*{\@glsxtr@setupshortcuts}{}%
616 \fi
617 }

```

lsxtr@doaccsupp

```
618 \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.
619 \@glsxtr@declareoption{accsupp}{%
620   \renewcommand*{\@glsxtr@doaccsupp}{\RequirePackage{glossaries-accsupp}}}

tr@doloadprefix
621 \newcommand*{\@glsxtr@doloadprefix}{}{}

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

GlossaryWarning Warning text displayed in document if the external glossary file given by the argument is missing.
624 \newcommand{\glsxtrNoGlossaryWarning}[1]{%
625   \GlossariesExtraWarning{Glossary '#1' is missing}%
626   \glsxtr@defaultnoglossarywarning{#1}%
627 }

omissingglstext If true, suppress the text and warning produced if the external glossary file is missing.
628 \define@choicekey{glossaries-extra.sty}{nomissingglstext}
629 [ \glsxtr@nomissingglstextval \glsxtr@nomissingglstextnr ] %
630 {true, false} [ true ] {%
631   \ifcase \glsxtr@nomissingglstextnr \relax % true
632     \renewcommand{\glsxtrNoGlossaryWarning}[1]{\null}%
633   \else % false
634     \renewcommand{\glsxtrNoGlossaryWarning}[1]{%
635       \glsxtr@defaultnoglossarywarning{#1}%
636     }%
637   \fi
638 }

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

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

stylemods
640 \define@key{glossaries-extra.sty}{stylemods}[default]{%
641   \ifstreq{\#1}{default}%
642   {%
643     \renewcommand*{\@glsxtr@redefstyles}{%
644       \RequirePackage{glossaries-extra-stylemods}}%
645   }%
646   {%
647     \ifstreq{\#1}{all}%
648     {%
649       \renewcommand*{\@glsxtr@redefstyles}{%
650         \PassOptionsToPackage{all}{glossaries-extra-stylemods}}%

```

```

651     \RequirePackage{glossaries-extra-stylemods}%
652   }%
653 }%
654 {%
655   \renewcommand*{\@glsxtr@redefstyles}{()}%
656   \@for\@glsxtr@tmp:=\#1\do{%
657     \IfFileExists{glossary-\@glsxtr@tmp.sty}%
658     {%
659       \eappto\@glsxtr@redefstyles{%
660         \noexpand\RequirePackage{glossary-\@glsxtr@tmp}}%
661     }%
662     {%
663       \PackageError{glossaries-extra}%
664         {Glossaries style package `glossary-\@glsxtr@tmp.sty'%
665          doesn't exist (did you mean to use the `style' key?)}%
666         {The list of values (#1) in the `stylemods' key should%
667          match the glossary-xxx.sty files provided with%
668          glossaries.sty}%
669     }%
670   }%
671   \appto\@glsxtr@redefstyles{\RequirePackage{glossaries-extra-stylemods}}%
672 }
673 }%
674 }

```

glsxtr@do@style

```
675 \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.

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

Defer actual style change:

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

Set this as the default style:

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

Set this style:

```
679   \setglossarystyle{#1}%
680 }%
681 }
```

**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.

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

cationHyperlink

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

The first two arguments are always control sequences.

```
683 \newcommand*{\GlsXtrInternalLocationHyperlink}[3]{%
684   \glsxtrhyperlink{#1#2#3}{#3}%
685 }
```

cationhyperlink

```
686 \newcommand*{\@glsxtr@wrglossary@locationhyperlink}[3]{%
687   \pageref{wrglossary.#3}%
688 }
```

**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.

```
689 \@glsxtr@declareoption{indexcounter}{%
690   \glsxtr@dooption{counter=wrglossary}%
691   \ifundef\c@wrglossary
692   {%
693     \newcounter{wrglossary}%
694     \renewcommand{\thewrglossary}{\arabic{wrglossary}}%
695   }%
696   {}%
697 }
```

Only increment if the current counter is `wrglossary`.

```
698 \ifdefstring@gls@counter{wrglossary}%
699 {%
700   \refstepcounter{wrglossary}%
701   \label{wrglossary.\thewrglossary}%
702 }%
703 {}%
704 }%
705 \renewcommand*{\GlsXtrInternalLocationHyperlink}[3]{%
706   \ifdefstring@glsentrycounter{wrglossary}%
707   {%
708     \@glsxtr@wrglossary@locationhyperlink{##1}{##2}{##3}%
709   }%
710   {\glsxtrhyperlink{##1##2##3}{##3}}%
711 }%
712 }
```

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

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

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

```
714 \newcommand*{\@glsxtrwrglossmark}{}%
715 \AtBeginDocument{\renewcommand*{\@glsxtrwrglossmark}{\@glsxtrwrglossmark}}
```

sxtrwrglossmark Does nothing by default.

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

debug Provide extra debug options.

```
717 \define@choicekey{glossaries-extra.sty}{debug}%
718 [\@glsxtr@debugval\@glsxtr@debugnr]%
719 {true,false,showtargets,showwrgloss,all,showaccsupp}[true]{%
720 \ifcase\@glsxtr@debugnr\relax % true
721 \glsxtr@dooption{debug=true}%
722 \renewcommand*{\@glsxtrwrglossmark}{}%
723 \or % false
724 \glsxtr@dooption{debug=false}%
725 \renewcommand*{\@glsxtrwrglossmark}{}%
726 \or % showtargets
727 \glsxtr@dooption{debug=showtargets}%
728 \or % showwrgloss
729 \glsxtr@dooption{debug=true}%
730 \renewcommand*{\@glsxtrwrglossmark}{\glsxtrwrglossmark}%
731 \or % all
732 \glsxtr@dooption{debug=showtargets,debug=showaccsupp}%
733 \renewcommand*{\@glsxtrwrglossmark}{\glsxtrwrglossmark}%
734 \or % showaccsupp
735 \glsxtr@dooption{debug=showaccsupp}%
736 \fi
737 }
```

Pass all other options to glossaries.

```
738 \DeclareOptionX*{%
739 \expandafter\glsxtr@dooption\expandafter{\CurrentOption}}}
```

Process options.

```
740 \ProcessOptionsX
```

Load glossaries if not already loaded.

```
741 \RequirePackage{glossaries}
```

Load the glossaries-accsupp package if required.

```
742 \@glsxtr@doaccsupp
```

Load the glossaries-prefix package if required.

```
743 \@glsxtr@doloadprefix
```

Redefine \glspostdescription if required.

```
744 \@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.

```
745 \ifdef\glsshowtargetouter
746 {
747   \renewcommand*\glsshowtarget{[1]{%
748     \glsxtrtitleorpdforheading
749     {%
750       \ifmmode
751         \nfss@text{\glsshowtargetfont [#1]}%
752       \else
753         \ifinner
754           {\glsshowtargetfont [#1]}%
755         \else
756           \glsshowtargetouter{#1}%
757         \fi
758       \fi
759     }%
760   {[#1]}%
761   {{\protect\glsshowtargetfont [#1]}}%
762 }
763 }
764 {
```

Old definition.

```
765 \def\glsshowtarget#1{%
766   \glsxtrtitleorpdforheading
767   {%
768     \ifmmode
769       \texttt{\small [#1]}%
770     \else
771       \ifinner
772         \texttt{\small [#1]}%
773       \else
774         \marginpar{\texttt{\small #1}}%
775       \fi
776     \fi
777   }%
778 {[#1]}%
779 {\texttt{\small [#1]}}%
780 }
781 }
```

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

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

```
783 \newcommand*\@glsxtr@doseeglossary[2]{%
784   \glsdoifexists{#1}{%
```

```

785  {%
786    \@@glsxtrwrglossmark
787    \glsxtr@org@doseeglossary{#1}{#2}%
788  }%
789 }

oindex@glossary
790 \newcommand*{\glsxtr@dosee@alsoindex@glossary}[2]{%
791   \glsxtr@recordsee{#1}{#2}%
792   \glsxtr@doseeglossary{#1}{#2}%
793 }

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

Check if user tried autoseeindex=false when it can't be supported.
795 \if@glsxtr@autoseeindex
796 \else
797   \ifdef\glsxtr@org@gloautosee
798   {}%
799   {\PackageError{glossaries-extra}{`autoseeindex=false' package
800     option requires at least v4.30 of glossaries.sty}%
801   {You need to update the glossaries.sty package}%
802 }
803 \fi

@\glo@autosee If \glo@autosee has been defined (glossaries v4.30 onwards), redefine it to test the au-
toseeindex option.
804 \ifdef@\glo@autosee
805 {}%
806   \renewcommand*{\glo@autosee}{}%
807   \if@glsxtr@autoseeindex\glsxtr@org@gloautosee\fi}%
808 {}%
809 {}

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.
810 \renewcommand*{\gls@checkseeallowed}{}%
811 \if@glsxtr@autoseeindex\gls@see@noindex\fi
812 }

Define abbreviations glossaries if required.
813 \glsxtr@abbreviationsdef
814 \let\glsxtr@abbreviationsdef\relax

Setup shortcuts if required.
815 \glsxtr@setupshortcuts

```

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

816 `\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`:

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

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

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

Now define the user command:

```
819 \newcommand*{\glossariesextrasetup}[1]{%
820   \let\glsxtr@setup@record\relax
821   \let@\glsxtr@setupshortcuts\relax
822   \let@\glsxtr@redef@forglsentries\relax
823   \let@\glsxtr@doloadprefix\relax
824   \setkeys{glossaries-extra.sty}{#1}%
825   \glsxtr@abbreviationsdef
826   \let@\glsxtr@abbreviationsdef\relax
827   \glsxtr@setupshortcuts
828   \glsxtr@setup@record
829   \glsxtr@redef@forglsentries
830   \glsxtr@doloadprefix
831 }
```

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

832 `\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.

```
833 \newcommand*{\glsxtr@@do@wrglossary}[1]{%
834   \glsxtr@wrglossmark
835   \glsxtr@inc@wrglossaryctr{#1}%
836   \glsxtr@org@@do@wrglossary{#1}%
837 }
```

`aveentrycounter` Save original definition of `\gls@saveentrycounter`.

838 `\let\glsxtr@saveentrycounter\gls@saveentrycounter`

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

839 `\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.

```

840 \renewcommand*{\gls@getcounterprefix[2]{%
841   \protected@edef{\gls@thisloc{\#1}\protected@edef{\gls@thisHloc{\#2}}{%
842     \ifx{\gls@thisloc}{\gls@thisHloc
843       \def{\glo@counterprefix{}}{%
844     \else
845       \def{\gls@get@counterprefix##1.#1##2\end@getprefix}{%
846         \def{\glo@tmp{\#2}}{%
847           \ifx{\glo@tmp}{\empty
848             \def{\glo@counterprefix{}}{%
849           \else
850             \def{\glo@counterprefix{\#1}}{%
851               \fi
852             }{%
853               \gls@get@counterprefix{\#1}\end@getprefix

```

Warn if no prefix can be formed, unless record=nameref.

```

854   \ifx{\glo@counterprefix}{\empty
855     \ifx{\glsxtr@record@setting}{\glsxtr@record@setting@nameref
856       \else
857         \GlossariesExtraWarning{Hyper target '#2' can't be formed by
858           prefixing^\Jlocation '#1'. You need to modify the
859           definition of \string\theH\gls@counter^\Jotherwise you
860           will get the warning: "name{\gls@counter.\#1}" has been^\J
861           referenced but does not exist"}%
862         \ifx{\glsxtr@record@setting}{\glsxtr@record@setting@only
863           . You may want to consider using record=nameref instead}%
864         \fi}%
865       \fi
866     \fi
867   \fi
868 }

```

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

#### sxtrdialecthook

```
869 \newcommand*{\glsxtrdialecthook}{}{}
```

Set up record option if required.

```
870 \glsxtr@setup@record
```

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

```

871 \AtBeginDocument{%
872   \disable@keys{glossaries-extra.sty}{abbreviations,docdef,record}%
873   \def{\glsxtrundeftag}{\glsxtrundeftag}%
874 }
```

## 1.2 Extra Utilities

usedOrUndefined

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

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

```
875 \newcommand*\GlsXtrIfUnusedOrUndefined[3]{%
876   \ifglsentryexists{#1}%
877   {\ifbool{glo@\glsdetoklabel{#1}@flag}{#3}{#2}}%
878   {#2}%
879 }
```

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

```
880 \ifdef\s@ifglossaryexists
881 {}
882 {
```

fglossaryexists

```
883 \renewcommand{\ifglossaryexists}{%
884   \@ifstar\s@ifglossaryexists\@ifglossaryexists
885 }
```

fglossaryexists

```
886 \newcommand{\@ifglossaryexists}[3]{%
887   \ifcsundef{\glotype@\#1@out}{#3}{#2}%
888 }
```

fglossaryexists

```
889 \newcommand{\s@ifglossaryexists}[3]{%
890   \ifcsundef{\glolist@\#1}{#3}{#2}%
891 }
892 }
```

ifemptyglossary

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

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.)

```
893 \newcommand{\glsxtrifemptyglossary}[3]{%
894   \ifcsdef{glolist@\#1}{%
895     {}%
896     \ifcsstring{glolist@\#1}{,}{%
897       {}%
898       {}%
899       \glsxtrundefaction{Glossary type '#1' doesn't exist}{}%
900       #2%
901     }%
902 }
```

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

```
903 \newcommand*\glsxtrifkeydefined}[3]{%
904   \key@ifundefined{glossentry}{\#1}{\#3}{\#2}%
905 }
```

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

```
906 \newcommand*\glsxtrprovidestoragekey}{%
907   \cstar\sglsxtr@provide@storagekey\glsxtr@provide@storagekey
908 }
```

vide@storagekey Unstarred version.

```
909 \newcommand*\glsxtr@provide@storagekey}[3]{%
910   \key@ifundefined{glossentry}{\#1}{%
911     {}%
912     \define@key{glossentry}{\#1}{\csdef{glo@\#1}{##1}}%
913     \appto{\gls@keymap}{\#1}{\#1}%
914     \appto{\newglossaryentryprehook}{\csdef{glo@\#1}{\#2}}%
915     \appto{\newglossaryentryposthook}{%
916       \letcs{\glo@tmp}{\glo@\#1}%
917       \gls@assign@field{\#2}{\glo@label}{\#1}{\glo@tmp}%
918     }%
```

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

```
919   \ifblank{\#3}{%
920     {}%
921     {}%
922     \newcommand*{\glsxtrusefield}[1]{\gls@entry@field{##1}{\#1}}%
923   }%
924 }%
925 }
```

Provide the no-link command if not already defined.

```
926   \ifblank{\#3}{%
927     {}%
928     {}%
```

```

929     \providecommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
930   }%
931 }%
932 }

```

`vide@storagekey` Starred version.

```

933 \newcommand*{\s@glsxtr@provide@storagekey}[1]{%
934   \key@ifundefined{glossentry}{#1}{%
935     {%
936       \expandafter\newcommand\expandafter*\expandafter{%
937         {\csname gls@assign@#1@field\endcsname}{#2}{%
938           \gls@expand@field{##1}{#1}{##2}}%
939         }%
940     }%
941   {}%
942   \glsxtr@provide@addstoragekey{#1}%
943 }

```

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`

```
944 \newcommand{\GlsXtrFmtField}{useri}
```

`tDefaultOptions`

```
945 \newcommand{\GlsXtrFmtDefaultOptions}{noindex}
```

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

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

`\@glsxtrfmt` Unstarred form.

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

`\s@glsxtrfmt` Starred form.

```

948 \newcommand*{\s@glsxtrfmt}[3][]{%
949   \new@ifnextchar[\s@glsxtrfmt{#1}{#2}{#3}{}}%
950   {\glsxtrfmt{#1}{#2}{#3}{}}%
951 }

```

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

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

`\@glsxtrfmt` Actual inner working.

```
953 \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).

```

954 \begingroup
955   \def\glslabel{#2}%
956   \glsdoifexistsordo{#2}%
957 {%
958   \ifglshasfield{\GlsXtrFmtField}{#2}%
959   {%
960     \let\do@gls@link@checkfirsthyper\relax
961     \expandafter\@gls@link\expandafter[\GlsXtrFmtDefaultOptions,#1]{#2}%
962     {\glsxtrfmtdisplay{\glscurrentfieldvalue}{#3}{#4}}%
963   }%
964   {\glsxtrfmtdisplay{@firstofone}{#3}{#4}}%
965 }%
966 {%

```

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

```

967 \begingroup
968   \@gls@setdefault@glslink@opts
969   \setkeys{glslink}{\GlsXtrFmtDefaultOptions,#1}%
970   \ifKV@glslink@noindex\else\glsadd{#2}\fi
971 \endgroup
972 \glsxtrfmtdisplay{@firstofone}{#3}{#4}%
973 }%
974 \endgroup
975 }

```

`\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).

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

`\glsxtreentryfmt` No link or indexing.

```

977 \ifdef\texorpdfstring
978 {
979   \newcommand*\glsxtreentryfmt[2]{%
980     \texorpdfstring{\@glsxtreentryfmt{#1}{#2}}{\glsxtrpdfentryfmt{#1}{#2}}%
981   }
982 }
983 {
984   \newcommand*\glsxtreentryfmt{\@glsxtreentryfmt}
985 }

```

`\glsxtrpdfentryfmt` Use for the PDF bookmarks.

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

```
987 \newrobustcmd*\@glsxtreentryfmt[2]{%
```

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

```
988 {%
989   \edef\glslabel{#1}%
990   \glsdoifexistsord{#1}%
991 {%
992   \ifglshasfield{\GlsXtrFmtField}{#1}%
993   {%
994     \csuse{\glscurrentfieldvalue}{#2}%
995   }%
996   {#2}%
997 }%
998 {#2}%
999 }%
1000 }
```

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.

```
1001 \newcommand*{\glsxtrfieldlistadd}[3]{%
1002   \listcsadd{glo@\glsdetoklabel{#1}@#2}{#3}%
1003 }
```

trfieldlistgadd Similarly but uses \listcsgadd.

```
1004 \newcommand*{\glsxtrfieldlistgadd}[3]{%
1005   \listcsgadd{glo@\glsdetoklabel{#1}@#2}{#3}%
1006 }
```

trfieldlisteadd Similarly but uses \listcseadd.

```
1007 \newcommand*{\glsxtrfieldlisteadd}[3]{%
1008   \listcseadd{glo@\glsdetoklabel{#1}@#2}{#3}%
1009 }
```

trfieldlistxadd Similarly but uses \listcsxadd.

```
1010 \newcommand*{\glsxtrfieldlistxadd}[3]{%
1011   \listcsxadd{glo@\glsdetoklabel{#1}@#2}{#3}%
1012 }
```

Now provide commands to iterate over these lists.

fielddolistloop

```
1013 \newcommand*{\glsxtrfielddolistloop}[2]{%
1014   \dolistcsloop{glo@\glsdetoklabel{#1}@#2}%
1015 }
```

fieldforlistloop

```
1016 \newcommand*{\glsxtrfieldforlistloop}[3]{%
1017   \forlistcsloop{#3}{glo@\glsdetoklabel{#1}@#2}%
1018 }
```

```
fieldformatlist
```

```
1019 \newrobustcmd*{\glsxtrfieldformatlist}[2]{%
1020   \begingroup
1021   \def\@dtl@formatlist@itemsep{}%
1022   \def\@dtl@formatlist@lastitem{}%
1023   \def\@dtl@formatlist@prelastitem{}%
1024   \def\@dtl@formatlist@prelastitemsep{}%
1025   \forlistcsloop{\@dtl@formatlist@handler}{\glo@\glsdetoklabel{#1}@#2}%
1026   \@dtl@formatlist@prelastitem\@dtl@formatlist@lastitem
1027 \endgroup
1028 }
```

List element tests:

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

```
1029 \newcommand*{\glsxtrfieldifinlist}[5]{%
1030   \ifinlistcs{#3}{\glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
1031 }
```

rfieldxifinlist Expands item.

```
1032 \newcommand*{\glsxtrfieldxifinlist}[5]{%
1033   \xifinlistcs{#3}{\glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
1034 }
```

```
sxtrforcsvfield
```

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

```
1035 \newcommand*{\glsxtrforcsvfield}[3]{%
1036   \glsxtrifhasfield{#2}{#1}%
1037   {%
1038     \let\glsxtrtrendfor\endfortrue
1039     \for\@glsxtr@label:=\glscurrentfieldvalue\do
1040       {\expandafter#3\expandafter{\@glsxtr@label}}%
1041   }%
1042 }
```

```
ldformatcsvlist
```

```
1043 \newrobustcmd*{\glsxtrfieldformatcsvlist}[2]{%
1044   \glsxtrifhasfield{#2}{#1}%
1045   {\@dtlformatlist\glscurrentfieldvalue}%
1046   {}%
1047 }
```

```
dValueInCsvList
```

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

```
1048 \newcommand*\GlsXtrIfFieldValueInCsvList[%  
1049   \@ifstar{s@\GlsXtrIfFieldValueInCsvList@\GlsXtrIfFieldValueInCsvList  
1050 }%
```

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

dValueInCsvList Unstarred version.

```
1051 \newcommand*\@GlsXtrIfFieldValueInCsvList[5]{%  
1052   \@glsxtrifhasfield{#2}{#1}-%  
1053   {%-  
1054     \expandafter\DTLifinlist\expandafter{\glscurrentfieldvalue}-%  
1055     {#3}{#4}{#5}-%  
1056   }-%  
1057   {#5}-%  
1058 }
```

dValueInCsvList Starred version.

```
1059 \newcommand*\s@\GlsXtrIfFieldValueInCsvList[5]{%  
1060   \s@glsxtrifhasfield{#2}{#1}-%  
1061   {%-  
1062     \expandafter\DTLifinlist\expandafter{\glscurrentfieldvalue}-%  
1063     {#3}{#4}{#5}-%  
1064   }-%  
1065   {#5}-%  
1066 }
```

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.

```
1067 \newrobustcmd{\glsxtrifhasfield}{%  
1068   \@ifstar{\s@glsxtrifhasfield}{\@glsxtrifhasfield}-%  
1069 }
```

lsxtrifhasfield Unstarred version adds grouping.

```
1070 \newcommand{\@glsxtrifhasfield}[4]{%  
1071   {\s@glsxtrifhasfield{#1}{#2}{#3}{#4}}-%  
1072 }
```

lsxtrifhasfield Starred version omits grouping.

```
1073 \newcommand{\s@glsxtrifhasfield}[4]{%  
1074   \letcs{\glscurrentfieldvalue}{\glo@\glsdetoklabel{#2}@#1}-%  
1075   \ifundefined\glscurrentfieldvalue  
1076   {#4}-%  
1077   {%-  
1078     \ifdefempty\glscurrentfieldvalue{#4}{#3}-%  
1079   }-%  
1080 }
```

rIfFieldNonZero Designed for numeric fields.

```
1081 \newcommand{\GlsXtrIfFieldNonZero}{%
1082   \@ifstar{s@\GlsXtrIfFieldNonZero@\GlsXtrIfFieldNonZero
1083 }
```

rIfFieldNonZero

```
1084 \newcommand{@GlsXtrIfFieldNonZero}[4]{%
1085   \@GlsXtrIfFieldCmpNum{#1}{#2}{=}{0}{#4}{#3}%
1086 }
```

XtrIfFieldEqNum

```
\GlsXtrIfFieldEqNum{<field>}{<label>}{<value>}{<true>}{<false>}
```

Designed for numeric fields.

```
1087 \newcommand{\GlsXtrIfFieldEqNum}{%
1088   \@ifstar{s@\GlsXtrIfFieldEqNum@\GlsXtrIfFieldEqNum
1089 }
```

XtrIfFieldEqNum

```
1090 \newcommand{@GlsXtrIfFieldEqNum}[5]{%
1091   \@GlsXtrIfFieldCmpNum{#1}{#2}{=}{#3}{#4}{#5}%
1092 }
```

XtrIfFieldEqNum

```
1093 \newcommand{s@\GlsXtrIfFieldEqNum}[5]{%
1094   s@\GlsXtrIfFieldCmpNum{#1}{#2}{=}{#3}{#4}{#5}%
1095 }
```

trIfFieldCmpNum

```
\GlsXtrIfFieldCmpNum{<field>}{<label>}{<comparison>}{<value>}{<true>}{<false>}
```

Designed for numeric fields.

```
1096 \newcommand{\GlsXtrIfFieldCmpNum}{%
1097   \@ifstar{s@\GlsXtrIfFieldCmpNum@\GlsXtrIfFieldCmpNum
1098 }
```

trIfFieldCmpNum

```
1099 \newcommand{@GlsXtrIfFieldCmpNum}[6]{%
1100   {%
1101     \letcs{\glscurrentfieldvalue}{\glo@\glstoklabel{#2}@#1}%
1102     \ifundefined{\glscurrentfieldvalue}
1103       {\def\glscurrentfieldvalue{0}}%
```

```

1104   {%
1105     \ifdefempty\glscurrentfieldvalue
1106       {\def\glscurrentfieldvalue{0}}%
1107     {}%
1108   }%
1109   \ifnum\glscurrentfieldvalue#3#4\relax #5\else #6\fi
1110 }%
1111 }

```

#### trIfFieldCmpNum

```

1112 \newcommand{\s@GlsXtrIfFieldCmpNum}[6]{%
1113   \letcs{\glscurrentfieldvalue}{glo@\glsdetoklabel{#2}@#1}%
1114   \ifundef\glscurrentfieldvalue
1115     {\def\glscurrentfieldvalue{0}}%
1116   {}%
1117   \ifdefempty\glscurrentfieldvalue
1118     {\def\glscurrentfieldvalue{0}}%
1119   {}%
1120 }%
1121 \ifnum\glscurrentfieldvalue#3#4\relax #5\else #6\fi
1122 }

```

#### XtrIfFieldUndef

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

Just uses \ifcsundef.

```

1123 \newcommand{\GlsXtrIfFieldUndef}[2]{%
1124   \ifcsundef{glo@\glsdetoklabel{#2}@#1}%
1125 }

```

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

```

1126 \newcommand*\glsxtrusefield[2]{%
1127   \gls@entry@field{#1}{#2}%
1128 }

```

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

```

1129 \ifdef\texorpdfstring
1130 {
1131   \newcommand*\Glsxtrusefield[2]{%
1132     \texorpdfstring
1133     {\gls@entry@field{#1}{#2}}
1134     {\gls@entry@field{#1}{#2}}%
1135   }
1136 }
1137 {

```

```

1138 \newcommand*{\Glsxtrusefield}[2]{%
1139   \gls@entry@field{#1}{#2}%
1140 }
1141 }

\GLSxtrusefield As above but convert to all caps.
1142 \ifdefined\texorpdfstring
1143 {
1144   \newcommand*{\GLSxtrusefield}[2]{%
1145     \texorpdfstring
1146     {\glsdoifexists{#1}{\mfirstucMakeUppercase{\gls@entry@field{#1}{#2}}}}%
1147     {\gls@entry@field{#1}{#2}}%
1148 }
1149 }
1150 {
1151   \newcommand*{\GLSxtrusefield}[2]{%
1152     \glsdoifexists{#1}{\mfirstucMakeUppercase{\gls@entry@field{#1}{#2}}}}%
1153 }
1154 }

entryparentname
1155 \newcommand*{\glsxtreentryparentname}[1]{%
1156   \ifcsdef{glo@\glsdetoklabel{#1}@parent}%
1157   {\csuse{glo@\csuse{glo@\glsdetoklabel{#1}@parent}{\name}}}%
1158   {}%
1159 }

\glsxtrdeffield Just use \csdef to provide a field value for the given entry.
1160 \newcommand*{\glsxtrdeffield}[2]{\csdef{glo@\glsdetoklabel{#1}@#2}{}

\glsxtredeffield Just use \csedef to provide a field value for the given entry.
1161 \newcommand*{\glsxtredeffield}[2]{\protected@csedef{glo@\glsdetoklabel{#1}@#2}{}

etfieldifexists
1162 \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.
1163 \newrobustcmd*{\GlsXtrSetField}[3]{%
1164   \glsxtrsetfieldifexists{#1}{#2}{%
1165   \csdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1166 }

\GlsXtrLetField Uses \cslet instead. Third argument should be a macro.
1167 \newrobustcmd*{\GlstrLetField}[3]{%
1168   \glsxtrsetfieldifexists{#1}{#2}{%
1169   \cslet{glo@\glsdetoklabel{#1}@#2}{#3}}%
1170 }

```

`\GlsXtrLetField` Uses `\csletcs` instead. Third argument should be a control sequence name.

```
1171 \newrobustcmd*\{\csGlsXtrLetField}[3]{%
1172   \glsxtrsetfieldifexists{#1}{#2}%
1173   {\csletcs{glo@\glsdetoklabel{#1}@#2}{#3}}%
1174 }
```

`\GlsXtrLetFieldToField` 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.

```
1175 \newrobustcmd*\{\GlsXtrLetFieldToField}[4]{%
1176   \glsxtrsetfieldifexists{#1}{#2}%
1177   {\csletcs{glo@\glsdetoklabel{#1}@#2}{glo@\glsdetoklabel{#3}@#4}}%
1178 }
```

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

```
1179 \newrobustcmd*\{\gGlsXtrSetField}[3]{%
1180   \glsxtrsetfieldifexists{#1}{#2}%
1181   {\csgdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1182 }
```

`\xGlsXtrSetField`

```
1183 \newrobustcmd*\{\xGlsXtrSetField}[3]{%
1184   \glsxtrsetfieldifexists{#1}{#2}%
1185   {\protected@csxdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1186 }
```

`\eGlsXtrSetField`

```
1187 \newrobustcmd*\{\eGlsXtrSetField}[3]{%
1188   \glsxtrsetfieldifexists{#1}{#2}%
1189   {\protected@csedef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1190 }
```

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

```
1191 \newcommand*\{\GlsXtrIfFieldEqStr}{%
1192   \@ifstar@s@GlsXtrIfFieldEqStr\@GlsXtrIfFieldEqStr
1193 }
```

`\XtrIfFieldEqStr`

```
1194 \newrobustcmd*\{\@GlsXtrIfFieldEqStr}[5]{%
1195   \glsxtrifhasfield{#1}{#2}%
1196   {%
1197     \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}%
1198   }%
1199   {#5}%
1200 }
```

`\XtrIfFieldEqStr`

```
1201 \newrobustcmd*\{\s@GlsXtrIfFieldEqStr}[5]{%
```

```

1202 \s@glsxtrifhasfield{#1}{#2}%
1203 {%
1204   \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}%
1205 }%
1206 {#5}%
1207 }

```

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

```

1208 \newcommand*{\GlsXtrIfFieldEqXpStr}{%
1209   \@ifstar\s@glsXtrIfFieldEqXpStr\@GlsXtrIfFieldEqXpStr
1210 }

```

**rIfFieldEqXpStr**

```

1211 \newrobustcmd*{\@GlsXtrIfFieldEqXpStr}[5]{%
1212   \@glsxtrifhasfield{#1}{#2}%
1213 {%
1214   \protected@edef\@gls@tmp{#3}%
1215   \ifdefequal{\glscurrentfieldvalue}{\@gls@tmp}{#4}{#5}%
1216 }%
1217 {#5}%
1218 }

```

**rIfFieldEqXpStr**

```

1219 \newrobustcmd*{\s@glsXtrIfFieldEqXpStr}[5]{%
1220   \s@glsxtrifhasfield{#1}{#2}%
1221 {%
1222   \protected@edef\@gls@tmp{#3}%
1223   \ifdefequal{\glscurrentfieldvalue}{\@gls@tmp}{#4}{#5}%
1224 }%
1225 {#5}%
1226 }

```

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

```

1227 \newcommand*{\GlsXtrIfXpFieldEqXpStr}{%
1228   \@ifstar\s@glsXtrIfXpFieldEqXpStr\@GlsXtrIfXpFieldEqXpStr
1229 }

```

**fXpFieldEqXpStr**

```

1230 \newrobustcmd*{\@GlsXtrIfXpFieldEqXpStr}[5]{%
1231   \@glsxtrifhasfield{#1}{#2}%
1232 {%
1233   \protected@edef\@gls@tmp{\glscurrentfieldvalue}%
1234   \let\glscurrentfieldvalue\@gls@tmp
1235   \protected@edef\@gls@tmp{#3}%
1236   \ifdefequal{\glscurrentfieldvalue}{\@gls@tmp}{#4}{#5}%
1237 }%

```

```

1238 {#5}%
1239 }

fXpFieldEqXpStr

1240 \newrobustcmd*{\s@GlsXtrIfXpFieldEqXpStr}[5]{%
1241   \s@glsxtrifhasfield{#1}{#2}%
1242   {%
1243     \protected@edef\@gls@tmp{\glscurrentfieldvalue}%
1244     \let\glscurrentfieldvalue\@gls@tmp
1245     \protected@edef\@gls@tmp{#3}%
1246     \ifdefeqequal{\glscurrentfieldvalue}{\@gls@tmp}{#4}{#5}%
1247   }%
1248 {#5}%
1249 }

```

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.

```

1250 \ifdef\foreignlanguage
1251 {
1252   \ifdef\GetTrackedDialectFromLanguageTag
1253   {
1254     \newcommand{\GlsXtrForeignText}[2]{%

```

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

```

1255   \let\@glsxtr@org@currentfieldvalue\glscurrentfieldvalue
1256   \glsxtrifhasfield{\GlsXtrForeignTextField}{#1}%
1257   {%
1258     \expandafter\GetTrackedDialectFromLanguageTag\expandafter
1259     {\glscurrentfieldvalue}{\@glsxtr@dialect}%
1260     \let\@glsxtr@locale\glscurrentfieldvalue
1261     \let\glscurrentfieldvalue\@glsxtr@org@currentfieldvalue
1262     \ifdefempty\@glsxtr@dialect
1263   }%

```

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

```

1264   \ifdef\TrackedDialectClosestSubMatch
1265   {%
1266     \GlossariesExtraWarning{Can't obtain dialect label
1267       (tracklang v1.3.6+ required)}%
1268   }%
1269   {\let\@glsxtr@dialect\TrackedDialectClosestSubMatch}%
1270 }%

```

```

1271      {}%
1272      \ifdefempty{@glsxtr@dialect}
1273      {%
1274      }%
1275      {%
1276      }%
1277      {%
1278      }%
1279      {%
1280      }%
1281      {%
1282      }%
1283      {%
1284      }%
1285      {%
1286      }%
1287      {%
1288      }%
1289      {%
1290      }%
1291      {%
1292      }%
1293      {%
1294      }%
1295      {%
1296      }%
1297      {%
1298      }%
1299      {%
1300      }%
1301      {%
1302      }%
1303      {%
1304      }%
1305      {%
1306      }%
1307      {%
1308      }%
1309      {%
1310      }%

```

No tracked dialect found for the root language.

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

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

Does a caption hook exist for this?

No mapping. Try root language label instead.

No mapping. Try root language label instead.

```

1311     tracklang v1.3.6+ required}%
1312     #2%
1313   }
1314 }
1315 }
1316 {
  \foreignlanguage isn't defined so just do <text>.
1317 \newcommand{\GlsXtrForeignText}[2]{#2}
1318 }

oreignTextField This is the user2 field by default but may be redefined as required.
1319 \newcommand*{\GlsXtrTextField}{userii}

nDialectWarning
1320 \newcommand*{\GlsXtrUnknownDialectWarning}[2]{%
1321   \GlossariesExtraWarning{Can't determine valid dialect label
1322   for locale '#1' (root language: #2)}%
1323 }

\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.
1324 \ifdef{\GlsEntryCounterLabelPrefix}
1325 {%
1326   \newcommand*{\glsxtrpageref}[1]{%
1327     \ifglsentrycounter
1328       \pageref{\GlsEntryCounterLabelPrefix\glsdetoklabel{#1}}%
1329     \else
1330       \ifglssubentrycounter
1331         \pageref{\GlsEntryCounterLabelPrefix\glsdetoklabel{#1}}%
1332       \else
1333         \gls{#1}%
1334       \fi
1335     \fi
1336   }
1337 }%
1338 {%
1339   \newcommand*{\glsxtrpageref}[1]{%
1340     \ifglsentrycounter
1341       \pageref{glsentry-\glsdetoklabel{#1}}%
1342     \else
1343       \ifglssubentrycounter
1344         \pageref{glsentry-\glsdetoklabel{#1}}%
1345       \else
1346         \gls{#1}%
1347       \fi
1348     \fi
1349   }
1350 }%

```

```

lossarypreamble
1351 \newcommand{\apptoglossarypreamble}[2][\glsdefaulttype]{%
1352   \ifcsdef{glolist@\#1}%
1353   {%
1354     \ifcsundef{@glossarypreamble@\#1}%
1355     {\csdef{@glossarypreamble@\#1}{}{}}%
1356     {}%
1357     \csappto{@glossarypreamble@\#1}{\#2}%
1358   }%
1359   {%
1360     \GlossariesExtraWarning{Glossary ‘#1’ is not defined}%
1361   }%
1362 }

lossarypreamble
1363 \newcommand{\preglossarypreamble}[2][\glsdefaulttype]{%
1364   \ifcsdef{glolist@\#1}%
1365   {%
1366     \ifcsundef{@glossarypreamble@\#1}%
1367     {\csdef{@glossarypreamble@\#1}{}{}}%
1368     {}%
1369     \cspreto{@glossarypreamble@\#1}{\#2}%
1370   }%
1371   {%
1372     \GlossariesExtraWarning{Glossary ‘#1’ is not defined}%
1373   }%
1374 }

```

## 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<sup>A</sup>T<sub>E</sub>X 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.

```

1375 \ifdef{\gls@entry@field}%
1376 {%
1377   \renewcommand*{\gls@entry@field}[2]{\csuse{\glo@\glsdetoklabel{\#1}\@#2}}%

```

```
1378 }  
1379 {}
```

\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.

```
1380 \renewcommand*{\ifglsused}[3]{%  
1381   \glsdoifexists{#1}{\ifbool{glo@\glsdetoklabel{#1}@flag}{#2}{#3}}%  
1382 }
```

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

```
1383 \renewcommand*{\longnewglossaryentry}{%  
1384   @ifstar@glsxtr@s@longnewglossaryentry@glsxtr@longnewglossaryentry  
1385 }
```

ewglossaryentry Starred version.

```
1386 \newcommand{\glsxtr@s@longnewglossaryentry}[3]{%  
1387   \glsdoifnoexists{#1}%  
1388   {  
1389     \bgroup  
1390       \let@org@newglossaryentryprehook@newglossaryentryprehook  
1391       \long\def@newglossaryentryprehook{  
1392         \long\def@glo@desc{#3}%  
1393         @org@newglossaryentryprehook  
1394       }%  
1395       \renewcommand*{\gls@assign@desc}[1]{%  
1396         \global\cslet{glo@\glsdetoklabel{#1}@desc}{\glo@desc}%  
1397         \global\cslet{glo@\glsdetoklabel{#1}@descplural}{\glo@descplural}%  
1398       }  
1399       \gls@defglossaryentry{#1}{#2}%  
1400     \egroup  
1401   }%  
1402 }
```

ewglossaryentry Unstarred version.

```
1403 \newcommand{\glsxtr@longnewglossaryentry}[3]{%  
1404   \glsdoifnoexists{#1}%  
1405 }
```

```

1406 \bgroup
1407   \let\@org@newglossaryentryprehook\@newglossaryentryprehook
1408   \long\def\@newglossaryentryprehook{%
1409     \long\def\@glo@desc{\#3\glsxtrpostlongdescription}%
1410     \@org@newglossaryentryprehook
1411   }%
1412   \renewcommand*{\gls@assign@desc}[1]{%
1413     \global\cslet{\glo@\glsdetoklabel{\#1}@desc}{\@glo@desc}%

```

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

```

1414   \global\cslet{\glo@\glsdetoklabel{\#1}@descplural}{\@glo@descplural}%
1415   }%
1416   \gls@defglossaryentry{\#1}{\#2}%
1417 \egroup
1418 }%
1419 }

```

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

```
1420 \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.

```

1421 \renewcommand{\newignoredglossary}{%
1422   \@ifstar\glsxtr@s@newignoredglossary\glsxtr@org@newignoredglossary
1423 }

```

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

```

1424 \newcommand*{\glsxtr@org@newignoredglossary}[1]{%
1425   \ifcsdef{glolist@\#1}
1426   {%
1427     \glsxtrundefaction{Glossary type '#1' already exists}{}%
1428   }%
1429   {%
1430     \ifdefempty{\@ignored@glossaries}
1431     {%
1432       \edef{\@ignored@glossaries}{\#1}%
1433     }%
1434     {%
1435       \eappto{\@ignored@glossaries}{,\#1}%
1436     }%
1437     \csgdef{glolist@\#1}{,}%
1438     \ifcsundef{gls@\#1@entryfmt}%
1439     {%
1440       \def{\glsentryfmt[\#1]}{\glsentryfmt}%
1441     }%
1442     {}%
1443     \ifdefempty{\gls@nohyperlist}

```

```

1444  {%
1445    \renewcommand*{\@gls@nohyperlist}{#1}%
1446  }%
1447  {%
1448    \eappto{\@gls@nohyperlist}{, #1}%
1449  }%
1450 }%
1451 }

```

`ignoredglossary` Starred form.

```

1452 \newcommand*{\glsxtr@s@newignoredglossary}[1]{%
1453   \ifcsdef{glolist@#1}%
1454   {%
1455     \glsxtrundefaction{Glossary type '#1' already exists}{}%
1456   }%
1457   {%
1458     \ifdefempty{\ignores@glossaries}%
1459     {%
1460       \edef{\ignores@glossaries}{#1}%
1461     }%
1462     {%
1463       \eappto{\ignores@glossaries}{, #1}%
1464     }%
1465     \csgdef{glolist@#1}{,}%
1466     \ifcsundef{gls@#1@entryfmt}%
1467     {%
1468       \def{glsentryfmt[#1]}{\glsentryfmt}%
1469     }%
1470     {}%
1471   }%
1472 }

```

`\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.

```

1473 \glsifusetranslator
1474 {%
1475   \renewcommand*{\glssettoctitle}[1]{%
1476     \ifcsdef{gls@tr@set@#1@toctitle}%
1477     {%
1478       \csuse{gls@tr@set@#1@toctitle}%
1479     }%
1480     {%
1481       \ifcsdef{@glotype@#1@title}%
1482         {\def{\glossarytoctitle}{\csname @glotype@#1@title\endcsname}}%
1483         {\def{\glossarytoctitle}{\glossarytitle}}%
1484     }%
1485   }%
1486 }
1487 {

```

```

1488 \renewcommand*{\glssettoctitle}[1]{%
1489   \ifcsdef{@glotype@#1@title}{%
1490     {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1491     {\def\glossarytoctitle{\glossarytitle}}%
1492   }%
1493 }

```

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

```

1494 \newcommand{\provideignoredglossary}{%
1495   \@ifstar\glsxtr@s\provideignoredglossary\glsxtr@provideignoredglossary
1496 }

```

`ignoredglossary` Unstarred version.

```

1497 \newcommand*{\glsxtr@provideignoredglossary}[1]{%
1498   \ifcsdef{glolist@#1}{%
1499     {}%
1500   }{%
1501     \ifdefempty{\@ignored@glossaries}{%
1502       {}%
1503       \edef{\@ignored@glossaries}{#1}%
1504     }%
1505     {}%
1506     \eappto{\@ignored@glossaries}{,#1}%
1507   }%
1508   \csgdef{glolist@#1}{,}%
1509   \ifcsundef{gls@#1@entryfmt}{%
1510     {}%
1511     \def\glsentryfmt[#1]{\glsentryfmt}%
1512   }%
1513   {}%
1514   \ifdefempty{\gls@nohyperlist}{%
1515     {}%
1516     \renewcommand*{\@gls@nohyperlist}{#1}%
1517   }%
1518   {}%
1519   \eappto{\gls@nohyperlist}{,#1}%
1520   }%
1521 }%
1522 }

```

`ignoredglossary` Starred form.

```

1523 \newcommand*{\glsxtr@s\provideignoredglossary}[1]{%
1524   \ifcsdef{glolist@#1}{%
1525     {}%
1526   }{%
1527     \ifdefempty{\@ignored@glossaries}{%
1528       {}%
1529       \edef{\@ignored@glossaries}{#1}%
1530     }%

```

```

1531   {%
1532     \eappto\@ignored@glossaries{,#1}%
1533   }%
1534   \csgdef{glolist@#1}{,}%
1535   \ifcsundef{gls@#1@entryfmt}%
1536   {%
1537     \defglsentryfmt[#1]{\glsentryfmt}%
1538   }%
1539   {}%
1540 }%
1541 }

```

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

```

1542 \newcommand*{\glsxtrcopytoglossary}[2]{%
1543   \glsdoifexists{#1}%
1544   {%
1545     \ifcsdef{glolist@#2}%
1546     {%
1547       \cseappto{glolist@#2}{#1,}%
1548     }%
1549     {}%
1550     \glsxtrundefinedaction{Glossary type '#2' doesn't exist}{}%
1551   }%
1552 }%
1553 }

```

### 1.3.1 Existence Checks

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

```

1554 \renewcommand{\glsdoifexists}[2]{%
1555   \ifglsentryexists{#1}{#2}%
1556   {%

```

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

```

1557   \edef\glslabel{\glsdetoklabel{#1}}%
1558   \glsxtrundefinedaction{Glossary entry '\glslabel'%
1559   has not been defined}{You need to define a glossary entry before%
1560   you can reference it.}%
1561 }%
1562 }

```

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

```

1563 \renewcommand{\glsdoifnoexists}[2]{%
1564   \ifglsentryexists{#1}{%
1565     \glsxtrundefinedaction{Glossary entry '\glsdetoklabel{#1}'%
1566     has already been defined}{}{#2}%
1567 }

```

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

```
1568 \ifdef\glsdoifexistsordo
1569 {%
1570   \renewcommand{\glsdoifexistsordo}[3]{%
1571     \ifglsentryexists{#1}{#2}%
1572     {%
1573       \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'%
1574         has not been defined}{You need to define a glossary entry%
1575         before you can use it.}%
1576       #3%
1577     }%
1578   }%
1579 }
1580 {%
1581   \glsxtr@warnonexistsordo\glsdoifexistsordo
1582   \newcommand{\glsdoifexistsordo}[3]{%
1583     \ifglsentryexists{#1}{#2}%
1584     {%
1585       \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'%
1586         has not been defined}{You need to define a glossary entry%
1587         before you can use it.}%
1588       #3%
1589     }%
1590   }%
1591 }
```

arynoexistsordo Similarly for \doifglossarynoexistsordo.

```
1592 \ifdef\doifglossarynoexistsordo
1593 {%
1594   \renewcommand{\doifglossarynoexistsordo}[3]{%
1595     \ifglossaryexists*{#1}%
1596     {%
1597       \glsxtrundefaction{Glossary type '#1' already exists}{}%
1598       #3%
1599     }%
1600     {#2}%
1601   }%
1602 }
1603 {%
1604   \glsxtr@warnonexistsordo\doifglossarynoexistsordo
1605   \newcommand{\doifglossarynoexistsordo}[3]{%
1606     \ifglossaryexists*{#1}%
1607     {%
1608       \glsxtrundefaction{Glossary type '#1' already exists}{}%
1609       #3%
1610     }%
1611     {#2}%
1612   }%
```

```
1613 }
```

```
1614
```

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

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

```
1615 \appto{\newglossaryentry}{%
1616   \ifdefvoid{\glo@see}%
1617   {\csxdef{\glo@\glo@label}{\glo@see}}%
1618   {%
1619     \csxdef{\glo@\glo@label}{\glo@see}{\glo@see}%
1620     \if@glstr@autoseeindex
1621       \glstr@autoindexcrossrefs
1622     \fi
1623   }%
1624 }
1625 \appto{\gls@keymap}{\gls@keymap{\glo@see}{\glo@see}}
```

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

```
1626 \newcommand*{\glstrusesee}[1]{%
1627   \glsdoifexists{\#1}{%
1628     {%
1629       \letcs{\glo@see}{\glsdetoklabel{\#1}{\glo@see}}%
1630       \ifdefempty{\glo@see}{%
1631         {}%
1632         {%
1633           \expandafter\glstr@usesee\glo@see\end\glstr@usesee
1634         }%
1635       }%
1636     }%
1637 }
```

\glstr@usesee

```
1637 \newcommand*{\glstr@usesee}[1][\seename]{%
1638   \glstr@usesee[\#1]%
1639 }
```

\@glstr@usesee

```
1640 \def{\glstr@usesee[\#1]\#2\end\glstr@usesee}{%
1641   \glstruseseeformat{\#1}{\#2}%
1642 }
```

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

```
1643 \newcommand*{\glstruseseeformat}[2]{%
1644   \glsseeformat[\#1]{\#2}%
1645 }
```

```
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 sani-
tized. 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.)
1646 \newcommand*{\glsseeitemformat}[1]{%
1647   \ifglshasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1648 }
```

\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.

```
1649 \newcommand*{\glsxtrhiername}[1]{%
1650   \glsdoifexists{#1}%
1651   {%
1652     \glsxtrifhasfield{parent}{#1}%
1653     {\glsxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1654     {}%
1655     \ifglshasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1656   }%
1657 }
```

\Glsxtrhiername

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

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

```
1658 \newcommand*{\Glsxtrhiername}[1]{%
1659   \glsdoifexists{#1}%
1660   {%
1661     \glsxtrifhasfield{parent}{#1}%
1662     {}%
1663     \Glsxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep%
1664     \ifglshasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1665   }%
1666   {\ifglshasshort{#1}{\Glsfmttext{#1}}{\Glsfmtname{#1}}}%
1667 }%
1668 }
```

```
\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.)

```
1669 \newcommand*{\GlsXtrhiername}[1]{%
1670   \glsdoifexists{#1}%
1671   {%
1672     \glsxtrifhasfield{parent}{#1}%
1673     {\GlsXtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1674     {}%
1675     \ifglshasshort{#1}{\Glsfmttext{#1}}{\Glsfmtname{#1}}%
1676   }%
1677 }
```

```
\GLSxtrhiername
```

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

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

```
1678 \newcommand*{\GLSxtrhiername}[1]{%
1679   \glsdoifexists{#1}%
1680   {%
1681     \glsxtrifhasfield{parent}{#1}%
1682     {}%
1683     \GLSxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep
1684     \ifglshasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1685   }%
1686   \ifglshasshort{#1}{\GLSfmttext{#1}}{\GLSfmtname{#1}}%
1687 }%
1688 }
```

```
\GLSXTRhiername
```

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

As above but displays all names in all-caps.

```
1689 \newcommand*{\GLSXTRhiername}[1]{%
1690   \glsdoifexists{#1}%
1691   {%
1692     \glsxtrifhasfield{parent}{#1}%
1693     {\GLSXTRhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1694     {}%
1695     \ifglshasshort{#1}{\GLSfmttext{#1}}{\GLSfmtname{#1}}%
```

```

1696  }%
1697 }

sxtrhiernamesep Separator used in \glsxtrhiername and variants.
1698 \newcommand*{\glsxtrhiernamesep}{\,\small$\triangleright$\,}

lxtruseseealso Apply \glsseeformat to the seealso key if not empty. There's no optional tag to worry about here.
1699 \newcommand*{\glsxtruseseealso}[1]{%
1700   \glsdoifexists{#1}%
1701   {%
1702     \letcs{\@glo@see}{\glsdetoklabel{#1}@seealso}%
1703     \ifdefempty{\@glo@see}%
1704     {}%
1705     {}%
1706     \expandafter\glsxtruseseealsoformat\expandafter{\@glo@see}%
1707   }%
1708 }%
1709 }

\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.
1710 \newcommand*{\glsxtrusealias}[1]{%
1711   \glsdoifexists{#1}%
1712   {%
1713     \letcs{\@glo@see}{\glsdetoklabel{#1}@alias}%
1714     \ifdefempty{\@glo@see}%
1715     {}%
1716     {}%
1717     \glsxtruseseeformat{\seename}{\@glo@see}%
1718   }%
1719 }%
1720 }

Expansion isn't necessary because the value is a single label not a list.
1717     \glsxtruseseeformat{\seename}{\@glo@see}%
1718   }%
1719 }%
1720 }

seseealsoformat The format used by \glsxtruseseealso. The argument is the comma-separated list of cross-referenced labels.
1721 \newcommand*{\glsxtruseseealsoformat}[1]{%
1722   \glsseeformat[\sealoname]{#1}{}%
1723 }

\glsxtrseelist Fully expands argument before passing to \glsseelist. (The argument to \glsseelist must be a comma-separated list of entry labels.)
1724 \newrobustcmd{\glsxtrseelist}[1]{%
1725   \edef\@glo@tmp{\noexpand\glsseelist{#1}}\@glo@tmp
1726 }

```

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

```
1727 \ifdef\alsoname
1728 {\providecommand{\seealsoname}{\alsoname}}
1729 {\providecommand{\seealsoname}{see also}}
```

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

```
1730 \ifdef\xdycrossrefhook
1731 {
```

Add the cross-reference class definition to the hook.

```
1732 \appto\xdycrossrefhook{%
1733   \write\glswrite{(\define-crossref-class \string"seealso\string"
1734     :unverified )}%
1735   \write\glswrite{(\markup-crossref-list
1736     :class \string"seealso\string"^^J\space\space\space
1737     :open \string"\string\glsxtruseealsoformat\glsopenbrace\string"
1738     :close \string"\glsclosebrace\string")}%
1739 }
```

Append to class list.

```
1740 \appto\xdylocationclassorder{\space\string"seealso\string"}
```

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

```
1741 \newrobustcmd*\glsxtrindexseealso}[2]{%
1742   \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
1743     \glsxtr@recordsee{#1}{#2}%
1744   \fi
1745   \glsdoifexists{#1}%
1746   {%
1747     \@@glsxtrwrglossmark
1748     \def\gls@xref{#2}%
1749     \onelevel@sanitize\gls@xref
1750     \gls@checkmkidxchars\gls@xref
1751     \gls@glossary{\csname glo@#1@type\endcsname}{%
1752       (indexentry
1753         :tkey (\csname glo@#1@index\endcsname)
1754         :xref (\string"\gls@xref\string")
1755         :attr \string"seealso\string"
1756       )
1757     }%
1758   }%
1759 }
1760 }
1761 {
```

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

```
1762 \newrobustcmd*{\glsxtrindexseealso}{\glssee[\seealso]}
1763 }
```

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

```
1764 \ifdef\gls@set@xr@key
1765 {
```

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

```
1766 \define@key{glossentry}{alias}{%
1767   \gls@set@xr@key{alias}{\@glo@alias}{#1}%
1768 }
1769 \define@key{glossentry}{seealso}{%
1770   \gls@set@xr@key{seealso}{\@glo@seealso}{#1}%
1771 }
```

Add to the key mappings.

```
1772 \appto{\gls@keymap}{, {alias}{alias}, {seealso}{seealso}}
```

Set the default value.

```
1773 \appto{\newglossaryentryprehook}{\def{\glo@alias}\def{\glo@seealso}}%
```

Assign the field values.

```
1774 \appto{\newglossaryentryposthook}{%
1775   \ifdefvoid{\glo@seealso}{%
1776     {\csxdef{\glo@\glo@label}{\seealso}{}}%
1777   }%
1778   {\csxdef{\glo@\glo@label}{\seealso}{\glo@seealso}}%
1779   \if@glsxtr@autoseeindex
1780     \glsxtr@autoindexcrossrefs
1781   \fi
1782 }
```

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

```
1783 \ifdefvoid{\glo@alias}{%
1784   {\csxdef{\glo@\glo@label}{\alias}{}}%
1785   }%
1786   {\csxdef{\glo@\glo@label}{\alias}{\glo@alias}}%
1787 }
1788 }
```

Provide user-level commands to access the values.

```
\glsxtralias
```

```
1789 \newcommand*{\glsxtralias}[1]{\gls@entry@field{#1}{alias}}
```

```
trseealsolabels
1790 \newcommand*{\glsxtrseealsolabels}[1]{\gls@entry@field{#1}{seealso}}
```

Add to the `\@glo@autosee` hook.

```
1791 \appto{\glo@autoseehook}{%
1792   \ifdefvoid{\glo@alias}{%
1793     {%
1794       \ifdefvoid{\glo@seealso}{%
1795         {}%
1796       {%
1797         \edef{\do@glssee}{\noexpand\glsxtrindexseealso}%
1798         {\glo@label}{\glo@seealso}}%
1799         \do@glssee
1800       }%
1801     }%
1802   }%
```

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

```
1803 \ifdefvoid{\glo@see}{%
1804   {%
1805     \edef{\do@glssee}{\noexpand\glssee{\glo@label}{\glo@alias}}%
1806     \do@glssee
1807   }%
1808   {}%
1809 }%
1810 }%
1811 }%
1812 {
```

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

```
\glsxtralias
1813 \glsaddstoragekey*{alias}{}{\glsxtralias}
```

```
trseealsolabels
1814 \glsaddstoragekey*{seealso}{}{\glsxtrseealsolabels}
```

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

ryentryposthook Append to the hook to check for the alias andseealso keys.

```
1815 \appto{\newglossaryentryposthook}{%
1816   \ifcsvvoid{\glo@\glo@label}{\alias}{%
1817     {%
1818       \ifcsvvoid{\glo@\glo@label}{\seealso}{%
1819         {}%
1820       {%
1821         \edef{\do@glssee}{\noexpand\glsxtrindexseealso}%
1822         {\glo@label}{\csuse{\glo@\glo@label}{\seealso}}}}%
1823         \do@glssee
1824       }%
1825     }%
1826   }%
```

```

1824      }%
1825      }%
1826      {%
1827          \ifdefvoid{@glo@see}%
1828          {%
1829              \edef\@do@glssee{\noexpand\glssee{%
1830                  {\@glo@label}\{\csuse{glo@\@glo@label}{\alias}\}}}}%
1831              \@do@glssee
1832          }%
1833          {}%
1834      }%
1835  }%
1836 }%

```

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

```
1837 \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.

```

1838 \newcommand*{\glsxtraddallcrossrefs}{%
1839     \forallglossaries{\@glo@type}%
1840     {%
1841         \forglsentries[\@glo@type]{\@glo@label}%
1842         {%
1843             \ifglsused{\@glo@label}%
1844                 {\expandafter\glsxtr@addunusedxrefs\expandafter{\@glo@label}}{}%
1845         }%
1846     }%
1847 }

```

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

```

1848 \newcommand*{\@glsxtr@addunusedxrefs}[1]{%
1849     \letcs{\@glo@see}{glo@\glsdetoklabel{\#1}@see}%
1850     \ifdefvoid{@glo@see}%
1851     {}%
1852     {%
1853         \expandafter\glsxtr@addunused\@glo@see\end@glsxtr@addunused
1854     }%
1855     \letcs{\@glo@see}{glo@\glsdetoklabel{\#1}@seealso}%
1856     \ifdefvoid{@glo@see}%
1857     {}%
1858     {%
1859         \expandafter\glsxtr@addunused\@glo@see\end@glsxtr@addunused
1860     }%
1861 }

```

```

lsxtr@addunused Adds all the entries if they haven't been used.
1862 \newcommand*{\glsxtr@addunused}[1][]{%
1863   \glsxtr@addunused
1864 }

lsxtr@addunused Adds all the entries if they haven't been used.
1865 \def\@glsxtr@addunused#1\@end@glsxtr@addunused{%
1866   \@for\@glsxtr@label:=#1\do
1867   {%
1868     \ifglsused{\@glsxtr@label}{}%
1869   {%
1870     \glsadd[format=glsxtrunusedformat]{\@glsxtr@label}%
1871     \glsunset{\@glsxtr@label}%
1872     \expandafter\@glsxtr@addunusedxrefs\expandafter{\@glsxtr@label}%
1873   }%
1874 }%
1875 }

xtrunusedformat
1876 \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.

```

1877 \ifdef\gls@begindocdefs
1878 {%
1879   \renewcommand*{\gls@begindocdefs}{%
1880     \ifnum\glsxtr@docdefval=1\relax
1881       \gls@enablesavenonumberlist
1882       \edef\gls@restoreat{%
1883         \noexpand\catcode`\noexpand\@=\number\catcode`\@}%
1884       \makeatletter
1885       \InputIfFileExists{\jobname.glsdefs}{}{%
1886         \gls@restoreat
1887         \undef\gls@restoreat
1888         \gls@defdocnewglossaryentry
1889       }%
1890     \else
1891       \ifnum\glsxtr@docdefval=3\relax

```

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

```

1891       \gls@enablesavenonumberlist
1892       \let\gls@checkseeallowed\relax
1893       \let\newglossaryentry\new@atom@glossaryentry
1894       \global\newwrite\gls@deffile
1895       \immediate\openout\gls@deffile=\jobname.glsdefs

```

Write all currently defined entries.

```
1896      \forallglsentries{\@glsentry}{\@gls@writedef{\@glsentry}}%
1897      \fi
1898      \fi
1899  }
1900 }
1901 {%
1902   \ifnum\@glsxtr@docdefval=3\relax
1903     \PackageError{glossaries-extra}{Package option
1904       'docdef=\@glsxtr@docdefsetting' requires at least version 4.37
1905       of the base glossaries.sty package}{}%
1906   \fi
1907 }
```

m@glossaryentry

```
1908 \newrobustcmd{\new@atom@glossaryentry}[2]{%
1909   \gls@defglossaryentry{#1}{#2}%
1910   \gls@writedef{#1}%
1911 }
```

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.

```
1912 \let\glsxtr@orgmakenoidxglossaries\makenoidxglossaries
1913 \renewcommand{\makenoidxglossaries}{%
1914   \domakeglossaries
1915   {%
1916     \ifdefeq{\@glsxtr@record@setting}{\@glsxtr@record@setting@off}
1917     {%
1918       \glsxtr@orgmakenoidxglossaries
```

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

```
1919 \renewcommand{\@do@seeglossary}[2]{%
1920   \@@glsxtrwrglossmark
1921   \edef\@gls@label{\glsdetoklabel{\#1}}%
1922   \protected@write\auxout{}{%
1923     \string\@gls@reference
1924     {\csname glo@\@gls@label\type\endcsname}%
1925     {\@gls@label}%
1926     {%
1927       \string\glsseeformat##2{}%
1928     }%
1929   }%
1930 }
```

Check for `docdefs=restricted`:

```
1931 \if@glsxtrdocdefrestricted
```

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

```

1932 \renewcommand*{\@gls@reference}[3]{%
1933   \ifcsundef{@glsref##1}{\csgdef{@glsref##1}{}{}}{%
1934     \ifinlistcs{##2}{@glsref##1}{%
1935       {}{%
1936       {\listcsgadd{@glsref##1}{##2}}{%
1937         \ifcsundef{glo@\glsdetoklabel{##2}@loc@list}{%
1938           {\csgdef{glo@\glsdetoklabel{##2}@loc@list}{}{}}{%
1939             {}{%
1940               {\listcsgadd{glo@\glsdetoklabel{##2}@loc@list}{##3}}{%
1941                 {}{%
1942               \else
1943                 \Disable document definitions.
1944               \fi
1945               \disable@keys{glossaries-extra.sty}{docdef}{%
1946             }{%
1947             {}{%
1948               \PackageError{glossaries-extra}{\string\makenoidxglossaries\space
1949                 not permitted\MessageBreak
1950                 with record=\glsxtr@record@setting\space package option}{%
1951                   {You may only use \string\makenoidxglossaries\ space with the
1952                     record=off option}}{%
1953             }{%
1954           }{%
1955         }

```

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

```

1956 \renewcommand*{\gls@defdocnewglossaryentry}{%
1957   \ifcase\@glsxtr@docdefval
1958     docdef=false:
1959     \renewcommand*{\newglossaryentry}[2]{%
1960       \PackageError{glossaries-extra}{Glossary entries must
1961         be \MessageBreak defined in the preamble with \MessageBreak
1962         package option ‘docdef=false’\MessageBreak(consider using
1963           ‘docdef=restricted’)\{Move your glossary definitions to
1964             the preamble. You can also put them in a \MessageBreak separate file
1965             and load them with \string\loadglsentries.\}}{%
1966             }{%
1967             \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.

```

1968   \let\gls@checkseeallowed\relax
1969   \let\newglossaryentry\new@glossaryentry
1970 \else

```

Restricted mode just needs to allow the see value.

```

1971   \let\gls@checkseeallowed\relax
1972 \fi

```

```
1972 }%
```

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`

```
1973 \newcommand*{\GlsXtrEnableOnTheFly}{%
1974   \@ifstar\@sGlsXtrEnableOnTheFly\@GlsXtrEnableOnTheFly
1975 }
```

`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.)

```
1976 \newcommand*{\@sGlsXtrEnableOnTheFly}{%
1977   \renewcommand*{\glsdetoklabel}[1]{%
1978     \expandafter\@glsxtr@ifcsstart\string##1 \@glsxtr@end@
1979     {%
1980       \expandafter\detokenize\expandafter{##1}%
1981     }%
1982     {\detokenize{##1}}%
1983   }%
1984   \@GlsXtrEnableOnTheFly
1985 }
1986 \def\@glsxtr@ifcsstart#1#2\@glsxtr@end@#3#4{%
1987   \expandafter\if\glsbackslash#1%
1988     #3%
1989   \else
1990     #4%
1991   \fi
1992 }
```

`sxtrstarflywarn`

```
1993 \newcommand*{\glsxtrstarflywarn}{%
1994   \GlossariesExtraWarning{Experimental starred version of
1995   \string\GlsXtrEnableOnTheFly\space in use (please ensure you have
1996   read the warnings in the glossaries-extra user manual)}%
1997 }
```

`rEnableOnTheFly`

```
1998 \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`

```
1999 \newcommand*{\glsxtrcat}{general}
```

```

\glsxtr
2000 \newcommand*{\glsxtr}[1] []{%
2001   \def\glsxtr@keylist{##1}%
2002   \glsxtr
2003 }

\@glsxtr
2004 \newcommand*{\@glsxtr}[2] []{%
2005   \ifglsentryexists{##2}%
2006   {%
2007     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2008   }%
2009   {%
2010     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2011       description={\nopostdesc},##1}%
2012   }%
2013   \expandafter\gls\expandafter[\glsxtr@keylist]{##2}%
2014 }

\Glsxtr
2015 \newcommand*{\Glsxtr}[1] []{%
2016   \def\glsxtr@keylist{##1}%
2017   \glsxtr
2018 }

\@Glsxtr
2019 \newcommand*{\@Glsxtr}[2] []{%
2020   \ifglsentryexists{##2}%
2021   {%
2022     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2023   }%
2024   {%
2025     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2026       description={\nopostdesc},##1}%
2027   }%
2028   \expandafter\Gls\expandafter[\glsxtr@keylist]{##2}%
2029 }

\glsxtrpl
2030 \newcommand*{\glsxtrpl}[1] []{%
2031   \def\glsxtr@keylist{##1}%
2032   \glsxtrpl
2033 }

\@glsxtrpl
2034 \newcommand*{\@glsxtrpl}[2] []{%
2035   \ifglsentryexists{##2}%
2036   {%

```

```

2037     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2038   }%
2039   {%
2040     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2041       description={\nopostdesc},##1}%
2042   }%
2043   \expandafter\glspl\expandafter[\glsxtr@keylist]{##2}%
2044 }

\Glsxtrpl
2045 \newcommand*\{\Glsxtrpl}[1] [] {%
2046   \def\glsxtr@keylist{##1}%
2047   \Glsxtrpl
2048 }

\@Glsxtrpl
2049 \newcommand*\{\@Glsxtrpl}[2] [] {%
2050   \ifglsentryexists{##2}
2051   {%
2052     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2053   }%
2054   {%
2055     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2056       description={\nopostdesc},##1}%
2057   }%
2058   \expandafter\Glspl\expandafter[\glsxtr@keylist]{##2}%
2059 }

\GlsXtrWarning
2060 \newcommand*\{\GlsXtrWarning}[2] {%
2061   \def\@glsxtr@optlist{##1}%
2062   \onelevel@sanitize\@glsxtr@optlist
2063   \GlossariesExtraWarning{The options '\@glsxtr@optlist' have
2064   been ignored for entry '##2' as it has already been defined}%
2065 }

Disable commands after the glossary:
2066 \renewcommand\@printglossary[2] {%
2067   \def\@glsxtr@printglossopts{##1}%
2068   \@glsxtr@orgprintglossary{##1}{##2}%
2069   \def\@glsxtr{\@glsxtr@disabledflycommand\glsxtr}%
2070   \def\@glsxtrpl{\@glsxtr@disabledflycommand\glsxtrpl}%
2071   \def\@Glsxtr{\@glsxtr@disabledflycommand\Glsxtr}%
2072   \def\@Glsxtrpl{\@glsxtr@disabledflycommand\Glsxtrpl}%
2073 }

abledflycommand
2074 \newcommand*\{@glsxtr@disabledflycommand}[1] {%
2075   \PackageError{glossaries-extra}%

```

```

2076  {\string##1\space can't be used after any of the \MessageBreak
2077    glossaries have been displayed}%
2078  {The on-the-fly commands enabled by
2079    \string\GlsXtrEnableOnTheFly\space may only be used \MessageBreak
2080    before the glossaries. If you want to use any entries \MessageBreak
2081    after any of the glossaries, you must use the standard \MessageBreak
2082    method of first defining the entry and then using the \MessageBreak
2083    entry with commands like \string\gls}%
2084    \@@glsxtr@disabledflycommand
2085 }%
2086 \newcommand*{\@@glsxtr@disabledflycommand}[2][]{\#2}

```

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

```

2087 \let\GlsXtrEnableOnTheFly\relax
2088 }
2089 \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.

```
2090 \newcommand*{\@glsxtr@current@style}{\@glossary@default@style}
```

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

etglossarystyle

```

2091 \renewcommand*{\setglossarystyle}[1]{%
2092   \ifcsundef{@glsstyle@#1}%
2093   {%
2094     \PackageError{glossaries-extra}{Glossary style '#1' undefined}{}%
2095   }%
2096   {%
2097     \csname @glsstyle@#1\endcsname

```

Only set the current style if it exists.

```

2098   \protected@edef{\@glsxtr@current@style}{#1}%
2099 }%
2100 \ifx\@glossary@default@style\relax
2101   \protected@edef{\@glossary@default@style}{#1}%
2102 \fi
2103 }

```

In case we have an old version of glossaries:

```

2104 \ifdef{\glossary@default@style}
2105 {}
2106 {%
2107   \let{\glossary@default@style}\relax
2108 }

```

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

```
2109 \ifdef{\glslistdottedwidth}{%  
2110   \ifdim{\glslistdottedwidth}=.5\hsize  
2111     \setlength{\glslistdottedwidth}{-\dimexpr\maxdimen-1sp\relax}  
2112   \AtBeginDocument{  
2113     \ifdim{\glslistdottedwidth}=-\dimexpr\maxdimen-1sp\relax  
2114       \setlength{\glslistdottedwidth}{.5\columnwidth}  
2115     \fi  
2116   }%  
2117 }%  
2118 \fi  
2119 }  
2120 {}%
```

Similarly for \glsdescwidth:

```
\glsdescwidth  
2121 \ifdef{\glsdescwidth}{%  
2122   \ifdim{\glsdescwidth}=.6\hsize  
2123     \setlength{\glsdescwidth}{-\dimexpr\maxdimen-1sp\relax}  
2124   \AtBeginDocument{  
2125     \ifdim{\glsdescwidth}=-\dimexpr\maxdimen-1sp\relax  
2126       \setlength{\glsdescwidth}{.6\columnwidth}  
2127     \fi  
2128   }%  
2129 }%  
2130 \fi  
2131 }  
2132 {}%
```

and for \glspagelistwidth:

```
lspagelistwidth  
2133 \ifdef{\glspagelistwidth}{%  
2134   \ifdim{\glspagelistwidth}=.1\hsize  
2135     \setlength{\glspagelistwidth}{-\dimexpr\maxdimen-1sp\relax}  
2136   \AtBeginDocument{  
2137     \ifdim{\glspagelistwidth}=-\dimexpr\maxdimen-1sp\relax  
2138       \setlength{\glspagelistwidth}{.1\columnwidth}  
2139     \fi  
2140   }%  
2141 }%  
2142 \fi  
2143 }  
2144 {}%
```

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

```
2145 \def{\org@glossaryentrynumbers#1{\#1\gls@save@numberlist{\#1}}}%
```

```

2146 \ifx\org@glossaryentrynumbers\glossaryentrynumbers
2147   \glsnonumberlistfalse
2148   \renewcommand*\glossaryentrynumbers[1]{%
2149     \ifglsentryexists{\glscurrententrylabel}{%
2150       {%
2151         \glsxtrpreloctag
2152         \GlsXtrFormatLocationList{#1}%
2153         \glsxtrpostloctag
2154         \gls@save@numberlist{#1}%
2155       }{%
2156     }%
2157   \else
2158     \glsnonumberlisttrue
2159     \renewcommand*\glossaryentrynumbers[1]{%
2160       \ifglsentryexists{\glscurrententrylabel}{%
2161         {%
2162           \gls@save@numberlist{#1}%
2163         }{%
2164       }%
2165   \fi

```

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

```
2166 \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`

```

2167 \newcommand*\GlsXtrEnablePreLocationTag[2]{%
2168   \let\glsxtrpreloctag\@glsxtrpreloctag
2169   \let\glsxtrpostloctag\@glsxtrpostloctag
2170   \renewcommand*\glsxtr@pagetag{#1}%
2171   \renewcommand*\glsxtr@pagestag{#2}%
2172   \renewcommand*\glsxtr@savepreloctag[2]{%
2173     \csgdef{\glsxtr@preloctag##1##2}%
2174   }%
2175   \renewcommand*\glsxtr@doloctag{%
2176     \ifcsundef{\glsxtr@preloctag@\glscurrententrylabel}{%
2177       {%
2178         \GlossariesWarning{Missing pre-location tag for '\glscurrententrylabel'.
2179         Rerun required}%
2180       }%
2181     }%
2182     \csuse{\glsxtr@preloctag@\glscurrententrylabel}%
2183   }%

```

```

2184  }%
2185 }
2186 \onlypreamble\GlsXtrEnablePreLocationTag

glsxtrpreloctag
2187 \newcommand*{\@glsxtrpreloctag}{%
2188   \let\@glsxtr@org@delimN\delimN
2189   \let\@glsxtr@org@delimR\delimR
2190   \let\@glsxtr@org@glsignore\glsignore
      \gdef is required as the delimiters may occur inside a scope.
2191   \gdef\@glsxtr@thisloctag{\@glsxtr@pagetag}%
2192   \renewcommand*{\delimN}{%
2193     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
2194     \@glsxtr@org@delimN}%
2195   \renewcommand*{\delimR}{%
2196     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
2197     \@glsxtr@org@delimR}%
2198   \renewcommand*{\glsignore}[1]{%
2199     \gdef\@glsxtr@thisloctag{\relax}%
2200     \@glsxtr@org@glsignore{##1}}%
2201   \glsxtr@doloctag
2202 }

glsxtrpreloctag
2203 \newcommand*{\@glsxtrpreloctag}{}}

@glsxtr@pagetag
2204 \newcommand*{\@glsxtr@pagetag}{}%

glsxtr@pagestag
2205 \newcommand*{\@glsxtr@pagestag}{}%

lsxtrpostloctag
2206 \newcommand*{\@glsxtrpostloctag}{%
2207   \let\delimN\@glsxtr@org@delimN
2208   \let\delimR\@glsxtr@org@delimR
2209   \let\glsignore\@glsxtr@org@glsignore
2210   \protected@write\@auxout{}{%
2211     {\string\@glsxtr@savepreloctag{\glscurrententrylabel}{\@glsxtr@thisloctag}}%
2212   }
}

lsxtrpostloctag
2213 \newcommand*{\@glsxtrpostloctag}{}}

lsxtr@preloctag
2214 \newcommand*{\@glsxtr@savepreloctag}[2]{}%
2215 \protected@write\@auxout{}{%
2216   \string\providecommand\string\@glsxtr@savepreloctag[2]{}}

```

```

glsxtr@doloctag
2217 \newcommand*{\@glsxtr@doloctag}{}}

ss@nonumberlist  Modify the nonumberlist key to use \GlsXtrFormatLocationList (and also save the number
                  list):
2218 \renewcommand*{\KV@printgloss@nonumberlist}[1]{%
2219   \XKV@plfalse
2220   \XKV@sttrue
2221   \XKV@checkchoice[\XKV@resa]{#1}{true, false}%
2222 {%
2223   \csname glsnonumberlist\XKV@resa\endcsname
2224   \ifglsnonumberlist
2225     \def\glossaryentrynumbers##1{\gls@save@numberlist{##1}}%
2226   \else
2227     \def\glossaryentrynumbers##1{%
2228       \@glsxtrpreloctag
2229       \GlsXtrFormatLocationList{##1}%
2230       \@glsxtrpostloctag
2231       \gls@save@numberlist{##1}}%
2232   \fi
2233 }%
2234 }

```

### 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.

```

2235 \renewcommand*{\glsentryfmt}{%
2236   \ifglshasshort{\glslabel}{\glssetabbrvfmt{\glscategory{\glslabel}}}{}%
2237   \glsifregular{\glslabel}%
2238   {\glsxtrregularfont{\glsgenentryfmt}}%
2239 {%
2240   \ifglshasshort{\glslabel}%
2241   {\glsxtrabbreviationfont{\glsxtrgenabbrvfmt}}%
2242   {\glsxtrregularfont{\glsgenentryfmt}}%
2243 }%
2244 }

```

sxtrregularfont Font used for regular entries.

```
2245 \newcommand*{\glsxtrregularfont}[1]{#1}
```

bbreviationfont Font used for abbreviation entries.

```
2246 \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.

```
2247 \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).

```
2248  \glsxtr@record{#2}{#3}{glslink}%
2249  \glsdoifexists{#3}%
2250  {%
```

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).

```
2251  \let\glsxtrorg@ifKV@glslink@hyper\ifKV@glslink@hyper
2252  \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2253  \def\glscustomtext{#4}%
2254  \glsxtr@field@linkdefs
2255  #1%
2256  \gls@link[#2]{#3}{#4}%
2257  \let\ifKV@glslink@hyper\glsxtrorg@ifKV@glslink@hyper
2258 }%
2259 \glspostlinkhook
2260 }
```

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.

```
2261 \let\glsxtr@org@gls@\gls@
2262 \def\gls@#1#2{%
2263  \glsxtr@record{#1}{#2}{glslink}%
2264  \glsxtr@org@gls@{#1}{#2}%
2265 }%
```

\glspl@ Save the original definition and redefine.

```
2266 \let\glsxtr@org@glspl@\glspl@
2267 \def\glspl@#1#2{%
2268  \glsxtr@record{#1}{#2}{glslink}%
2269  \glsxtr@org@glspl@{#1}{#2}%
2270 }%
```

\Gls@ Save the original definition and redefine.

```
2271 \let\glsxtr@org@Gls@\Gls@
2272 \def\Gls@#1#2{%
```

```
2273  \@glsxtr@record{#1}{#2}{glslink}%
2274  \@glsxtr@org@Gls@{#1}{#2}%
2275 }%
```

\@Glspl@ Save the original definition and redefine.

```
2276 \let\@glsxtr@org@Glspl@\@Glspl@
2277 \def\@Glspl@#1#2{%
2278  \@glsxtr@record{#1}{#2}{glslink}%
2279  \@glsxtr@org@Glspl@{#1}{#2}%
2280 }%
```

\@GLS@ Save the original definition and redefine.

```
2281 \let\@glsxtr@org@GLS@\@GLS@
2282 \def\@GLS@#1#2{%
2283  \@glsxtr@record{#1}{#2}{glslink}%
2284  \@glsxtr@org@GLS@{#1}{#2}%
2285 }%
```

\@GLSpl@ Save the original definition and redefine.

```
2286 \let\@glsxtr@org@GLSpl@\@GLSpl@
2287 \def\@GLSpl@#1#2{%
2288  \@glsxtr@record{#1}{#2}{glslink}%
2289  \@glsxtr@org@GLSpl@{#1}{#2}%
2290 }%
```

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

```
2291 \renewcommand*{\@glsdisp}[3][]{%
2292  \@glsxtr@record{#1}{#2}{glslink}%
2293  \glsdoifexists{#2}{%
2294   \let\do@gls@link@checkfirsthyper\gls@link@checkfirsthyper
2295   \let\glsifplural\@secondoftwo
2296   \let\glscapscase\@firstofthree
2297   \def\glscustomtext{#3}%
2298   \def\glsinsert{}%
2299   \def\@glo@text{\csname gls@\glstype @entryfmt\endcsname}%
2300   \gls@link[#1]{#2}{\@glo@text}%
2301   \ifKV@glslink@local
2302     \glslocalunset{#2}%
2303   \else
2304     \glsunset{#2}%
2305   \fi
2306 }%
2307 \glspostlinkhook
2308 }
```

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

```
2309 \renewcommand*{\@gls@@link}[3][]{%
```

```
2310  \@glsxtr@record{#1}{#2}{glslink}%
2311  \glsdoifexistsord{o}{#2}%
2312  {%
2313    \let\do@gls@link@checkfirsthyper\relax
```

Post-link hook commands need initialising.

```
2314  \def\glscustomtext{#3}%
2315  \@glsxtr@field@linkdefs
2316  \@gls@link[#1]{#2}{#3}%
2317  }%
2318  {%
2319  \glstextformat{#3}%
2320  }%
2321  \glspostlinkhook
2322 }
```

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

```
2323 \newcommand*\glsxtrinitwrgloss{%
2324  \glsifattribute{\glslabel}{wrgloss}{after}%
2325  {%
2326    \glsxtrinitwrglossbeforefalse
2327  }%
2328  {%
2329    \glsxtrinitwrglossbeforetrue
2330  }%
2331 }
```

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

```
2332 \newif\ifglsxtrinitwrglossbefore
2333 \glsxtrinitwrglossbeforetrue
```

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

```
2334 \define@choicekey{glslink}{wrgloss}%
2335 [\@glsxtr@wrglossval\@glsxtr@wrglossnr]%
2336 {before,after}%
2337 {%
2338  \ifcase\@glsxtr@wrglossnr\relax
2339    \glsxtrinitwrglossbeforetrue
2340  \or
2341    \glsxtrinitwrglossbeforefalse
2342  \fi
2343 }
2344 \define@key{glslink}{thevalue}{\def\@glsxtr@thevalue{#1}}
2345 \define@key{glslink}{theHvalue}{\def\@glsxtr@theHvalue{#1}}
```

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

```
2346 \define@boolkey{glslink}[glsxtr@]{hyperoutside}[true]{}
2347 \glsxtr@hyperoutsidetrue
```

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

```

2348 \define@key{glslink}{textformat}{%
2349   \ifcsdef{#1}%
2350   {%
2351     \letcs{\@glsxtr@local@textformat}{#1}%
2352   }%
2353   {%
2354     \PackageError{glossaries-extra}{Unknown control sequence name ‘#1’}{}%
2355   }%
2356 }

```

2357 \define@key{glslink}{prefix}{\def\glolinkprefix{#1}}

nithyperoutside Set the default if the hyperoutside is omitted.

```

2358 \newcommand*{\glsxtrnithyperoutside}{%
2359   \glsifattribute{\glslabel}{hyperoutside}{false}%
2360   {%
2361     \glsxtr@hyperoutsidefalse
2362   }%
2363   {%
2364     \glsxtr@hyperoutsidetrue
2365   }%
2366 }

```

r@inc@linkcount Does nothing by default.

```

2367 \newcommand*{\glsxtr@inc@linkcount}{}

```

slinkpresetkeys User hook performed immediately before options are set. Does nothing by default.

```

2368 \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.

```

2369 \newrobustcmd*{\GlsXtrExpandedFmt}[2]{%
2370   \protected@edef{\glsxtr@tmp{#2}}%
2371   {\expandafter\expandafter\expandafter{\glsxtr@tmp{}}%
2372 }

```

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.

```

2373 \newcommand*{\@glsxtr@use@equation@counter}{%
2374   \glsxtr@ifnum@mmode{\def\gls@counter{equation}}{}%
2375 }

```

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).

```

2376 \newcommand*{\glsxtr@do@autoadd}[1]{}

```

```
\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.

```
2377 \newcommand*{\GlsXtrAutoAddOnFormat}[3][\glslabel]{%
2378   \renewcommand*{\glsxtr@do@autoadd}[1]{%
2379     \begingroup
2380       \protected@edef{\glsxtr@do@autoadd}{%
2381         \noexpand\ifstreq{\##1}{\glslink}{%
2382           {}%
2383           \noexpand\DTLifinlist{\glsnumberformat}{\#2}{\noexpand\glsadd[format={\glsnumberfor}%
2384             }%
2385             {}%
2386             }%
2387           \glsxtr@do@autoadd
2388         \endgroup
2389       }%
2390 }
```

\@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.

```
2391 \def{\gls@link[#1]#2#3}{%
2392   \leavevmode
2393   \edef{\glslabel}{\glsdetoklabel{#2}}%
2394   \def{\gls@link@opts}{#1}%
2395   \let{\gls@link@label}{\glslabel}
2396   \let{\glsnumberformat}{\glsxtr@defaultnumberformat}
2397   \edef{\gls@counter}{\csname glo@\glslabel\@counter\endcsname}%
2398   \edef{\glstype}{\csname glo@\glslabel\@type\endcsname}%
2399   \let{\org@ifKV@glslink@hyper}{\ifKV@glslink@hyper}
```

Save current value of \glolinkprefix:

```
2400 \let{\glsxtr@org@glolinkprefix}{\glolinkprefix}
```

Initialise \glsxtr@local@textformat

```
2401 \let{\glsxtr@local@textformat}{\relax}
```

Initialise thevalue and theHvalue (v1.19).

```
2402 \def{\glsxtr@thevalue}{}%
2403 \def{\glsxtr@theHvalue}{\glsxtr@thevalue}
```

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

```
2404 \glsxtrinitwrgloss
```

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

```
2405 \glsxtrinithyperoutside
```

Note that the default link options may override \glsxtrinitwrgloss.

```
2406  \gls@setdefault@glslink@opts
```

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

```
2407  \glsxtr@inc@linkcount
```

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

```
2408  \if@glsxtr@equations
```

```
2409    \glsxtr@use@equation@counter
```

```
2410  \fi
```

As the original definition.

```
2411  \do@glsdisablehyperinlist
```

```
2412  \do@gls@link@checkfirsthyper
```

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

```
2413  \glslinkpresetkeys
```

Set options.

```
2414  \setkeys{glslink}{#1}%
```

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

```
2415  \glsxtr@do@autoadd{glslink}%
```

User hook after options are set:

```
2416  \glslinkpostsetkeys
```

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

```
2417  \ifdefempty{\glsxtr@thevalue}{%
```

```
2418  {%
```

```
2419    \gls@saveentrycounter
```

```
2420  }%
```

```
2421  {%
```

```
2422    \let\theglsentrycounter\glsxtr@thevalue
```

```
2423    \def\theHglsentrycounter{\glsxtr@theHvalue}{%
```

```
2424  }%
```

```
2425  \gls@setsort{\glslabel}{%
```

Check if the textformat key has been used.

```
2426  \ifx\glsxtr@local@textformat\relax
```

Check textformat attribute (new to v1.21).

```
2427  \glshasattribute{\glslabel}{textformat}{%
```

```
2428  {%
```

```
2429    \edef\glsxtr@attrval{\glsgetattribute{\glslabel}{textformat}}{%
```

```
2430    \ifcsdef{\glsxtr@attrval}{%
```

```
2431    {%
```

```
2432      \letcs{\glsxtr@textformat}{\glsxtr@attrval}{%
```

```
2433    }%
```

```
2434    {%
```

```
2435      \GlossariesExtraWarning{Unknown control sequence name}{%
```

```
2436      '\glsxtr@attrval' supplied in textformat attribute{}}
```

```
2437      for entry '\glslabel'. Reverting to default \string\gls{textformat}}{%
```

```

2438      \let\@glsxtr@textformat\glstextformat
2439      }%
2440      }%
2441      {%
2442          \let\@glsxtr@textformat\glstextformat
2443          }%
2444      \else
2445          \let\@glsxtr@textformat\@glsxtr@local@textformat
2446      \fi

    Do write if it should occur before the link text:
2447  \ifglsxtrinitwrglossbefore
2448      \do@wrglossary{#2}%
2449  \fi

    Do the link text:
2450  \ifKV@glslink@hyper
2451      \ifglsxtr@hyperoutside
2452          \glslink{\glolinkprefix\glslabel}{\glsxtr@textformat{#3}}%
2453      \else
2454          \glsxtr@textformat{\glslink{\glolinkprefix\glslabel}{#3}}%
2455      \fi
2456  \else
2457      \ifglsxtr@hyperoutside
2458          \glsdonohyperlink{\glolinkprefix\glslabel}{\glsxtr@textformat{#3}}%
2459      \else
2460          \glsxtr@textformat{\glsdonohyperlink{\glolinkprefix\glslabel}{#3}}%
2461      \fi
2462  \fi

    Do write if it should occur after the link text:
2463  \ifglsxtrinitwrglossbefore
2464  \else
2465      \do@wrglossary{#2}%
2466  \fi

    Restore original value of \glolinkprefix:
2467  \let\glolinkprefix\glsxtr@org@glolinkprefix

    As the original definition:
2468  \let\ifKV@glslink@hyper\org@ifKV@glslink@hyper
2469 }

2470 \define@key{glossadd}{thevalue}{\def\@glsxtr@thevalue{#1}}
2471 \define@key{glossadd}{theHvalue}{\def\@glsxtr@theHvalue{#1}}


lsaddpresetkeys
2472 \newcommand*{\lsaddpresetkeys}{} 

saddpostsetkeys
2473 \newcommand*{\saddpostsetkeys}{} 

```

```

\glsadd Redefine to include \@glsxtr@record and suppress in headings
2474 \renewrobustcmd*\{\glsadd\}[2] [] {%
2475   \glsxtrifinmark
2476   {}%
2477   {}%
2478   \@gls@adjustmode
2479   \begingroup
2480     \@glsxtr@record{#1}{#2}{glossadd}%
2481     \glsdoifexists{#2}%
2482     {}%
2483     \let\@glsnumberformat\@glsxtr@defaultnumberformat
2484     \edef\@gls@counter{\csname glo@\glsdetoklabel{#2}@counter\endcsname}%
2485     \def\@glsxtr@thevalue{}%
2486     \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%

```

Implement any default settings (before options are set)

```

2487   \glsaddpresetkeys
2488   \setkeys{glossadd}{#1}%

```

Implement any default settings (after options are set)

```

2489   \glsaddpostsetkeys
2490   \ifdefempty{\@glsxtr@thevalue}%
2491   {}%
2492   \@gls@saveentrycounter
2493   }%
2494   {}%
2495   \let\theglsentrycounter\@glsxtr@thevalue
2496   \def\theHglsentrycounter{\@glsxtr@theHvalue}%
2497   }%

```

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

```

2498   \@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.

```

2499   \KV@glslink@noindexfalse
2500   \@@do@wrglossary{#2}%
2501   }%
2502   \endgroup
2503 }%
2504 }

```

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

```

2505 \newrobustcmd*\{\glsaddeach\}[2] [] {%
2506   \@for\@gls@thislabel:=#2\do{\glsadd[#1]{\@gls@thislabel}}%
2507 }

```

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

```

2508 \newcommand*\{\glsxtr@field@linkdefs\}%

```

```

2509 \let\glsxtrifwasfirstuse@\secondoftwo
2510 \let\glsifplural@\secondoftwo
2511 \let\glscapscase@\firstofthree
2512 \let\glsinsert@\empty
2513 }

```

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

#### assignfieldfont

```

2514 \newcommand*{\glsxtrassignfieldfont}[1]{%
2515   \ifglsentryexists{#1}{%
2516     {%
2517       \ifglshasshort{#1}{%
2518         {%
2519           \glssetabbrvfmt{\glscategory{#1}}{%
2520             \glsifregular{#1}{%
2521               {\let\@gls@field@font\glsxtrregularfont}{%
2522                 {\let\@gls@field@font\@firstofone}{%
2523                   }{%
2524                     {%
2525                       \glsifnotregular{#1}{%
2526                         {\let\@gls@field@font\@firstofone}{%
2527                           {\let\@gls@field@font\glsxtrregularfont}{%
2528                             }{%
2529                           }{%
2530                         {%
2531                           \let\@gls@field@font@gobble
2532                         }{%
2533                       }
2534 }
2535 \glsxtrassignfieldfont{#2}{%
2536   \gls@field@link{#1}{#2}{\gls@field{\glsaccesstext{#2}{#3}}}{%
2537 }

```

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

```

2534 \def\@glstext@#1#2[#3]{%
2535   \glsxtrassignfieldfont{#2}{%
2536     \gls@field@link[\let\glscapscase@\thirdofthree]{#1}{#2}{%
2537       {\gls@field{\GLSaccesstext{#2}\mfirstuclMakeUppercase{#3}}}{%
2538 }
2539 \glsxtrassignfieldfont{#2}{%
2540   \gls@field@link[\let\glscapscase@\secondofthree]{#1}{#2}{%
2541     {\gls@field{\Glsaccesstext{#2}{#3}}}{%
2542 }

```

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

```

2538 \def\@GLStext@#1#2[#3]{%
2539   \glsxtrassignfieldfont{#2}{%
2540     \gls@field@link[\let\glscapscase@\thirdofthree]{#1}{#2}{%
2541       {\gls@field{\GLSaccesstext{#2}\mfirstuclMakeUppercase{#3}}}{%
2542 }
2543 \def\@Glstext@#1#2[#3]{%
2544   \glsxtrassignfieldfont{#2}{%
2545   \gls@field@link[\let\glscapscase@\secondofthree]{#1}{#2}{%
2546     {\gls@field{\Glsaccesstext{#2}{#3}}}{%
2547 }

```

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

```
2548 \newcommand*\glsxtrchecknohyperfirst[1]{%
2549   \glsifattribute{#1}{nohyperfirst}{true}{\KV@glslink@hyperfalse}{}%
2550 }
```

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

```
2551 \def\@glsfirst@#1#2[#3]{%
2552   \glsxtrassignfieldfont{#2}}%
```

Ensure that \glsfirst honours the nohyperfirst attribute.

```
2553 \gls@field@link
2554 [\let\glsxtrifwasfirstuse\@firstoftwo
2555   \glsxtrchecknohyperfirst{#2}%
2556 ]{#1}{#2}%
2557 {\gls@field@font{\glsaccessfirst{#2}#3}}%
2558 }
```

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

```
2559 \def\@Glsfirst@#1#2[#3]{%
2560   \glsxtrassignfieldfont{#2}}%
```

Ensure that \Glsfirst honours the nohyperfirst attribute.

```
2561 \gls@field@link
2562 [\let\glsxtrifwasfirstuse\@firstoftwo
2563   \let\glscapscase\@secondofthree
2564   \glsxtrchecknohyperfirst{#2}%
2565 ]%
2566 {#1}{#2}{\gls@field@font{\Glsaccessfirst{#2}#3}}%
2567 }
```

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

```
2568 \def\@GLSfirst@#1#2[#3]{%
2569   \glsxtrassignfieldfont{#2}}%
```

Ensure that \GLSfirst honours the nohyperfirst attribute.

```
2570 \gls@field@link
2571 [\let\glsxtrifwasfirstuse\@firstoftwo
2572   \let\glscapscase\@thirdofthree
2573   \glsxtrchecknohyperfirst{#2}%
2574 ]%
2575 {#1}{#2}{\gls@field@font{\GLSaccessfirst{#2}\mfirstucMakeUppercase{#3}}}%
```

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

```
2577 \def\@glplural@#1#2[#3]{%
2578   \glsxtrassignfieldfont{#2}}%
2579 \gls@field@link[\let\glplural\@firstoftwo]{#1}{#2}%
```

```
2580     {\@gls@field@font{\glsaccessplural{#2}#3}}%
2581 }
```

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

```
2582 \def\@Glsplural@#1#2[#3]{%
2583   \glsxtrassignfieldfont{#2}%
2584   \@gls@field@link
2585   [\let\glsifplural\@firstoftwo
2586    \let\glscapscase\@secondofthree
2587   ]%
2588   {#1}{#2}{\@gls@field@font{\Glsaccessplural{#2}#3}}%
2589 }
```

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

```
2590 \def\@GLSplural@#1#2[#3]{%
2591   \glsxtrassignfieldfont{#2}%
2592   \@gls@field@link
2593   [\let\glsifplural\@firstoftwo
2594    \let\glscapscase\@thirdofthree
2595   ]%
2596   {#1}{#2}{\@gls@field@font{\GLSaccessplural{#2}\mfistucMakeUppercase{#3}}}}%
2597 }
```

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

```
2598 \def\@glsfirstplural@#1#2[#3]{%
2599   \glsxtrassignfieldfont{#2}%


```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2600   \@gls@field@link
2601   [\let\glsxtrifwasfirstuse\@firstoftwo
2602    \let\glsifplural\@firstoftwo
2603    \glsxtrchecknohyperfirst{#2}%
2604   ]%
2605   {#1}{#2}{\@gls@field@font{\glsaccessfirstplural{#2}#3}}%
2606 }
```

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

```
2607 \def\@Glsfirstplural@#1#2[#3]{%
2608   \glsxtrassignfieldfont{#2}%


```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2609   \@gls@field@link
2610   [\let\glsxtrifwasfirstuse\@firstoftwo
2611    \let\glsifplural\@firstoftwo
2612    \let\glscapscase\@secondofthree
2613    \glsxtrchecknohyperfirst{#2}%
2614   ]%
2615   {#1}{#2}{\@gls@field@font{\Glsaccessfirstplural{#2}#3}}%
2616 }
```

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

```
2617 \def\@GLSfirstplural[#1#2[#3]{%
2618   \glsxtrassignfieldfont{#2}{%
```

Ensure that \glsxtrchecknohyperfirst honours the nohyperfirst attribute.

```
2619   \gls@field@link{%
2620     [\let\glsxtrifwasfirstuse\@firstoftwo{%
2621       \let\glsifplural\@firstoftwo{%
2622         \let\glscapscase\@thirdoftthree{%
2623           \glsxtrchecknohyperfirst{#2}{%
2624         }{%
2625           {#1}{#2}{%
2626             {\@gls@field@font{\GLSaccessfirstplural{#2}\mfirstucMakeUppercase{#3}}}{%
2627           }}}{}}
```

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

```
2628 \def\@glsname[#1#2[#3]{%
2629   \glsxtrassignfieldfont{#2}{%
2630     \gls@field@link{#1}{#2}{\@gls@field@font{\glsaccessname{#2}{#3}}}{%
2631   }}
```

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

```
2632 \def\@Glsname[#1#2[#3]{%
2633   \glsxtrassignfieldfont{#2}{%
2634     \gls@field@link{%
2635       [\let\glscapscase\@secondoftwo]{#1}{#2}{%
2636         {\@gls@field@font{\Glsaccessname{#2}{#3}}}{%
2637   }}
```

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

```
2638 \def\@GLSname[#1#2[#3]{%
2639   \glsxtrassignfieldfont{#2}{%
2640     \gls@field@link[\let\glscapscase\@thirdoftwo]{%
2641       {#1}{#2}{%
2642         {\@gls@field@font{\GLSaccessname{#2}\mfirstucMakeUppercase{#3}}}{%
2643   }}
```

\@glsdesc@

```
2644 \def\@glsdesc[#1#2[#3]{%
2645   \glsxtrassignfieldfont{#2}{%
2646     \gls@field@link{#1}{#2}{\@gls@field@font{\glsaccessdesc{#2}{#3}}}{%
2647   }}
```

\@Glsdesc@ First letter uppercase version.

```
2648 \def\@Glsdesc[#1#2[#3]{%
2649   \glsxtrassignfieldfont{#2}{%
2650     \gls@field@link{%
2651       [\let\glscapscase\@secondoftwo]{#1}{#2}{%
2652         {\@gls@field@font{\Glsaccessdesc{#2}{#3}}}{%
2653   }}
```

```

\@GLSdesc@ All uppercase version.
2654 \def\@GLSdesc@#1#2[#3]{%
2655   \glsxtrassignfieldfont{#2}%
2656   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2657   {#1}{#2}{\gls@field@font{\GLSaccessdesc{#2}\mfirstucMakeUppercase{#3}}}}%
2658 }

@glsdescplural@ No case-changing version.
2659 \def\@glsdescplural@#1#2[#3]{%
2660   \glsxtrassignfieldfont{#2}%
2661   \gls@field@link
2662   [\let\glscapscase\@secondoftwo
2663   \let\glsifplural\@firstoftwo
2664   ]{#1}{#2}{\gls@field@font{\glsaccessdescplural{#2}#3}}%
2665 }

@Glsdescplural@ First letter uppercase version.
2666 \def\@Glsdescplural@#1#2[#3]{%
2667   \glsxtrassignfieldfont{#2}%
2668   \gls@field@link
2669   [\let\glscapscase\@secondoftwo
2670   \let\glsifplural\@firstoftwo
2671   ]{#1}{#2}{\gls@field@font{\Glsaccessdescplural{#2}#3}}%
2672 }

@GLSdescplural@ All uppercase version.
2673 \def\@GLSdesc@#1#2[#3]{%
2674   \glsxtrassignfieldfont{#2}%
2675   \gls@field@link
2676   [\let\glscapscase\@thirdoftwo
2677   \let\glsifplural\@firstoftwo
2678   ]%
2679   {#1}{#2}%
2680   {\gls@field@font{\GLSaccessdescplural{#2}\mfirstucMakeUppercase{#3}}}}%
2681 }

\@glssymbol@
2682 \def\@glssymbol@#1#2[#3]{%
2683   \glsxtrassignfieldfont{#2}%
2684   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccesssymbol{#2}#3}}%
2685 }

@Glssymbol@ First letter uppercase version.
2686 \def\@Glssymbol@#1#2[#3]{%
2687   \glsxtrassignfieldfont{#2}%
2688   \gls@field@link
2689   [\let\glscapscase\@secondoftwo]%
2690   {#1}{#2}{\gls@field@font{\Glsaccesssymbol{#2}#3}}%
2691 }

```

```

\@GLSsymbol@ All uppercase version.
2692 \def\@GLSsymbol@#1#2[#3]{%
2693   \glsxtrassignfieldfont{#2}%
2694   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2695   {#1}{#2}{\gls@field@font{\GLSaccesssymbol{#2}\mfirstucMakeUppercase{#3}}}}%
2696 }

lssymbolplural@ No case-changing version.
2697 \def\@glssymbolplural@#1#2[#3]{%
2698   \glsxtrassignfieldfont{#2}%
2699   \gls@field@link
2700   [\let\glscapscase\@secondoftwo
2701   \let\glsifplural\@firstoftwo
2702   ]{#1}{#2}{\gls@field@font{\glsaccesssymbolplural{#2}{#3}}}}%
2703 }

lssymbolplural@ First letter uppercase version.
2704 \def\@Glssymbolplural@#1#2[#3]{%
2705   \glsxtrassignfieldfont{#2}%
2706   \gls@field@link
2707   [\let\glscapscase\@secondoftwo
2708   \let\glsifplural\@firstoftwo
2709   ]{#1}{#2}{\gls@field@font{\Glsaccesssymbolplural{#2}{#3}}}}%
2710 }

LSSymbolplural@ All uppercase version.
2711 \def\@GLSsymbol@#1#2[#3]{%
2712   \glsxtrassignfieldfont{#2}%
2713   \gls@field@link
2714   [\let\glscapscase\@thirdoftwo
2715   \let\glsifplural\@firstoftwo
2716   ]%
2717   {#1}{#2}%
2718   {\gls@field@font{\GLSaccesssymbolplural{#2}\mfirstucMakeUppercase{#3}}}}%
2719 }

\@Glsuseri@ First letter uppercase version.
2720 \def\@Glsuseri@#1#2[#3]{%
2721   \glsxtrassignfieldfont{#2}%
2722   \gls@field@link
2723   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2724   {\gls@field@font{\Glsentryuseri{#2}{#3}}}}%
2725 }

\@GLSuseri@ All uppercase version.
2726 \def\@GLSuseri@#1#2[#3]{%
2727   \glsxtrassignfieldfont{#2}%
2728   \gls@field@link[\let\glscapscase\@thirdoftwo]%

```

```
2729     {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseri{#2}#3}}}%  
2730 }
```

\@Glsuserii@ First letter uppercase version.

```
2731 \def\@Glsuserii@#1#2[#3]{%  
2732   \glsxtrassignfieldfont{#2}%">  
2733   \gls@field@link  
2734   [\let\glscapscase\@secondoftwo]%">  
2735   {#1}{#2}{\@gls@field@font{\Glsentryuserii{#2}#3}}%  
2736 }
```

\@GLSuserii@ All uppercase version.

```
2737 \def\@GLSuserii@#1#2[#3]{%  
2738   \glsxtrassignfieldfont{#2}%">  
2739   \gls@field@link[\let\glscapscase\@thirdoftwo]%">  
2740   {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuserii{#2}#3}}}}%  
2741 }
```

\@Glsuseriii@ First letter uppercase version.

```
2742 \def\@Glsuseriii@#1#2[#3]{%  
2743   \glsxtrassignfieldfont{#2}%">  
2744   \gls@field@link  
2745   [\let\glscapscase\@secondoftwo]%">  
2746   {#1}{#2}{\@gls@field@font{\Glsentryuseriii{#2}#3}}%  
2747 }
```

\@GLSuseriii@ All uppercase version.

```
2748 \def\@GLSuseriii@#1#2[#3]{%  
2749   \glsxtrassignfieldfont{#2}%">  
2750   \gls@field@link[\let\glscapscase\@thirdoftwo]%">  
2751   {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseriii{#2}#3}}}}%  
2752 }
```

\@Glsuseriv@ First letter uppercase version.

```
2753 \def\@Glsuseriv@#1#2[#3]{%  
2754   \glsxtrassignfieldfont{#2}%">  
2755   \gls@field@link  
2756   [\let\glscapscase\@secondoftwo]%">  
2757   {#1}{#2}{\@gls@field@font{\Glsentryuseriv{#2}#3}}%  
2758 }
```

\@GLSuseriv@ All uppercase version.

```
2759 \def\@GLSuseriv@#1#2[#3]{%  
2760   \glsxtrassignfieldfont{#2}%">  
2761   \gls@field@link[\let\glscapscase\@thirdoftwo]%">  
2762   {#1}{#2}%">  
2763   {\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseriv{#2}#3}}}}%  
2764 }
```

\@Glsuserv@ First letter uppercase version.

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

\@GLSuser@ All uppercase version.

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

\@Glsuservi@ First letter uppercase version.

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

\@GLSuservi@ All uppercase version.

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

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.

```
2787 \newcommand*{\@glsxtr@base@acrcmd@warn}[2]{%
2788   \GlossariesExtraWarning{Base acronym command \string#1\space
2789   should not be used with new abbreviation definitions. Use
2790   \string#2\space instead}%
2791 }
```

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

```
2792 \let\@glsxtr@base@acrcmd\@glsxtr@base@acrcmd@warn
```

\@acrshort No case change.

```
2793 \def \@acrshort#1#2[#3]{%
2794   \glsxtr@base@acrcmd\acrshort\glsxtrshort
2795   \glsdoifexists{#2}%
```

```

2796 {%
2797   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2798   \let\glsxtrifwasfirstuse\@secondoftwo
2799   \let\glsifplural\@secondoftwo
2800   \let\glscapscase\@firstofthree
2801   \let\glsinsert\@empty
2802   \def\glscustomtext{%
2803     \acronymfont{\glsaccessshort{#2}}#3%
2804   }%
2805   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2806 }%
2807 \glspostlinkhook
2808 }

```

\@Acrshort First letter uppercase.

```

2809 \def\@Acrshort#1#2[#3]{%
2810   \glsxtr@base@acrcmd\Acrshort\Glsxtrshort
2811   \glsdoifexists{#2}%
2812 {%
2813   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2814   \let\glsxtrifwasfirstuse\@secondoftwo
2815   \let\glsifplural\@secondoftwo
2816   \let\glscapscase\@secondofthree
2817   \let\glsinsert\@empty
2818   \def\glscustomtext{%
2819     \acronymfont{\Glsaccessshort{#2}}#3%
2820   }%
2821   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2822 }%
2823 \glspostlinkhook
2824 }

```

\@ACRshort All uppercase.

```

2825 \def\@ACRshort#1#2[#3]{%
2826   \glsxtr@base@acrcmd\ACRshort\GLSxtrshort
2827   \glsdoifexists{#2}%
2828 {%
2829   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2830   \let\glsxtrifwasfirstuse\@secondoftwo
2831   \let\glsifplural\@secondoftwo
2832   \let\glscapscase\@thirdofthree
2833   \let\glsinsert\@empty
2834   \def\glscustomtext{%
2835     \mfirstrucMakeUppercase{\acronymfont{\glsaccessshort{#2}}#3}%
2836   }%
2837   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2838 }%
2839 \glspostlinkhook
2840 }

```

\@acrshortpl No case change.

```
2841 \def\@acrshortpl#1#2[#3]{%
2842   \glsxtr@base@acrcmd\acrshortpl\glsxtrshortpl
2843   \glsdoifexists{#2}%
2844 {%
2845   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2846   \let\glsxtrifwasfirstuse\@secondoftwo
2847   \let\glsifplural\@firstoftwo
2848   \let\glscapscase\@firstofthree
2849   \let\glsinsert\@empty
2850   \def\glscustomtext{%
2851     \acronymfont{\glsaccessshortpl{#2}}#3%
2852   }%
2853   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2854 }%
2855 \glspostlinkhook
2856 }
```

\@Acrshortpl First letter uppercase.

```
2857 \def\@Acrshortpl#1#2[#3]{%
2858   \glsxtr@base@acrcmd\Acrshortpl\Glsxtrshortpl
2859   \glsdoifexists{#2}%
2860 {%
2861   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2862   \let\glsxtrifwasfirstuse\@secondoftwo
2863   \let\glsifplural\@firstoftwo
2864   \let\glscapscase\@secondofthree
2865   \let\glsinsert\@empty
2866   \def\glscustomtext{%
2867     \acronymfont{\Glsaccessshortpl{#2}}#3%
2868   }%
2869   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2870 }%
2871 \glspostlinkhook
2872 }
```

\@ACRshortpl All uppercase.

```
2873 \def\@ACRshortpl#1#2[#3]{%
2874   \glsxtr@base@acrcmd\ACRshortpl\GLSxtrshortpl
2875   \glsdoifexists{#2}%
2876 {%
2877   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2878   \let\glsxtrifwasfirstuse\@secondoftwo
2879   \let\glsifplural\@firstoftwo
2880   \let\glscapscase\@thirdofthree
2881   \let\glsinsert\@empty
2882   \def\glscustomtext{%
2883     \mfirstucMakeUppercase{\acronymfont{\glsaccessshortpl{#2}}#3}%
2884   }%
```

```

2885     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2886   }%
2887   \glspostlinkhook
2888 }

\@acrlong No case change.
2889 \def\@acrlong#1#2[#3]{%
2900   \glsxtr@base@acrcmd\acrlong\glsxtrlong
2901   \glsdoifexists{#2}%
2902   {%
2903     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2904     \let\glsxtrifwasfirstuse\@secondoftwo
2905     \let\glsifplural\@secondoftwo
2906     \let\glscapscase\@firstofthree
2907     \let\glsinsert\@empty
2908     \def\glscustomtext{%
2909       \acronymfont{\glsaccesslong{#2}}#3%
2910     }%
2911     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2912   }%
2913   \glspostlinkhook
2914 }

\@Acrlong First letter uppercase.
2905 \def\@Acrlong#1#2[#3]{%
2906   \glsxtr@base@acrcmd\Acrlong\Glsxtrlong
2907   \glsdoifexists{#2}%
2908   {%
2909     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2910     \let\glsxtrifwasfirstuse\@secondoftwo
2911     \let\glsifplural\@secondoftwo
2912     \let\glscapscase\@secondofthree
2913     \let\glsinsert\@empty
2914     \def\glscustomtext{%
2915       \acronymfont{\Glsaccesslong{#2}}#3%
2916     }%
2917     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2918   }%
2919   \glspostlinkhook
2920 }

\@ACRlong All uppercase.
2921 \def\@ACRlong#1#2[#3]{%
2922   \glsxtr@base@acrcmd\ACRlong\GLSxtrlong
2923   \glsdoifexists{#2}%
2924   {%
2925     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2926     \let\glsxtrifwasfirstuse\@secondoftwo
2927     \let\glsifplural\@secondoftwo

```

```

2928     \let\glscapscase\@thirdofthree
2929     \let\glsinsert\@empty
2930     \def\glscustomtext{%
2931         \mfirstucMakeUppercase{\acronymfont{\glsaccesslong{#2}}#3}%
2932     }%
2933     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2934 }%
2935 \glspostlinkhook
2936 }

```

\@acrlongpl No case change.

```

2937 \def\@acrlongpl#1#2[#3]{%
2938     \@glsxtr@base@acrcmd\acrlongpl\glsxtrlongpl
2939     \glsdoifexists{#2}%
2940     {%
2941         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2942         \let\glsxtrifwasfirstuse\@secondoftwo
2943         \let\glsifplural\@firstoftwo
2944         \let\glscapscase\@firstofthree
2945         \let\glsinsert\@empty
2946         \def\glscustomtext{%
2947             \acronymfont{\glsaccesslongpl{#2}}#3}%
2948         }%
2949         \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2950     }%
2951     \glspostlinkhook
2952 }

```

\@Acrlongpl First letter uppercase.

```

2953 \def\@Acrlongpl#1#2[#3]{%
2954     \@glsxtr@base@acrcmd\Acrlongpl\Glsxtrlongpl
2955     \glsdoifexists{#2}%
2956     {%
2957         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2958         \let\glsxtrifwasfirstuse\@secondoftwo
2959         \let\glsifplural\@firstoftwo
2960         \let\glscapscase\@secondofthree
2961         \let\glsinsert\@empty
2962         \def\glscustomtext{%
2963             \acronymfont{\Glsaccesslongpl{#2}}#3}%
2964         }%
2965         \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2966     }%
2967     \glspostlinkhook
2968 }

```

\@ACRlongpl All uppercase.

```

2969 \def\@ACRlongpl#1#2[#3]{%
2970     \@glsxtr@base@acrcmd\ACRlongpl\GLSxtrlongpl

```

```

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

```

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
2985 \def\@acrfull#1#2[#3]{%
2986   \glsxtr@base@acrcmd\acrfull\glsxtrfull
2987   \acrfullfmt{#1}{#2}{#3}%
2988 }

\@Acrfull
2989 \def\@Acrfull#1#2[#3]{%
2990   \glsxtr@base@acrcmd\Acrfull\Glsxtrfull
2991   \Acrfullfmt{#1}{#2}{#3}%
2992 }

\@ACRfull
2993 \def\@ACRfull#1#2[#3]{%
2994   \glsxtr@base@acrcmd\ACRfull\GLSxtrfull
2995   \ACRfullfmt{#1}{#2}{#3}%
2996 }

\@acrfullpl
2997 \def\@acrfullpl#1#2[#3]{%
2998   \glsxtr@base@acrcmd\acrfullpl\glsxtrfullpl
2999   \acrfullplfmt{#1}{#2}{#3}%
3000 }

\@Acrfullpl
3001 \def\@Acrfullpl#1#2[#3]{%
3002   \glsxtr@base@acrcmd\Acrfullpl\Glsxtrfullpl

```

```

3003 \Acrfullplfmt{#1}{#2}{#3}%
3004 }

\@ACRfullpl
3005 \def\@ACRfullpl#1#2[#3]{%
3006 \@glsxtr@base@acrcmd\ACRfullpl\GLSxtrfullpl
3007 \ACRfullplfmt{#1}{#2}{#3}%
3008 }

```

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

```

\glsaddkey
3009 \renewcommand*{\glsaddkey}[7]{%
3010 \key@ifundefined{glossentry}{#1}{%
3011 {%
3012 \define@key{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
3013 \appto{\gls@keymap}{, #1}{#1}}%
3014 \appto{\newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
3015 \appto{\newglossaryentryposthook}{%
3016 \letcs{@glo@tmp}{@glo@#1}%
3017 \gls@assign@field{#2}{\glo@label}{#1}{@glo@tmp}}%
3018 }%
3019 \newcommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
3020 \newcommand*{#4}[1]{\Gls@entry@field{##1}{#1}}%

```

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

```

3021 \ifcsdef{@gls@user@#1}{}%
3022 {%
3023 \PackageError{glossaries}{%
3024 {Can't define '\string#5' as helper command
3025 '\expandafter\string\csname @gls@user@#1\endcsname' already
3026 exists}%
3027 }%
3028 }%
3029 {%
3030 \expandafter\newcommand\expandafter*\expandafter
3031 {\csname @gls@user@#1\endcsname}[2][]{%
3032 \new@ifnextchar{%
3033 {\csuse{@gls@user@#1}{##1}{##2}}%
3034 {\csuse{@gls@user@#1}{##1}{##2}[]}}%
3035 \csdef{@gls@user@#1}##1##2[##3]{%
3036 \gls@field@link{##1}{##2}{##3{##2}##3}%
3037 }%
3038 \newrobustcmd*{#5}{%
3039 \expandafter\gls@hyp@opt\csname @gls@user@#1\endcsname}%
3040 }%

```

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

```

3041 \ifcsdef{@Gls@user@#1}{}%

```

```

3042  {%
3043      \PackageError{glossaries}%
3044      {Can't define '\string#6' as helper command
3045      '\expandafter\string\csname @Gls@user@#1@\\endcsname' already
3046      exists}%
3047  {}%
3048 }%
3049 {%
3050     \expandafter\newcommand\expandafter*\expandafter
3051         {\csname @Gls@user@#1\\endcsname}[2] []{%
3052             \new@ifnextchar[%
3053                 {\csuse{@Gls@user@#1@}{##1}{##2}}%
3054                 {\csuse{@Gls@user@#1@}{##1}{##2}[]}}%
3055     \csdef{@Gls@user@#1@}##1##2[##3]{%
3056         \@gls@field@link[\let\glscapscase@\secondofthree]%
3057             {##1}{##2}{##4{##2}##3}}%
3058     }%
3059     \newrobustcmd*{#6}{%
3060         \expandafter\@gls@hyp@opt\csname @Gls@user@#1\\endcsname}%
3061 }%

```

Finally the all caps version (modified):

```

3062  \ifcsdef{@GLS@user@#1@}%
3063  {}%
3064      \PackageError{glossaries}%
3065      {Can't define '\string#7' as helper command
3066      '\expandafter\string\csname @GLS@user@#1@\\endcsname' already
3067      exists}%
3068  {}%
3069 }%
3070 {%
3071     \expandafter\newcommand\expandafter*\expandafter
3072         {\csname @GLS@user@#1\\endcsname}[2] []{%
3073             \new@ifnextchar[%
3074                 {\csuse{@GLS@user@#1@}{##1}{##2}}%
3075                 {\csuse{@GLS@user@#1@}{##1}{##2}[]}}%
3076     \csdef{@GLS@user@#1@}##1##2[##3]{%
3077         \@gls@field@link[\let\glscapscase@\thirdofthree]%
3078             {##1}{##2}{\mfirstucMakeUppercase{##3{##2}##3}}}}%
3079     }%
3080     \newrobustcmd*{#7}{%
3081         \expandafter\@gls@hyp@opt\csname @GLS@user@#1\\endcsname}%
3082 }%
3083 }%
3084 {%
3085     \PackageError{glossaries-extra}{Key '#1' already exists}{}%
3086 }%
3087 }%

```

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

```
3088 \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.

```
3089 \let\glsxstr@org@checkfirsthyper\gls@link@checkfirsthyper
3090 \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 \glsxstr@field@linkdefs). Note that if the entry is undefined (as with bib2gls on the first L<sup>A</sup>T<sub>E</sub>X run), \ifglsused does neither true nor false parts. However, in that case, this macro won't be called anyway (since it's used in the argument of \glsdoifexistsordo).

```
3091 \ifglsused{\glslabel}{%
3092   \let\glsxtrifwasfirstuse\secondoftwo
3093   \let\glsxtrifwasfirstuse\firstoftwo}{%
```

Store the category label for convenience.

```
3094 \edef\glscategorylabel{\glscategory{\glslabel}}{%
3095 \ifglsused{\glslabel}{%
3096 {%
3097   \glsifcategoryattribute{\glscategorylabel}{nohypernext}{true}{%
3098     {\KV@glslink@hyperfalse}{}}{%
3099   }{%
3100   {%
3101     \glsifcategoryattribute{\glscategorylabel}{nohyperfirst}{true}{%
3102       {\KV@glslink@hyperfalse}{}}{%
3103     }{%
3104     \glslinkcheckfirsthyperhook
3105 }}
```

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.

```
3106 \ifdef\do@glsdisablehyperinlist
3107 {%
3108   \let\@glsxtr@do@glsdisablehyperinlist\do@glsdisablehyperinlist
3109   \renewcommand*{\do@glsdisablehyperinlist}{}{%
3110     \glsxtr@do@glsdisablehyperinlist
3111     \glsifattribute{\glslabel}{nohyper}{true}{\KV@glslink@hyperfalse}{}}{%
3112   }
3113 }
3114 {}
```

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

```
3115 \define@boolkey{glslink}{noindex}[true]{}
3116 \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

```
3117 \ifdef{\@gls@setdefault@glslink@opts}
3118 {
3119   \renewcommand*{\@gls@setdefault@glslink@opts}{%
3120     \KV@glslink@noindexfalse
3121     \@glsxtrsetaliasnoindex
3122   }
3123 }
3124 {

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

3125 \newcommand*{\@gls@setdefault@glslink@opts}{%
3126   \KV@glslink@noindexfalse
3127   \@glsxtrsetaliasnoindex
3128 }
3129 \preto{\do@glsdisablehyperinlist}{\@gls@setdefault@glslink@opts}
3130 }
```

`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.)

```
3131 \providecommand*{\glsxtrsetaliasnoindex}{%
3132   \KV@glslink@noindextrue
3133 }
```

`setaliasnoindex`

```
3134 \newcommand*{\glsxtrsetaliasnoindex}{%
3135   \glsxtrifhasfield{alias}{\glslabel}{%
3136     {%
3137       \let\glsxtrindexaliased\glsxtrindexaliased
3138       \@glsxtrsetaliasnoindex
3139       \let\glsxtrindexaliased\@no@glsxtrindexaliased
3140     }%
3141   {}%
3142 }
```

`xtrindexaliased`

```
3143 \newcommand{\@glsxtrindexaliased}{%
3144   \ifKV@glslink@noindex
3145   \else
3146     \begingroup
3147     \let\@glsnumberformat\glsxtr@defaultnumberformat
3148     \edef\@gls@counter{\csname glo@\glsdetoklabel{\glslabel}@\counter\endcsname}%
3149     \glsxtr@saveentrycounter
3150     \@@do@wrglossary{\glsxtralias{\glslabel}}%
3151   \endgroup
3152 }
```

```

3152 \fi
3153 }

xtrindexaliased
3154 \newcommand{\@no@glsxtrindexaliased}{%
3155 \PackageError{glossaries-extra}{\string\glsxtrindexaliased\space
3156 not permitted outside definition of \string\glsxtrsetaliasnoindex}{%
3157 }%
3158 }

xtrindexaliased Provide a command to redirect alias indexing, but only allow it to be used within \glsxtrsetaliasnoindex.
3159 \let\glsxtrindexaliased\@no@glsxtrindexaliased

tDefaultGlsOpts Set the default options for \glslink etc.
3160 \newcommand*\GlsXtrSetDefaultGlsOpts[1]{%
3161 \renewcommand*\@gls@setdefault@glslink@opts{%
3162 \setkeys{glslink}{#1}%
3163 \glsxtrsetaliasnoindex
3164 }%
3165 }

lsxtrifindexing Provide user level command to access it in \glswriteentry.
3166 \newcommand*\glsxtrifindexing[2]{%
3167 \ifKV@glslink@noindex #2\else #1\fi
3168 }

\glswriteentry Redefine to test for indexonlyfirst category attribute. This needs to use \GlsXtrIfUnusedOrUndefined instead of \ifglsused to allow it to work with bib2gls.
3169 \renewcommand*\glswriteentry[2]{%
3170 \glsxtrifindexing
3171 }%
3172 \ifglsindexonlyfirst
3173 \GlsXtrIfUnusedOrUndefined{#1}
3174 {#2}%
3175 {\glsxtrdoautoindexname{#1}{dualindex}}%
3176 \else
3177 \glsifattribute{#1}{indexonlyfirst}{true}%
3178 }%
3179 \GlsXtrIfUnusedOrUndefined{#1}%
3180 {#2}%
3181 {\glsxtrdoautoindexname{#1}{dualindex}}%
3182 }%
3183 {#2}%
3184 \fi
3185 }%
3186 {}%
3187 }

```

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

```
3188 \appto\@do@@wrglossary{\glsxtr@do@@wrindex
3189   \glsxtrdowrglossaryhook{\gls@label}%
3190 }
```

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

Similarly for the “noidx” version:

```
s@noidxglossary
3191 \appto\gls@noidxglossary{\glsxtr@do@@wrindex
3192   \glsxtrdowrglossaryhook{\gls@label}%
3193 }
```

```
xtr@do@@wrindex
3194 \newcommand*{\glsxtr@do@@wrindex}{%
3195   \glsxtrdoautoindexname{\gls@label}{dualindex}%
3196 }
```

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.)

```
3197 \newcommand*{\glsxtrdowrglossaryhook}[1]{}
```

gls@alt@hyp@opt Commands like \gls have a star or plus version. Provide a third symbol that the user can adapt for convenience.

```
3198 \newcommand*{\gls@alt@hyp@opt}[1]{%
3199   \let\glslinkvar\@firstofthree
3200   \let\@gls@hyp@opt@cs\relax
3201   \@ifstar{\s@gls@hyp@opt}%
3202   {\@ifnextchar+{%
3203     {\@firstoftwo{\p@gls@hyp@opt}}%
3204     {%
3205       \expandafter\@ifnextchar\@gls@alt@hyp@opt@char
3206       {\@firstoftwo{\@alt@gls@hyp@opt}}%
3207       {#1}%
3208     }%
3209   }%
3210 }
```

alt@gls@hyp@opt User version

```
3211 \newcommand*{\@alt@gls@hyp@opt}[1][]{%
3212   \let\glslinkvar\@firstofthree
3213   \expandafter\@gls@hyp@opt@cs\expandafter[\@gls@alt@hyp@opt@keys,#1]}
```

lt@hyp@opt@char Contains the character used as the command modifier.

```
3214 \newcommand*{\gls@alt@hyp@opt@char}{}%
```

lt@hyp@opt@keys Contains the option list used as the command modifier.

```
3215 \newcommand*{\gls@alt@hyp@opt@keys}{}%
```

rSetAltModifier

```
3216 \newcommand*{\GlsXtrSetAltModifier}[2]{%
 3217   \let\gls@hyp@opt\gls@alt@hyp@opt
```

Check that the supplied character isn't + or \*

```
3218 \ifstreq{\#1}{+}{%
 3219   {\PackageError{glossaries-extra}{%
 3220     {Can't use '#1' as modifier (it's already in use)}}{}%
 3221 }%
 3222 \ifstreq{\#1}{*}{%
 3223   {\PackageError{glossaries-extra}{%
 3224     {Can't use '#1' as modifier (it's already in use)}}{}%
 3225 }%
 3226 }%
 3227 \def\gls@alt@hyp@opt@char{\#1}%
 3228 \def\gls@alt@hyp@opt@keys{\#2}%
 3229 \ifdefeq{\glsxtr@record@setting}{\glsxtr@record@setting@off}%
 3230 {}%
 3231 {}%
```

Let **bib2gls** know the modifier.

```
3232 \protected@write\auxout{\string\providecommand{\string@glsxtr@altmodifier}[1]{}%
 3233 \protected@write\auxout{\string@glsxtr@altmodifier{\#1}}%
 3234 }%
 3235 }
```

org@dohyperlink

```
3236 \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.

```
3237 \ifdef{\glsnavhyperlink}{%
 3238 {
 3239   \renewcommand*{\glsnavhyperlink}[3][\@glo@type]{%
 3240     \edef\gls@grplabel{\#2}\protected@edef\gls@grptitle{\#3}}%
```

Scope:

```
3241   {%
 3242     \let\glsxtrdohyperlink\glsxtr@org@dohyperlink
 3243     \@glslink{\glsnavhyperlinkname{\#1}{\#2}}{\#3}%
 3244   }%
 3245 }%
 3246 }
 3247 {}
```

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

`sxtrdohyperlink` Unpleasant complications can occur if the text or first key etc contains \gls, particularly if there are hyperlinks. To get around this problem, patch \glsdohyperlink so that it temporarily makes \gls behave like \glstext[*hyper=false,noindex*]. (This will be overridden if the user explicitly cancels either of those options in the optional argument of \gls or using the plus version.) This also patches the short form commands like \acrshort and \glsxtrshort to use \glsentryshort and, similarly, the long form commands like \acrlong and \glsxtrlong to use \glsentrylong. Added attribute check.

```

3248 \newcommand*\glsxtrdohyperlink}[2]{%
3249   \glshasattribute{\glslabel}{targeturl}%
3250   {%
3251     \glshasattribute{\glslabel}{targetname}%
3252     {%
3253       \glshasattribute{\glslabel}{targetcategory}%
3254       {%
3255         \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
3256           \glsgetattribute{\glslabel}{targetcategory}}%
3257           \glsgetattribute{\glslabel}{targetname}}%
3258           {{\glsxtrprotectlinks#2}}%
3259         }%
3260       {%
3261         \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
3262           {}%
3263             \glsgetattribute{\glslabel}{targetname}}%
3264             {{\glsxtrprotectlinks#2}}%
3265           }%
3266         }%
3267       {%
3268         \href{\glsgetattribute{\glslabel}{targeturl}}{%
3269           {{\glsxtrprotectlinks#2}}%
3270         }%
3271       }%
3272     {%

```

Check for alias.

```

3273   \glsfieldfetch{\glslabel}{alias}{\gloaliaslabel}%
3274   \ifdefvoid\gloaliaslabel
3275   {%
3276     \glsxtrhyperlink{\gloaliaslabel}{\glsxtrprotectlinks#2}%
3277   }%
3278   {%

```

Redirect link to the alias target.

```

3279   \glsxtrhyperlink
3280     {\glolinkprefix\glsdetoklabel{\gloaliaslabel}}%
3281     {{\glsxtrprotectlinks#2}}%
3282   }%

```

```
3283 }%
3284 }
```

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

```
3285 \ifdef{\glsshowtarget}
3286 {
3287   \newcommand{\glsxtrhyperlink}[2]{%
3288     \glsshowtarget{#1}%
3289     \hyperlink{#1}{#2}%
3290   }%
3291 }
3292 {
3293   \newcommand{\glsxtrhyperlink}[2]{\hyperlink{#1}{#2}}%
3294 }
```

`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.

```
3295 \renewrobustcmd*{\glshyperlink}[2][\glsentrytext{\glo@label}]{%
3296   \glsdoifexists{#2}%
3297   {%
3298     \def{\glo@label}{#2}%
3299     {\edef{\glslabel}{#2}%
3300       \glslink{\glo@label}{\glslabel}%
3301     }%
3302 }
```

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

```
3303 \renewcommand{\glsdisablehyper}{%
3304   \KV@glslink@hyperfalse
3305   \def{\glslink}{\glsdonohyperlink}%
3306   \let{\glstarget}{\secondoftwo}
3307 }
```

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

```
3308 \renewcommand{\glsenablehyper}{%
3309   \KV@glslink@hypertrue
3310   \def{\glslink}{\glsxtrdohyperlink}%
3311   \def{\glstarget}{\glsdohypertarget}%
3312 }
```

`\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).

```

3313 \def\glsdonohyperlink#1#2{{\glsxtrprotectlinks #2} }

\@glslink Reset \glslink with patched versions:
3314 \ifcsundef{hyperlink}%
3315 {%
3316   \def\glslink{\glsdonohyperlink}%
3317 }%
3318 {%
3319   \def\glslink{\glsxtrdohyperlink}%
3320 }

xtrprotectlinks Make \gls (and variants) behave like the corresponding \glstext (and variants) with hy-
perlinking and indexing off.
3321 \newcommand*{\glsxtrprotectlinks}{%
3322   \KV@glslink@hyperfalse
3323   \KV@glslink@noindextrue
3324   \let\@gls@\@glsxtr@p@text@
3325   \let\@Gls@\@Glsxtr@p@text@
3326   \let\@GLS@\@GLSxtr@p@text@
3327   \let\@glspl@\@glsxtr@p@plural@
3328   \let\@Glspl@\@Glsxtr@p@plural@
3329   \let\@GLSpl@\@GLSxtr@p@plural@
3330   \let\@glsxtrshort@\glsxtr@p@short@
3331   \let\@Glsxtrshort@\Glsxtr@p@short@
3332   \let\@GLSxtrshort@\GLSxtr@p@short@
3333   \let\@glsxtrlong@\glsxtr@p@long@
3334   \let\@Glsxtrlong@\Glsxtr@p@long@
3335   \let\@GLSxtrlong@\GLSxtr@p@long@
3336   \let\@glsxtrshortpl@\glsxtr@p@shortpl@
3337   \let\@Glsxtrshortpl@\Glsxtr@p@shortpl@
3338   \let\@GLSxtrshortpl@\GLSxtr@p@shortpl@
3339   \let\@glsxtrlongpl@\glsxtr@p@longpl@
3340   \let\@Glsxtrlongpl@\Glsxtr@p@longpl@
3341   \let\@GLSxtrlongpl@\GLSxtr@p@longpl@
3342   \let\@acrshort@\glsxtr@p@acrshort@
3343   \let\@Acrshort@\Glsxtr@p@acrshort@
3344   \let\@ACRshort@\GLSxtr@p@acrshort@
3345   \let\@acrshortpl@\glsxtr@p@acrshortpl@
3346   \let\@Acrshortpl@\Glsxtr@p@acrshortpl@
3347   \let\@ACRshortpl@\GLSxtr@p@acrshortpl@
3348   \let\@acrlong@\glsxtr@p@acrlong@
3349   \let\@Acrlong@\Glsxtr@p@acrlong@
3350   \let\@ACRlong@\GLSxtr@p@acrlong@
3351   \let\@acrlongpl@\glsxtr@p@acrlongpl@
3352   \let\@Acrlongpl@\Glsxtr@p@acrlongpl@
3353   \let\@ACRlongpl@\GLSxtr@p@acrlongpl@
3354 }

```

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

```

@glsxtr@p@text@
 3355 \def\@glsxtr@p@text@#1#2[#3]{{\@glstext@{#1}{#2}[#3]}}
```

```

@Glsxtr@p@text@
 3356 \def\@Glsxtr@p@text@#1#2[#3]{{\@Glstext@{#1}{#2}[#3]}}
```

```

@GLSxtr@p@text@
 3357 \def\@GLSxtr@p@text@#1#2[#3]{{\@GLStext@{#1}{#2}[#3]}}
```

```

lsxtr@p@plural@
 3358 \def\@glsxtr@p@plural@#1#2[#3]{{\@glsplural@{#1}{#2}[#3]}}
```

```

lsxtr@p@plural@
 3359 \def\@Glsxtr@p@plural@#1#2[#3]{{\@Glsplural@{#1}{#2}[#3]}}
```

```

LSxtr@p@plural@
 3360 \def\@GLSxtr@p@plural@#1#2[#3]{{\@GLSplural@{#1}{#2}[#3]}}
```

```

glsxtr@p@short@
 3361 \def\@glsxtr@p@short@#1#2[#3]{%
 3362   {%
 3363     \glssetabbrvfmt{\glscategory{#2}}%
 3364     \glsabbrvfont{\glsentryshort{#2}}#3%
 3365   }%
 3366 }
```

```

Glsxtr@p@short@
 3367 \def\@Glsxtr@p@short@#1#2[#3]{%
 3368   {%
 3369     \glssetabbrvfmt{\glscategory{#2}}%
 3370     \glsabbrvfont{\Glsentryshort{#2}}#3%
 3371   }%
 3372 }
```

```

GLSxtr@p@short@
 3373 \def\@GLSxtr@p@short@#1#2[#3]{%
 3374   {%
 3375     \glssetabbrvfmt{\glscategory{#2}}%
 3376     \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshort{#2}}#3}%
 3377   }%
 3378 }
```

```

sxtr@p@shortpl@
 3379 \def\@glsxtr@p@shortpl@#1#2[#3]{%
 3380   {%
 3381     \glssetabbrvfmt{\glscategory{#2}}%
 3382     \glsabbrvfont{\glsentryshortpl{#2}}#3%
 3383   }%
 3384 }
```

```

sxtr@p@shortpl@
 3385 \def\@Glsxtr@p@shortpl@#1#2[#3]{%
 3386   {%
 3387     \glssetabrvfmt{\glscategory{#2}}%
 3388     \glsabbrvfont{\Glsentryshortpl{#2}}#3%
 3389   }%
 3390 }

Sxtr@p@shortpl@
 3391 \def\@GLSxtr@p@shortpl@#1#2[#3]{%
 3392   {%
 3393     \glssetabrvfmt{\glscategory{#2}}%
 3394     \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshortpl{#2}}#3}%
 3395   }%
 3396 }

@glsxtr@p@long@
 3397 \def\@glsxtr@p@long@#1#2[#3]{{{\glsentrylong{#2}}#3}}


@Glsxtr@p@long@
 3398 \def\@Glsxtr@p@long@#1#2[#3]{{{\Glsentrylong{#2}}#3}}


@GLSxtr@p@long@
 3399 \def\@GLSxtr@p@long@#1#2[#3]{%
 3400   {\mfirstucMakeUppercase{\glslongfont{\glsentrylong{#2}}#3}}}

lsxtr@p@longpl@
 3401 \def\@glsxtr@p@longpl@#1#2[#3]{{{\glsentrylongpl{#2}}#3}}


lsxtr@p@longpl@
 3402 \def\@Glsxtr@p@longpl@#1#2[#3]{{{\glslongfont{\Glsentrylongpl{#2}}#3}}}

LSxtr@p@longpl@
 3403 \def\@GLSxtr@p@longpl@#1#2[#3]{%
 3404   {\mfirstucMakeUppercase{\glslongfont{\glsentrylongpl{#2}}#3}}}

xtr@p@acrshort@
 3405 \def\@glsxtr@p@acrshort@#1#2[#3]{{{\acronymfont{\glsentryshort{#2}}#3}}}

xtr@p@acrshort@
 3406 \def\@Glsxtr@p@acrshort@#1#2[#3]{{{\acronymfont{\Glsentryshort{#2}}#3}}}

xtr@p@acrshort@
 3407 \def\@GLSxtr@p@acrshort@#1#2[#3]{%
 3408   {\mfirstucMakeUppercase{\acronymfont{\glsentryshort{#2}}#3}}}

r@p@acrshortpl@
 3409 \def\@glsxtr@p@acrshortpl@#1#2[#3]{{{\acronymfont{\glsentryshortpl{#2}}#3}}}

```

```

r@p@acrshortpl@
 3410 \def\@Glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\Glsentryshortpl{#2}}#3}}
r@p@acrshortpl@
 3411 \def\@GLSxtr@p@acrshortpl@#1#2[#3]{%
 3412   {\mfirstucMakeUppercase{\acronymfont{\glsentryshortpl{#2}}#3}}}
sxtr@p@acrlong@
 3413 \def\@glsxtr@p@acrlong@#1#2[#3]{{\glsentrylong{#2}}#3}
sxtr@p@acrlong@
 3414 \def\@Glsxtr@p@acrlong@#1#2[#3]{{\Glsentrylong{#2}}#3}
Sxtr@p@acrlong@
 3415 \def\@GLSxtr@p@acrlong@#1#2[#3]{%
 3416   {\mfirstucMakeUppercase{\glsentrylong{#2}}#3}}}
tr@p@acrlongpl@
 3417 \def\@glsxtr@p@acrlongpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}
tr@p@acrlongpl@
 3418 \def\@Glsxtr@p@acrlongpl@#1#2[#3]{{\Glsentrylongpl{#2}}#3}
tr@p@acrlongpl@
 3419 \def\@GLSxtr@p@acrlongpl@#1#2[#3]{%
 3420   {\mfirstucMakeUppercase{\glsentrylongpl{#2}}#3}}
      Commands to minimise conflict.

\@glsxtrp@opt
 3421 \newcommand*{\@glsxtrp@opt}{\hyper=false,\noindex}

\glsxtrsetpopts Used in glossary to switch hyperlinks on for the \glsxtrp type of commands.
 3422 \newcommand*{\glsxtrsetpopts}[1]{%
 3423   \renewcommand*{\@glsxtrp@opt}{\#1}%
 3424 }

\lossxtrsetpopts Used in glossary to switch hyperlinks on for the \glossxtrp type of commands.
 3425 \newcommand*{\glossxtrsetpopts}{%
 3426   \glsxtrsetpopts{\noindex}%
 3427 }

\@@glsxtrp
 3428 \newrobustcmd*{\@@glsxtrp}[2]{%

```

Add scope.

```
3429  {%
3430    \let\glspostlinkhook\relax
3431    \csname#1\expandafter\endcsname\expandafter[\@glsxtrp@opt]{#2}[]%
3432  }%
3433 }

\@glsxtrp
3434 \newrobustcmd*\{@glsxtrp}[2]{%
3435   \ifcsdef{gls#1}{%
3436     {%
3437       \@@glsxtrp{gls#1}{#2}%
3438     }%
3439   }%
3440   \ifcsdef{glsxtr#1}{%
3441     {%
3442       \@@glsxtrp{glsxtr#1}{#2}%
3443     }%
3444   }%
3445   \PackageError{glossaries-extra}{‘#1’ not recognised by
3446     \string\glsxtrp{}}
3447   }%
3448 }%
3449 }
```

\@Glsxtrp

```
3450 \newrobustcmd*\{@Glsxtrp}[2]{%
3451   \ifcsdef{Gls#1}{%
3452     {%
3453       \@@glsxtrp{Gls#1}{#2}%
3454     }%
3455   }%
3456   \ifcsdef{Glsxtr#1}{%
3457     {%
3458       \@@glsxtrp{Glsxtr#1}{#2}%
3459     }%
3460   }%
3461   \PackageError{glossaries-extra}{‘#1’ not recognised by
3462     \string\Glsxtrp{}}
3463   }%
3464 }%
3465 }
```

\@GLSxtrp

```
3466 \newrobustcmd*\{@GLSxtrp}[2]{%
3467   \ifcsdef{GLS#1}{%
3468     {%
3469       \@@glsxtrp{GLS#1}{#2}%
3470     }%
3471   }%
```

```

3471  {%
3472    \ifcsdef{GLSxtr#1}%
3473    {%
3474      \@@glsxtrp{GLSxtr#1}{#2}%
3475    }%
3476    {%
3477      \PackageError{glossaries-extra}{‘#1’ not recognised by
3478        \string\GLSxtrp{}}{%
3479    }%
3480  }%
3481 }

\glsxtr@entry@p
3482 \newrobustcmd*\glsxtr@headentry@p}[2]{%
3483   \glsifattribute{#1}{headuc}{true}%
3484   {%
3485     \mfirstucMakeUppercase{\gls@entry@field{#1}{#2}}%
3486   }%
3487   {%
3488     \gls@entry@field{#1}{#2}%
3489   }%
3490 }

\glsxtrp Not robust as it needs to expand somewhat.
3491 \ifdef\texorpdfstring
3492 {
3493   \newcommand{\glsxtrp}[2]{%
3494     \protect\NoCaseChange
3495     {%
3496       \protect\texorpdfstring
3497       {%
3498         \protect\glsxtrifinmark
3499         {%
3500           \ifcsdef{glsxtrhead#1}%
3501           {%
3502             \protect\csuse{glsxtrhead#1}{#2}%
3503           }%
3504           {%
3505             \glsxtr@headentry@p{#2}{#1}%
3506           }%
3507         }%
3508         {%
3509           \glsxtrp{#1}{#2}%
3510         }%
3511       }%
3512       {%
3513         \protect\gls@entry@field{#2}{#1}%
3514       }%
3515     }%

```

```

3516  }
3517 }
3518 {
3519 \newcommand{\glsxtrp}[2]{%
3520   \protect\NoCaseChange
3521   {%
3522     \protect\glsxtrifinmark
3523     {%
3524       \ifcsdef{glsxtrhead#1}{%
3525         {%
3526           {\protect\csuse{glsxtrhead#1}}%
3527         }%
3528         {%
3529           \glsxtr@headentry@p{#2}{#1}%
3530         }%
3531       }%
3532       {%
3533         \glsxtrp{#1}{#2}%
3534       }%
3535     }%
3536   }%
3537 }
```

Provide short synonyms for the most common option.

```
\glsps
3538 \newcommand*\glsps{\glsxtrp{short}}
```

```
\glspt
3539 \newcommand*\glspt{\glsxtrp{text}}
```

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

```

3540 \ifdef\texorpdfstring
3541 {
3542 \newcommand{\Glsxtrp}[2]{%
3543   \protect\NoCaseChange
3544   {%
3545     \protect\texorpdfstring
3546     {%
3547       \protect\glsxtrifinmark
3548       {%
3549         \ifcsdef{Glsxtrhead#1}{%
3550           {%
3551             {\protect\csuse{Glsxtrhead#1}{#2}}%
3552           }%
3553           {%
3554             \protect\@Gls@entry@field{#2}{#1}%
3555           }%
```

```

3556      }%
3557      {%
3558          \Glsxtrp{#1}{#2}%
3559      }%
3560      }%
3561      {%
3562          \protect\gls@entry@field{#2}{#1}%
3563      }%
3564  }%
3565 }
3566 }
3567 {
3568 \newcommand{\Glsxtrp}[2]{%
3569     \protect\NoCaseChange
3570     {%
3571         \protect\glsxtrifinmark
3572     }%
3573     \ifcsdef{Glsxtrhead#1}%
3574     {%
3575         {\protect\csuse{Glsxtrhead#1}}%
3576     }%
3577     {%
3578         \protect\gls@entry@field{#2}{#1}%
3579     }%
3580 }%
3581 {%
3582     \Glsxtrp{#1}{#2}%
3583 }%
3584 }%
3585 }
3586 }

```

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

```

3587 \ifdef\texorpdfstring
3588 {
3589 \newcommand{\GLSxtrp}[2]{%
3590     \protect\NoCaseChange
3591     {%
3592         \protect\texorpdfstring
3593     }%
3594     \protect\glsxtrifinmark
3595     {%
3596         \ifcsdef{GLSxtr#1}%
3597         {%
3598             {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}}%
3599         }%
3600         {%
3601             \protect\mfirstucMakeUppercase
3602         }%

```

```

3603         \protect\@gls@entry@field{#2}{#1}%
3604     }%
3605   }%
3606   }%
3607   {%
3608     \c@GLSxtrp{#1}{#2}%
3609   }%
3610 }%
3611 {%
3612   \protect\@gls@entry@field{#2}{#1}%
3613 }%
3614 }%
3615 }
3616 }
3617 {
3618 \newcommand{\GLSxtrp}[2]{%
3619   \protect\NoCaseChange
3620   {%
3621     \protect\glsxtrifinmark
3622   }%
3623   \ifcsdef{GLSxtr#1}%
3624   {%
3625     \protect\GLSxtrshort[noindex,hyper=false]{#1}[]%
3626   }%
3627   {%
3628     \protect\mfistucMakeUppercase
3629   }%
3630   \protect\@gls@entry@field{#2}{#1}%
3631 }%
3632 }%
3633 }%
3634 {%
3635   \c@GLSxtrp{#1}{#2}%
3636 }%
3637 }%
3638 }
3639 }

```

### 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 exceeding 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.  
3640 `\newcommand*{\@glsxtr@unset}{[1]{%`  
3641   `\@@glsunset{#1}%`  
3642   `\glsxtrpostunset{#1}%`  
3643 `}}`

`\@glsunset` Global unset.  
3644 `\let\@glsunset\@glsxtr@unset`

`glsxtrpostunset`  
3645 `\newcommand*{\glsxtrpostunset}{[1]{}}`

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

`tUnsetBuffering`  
3646 `\newcommand*{\GlsXtrStartUnsetBuffering}{%`  
3647   `\@ifstar\s@GlsXtrStartUnsetBuffering\@GlsXtrStartUnsetBuffering`  
3648 `}`

`tUnsetBuffering` Unstarred version doesn't check for duplicates.  
3649 `\newcommand*{\@GlsXtrStartUnsetBuffering}{%`  
3650   `\let\@glsxtr@org@unset@buffer\@glsxtr@unset@buffer`  
3651   `\def\@glsxtr@unset@buffer{}%`  
3652   `\let\@glsunset\@glsxtrbuffer@unset`  
3653 `}`

`tUnsetBuffering` Starred version checks for duplicates.  
3654 `\newcommand*{\s@GlsXtrStartUnsetBuffering}{%`  
3655   `\let\@glsxtr@org@unset@buffer\@glsxtr@unset@buffer`  
3656   `\def\@glsxtr@unset@buffer{}%`  
3657   `\let\@glsunset\@glsxtrbuffer@nodup@unset`  
3658 `}`

`xtrbuffer@unset` This must use a global change since `\gls` may have to be placed inside `\mbox` (for example, with soul commands).  
3659 `\newcommand*{\@glsxtrbuffer@unset}{[1]{%`  
3660   `\listxadd\@glsxtr@unset@buffer{#1}%`  
3661 `}`

`fer@nodup@unset` Alternative version that avoids duplicates. One level of expansion is performed on the argument in case it's a control sequence containing the label. (Not using `\xifinlist` as the added complexity might cause problems that the buffering is trying to overcome.)

```
3662 \newcommand*{\@glsxtrbuffer@nodup@unset}[1]{%
3663   \expandafter\ifinlist\expandafter{\#1}{\@glsxtr@unset@buffer}{}%
3664   {\listxadd{\@glsxtr@unset@buffer}{#1}}%
3665 }
```

pUnsetBuffering

```
3666 \newcommand*{\GlsXtrStopUnsetBuffering}{%
3667   \@ifstar{s}{\GlsXtrStopUnsetBuffering}{\GlsXtrStopUnsetBuffering}%
3668 }
```

pUnsetBuffering Unstarred form (global unset).

```
3669 \newcommand*{\@GlsXtrStopUnsetBuffering}{%
3670   \let\@glsunset\@glsxtr@unset
3671   \forlistloop{\glsunset}{\glsxtr@unset@buffer}
3672   \let\@glsxtr@unset@buffer\@glsxtr@org@unset@buffer
3673 }
```

pUnsetBuffering Starred form (local unset).

```
3674 \newcommand*{\s@GlsXtrStopUnsetBuffering}{%
3675   \forlistloop{\glslocalunset}{\glsxtr@unset@buffer}
3676   \let\@glsunset\@glsxtr@unset
3677 }
```

dUnsetBuffering Discards pending buffer and restores \glsunset.

```
3678 \newcommand*{\GlsXtrDiscardUnsetBuffering}{%
3679   \let\@glsunset\@glsxtr@unset
3680   \let\@glsxtr@unset@buffer\@glsxtr@org@unset@buffer
3681 }
```

setBufferedList Iterate over labels stored in the current buffer. The argument is the handler macro.

```
3682 \newcommand*{\GlsXtrForUnsetBufferedList}[1]{%
3683   \forlistloop{\@glsxtr@unset@buffer}{#1}%
3684 }
```

\@glslocalunset Local unset.

```
3685 \renewcommand*{\@glslocalunset}[1]{%
3686   \@@glslocalunset{#1}%
3687   \glsxtrpostlocalunset{#1}%
3688 }%
```

rpostlocalunset

```
3689 \newcommand*{\glsxtrpostlocalunset}[1]{}
```

\@glsreset Global reset.

```
3690 \renewcommand*{\@glsreset}[1]{%
3691   \@@glsreset{#1}%
3692   \glsxtrpostreset{#1}%
3693 }%
```

```

glsxtrpostreset
3694 \newcommand*{\glsxtrpostreset}[1]{}

\@glslocalreset Local reset.
3695 \renewcommand*{\@glslocalreset}[1]{%
3696   \@@glslocalreset{#1}%
3697   \glsxtrpostlocalreset{#1}%
3698 }%

rpostlocalreset
3699 \newcommand*{\glsxtrpostlocalreset}[1]{}

slocalreseteach Locally reset a list of entries.
3700 \newcommand*{\glslocalreseteach}[1]{%
3701   \gls@ifnotmeasuring
3702   {%
3703     \@for\@gls@thislabel:=#1\do{%
3704       \glsdoifexists{\@gls@thislabel}%
3705       {%
3706         \glslocalreset{\@gls@thislabel}%
3707       }%
3708     }%
3709   }%
3710 }

slocalunseteach Locally unset a list of entries.
3711 \newcommand*{\glslocalunseteach}[1]{%
3712   \gls@ifnotmeasuring
3713   {%
3714     \@for\@gls@thislabel:=#1\do{%
3715       \glsdoifexists{\@gls@thislabel}%
3716       {%
3717         \glslocalunset{\@gls@thislabel}%
3718       }%
3719     }%
3720   }%
3721 }

leEntryCounting The first argument is the list of categories and the second argument is the value of the entrycount attribute.
3722 \newcommand*{\GlsXtrEnableEntryCounting}[2]{%
  Enable entry counting:
  3723   \glsenableentrycount
  Redefine \gls etc:
  3724   \renewcommand*{\gls}{\cgls}%
  3725   \renewcommand*{\Gls}{\cGls}%
  3726   \renewcommand*{\glspol}{\cglspl}%
}

```

```
3727 \renewcommand*\Glspl}{\cGlspl}%
3728 \renewcommand*\GLS}{\cGLS}%
3729 \renewcommand*\GLSpl}{\cGLSpl}%
```

Set the entrycount attribute:

```
3730 \glsxtr@setentrycountunsetattr{#1}{#2}%
```

In case this command is used again:

```
3731 \let\GlsXtrEnableEntryCounting\glsxtr@setentrycountunsetattr
3732 \renewcommand*\GlsXtrEnableEntryCounting[3]{%
3733   \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryCounting\space
3734   can't be used with \string\GlsXtrEnableEntryCounting}%
3735   {Use one or other but not both commands}}%
3736 }
```

## entrycountunsetattr

```
3737 \newcommand*\glsxtr@setentrycountunsetattr[2]{%
3738   @for\glsxtr@cat:=#1\do
3739   {%
3740     \ifempty{\glsxtr@cat}{}{%
3741       \glssetcategoryattribute{\glsxtr@cat}{entrycount}{#2}%
3742     }%
3743   }%
3744 }%
3745 }
```

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

## enableentrycount

```
3746 \renewcommand*\glsenableentrycount{}%
```

Enable new fields:

```
3747 \appto\newglossaryentry@defcounters{\@newglossaryentry@defcounters}%
```

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

```
3748 \renewcommand*\gls@defdocnewglossaryentry{}%
3749   \renewcommand*\newglossaryentry[2]{%
3750     \PackageError{glossaries}{\string\newglossaryentry\space
3751     may only be used in the preamble when entry counting has
3752     been activated}{If you use \string\glsenableentrycount\space
3753     you must place all entry definitions in the preamble not in
3754     the document environment}}%
3755   }%
3756 }%
```

New commands to access new fields:

```
3757 \newcommand*\glsentrycurrcount[1]{%
3758   \ifcsundef{glo@\glsdetoklabel{##1}@currcount}%
3759   {}{\gls@entry@field{##1}{currcount}}%
3760 }%
3761 \newcommand*\glsentryprevcount[1]{%
```

```

3762 \ifcsundef{glo@\glsdetoklabel{\#1}@prevcount}%
3763 {0}{\@gls@entry@field{\#1}{prevcount}}%
3764 }%

```

Adjust post unset and reset:

```

3765 \let\@glsxtr@entrycount@org@unset\glsxtrpostunset
3766 \renewcommand*{\glsxtrpostunset}[1]{%
3767   \@glsxtr@entrycount@org@unset{\#1}%
3768   \@gls@increment@currcount{\#1}%
3769 }%
3770 \let\@glsxtr@entrycount@org@localunset\glsxtrpostlocalunset
3771 \renewcommand*{\glsxtrpostlocalunset}[1]{%
3772   \@glsxtr@entrycount@org@localunset{\#1}%
3773   \@gls@local@increment@currcount{\#1}%
3774 }%
3775 \let\@glsxtr@entrycount@org@reset\glsxtrpostreset
3776 \renewcommand*{\glsxtrpostreset}[1]{%
3777   \@glsxtr@entrycount@org@reset{\#1}%
3778   \csgdef{glo@\glsdetoklabel{\#1}@currcount}{0}%
3779 }%
3780 \let\@glsxtr@entrycount@org@localreset\glsxtrpostlocalreset
3781 \renewcommand*{\glsxtrpostlocalreset}[1]{%
3782   \@glsxtr@entrycount@org@localreset{\#1}%
3783   \csdef{glo@\glsdetoklabel{\#1}@currcount}{0}%
3784 }%

```

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

```

3785 \let\@cgls@\@@cgls@
3786 \let\@cglspl@\@@cglspl@

3787 \let\@cGls@\@@cGls@
3788 \let\@cGlspl@\@@cGlspl@
3789 \let\@cGLS@\@@cGLS@
3790 \let\@cGLSpl@\@@cGLSpl@

```

The rest is as the original definition.

```

3791 \AtEndDocument{\@gls@write@entrycounts}%
3792 \renewcommand*{\@gls@entry@count}[2]{%
3793   \csgdef{glo@\glsdetoklabel{\#1}@prevcount}{\#2}%
3794 }%
3795 \let\glsenableentrycount\relax
3796 \renewcommand*{\glsenableentryunitcount}{}%
3797 \PackageError{glossaries-extra}{\string\glsenableentryunitcount\space
3798 can't be used with \string\glsenableentrycount}%
3799 {Use one or other but not both commands}%
3800 }%
3801 }

```

`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.

```

3802 \renewcommand*{\@gls@write@entrycounts}{%
3803   \immediate\write\@auxout
3804     {\string\providetcommand*{\string\@gls@entry@count}[2]{}}%
3805   \count@=0\relax
3806   \forallglsentries{\@glsentry}{%
3807     \glshasattribute{\@glsentry}{entrycount}%
3808     {%
3809       \ifglsused{\@glsentry}%
3810       {%
3811         \immediate\write\@auxout
3812           {\string\@gls@entry@count{\@glsentry}{\glsentrycurrcount{\@glsentry}}}%
3813       }%
3814       {}%
3815       \advance\count@ by \cne
3816     }%
3817     {}%
3818   }%
3819   \ifnum\count@=0
3820     \GlossariesExtraWarning{Entry counting has been enabled
3821       \MessageBreak with \string\glsenableentrycount\space but the
3822       \MessageBreak attribute ‘entrycount’ hasn’t
3823       \MessageBreak been assigned to any of the defined
3824       \MessageBreak entries}%
3825   \fi
3826 }

```

rifcounttrigger

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

```

3827 \newcommand*{\glsxtrifcounttrigger}[3]{%
3828   \glshasattribute{#1}{entrycount}%
3829   {%
3830     \ifnum\glsentryprevcount{#1}>\glsgetattribute{#1}{entrycount}\relax
3831       #3%
3832     \else
3833       #2%
3834     \fi
3835   }%
3836   {#3}%
3837 }

```

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

\@@cgls@

```

3838 \def\@@cgls@#1#2[#3]{%
3839   \glsxtrifcounttrigger{#2}%

```

```

3840  {%
3841    \cglformat{#2}{#3}%
3842    \glsunset{#2}%
3843  }%
3844  {%
3845    \cgl@{#1}{#2}{#3}%
3846  }%
3847 }%


\@@cglspl@

3848 \def\@@cglspl@#1#2[#3]{%
3849   \glsxtrifcounttrigger{#2}%
3850   {%
3851     \cglplformat{#2}{#3}%
3852     \glsunset{#2}%
3853   }%
3854   {%
3855     \cglpl@{#1}{#2}{#3}%
3856   }%
3857 }%


\@@cGls@

3858 \def\@@cGls@#1#2[#3]{%
3859   \glsxtrifcounttrigger{#2}%
3860   {%
3861     \cGlsformat{#2}{#3}%
3862     \glsunset{#2}%
3863   }%
3864   {%
3865     \cGls@{#1}{#2}{#3}%
3866   }%
3867 }%


\@@cGlsp1@

3868 \def\@@cGlsp1@#1#2[#3]{%
3869   \glsxtrifcounttrigger{#2}%
3870   {%
3871     \cGlsp1format{#2}{#3}%
3872     \glsunset{#2}%
3873   }%
3874   {%
3875     \cGlsp1@{#1}{#2}{#3}%
3876   }%
3877 }%


\@@cGLS@

3878 \def\@@cGLS@#1#2[#3]{%
3879   \glsxtrifcounttrigger{#2}%
3880   {%

```

```

3881     \cGLSformat{#2}{#3}%
3882     \glsunset{#2}%
3883 }%
3884 {%
3885     \cGLS@{#1}{#2}{#3}%
3886 }%
3887 }%

```

### \@@cGLSpl@

```

3888 \def\@@cGLSpl@#1#2[#3]{%
3889   \glsxtrifcounttrigger{#2}%
3890 {%
3891   \cGLSplformat{#2}{#3}%
3892   \glsunset{#2}%
3893 }%
3894 {%
3895   \cGLSpl@{#1}{#2}{#3}%
3896 }%
3897 }%

```

Remove default warnings from \cglS etc so that it can be used interchangeable with \gls etc.

### \@cglS@

```
3898 \def\@cglS@#1#2[#3]{\@gls@{#1}{#2}{#3}}
```

### \@cGls@

```
3899 \def\@cGls@#1#2[#3]{\@Gls@{#1}{#2}{#3}}
```

### \@cglSpl@

```
3900 \def\@cglSpl@#1#2[#3]{\@glspl@{#1}{#2}{#3}}
```

### \@cGlspl@

```
3901 \def\@cGlspl@#1#2[#3]{\@Glspl@{#1}{#2}{#3}}
```

Add all upper case versions not provided by glossaries.

### \cGLS

```
3902 \newrobustcmd*\cGLS{\gls@hyp@opt\cGLS}
```

\@cGLS Defined the un-starred form. Need to determine if there is a final optional argument

```

3903 \newcommand*\@cGLS[2][]{%
3904   \new@ifnextchar[\@cGLS@{#1}{#2}]{\@cGLS@{#1}{#2}[]}{%
3905 }
```

### \@cGLS@

```
3906 \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.
3907 \newcommand*{\cGLSformat}[2]{%
3908   \expandafter\mfirstuc\expandafter{\cglstformat{\#1}{\#2}}%
3909 }

\cGLSp1
3910 \newrobustcmd*{\cGLSp1}{\gls@hyp@opt\cGLSp1}

\c@cGLSp1 Defined the un-starred form. Need to determine if there is a final optional argument
3911 \newcommand*{\c@cGLSp1}[2][]{%
3912   \new@ifnextchar[\c@cGLSp1{\#1}{\#2}]{\c@cGLSp1{\#1}{\#2}[]}{%
3913 }

\c@cGLSp1@
3914 \def\c@cGLSp1#1#2[#3]{\c@cGLSp1{\#1}{\#2}[#3]}

\cGLSp1format Format used by \cGLSp1 if entry only used once on previous run. The first argument is the
label, the second argument is the insert text.
3915 \newcommand*{\cGLSp1format}[2]{%
3916   \expandafter\mfirstuc\expandafter{\cglsp1format{\#1}{\#2}}%
3917 }

Modify the trigger formats to check for the regular attribute.

\cglstformat
3918 \renewcommand*{\cglstformat}[2]{%
3919   \glsifregular{\#1}%
3920   {\glsentryfirst{\#1}}%
3921   {\ifglslong{\#1}{\glsentrylong{\#1}}{\glsentryfirst{\#1}}}#2%
3922 }

\cGlsformat
3923 \renewcommand*{\cGlsformat}[2]{%
3924   \glsifregular{\#1}%
3925   {\Glsentryfirst{\#1}}%
3926   {\ifglslong{\#1}{\Glsentrylong{\#1}}{\Glsentryfirst{\#1}}}#2%
3927 }

\cglsp1format
3928 \renewcommand*{\cglsp1format}[2]{%
3929   \glsifregular{\#1}%
3930   {\glsentryfirstplural{\#1}}%
3931   {\ifglslong{\#1}{\glsentrylongpl{\#1}}{\glsentryfirstplural{\#1}}}#2%
3932 }

```

```
\cGlsplformat
3933 \renewcommand*\cGlsplformat}[2]{%
3934   \glsifregular{#1}%
3935   {\Glsentryfirstplural{#1}}%
3936   {\ifglshaslong{#1}{\Glsentrylongpl{#1}}{\Glsentryfirstplural{#1}}}#2%
3937 }
```

New code similar to above for unit counting.

```
defunitcounters
3938 \newcommand*\@newglossaryentry@defunitcounters}{%
3939   \edef@\glo@countunit{\csuse{@glsxtr@categoryattr@@\glo@category @unitcount}}%
3940   \ifdefvoid@\glo@countunit
3941   {}%
3942   {}%
3943   \@glsxtr@ifunitcounter{\glo@countunit}%
3944   {}%
3945   {\expandafter\glsxtr@addunitcounter\expandafter{\glo@countunit}}%
3946 }%
3947 }
```

r@unitcountlist List to keep track of which counters are being used by the entry unit count facility.

```
3948 \newcommand*\@glsxtr@unitcountlist}{}
```

```
@addunitcounter
3949 \newcommand*\@glsxtr@addunitcounter}[1]{%
3950   \listadd{\@glsxtr@unitcountlist}{#1}%
3951   \ifcsundef{glsxtr@theunit@#1}
3952   {}%
3953   \ifcsdef{theH#1}%
3954   {\csdef{glsxtr@theunit@#1}{\csuse{theH#1}}}{%
3955   {\csdef{glsxtr@theunit@#1}{\csuse{the#1}}}}%
3956 }%
3957 {}%
3958 }
```

```
r@ifunitcounter
3959 \newcommand*\@glsxtr@ifunitcounter}[3]{%
3960   \xifinlist{#1}{\@glsxtr@unitcountlist}{#2}{#3}}%
3961 }
```

```
urrentunitcount
3962 \newcommand*\@glsxtr@currentunitcount[1]{%
3963   glo@\glsdetoklabel{#1}@currunit@\glsgetattribute{#1}{unitcount}.%
3964   \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3965 }
```

```

eviousunitcount
3966 \newcommand*{\glsxtr@previousunitcount}[1]{%
3967   glo@\glsdetoklabel{#1}@prevunit@\glsgetattribute{#1}{unitcount}.%
3968   \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3969 }

t@currunitcount
3970 \newcommand*{\gls@increment@currunitcount}[1]{%
3971   \glshasattribute{#1}{unitcount}%
3972   {%
3973     \edef\glsxtr@csname{\glsxtr@currentunitcount{#1}}%
3974     \ifcsundef{\glsxtr@csname}%
3975     {%
3976       \csgdef{\glsxtr@csname}{1}%
3977       \listcsxadd{%
3978         glo@\glsdetoklabel{#1}@unitlist}%
3979         {\glsgetattribute{#1}{unitcount}.%
3980           \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3981         }%
3982       }%
3983     {%
3984       \csxdef{\glsxtr@csname}%
3985       {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
3986     }%
3987   }%
3988   {}%
3989 }

t@currunitcount
3990 \newcommand*{\gls@local@increment@currunitcount}[1]{%
3991   \glshasattribute{#1}{unitcount}%
3992   {%
3993     \edef\glsxtr@csname{\glsxtr@currentunitcount{#1}}%
3994     \ifcsundef{\glsxtr@csname}%
3995     {%
3996       \csdef{\glsxtr@csname}{1}%
3997       \listcseadd{%
3998         glo@\glsdetoklabel{#1}@unitlist}%
3999         {\glsgetattribute{#1}{unitcount}.%
4000           \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
4001         }%
4002       }%
4003     {%
4004       \csedef{\glsxtr@csname}%
4005       {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
4006     }%
4007   }%
4008   {}%
4009 }

```

```

r@currunitcount
4010 \newcommand*{\@glsxtr@currunitcount}[2]{%
4011   \ifcsundef
4012     {glo@\glsdetoklabel{#1}@currunit@#2}%
4013   {0}%
4014   {\csuse{glo@\glsdetoklabel{#1}@currunit@#2}}%
4015 }%

r@prevunitcount
4016 \newcommand*{\@glsxtr@prevunitcount}[2]{%
4017   \ifcsundef
4018     {glo@\glsdetoklabel{#1}@prevunit@#2}%
4019   {0}%
4020   {\csuse{glo@\glsdetoklabel{#1}@prevunit@#2}}%
4021 }%

entryunitcount
4022 \newcommand*{\glsenableentryunitcount}{%
  Enable new fields:
  4023   \appto\@newglossaryentry@defcounters{\@newglossaryentry@defunitcounters}%
  Just in case the user has switched on the docdef option.
  4024   \renewcommand*{\gls@defdocnewglossaryentry}{%
  4025     \renewcommand*{\newglossaryentry}[2]{%
  4026       \PackageError{glossaries}{\string\newglossaryentry\space
  4027         may only be used in the preamble when entry counting has
  4028         been activated}{If you use \string\glsenableentryunitcount\space
  4029         you must place all entry definitions in the preamble not in
  4030         the document environment}%
  4031     }%
  4032   }%
  New commands to access new fields:
  4033   \newcommand*{\glsentrycurrcount}[1]{%
  4034     \@glsxtr@currunitcount{##1}{\glsgetattribute{##1}{unitcount}.}%
  4035     \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
  4036   }%
  4037   \newcommand*{\glsentryprevcount}[1]{%
  4038     \@glsxtr@prevunitcount{##1}{\glsgetattribute{##1}{unitcount}.}%
  4039     \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
  4040   }%
  Access total count:
  4041   \newcommand*{\glsentryprevtotalcount}[1]{%
  4042     \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
  4043     {0}%
  4044     {%
  4045       \number\csuse{glo@\glsdetoklabel{##1}@prevunittotal}%
  4046     }%
  4047   }%

```

Access max value:

```
4048 \newcommand*{\glsentryprevmaxcount}[1]{%
4049   \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
4050   {}%
4051   {}%
4052   \number\csuse{glo@\glsdetoklabel{##1}@prevunitmax}%
4053 }
4054 }%
```

Adjust post unset and reset:

```
4055 \let\@glsxtr@entryunitcount@org@unset\glsxtrpostunset
4056 \renewcommand*{\glsxtrpostunset}[1]{%
4057   \@glsxtr@entryunitcount@org@unset{##1}%
4058   \@gls@increment@currunitcount{##1}%
4059 }
4060 \let\@glsxtr@entryunitcount@org@localunset\glsxtrpostlocalunset
4061 \renewcommand*{\glsxtrpostlocalunset}[1]{%
4062   \@glsxtr@entryunitcount@org@localunset{##1}%
4063   \@gls@local@increment@currunitcount{##1}%
4064 }
4065 \let\@glsxtr@entryunitcount@org@reset\glsxtrpostreset
4066 \renewcommand*{\glsxtrpostreset}[1]{%
4067   \glshasattribute{##1}{unitcount}%
4068   {}%
4069   \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
4070   \ifcsundef{\@glsxtr@csname}%
4071   {}%
4072   {\csgdef{\@glsxtr@csname}{0}}%
4073 }
4074 {}%
4075 }%
4076 \let\@glsxtr@entryunitcount@org@localreset\glsxtrpostlocalreset
4077 \renewcommand*{\glsxtrpostlocalreset}[1]{%
4078   \@glsxtr@entryunitcount@org@localreset{##1}%
4079   \@gls@increment@currunitcount{##1}%
4080   {}%
4081   \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
4082   \ifcsundef{\@glsxtr@csname}%
4083   {}%
4084   {\csgdef{\@glsxtr@csname}{0}}%
4085 }
4086 {}%
4087 }%
```

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

```
4088 \let\@cgls@\@@cgls@
4089 \let\@cglsp1@\@@cglsp1@
4090 \let\@cGls@\@@cGls@
```

```

4091 \let\@cGlsp1@\@@cGlsp1@
4092 \let\@cGLS@\@@cGLS@
4093 \let\@cGLSp1@\@@cGLSp1@

    Write information to the aux file.

4094 \AtEndDocument{\gls@write@entryunitcounts}%
4095 \renewcommand*{\gls@entry@unitcount}[3]{%
4096   \csgdef{glo@\glsdetoklabel{##1}@prevunit@##3}{##2}%
4097   \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
4098     {\csgdef{glo@\glsdetoklabel{##1}@prevunittotal}{##2}}%
4099   {%
4100     \csxdef{glo@\glsdetoklabel{##1}@prevunittotal}{%
4101       \number\numexpr\csuse{glo@\glsdetoklabel{##1}@prevunittotal}+##2}%
4102   }%
4103   \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
4104     {\csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}}%
4105   {%
4106     \ifnum\csuse{glo@\glsdetoklabel{##1}@prevunitmax}<##2
4107       \csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}%
4108     \fi
4109   }%
4110 }%
4111 \let\glsenableentryunitcount\relax
4112 \renewcommand*{\glsenableentrycount}{%
4113   \PackageError{glossaries-extra}{\string\glsenableentrycount\space
4114     can't be used with \string\glsenableentryunitcount}%
4115   {Use one or other but not both commands}%
4116 }%
4117 }
4118 \onlypreamble\glsenableentryunitcount

```

entry@unitcount

```
4119 \newcommand*{\gls@entry@unitcount}[3]{}
```

ryunitcounts@do

```

4120 \newcommand*{\gls@write@entryunitcounts@do}[1]{%
4121   \immediate\write\auxout
4122   {\string\gls@entry@unitcount
4123   {\string\glsentry}%
4124   {\string\glsxtr@currunitcount{\string\glsentry}{#1}}%
4125   }%
4126   {#1}}%
4127 }
```

entryunitcounts

```

4128 \newcommand*{\gls@write@entryunitcounts}{%
4129   \immediate\write\auxout
4130   {\string\providecommand*{\string\gls@entry@unitcount}[3]{}{}}%
4131   \count@=0\relax

```

```

4132 \forallglsentries{@glsentry}{%
4133   \glshasattribute{@glsentry}{unitcount}{%
4134     {%
4135       \ifglsused{@glsentry}{%
4136         {%
4137           \forlistcsloop{%
4138             {@gls@write@entryunitcounts@do}{%
4139               {glo@\glsdetoklabel{@glsentry}@unitlist}{%
4140             }{%
4141             {}{%
4142               \advance\count@ by \cne{%
4143             }{%
4144             {}{%
4145             }{%
4146             \ifnum\count@=0{%
4147               \GlossariesExtraWarningNoLine{Entry counting has been enabled
4148                 \MessageBreak with \string\glsenableentryunitcount\space but the
4149                 \MessageBreak attribute ‘unitcount’ hasn’t
4150                 \MessageBreak been assigned to any of the defined
4151                 \MessageBreak entries}{%
4152             \fi{%
4153 }

```

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.

```
4154 \newcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
```

Enable entry counting:

```
4155 \glsenableentryunitcount
```

Redefine \gls etc:

```

4156 \renewcommand*{\gls}{\cgls}{%
4157 \renewcommand*{\Gls}{\cGls}{%
4158 \renewcommand*{\glspl}{\cglspl}{%
4159 \renewcommand*{\Glspl}{\cGlspl}{%
4160 \renewcommand*{\GLS}{\cGLS}{%
4161 \renewcommand*{\GLSpl}{\cGLSpl}{%

```

Set the entrycount attribute:

```
4162 \glsxtr@setentryunitcountunsetattr{#1}{#2}{#3}{}
```

In case this command is used again:

```

4163 \let\GlsXtrEnableEntryUnitCounting\glsxtr@setentryunitcountunsetattr
4164 \renewcommand*{\GlsXtrEnableEntryCounting}[2]{%
4165   \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryCounting\space
4166     can’t be used with \string\GlsXtrEnableEntryUnitCounting}{%
4167     {Use one or other but not both commands}}{%
4168 }

```

tcountunsetattr

```

4169 \newcommand*{\@glsxtr@setentryunitcountunsetattr}[3]{%
4170   \@for\@glsxtr@cat:=#1\do
4171   {%
4172     \ifdefempty{\@glsxtr@cat}{}{%
4173       \glssetcategoryattribute{\@glsxtr@cat}{entrycount}{#2}%
4174       \glssetcategoryattribute{\@glsxtr@cat}{unitcount}{#3}%
4175     }%
4176   }%
4177 }%
4178 }

```

### 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.

`nericNewAcronym`

```

4179 \renewcommand*{\SetGenericNewAcronym}{%
  Make sure \RestoreAcronyms has been used.
4180   \ifdefeq\@addtoacronymlists\@glsxtr@org\@addtoacronymlists
4181   {}%
4182   {%
4183     \GlossariesWarning{\string\SetGenericNewAcronym\space used
4184       without restoring base acronym functions with
4185       \string\RestoreAcronyms}%
4186   }%
4187   \let\@Gls@entryname\@Gls@acrentryname
  Redefine \newacronym:
4188 \renewcommand{\newacronym}[4][]{%
4189   \ifdefempty{\@glsacronymlists}{%
4190     {%
4191       \def\@glo@type{\acronymtype}%
4192       \setkeys{glossentry}{##1}%
4193       \DeclareAcronymList{\@glo@type}%
4194     }%
4195   }%
4196   \glskeylisttok{##1}%
4197   \glslabeltok{##2}%
4198   \glsshorttok{##3}%
4199   \glslongtok{##4}%
4200   \newacronymhook
4201   \protected@edef\@do@newglossaryentry{%
4202     \noexpand\newglossaryentry{\the\glslabeltok}%
}

```

```

4203   {%
4204     type=\acronymtype,%
4205     name={\expandonce{\acronymentry{##2}}},%
4206     sort={\acronymsort{\the\glsshorttok}{\the\glslongtok}},%
4207     text={\the\glsshorttok},%
4208     short={\the\glsshorttok},%
4209     shortplural={\the\glsshorttok\noexpand\acrpluralsuffix},%
4210     long={\the\glslongtok},%
4211     longplural={\the\glslongtok\noexpand\acrpluralsuffix},%
4212     category=acronym,
4213     \GenericAcronymFields,%
4214     \the\glskeylisttok
4215   }%
4216 }%
4217 \do@newglossaryentry
4218 }%
4219 \renewcommand*\acrfullfmt}[3]{%
4220   \glslink[##1]{##2}{\genacrfullformat{##2}{##3}}}%
4221 \renewcommand*\Acrfullfmt}[3]{%
4222   \glslink[##1]{##2}{\Genacrfullformat{##2}{##3}}}%
4223 \renewcommand*\ACRfullfmt}[3]{%
4224   \glslink[##1]{##2}{%
4225     \mfirstucMakeUppercase{\genacrfullformat{##2}{##3}}}}%
4226 \renewcommand*\acrfullplfmt}[3]{%
4227   \glslink[##1]{##2}{\genplacrfullformat{##2}{##3}}}%
4228 \renewcommand*\Acrfullplfmt}[3]{%
4229   \glslink[##1]{##2}{\Genplacrfullformat{##2}{##3}}}%
4230 \renewcommand*\ACRfullplfmt}[3]{%
4231   \glslink[##1]{##2}{%
4232     \mfirstucMakeUppercase{\genplacrfullformat{##2}{##3}}}}%
4233 \renewcommand*\glsentryfull}[1]{\genacrfullformat{##1}{}}%
4234 \renewcommand*\Glsentryfull}[1]{\Genacrfullformat{##1}{}}%
4235 \renewcommand*\glsentryfullpl}[1]{\genplacrfullformat{##1}{}}%
4236 \renewcommand*\Glsentryfullpl}[1]{\Genplacrfullformat{##1}{}}%
4237 }

```

This will cause a problem for glossaries that contain a mixture of acronyms and abbreviations, so redefine `\newacronym` to use the new abbreviation interface.

First save the original definitions:

```

4238 \let\@glsxtr@org@setacronymstyle\setacronymstyle
4239 \let\@glsxtr@org@newacronymstyle\newacronymstyle

```

Save the list of acronyms in case they are required.

```

tr@acronymlists
4240 \let\@glsxtr@acronymlists\@glsacronymlists

dtoacronymlists
4241 \let\@glsxtr@org@addtoacronymlists\addtoacronymlists

```

```

setacronymlists
4242 \let\@glsxtr@org@setacronymlists\SetAcronymLists

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

lsxtr@abbrlists
4243 \newcommand{\@glsxtr@abbrlists}{}{}

abbreviationlists
4244 \newcommand*{\forallabbreviationlists}[2]{%
4245   \cfor#1:=\@glsxtr@abbrlists\do{\ifdefempty{#1}{}{#2}}%
4246 }

bbreviouslist
4247 \newcommand*{\@glsxtr@addabbreviationlist}[1]{%
4248   \edef\@glo@type{#1}%
4249   \ifdefempty{\@glsxtr@abbrlists}{%
4250     \let\@glsxtr@abbrlists\@glo@type}%
4251   {%
4252     \ifequal{\@glsxtr@abbrlists\@glo@type}{%
4253       {}%
4254       {%
4255         \expandafter\DTLifinlist\expandafter{\@glo@type}{\@glsxtr@abbrlists}{}%
4256         {\eappto{\@glsxtr@abbrlists}{\@glo@type}}%
4257       }%
4258     }%
4259   }
}

\forallacronyms Modify to add warning.
4260 \renewcommand*{\forallacronyms}[2]{%
4261   \cfor\@glsxtr@base@acrcmd\forallacronyms\forallabbreviationlists{%
4262     \cfor#1:=\@glsacronymlists\do{\ifx#1\empty\else#2\fi}%
4263   }
}

msAbbreviations Make acronyms use the same interface as abbreviations. Note that \newacronymstyle has
a different implementation to \newabbreviationstyle so disable \newacronymstyle and
\setacronymstyle.
4264 \newcommand*{\MakeAcronymsAbbreviations}{}{}

    Undo acronym display style:
4265   \cfor\@gls@type:=\@glsacronymlists\do{%
4266     \csgdef{\gls@\@gls@type}{\entryfmt}{\glsentryfmt}%
4267   }

    Save and clear acronym list.
4268   \let\@glsxtr@acronymlists\@glsacronymlists
4269   \let\@glsacronymlists\empty
4270   \let\@addtoacronymlists\gobble
4271   \let\SetAcronymLists\gobble

```

Warn if \acrshort etc are used.

```
4272 \let\@glsxtr@base@acrcmd\@glsxtr@base@acrcmd@warn
    Redefine \newacronym to use same interface as \newabbreviation.

4273 \renewcommand*\{\newacronym}[4] []{%
4274     \glsxtr@newabbreviation{type=\acronymtype,category=acronym,##1}{##2}{##3}{##4}%
4275 }%
4276 \renewcommand*\{\firstacronymfont}[1]{\glsfirstabbrvfont{##1}}%
4277 \renewcommand*\{\acronymfont}[1]{\glsabbrvfont{##1}}%
4278 \renewcommand*\{\setacronymstyle}[1]{%
4279     \PackageError{glossaries-extra}{\string\setacronymstyle{##1}%
4280     unavailable.}%
4281     Use \string\setabbreviationstyle[acronym]\space instead.
4282     The original acronym interface can be restored with
4283     \string\RestoreAcronyms}%
4284 }%
4285 \renewcommand*\{\newacronymstyle}[1]{%
4286     \GlossariesExtraWarning{New acronym style ‘##1’ won’t be%
4287     available unless you restore the original acronym interface with%
4288     \string\RestoreAcronyms}%
4289     \glsxtr@org@newacronymstyle{##1}%
4290 }%
4291 }
```

Switch acronyms to abbreviations:

```
4292 \MakeAcronymsAbbreviations
```

RestoreAcronyms Restore acronyms to glossaries interface.

```
4293 \newcommand*\{\RestoreAcronyms}{%
    Restore acronym list.

4294 \let\@glsacronymlists\@glsxtr@acronymlists
4295 \let\@addtoacronymlists\@glsxtr@org@addtoacronymlists
4296 \let\SetAcronymLists\@glsxtr@org@setacronymlists
```

Suppress warnings if \acrshort etc are used.

```
4297 \let\@glsxtr@base@acrcmd\@gobbletwo
```

Restore acronym display style:

```
4298 \cfor@\gls@type:=\glsacronymlists\do{%
4299     \SetDefaultAcronymDisplayStyle{\@gls@type}%
4300 }%
```

Switch to the generic acronym mechanism.

```
4301 \SetGenericNewAcronym
4302 \renewcommand{\firstacronymfont}[1]{\acronymfont{##1}}%
4303 \renewcommand{\acronymfont}[1]{##1}%
4304 \let\setacronymstyle\glsxtr@org@setacronymstyle
4305 \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.

```
4306 \renewcommand*\@gls@link@checkfirsthyper{%
4307   \ifglsused{\glslabel}{%
4308     {\let\glsxtrifwasfirstuse\@secondoftwo}%
4309     {\let\glsxtrifwasfirstuse\@firstoftwo}%
4310     \@glsxtr@org@checkfirsthyper
4311   }%
4312   \glssetcategoryattribute{acronym}{regular}{false}%
4313   \setacronymstyle{long-short}%
4314 }
```

`\glsacspace` Allow the user to customise the maximum value.

```
4315 \renewcommand*{\glsacspace}[1]{%
4316   \settowidth{\dimen0}{(\firstacronymfont{\glsentryshort{\#1}})}%
4317   \ifdim\dimen0<\glsacspacemax\else\space\fi
4318 }
```

`\glsacspacemax` Value used in the above.

```
4319 \newcommand*{\glsacspacemax}{3em}
```

### 1.3.7 Indexing and Displaying Glossaries

From time-to-time users ask if they can have one glossary sorted normally and another sorted by definition or usage. With the base glossaries package this can only be achieved with the “noidx” commands (Option 1). This is an attempt to mix and match.

First we need a list of the glossaries that require `makeindex/xindy`.

r@reg@glosslist

```
4320 \newcommand*{\@glsxtr@reg@glosslist}{}  
  
Save the original definition of \makeglossaries:
```

```
4321 \let\@glsxtr@org@makeglossaries\makeglossaries
```

`\makeglossaries` glossaries v4.45 introduced `\@domakeglossaries` to provide a way of disabling `\makeglossaries`. If it hasn’t been defined, define here to do its argument:

```
4322 \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`

```
4323 \renewcommand*{\makeglossaries}[1][]{%
4324   \@domakeglossaries
4325   {%
4326     \@glsxtr@if@record@only
```

```

4327  {%
4328    \PackageError{glossaries-extra}{\string\makeglossaries\space
4329      not permitted\MessageBreak with record=\@glsxtr@record@setting\space
4330      package option}%
4331    {You may only use \string\makeglossaries\space with
4332      record=off or record=alsoindex options}%
4333  }%
4334  {%
4335    \ifblank{#1}%
4336      {\@glsxtr@org@makeglossaries}%
4337    {%
4338      \ifx\@glsxtr@record@setting\@glsxtr@record@setting@alsoindex
4339        \PackageError{glossaries-extra}{\string\makeglossaries[#1]\space
4340          not permitted\MessageBreak with record=alsoindex package option}%
4341        {You may only use the hybrid \string\makeglossaries[...]\space with
4342          record=off option}%
4343      \else
4344        \gls@@automake@immediate was introduced to glossaries v4.42 so it may not be defined.
4345        \ifdef\@gls@@automake@immediate{\@gls@@automake@immediate}{}%
4346        \edef\@glsxtr@reg@glosslist{#1}%
4347        \ifundef{\glswrite}{\newwrite\glswrite}{}%
4348        \protected@write\@auxout{}{\string\providecommand
4349          \string\@glsorder[1]{}}
4350        \protected@write\@auxout{}{\string\providecommand
4351          \string\@istfilename[1]{}}
4352        \protected@write\@auxout{}{\string\@glsorder{\glsorder}}
4353        \protected@write\@auxout{}{\string\glsxtr@makeglossaries{#1}}
4354        \write\@auxout{\string\providecommand\string\@gls@reference[3]{}}
4355    }
4356  }

```

Iterate through each supplied glossary type and activate it.

```

4355  \for\@glo@type:=#1\do{%
4356    \ifempty{\@glo@type}{}{\makeglossary{\@glo@type}}%
4357  }%

```

New glossaries must be created before \makeglossaries:

```

4358  \renewcommand*\newglossary[4] []{%
4359    \PackageError{glossaries}{New glossaries
4360      must be created before \string\makeglossaries}{You need
4361      to move \string\makeglossaries\space after all your
4362      \string\newglossary\space commands}%

```

Any subsequence instances of this command should have no effect.

```
4363  \let\makeglossary\gobble
```

Version 1.42 removed letting \makeglossary to \relax (no kernel redefs may be in effect).

```
4364  \renewcommand\makeglossaries[1] []{}%
```

Disable all commands that have no effect after \makeglossaries

```
4365  \disable@onlypremakeg
```

Allow see key:

```
4366 \let\gls@checkseeallowed\relax
```

Adjust `\@do@seeglossary`. This needs to check for the entry's existence but don't increment associated counter.

```
4367 \renewcommand*\@do@seeglossary[2]{%
4368   \glsdoifexists{##1}{%
4369     {%
4370       \edef\@gls@label{\glsdetoklabel{##1}}%
4371       \edef\@gls@type{\csname glo@\@gls@label \type\endcsname}%
4372       \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
4373       {\@glsxtr@org@doseeglossary{##1}{##2}}%
4374     {%
4375       \@@glsxtrwrglossmark
4376       \protected@write\@auxout{}{%
4377         \string\@gls@reference
4378         {\@gls@type}{\@gls@label}{\string\glsseefORMAT##2{} }%
4379       }%
4380     }%
4381   }%
4382 }
```

Adjust `\@@do@@wrglossary`

```
4383 \let\@glsxtr@@do@@wrglossary\@@do@@wrglossary
4384 \def\@@do@@wrglossary{%
4385   \edef\@gls@type{\csname glo@\@gls@label \type\endcsname}%
4386   \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
4387   {\@glsxtr@@do@@wrglossary}%
4388   {\gls@noidxglossary}%
4389 }
```

Suppress warning about no `\makeglossaries`

```
4390 \let\warn@nomakeglossaries\relax
4391 \def\warn@noprintglossary{%
4392   \GlossariesWarningNoLine{No \string\printglossary\space
4393   or \string\printglossaries\space
4394   found.\^J(Remove \string\makeglossaries\space if you don't want
4395   any glossaries.)\^JThis document will not have a glossary}%
4396 }
```

Only warn for glossaries not listed.

```
4397 \renewcommand{\@gls@noref@warn}[1]{%
4398   \edef\@gls@type{##1}%
4399   \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
4400   {%
4401     \GlossariesExtraWarning{Can't use
4402       \string\printnoidxglossary[type={\@gls@type}]
4403       when '\@gls@type' is listed in the optional argument of
4404       \string\makeglossaries}%
4405   }%
4406 }
```

```

4407     \GlossariesWarning{Empty glossary for
4408     \string\printnoidxglossary[type={##1}].}
4409     Rerun may be required (or you may have forgotten to use
4410     commands like \string\gls){}%
4411   }%
4412 }%

```

Adjust display number list to check for type:

```

4413     \renewcommand*\glsdisplaynumberlist[1]{%
4414       \expandafter\DTLifinlist\expandafter{\##1}{\@glsxtr@reg@glosslist}%
4415       {\@glsxtr@idx@displaynumberlist{\##1}}%
4416       {\@glsxtr@noidx@displaynumberlist{\##1}}%
4417     }%

```

Adjust entry list:

```

4418     \renewcommand*\glsentrynumberlist[1]{%
4419       \expandafter\DTLifinlist\expandafter{\##1}{\@glsxtr@reg@glosslist}%
4420       {\@glsxtr@idx@entrynumberlist{\##1}}%
4421       {\@glsxtr@noidx@entrynumberlist{\##1}}%
4422     }%

```

Adjust number list loop

```

4423     \renewcommand*\glsnumberlistloop[2]{%
4424       \expandafter\DTLifinlist\expandafter{\##1}{\@glsxtr@reg@glosslist}%
4425       {%
4426         \PackageError{glossaries-extra}{\string\glsnumberlistloop\space
4427           not available for glossary '\##1'}{}%
4428       }%
4429       {\@glsxtr@noidx@numberlistloop{\##1}{\##2}}%
4430     }%

```

Only sanitize sort for normal indexing glossaries.

```

4431     \renewcommand*\glsprestandardsort[3]{%
4432       \expandafter\DTLifinlist\expandafter{\##2}{\@glsxtr@reg@glosslist}%
4433       {%
4434         \glsdosanitizesort
4435       }%
4436       {%
4437         \ifglssanitizesort
4438           \gls@noidx@sanitizesort
4439         \else
4440           \gls@noidx@nosanitizesort
4441         \fi
4442       }%
4443     }%

```

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

```

4444     \renewcommand*\new@glossaryentry[2]{%
4445       \PackageError{glossaries-extra}{Glossary entries must be defined
4446         in the preamble\MessageBreak when you use the optional argument}%

```

```

4447         of \string\makeglossaries}{Either move your definitions to the
4448         preamble or don't use the optional argument of
4449         \string\makeglossaries}%
4450     }%

```

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).

```

4451     \let\@glo@assign@sortkey\@glsxtr@mixed@assign@sortkey
4452     \renewcommand*{\@printgloss@setsort}{%

```

Need to extract just the type value.

```

4453     \expandafter\@glsxtr@gettype\expandafter,\@glsxtr@printglossopts,%
4454         type=\glsdefaulttype,\@end@glsxtr@gettype
4455     \def\@glo@sorttype{\@glo@default@sorttype}%
4456 }%

```

Check automake setting:

```

4457     \ifglsautomake
4458     \renewcommand*{\@gls@doautomake}{%
4459         \@for\@gls@type:=\@glsxtr@reg@glosslist\do{%
4460             \ifdefempty{\@gls@type}{}{\@gls@automake{\@gls@type}}%
4461         }%
4462     }%
4463     \fi

```

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

```

4464     \ifdef{\@glo@check@sortallowed}{\@glo@check@sortallowed\makeglossaries}{}%
4465     \fi
4466 }%
4467 }%
4468 }%
4469 }%

```

The optional argument version of `\makeglossaries` needs an adjustment to `\@printglossary` to allow `\@glo@assign@sortkey` to pick up the glossary type.

Earlier versions of glossaries-extra simply saved the original version of `\@printglossary` with `\let \@glsxtr@orgprintglossary`. This was later changed to actually defining `\@glsxtr@orgprintglossary` to something similar with some alterations to allow for ignored glossaries, which don't have an associated title and to by-pass the existence check with `\ifglossaryexists` which doesn't recognise ignored glossaries. (`bib2gls` writes `\provideignoredglossary` to the `glstex` file for some settings, so the glossary might not been defined on the first `LATEX` run and it needs to be allowed with `\printunsrtglossary` on subsequent runs.)

Unfortunately, removing the existence check will cause an error if `\printglossary` is used with an ignored glossary.

As from glossaries v4.46, some new commands have been included to allow the existence check to be varied depending on whether or not ignored glossaries should be allowed, so check for them:

oss@checkexists

```

4470 \ifdef\@printgloss@checkexists
4471 {\newcommand{\glsxtr@printgloss@checkexists}{\@printgloss@checkexists}}
4472 {\newcommand{\glsxtr@printgloss@checkexists}[2]{#2}}

```

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

```

4473 \newcommand{\@glsxtr@orgprintglossary}[2]{%
4474   \def\@glo@type{\glsdefaulttype}%

```

Add check here.

```

4475   \def\glossarytitle{%
4476     \ifcsdef{@glotype@\@glo@type @title}%
4477       {\csuse{@glotype@\@glo@type @title}}%
4478       {\glossaryname}}%
4479   \def\glossarytoctitle{\glossarytitle}%
4480   \let\org@glossarytitle\glossarytitle
4481   \def\@glossarystyle{%
4482     \ifx\@glossary@default@style\relax
4483       \GlossariesWarning{No default glossary style provided \MessageBreak
4484         for the glossary '\@glo@type'. \MessageBreak
4485         Using deprecated fallback. \MessageBreak
4486         To fix this set the style with \MessageBreak
4487         \string\setglossarystyle\space or use the \MessageBreak
4488         style key=value option}%
4489     \fi
4490   }%
4491   \def\gls@dotocitle{\glssettoctitle{\@glo@type}}%
4492   \let\@org@glossaryentrynumbers\glossaryentrynumbers
4493   \bgroup
4494     \@printgloss@setsort
4495     \setkeys{printgloss}{#1}%
4496     \ifx\glossarytitle\org@glossarytitle
4497     \else
4498       \cslet{@glotype@\@glo@type @title}{\glossarytitle}%
4499     \fi
4500     \let\currentglossary@\glo@type
4501     \let\org@glossaryentrynumbers\glossaryentrynumbers
4502     \let\glsnonextpages@\glsnonextpages
4503     \let\glsnextpages@\glsnextpages
4504     \glsxtractivenopost
4505     \gls@dotocitle
4506     \@glossarystyle
4507     \let\gls@org@glossaryentryfield\glossentry
4508     \let\gls@org@glossarysubentryfield\subglossentry
4509     \renewcommand{\glossentry}[1]{%
4510       \xdef\glscurrententrylabel{\glsdetoklabel{##1}}%
4511       \gls@org@glossaryentryfield{##1}%
4512     }%
4513     \renewcommand{\subglossentry}[2]{%
4514       \xdef\glscurrententrylabel{\glsdetoklabel{##2}}%

```

```

4515     \gls@org@glossarysubentryfield{##1}{##2}%
4516   }%
4517   \glsxtr@printgloss@checkexists{\@glo@type}{#2}%
4518   \egroup
4519 \global\let\glossaryentrynumbers\@org@glossaryentrynumbers
4520 \global\let\warn@noprintglossary\relax
4521
4522 }

ractivatenopost Change \nopostdesc and \glsxtrnropostpunc to behave as they do in the glossary.
4523 \newcommand*\glsxtractivenopost{}%
4524 \let\nopostdesc\@nopostdesc
4525 \let\glsxtrnropostpunc\glsxtr@nopostpunc
4526

lsxtrnropostpunc
4527 \newrobustcmd*\glsxtrnropostpunc{}{}

sxtr@nopostpunc Provide a command that works like \nopostdesc but only switches off the punctuation without suppressing the post-description hook.
4528 \newcommand{\glsxtr@nopostpunc}%
4529 \let\@glsxtr@org@postdescription\glspostdescription
4530 \ifglsnopostrdot
4531   \renewcommand{\glspostdescription}%
4532   \glsnopostrdottrue
4533   \let\glspostdescription\@glsxtr@org@postdescription
4534   \let\glsxtrrestorepostpunc\glsxtr@restore@postpunc
4535   \glsxtrpostdescription
4536   \glsxtr@nopostpunc@postdesc}%
4537 \else
4538   \renewcommand{\glspostdescription}%
4539   \let\glspostdescription\@glsxtr@org@postdescription
4540   \let\glsxtrrestorepostpunc\glsxtr@restore@postpunc
4541   \glsxtrpostdescription
4542   \glsxtr@nopostpunc@postdesc}%
4543 \fi
4544 \glsnopostrdotfalse
4545

stpunc@postdesc
4546 \newcommand*\glsxtr@nopostpunc@postdesc{}{}

estore@postpunc
4547 \newcommand*\glsxtr@restore@postpunc{}%
4548 \def\glsxtr@nopostpunc@postdesc{%
4549   \glsxtr@org@postdescription
4550   \let\glsxtr@nopostpunc@postdesc\empty
4551   \let\glsxtrrestorepostpunc\empty

```

```
4552 }%
4553 }
```

`restorepostpunc` Does nothing outside of glossary.

```
4554 \newcommand*{\glsxtrrestorepostpunc}{}%
```

`\@printglossary` Redefine.

```
4555 \renewcommand{\@printglossary}[2]{%
4556   \def\@glsxtr@printglossopts{\#1}%
4557   \glsxtr@orgprintglossary{\#1}{\#2}%
4558 }
```

Add a key that switches off the entry targets:

```
4559 \define@choicekey{printgloss}{target}
4560 [ \glsxtr@printglossval \glsxtr@printglossnr ]%
4561 {true, false}[true]%
4562 {%
4563   \ifcase\glsxtr@printglossnr
4564     \def\@glstarget{\glsdohypertarget}%
4565   \else
4566     \let\@glstarget\@secondoftwo
4567   \fi
4568 }
```

`hypernameprefix`

```
4569 \newcommand{\@glsxtrhypernameprefix}{}%
```

New to v1.20:

```
4570 \define@key{printgloss}{targetnameprefix}{%
4571   \renewcommand{\@glsxtrhypernameprefix}{\#1}%
4572 }
4573 \define@key{printgloss}{prefix}{%
4574   \renewcommand{\glolinkprefix}{\#1}%
4575 }
4576 \define@key{printgloss}{label}{%
4577   \glsxtrsetglossarylabel{\#1}%
4578 }
```

`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.

```
4579 \newcommand{\glsxtrsetglossarylabel}[1]{%
4580   \renewcommand*{\@glossaryseclabel}{%
4581     \protected@edef\@currentlabelname{\glossarytoctitle}%
4582     \label{\#1}%
4583   }%
4584 }
```

```

xtr@leveloffset
4585 \newcount\@glsxtr@leveloffset

    New to v1.44:
4586 \define@key{printgloss}{leveloffset}{%
4587   \glsxtr@assign@leveloffset#1\relax
4588 }

ign@leveloffset
4589 \newcommand*\@glsxtr@assign@leveloffset{%
4590   \@ifnextchar+{\p@glsxtr@assign@leveloffset}{\np@glsxtr@assign@leveloffset}%
4591 }

ign@leveloffset Discard initial + character.
4592 \newcommand*\p@glsxtr@assign@leveloffset[1]{%
4593   \@ifnextchar+{\pp@glsxtr@assign@leveloffset}{\np@glsxtr@assign@leveloffset}%
4594 }

ign@leveloffset
4595 \def\np@glsxtr@assign@leveloffset#1\relax{\@glsxtr@leveloffset=#1\relax}

ign@leveloffset
4596 \def\pp@glsxtr@assign@leveloffset#1\relax{\advance\@glsxtr@leveloffset by #1\relax}

4597 \define@boolkey{printgloss}[\glsxtr@printgloss@]{groups}[true]{}
4598 \glsxtr@printgloss@groupstrue

lsdohypertarget Redefine to insert \@glsxtrhypernameprefix before the target name.
4599 \let\@glsxtr@org@glsdohypertarget\glsdohypertarget
4600 \renewcommand{\glsdohypertarget}[2]{%
4601   \glsxtr@org@glsdohypertarget{\glsxtrhypernameprefix#1}{#2}%
4602 }

    Update \@glstarget to use \def instead being assigned with \let so that it can pick up the
    new definition and allow any further redefinitions:
4603 \ifx\@glstarget\@glsxtr@org@glsdohypertarget
4604   \def\@glstarget{\glsdohypertarget}%
4605 \fi

@makeglossaries For the benefit of makeglossaries
4606 \newcommand*\@glsxtr@makeglossaries[1]{}

@glsxtr@gettype Get just the type.
4607 \def\@glsxtr@gettype#1,type=#2,#3\@end@glsxtr@gettype{%
4608   \def\@glo@type{#2}%
4609 }

```

```

@assign@sortkey Assign the sort key.
4610 \newcommand{\glsxtr@mixed@assign@sortkey}[1]{%
4611   \edef\@glo@type{\glo@type}%
4612   \expandafter\DTLifinlist\expandafter{\glo@type}{\glsxtr@reg@glosslist}%
4613 {%
4614   \glo@no@assign@sortkey{#1}%
4615 }%
4616 {%
4617   \glo@assign@sortkey{#1}%
4618 }%
4619 }%

```

Display number list for the regular version:

```
splaynumberlist
4620 \let\@glsxtr@idx@displaynumberlist\glsdisplaynumberlist
```

Display number list for the “noidx” version:

```
splaynumberlist
4621 \newcommand*{\glsxtr@noidx@displaynumberlist}[1]{%
4622   \letcs{\gls@loclist}{\glsdetoklabel{#1}@loclist}%
4623   \ifdef{\gls@loclist}%
4624 {%
4625     \def\gls@noidxloclist@sep{%
4626       \def\gls@noidxloclist@sep{%
4627         \def\gls@noidxloclist@sep{%
4628           \glsnumlistsep
4629         }%
4630         \def\gls@noidxloclist@finalsep{\glsnumlistlastsep}%
4631       }%
4632     }%
4633     \def\gls@noidxloclist@finalsep{}%
4634     \def\gls@noidxloclist@prev{}%
4635     \forlistloop{\glsnoidxdisplayloclisthandler}{\gls@loclist}%
4636     \gls@noidxloclist@finalsep
4637     \gls@noidxloclist@prev
4638   }%
4639 {%
4640   \glsxtrundeftag
4641   \glsdoifexists{#1}%
4642 {%
4643   \GlossariesWarning{Missing location list for '#1'. Either
4644     a rerun is required or you haven't referenced the entry.}%
4645 }%
4646 }%
4647 }%
4648 }
```

And for the number list loop:

```

@numberlistloop
4649 \newcommand*{\@glsxtr@noidx@numberlistloop}[3]{%
4650   \letcs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@loclist}%
4651   \let{\gls@org@glsnoidxdisplayloc}{\glsnoidxdisplayloc}
4652   \let{\gls@org@glsseefORMAT}{\glsseeFORMAT}
4653   \let{\glsnoidxdisplayloc}{\relax}
4654   \let{\glsseeFORMAT}{\relax}
4655   \ifdef{\@gls@loclist}
4656   {%
4657     \forlistloop{\glsnoidxnumberlistloopHandler}{\@gls@loclist}%
4658   }%
4659   {%
4660     \glsxtrundeftag
4661     \glsdoifexists{#1}%
4662     {%
4663       \GlossariesWarning{Missing location list for ‘##1’. Either
4664         a rerun is required or you haven’t referenced the entry.}%
4665     }%
4666   }%
4667   \let{\glsnoidxdisplayloc}{\gls@org@glsnoidxdisplayloc}
4668   \let{\glsseeFORMAT}{\gls@org@glsseeFORMAT}
4669 }%

```

Same for entry number list.

```

entrynumberlist
4670 \newcommand*{\@glsxtr@noidx@entrynumberlist}[1]{%
4671   \letcs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@loclist}%
4672   \ifdef{\@gls@loclist}
4673   {%
4674     \glsnoidxloclist{\@gls@loclist}%
4675   }%
4676   {%
4677     \glsxtrundeftag
4678     \glsdoifexists{#1}%
4679     {%
4680       \GlossariesWarning{Missing location list for ‘#1’. Either
4681         a rerun is required or you haven’t referenced the entry.}%
4682     }%
4683   }%
4684 }%

```

```

entrynumberlist
4685 \newcommand*{\@glsxtr@idx@entrynumberlist}[1]{\glsentrynumberlist{#1}}

```

```

x@getgroupTitle Patch.
4686 \renewcommand*{\@gls@noidx@getgroupTitle}[2]{%
4687   \protected@edef{\glsxtr@titleLabel}{#1}%

```

```

4688 \ifdefvoid@glsxtr@titlelabel
4689 {}%
4690 {%
4691   \protected@edef@glsxtr@titlelabel{\csuse{glsxtr@group title@#1}}%
4692 }%
4693 \ifdefvoid{\@glsxtr@titlelabel}%
4694 {%
4695   \DTLifint{#1}%
4696   {%
4697     \ifnum#1<256\relax
4698       \edef#2{\char#1\relax}%
4699     \else
4700       \edef#2{#1}%
4701     \fi
4702   }%
4703   {%
4704     \ifcsundef{#1 group name}%
4705       {\def#2{#1}}%
4706       {\letcs#2{#1 group name}}%
4707     }%
4708   }%
4709   {%
4710     \let#2@glsxtr@titlelabel
4711   }%
4712 }

```

`g@getgroup title` Save original definition of `\@gls@getgroup title`  
 4713 `\let\glsxtr@org@getgroup title\@gls@getgroup 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.

```

4714 \newrobustcmd{\glsxtr@getgroup title}[2]{%
4715   \protected@edef@glsxtr@titlelabel{glsxtr@group title@#1}}%
4716   \onelevel@sanitize@glsxtr@titlelabel
4717 \ifcsdef{\@glsxtr@titlelabel}
4718   {\letcs{#2}{\@glsxtr@titlelabel}}%
4719   {\glsxtr@org@getgroup title{#1}{#2}}%
4720 }
4721 \let\@gls@getgroup title\glsxtr@getgroup title

```

`trsetgroup title` Sets the title for the given group label.

```

4722 \newcommand{\glsxtr@setgroup title}[2]{%
4723   \protected@edef@glsxtr@titlelabel{glsxtr@group title@#1}}%
4724   \onelevel@sanitize@glsxtr@titlelabel
4725   \protected@csxdef{\@glsxtr@titlelabel}{#2}%
4726 }

```

`alsetgroup title` As above put only locally defines the title.

```
4727 \newcommand{\glsxtr@localsetgroup title}[2]{%
```

```

4728 \protected@edef\@glsxtr@titlelabel{\glsxtr@grouptitle@#1}%
4729 \@onelevel@sanitize\@glsxtr@titlelabel
4730 \protected@csedef{\@glsxtr@titlelabel}{#2}%
4731 }

```

\glsnavigation Redefine to use new user-level command.

```

4732 \renewcommand*{\glsnavigation}{%
4733   \def\@gls@between{}%
4734   \ifcsundef{@gls@hypergrouplist@\@glo@type}%
4735   {%
4736     \def\@gls@list{}%
4737   }%
4738   {%
4739     \expandafter\let\expandafter\@gls@list
4740       \csname @gls@hypergrouplist@\@glo@type\endcsname
4741   }%
4742   \cfor\@gls@tmp:=\@gls@list\do{%
4743     \@gls@between
4744     \glsxtrgetgrouptitle{\@gls@tmp}{\@gls@grptitle}%
4745     \glsnavhyperlink{\@gls@tmp}{\@gls@grptitle}%
4746     \let\@gls@between\glshypernavsep
4747   }%
4748 }

```

@noidx@glossary

```

4749 \renewcommand*{\@print@noidx@glossary}{%
4750   \ifcsdef{@glsref@\@glo@type}%
4751   {%
4752     \ifcsdef{@glo@sortmacro@\@glo@sorttype}%
4753     {%
4754       \csuse{@glo@sortmacro@\@glo@sorttype}{\@glo@type}%
4755     }%
4756     {%
4757       \PackageError{glossaries}{Unknown sort handler '\@glo@sorttype'}{}%
4758     }%
4759     \glossarysection[\glossarytoctitle]{\glossarytitle}%
4760     \glossarypreamble

```

Moved this command definition outside of environment in case of scoping issues (e.g. in tabular-like styles).

```

4761   \def\@gls@currentlettergroup{}%
4762   \begin{theglossary}%
4763     \glossaryheader
4764     \glsresetentrylist
4765     \forlistcsloop{\@gls@noidx@do}{\@glsref@\@glo@type}%
4766     \end{theglossary}%
4767     \glossarypostamble
4768   }%
4769   {%

```

Add section header if there are actually entries defined in this glossary as the document is likely pending a re-run.

```
4770 \glsxtrifemptyglossary{@glo@type}%
4771 {}%
4772 {\glossarysection[\glossarytoctitle]{\glossarytitle}}%
4773 \@gls@noref@warn{@glo@type}%
4774 }%
4775 }
```

noidxdisplayloc Patch to check for range formations.

```
4776 \renewcommand*\glsnoidxdisplayloc[4]{%
4777 \setentrycounter[#1]{#2}%
4778 \@glsxtr@display@loc#3\empty@end@glsxtr@display@loc{#4}%
4779 }
```

xtr@display@loc Patch to check for range formations.

```
4780 \def\glsxtr@display@loc#1#2\end@glsxtr@display@loc#3{%
4781 \ifx#1\relax
4782 \glsxtrdisplaystartloc{#2}{#3}%
4783 \else
4784 \ifx#1\relax
4785 \glsxtrdisplayendloc{#2}{#3}%
4786 \else
4787 \glsxtrdisplaysingleloc{#1#2}{#3}%
4788 \fi
4789 \fi
4790 }
```

isplaysingleloc Single location.

```
4791 \newcommand*\glsxtrdisplaysingleloc[2]{%
4792 \csuse{#1}{#2}%
4793 }
```

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.

```
4794 \newcommand*\glsxtrdisplaystartloc[2]{%
4795 \edef\glsxtrlocrengefmt{#1}%
4796 \ifx\glsxtrlocrengefmt\empty
4797 \def\glsxtrlocrengefmt{\glsnumberformat}%
4798 \fi
4799 \expandafter\glsxtrdisplaysingleloc
4800 \expandafter{\glsxtrlocrengefmt}{#2}%
4801 }
```

trdisplayendloc End of a location range.

```
4802 \newcommand*\glsxtrdisplayendloc[2]{%
```

```

4803 \edef\@glsxstr@tmp{#1}%
4804 \ifdefempty{\@glsxstr@tmp}{\def\@glsxstr@tmp{glsnumberformat}}{}%
4805 \ifx\glsxtrlocrangefmt\@glsxstr@tmp
4806 \else
4807   \GlossariesExtraWarning{Mismatched end location range}
4808   (start=\glsxtrlocrangefmt, end=\@glsxstr@tmp)}%
4809 \fi
4810 \expandafter\glsxtrdisplayendlochook\expandafter{\@glsxstr@tmp}{#2}%
4811 \expandafter\glsxtrdisplaysingleloc
4812 \expandafter{\glsxtrlocrangefmt}{#2}%
4813 \def\glsxtrlocrangefmt{}%
4814 }

```

splayendlochook Allow the user to hook into the end of range command.

```
4815 \newcommand*{\glsxtrdisplayendlochook}[2]{}
```

sxtrlocrangefmt Current range format. Empty if not in a range.

```
4816 \newcommand*{\glsxtrlocrangefmt}{}%
```

setentrycounter Adjust \setentrycounter to save the original prefix.

```

4817 \renewcommand*{\setentrycounter}[2][]{%
4818   \def\glsxtrcounterprefix{#1}%
4819   \ifx\glsxtrcounterprefix\empty
4820     \def\@glo@counterprefix{.}%
4821   \else
4822     \def\@glo@counterprefix{.#1.}%
4823   \fi
4824   \def\glsentrycounter{#2}%
4825 }
```

ls@removespaces Redefine to allow adjustments to location hyperlink.

```

4826 \def\@gls@removespaces#1 #2\@nil{%
4827   \toks@=\expandafter{\the\toks@#1}%
4828   \ifx\\#2\\%
4829     \edef\@glo@tmp{\the\toks@}%
4830     \ifx\@glo@tmp\empty
4831   \else
```

Expand location (just in case \toks@ is needed for something else).

```

4832   \expandafter\glsxtrlocationhyperlink\expandafter
4833     \glsentrycounter\expandafter\@glo@counterprefix\expandafter{\the\toks@}%
4834   \fi
4835 \else
4836   \gls@ReturnAfterFi{%
4837     \gls@removespaces#2\@nil
4838   }%
4839 \fi
4840 }
```

cationhyperlink

```
\glsxtrlocationhyperlink{\langle counter \rangle}{\langle prefix \rangle}{\langle location \rangle}
```

```
4841 \newcommand*\glsxtrlocationhyperlink[3]{%
4842   \ifdefvoid\glsxtrspplocationurl{%
4843     {%
4844       \GlsXtrInternalLocationHyperlink{\#1}{\#2}{\#3}%
4845     }%
4846   {%
4847     \hyperref{\glsxtrspplocationurl}{\#1\#2\#3}{\#3}%
4848   }%
4849 }
```

supphypernumber

```
4850 \newcommand*\glsxtrspphypernumber[1]{%
4851   {%
4852     \glshasattribute{\glscurrententrylabel}{externalallocation}%
4853   {%
4854     \def\glsxtrspplocationurl{%
4855       \glsgetattribute{\glscurrententrylabel}{externalallocation}%
4856     }%
4857   {%
4858     \def\glsxtrspplocationurl{}%
4859   }%
4860   \glshypernumber{\#1}%
4861 }%
4862 }
```

Give a bit of assistance to new users who are confused and don't know how to read transcript messages.

@print@glossary

```
4863 \renewcommand{\@print@glossary}{%
4864   \makeatletter
4865   \Cinput{\jobname.\csname \glototype@\glo@type @in\endcsname}%
4866   \IfFileExists{\jobname.\csname \glototype@\glo@type @in\endcsname}{}{%
4867   }%
4868   {\glsxtrNoGlossaryWarning{\glo@type}}%
4869   \ifglsxindy{%
4870     \ifcundeft{\xdy@\glo@type @language}{%
4871     }%
4872     \edef\do@auxoutstuff{%
4873       \noexpand\AtEndDocument{%
4874         \noexpand\immediate\noexpand\write\auxout{%
4875           \string\providecommand\string\@xdylanguage[2]{}%
4876         }%
4877         \noexpand\immediate\noexpand\write\auxout{%
4878           \string\@xdylanguage{\glo@type}\{\xdy@main@language\}%
4879         }%
4880       }%
4881     }%
4882   }%
4883 }
```

```

4878      }%
4879      }%
4880      }%
4881      {%
4882      \edef\@do@auxoutstuff{%
4883          \noexpand\AtEndDocument{%
4884              \noexpand\immediate\noexpand\write\@auxout{%
4885                  \string\providetcommand\string\@xdylanguage[2]{}{}}%
4886              \noexpand\immediate\noexpand\write\@auxout{%
4887                  \string\@xdylanguage{\@glo@type}{\csname @xdy@\@glo@type
4888                      @language\endcsname}}{}}%
4889          }%
4890          }%
4891      }%
4892      \@do@auxoutstuff
4893      \edef\@do@auxoutstuff{%
4894          \noexpand\AtEndDocument{%
4895              \noexpand\immediate\noexpand\write\@auxout{%
4896                  \string\providetcommand\string\@gls@codepage[2]{}{}}%
4897              \noexpand\immediate\noexpand\write\@auxout{%
4898                  \string\@gls@codepage{\@glo@type}{\gls@codepage}}{}}%
4899          }%
4900          }%
4901      \@do@auxoutstuff
4902      \fi
4903      \renewcommand*\@warn@nomakeglossaries{%
4904          \GlossariesWarningNoLine{\string\makeglossaries\space
4905              hasn't been used, ^J the glossaries will not be updated}{}}%
4906      }%
4907 }

```

Setup the warning text to display if the external file for the given glossary is missing.

`\GlsWarningHead` Header message.

```

4908 \newcommand{\GlsXtrNoGlsWarningHead}[2]{%
4909 This document is incomplete. The external file associated with
4910 the glossary '#1' (which should be called \texttt{\#2})
4911 hasn't been created.%}
4912 }

```

`\GlsWarningEmptyStart` No entries have been added to the glossary.

```

4913 \newcommand{\GlsXtrNoGlsWarningEmptyStart}{%
4914 This has probably happened because there are no entries defined
4915 in this glossary.%}
4916 }

```

`\GlsWarningEmptyMain` The default “main” glossary is empty.

```

4917 \newcommand{\GlsXtrNoGlsWarningEmptyMain}{%
4918 If you don't want this glossary,

```

```
4919 add \texttt{\texttt{nomain}} to your package option list when you load  
4920 \texttt{\texttt{glossaries-extra.sty}}. For example:%  
4921 }
```

ingEmptyNotMain A glossary that isn't the default "main" glossary is empty.

```
4922 \newcommand{\GlsXtrNoGlsWarningEmptyNotMain}[1]{%  
4923 Did you forget to use \texttt{\texttt{type=\#1}} when you defined your  
4924 entries? If you tried to load entries into this glossary with  
4925 \texttt{\texttt{\string\loadglsentries}} did you remember to use  
4926 \texttt{\texttt{\#1}} as the optional argument? If you did, check that  
4927 the definitions in the file you loaded all had the type set  
4928 to \texttt{\texttt{\string\glsdefaulttype}}.%  
4929 }
```

arningCheckFile Advisory message to check the file contents.

```
4930 \newcommand{\GlsXtrNoGlsWarningCheckFile}[1]{%  
4931 Check the contents of the file \texttt{\texttt{\#1}}. If  
4932 it's empty, that means you haven't indexed any of your entries in this  
4933 glossary (using commands like \texttt{\texttt{\string\gls}} or  
4934 \texttt{\texttt{\string\glsadd}}) so this list can't be generated.  
4935 If the file isn't empty, the document build process hasn't been  
4936 completed.%  
4937 }
```

WarningAutoMake Message when automake option has been used.

```
4938 \newcommand{\GlsXtrNoGlsWarningAutoMake}[1]{%  
4939 You may need to rerun \LaTeX. If you already have, it may be that  
4940 \TeX's shell escape doesn't allow you to run  
4941 \texttt{\texttt{\ifglsxindy xindy\else makeindex\fi}}. Check the  
4942 transcript file \texttt{\texttt{\jobname.log}}. If the shell escape is  
4943 disabled, try one of the following:  
4944  
4945 \begin{itemize}  
4946 \item Run the external (Lua) application:  
4947  
4948 \texttt{\texttt{\makeglossaries-lite \string"\jobname\string"}}  
4949  
4950 \item Run the external (Perl) application:  
4951  
4952 \texttt{\texttt{\makeglossaries \string"\jobname\string"}}  
4953 \end{itemize}  
4954  
4955 Then rerun \LaTeX\ on this document.  
4956 \GlossariesExtraWarning{Rerun required to build the  
4957 glossary '#1' or check TeX's shell escape allows  
4958 you to run \texttt{\texttt{\ifglsxindy xindy\else makeindex\fi}}}%  
4959 }
```

WarningMisMatch Mismatching \makenoidxglossaries.

```
4960 \newcommand{\GlsXtrNoGlsWarningMisMatch}{%
4961   You need to either replace \texttt{\string\makenoidxglossaries}
4962   with \texttt{\string\makeglossaries} or replace
4963   \texttt{\string\printglossary} (or \texttt{\string\printglossaries}) with
4964   \texttt{\string\printnoidxglossary}
4965   (or \texttt{\string\printnoidxglossaries}) and then rebuild
4966   this document.%
```

```
4967 }
```

arningBuildInfo Build advice.

```
4968 \newcommand{\GlsXtrNoGlsWarningBuildInfo}{%
4969   Try one of the following:
4970   \begin{itemize}
4971     \item Add \texttt{automake} to your package option list when you load
4972       \texttt{glossaries-extra.sty}. For example:
4973
4974       \texttt{\string\usepackage[automake]%
4975         \glsopenbrace glossaries-extra\glsclosebrace}
4976
4977     \item Run the external (Lua) application:
4978
4979       \texttt{\string\makeglossaries-lite.lua \string"\jobname\string"}
4980
4981     \item Run the external (Perl) application:
4982
4983       \texttt{\string\makeglossaries \string"\jobname\string"}
4984   \end{itemize}
4985
4986 Then rerun \LaTeX\ on this document.%
```

```
4987 }
```

trRecordWarning Paragraph for record=only.

```
4988 \newcommand{\GlsXtrRecordWarning}[1]{%
4989   \texttt{\string\printglossary} doesn't work
4990   with the \texttt{record=@glsxtr@record@setting} package option
4991   use\par\texttt{\string\printunsrtglossary[type=#1]\par}
4992   instead (or change the package option).%
4993 }
```

oGlsWarningTail Final paragraph.

```
4994 \newcommand{\GlsXtrNoGlsWarningTail}{%
4995 This message will be removed once the problem has been fixed.%
```

```
4996 }
```

GlsWarningNoOut No out file created. Build advice.

```
4997 \newcommand{\GlsXtrNoGlsWarningNoOut}[1]{%
4998   The file \texttt{\#1} doesn't exist. This most likely means you haven't used
4999   \texttt{\string\makeglossaries} or you have used
```

```

5000 \texttt{\string\nofiles}. If this is just a draft version of the
5001 document, you can suppress this message using the
5002 \texttt{nomissingglostext} package option.%  

5003 }

glossarywarning
5004 \newcommand*{\@glsxtr@defaultnoglossarywarning}[1]{%
5005   \glossarysection[\glossarytoctitle]{\glossarytitle}
5006   \GlsXtrNoGlsWarningHead{\#1}{\jobname.\csname @glotype@\glo@type @in\endcsname}
5007   \par
5008   \glsxtrifemptyglossary{\#1}%
5009   {%
5010     \GlsXtrNoGlsWarningEmptyStart\space
5011     \ifthenelse{\equal{\#1}{main}}{\GlsXtrNoGlsWarningEmptyMain\par
5012       \medskip
5013       \noindent\texttt{\string\usepackage[nomain\ifglsacronym ,acronym\fi]}%
5014         \glsopenbrace glossaries-extra\glsclosebrace}
5015       \medskip
5016     }%
5017     {\GlsXtrNoGlsWarningEmptyNotMain{\#1}}%
5018   }%
5019   {%
5020     \IfFileExists{\jobname.\csname @glotype@\glo@type @out\endcsname}
5021     {%
5022       \GlsXtrNoGlsWarningCheckFile
5023         {\jobname.\csname @glotype@\glo@type @out\endcsname}
5024
5025       \ifglsautomake
5026
5027         \GlsXtrNoGlsWarningAutoMake{\#1}
5028
5029     \else
5030
5031       \ifthenelse{\equal{\#1}{main}}{%
5032         {%
5033           \GlsXtrNoGlsWarningEmptyMain\par
5034           \medskip
5035           \noindent\texttt{\string\usepackage[nomain]}%
5036             \glsopenbrace glossaries-extra\glsclosebrace}
5037           \medskip
5038         }%
5039       {}%
5040
5041       \ifdefequal{\makeglossaries}{no@makeglossaries}
5042       {%
5043         \GlsXtrNoGlsWarningMisMatch
5044       }%
5045       {%
5046         \GlsXtrNoGlsWarningBuildInfo

```

```

5047      }%
5048      \fi
5049  }%
5050  {%
5051      \GlsXtrNoGlsWarningNoOut
5052      {\jobname.\csname @glo@type \out\endcsname}%
5053  }%
5054 }%
5055 \par
5056 \GlsXtrNoGlsWarningTail
5057 }

glossarywarning Warn about using \printglossary with record
5058 \newcommand*{\glsxtr@record@glossarywarning}[1]{%
5059     \GlossariesExtraWarning{\string\printglossary\space doesn't work\MessageBreak
5060     with record=\glsxtr@record@setting\space package option\MessageBreak(use
5061     \string\printunsrtglossary[type=#1])\MessageBreak
5062     instead (or change the package option)}%
5063     \glossarysection[\glossarytoctitle]{\glossarytitle}%
5064     \GlsXtrRecordWarning{#1}%
5065     \GlsXtrNoGlsWarningTail
5066 }

```

Provide some commands to accompany the record option for use with **bib2gls**.

ResourceOptions Default resource options.

```
5067 \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.

```
5068 \newcommand*{\glsxtrresourcefile}[2][]{%
```

The record option can't be set after this command.

```

5069 \disable@keys{glossaries-extra.sty}{record}%
5070 \glsxtr@writefields
5071 \ifdefempty{\GlsXtrDefaultResourceOptions}
5072 {%
5073     \protected@write\@auxout{\glsxtrresourceinit}%
5074     {\string\glsxtr@resource{#1}{#2}}%
5075 }%
5076 {%
5077     \protected@write\@auxout{\glsxtrresourceinit}%
5078     {\string\glsxtr@resource{\GlsXtrDefaultResourceOptions,#1}{#2}}%
5079 }%
5080 \let\@glsxtr@org@see@noindex\gls@see@noindex
5081 \let\@gls@see@noindex\relax
5082 \IfFileExists{#2.glstex}%
5083 {%

```

Can't scope \@input so save and restore the category code of @ to allow for internal commands in the location list.

```
5084 \edef\@bibgls@restoreat{\noexpand\catcode\noexpand`\\noexpand\@=\number\catcode`\@}%
5085 \makeatletter
5086 \@input{#2.glstex}%
5087 \@bibgls@restoreat
```

If the record=nameref option has been set, check if this is supported by the installed version of bib2gls.

```
5088 \@glsxtr@check@bibgls@nameref
5089 }%
5090 {%
5091 \GlossariesExtraWarning{No file '#2.glstex'}%
5092 }%
5093 \let\@gls@see@noindex\@glsxtr@org@see@noindex
5094 }
5095 \onlypreamble\glsxtrresourcefile
```

@bibgls@nameref This will only warn after bib2gls has created the .glostex file, but there's way to check before.

```
5096 \newcommand{\@glsxtr@check@bibgls@nameref}{%
5097 \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
5098 \ifdef\bibglshrefchar
5099 {}%
5100 {}%
5101 \GlossariesExtraWarning{record=nameref requires at least
5102 version 1.8 of bib2gls}%
5103 }%
5104 \fi
5105 \let\@glsxtr@check@bibgls@nameref\relax
5106 }
```

xtrresourceinit Code used during the protected write operation.

```
5107 \newcommand*\@glsxtrresourceinit{}
```

trresourcecount

```
5108 \newcount\glsxtrresourcecount
```

trLoadResources Short cut that uses \glsxtrresourcefile with \jobname as the mandatory argument.

```
5109 \newcommand*\@GlsXtrLoadResources[1][]{%
5110 \ifnum\glsxtrresourcecount=0\relax
5111 \glsxtrresourcefile[#1]{\jobname}%
5112 \else
5113 \glsxtrresourcefile[#1]{\jobname-\the\glsxtrresourcecount}%
5114 \fi
5115 \advance\glsxtrresourcecount by 1\relax
5116 }
```

glsxtr@resource

```
5117 \newcommand*\@glsxtr@resource[2]{}
```

```

\glsxtr@fields
5118 \newcommand*{\glsxtr@fields}[1]{}

xtr@texencoding
5119 \newcommand*{\glsxtr@texencoding}[1]{}

\glsxtr@langtag
5120 \newcommand*{\glsxtr@langtag}[1]{}

@pluralsuffixes
5121 \newcommand*{\glsxtr@pluralsuffixes}[4]{}

tr@shortcutsval
5122 \newcommand*{\glsxtr@shortcutsval}[1]{}

sxtr@linkprefix
5123 \newcommand*{\glsxtr@linkprefix}[1]{}

xtr@writefields This information only needs to be written once, so disable it after it's been used.
5124 \newcommand*{\glsxtr@writefields}{%
  \protected@write\@auxout{}{%
    {\string\providet命令*{\string\glsxtr@fields}[1]{}}%
    \protected@write\@auxout{}{%
      {\string\providet命令*{\string\glsxtr@resource}[2]{}}%
      \protected@write\@auxout{}{%
        {\string\providet命令*{\string\glsxtr@pluralsuffixes}[4]{}}%
        \protected@write\@auxout{}{%
          {\string\providet命令*{\string\glsxtr@shortcutsval}[1]{}}%
          \protected@write\@auxout{}{%
            {\string\providet命令*{\string\glsxtr@linkprefix}[1]{}}%
            \protected@write\@auxout{}{%
              {\string\glsxtr@fields{\@gls@keymap}}%
            }%
          }%
        }%
      }%
    }%
  }%
}%
  \protected@write\@auxout{}{%
    {\string\providet命令*{\string\glsxtr@record}[5]{}}%
  }%
}%
  \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
    \protected@write\@auxout{}{%
      {\string\providet命令*{\string\glsxtr@record@nameref}[8]{}}%
    }%
  }%
}%
\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.

5142 \ifdef\CurrentTrackedLanguageTag
5143 {%
  \protected@write\@auxout{}{%
    \string\glsxtr@langtag{\CurrentTrackedLanguageTag}}%
}

```

```

5146 }%
5147 {}%
5148 \protected@write\@auxout{}{\string\glsxtr@pluralsuffixes
5149   {\glspluralsuffix}{\abbrvpluralsuffix}{\acrpluralsuffix}}%
5150   {\glsxtrabbrvpluralsuffix}}}%
5151 \ifdef\inputencodingname
5152 {%
5153   \protected@write\@auxout{}{\string\glsxtr@texencoding{\inputencodingname}}}%
5154 }%
5155 {%

```

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.)

```

5156   \@ifpackageloaded{fontspec}{%
5157     {\protected@write\@auxout{}{\string\glsxtr@texencoding{utf8}}}}%
5158   {}%
5159 }%
5160 \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.

```

5161 \AtBeginDocument
5162   {\protected@write\@auxout{}{\string\glsxtr@linkprefix{\glolinkprefix}}}}%
5163 \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.

```

5164 \ifglsautomake
5165   \IfFileExists{\jobname.aux}{%
5166     {\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`.

```

5167 \ifx\gls@doautomake\gls@doautomake@err
5168   \let\gls@doautomake\relax
5169   \fi
5170 \fi

```

Check if `order=letter` has been used by mistake (but not if `record=alsoindex` has been used).

```

5171 \glsxtr@if@record@only
5172 {\ifdefstring{\glsorder}{letter}{%
5173   {\GlossariesExtraWarningNoLine{Package option 'order=letter' isn't
5174     supported with 'record=@glsxtr@record@setting'. Use 'break-at=none'
5175     resource option instead}}}}%
5176 {}%
5177 }%
5178 {}%
5179 }

```

```

do@automake@err
 5180 \newcommand*{\@gls@doautomake@err}{%
 5181   \PackageError{glossaries}{You must use
 5182     \string\makeglossaries\space with automake=true}
 5183   {%
 5184     Either remove the automake=true setting or
 5185     add \string\makeglossaries\space to your document preamble.%
 5186   }%
 5187 }

Allow locations specific to a particular counter to be recorded.

\glsxtr@record
 5188 \newcommand*{\glsxtr@record}[5]{}

@record@nameref Used with record=nameref to include current label information.
 5189 \newcommand*{\glsxtr@record@nameref}[8]{}

r@counterrecord Aux file command.
 5190 \newcommand*{\glsxtr@counterrecord}[3]{%
 5191   \glsxtrfieldlistgadd{\#1}{record.\#2}{\#3}%
 5192 }

unterrecordhook Hook used by \@glsxtr@dorecord.
 5193 \newcommand*{\@glsxtr@counterrecordhook}{}

trRecordCounter Activate recording for a particular counter (identified in the argument).
 5194 \newcommand*{\GlsXtrRecordCounter}[1]{%
 5195   \@@glsxtr@recordcounter{\#1}%
 5196 }
 5197 \onlypreamble\GlsXtrRecordCounter

docounterrecord
 5198 \newcommand*{\@glsxtr@docounterrecord}[1]{%
 5199   \protected@write\@auxout{}{\string\glsxtr@counterrecord
 5200     {\@gls@label}{\#1}{\csuse{the\#1}}}}
 5201 }

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.
 5202 \newcommand*{\glsxtrglossentry}[1]{%
 5203   \glsxtrtitleorpdforheading
 5204   {\@glsxtrglossentry{\#1}}%
 5205   {\glsentryname{\#1}}%

```

```
5206  {\glsxtrheadname{#1}}%
5207 }
```

`lsxtrglossentry` Another test is needed in case `\@glsxtrglossentry` has been written to the table of contents.

```
5208 \newrobustcmd*\{@glsxtrglossentry}[1]{%
5209   \glsxtrtitleorpdforheading
5210   {%
5211     \glsdoifexists{#1}%
5212     {%
5213       \begingroup
5214         \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
5215         \edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
5216         \ifglsparent{#1}%
5217           {\GlsXtrStandaloneSubEntryItem{#1}}%
5218           {\glsentryitem{#1}}%
5219           \GlsXtrStandaloneEntryName{#1}%
5220         \endgroup
5221     }%
5222   }%
5223   {\glsentryname{#1}}%
5224   {\glsxtrheadname{#1}}%
5225 }
```

`daloneEntryName`

```
5226 \newcommand*{\GlsXtrStandaloneEntryName}[1]{%
5227   \glstarget{#1}{\glossentryname{#1}}%
5228 }
```

`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.)

```
5229 \newcommand{\GlsXtrStandaloneGlossaryType}{\glsentrytype{\glscurrententrylabel}}
```

`oneSubEntryItem` Used for sub-entries in standalone format. The argument is the entry's label.

```
5230 \newcommand*{\GlsXtrStandaloneSubEntryItem}[1]{%
5231   \GlsXtrIfFieldEqNum{level}{#1}{1}{\glssubentryitem{#1}}{}%
5232 }
```

`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.

```
5233 \newcommand*{\glsxtrglossentryother}[3]{%
5234   \ifstrempty{#1}%
5235   {%
5236     \ifcsdef{glsxtrhead#3}%
5237     {%
```

```

5238     \glsxtrtitleorpdforheading
5239     {\@glsxtrglossentryother{#2}{#3}{#1}}%
5240     {\@gls@entry@field{#2}{#3}}%
5241     {\csuse{glsxtrhead#3}{#2}}%
5242   }%
5243   {%
5244     \glsxtrtitleorpdforheading
5245     {\@glsxtrglossentryother{#2}{#3}{#1}}%
5246     {\@gls@entry@field{#2}{#3}}%
5247     {\@gls@entry@field{\NoCaseChange{#2}}{#3}}%
5248   }%
5249 }%
5250 {%
5251   \glsxtrtitleorpdforheading
5252   {\@glsxtrglossentryother{#2}{#3}{#1}}%
5253   {\@gls@entry@field{#2}{#3}}%
5254   {#1}%
5255 }%
5256 }

```

`glossentryother` As `\@glsxtrglossentry` but uses a different field.

```

5257 \newrobustcmd*{\@glsxtrglossentryother}[3]{%
5258   \glsxtrtitleorpdforheading
5259   {%
5260     \glsdoifexists{#1}%
5261   {%
5262     \begingroup
5263       \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
5264       \edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
5265       \ifglshasparent{#1}%
5266         {\GlsXtrStandaloneSubEntryItem{#1}}%
5267         {\glsentryitem{#1}}%
5268         \GlsXtrStandaloneEntryOther{#1}%
5269     \endgroup
5270   }%
5271 }%
5272 {\@gls@entry@field{#1}{#2}}%
5273 {#3}%
5274 }

```

`aloneEntryOther`

```

5275 \newcommand*{\GlsXtrStandaloneEntryOther}[2]{%
5276   \glstarget{#1}{\glossentrynameother{#1}{#2}}%
5277 }

```

`ntunsrtglossary` Similar to `\printnoidxglossary` but it displays all entries defined for the given glossary without sorting. Check for `\@printgloss@checkexists` which was introduced to glossaries v4.46.

```

5278 \ifdef{\printgloss@checkexists}

```

```

5279 {
5280   \newcommand*{\printunsrtglossary}{%
5281     \let\@printgloss@checkexists\@printgloss@checkexists@allowignored
5282     \@ifstar\s@printunsrtglossary\@printunsrtglossary
5283   }
5284 }
5285 {
5286   \newcommand*{\printunsrtglossary}{%
5287     \@ifstar\s@printunsrtglossary\@printunsrtglossary
5288   }
5289 }

@ntunsrtglossary Unstarred version.
5290 \newcommand*{\@printunsrtglossary}[1] []{%
5291   \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%
5292 }

@ntunsrtglossary Starred version.
5293 \newcommand*{\s@printunsrtglossary}[2] []{%
5294   \begingroup
5295     #2%
5296     \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%
5297   \endgroup
5298 }

@unsrtglossaries Similar to \printnoidxglossaries but it displays all entries defined for the given glossary
without sorting.
5299 \newcommand*{\printunsrtglossaries}{%
5300   \forallglossaries{\@glo@type}{\printunsrtglossary[type=\@glo@type]}%
5301 }

@unsrt@glossary
5302 \newcommand*{\@print@unsrt@glossary}{%
5303   \glossarysection[\glossarytoctitle]{\glossarytitle}%
5304   \glossarypreamble
      check for empty list
5305   \glsxtrifemptyglossary{\@glo@type}%
5306   {%
5307     \GlossariesExtraWarning{No entries defined in glossary '\@glo@type'}%
5308   }%
5309   {%
5310     \key@ifundefined{glossentry}{group}%
5311     {\let\@gls@getgroupname\@gls@noidx@getgroupname}%
5312     {\let\@gls@getgroupname\@glsxtr@unsrt@getgroupname}%
5313     \def\@gls@currentlettergroup{}%

```

A loop within the tabular-like styles can cause problems, so move the loop outside.

```

5314 \def\@glsxtr@doglossary{%
5315   \begin{theglossary}%
5316     \glossaryheader
5317     \glsresetentrylist
5318   }%
5319   \expandafter\@for\expandafter\glscurrententrylabel\expandafter
5320     :\expandafter=\csname glolist@\@glo@type\endcsname\do{%
5321       \ifdefempty{\glscurrententrylabel}{%
5322         {}%
5323       }%

```

Provide a hook (for example to measure width).

```

5324   \let\glsxtr@process\@firstofone
5325   \let\printunsrtglossaryskipentry
5326     \@glsxtr@printunsrtglossaryskipentry
5327   \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%

```

Don't check group for child entries.

```

5328   \glsxtr@process
5329   {%
5330     \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.)

```

5331   \ifglshasparent{\glscurrententrylabel}{}%
5332   {%
5333     \@glsxtr@checkgroup\glscurrententrylabel
5334     \expandafter\appto\expandafter\@glsxtr@doglossary\expandafter
5335       {\@glsxtr@grouphereading}%
5336   }%
5337   \fi
5338   \eappto\@glsxtr@doglossary{%
5339     \noexpand\@printunsrtglossary@handler{\glscurrententrylabel}}%
5340   }%
5341   {%
5342   }%
5343   \appto\@glsxtr@doglossary{\end{theglossary}}%
5344   \printunsrtglossarypredoglossary
5345   \@glsxtr@doglossary
5346 }%
5347 \glossarypostamble
5348 }

```

`\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.

```
5349 \newcommand*\printunsrtinnerglossary[3] [] {%
```

```

5350 \begingroup
5351   \def\@glsxtr@printglossopts[#1]%
5352   \def\@glo@type{\glsdefaulttype}%
5353   \setkeys{printgloss}{title,toctitle,style,numberedsection,sort,label}[]{#1}%
5354   \let\currentglossary\@glo@type
5355   #2%
5356   \@print@unsrt@innerglossary
5357   #3%
5358 \endgroup
5359 }

srtglossarywrap
5360 \newenvironment{printunsrtglossarywrap}[1] []{%
5361 {%
5362   \def\@glsxtr@printglossopts[#1]%
5363   \def\@glo@type{\glsdefaulttype}%
5364   \def\glossarytitle{\csname @glo@type@\@glo@type @title\endcsname}%
5365   \def\glossarytoctitle{\glossarytitle}%
5366   \let\org@glossarytitle\glossarytitle
5367   \def\@glossarystyle{%
5368     \ifx\@glossary@default@style\relax
5369       \GlossariesWarning{No default glossary style provided \MessageBreak
5370         for the glossary '\@glo@type'. \MessageBreak
5371         Using deprecated fallback. \MessageBreak
5372         To fix this set the style with \MessageBreak
5373           \string\setglossarystyle\space or use the \MessageBreak
5374             style key=value option}%
5375     \fi
5376   }%
5377   \def\gls@dotocitle{\glssettoctitle{\@glo@type}}%
5378   \let\@org@glossaryentrynumbers\glossaryentrynumbers
5379   \@printgloss@setsort
5380   \setkeys{printgloss}{#1}%

```

The type key simply allows the title to be set if the title key isn't supplied.

```

5381 \ifglossaryexists*{\@glo@type}%
5382 {%
5383   \ifx\glossarytitle\org@glossarytitle
5384   \else
5385     \expandafter\let\csname @glo@type@\@glo@type @title\endcsname
5386       \glossarytitle
5387   \fi
5388   \let\currentglossary\@glo@type
5389 }%
5390 {}%
5391 \let\org@glossaryentrynumbers\glossaryentrynumbers
5392 \let\glsnonextpages\glsnonextpages
5393 \let\glsnextpages\glsnextpages
5394 \let\nopostdesc\nopostdesc
5395 \gls@dotocitle

```

```

5396  \@glossarystyle
5397  \let\gls@org@glossaryentryfield\glossentry
5398  \let\gls@org@glossarysubentryfield\subglossentry
5399  \renewcommand{\glossentry}[1]{%
5400    \xdef\glscurrententrylabel{\glsdetoklabel{##1}}%
5401    \gls@org@glossaryentryfield{##1}%
5402 }%
5403 \renewcommand{\subglossentry}[2]{%
5404   \xdef\glscurrententrylabel{\glsdetoklabel{##2}}%
5405   \gls@org@glossarysubentryfield{##1}{##2}%
5406 }%
5407 \@gls@preglossaryhook
5408 \glossarysection[\glossarytoctitle]{\glossarytitle}%
5409 \glossarypreamble
5410 \begin{theglossary}%
5411 \glossaryheader
5412 \glsresetentrylist
5413 }%
5414 {%
5415 \end{theglossary}%
5416 \glossarypostamble
5417 \global\let\glossaryentrynumbers\@org@glossaryentrynumbers
5418 \global\let\warn@noprintglossary\relax
5419 }

```

t@innerglossary This is much like \print@unsrt@innerglossary but only contains what would normally be the content of the theglossary.

```
5420 \newcommand*{\@print@unsrt@innerglossary}{%
```

No section header or preamble.

```

5421 \glsxtrifemptyglossary{\@glo@type}%
5422 {%
5423   \GlossariesExtraWarning{No entries defined in glossary '\@glo@type'}%
5424 }%
5425 {%
5426   \key@ifundefined{glossentry}{group}%
5427   {\let\@gls@getgroupname\@gls@noidx@getgroupname}%
5428   {\let\@gls@getgroupname\@glsxtr@unsrt@getgroupname}%
5429   \def\@gls@currentlettergroup{}%

```

No header or reset.

```

5430 \def\@glsxtr@doglossary{}%
5431 \expandafter\@for\expandafter\glscurrententrylabel\expandafter
5432   :\expandafter=\csname glolist@\@glo@type\endcsname\do{%
5433   \ifdefempty{\glscurrententrylabel}%
5434   {}%
5435   {}%

```

Provide a hook (for example to measure width).

```
5436 \let\glsxtr@process\@firstofone
```

```
5437     \let\printunsrtglossaryskipentry
5438         \@glsxtr@printunsrtglossaryskipentry
5439         \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%

```

Don't check group for child entries.

```
5440     \@glsxtr@process
5441     {%
5442         \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.)

```
5443         \ifglshasparent{\glscurrententrylabel}{}%
5444         {%
5445             \@glsxtr@checkgroup\glscurrententrylabel
5446             \expandafter\appto\expandafter\@glsxtr@doglossary\expandafter
5447                 {\@glsxtr@groupleading}%
5448             }%
5449         \fi
5450         \eappto\@glsxtr@doglossary{%
5451             \noexpand\@printunsrt@glossary@handler{\glscurrententrylabel}}%
5452         }%
5453     }%
5454 }%
5455 \printunsrtglossarypredoglossary
5456 \@glsxtr@doglossary
5457 }%

```

No postamble.

```
5458 }
```

entryprocesshook

```
5459 \newcommand*{\printunsrtglossaryentryprocesshook}[1]{}
```

glossaryskipentry

```
5460 \newcommand*{\printunsrtglossaryskipentry}{%
5461     \PackageError{glossaries-extra}{\string\printunsrtglossaryskipentry\space
5462 can only be used within \string\printunsrtglossaryentryprocesshook}{}%
5463 }
```

entryprocesshook

```
5464 \newcommand*{\@glsxtr@printunsrtglossaryskipentry}{%
5465     \let\glsxtr@process\@gobble
5466 }
```

glossarypredoglossary

```
5467 \newcommand*{\printunsrtglossarypredoglossary}{}%
```

glossary@handler

```
5468 \newcommand{\@printunsrt@glossary@handler}[1]{%
5469   \xdef\glscurrententrylabel{#1}%
5470   \printunsrtglossaryhandler\glscurrententrylabel
5471 }
```

#### glossaryhandler

```
5472 \newcommand{\printunsrtglossaryhandler}[1]{%
5473   \glsxtrunsrtdo{#1}%
5474 }
```

#### 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.

```
5475 \newrobustcmd*\glsxtriflabelinlist[4]{%
5476   \protected@edef\glsxtr@doiflabelinlist{\noexpand@gls@ifinlist{#1}{#2}}%
5477   \@glsxtr@doiflabelinlist{#3}{#4}%
5478 }
```

#### srtglossaryunit

```
5479 \newcommand{\print@op@unsrtglossaryunit}[2][]{%
5480   \s@printunsrtglossary[type=\glsdefaulttype,#1]{%
5481     \printunsrtglossaryunitsetup{#2}%
5482   }%
5483 }
```

#### glossaryunitsetup

```
5484 \newcommand*\printunsrtglossaryunitsetup[1]{%
5485   \renewcommand{\printunsrtglossaryhandler}[1]{%
5486     \glsxtrfieldxifinlist{##1}{record.#1}{\csuse{the#1}}%
5487     {\glsxtrunsrtdo{##1}}%
5488     {}%
5489   }%
```

Only the target names should have the prefixes adjusted as \gls etc need the original \glolinkprefix. The \gobble part discards \glolinkprefix.

```
5490   \ifcsundef{theH#1}%
5491   {}%
5492   \renewcommand*\@glsxtrhypernameprefix{record.#1.\csuse{the#1}. \gobble}%
5493   {}%
5494   \renewcommand*\@glsxtrhypernameprefix{record.#1.\csuse{theH#1}. \gobble}%
5495   {}%
5496   \renewcommand*\glossarysection[2]{}%
```

```

5498 \appto\glossarypostamble{\glspar\medskip\glspar}%
5499 }

srtglossaryunit
5500 \newcommand{\print@noop@unsrtglossaryunit}[2][]{%
5501   \PackageError{glossaries-extra}{\string\printunsrtglossaryunit\space
5502     requires the record=only or record=alsoindex package option}{}%
5503 }

t@getgroupitle
5504 \newrobustcmd*\{@glsxtr@unsrt@getgroupitle}[2]{%
5505   \protected@edef@glsxtr@titlelabel{glsxtr@groupitle@#1}%
5506   \onelevel@sanitize@glsxtr@titlelabel
5507   \ifcsdef@glsxtr@titlelabel
5508   {\letcs{#2}{@glsxtr@titlelabel}}%
5509   {\def#2{#1}}%
5510 }

\glsxtrunsrtdo Provide a user-level call to \@glsxtr@noidx@do to make it easier to define a new handler.
5511 \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).
5512 \newcommand*{\glsxtrgroupfield}{group}

The tabular-like glossary styles cause quite a problem with the iterative approach. In par-
ticular for the group skip. To compensate for this, the groups are now determined while
\glsxtr@doglossary is being constructed rather than in the handler.

sxtr@checkgroup The argument is the entry's label. (This block of code was formerly in \@glsxtr@noidx@do.)
Now that this is no longer within a tabular environment, the global definitions aren't needed.
The result is now stored in \@glsxtr@groupheading, which will be empty if no heading is
required.
5513 \newcommand*{\@glsxtr@checkgroup}[1]{%
5514   \def@glsxtr@groupheading{}%
5515   \key@ifundefined{glossentry}{group}%
5516   {%
5517     \letcs{@gls@sort}{glo@\glsdetoklabel{#1}@sort}%
5518     \expandafter\glo@grabfirst@gls@sort{}{}\@nil
5519   }%
5520   {%
5521     \protected@edef@glo@thislettergrp{%
5522       \csuse{glo@\glsdetoklabel{#1}@glsxtrgroupfield}%
5523     }%
5524     \ifdefequal{@glo@thislettergrp}{\gls@currentlettergroup}%
5525   }%

```

```

5526  {%
5527    \ifdefempty{\@gls@currentlettergroup}{}
5528    {\def\@glsxtr@groupheading{\glsgroupskip}%
5529     \eappto\@glsxtr@groupheading{%
5530       \noexpand\glsgroupheading{\expandonce\@glo@thislettergrp}%
5531     }%
5532   }%
5533   \let\@gls@currentlettergroup\@glo@thislettergrp
5534 }

```

`trLocationField` Stores the internal name of the location field.

```
5535 \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.

```

5536 \newcommand{\@glsxtr@noidx@do}[1]{%
5537   \ifglsentryexists{#1}%
5538   {%
5539     \global\let\csname\@gls@loclist\endcsname\glsdetoklabel{#1}\@loclist\%
5540     \global\let\csname\@gls@location\endcsname\glsdetoklabel{#1}\@GlsXtrLocationField\%

```

Use level number to determine whether or not this entry has a parent.

```

5541   \gls@level=\numexpr\csuse{\glo@\glsdetoklabel{#1}@level}+\@glsxtr@leveloffset\relax
5542   \ifnum\gls@level>0
5543     \let\@glsxtr@ifischild\@firstoftwo
5544   \else
5545     \let\@glsxtr@ifischild\@secondoftwo
5546   \fi

```

Some glossary styles (such as `topiccols`) save the level using `\def` so make sure `\gls@level` is expanded before being passed to `\subglossentry`.

```

5547   \glsxtr@ifischild
5548   {%
5549     \ifdefvoid{\@gls@location}{}
5550     {%
5551       \ifdefvoid{\@gls@loclist}{}
5552         {%
5553           \expandafter\subglossentry\expandafter{\number\gls@level}{#1}{}%
5554         }%
5555       {%
5556         \expandafter\subglossentry\expandafter{\number\gls@level}{#1}%
5557         {%
5558           \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}%
5559         }%
5560       }%
5561     }%
5562   {%
5563     \expandafter\subglossentry\expandafter
5564       {\number\gls@level}{#1}\glossaryentrynumbers{\@gls@location}%
5565   }%

```

```

5566 }%
5567 {%
5568 \ifdefvoid{\@gls@location}%
5569 {%
5570 \ifdefvoid{\@gls@loclist}%
5571 {%
5572 \glossentry{\#1}{}%
5573 }%
5574 {%
5575 \glossentry{\#1}%
5576 {%
5577 \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}%
5578 }%
5579 }%
5580 }%
5581 {%
5582 \glossentry{\#1}%
5583 {%
5584 \glossaryentrynumbers{\@gls@location}}%
5585 }%
5586 }%
5587 }%
5588 }%
5589 {}%
5590 }

```

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
5591 \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
5592 \newcommand*\@glsxtr@providenewgls}{%
5593 \protected@write\auxout{}{\string\providecommand{\string\@glsxtr@newglslike}[2]{}{}}%
5594 \let\@glsxtr@providenewgls\relax
5595 }
```

`identifyglslike` Identify the command given in the second argument for the benefit of `bib2gls`.

```
5596 \newcommand{\glsxtridentifyglslike}[2]{%
5597 \ifdefequal\@glsxtr@record@setting\@glsxtr@record@setting@off
5598 {}%
5599 {}%
```

```

5600   \glsxtr@providenewgls
5601   \protected@write\@auxout{}{\string\glsxtr@newglslike{#1}{\string#2}}%
5602 }%
5603 }

```

\@glsxtrnewgls

```
\glsxtrnewgls[<options>]{<prefix>}{<cs>}{<inner cs name>}
```

```

5604 \newcommand*{\glsxtrnewgls}[4]{%
5605   \ifdef{\#3}{%
5606     {%
5607       \PackageError{glossaries-extra}{Command \string#3\space already%
5608 defined}{}%
5609     }%
5610   }%

```

Write information to the aux file for bib2gls.

```

5611   \glsxtridentifyglslike{#2}{#3}{%
5612     \ifcsdef{@#4like@#2}{%
5613       {%
5614         \advance\glsxtrnewgls@inner by \one
5615         \def\glsxtrnewgls@innercsname{@#4like\number\glsxtrnewgls@inner @#2}{%
5616       }%
5617       {\def\glsxtrnewgls@innercsname{@#4like@#2}{%
5618         \expandafter\newrobustcmd\expandafter*\expandafter
5619         #3\expandafter{\expandafter\gls@hyp@opt\csname\glsxtrnewgls@innercsname\endcsname}%
5620       \ifstrempty{#1}{%
5621         {%
5622           \expandafter\newcommand\expandafter*\csname\glsxtrnewgls@innercsname\endcsname[2][]{%
5623             \new@ifnextchar[%]
5624               {\csname @#4@\endcsname{##1}{##2}}%
5625               {\csname @#4@\endcsname{##1}{##2}[]}%
5626             }%
5627           }%
5628         {%
5629           \expandafter\newcommand\expandafter*\csname\glsxtrnewgls@innercsname\endcsname[2][]{%
5630             \new@ifnextchar[%]
5631               {\csname @#4@\endcsname{##1}{##2}}%
5632               {\csname @#4@\endcsname{##1}{##2}[]}%
5633             }%
5634           }%
5635         }%
5636       }%

```

\glsxtrnewgls

```
\glsxtrnewgls[<options>]{<prefix>}{<cs>}
```

The first argument prepends to the options and the second argument is the prefix.

```
5637 \newrobustcmd*{\glsxtrnewgls}[3] [] {%
5638   \@glsxtrnewgls{#1}{#2}{#3}{gls}%
5639 }
```

**lsxtrnewglslike** Provide a way to conveniently define commands that behave like `\gls`, `\glspl`, `\Gls` and `\Glspl` with a label prefix. The first argument prepends to the options and the second argument is the prefix.

```
5640 \newrobustcmd*{\glsxtrnewglslike}[6] [] {%
5641   \@glsxtrnewgls{#1}{#2}{#3}{gls}%
5642   \@glsxtrnewgls{#1}{#2}{#4}{glspl}%
5643   \@glsxtrnewgls{#1}{#2}{#5}{Gls}%
5644   \@glsxtrnewgls{#1}{#2}{#6}{Glspl}%
5645 }
```

**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.

```
5646 \newrobustcmd*{\glsxtrnewGLSlike}[4] [] {%
5647   \@glsxtrnewgls{#1}{#2}{#3}{GLS}%
5648   \@glsxtrnewgls{#1}{#2}{#4}{GLSpl}%
5649 }
```

**\glsxtrnewrgls** As `\glsxtrnewgls` but for `\rgls`.

```
5650 \newrobustcmd*{\glsxtrnewrgls}[3] [] {%
5651   \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
5652 }
```

**sxtnewrglslike** As `\glsxtrnewglslike` but for `\rgls` etc.

```
5653 \newrobustcmd*{\glsxtrnewrglslike}[6] [] {%
5654   \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
5655   \@glsxtrnewgls{#1}{#2}{#4}{rglspl}%
5656   \@glsxtrnewgls{#1}{#2}{#5}{rGls}%
5657   \@glsxtrnewgls{#1}{#2}{#6}{rGlspl}%
5658 }
```

**sxtnewrGLSlike** As `\glsxtrnewGLSlike` but for `\rGLS` etc.

```
5659 \newrobustcmd*{\glsxtrnewrGLSlike}[4] [] {%
5660   \@glsxtrnewgls{#1}{#2}{#3}{rGLS}%
5661   \@glsxtrnewgls{#1}{#2}{#4}{rGLSpl}%
5662 }
```

Provide easy access to record count fields.

**totalRecordCount** Access total record count. This is designed to be expandable. The argument is the label.

```
5663 \newcommand*{\GlsXtrTotalRecordCount}[1] {%
5664   \ifcsdef{glo@\glsdetoklabel{#1}@recordcount}{%
```

```
5665 {\csname glo@\glsdetoklabel{\#1}@recordcount\endcsname}%
5666 {0}%
5667 }
```

**xtrRecordCount** Access record count for a particular counter. The first argument is the label. The second argument is the counter name.

```
5668 \newcommand*{\GlsXtrRecordCount}[2]{%
5669  \ifcsdef{glo@\glsdetoklabel{\#1}@recordcount.\#2}{%
5670  {\csname glo@\glsdetoklabel{\#1}@recordcount.\#2\endcsname}%
5671 {0}%
5672 }
```

**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.

```
5673 \newcommand*{\GlsXtrLocationRecordCount}[3]{%
5674  \ifcsdef{glo@\glsdetoklabel{\#1}@recordcount.\#2.\glsxtrdetoklocation{\#3}}{%
5675  {\csname glo@\glsdetoklabel{\#1}@recordcount.\#2.\glsxtrdetoklocation{\#3}\endcsname}%
5676 {0}%
5677 }
```

**trdetoklocation**

```
5678 \newcommand*{\glsxtrdetoklocation}[1]{#1}
```

**ablerecordcount**

```
5679 \newcommand*{\glsxtrenablerecordcount}{%
5680  \renewcommand*{\gls}{\rgls}%
5681  \renewcommand*{\Gls}{\rGls}%
5682  \renewcommand*{\glsp1}{\rglsp1}%
5683  \renewcommand*{\Glspl}{\rGlspl}%
5684  \renewcommand*{\GLS}{\rGLS}%
5685  \renewcommand*{\GLSp1}{\rGLSp1}%
5686 }
```

**ordtriggervalue** The value used by the record trigger test. The argument is the entry's label.

```
5687 \newcommand*{\glsxtrrecordtriggervalue}[1]{%
5688  \GlsXtrTotalRecordCount{#1}%
5689 }
```

**dCountAttribute**

```
5690 \newcommand*{\GlsXtrSetRecordCountAttribute}[2]{%
5691  \@for\@glsxtr@cat:=#1\do
5692  {%
5693   \ifdefempty{\@glsxtr@cat}{}{%
5694   {%
5695     \glssetcategoryattribute{\@glsxtr@cat}{recordcount}{#2}%
5696   }%
5697 }}
```

```
5697 }%
5698 }
```

ifrecordtrigger

```
\glsxtrifrecordtrigger{\label}{\triggerformat}{\normal}
```

```
5699 \newcommand*{\glsxtrifrecordtrigger}[3]{%
5700   \glshasattribute{#1}{recordcount}%
5701   {%
5702     \ifnum\glsxtrrecordtriggervalue{#1}>\glsgetattribute{#1}{recordcount}\relax
5703       #3%
5704     \else
5705       #2%
5706     \fi
5707   }%
5708   {#3}%
5709 }
```

trigger@record Still need a record to ensure that bib2gls selects the entry.

```
5710 \newcommand*{\@glsxtr@rgltrigger@record}[3]{%
5711   \edef\glslabel{\glsdetoklabel{#2}}%
5712   \let\gls@link@label\glslabel
5713   \def\@glsxtr@thevalue{}%
5714   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
5715   \def\@glsnumberformat{\glstriggerrecordformat}%
5716   \edef\@gls@counter{\csname glo@\glslabel @counter\endcsname}%
5717   \edef\glstype{\csname glo@\glslabel @type\endcsname}%
5718   \def\@glsxtr@thevalue{}%
5719   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
5720   \glsxtrinitwrgloss
5721   \glslinkpresetkeys
5722   \setkeys{glslink}{#1}%
5723   \glslinkpostsetkeys
5724   \ifdefempty{\@glsxtr@thevalue}{%
5725     {%
5726       \gls@saveentrycounter
5727     }%
5728     {%
5729       \let\the\glsentrycounter\@glsxtr@thevalue
5730       \def\theH\glsentrycounter{\@glsxtr@theHvalue}%
5731     }%
5732     \ifglsxtrinitwrglossbefore
5733       \do@wrglossary{#2}%
5734     \fi
5735     #3%
5736     \ifglsxtrinitwrglossbefore
```

```

5737 \else
5738   \do@wrglossary{#2}%
5739 \fi
5740 \ifKV@glslink@local
5741   \glslocalunset{#2}%
5742 \else
5743   \glsunset{#2}%
5744 \fi
5745 }

```

`\gerrecordformat` Typically won't be used as it should be recognised as a special type of ignored location by `bib2gls`.

```
5746 \newcommand*{\glstriggerrecordformat}[1]{}
```

```
\rgls
5747 \newrobustcmd*{\rgls}{\gls@hyp@opt\rgls}
```

```
\@rgls
5748 \newcommand*{\@rgls}[2][]{%
5749   \new@ifnextchar[{\@rgls@{#1}{#2}}{\@rgls@{#1}{#2}}[]]{%
5750 }
```

```
\@rgls@
5751 \def\@rgls@#1#2[#3]{%
5752   \glsxtrifrecordtrigger{#2}%
5753   {%
5754     \glsxtr@rglstrigger@record{#1}{#2}{\rglsformat{#2}{#3}}%
5755   }%
5756   {%
5757     \gls@{#1}{#2}[#3]%
5758   }%
5759 }
```

```
\rglspl
5760 \newrobustcmd*{\rglspl}{\gls@hyp@opt\rglspl}
```

```
\@rglspl
5761 \newcommand*{\@rglspl}[2][]{%
5762   \new@ifnextchar[{\@rglspl@{#1}{#2}}{\@rglspl@{#1}{#2}}[]]{%
5763 }
```

```
\@rglspl@
5764 \def\@rglspl@#1#2[#3]{%
5765   \glsxtrifrecordtrigger{#2}%
5766   {%
5767     \glsxtr@rglstrigger@record{#1}{#2}{\rglsplformat{#2}{#3}}%
5768   }%
5769   {%
```

```

5770     \glspl@{#1}{#2}{#3}%
5771   }%
5772 }%

\rGls
5773 \newrobustcmd*\rGls{\gls@hyp@opt\rGls}

\@rGls
5774 \newcommand*\@rGls[2][]{%
5775   \new@ifnextchar[\@rGls@{#1}{#2}]{\@rGls@{#1}{#2}[]}{%
5776 }

\@rGls@
5777 \def\@rGls@#2[#3]{%
5778   \glsxtrifrecordtrigger{#2}%
5779   {%
5780     \glsxtr@rglstrigger@record{#1}{#2}{\rGlsformat{#2}{#3}}%
5781   }%
5782   {%
5783     \Gls@{#1}{#2}{#3}%
5784   }%
5785 }%

\rGlspl
5786 \newrobustcmd*\rGlspl{\gls@hyp@opt\rGlspl}

\@rGlspl
5787 \newcommand*\@rGlspl[2][]{%
5788   \new@ifnextchar[\@rGlspl@{#1}{#2}]{\@rGlspl@{#1}{#2}[]}{%
5789 }

\@rGlspl@
5790 \def\@rGlspl@#2[#3]{%
5791   \glsxtrifrecordtrigger{#2}%
5792   {%
5793     \glsxtr@rglstrigger@record{#1}{#2}{\rGlsplformat{#2}{#3}}%
5794   }%
5795   {%
5796     \Glspl@{#1}{#2}{#3}%
5797   }%
5798 }%

\rGLS
5799 \newrobustcmd*\rGLS{\gls@hyp@opt\rGLS}

\@rGLS
5800 \newcommand*\@rGLS[2][]{%
5801   \new@ifnextchar[\@rGLS@{#1}{#2}]{\@rGLS@{#1}{#2}[]}{%
5802 }

```

```

\@rGLS@
5803 \def\@rGLS@#1#2[#3]{%
5804   \glsxtrifrecordtrigger{#2}%
5805   {%
5806     \glsxtr@rglstrigger@record{#1}{#2}{\rGLSformat{#2}{#3}}%
5807   }%
5808   {%
5809     \@GLS@{#1}{#2}{#3}%
5810   }%
5811 }%


\rGLSp1
5812 \newrobustcmd*\rGLSp1{\gls@hyp@opt\rGLSp1}

\@rGLSp1
5813 \newcommand*\@rGLSp1[2][]{%
5814   \new@ifnextchar[\@rGLSp1{#1}{#2}]{\@rGLSp1{#1}{#2}[]}{%
5815 }%


\@rGLSp1@
5816 \def\@rGLSp1@#1#2[#3]{%
5817   \glsxtrifrecordtrigger{#2}%
5818   {%
5819     \glsxtr@rglstrigger@record{#1}{#2}{\rGLSp1format{#2}{#3}}%
5820   }%
5821   {%
5822     \@GLSp1{#1}{#2}{#3}%
5823   }%
5824 }%


\rglsformat
5825 \newcommand*\rglsformat[2]{%
5826   \glsifregular{#1}%
5827   {\glsentryfirst{#1}}%
5828   {\ifglshaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}\#2%
5829 }%


\rglsp1format
5830 \newcommand*\rglsp1format[2]{%
5831   \glsifregular{#1}%
5832   {\glsentryfirstplural{#1}}%
5833   {\ifglshaslong{#1}{\glsentrylongplural{#1}}{\glsentryfirstplural{#1}}}\#2%
5834 }%


\rGlsformat
5835 \newcommand*\rGlsformat[2]{%
5836   \glsifregular{#1}%
5837   {\Glsentryfirst{#1}}%

```

```

5838  {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
5839 }

\rGlsplformat
5840 \newcommand*{\rGlsplformat}[2]{%
5841   \glsifregular{#1}%
5842   {\Glsentryfirstplural{#1}}%
5843   {\ifglshaslong{#1}{\Glsentrylongplural{#1}}{\Glsentryfirstplural{#1}}}#2%
5844 }

\rGLSformat
5845 \newcommand*{\rGLSformat}[2]{%
5846   \expandafter\mfirstuc\expandafter{\rglsformat{#1}{#2}}%
5847 }

\rGLSplformat
5848 \newcommand*{\rGLSplformat}[2]{%
5849   \expandafter\mfirstuc\expandafter{\rglsplformat{#1}{#2}}%
5850 }

```

## 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`.

```
5851 \newcommand{\@glsxtr@do@inc@linkcount}{%
```

Does this entry have the linkcount attribute set?

```
5852 \glsifattribute{\glslabel}{linkcount}{true}%
5853 {%
```

Does the counter exist?

```
5854 \ifcsdef{c@glsxtr@linkcount@\glslabel}{}%
5855 {%
```

Counter doesn’t exist, so define it.

```
5856 \newcounter{glsxtr@linkcount@\glslabel}%
```

If `linkcountmaster` is set, add to counter reset.

```
5857 \glshasattribute{\glslabel}{linkcountmaster}%
5858 {%
```

Need to ensure values are fully expanded.

```
5859     \begingroup
5860         \edef\x{\endgroup\noexpand\@addtoreset{glsxtr@linkcount@\glslabel}{%
5861             {\glsgetattribute{\glslabel}{linkcountmaster}}}}%
5862         \x
5863     }%
5864     {}%
5865 }
```

Increment counter:

```
5866 \glsxtrinlinkcounter{glsxtr@linkcount@\glslabel}%
5867 }%
5868 {}%
5869 }
```

`rinlinkcounter` May be redefined to use `\refstepcounter` if required.

```
5870 \newcommand*{\glsxtrinlinkcounter}[1]{\stepcounter{#1}}
```

`inkCounterValue` Expands to the associated link counter register or 0 if not defined.

```
5871 \newcommand*{\GlsXtrLinkCounterValue}[1]{%
5872 \ifcsundef{c@glsxtr@linkcount@#1}{0}{\csname c@glsxtr@linkcount@#1\endcsname}%
5873 }
```

`rTheLinkCounter` Expands to the display value of the associated link counter or 0 if not defined.

```
5874 \newcommand*{\GlsXtrTheLinkCounter}[1]{%
5875 \ifcsundef{theglsxtr@linkcount@#1}{0}{%
5876 {\csname theglsxtr@linkcount@#1\endcsname}%
5877 }}
```

`fLinkCounterDef` Tests if the counter has been defined

```
5878 \newcommand*{\GlsXtrIfLinkCounterDef}[3]{%
5879 \ifcsundef{theglsxtr@linkcount@#1}{#3}{#2}%
5880 }
```

`LinkCounterName` Expands to the associated link counter name. (No check for existence.)

```
5881 \newcommand*{\GlsXtrLinkCounterName}[1]{glsxtr@linkcount@#1}
```

`bleLinkCounting`

```
\GlsXtrEnableLinkCounting[<master counter>]{<categories>}
```

Enable link counting for the given categories.

```
5882 \newcommand*{\GlsXtrEnableLinkCounting}[2][]{%
5883 \let\glsxtr@inc@linkcount\glsxtr@do@inc@linkcount
5884 \@for\@glsxtr@label:=#2\do
5885 {%
5886 \glssetcategoryattribute{\@glsxtr@label}{linkcount}{true}}%
```

```

5887 \ifstrempty{#1}{}%
5888 {%
5889   \ifcsundef{c@#1}%
5890   {\@nocounterr{#1}}%
5891   {\glssetcategoryattribute{\glsxtr@label}{linkcountmaster}{#1}}%
5892 }%
5893 }%
5894 }
5895 \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.

```

5896 \ifpackageloaded{glossaries-accsupp}%
5897 {

```

Define (or redefine) commands to use the accessibility information.

\glsaccessname Display the name value (no link and no check for existence).

```

5898 \newcommand*{\glsaccessname}[1]{%
5899   \glsnameaccessdisplay
5900   {%
5901     \glsentryname{#1}%
5902   }%
5903   {#1}%
5904 }

```

\Glsaccessname Display the name value (no link and no check for existence) with the first letter converted to upper case.

```

5905 \newcommand*{\Glsaccessname}[1]{%
5906   \glsnameaccessdisplay
5907   {%
5908     \Glsentryname{#1}%
5909   }%
5910   {#1}%
5911 }

```

\GLSaccessname Display the name value (no link and no check for existence) converted to upper case.

```

5912 \newcommand*{\GLSaccessname}[1]{%
5913   \glsnameaccessdisplay
5914   {%
5915     \mfirstucMakeUppercase{\glsentryname{#1}}%
5916   }%
5917   {#1}%
5918 }

```

```

\glsaccesstext Display the text value (no link and no check for existence).
5919 \newcommand*{\glsaccesstext}[1]{%
5920   \glstextaccessdisplay
5921   {%
5922     \glsentrytext{#1}%
5923   }%
5924   {#1}%
5925 }

\Glsaccesstext Display the text value (no link and no check for existence) with the first letter converted to
upper case.
5926 \newcommand*{\Glsaccesstext}[1]{%
5927   \glstextaccessdisplay
5928   {%
5929     \Glsentrytext{#1}%
5930   }%
5931   {#1}%
5932 }

\GLSaccesstext Display the text value (no link and no check for existence) converted to upper case.
5933 \newcommand*{\GLSaccesstext}[1]{%
5934   \glstextaccessdisplay
5935   {%
5936     \mfirstucMakeUppercase{\glsentrytext{#1}}%
5937   }%
5938   {#1}%
5939 }

\glsaccessplural Display the plural value (no link and no check for existence).
5940 \newcommand*{\glsaccessplural}[1]{%
5941   \glspluralaccessdisplay
5942   {%
5943     \glsentryplural{#1}%
5944   }%
5945   {#1}%
5946 }

\Glsaccessplural Display the plural value (no link and no check for existence) with the first letter converted to
upper case.
5947 \newcommand*{\Glsaccessplural}[1]{%
5948   \glspluralaccessdisplay
5949   {%
5950     \Glsentryplural{#1}%
5951   }%
5952   {#1}%
5953 }

\GLSaccessplural Display the plural value (no link and no check for existence) converted to upper case.

```

```

5954 \newcommand*{\GLSaccessplural}[1]{%
5955   \glspluralaccessdisplay
5956   {%
5957     \mfirstucMakeUppercase{\glsentryplural{#1}}%
5958   }%
5959   {#1}%
5960 }

\glsaccessfirst Display the first value (no link and no check for existence).
5961 \newcommand*{\glsaccessfirst}[1]{%
5962   \glsfirstaccessdisplay
5963   {%
5964     \glsentryfirst{#1}%
5965   }%
5966   {#1}%
5967 }

\Glsaccessfirst Display the first value (no link and no check for existence) with the first letter converted to
upper case.
5968 \newcommand*{\Glsaccessfirst}[1]{%
5969   \glsfirstaccessdisplay
5970   {%
5971     \Glsentryfirst{#1}%
5972   }%
5973   {#1}%
5974 }

\GLSaccessfirst Display the first value (no link and no check for existence) converted to upper case.
5975 \newcommand*{\GLSaccessfirst}[1]{%
5976   \glsfirstaccessdisplay
5977   {%
5978     \mfirstucMakeUppercase{\glsentryfirst{#1}}%
5979   }%
5980   {#1}%
5981 }

cessfirstplural Display the firstplural value (no link and no check for existence).
5982 \newcommand*{\glsaccessfirstplural}[1]{%
5983   \glsfirstpluralaccessdisplay
5984   {%
5985     \glsentryfirstplural{#1}%
5986   }%
5987   {#1}%
5988 }

cessfirstplural Display the firstplural value (no link and no check for existence) with the first letter converted
to upper case.
5989 \newcommand*{\Glsaccessfirstplural}[1]{%

```

```
5990     \glsfirstpluralaccessdisplay
5991     {%
5992         \Glsentryfirstplural{#1}%
5993     }%
5994     {#1}%
5995 }
```

`cessfirstplural` Display the `firstplural` value (no link and no check for existence) converted to upper case.

```
5996 \newcommand*{\GLSaccessfirstplural}[1]{%
5997     \glsfirstpluralaccessdisplay
5998     {%
5999         \mfirstucMakeUppercase{\glsentryfirstplural{#1}}%
6000     }%
6001     {#1}%
6002 }
```

`glsaccesssymbol` Display the `symbol` value (no link and no check for existence).

```
6003 \newcommand*{\glsaccesssymbol}[1]{%
6004     \glssymbolaccessdisplay
6005     {%
6006         \glsentrysymbol{#1}%
6007     }%
6008     {#1}%
6009 }
```

`Glsaccesssymbol` Display the `symbol` value (no link and no check for existence) with the first letter converted to upper case.

```
6010 \newcommand*{\Glsaccesssymbol}[1]{%
6011     \glssymbolaccessdisplay
6012     {%
6013         \Glsentrysymbol{#1}%
6014     }%
6015     {#1}%
6016 }
```

`GLSaccesssymbol` Display the `symbol` value (no link and no check for existence) converted to upper case.

```
6017 \newcommand*{\GLSaccesssymbol}[1]{%
6018     \glssymbolaccessdisplay
6019     {%
6020         \mfirstucMakeUppercase{\glsentrysymbol{#1}}%
6021     }%
6022     {#1}%
6023 }
```

`esssymbolplural` Display the `symbolplural` value (no link and no check for existence).

```
6024 \newcommand*{\glsaccesssymbolplural}[1]{%
6025     \glssymbolpluralaccessdisplay
6026     {%
```

```
6027     \glsentrysymbolplural{#1}%
6028 }
6029 {#1}%
6030 }
```

`esssymbolplural` Display the symbolplural value (no link and no check for existence) with the first letter converted to upper case.

```
6031 \newcommand*{\Glsaccesssymbolplural}[1]{%
6032     \glssymbolpluralaccessdisplay
6033     {%
6034         \Glsentrysymbolplural{#1}%
6035     }%
6036     {#1}%
6037 }
```

`esssymbolplural` Display the symbolplural value (no link and no check for existence) converted to upper case.

```
6038 \newcommand*{\GLSaccesssymbolplural}[1]{%
6039     \glssymbolpluralaccessdisplay
6040     {%
6041         \mfirstucMakeUppercase{\glsentrysymbolplural{#1}}%
6042     }%
6043     {#1}%
6044 }
```

`\glsaccessdesc` Display the desc value (no link and no check for existence).

```
6045 \newcommand*{\glsaccessdesc}[1]{%
6046     \glsdescriptionaccessdisplay
6047     {%
6048         \glsentrydesc{#1}%
6049     }%
6050     {#1}%
6051 }
```

`\Glsaccessdesc` Display the desc value (no link and no check for existence) with the first letter converted to upper case.

```
6052 \newcommand*{\Glsaccessdesc}[1]{%
6053     \glsdescriptionaccessdisplay
6054     {%
6055         \Glsentrydesc{#1}%
6056     }%
6057     {#1}%
6058 }
```

`\GLSaccessdesc` Display the desc value (no link and no check for existence) converted to upper case.

```
6059 \newcommand*{\GLSaccessdesc}[1]{%
6060     \glsdescriptionaccessdisplay
6061     {%
6062         \mfirstucMakeUppercase{\glsentrydesc{#1}}%
```

```
6063    }%
6064    {#1}%
6065 }
```

ccessdescplural Display the descplural value (no link and no check for existence).

```
6066 \newcommand*{\glsaccessdescplural}[1]{%
6067   \glsdescriptionpluralaccessdisplay
6068   {%
6069     \glsentrydescplural{#1}%
6070   }%
6071   {#1}%
6072 }
```

ccessdescplural Display the descplural value (no link and no check for existence) with the first letter converted to upper case.

```
6073 \newcommand*{\Glsaccessdescplural}[1]{%
6074   \glsdescriptionpluralaccessdisplay
6075   {%
6076     \Glsentrydescplural{#1}%
6077   }%
6078   {#1}%
6079 }
```

ccessdescplural Display the descplural value (no link and no check for existence) converted to upper case.

```
6080 \newcommand*{\GLSaccessdescplural}[1]{%
6081   \glsdescriptionpluralaccessdisplay
6082   {%
6083     \mfirstrucMakeUppercase{\glsentrydescplural{#1}}%
6084   }%
6085   {#1}%
6086 }
```

\glsaccessshort Display the short form (no link and no check for existence).

```
6087 \newcommand*{\glsaccessshort}[1]{%
6088   \glsshortaccessdisplay
6089   {%
6090     \glsentryshort{#1}%
6091   }%
6092   {#1}%
6093 }
```

\Glsaccessshort Display the short form with first letter converted to uppercase (no link and no check for existence).

```
6094 \newcommand*{\Glsaccessshort}[1]{%
6095   \glsshortaccessdisplay
6096   {%
6097     \Glsentryshort{#1}%
6098   }%
```

```

6099      {#1}%
6100  }

\GLSaccessshort  Display the short value (no link and no check for existence) converted to upper case.
6101  \newcommand*{\GLSaccessshort}[1]{%
6102    \glsshortaccessdisplay
6103    {%
6104      \mfirstucMakeUppercase{\glsentryshort{#1}}%
6105    }%
6106    {#1}%
6107  }

lsaccessshortpl  Display the short plural form (no link and no check for existence).
6108  \newcommand*{\lsaccessshortpl}[1]{%
6109    \glsshortpluralaccessdisplay
6110    {%
6111      \glsentryshortpl{#1}%
6112    }%
6113    {#1}%
6114  }

lsaccessshortpl  Display the short plural form with first letter converted to uppercase (no link and no check
for existence).
6115  \newcommand*{\lsaccessshortpl}[1]{%
6116    \glsshortpluralaccessdisplay
6117    {%
6118      \Glsentryshortpl{#1}%
6119    }%
6120    {#1}%
6121  }

Laccessshortpl  Display the shortplural value (no link and no check for existence) converted to upper case.
6122  \newcommand*{\Laccessshortpl}[1]{%
6123    \glsshortpluralaccessdisplay
6124    {%
6125      \mfirstucMakeUppercase{\glsentryshortpl{#1}}%
6126    }%
6127    {#1}%
6128  }

\glsaccesslong  Display the long form (no link and no check for existence).
6129  \newcommand*{\glsaccesslong}[1]{%
6130    \glslongaccessdisplay{\glsentrylong{#1}}{#1}%
6131  }

\Glsaccesslong  Display the long form (no link and no check for existence).
6132
6133  \newcommand*{\Glsaccesslong}[1]{%

```

```

6134     \glslongaccessdisplay{\Glsentrylong{#1}}{#1}%
6135 }

\GLSaccesslong Display the long value (no link and no check for existence) converted to upper case.
6136 \newcommand*{\GLSaccesslong}[1]{%
6137   \glslongaccessdisplay
6138   {%
6139     \mfirstucMakeUppercase{\glsentrylong{#1}}%
6140   }%
6141   {#1}%
6142 }

glsaccesslongpl Display the long plural form (no link and no check for existence).
6143 \newcommand*{\glsaccesslongpl}[1]{%
6144   \glslongpluralaccessdisplay{\glsentrylongpl{#1}}{#1}%
6145 }

Glsaccesslongpl Display the long plural form (no link and no check for existence).
6146 \newcommand*{\Glsaccesslongpl}[1]{%
6147   \glslongpluralaccessdisplay{\Glsentrylongpl{#1}}{#1}%
6148   {%
6149 }

GLSaccesslongpl Display the longplural value (no link and no check for existence) converted to upper case.
6150 \newcommand*{\GLSaccesslongpl}[1]{%
6151   \glslongpluralaccessdisplay
6152   {%
6153     \mfirstucMakeUppercase{\glsentrylongpl{#1}}%
6154   }%
6155   {#1}%
6156 }

```

Keys for accessibility support.

```

6157 \define@key{glsxtrabrv}{access}{%
6158   \def\@gls@nameaccess{#1}%
6159 }
6160 \define@key{glsxtrabrv}{textaccess}{%
6161   \def\@gls@textaccess{#1}%
6162 }
6163 \define@key{glsxtrabrv}{pluralaccess}{%
6164   \def\@gls@pluralaccess{#1}%
6165 }
6166 \define@key{glsxtrabrv}{firstaccess}{%
6167   \def\@gls@firstaccess{#1}%
6168 }
6169 \define@key{glsxtrabrv}{firstpluralaccess}{%
6170   \def\@gls@firstpluralaccess{#1}%
6171 }

```

```

6172 \define@key{glsxtrabrv}{shortaccess}{%
6173   \def\@gls@shortaccess{\#1}%
6174 }
6175 \define@key{glsxtrabrv}{shortpluralaccess}{%
6176   \def\@gls@shortaccesspl{\#1}%
6177 }
6178 \define@key{glsxtrabrv}{longaccess}{%
6179   \def\@gls@longaccess{\#1}%
6180 }
6181 \define@key{glsxtrabrv}{shortlonglaccess}{%
6182   \def\@gls@longaccesspl{\#1}%
6183 }

@initaccesskeys
6184 \newcommand*{\@gls@initaccesskeys}{%
6185   \def\@gls@nameaccess{}%
6186   \def\@gls@textaccess{}%
6187   \def\@gls@pluralaccess{}%
6188   \def\@gls@firstaccess{}%
6189   \def\@gls@firstpluralaccess{}%
6190   \def\@gls@shortaccess{}%
6191   \def\@gls@shortaccesspl{}%
6192   \def\@gls@longaccess{}%
6193   \def\@gls@longaccesspl{}%
6194 }

```

ssattribute@set

```
\gls@ifaccessattribute@set{\<attribute>}{\<true>}{\<false>}
```

```

6195 \newcommand*{\@gls@ifaccessattribute@set}[3]{%
6196   \glsifcategoryattribute{\glscategorylabel}{access#1}{true}%
6197   {#2}%
6198   {%
6199     \glsifcategoryattribute{\glscategorylabel}{access#1}{false}%
6200     {#3}%
6201     {%
6202       \glsifcategoryattribute{\glscategorylabel}{#1}{true}%
6203       {#2}%
6204       {#3}%
6205     }%
6206   }%
6207 }

```

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.

```
6208 \def\glsdefaultshortaccess#1#2{\#1 (#2)}
```

signactualsetup

```
6209 \newcommand{\glsxtrassignactualsetup}{%
6210 \let\@\empty
6211 \let\emph\@firstofone
6212 \let\textbf\@firstofone
6213 \let\textmd\@firstofone
6214 \let\textit\@firstofone
6215 \let\textsl\@firstofone
6216 \let\textsc\@firstofone
6217 \let\textrm\@firstofone
6218 \let\textsf\@firstofone
6219 \let\texttt\@firstofone
6220 }
```

s@assign@actual

```
6221 \ifdef\pdfstringdef
6222 {
6223 \newcommand{\@gls@assign@actual}{%
6224 \begingroup
6225 \glsxtrassignactualsetup
6226 \pdfstringdef{\gls@actualshort}{\glsxtrorgshort}%
6227 \pdfstringdef{\gls@actuallong}{\glsxtrorglong}%
6228 \pdfstringdef{\gls@actualshortpl}{\gls@shortpl}%
6229 \pdfstringdef{\gls@actuallongpl}{\gls@longpl}%
6230 \protected@edef{\gls@tmp}\endgroup
6231 \def\noexpand{\gls@actualshort}{\expandonce{\gls@actualshort}}%
6232 \def\noexpand{\gls@actuallong}{\expandonce{\gls@actuallong}}%
6233 \def\noexpand{\gls@actualshortpl}{\expandonce{\gls@actualshortpl}}%
6234 \def\noexpand{\gls@actuallongpl}{\expandonce{\gls@actuallongpl}}%
6235 }%
6236 \gls@tmp
6237 }
6238 }
6239 {
6240 \newcommand{\@gls@assign@actual}{%
6241 \begingroup
6242 \glsxtrassignactualsetup
```

```

6243     \protected@edef{\gls@tmp{\endgroup
6244         \def\noexpand{\gls@actualshort{\glsxtrorgshort}}%
6245         \def\noexpand{\gls@actuallong{\glsxtrorglong}}%
6246         \def\noexpand{\gls@actualshortpl{\gls@shortpl}}%
6247         \def\noexpand{\gls@actuallongpl{\gls@longpl}}%
6248     }%
6249     \gls@tmp
6250 }
6251 }
```

`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.

```

6252 \newcommand{\@gls@setup@default@access}{%
6253     \@gls@assign@actual
6254     \ifdefempty{\gls@shortaccess}
6255     {}%
```

Check if the accessinsertdots attribute has been set but only if shortaccess hasn't been set.

```

6256     \@gls@ifaccessattribute@set{insertdots}%
6257     {}%
6258     \expandafter\glsxtrinsertdots\expandafter\@gls@actualshort\expandafter
6259     {\gls@actualshort}%
6260     {}%
6261     {}%
6262     \ifdefempty{\gls@longaccess}
6263     {}%
6264     \edef{\gls@shortaccess{\glsdefaultshortaccess
6265         {\expandonce{\gls@actuallong}{\expandonce{\gls@actualshort}}}}%
6266     }%
6267     {}%
6268     \edef{\gls@shortaccess{\glsdefaultshortaccess
6269         {\expandonce{\gls@longaccess}{\expandonce{\gls@actualshort}}}}%
6270     }%
6271     \appto{\ExtraCustomAbbreviationFields{shortaccess={\gls@shortaccess},}}%
```

If shortaccessplural hasn't been set, assign plural form.

```

6272 \ifdefempty{\gls@shortaccesspl}
6273 {}%
6274     \@gls@ifaccessattribute@set{aposplural}%
6275     {}%
6276     \expandafter\def\expandafter\@gls@shortaccesspl\expandafter{%
6277         \gls@actualshort'\glsxtrabbrvpluralsuffix}%
6278     {}%
6279     {}%
6280     \@gls@ifaccessattribute@set{noshortplural}%
6281     {}%
6282     \let\@gls@shortaccesspl\gls@shortaccess
```

```

6283      }%
6284      {%
6285          \let\@gls@shortaccesspl\@gls@actualshortpl
6286          }%
6287      }%
6288      \ifdefempty\@gls@longaccesspl
6289      {%
6290          \edef\@gls@shortaccesspl{\glsdefaultshortaccess
6291              {\expandonce\@gls@actuallongpl}{\expandonce\@gls@actualshortpl}}%
6292      }%
6293      {%
6294          \edef\@gls@shortaccesspl{\glsdefaultshortaccess
6295              {\expandonce\@gls@longaccesspl}{\expandonce\@gls@actualshort}}%
6296      }%
6297      \eappto\ExtraCustomAbbreviationFields{shortpluralaccess={\@gls@shortaccesspl},}%
6298      }%
6299      {}%
6300  }%
6301  {%
6302      \ifdefempty\@gls@shortaccesspl
6303          {\let\@gls@shortaccesspl\@gls@shortaccess}%
6304      {}%
6305  }%

```

If access key hasn't been set, check if the nameshortaccess attribute has been set.

```

6306      \ifdefempty\@gls@nameaccess
6307      {%
6308          \glsifcategoryattribute{\glscategorylabel}{nameshortaccess}{true}}%
6309          {%
6310              \eappto\ExtraCustomAbbreviationFields{access={\@gls@shortaccess},}%
6311          }%
6312      {}%
6313  }%
6314  {}%

```

If textaccess key hasn't been set, check if the textshortaccess attribute has been set.

```

6315      \ifdefempty\@gls@textaccess
6316      {%
6317          \glsifcategoryattribute{\glscategorylabel}{textshortaccess}{true}}%
6318          {%
6319              \eappto\ExtraCustomAbbreviationFields{textaccess={\@gls@shortaccess},}%
6320          }%
6321      {}%
6322  }%
6323  {}%
6324  \ifdefempty\@gls@pluralaccess
6325  {%
6326      \glsifcategoryattribute{\glscategorylabel}{textshortaccess}{true}}%
6327      {%
6328          \eappto\ExtraCustomAbbreviationFields{%

```

```

6329         pluralaccess={\@gls@shortaccesspl},%
6330     }%
6331   }%
6332   {}%
6333 }%
6334 {}%

```

If `firstaccess` key hasn't been set, check if the `firstshortaccess` attribute has been set.

```

6335 \ifdefempty{\gls@firstaccess}
6336 {%
6337   \glsifcategoryattribute{\glscategorylabel}{firstshortaccess}{true}%
6338   {%
6339     \eappto{\ExtraCustomAbbreviationFields}{firstaccess={\@gls@shortaccess},}%
6340   }%
6341   {}%
6342 }%
6343 {}%
6344 \ifdefempty{\gls@firstpluralaccess}
6345 {%
6346   \glsifcategoryattribute{\glscategorylabel}{firstshortaccess}{true}%
6347   {%
6348     \eappto{\ExtraCustomAbbreviationFields}{%
6349       firstpluralaccess={\@gls@shortaccesspl},%
6350     }%
6351   }%
6352   {}%
6353 }%
6354 {}%
6355 }

```

Provide hooks for `\setabbreviationstyle` that automatically set the attributes appropriate for the style. If the name is just the short form and the description contains the long form, then it may not be necessary to set `nameshortaccess` but it would depend on the glossary style.

Need to provide `\glsxtr<category><field>accsupp` if not already defined.

#### ovideaccsuppcmd

```

6356 \newcommand*{\glsxtrprovideaccsuppcmd}[2]{%
6357   \ifcsundef{\glsxtr#1#2accsupp}%
6358   { \csdef{\glsxtr#1#2accsupp}{\glsshortaccsupp} }%
6359   {}%
6360 }

```

#### rSetNoLongAttrs

For styles where the name, first and text are just the abbreviation.

```

6361 \newcommand*{\glsxtrAccSuppAbbrSetNoLongAttrs}[1]{%
6362   \glssetcategoryattribute{#1}{nameshortaccess}{true}%
6363   \glssetcategoryattribute{#1}{firstshortaccess}{true}%
6364   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6365   \glsxtrprovideaccsuppcmd{#1}{name}%
6366   \glsxtrprovideaccsuppcmd{#1}{first}%

```

```

6367   \glsxtrprovideaccsuppcmd{#1}{firstpl}%
6368   \glsxtrprovideaccsuppcmd{#1}{text}%
6369   \glsxtrprovideaccsuppcmd{#1}{plural}%
6370 }
```

**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.

```

6371 \newcommand*\glsxtrAccSuppAbbrSetFirstLongAttrs[1]{%
6372   \glssetcategoryattribute{#1}{nameshortaccess}{true}%
6373   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6374   \glsxtrprovideaccsuppcmd{#1}{name}%
6375   \glsxtrprovideaccsuppcmd{#1}{text}%
6376   \glsxtrprovideaccsuppcmd{#1}{plural}%
6377 }
```

**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.

```

6378 \newcommand*\glsxtrAccSuppAbbrSetTextShortAttrs[1]{%
6379   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6380   \glsxtrprovideaccsuppcmd{#1}{text}%
6381   \glsxtrprovideaccsuppcmd{#1}{plural}%
6382 }
```

**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.

```

6383 \newcommand*\glsxtrAccSuppAbbrSetNameShortAttrs[1]{%
6384   \glssetcategoryattribute{#1}{nameshortaccess}{true}%
6385   \glsxtrprovideaccsuppcmd{#1}{name}%
6386 }
```

**tNameLongAttrs** 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.

```

6387 \newcommand*\glsxtrAccSuppAbbrSetNameLongAttrs[1]{%
6388   \glssetcategoryattribute{#1}{firstshortaccess}{true}%
6389   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6390   \glsxtrprovideaccsuppcmd{#1}{first}%
6391   \glsxtrprovideaccsuppcmd{#1}{firstpl}%
6392   \glsxtrprovideaccsuppcmd{#1}{text}%
6393   \glsxtrprovideaccsuppcmd{#1}{plural}%
6394 }
```

End of if accsupp part

```

6395 }
6396 {
```

No accessibility support. Just define these commands to do \glsentry<xxx>

\glsaccessname Display the name value (no link and no check for existence).  
6397 \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.  
6398 \newcommand\*{\Glsaccessname}[1]{\Glsentryname{#1}}

\GLSaccessname Display the name value (no link and no check for existence). converted to upper case.  
6399 \newcommand\*{\GLSaccessname}[1]{%  
6400 \protect\mfirstucMakeUppercase{\glsentryname{#1}}}

\glsaccesstext Display the text value (no link and no check for existence).  
6401 \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.  
6402 \newcommand\*{\Glsaccesstext}[1]{\Glsentrytext{#1}}

\GLSaccesstext Display the text value (no link and no check for existence). converted to upper case.  
6403 \newcommand\*{\GLSaccesstext}[1]{%  
6404 \protect\mfirstucMakeUppercase{\glsentrytext{#1}}}

\glsaccessplural Display the plural value (no link and no check for existence).  
6405 \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.  
6406 \newcommand\*{\Glsaccessplural}[1]{\Glsentryplural{#1}}

\GLSaccessplural Display the plural value (no link and no check for existence). converted to upper case.  
6407 \newcommand\*{\GLSaccessplural}[1]{%  
6408 \protect\mfirstucMakeUppercase{\glsentryplural{#1}}}

\glsaccessfirst Display the first value (no link and no check for existence).  
6409 \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.  
6410 \newcommand\*{\Glsaccessfirst}[1]{\Glsentryfirst{#1}}

\GLSaccessfirst Display the first value (no link and no check for existence). converted to upper case.  
6411 \newcommand\*{\GLSaccessfirst}[1]{%  
6412 \protect\mfirstucMakeUppercase{\glsentryfirst{#1}}}

\glsaccessfirstplural Display the firstplural value (no link and no check for existence).  
6413 \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.  
 6414 \newcommand\*{\Glsaccessfirstplural}[1]{\Glsentryfirstplural{\#1}}

cessfirstplural Display the firstplural value (no link and no check for existence). converted to upper case.  
 6415 \newcommand\*{\GLSaccessfirstplural}[1]{%  
 6416 \protect\mfirstucMakeUppercase{\glsentryfirstplural{\#1}}}

glsaccesssymbol Display the symbol value (no link and no check for existence).  
 6417 \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.  
 6418 \newcommand\*{\Glsaccesssymbol}[1]{\Glsentrysymbol{\#1}}

GLSaccesssymbol Display the symbol value (no link and no check for existence). converted to upper case.  
 6419 \newcommand\*{\GLSaccesssymbol}[1]{%  
 6420 \protect\mfirstucMakeUppercase{\glsentrysymbol{\#1}}}

esssymbolplural Display the symbolplural value (no link and no check for existence).  
 6421 \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.  
 6422 \newcommand\*{\Glsaccesssymbolplural}[1]{\Glsentrysymbolplural{\#1}}

esssymbolplural Display the symbolplural value (no link and no check for existence). converted to upper case.  
 6423 \newcommand\*{\GLSaccesssymbolplural}[1]{%  
 6424 \protect\mfirstucMakeUppercase{\glsentrysymbolplural{\#1}}}

\glsaccessdesc Display the desc value (no link and no check for existence).  
 6425 \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.  
 6426 \newcommand\*{\Glsaccessdesc}[1]{\Glsentrydesc{\#1}}

\GLSaccessdesc Display the desc value (no link and no check for existence). converted to upper case.  
 6427 \newcommand\*{\GLSaccessdesc}[1]{%  
 6428 \protect\mfirstucMakeUppercase{\glsentrydesc{\#1}}}

ccessdescplural Display the descplural value (no link and no check for existence).  
 6429 \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.  
 6430 \newcommand\*{\Glsaccessdescplural}[1]{\Glsentrydescplural{\#1}}

ccessdescplural Display the descplural value (no link and no check for existence). converted to upper case.  
 6431 \newcommand\*{\GLSaccessdescplural}[1]{%  
 6432 \protect\mfirstucMakeUppercase{\glsentrydescplural{\#1}}}

\glsaccessshort Display the short form (no link and no check for existence).  
 6433 \newcommand\*{\glsaccessshort}[1]{\glsentryshort{\#1}}

\Glsaccessshort Display the short form with first letter converted to uppercase (no link and no check for existence).  
 6434 \newcommand\*{\Glsaccessshort}[1]{\Glsentryshort{\#1}}

\GLSaccessshort Display the short value (no link and no check for existence). converted to upper case.  
 6435 \newcommand\*{\GLSaccessshort}[1]{%  
 6436 \protect\mfirstucMakeUppercase{\glsentryshort{\#1}}}

\glsaccessshortpl Display the short plural form (no link and no check for existence).  
 6437 \newcommand\*{\glsaccessshortpl}[1]{\glsentryshortpl{\#1}}

\glsaccessshortpl Display the short plural form with first letter converted to uppercase (no link and no check for existence).  
 6438 \newcommand\*{\Glsaccessshortpl}[1]{\Glsentryshortpl{\#1}}

\Glsaccessshortpl Display the shortplural value (no link and no check for existence). converted to upper case.  
 6439 \newcommand\*{\GLSaccessshortpl}[1]{%  
 6440 \protect\mfirstucMakeUppercase{\glsentryshortpl{\#1}}}

\glsaccesslong Display the long form (no link and no check for existence).  
 6441 \newcommand\*{\glsaccesslong}[1]{\glsentrylong{\#1}}

\Glsaccesslong Display the long form (no link and no check for existence).  
 6442 \newcommand\*{\Glsaccesslong}[1]{\Glsentrylong{\#1}}

\GLSaccesslong Display the long value (no link and no check for existence). converted to upper case.  
 6443 \newcommand\*{\GLSaccesslong}[1]{%  
 6444 \protect\mfirstucMakeUppercase{\glsentrylong{\#1}}}

\glsaccesslongpl Display the long plural form (no link and no check for existence).  
 6445 \newcommand\*{\glsaccesslongpl}[1]{\glsentrylongpl{\#1}}

\Glsaccesslongpl Display the long plural form (no link and no check for existence).  
 6446 \newcommand\*{\Glsaccesslongpl}[1]{\Glsentrylongpl{\#1}}

```

GLSaccesslongpl  Display the longplural value (no link and no check for existence). converted to upper case.
6447  \newcommand*{\GLSaccesslongpl}[1]{%
6448   \protect\mfirstucMakeUppercase{\glsentrylongpl{\#1}}}

@initaccesskeys  This does nothing if there's no accessibility support.
6449  \newcommand*{\@gls@initaccesskeys}{}

@default@access  This does nothing if there's no accessibility support.
6450  \newcommand{\@gls@setup@default@access}{}

rSetNoLongAttrs  This does nothing if there's no accessibility support.
6451  \newcommand*{\glsxtrAccSuppAbbrSetNoLongAttrs}[1]{}

tFirstLongAttrs  This does nothing if there's no accessibility support.
6452  \newcommand*{\glsxtrAccSuppAbbrSetFirstLongAttrs}[1]{}

tTextShortAttrs  This does nothing if there's no accessibility support.
6453  \newcommand*{\glsxtrAccSuppAbbrSetTextShortAttrs}[1]{}

tNameShortAttrs  This does nothing if there's no accessibility support.
6454  \newcommand*{\glsxtrAccSuppAbbrSetNameShortAttrs}[1]{}

etNameLongAttrs  This does nothing if there's no accessibility support.
6455  \newcommand*{\glsxtrAccSuppAbbrSetNameLongAttrs}[1]{}
      End of else part
6456 }

```

## 1.6 Categories

```

\glscategory  Add a new storage key that can be used to indicate a category. The default category is general.
6457 \glsaddstoragekey{category}{general}{\glscategory}

\glsifcategory  Convenient shortcut to determine if an entry has the given category.
6458 \newcommand{\glsifcategory}[4]{%
6459   \ifglsfieldeq{\#1}{category}{\#2}{\#3}{\#4}%
6460 }

Categories can have attributes.

```

tegoryattribute

`\glssetcategoryattribute{\langle category \rangle}{\langle attribute-label \rangle}{\langle value \rangle}`

Set (or override if already set) an attribute for the given category.

```

6461 \newcommand*{\glssetcategoryattribute}[3]{%
6462   \csdef{@glsxtr@categoryattr@@\#1@#2}{\#3}%
6463 }

```

categoryattribute

```
\glsgetcategoryattribute{\langle category \rangle}{\langle attribute-label \rangle}
```

Get the value of the given attribute for the given category. Does nothing if the attribute isn't defined.

```
6464 \newcommand*{\glsgetcategoryattribute}[2]{%
6465   \csuse{@glsxtr@categoryattr@@#1@#2}%
6466 }
```

categoryattribute

```
\glshascategoryattribute{\langle category \rangle}{\langle attribute-label \rangle}{\langle true \rangle}{\langle false \rangle}
```

Tests if the category has the given attribute set.

```
6467 \newcommand*{\glshascategoryattribute}[4]{%
6468   \ifcsvoid{@glsxtr@categoryattr@@#1@#2}{#4}{#3}%
6469 }
```

glssetattribute

```
\glssetattribute{\langle entry_label \rangle}{\langle attribute-label \rangle}{\langle value \rangle}
```

Short cut where the category label is obtained from the entry information.

```
6470 \newcommand*{\glssetattribute}[3]{%
6471   \glssetcategoryattribute{\glscategory{#1}}{#2}{#3}%
6472 }
```

glsgetattribute

```
\glsgetattribute{\langle entry_label \rangle}{\langle attribute-label \rangle}
```

Short cut where the category label is obtained from the entry information.

```
6473 \newcommand*{\glsgetattribute}[2]{%
6474   \glsgetcategoryattribute{\glscategory{#1}}{#2}%
6475 }
```

glshasattribute

```
\glshasattribute{\langle entry_label \rangle}{\langle attribute-label \rangle}{\langle true \rangle}{\langle false \rangle}
```

Short cut to test if the given attribute has been set where the category label is obtained from the entry information.

```

6476 \newcommand*\glshasattribute}[4]{%
6477   \ifglsentryexists{#1}%
6478     {\glshascategoryattribute{\glscategory{#1}}{#2}{#3}{#4}}%
6479     {#4}%
6480 }

```

\categoryattribute

$\glsifcategoryattribute{\langle category \rangle}{\langle attribute-label \rangle}{\langle value \rangle}{\langle true part \rangle}{\langle false part \rangle}$

True if category has the attribute with the given value.

```

6481 \newcommand{\glsifcategoryattribute}[5]{%
6482   \ifcsundef{@glsxtr@categoryattr@@#1@#2}%
6483   {#5}%
6484   {\ifcsstring{@glsxtr@categoryattr@@#1@#2}{#3}{#4}{#5}}%
6485 }

```

\glsifattribute

$\glsifattribute{\langle entry\_label \rangle}{\langle attribute-label \rangle}{\langle value \rangle}{\langle true part \rangle}{\langle false part \rangle}$

Short cut to determine if the given entry has a category with the given attribute set.

```

6486 \newcommand{\glsifattribute}[5]{%
6487   \ifglsentryexists{#1}%
6488   {\glsifcategoryattribute{\glscategory{#1}}{#2}{#3}{#4}{#5}}%
6489   {#5}%
6490 }

```

Set attributes for the default general category:

```
6491 \glssetcategoryattribute{general}{regular}{true}
```

Acronyms are regular by default, since they're typically just treated like normal words.

```
6492 \glssetcategoryattribute{acronym}{regular}{true}
```

`regularcategory` Convenient shortcut to add the regular attribute.

```

6493 \newcommand*\glssetregularcategory}[1]{%
6494   \glssetcategoryattribute{#1}{regular}{true}%
6495 }

```

`regularcategory`

$\glsifregularcategory{\langle category \rangle}{\langle true part \rangle}{\langle false part \rangle}$

Short cut to determine if a category has the regular attribute explicitly set to true.

```
6496 \newcommand{\glsifregularcategory}[3]{%
6497   \glsifcategoryattribute{#1}{regular}{true}{#2}{#3}%
6498 }
```

regularcategory

```
\glsifnotregularcategory{\category}{\truepart}{\falsepart}
```

Short cut to determine if a category has the regular attribute explicitly set to false.

```
6499 \newcommand{\glsifnotregularcategory}[3]{%
6500   \glsifcategoryattribute{#1}{regular}{false}{#2}{#3}%
6501 }
```

\glsifregular

```
\glsifregular{\entrylabel}{\truepart}{\falsepart}
```

Short cut to determine if an entry has a regular attribute set to true.

```
6502 \newcommand{\glsifregular}[3]{%
6503   \glsifregularcategory{\glscategory{#1}}{#2}{#3}%
6504 }
```

glsifnotregular

```
\glsifnotregular{\entrylabel}{\truepart}{\falsepart}
```

Short cut to determine if an entry has a regular attribute set to false.

```
6505 \newcommand{\glsifnotregular}[3]{%
6506   \glsifnotregularcategory{\glscategory{#1}}{#2}{#3}%
6507 }
```

reachincategory

```
\glsforeachincategory[\glossarylabels]{\categorylabel}{%
  \glossarycs}{\labelcs}{\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.

```
6508 \newcommand{\glsforeachincategory}[5][\@glo@types]{%
6509   \forallglossaries[#1]{#3}}
```

```

6510  {%
6511      \forglsentries[#3]{#4}%
6512      {%
6513          \glsifcategory{#4}{#2}{#5}{()}%
6514      }%
6515  }%
6516 }

```

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.

```

6517 \newcommand{\glsforeachwithattribute}[6][\@glo@types]{%
6518   \forallglossaries[#1]{#4}%
6519   {%
6520     \forglsentries[#4]{#5}%
6521     {%
6522       \glsifattribute{#5}{#2}{#3}{#6}{()}%
6523     }%
6524   }%
6525 }

```

If *\newterm* has been defined, redefine it so that it automatically sets the category label to *index* and add *\glsxtrpostdescription*.

```

6526 \ifdef\newterm
6527 {%

```

*\newterm*

```

6528 \renewcommand*{\newterm}[2][]{%
6529   \newglossaryentry[#2]{%
6530     {type={index},category=index,name={#2},%
6531      description={\glsxtrpostdescription\nopostdesc},#1}%
6532   }

```

Indexed terms are regular by default.

```

6533 \glssetcategoryattribute{index}{regular}{true}

```

*trpostdescindex*

```

6534 \newcommand*{\glsxtrpostdescindex}{}%
6535 }%
6536 {}

```

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.

```
6537 \ifdef\printsymbols  
6538 {%
```

`glsxtrnewsymbol` Unlike `\newterm`, this has a separate argument for the label (since the symbol will likely contain commands).

```
6539 \newcommand*\glsxtrnewsymbol[3][]{%  
6540   \newglossaryentry{#2}{name={#3},sort={#2},type=symbols,category=symbol,#1}%  
6541 }
```

Symbols are regular by default.

```
6542 \glssetcategoryattribute{symbol}{regular}{true}
```

`rpostdescsymbol`

```
6543 \newcommand*\glsxtrpostdescsymbol{}  
  
6544 }  
6545 {}
```

Similar for the numbers option.

```
6546 \ifdef\printnumbers  
6547 {%
```

`glsxtrnewnumber`

```
6548 \ifdef\printnumbers  
6549 \newcommand*\glsxtrnewnumber[3][]{%  
6550   \newglossaryentry{#2}{name={#3},sort={#2},type=numbers,category=number,#1}%  
6551 }
```

Numbers are regular by default.

```
6552 \glssetcategoryattribute{number}{regular}{true}
```

`rpostdescnumber`

```
6553 \newcommand*\glsxtrpostdescnumber{}  
  
6554 }  
6555 {}
```

`sxtersetcategory` Set the category for all listed labels. The first argument is the list of entry labels and the second argument is the category label.

```
6556 \newcommand*\glsxtrsetcategory[2]{%  
6557   @for@glsxtr@label:=#1\do  
6558   {  
6559     \glsfieldxdef{@glsxtr@label}{category}{#2}%  
6560   }%  
6561 }
```

`\categoryforall` 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.

```
6562 \newcommand*{\glsxtrsetcategoryforall}[2]{%
6563   \forallglossaries[#1]{\glsxtr@type}{%
6564     \forglsentries[\glsxtr@type]{\glsxtr@label}{%
6565       {%
6566         \glsfieldxdef{\glsxtr@label}{category}{#2}{%
6567       }%
6568     }%
6569   }%
```

`\fieldtitlecase`

```
\glsxtrfieldtitlecase{\label}{\field}
```

Apply title casing to the contents of the given field.

```
6570 \newcommand*{\glsxtrfieldtitlecase}[2]{%
6571   \expandafter\glsxtrfieldtitlecasecs\expandafter
6572   {\csname glo@\glsdetoklabel{#1}@#2\endcsname}{%
6573 }}
```

`\fieldtitlecasecs` The command used by `\glsxtrfieldtitlecase`. May be redefined to use a different command, for example, `\xcapitalisefmtwords`.

```
6574 \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.

```
6575 \@ifpackageloaded{glossaries-accsupp}
6576 {
6577   \renewcommand*{\glossentrydesc}[1]{%
6578     \glsdoifexistsorwarn{#1}{%
6579       {%
6580         \glssetabrvfmt{\glscategory{#1}}{}}
```

As from version 1.04, allow the `glossdescfont` attribute to determine the font applied.

```
6581   \glshasattribute{#1}{glossdescfont}{%
6582     {%
6583       \edef\glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}{%
6584         \ifcsdef\glsxtr@attrval{%
6585           {%
6586             \letcs{\glsxtr@glossdescfont}{\glsxtr@attrval}{%
6587           }%
6588         {%
6589           \GlossariesExtraWarning{Unknown control sequence name
```

```

6590     '@glsxtr@attrval' supplied in glossdescfont attribute
6591     for entry '#1'. Ignoring}%
6592     \let\@glsxtr@glossdescfont\@firstofone
6593     }%
6594   }%
6595   {\let\@glsxtr@glossdescfont\@firstofone}%
6596   \glsifattribute{#1}{glossdesc}{firstuc}%
6597   {%
6598     \@glsxtr@glossdescfont{\Glsaccessdesc{#1}}%
6599   }%
6600   {%
6601     \glsifattribute{#1}{glossdesc}{title}%
6602     {%
6603       \@glsxtr@do@titlecaps@warn
6604       \glsdescriptionaccessdisplay
6605       {%
6606         \@glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
6607       }%
6608       {#1}%
6609     }%
6610     {%
6611       \@glsxtr@glossdescfont{\glsaccessdesc{#1}}%
6612     }%
6613   }%
6614 }%
6615 }%
6616 }%
6617 {%
6618 \renewcommand*{\glossentrydesc}[1]{%
6619   \glsdoifexistsorwarn{#1}%
6620   {%
6621     \glssetabbrvfmt{\glscategory{#1}}%
6622     \glshasattribute{#1}{glossdescfont}%
6623     {%
6624       \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%
6625       \ifcscdef{\@glsxtr@attrval}%
6626       {%
6627         \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}%
6628       }%
6629       {%
6630         \GlossariesExtraWarning{Unknown control sequence name
6631           '\@glsxtr@attrval' supplied in glossdescfont attribute
6632           for entry '#1'. Ignoring}%
6633         \let\@glsxtr@glossdescfont\@firstofone
6634       }%
6635     }%
6636     {\let\@glsxtr@glossdescfont\@firstofone}%
6637     \glsifattribute{#1}{glossdesc}{firstuc}%
6638   }%

```

```

6639      \glsxtr@glossdescfont{\Glsentrydesc{#1}}%
6640  }%
6641  {%
6642      \glsifattribute{#1}{glossdesc}{title}%
6643  {%
6644      \glsxtr@do@titlecaps@warn
6645      \glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
6646  }%
6647  {%
6648      \glsxtr@glossdescfont{\glsentrydesc{#1}}%
6649  }%
6650  }%
6651  }%
6652 }
6653 }

```

\glossentryname If the glossname attribute is “firstuc” convert first letter to upper case. If the attribute is “title” use title case.

```

6654 \@ifpackageloaded{glossaries-accsupp}
6655 {
6656 \renewcommand*\glossentryname[1]{%
6657     \glsdoifexistsorwarn{#1}%
6658     {%
6659         \glssetabrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the glossnamefont attribute to determine the font applied.

```

6660     \glshasattribute{#1}{glossnamefont}%
6661     {%
6662         \edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6663         \ifcsdef\glsxtr@attrval{%
6664             {%
6665                 \letcs\glsxtr@glossnamefont{\glsxtr@attrval}%
6666             }%
6667             {%
6668                 \GlossariesExtraWarning{Unknown control sequence name
6669                 ‘\glsxtr@attrval’ supplied in glossnamefont attribute
6670                 for entry ‘#1’. Reverting to default \string\glsnamefont}%
6671                 \let\glsxtr@glossnamefont\glsnamefont
6672             }%
6673             {%
6674                 \let\glsxtr@glossnamefont\glsnamefont}%
6675                 \glsifattribute{#1}{glossname}{firstuc}%
6676             {%
6677                 \glsnameaccessdisplay
6678             {%
6679                 \glsxtr@glossnamefont{\Glossentryname{#1}}%
6680             }%
6681             {#1}%
6682         }%
6683     }%

```

```

6684     \glsifattribute{#1}{glossname}{title}%
6685     {%
6686         \glsxtr@do@titlecaps@warn
6687         \glsnameaccessdisplay
6688         {%
6689             \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
6690         }%
6691         {#1}%
6692     }%
6693     {%
6694         \glsifattribute{#1}{glossname}{uc}%
6695     }%
6696         \glsnameaccessdisplay
6697     {%

```

Hide the label from the upper-casing command.

```

6698         \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6699         \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
6700     }%
6701     {#1}%
6702 }%
6703 {%
6704     \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6705     \glsnameaccessdisplay
6706     {%
6707         \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
6708     }%
6709     {#1}%
6710     {%
6711     }%
6712 }%

```

Do post-name hook:

```

6713     \glsxtrpostnamehook{#1}%
6714     {%
6715 }
6716 }
6717 {
6718 \renewcommand*\glossentryname[1]{%
6719     \glsdoifexistsorwarn{#1}%
6720     {%
6721         \glssetabrvfmt{\glscategory{#1}}%
6722         \glshasattribute{#1}{glossnamefont}%
6723     {%
6724         \edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6725         \ifcsdef{\glsxtr@attrval}%
6726         {%
6727             \letcs{\glsxtr@glossnamefont}{\glsxtr@attrval}%
6728         }%
6729     {%

```

```

6730     \GlossariesExtraWarning{Unknown control sequence name
6731         '@glsxtr@attrval' supplied in glossnamefont attribute
6732         for entry '#1'. Reverting to default \string\glsnamefont}%
6733         \let@\glsxtr@glossnamefont\glsnamefont
6734     }%
6735 }%
6736 {\let@\glsxtr@glossnamefont\glsnamefont}%
6737 \glsifattribute{#1}{glossname}{firstuc}%
6738 {%
6739     \glsxtr@glossnamefont{\Glsentryname{#1}}%
6740 }%
6741 {%
6742     \glsifattribute{#1}{glossname}{title}%
6743     {%
6744         \glsxtr@do@titlecaps@warn
6745         \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
6746     }%
6747     {%
6748         \glsifattribute{#1}{glossname}{uc}%
6749     }%

```

Hide the label from the upper-casing command.

```

6750     \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6751     \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
6752 }%
6753 {%

```

This little trick is used by glossaries to allow the user to redefine \glsnamefont to use \makefirstuc. Support it even though they can now use the firstuc attribute.

```

6754     \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6755     \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
6756 }%
6757 }%
6758 }%

```

Do post-name hook.

```

6759     \glsxtrpostnamehook{#1}%
6760 }%
6761 }
6762 }

```

\Glossentryname Redefine to set the abbreviation format and accessibility support.

```

6763 \@ifpackageloaded{glossaries-accsupp}%
6764 {
6765     \renewcommand*\Glossentryname[1]{%
6766         \glsdoifexistsorwarn{#1}%
6767     {%
6768         \glssetabbrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the glossnamefont attribute to determine the font applied.

```

6769     \glshasattribute{#1}{glossnamefont}%

```

```

6770  {%
6771      \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6772      \ifcsdef{\@glsxtr@attrval}%
6773      {%
6774          \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6775      }%
6776      {%
6777          \GlossariesExtraWarning{Unknown control sequence name
6778              '\@glsxtr@attrval' supplied in glossnamefont attribute
6779              for entry '#1'. Reverting to default \string\glsnamefont}%
6780          \let\@glsxtr@glossnamefont\glsnamefont
6781      }%
6782  }%
6783  {\let\@glsxtr@glossnamefont\glsnamefont}%
6784  \glsnameaccessdisplay
6785  {%
6786      \@glsxtr@glossnamefont{\Glsentryname{#1}}%
6787  }%
6788  {#1}%

```

Do post-name hook:

```

6789      \glsxtrpostnamehook{#1}%
6790  }%
6791 }
6792 }
6793 {
6794 \renewcommand*\Glossentryname[1]{%
6795     \glsdoifexistsorwarn{#1}%
6796     {%
6797         \glssetabbrvfmt{\glscategory{#1}}%
6798         \glshasattribute{#1}{glossnamefont}%
6799     }%
6800     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6801     \ifcsdef{\@glsxtr@attrval}%
6802     {%
6803         \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6804     }%
6805     {%
6806         \GlossariesExtraWarning{Unknown control sequence name
6807             '\@glsxtr@attrval' supplied in glossnamefont attribute
6808             for entry '#1'. Reverting to default \string\glsnamefont}%
6809         \let\@glsxtr@glossnamefont\glsnamefont
6810     }%
6811 }%
6812 {\let\@glsxtr@glossnamefont\glsnamefont}%
6813 \@glsxtr@glossnamefont{\Glsentryname{#1}}%

```

Do post-name hook:

```

6814      \glsxtrpostnamehook{#1}%
6815  }%

```

```
6816 }
6817 }
```

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.

```
6818 \newcommand*{\glsxtrpostnamehook}[1]{%
6819   \let\@glsnumberformat\@glsxtr@defaultnumberformat
6820   \glsxtrdoautoindexname{#1}{indexname}}%
```

Allow additional code regardless of category:

```
6821 \glsextrapostnamehook{#1}%
6822 \csuse{glsxtrpostname\glscategory{#1}}%
6823 }
```

trapostnamehook

```
6824 \newcommand*{\glsextrapostnamehook}[1]{}%
```

\glsdefpostname Provide a convenient command for defining the post-name hook for the given category.

```
6825 \newcommand*{\glsdefpostname}[2]{%
6826   \csdef{glsxtrpostname#1}{#2}%
6827 }
```

etaccessdisplay

```
6828 \@ifpackageloaded{glossaries-accsupp}
6829 {
6830   \newcommand*{\glsxtr@setaccessdisplay}[1]{%
6831     \ifcsdef{gls#1accessdisplay}%
6832       {\let\cs\glsxtr@accessdisplay{gls#1accessdisplay}}%
6833     {}%
6834 }
```

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.

```
6835   \edef\@gls@thisval{#1}%
6836   \for\@gls@map:=\@gls@keymap\do{%
6837     \edef\@this@key{\expandafter\@secondoftwo\@gls@map}%
6838     \ifdefequal{\@this@key}{\@gls@thisval}%
6839     \%
6840     \edef\@gls@thisval{\expandafter\@firstoftwo\@gls@map}%
6841     \endfortrue
6842     {}%
6843   }%
6844 }
```

```

6845      {\let\cs\@glsxtr@accessdisplay{\glsh@thisval \accessdisplay}}%
6846      {\let\@glsxtr@accessdisplay\@firstoftwo}%
6847  }%
6848 }
6849 }%
6850 {%
6851 \newcommand*{\glsxtr@setaccessdisplay}[1]{%
6852   \let\@glsxtr@accessdisplay\@firstoftwo}%
6853 }

```

`sentrynameother` Provide a command that works like `\glossentryname` but accesses a different field (which must be supplied using its internal field label).

```

6854 \newrobustcmd*{\glossentrynameother}[2]{%
6855   \glsdoifexistsorwarn{#1}%
6856   {%

```

Accessibility support:

```
6857   \glsxtr@setaccessdisplay{#2}%

```

Set the abbreviation format:

```

6858   \glssetabrvfmt{\glscategory{#1}}%
6859   \glshasattribute{#1}{glossnamefont}%
6860   {%
6861     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6862     \ifcscdef{\@glsxtr@attrval}%
6863     {%
6864       \let\cs\@glsxtr@glossnamefont{\@glsxtr@attrval}%
6865     }%
6866     {%
6867       \GlossariesExtraWarning{Unknown control sequence name
6868         '\@glsxtr@attrval' supplied in glossnamefont attribute
6869         for entry '#1'. Reverting to default \string\glsnamefont}%
6870       \let\@glsxtr@glossnamefont\glsnamefont
6871     }%
6872   }%
6873   {\let\@glsxtr@glossnamefont\glsnamefont}%
6874   \glsifattribute{#1}{glossname}{firstuc}%
6875   {%
6876     \glsxtr@accessdisplay
6877     {\@glsxtr@glossnamefont{\@Gls@entry@field{#1}{#2}}}%
6878     {#1}%
6879   }%
6880   {%
6881     \glsifattribute{#1}{glossname}{title}%
6882     {%
6883       \glsxtr@do@titlecaps@warn
6884       \glsxtr@accessdisplay
6885       {\@glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{#2}}}%
6886     {#1}%
6887   }%

```

```

6888      {%
6889          \glsifattribute{#1}{glossname}{uc}%
6890          {%
6891              \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
6892              \glsxtr@accessdisplay
6893              {\glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}}%
6894              {#1}%
6895          }%
6896          {%
6897              \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
6898              \glsxtr@accessdisplay
6899              {\expandafter\glsxtr@glossnamefont\expandafter{\glo@name}}%
6900              {#1}%
6901          }%
6902      }%
6903  }%

```

Do post-name hook.

```

6904      \glsxtrpostnamehook{#1}%
6905  }%
6906 }

```

`format@override` Determines if the `format` key should override the indexing attribute value.

```

6907 \newif\if@glsxtr@format@Override
6908 \@glsxtr@format@Overridefalse

```

If overriding is enabled, the `\glshypernumber` command will have to be redefined in the index to use `\hyperpage` instead.

`xFormatOverride`

```

6909 \@ifpackageloaded{hyperref}
6910 {

```

If hyperref's `hyperindex` option is on, then `hyperref` will automatically add `\hyperpage`, so don't add it.

```

6911 \ifHy@hyperindex
6912     \newcommand*\GlsXtrEnableIndexFormatOverride{%
6913         \@glsxtr@format@Overridetrue
6914         \appto\theindex{\let\glshypernumber\@firstofone}%
6915     }
6916 \else
6917     \newcommand*\GlsXtrEnableIndexFormatOverride{%
6918         \@glsxtr@format@Overridetrue
6919         \appto\theindex{\let\glshypernumber\hyperpage}%
6920     }
6921 \fi
6922 }
6923 {
6924 \newcommand*\GlsXtrEnableIndexFormatOverride{%
6925     \@glsxtr@format@Overridetrue

```

```

6926  }
6927 }
6928 \only\GlsXtrEnableIndexFormatOverride

doautoindexname
6929 \newcommand*{\glsxtrdoautoindexname}[2]{%
6930   \glshasattribute{#1}{#2}%
6931  {%
  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.
6932    \glsxtr@autoindex@setname{#1}%
  If the attribute value is simply "true" don't add an encap, otherwise use the value as the encap.
6933    \protected@edef{\glsxtr@attrval}{\glsgetattribute{#1}{#2}}%
6934    \if@glsxtr@format@override
  6935      \ifx\glsnumberformat\glsxtr@defaultnumberformat
  6936      \else
  6937        \let\glsxtr@attrval\glsnumberformat
  6938      \fi
  6939    \fi
  6940    \ifdefstring{\glsxtr@attrval}{true}%
  6941    {}%
  6942    {\eappto{\glo@name}{\glsxtr@autoindex@encap{\glsxtr@attrval}}}%
  6943    \expandafter\glsxtrautoindex\expandafter{\glo@name}%
  6944  }%
  6945  {}%
6946 }

glsxtrautoindex
6947 \newcommand*{\glsxtrautoindex}{\index}

xtrautoindexesc
6948 \newcommand{\glsxtrautoindexesc}{%
6949   \gls@checkmkidxchars\glo@sort
6950   \glsxtr@autoindex@doextra@esc\glo@sort
6951 }

toindex@setname Assign \glo@name for use with indexname attribute.
6952 \newcommand*{\glsxtr@autoindex@setname}[1]{%
6953   \protected@edef{\glo@name}{\glsxtrautoindexentry{#1}}%
6954   \glsxtrautoindexassort{\glo@sort}{#1}%
6955   \glsxtrautoindexesc
6956   \epreto{\glo@name}{\glo@sort\glsxtr@autoindex@at}%
6957 }

rautoindexentry Command used for the actual part when auto-indexing.
6958 \newcommand*{\glsxtrautoindexentry}[1]{\string\glsentryname{#1}}

```

indexassingsort Used to assign the sort value when auto-indexing.

```
6959 \newcommand*{\glsxtrautoindexassingsort}[2]{%
6960   \glsletentryfield{#1}{#2}{sort}%
6961 }
```

dex@doextra@esc

```
6962 \newcommand*{\@glsxtr@autoindex@doextra@esc}[1]{%
```

Escape the escape character unless it has already been escaped.

```
6963 \ifx\@glsxtr@autoindex@esc\@gls@quotechar
6964 \else
6965   \def\@gls@checkedmkidx{}%
6966   \edef\@glsxtr@checkspch{}%
6967     \noexpand\@glsxtr@autoindex@escquote\expandonce{#1}%
6968     \noexpand\@empty\@glsxtr@autoindex@esc\noexpand\@nnil
6969     \@glsxtr@autoindex@esc\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6970   \@@glsxtr@checkspch
6971   \let#1\@gls@checkedmkidx\relax
6972 \fi
```

Escape actual character unless it has already been escaped.

```
6973 \ifx\@glsxtr@autoindex@at\@gls@actualchar
6974 \else
6975   \def\@gls@checkedmkidx{}%
6976   \edef\@glsxtr@checkspch{}%
6977     \noexpand\@glsxtr@autoindex@escat\expandonce{#1}%
6978     \noexpand\@empty\@glsxtr@autoindex@at\noexpand\@nnil
6979     \@glsxtr@autoindex@at\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6980   \@@glsxtr@checkspch
6981   \let#1\@gls@checkedmkidx\relax
6982 \fi
```

Escape level character unless it has already been escaped.

```
6983 \ifx\@glsxtr@autoindex@level\@gls@levelchar
6984 \else
6985   \def\@gls@checkedmkidx{}%
6986   \edef\@glsxtr@checkspch{}%
6987     \noexpand\@glsxtr@autoindex@esclevel\expandonce{#1}%
6988     \noexpand\@empty\@glsxtr@autoindex@level\noexpand\@nnil
6989     \@glsxtr@autoindex@level\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6990   \@@glsxtr@checkspch
6991   \let#1\@gls@checkedmkidx\relax
6992 \fi
```

Escape encap character unless it has already been escaped.

```
6993 \ifx\@glsxtr@autoindex@encap\@gls@encapchar
6994 \else
6995   \def\@gls@checkedmkidx{}%
6996   \edef\@glsxtr@checkspch{}%
6997     \noexpand\@glsxtr@autoindex@escencap\expandonce{#1}%
6998     \noexpand\@empty\@glsxtr@autoindex@encap\noexpand\@nnil
```

```

6999      \@glsxtr@autoindex@encap\noexpand\empty\noexpand\@glsxtr@endescspch}%
7000      \@@glsxtr@checkspch
7001      \let#1\gls@checkedmkidx\relax
7002  \fi
7003 }

```

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`.  
 7004 `\newcommand*{\@glsxtr@autoindex@at}{}`

`trSetActualChar` Set the actual character.  
 7005 `\newcommand*{\GlsXtrSetActualChar}[1]{%`  
 7006 `\gdef\@glsxtr@autoindex@at{#1}%`  
 7007 `\def\@glsxtr@autoindex@escat##1#2#1##3\@glsxtr@endescspch{%`  
 7008 `\@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escat}{##1}{##2}{##3}%`  
 7009 `}`  
 7010 `}`  
 7011 `@onlypreamble\GlsXtrSetActualChar`  
 7012 `\makeatother`  
 7013 `\GlsXtrSetActualChar{0}`  
 7014 `\makeatletter`

`autoindex@encap` Encap character for use with `\index`.  
 7015 `\newcommand*{\@glsxtr@autoindex@encap}{}`

`XtrSetEncapChar` Set the encap character.  
 7016 `\newcommand*{\GlsXtrSetEncapChar}[1]{%`  
 7017 `\gdef\@glsxtr@autoindex@encap{#1}%`  
 7018 `\def\@glsxtr@autoindex@escencap##1#2#1##3\@glsxtr@endescspch{%`  
 7019 `\@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escencap}{##1}{##2}{##3}%`  
 7020 `}`  
 7021 `}`  
 7022 `\GlsXtrSetEncapChar{}`  
 7023 `@onlypreamble\GlsXtrSetEncapChar`

`autoindex@level` Level character for use with `\index`.  
 7024 `\newcommand*{\@glsxtr@autoindex@level}{}`

`XtrSetLevelChar` Set the encap character.  
 7025 `\newcommand*{\GlsXtrSetLevelChar}[1]{%`  
 7026 `\gdef\@glsxtr@autoindex@level{#1}%`  
 7027 `\def\@glsxtr@autoindex@esclevel##1#2#1##3\@glsxtr@endescspch{%`  
 7028 `\@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@esclevel}{##1}{##2}{##3}%`  
 7029 `}`  
 7030 `}`  
 7031 `\GlsXtrSetLevelChar{!}`  
 7032 `@onlypreamble\GlsXtrSetLevelChar`

```

r@autoindex@esc Escape character for use with \index.
7033 \newcommand*{\glsxtr@autoindex@esc}{}

lsXtrSetEscChar Set the escape character.
7034 \newcommand*{\GlsXtrSetEscChar}[1]{%
7035   \gdef\@glsxtr@autoindex@esc{\#1}%
7036   \def\@glsxtr@autoindex@escquote##1##2##3\@glsxtr@endescspch{%
7037     \@@glsxtr@autoindex@escspch{\#1}{\@glsxtr@autoindex@escquote}{##1}{##2}{##3}%
7038   }%
7039 }
7040 \GlsXtrSetEscChar{`}
7041 \onlypreamble\GlsXtrSetEscChar

Set if defined. (For example, if doc package has been loaded.) Actual character \actualchar:
7042 \ifdef\actualchar
7043   {\expandafter\GlsXtrSetActualChar\expandafter{\actualchar}}
7044 {}

Quote character \quotechar:
7045 \ifdef\quotechar
7046   {\expandafter\GlsXtrSetEscChar\expandafter{\quotechar}}
7047 {}

Level character \levelchar:
7048 \ifdef\levelchar
7049   {\expandafter\GlsXtrSetLevelChar\expandafter{\levelchar}}
7050 {}

Encap character \encapchar:
7051 \ifdef\encapchar
7052   {\expandafter\GlsXtrSetEncapChar\expandafter{\encapchar}}
7053 {}

leto@endescspch
7054 \def\@glsxtr@gobbleto@endescspch#1\@glsxtr@endescspch{}

oindex@esc@spch


\@@glsxtr@autoindex@escspch{\<char>}{\<cs>}{\<pre>}{\<mid>}{\<post>}


7055 \newcommand*{\@@glsxtr@autoindex@escspch}[5]{%
7056   \gls@tmpb=\expandafter{\gls@checkedmidx}%
7057   \toks@={#3}%
7058   \ifx\@nnil#3\relax
7059     \def\@@glsxtr@checkspch{\glsxtr@gobbleto@endescspch#5\glsxtr@endescspch}%
7060   \else
7061     \ifx\@nnil#4\relax
7062       \edef\gls@checkedmidx{\the\gls@tmpb\the\toks@}%

```

```

7063     \def\@glsxtr@checkspch{\@glsxtr@gobbleto@endescspch
7064         #4#5\@glsxtr@endescspch}%
7065     \else
7066         \edef\@gls@checkedmkidx{\the\@gls@tmpb\the\toks@
7067             \@glsxtr@autoindex@esc#1}%
7068         \def\@glsxtr@checkspch{#2#5#1\@nnil#1\@glsxtr@endescspch}%
7069     \fi
7070 \fi
7071 \@@glsxtr@checkspch
7072 }

```

\Glossentrydesc Redefine to set the abbreviation format and accessibility support.

```

7073 \renewcommand*\Glossentrydesc[1]{%
7074     \glsdoifexistsorwarn{#1}%
7075     {%
7076         \glssetabbrvfmt{\glscategory{#1}}%
7077         \Glsaccessdesc{#1}%
7078     }%
7079 }

```

\lossentrysymbol Redefine to set the format and accessibility support. Allow for the possibility of being used in a section heading for standalone entry definitions.

```

7080 \ifdef\texorpdfstring
7081 {
7082     \renewcommand*\glossentrysymbol[1]{%
7083         \texorpdfstring{\glossentrysymbol{#1}}{\glsentrypdfsymbol{#1}}%
7084     }
7085 }
7086 {
7087     \renewcommand*\glossentrysymbol[1]{\glossentrysymbol{#1}}
7088 }

```

\sentrypdfsymbol May be redefined to a field that expands to a value that's more suitable for PDF bookmarks.

```
7089 \newcommand{\glsentrypdfsymbol}[1]{\glsentrysymbol{#1}}
```

\lossentrysymbol There are no case-changing attributes as it's less usual for symbols.

```

7090 \newrobustcmd*\glossentrysymbol[1]{%
7091     \glsdoifexistsorwarn{#1}%
7092     {%
7093         \begingroup
7094             \glssetabbrvfmt{\glscategory{#1}}%
7095             \glshasattribute{#1}{glosssymbolfont}%
7096         {%
7097             \edef\@glsxtr@attrval{\glsgetattribute{#1}{glosssymbolfont}}%
7098             \ifcsdef{\@glsxtr@attrval}%
7099             {%
7100                 \letcs{\@glsxtr@glosssymbolfont}{\@glsxtr@attrval}%
7101             }%
7102         {%

```

```

7103     \GlossariesExtraWarning{Unknown control sequence name
7104     '\@glsxtr@attrval' supplied in glosssymbolfont attribute
7105     for entry '#1'. Ignoring}%
7106     \let\@glsxtr@glosssymbolfont\@firstofone
7107     }%
7108   }%
7109   {\let\@glsxtr@glosssymbolfont\@firstofone}%
7110   \@glsxtr@glosssymbolfont{\glsaccesssymbol{#1}}%
7111 \endgroup
7112 }%
7113 }

```

`\lossentrysymbol` Redefine to set the abbreviation format and accessibility support.

```

7114 \renewcommand*{\Glossentrysymbol}[1]{%
7115   \glsdoifexistsorwarn{#1}%
7116   {%
7117     \glssetabbrvfmt{\glscategory{#1}}%
7118     \Glsaccesssymbol{#1}%
7119   }%
7120 }

```

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.

```

7121 \newcommand*{\GlsXtrEnableInitialTagging}{%
7122   \@ifstar\s@glsxtr@enabletagging\@glsxtr@enabletagging
7123 }
7124 \onlypreamble\GlsXtrEnableInitialTagging

```

`\r@enabletagging` Starred version undefines command.

```

7125 \newcommand*{\s@glsxtr@enabletagging}[2]{%
7126   \undef#2%
7127   \@glsxtr@enabletagging{#1}{#2}%
7128 }

```

`\r@enabletagging` Internal command.

```

7129 \newcommand*{\@glsxtr@enabletagging}[2]{%
  Set attributes for categories given in the first argument.

```

```

7130   \foreach\@glsxtr@cat:=#1\do
7131   {%
7132     \ifdefempty\@glsxtr@cat
7133     {}%
7134     {\glssetcategoryattribute{\@glsxtr@cat}{tagging}{true}}%
7135   }%
7136   \newrobustcmd*#2[1]{##1}%
7137   \def\@glsxtr@taggingcs{#2}%

```

```

7138 \renewcommand*\@glsxtr@activate@initialtagging{%
7139   \let#2\@glsxtr@tag
7140 }%
7141 \ifundef\@gls@preglossaryhook
7142 {\GlossariesExtraWarning{Initial tagging requires at least
7143   glossaries.sty v4.19 to work correctly}}%
7144 {}%
7145 }

```

Are we using an old version of `mfirstuc` that has a bug in `\capitalisewords`? If so, patch it so we don't have a problem with a combination of tagging and title case.

`fu@checkword@do` If this command hasn't been defined, then we have pre v2.02 of `mfirstuc`

```

7146 \ifundef\mfu@checkword@do
7147 {
7148   \newcommand*{\mfu@checkword@do}[1]{%
7149     \ifdefstring{\mfu@checkword@arg}{#1}%
7150     {}%
7151     \let\@mfu@domakefirstuc\@firstofone
7152     \listbreak
7153   }%
7154   {}%
7155 }

```

`\mfu@checkword` `\capitalisewords` was introduced in `mfirstuc` v1.06. If `\mfu@checkword` hasn't been defined `mfirstuc` is too old to support the title case attribute.

```

7156 \ifundef\mfu@checkword
7157 {
7158   \newcommand{\@glsxtr@do@titlecaps@warn}{%
7159     \GlossariesExtraWarning{mfirstuc.sty too old. Title Caps
7160       support not available}}

```

One warning should suffice.

```

7161   \let\@glsxtr@do@titlecaps@warn\relax
7162   }
7163 }
7164 {
7165   \renewcommand*{\mfu@checkword}[1]{%
7166     \def\mfu@checkword@arg{#1}%
7167     \let\@mfu@domakefirstuc\makefirstuc
7168     \forlistloop\mfu@checkword@do\@mfu@nocaplist
7169   }
7170 }
7171 }
7172 {}% no patch required

```

`@titlecaps@warn` Do warning if title case not supported.

```

7173 \newcommand*{\@glsxtr@do@titlecaps@warn}{}

```

@initialtagging Used in \printglossary but at least v4.19 of glossaries required.

```
7174 \newcommand*\@glsxtr@activate@initialtagging{}
```

\@glsxtr@tag Definition of tagging command when used in glossary.

```
7175 \newrobustcmd*{\@glsxtr@tag}[1]{%
7176   \glsifattribute{\glscurrententrylabel}{tagging}{true}{%
7177     \glsxtrtagfont{\#1}{\#1}%
7178   }}
```

\glsxtrtagfont Used in the glossary.

```
7179 \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.

```
7180 \ifdef\@gls@preglossaryhook
7181 {
7182   \renewcommand*{\@gls@preglossaryhook}{%
7183     \@glsxtr@activate@initialtagging
7184     \ifundef\@glsxtr@org@postdescription
7185     {%
7186       \let\@glsxtr@org@postdescription\glspostdescription
7187       \renewcommand*{\glspostdescription}{%
7188         \ifglsentryexists{\glscurrententrylabel}{%
7189           {%
7190             \glsxtrpostdescription
7191             \@glsxtr@org@postdescription
7192           }%
7193           {}%
7194         }%
7195       }%
7196     }%
7197   }%
7198 }
```

Enable the options used by \glossxtrsetopts:

```
7197   \glossxtrsetopts
7198 }%
7199 }
7200 {}
```

postdescription This command will only be used if \@gls@preglossaryhook is available *and* the glossary style uses \glspostdescription without modifying it. (\nopostdesc will suppress this.) The glossaries-extra-stylemods package will add the post description hook to all the predefined styles that don't include it.

```
7201 \newcommand*{\glsxtrpostdescription}{%
```

```

7202 \csuse{glsxtrpostdesc\glscategory{\glscurrententrylabel}}%
7203 }

postdescgeneral
7204 \newcommand*{\glsxtrpostdescgeneral}{}}

xtrpostdescterm
7205 \newcommand*{\glsxtrpostdescterm}{}}

postdescacronym
7206 \newcommand*{\glsxtrpostdescacronym}{}}

escabbreviation
7207 \newcommand*{\glsxtrpostdescabbreviation}{}}

\glsdefpostdesc Provide a convenient command for defining the post-description hook for the given category.
7208 \newcommand*{\glsdefpostdesc}[2]{%
7209   \csdef{glsxtrpostdesc#1}{\#2}%
7210 }

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.
7211 \renewcommand*{\glspostlinkhook}{%
7212   \ifglsentryexists{\glslabel}{\glsxtrpostlinkhook}{}%
7213 }

xtrpostlinkhook The entry label should already be stored in \glslabel by \gls@link.
7214 \newcommand*{\glsxtrpostlinkhook}{%
7215   \glsxtrdiscardperiod{\glslabel}%
7216   {\glsxtrpostlinkendsentence}%
7217   {\glsxtrifcustomdiscardperiod
7218     {\glsxtrifperiod{\glsxtrpostlinkendsentence}{\glsxtrpostlink}}%
7219     {\glsxtrpostlink}%
7220   }%
7221 }

omdiscardperiod Allow user to provide a custom check. Should expand to #2 if no check is required otherwise expand to #1.
7222 \newcommand*{\glsxtrifcustomdiscardperiod}[2]{#2}

\glsxtrpostlink
7223 \newcommand*{\glsxtrpostlink}{%
7224   \csuse{glsxtrpostlink\glscategory{\glslabel}}%
7225 }

```

\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.

```
7226 \newcommand*{\glsdefpostlink}[2]{%
    \ifthenelse is used to ensure that the expanded value is tested. (The category label must be fully expandable.)
    7227 \ifthenelse{\equal{#1}{}}{%
    7228 {\PackageError{glossaries-extra}{%
    7229 {Invalid empty category label in \string\glsdefpostlink{}{}}{%
    7230 {\csdef{glsxtrpostlink#1}{#2}}{%
    7231 }}}
```

linkendsentence Done by \glsxtrpostlinkhook if a full stop is discarded.

```
7232 \newcommand*{\glsxtrpostlinkendsentence}{%
    \ifcsdef{glsxtrpostlink}{\glscategory{\glslabel}}{%
    7234 {%
        \csuse{glsxtrpostlink}{\glscategory{\glslabel}}{%
            Put the full stop back.
            7236 .\spacefactor\sfcodes`\. \relax
            7237 }%
            7238 {%
                Assume the full stop was discarded because the entry ends with a period, so adjust the space-factor.
                7239 \spacefactor\sfcodes`\. \relax
                7240 }%
                7241 }}
```

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.

```
7242 \newcommand*{\glsxtrpostlinkAddDescOnFirstUse}{%
    \glsxtrifwasfirstuse{\space\glsxtrparen{\glsaccessdesc{\glslabel}}}{}}{%
    7244 }}
```

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.

```
7245 \newcommand*{\glsxtrpostlinkAddSymbolOnFirstUse}{%
    \glsxtrifwasfirstuse{%
    7247 {%
        \ifglshassymbol{\glslabel}{%
            7249 {\space\glsxtrparen{\glsaccesssymbol{\glslabel}}}{}}{%
            7250 {}{%
            7251 }{%
            7252 {}{%
            7253 }}}}}{}}
```

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.

```

7254 \newcommand*{\glsxtrpostlinkAddSymbolDescOnFirstUse}{%
7255   \glsxtrifwasfirstuse
7256   {%
7257     \space\glsxtrparen
7258     {%
7259       \ifglshassymbol{\glslabel}%
7260         {\glsaccesssymbol{\glslabel}, }%
7261         {}%
7262         \glsaccessdesc{\glslabel}%
7263     }%
7264   }%
7265   {}%
7266 }

```

**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).

```

7267 \newcommand*{\glsxtrdiscardperiod}[3]{%
7268   \glsxtrifwasfirstuse
7269   {%
7270     \glsifattribute{#1}{retainfirstuseperiod}{true}%
7271     {#3}%
7272   {%
7273     \glsifattribute{#1}{discardperiod}{true}%
7274     {%
7275       \glsifplural
7276       {%
7277         \glsifattribute{#1}{pluraldiscardperiod}{true}%
7278         {\glsxtrifperiod{#2}{#3}}%
7279         {#3}%
7280       }%
7281       {%
7282         \glsxtrifperiod{#2}{#3}%
7283       }%
7284     }%
7285     {#3}%
7286   }%
7287 }%
7288 {%
7289   \glsifattribute{#1}{discardperiod}{true}%
7290   {%
7291     \glsifplural
7292     {%
7293       \glsifattribute{#1}{pluraldiscardperiod}{true}%
7294       {\glsxtrifperiod{#2}{#3}}%
7295       {#3}%
7296     }%
7297     {%

```

```

7298     \glsxtrifperiod{#2}{#3}%
7299     }%
7300   }%
7301   {#3}%
7302 }%
7303 }

```

\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

```

7304 \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 ',').

```

7305 \newcommand*{\glsxtr@punclist}{.,;?!}

```

punctuationmark Add character to punctuation list.

```

7306 \newcommand*{\glsxtraddpunctuationmark}[1]{\appto{\glsxtr@punclist}{#1}}

```

unctuationmarks Reset the punctuation list.

```

7307 \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.)

```

7308 \newcommand*{\glsxtrifnextpunc}[2]{%
7309   \def{\reserved@a}{#1}%
7310   \def{\reserved@b}{#2}%
7311   \futurelet{\glspunc@token}\glsxtr@ifnextpunc
7312 }

```

sxtr@ifnextpunc

```

7313 \newcommand*{\glsxtr@ifnextpunc}{%
7314   \glsxtr@ifpunctoken{\glspunc@token}{\let{\reserved@b}{\reserved@a}{}}%
7315   \reserved@b
7316 }

```

xtr@ifpunctoken Test if the token given in the first argument is in the punctuation list.

```

7317 \newcommand*{\glsxtr@ifpunctoken}[1]{%
7318   \expandafter{\glsxtr@ifpunctoken\expandafter#1\glsxtr@punclist\@nnil
7319 }

```

```
xtr@ifpunctoken
7320 \def\@glsxtr@ifpunctoken#1#2{%
7321   \let\reserved@d=#2%
7322   \ifx\reserved@d\@nnil
7323     \let\glsxtr@next\@glsxtr@notfoundinlist
7324   \else
7325     \ifx#1\reserved@d
7326       \let\glsxtr@next\@glsxtr@foundinlist
7327     \else
7328       \let\glsxtr@next\@glsxtr@ifpunctoken
7329     \fi
7330   \fi
7331   \glsxtr@next#1%
7332 }
```

```
xtr@foundinlist
7333 \def\@glsxtr@foundinlist#1\@nnil{\@firstoftwo}
```

```
@notfoundinlist
7334 \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.

```
7335 \newcommand{\glsxtrdopostpunc}[1]{%
7336   \glsxtrifnextpunc{\glsxtr@swaptwo{#1}}{#1}%
7337 }
```

@glsxtr@swaptwo

```
7338 \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`.

```
7339 \define@key{glsxtrabbrv}{category}{%
7340   \edef\glscategorylabel{#1}%
7341 }
```

Save the short plural form. This may be needed before the entry is defined.

```
7342 \define@key{glsxtrabbrv}{shortplural}{%
7343   \def\@gls@shortpl{\#1}%
7344 }
```

Similarly for the long plural form.

```
7345 \define@key{glsxtrabbrv}{longplural}{%
7346   \def\@gls@longpl{\#1}%
7347 }
```

Token registers for the short plural and long plural, provided for use in the abbreviation style definitions.

```
\glsshortpltok
7348 \newtoks\glsshortpltok

\glslongpltok
7349 \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.

```
7350 \newcommand*{\@glsxtr@insertdots}[2]{%
7351   \def#1{}%
7352   \@glsxtr@insert@dots#1#2\@nnil
7353 }
```

xtr@insert@dots

```
7354 \newcommand*{\@glsxtr@insert@dots}[2]{%
7355   \ifx\@nnil#2\relax
7356     \let\@glsxtr@insert@dots@next\@gobble
7357   \else
7358     \ifx\relax#2\relax
7359   \else
7360     \appto#1{#2.}%
7361   \fi
7362   \let\@glsxtr@insert@dots@next\@glsxtr@insert@dots
7363 \fi
7364 \@glsxtr@insert@dots@next#1%
7365 }
```

Similarly provide a way of replacing spaces with \glsxtrwordsep, which first needs to be defined:

```
\glsxtrwordsep
7366 \newcommand*{\glsxtrwordsep}{\space}
```

Each word is marked with

```
\glsxtrword  
7367 \newcommand*\{\glsxtrword\}[1]{#1}
```

```
7368 \newcommand*{\@glsxstr@markwordseps}[2]{%
7369   \def#1{}%
7370   \@glsxstr@mark@wordseps#1#2 \@nnil
7371 }
```

```
7372 \def\@glsxstr@mark@wordseps#1#2 #3{%
7373   \ifdefempty{#1}%
7374   {\def#1{\protect\glsxtrword{#2}}}%
7375   {\appto#1{\protect\glsxtrwordsep\protect\glsxtrword{#2}}}%
7376   \ifx\@nnil#3\relax
7377     \let\@glsxstr@mark@wordseps@next\relax
7378   \else
7379     \def\@glsxstr@mark@wordseps@next{%
7380       \@glsxstr@mark@wordseps#1#3}%
7381   \fi
7382   \@glsxstr@mark@wordseps@next
7383 }
```

**newabbreviation** Define a new generic abbreviation.

```
7384 \newcommand*{\newabbreviation}[4][]{\%  
7385   \glsxstr@newabbreviation{#1}{#2}{#3}{#4}\%  
7386 }
```

`\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.)

```
7387 \newcommand*{\glsxstr@newabbreviation}[4]{%
7388   \glskeylisttok{#1}%
7389   \glslabeltok{#2}%
7390   \glsshorttok{#3}%
7391   \glslongtok{#4}%
```

Save the original short and long values (before attribute settings modify them).

```
7392 \def\glsxtrorgshort{\#3}%
7393 \def\glsxtrorglong{\#4}%
```

Provide extra settings for hooks (if modified, this command must end with a comma).

```
7394 \def\ExtraCustomAbbreviationFields{}%
```

Initialise accessibility settings if required.

7395 \@gls@initaccesskeys

## Get the category.

```
7396 \def\glscategorylabel{abbreviation}%
```

Ignore the shortplural and longplural keys.

```
7397 \setkeys*{glsxtrabbrv}[shortplural, longplural]{#1}%
```

Set the abbreviation style.

```
7398 \ifcsdef{glsabbrv@current@\glscategorylabel}%
7399 {%
```

Warning should already have been issued.

```
7400 \let\@glsxtr@orgwarndep\GlsXtrWarnDeprecatedAbbrStyle
7401 \let\GlsXtrWarnDeprecatedAbbrStyle@gobbletwo
7402 \glsxtr@applyabbrvstyle{\csname glsabbrv@current@\glscategorylabel\endcsname}%
7403 \let\GlsXtrWarnDeprecatedAbbrStyle@glsxtr@orgwarndep
7404 }%
7405 {%
```

If no style has been associated with this category, fallback on the style for the abbreviation category.

```
7406 \glsxtr@applyabbrvstyle{@glsabbrv@current@abbreviation}%
7407 }%
```

Set the default long plural

```
7408 \def@gls@longpl{#4\glspluralsuffix}%
7409 \let@gls@default@longpl@gls@longpl
```

Has the markwords attribute been set?

```
7410 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
7411 {%
7412 \@glsxtr@markwordseps@gls@long{#4}%
7413 \expandafter\def\expandafter@gls@longpl\expandafter
7414 {\@gls@long\glspluralsuffix}%
7415 \let@gls@default@longpl@gls@longpl
```

Update \glslongtok.

```
7416 \expandafter\glslongtok\expandafter{@gls@long}%
7417 }%
7418 {}%
```

Has the markshortwords attribute been set? (Not compatible with insertdots.)

```
7419 \glsifcategoryattribute{\glscategorylabel}{markshortwords}{true}%
7420 {%
7421 \@glsxtr@markwordseps@gls@short{#3}%
7422 }%
7423 {}%
```

Has the insertdots attribute been set?

```
7424 \glsifcategoryattribute{\glscategorylabel}{insertdots}{true}%
7425 {%
7426 \@glsxtr@insertdots@gls@short{#3}%
7427 \appto@gls@short{\@}%
7428 }%
7429 {\def@gls@short{#3}}%
7430 }%
```

Has the aposplural attribute been set? (Not compatible with noshortplural.)

```
7431 \glsifcategoryattribute{\glscategorylabel}{aposplural}{true}%
7432 {%
7433   \expandafter\def\expandafter@\gls@shortpl\expandafter{\gls@short
7434     '\abrvpluralsuffix}%
7435 }%
7436 {%
```

Has the noshortplural attribute been set?

```
7437 \glsifcategoryattribute{\glscategorylabel}{noshortplural}{true}%
7438 {%
7439   \let@\gls@shortpl@\gls@short
7440 }%
7441 {%
7442   \expandafter\def\expandafter@\gls@shortpl\expandafter{\gls@short
7443     '\abrvpluralsuffix}%
7444 }%
7445 {%
```

Update \glsshorttok:

```
7446 \expandafter\glsshorttok\expandafter{\gls@short}%
```

Hook for further customisation if required:

```
7447 \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).

```
7448 \setkeys*{\glsxtrabbrv}[category]{#1}%
```

Save in case required.

```
7449 \let@\gls@org@longpl@\gls@longpl
7450 \let@\gls@org@shortpl@\gls@shortpl
```

Has the plural been explicitly set?

```
7451 \ifx@\gls@default@longpl@\gls@longpl
7452 \else
```

Has the markwords attribute been set?

```
7453 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
7454 {%
7455   \expandafter\glsxtr@markwordseps\expandafter@\gls@longpl\expandafter
7456     {\gls@longpl}%
7457 }%
7458 {%
7459 \fi
```

Set the plural token registers so the values can be accessed by the abbreviation styles.

```
7460 \expandafter\glsshortpltok\expandafter{\gls@shortpl}%
7461 \expandafter\glslongpltok\expandafter{\gls@longpl}%
```

Hook for accessibility support (does nothing if glossaries-accsupp hasn't been loaded).

```
7462 \gls@setup@default@access
```

Do any extra setup provided by hook:

```
7463 \newabbreviationhook
```

Define this entry:

```
7464 \protected@edef\@do@newglossaryentry{%
7465   \noexpand\newglossaryentry{\the\glslabeltok}%
7466   {%
7467     type=\glsxtrabbrvtype,%
7468     category=abbreviation,%
7469     short={\the\glsshorttok},%
7470     shortplural={\the\glsshortpltok},%
7471     long={\the\glslongtok},%
7472     longplural={\the\glslongpltok},%
7473     name={\the\glsshorttok},%
7474     \CustomAbbreviationFields,%
```

Hook may override abbreviation style default settings (this hook must end with a comma if set).

```
7475 \ExtraCustomAbbreviationFields
```

Any explicit fields set in the optional argument override all other settings.

```
7476 \the\glskeylisttok
7477 }%
7478 }%
7479 \@do@newglossaryentry
```

Obtain the type and add it to the list of abbreviations.

```
7480 \@glsxtr@addabbreviationlist{\glsentrytype{\the\glslabeltok}}%
7481 \GlsXtrPostNewAbbreviation
7482 }
```

`evpresetkeyhook` Hook for extra stuff in `\newabbreviation`  
7483 `\newcommand*{\glsxtrnewabbrevpresetkeyhook}{[3] {}}`

`NewAbbreviation` Hook used by abbreviation styles.  
7484 `\newcommand*{\GlsXtrPostNewAbbreviation}{()}`

`bbreviationhook` Hook for use with `\newabbreviation`.  
7485 `\newcommand*{\newabbreviationhook}{()}`

`reviationFields`  
7486 `\newcommand*{\CustomAbbreviationFields}{()}`

`\glsxtrparen` For the parenthetical styles.  
7487 `\newcommand*{\glsxtrparen}{[1]{(#1)}}`

`lsxtrfullformat` Full format without case change.  
7488 `\newcommand*{\glsxtrfullformat}{[2]{%`  
7489  `\glsfirstlongfont{\glsaccesslong{#1}}#2\glsxtrfullsep{#1}}%`  
7490  `\glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}}%`  
7491 `}`

`\lsxtrfullformat` Full format with case change.

```
7492 \newcommand*{\Glsxtrfullformat}[2]{%
7493   \glsfirstlongfont{\Glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
7494   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}}%
7495 }
```

`\xtrfullplformat` Plural full format without case change.

```
7496 \newcommand*{\glsxtrfullplformat}[2]{%
7497   \glsfirstlongfont{\glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
7498   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}}%
7499 }
```

`\xtrfullplformat` Plural full format with case change.

```
7500 \newcommand*{\Glsxtrfullplformat}[2]{%
7501   \glsfirstlongfont{\Glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
7502   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}}%
7503 }
```

`\glsxtrfullsep` Separator used by full format is a space by default. The argument is the entry's label.

```
7504 \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).

`\newlinefullformat` Full format without case change.

```
7505 \newcommand*{\glsxtrnewlinefullformat}{\glsxtrfullformat}
```

`\newlinefullformat` Full format with case change.

```
7506 \newcommand*{\Glsxtrnewlinefullformat}{\Glsxtrfullformat}
```

`\xtrfullplformat` Plural full format without case change.

```
7507 \newcommand*{\glsxtrnewlinefullplformat}{\glsxtrfullplformat}
```

`\newlinefullplformat` Plural full format with case change.

```
7508 \newcommand*{\Glsxtrnewlinefullplformat}{\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`

```
7509 \renewcommand*{\glsentryfull}[1]{\glsxtrnewlinefullformat{#1}{}}
```

`\Glsentryfull`

```
7510 \renewcommand*{\Glsentryfull}[1]{\Glsxtrnewlinefullformat{#1}{}}
```

`\glsentryfullpl`

```
7511 \renewcommand*{\glsentryfullpl}[1]{\glsxtrnewlinefullplformat{#1}{}}
```

```

\Glsentryfullpl
 7512 \renewcommand*{\Glsentryfullpl}[1]{\Glsxtrinlinefullplformat{#1}{}}
```

**sfirstabrvfont** Font changing command used for the abbreviation on first use or in the full format.  
 7513 \newcommand\*{\glsfirstabrvfont}[1]{\glsfirstabrvdefaultfont{#1}}

**bbrvdefaultfont** Font changing command used for the abbreviation on first use or in the full format.  
 7514 \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.  
 7515 \newcommand\*{\glsabrvfont}[1]{\glsabrvdefaultfont{#1}}

**bbrvdefaultfont**  
 7516 \newcommand\*{\glsabrvdefaultfont}[1]{#1}

**\glslongfont** Font changing command used for the long form in commands like \glsxtrlong.  
 7517 \newcommand\*{\glslongfont}[1]{\glslongdefaultfont{#1}}

**longdefaultfont** Default font changing command used for the long form in commands like \glsxtrlong.  
 7518 \newcommand\*{\glslongdefaultfont}[1]{#1}

**lsfirstlongfont** Font changing command used for the long form on first use or in the full format.  
 7519 \newcommand\*{\glsfirstlongfont}[1]{\glslongfont{#1}}

**longdefaultfont**  
 7520 \newcommand\*{\glsfirstlongdefaultfont}[1]{\glslongdefaultfont{#1}}

**brvpluralsuffix** Default plural suffix. Allow an alternative default suffix for abbreviations.  
 7521 \newcommand\*{\glsxtrabbrvpluralsuffix}{\glspluralsuffix}

**brvpluralsuffix** Default plural suffix.  
 7522 \newcommand\*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}

**\glsxtrfull** Full form (no case-change).  
 7523 \newrobustcmd\*{\glsxtrfull}{\@gls@hyp@opt\ns@glsxtrfull}  
 7524 \newcommand\*\ns@glsxtrfull[2][]{%  
 7525 \new@ifnextchar[\{\@glsxtr@full{#1}{#2}\}]{%  
 7526 {\@glsxtr@full{#1}{#2}}[]}%  
 7527 }

**\@glsxtr@full** Low-level macro:  
 7528 \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).

```

7529  \glsxstr@record{#1}{#2}{\glslink}%
7530  \glsdoifexists{#2}%
7531  {%
7532    \glssetabrvfmt{\glscategory{#2}}%
7533    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7534    \let\glsifplural@\secondoftwo
7535    \let\glscapscase@\firstofthree
7536    \let\glsinsert@\empty
7537    \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.

```

7538  \glsxtrsetupfulldefs
7539  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7540  }%
7541 \glspostlinkhook
7542 }

```

#### trsetupfulldefs

```

7543 \newcommand*{\glsxtrsetupfulldefs}{%
7544   \let\glsxtrifwasfirstuse@\firstoftwo
7545 }

```

#### \Glsxtrfull Full form (first letter uppercase).

```

7546 \newrobustcmd*{\Glsxtrfull}{\gls@hyp@opt\ns@Glsxtrfull}
7547 \newcommand*\ns@Glsxtrfull[2][]{%
7548   \new@ifnextchar[\{@Glsxtr@full{#1}{#2}}%
7549     {\@Glsxtr@full{#1}{#2}[]}%
7550 }

```

#### \@Glsxtr@full Low-level macro:

```

7551 \def\@Glsxtr@full#1#2[#3]{%
7552   \glsdoifexists{#2}%
7553   {%
7554     \glssetabrvfmt{\glscategory{#2}}%
7555     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7556     \let\glsifplural@\secondoftwo
7557     \let\glscapscase@\secondofthree
7558     \let\glsinsert@\empty
7559     \def\glscustomtext{\Glsxtrinlinefullformat{#2}{#3}}%
7560     \glsxtrsetupfulldefs
7561     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7562   }%
7563   \glspostlinkhook
7564 }

```

\GLSxtrfull Full form (all uppercase).

```
7565 \newrobustcmd*{\GLSxtrfull}{\gls@hyp@opt\ns@GLSxtrfull}
7566 \newcommand*\ns@GLSxtrfull[2][]{%
7567   \new@ifnextchar[{\gls@category{\ns@GLSxtr@full{\#1}{\#2}}}{%
7568     {\gls@category{\ns@GLSxtr@full{\#1}{\#2}}{}}{}}%
7569 }
```

\@GLSxtr@full Low-level macro:

```
7570 \def\@GLSxtr@full#1#2[#3]{%
7571   \glsdoifexists{\#2}{%
7572     {%
7573       \glssetabrvfmt{\glscategory{\#2}}{%
7574         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7575         \let\glsifplural\glsifpluralfirstoftwo
7576         \let\glscapscase\glsifpluralthirdofthree
7577         \let\glsinsert\glsinsertempty
7578         \def\glscustomtext{\glsfirstucMakeUppercase{\glsxtrinlinefullformat{\#2}{\#3}}}{%
7579           \glsxtrsetupfulldefs
7580           \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}{%
7581             }{%
7582             \glspostlinkhook
7583           }}
```

\glsxtrfullpl Plural full form (no case-change).

```
7584 \newrobustcmd*{\glsxtrfullpl}{\gls@hyp@opt\ns@glsxtrfullpl}
7585 \newcommand*\ns@glsxtrfullpl[2][]{%
7586   \new@ifnextchar[{\glsxtr@fullpl{\#1}{\#2}}{%
7587     {\glsxtr@fullpl{\#1}{\#2}}{}}{}}%
7588 }
```

\@glsxtr@fullpl Low-level macro:

```
7589 \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).

```
7590   \glsxtr@record{\#1}{\#2}{\glslink}{%
7591     \glsdoifexists{\#2}{%
7592       {%
7593         \glssetabrvfmt{\glscategory{\#2}}{%
7594           \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7595           \let\glsifplural\glsifpluralfirstoftwo
7596           \let\glscapscase\glsifpluralthirdofthree
7597           \let\glsinsert\glsinsertempty
7598           \def\glscustomtext{\glsxtrinlinefullplformat{\#2}{\#3}}{%
7599             \glsxtrsetupfulldefs
7600             \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}{%
7601               }{%
7602               \glspostlinkhook
7603             }}
```

```
\Glsxtrfullpl Plural full form (first letter uppercase).
```

```
7604 \newrobustcmd*\Glsxtrfullpl{\gls@hyp@opt\ns@Glsxtrfullpl}
7605 \newcommand*\ns@Glsxtrfullpl[2][]{%
7606   \new@ifnextchar[\{@Glsxtr@fullpl{#1}{#2}}%
7607     {\@Glsxtr@fullpl{#1}{#2}[]}%
7608 }
```

```
\@Glsxtr@fullpl Low-level macro:
```

```
7609 \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).

```
7610  \@glsxtr@record{#1}{#2}{glslink}%
7611  \glsdoifexists{#2}%
7612  {%
7613    \glssetabrvfmt{\glscategory{#2}}%
7614    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7615    \let\glsifplural\@firstoftwo
7616    \let\glscapscase\@secondofthree
7617    \let\glsinsert\@empty
7618    \def\glscustomtext{\Glsxtrinlinefullplformat{#2}{#3}}%
7619    \glsxtrsetupfulldefs
7620    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7621  }%
7622  \glspostlinkhook
7623 }
```

```
\GLSxtrfullpl Plural full form (all upper case).
```

```
7624 \newrobustcmd*\GLSxtrfullpl{\gls@hyp@opt\ns@GLSxtrfullpl}
7625 \newcommand*\ns@GLSxtrfullpl[2][]{%
7626   \new@ifnextchar[\{@GLSxtr@fullpl{#1}{#2}}%
7627     {\@GLSxtr@fullpl{#1}{#2}[]}%
7628 }
```

```
\@GLSxtr@fullpl Low-level macro:
```

```
7629 \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).

```
7630  \@glsxtr@record{#1}{#2}{glslink}%
7631  \glsdoifexists{#2}%
7632  {%
7633    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7634    \let\glsifplural\@firstoftwo
7635    \let\glscapscase\@thirdofthree
7636    \let\glsinsert\@empty
7637    \def\glscustomtext{%
7638      \mfirstrucMakeUppercase{\glsxtrinlinefullplformat{#2}{#3}}}%
7639    \glsxtrsetupfulldefs
```

```

7640     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7641   }%
7642   \glspostlinkhook
7643 }

```

The short and long forms work in a similar way to acronyms.

\glsxtrshort

```
7644 \newrobustcmd*\glsxtrshort{\gls@hyp@opt\ns@glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7645 \newcommand*\ns@glsxtrshort[2][]{%
7646   \new@ifnextchar{@\glsxtrshort[#1]{#2}}{\glsxtrshort[#1]{#2}[]}{%
7647 }

```

Read in the final optional argument:

```
7648 \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).

```

7649  \glsxtr@record[#1]{#2}{\glslink}%
7650  \glsdoifexists[#2]%
7651  {%

```

Need to make sure \glsabrvfont is set correctly.

```

7652  \glssetabrvfmt{\glscategory{#2}}%
7653  \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7654  \let\glsxtrifwasfirstuse\@secondoftwo
7655  \let\glsifplural\@secondoftwo
7656  \let\glscapscase\@firstofthree
7657  \let\glsinsert\@empty
7658  \def\glscustomtext{%
7659    \glsabrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
7660    \ifglsxtrinsertinside\else#3\fi
7661  }%
7662  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7663 }%
7664 \glspostlinkhook
7665 }

```

\Glsxtrshort

```
7666 \newrobustcmd*\Glsxtrshort{\gls@hyp@opt\ns@Glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7667 \newcommand*\ns@Glsxtrshort[2][]{%
7668   \new@ifnextchar{@\Glsxtrshort[#1]{#2}}{\Glsxtrshort[#1]{#2}[]}{%
7669 }

```

Read in the final optional argument:

```
7670 \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).

```

7671  \@glsxtr@record{\#1}{\#2}{\glslink}%
7672  \glsdoifexists{\#2}%
7673  {%
7674    \glssetabrvfmt{\glscategory{\#2}}%
7675    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7676    \let\glsxtrifwasfirstuse@secondoftwo
7677    \let\glsifplural@secondoftwo
7678    \let\glscapscase@secondofthree
7679    \let\glsinsert@\empty
7680    \def\glscustomtext{%
7681      \glsabbrvfont{\Glsaccessshort{\#2}\ifglsxtrinsertinside#3\fi}%
7682      \ifglsxtrinsertinside\else#3\fi
7683    }%
7684    \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
7685  }%
7686  \glspostlinkhook
7687 }

```

### \GLSxtrshort

```
7688 \newrobustcmd*\GLSxtrshort{\gls@hyp@opt\ns@GLSxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7689 \newcommand*\ns@GLSxtrshort[2][]{%
7690   \new@ifnextchar[\ns@GLSxtrshort{\#1}{\#2}]{\ns@GLSxtrshort{\#1}{\#2}[]}{%
7691 }

```

Read in the final optional argument:

```
7692 \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).

```

7693  \@glsxtr@record{\#1}{\#2}{\glslink}%
7694  \glsdoifexists{\#2}%
7695  {%
7696    \glssetabrvfmt{\glscategory{\#2}}%
7697    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7698    \let\glsxtrifwasfirstuse@secondoftwo
7699    \let\glsifplural@secondoftwo
7700    \let\glscapscase@thirdofthree
7701    \let\glsinsert@\empty
7702    \def\glscustomtext{%
7703      \mfirstrucMakeUppercase
7704      \glsabbrvfont{\Glsaccessshort{\#2}\ifglsxtrinsertinside#3\fi}%
7705      \ifglsxtrinsertinside\else#3\fi
7706    }%
7707  }%
7708  \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
7709 }

```

```

7710 \glspostlinkhook
7711 }

\glsxtrlong
7712 \newrobustcmd*{\glsxtrlong}{\gls@hyp@opt\ns@glsxtrlong}
    Define the un-starred form. Need to determine if there is a final optional argument
7713 \newcommand*{\ns@glsxtrlong}[2][]{%
7714 \new@ifnextchar[{\glsxtrlong[#1]{#2}}{\glsxtrlong[#1]{#2}[]}%
7715 }

    Read in the final optional argument:
7716 \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).
7717 \glsxtr@record[#1]{#2}{glslink}%
7718 \glsdoifexists{#2}%
7719 {%
7720 \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7721 \let\glsxtrifwasfirstuse\secondoftwo
7722 \let\glsifplural\secondoftwo
7723 \let\glscapscase\firstofthree
7724 \let\glsinsert\empty
7725 \def\glscustomtext{%
7726 \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7727 \ifglsxtrinsertinside\else#3\fi
7728 }%
7729 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7730 }%
7731 \glspostlinkhook
7732 }

\Glsxtrlong
7733 \newrobustcmd*{\Glsxtrlong}{\gls@hyp@opt\ns@Glsxtrlong}
    Define the un-starred form. Need to determine if there is a final optional argument
7734 \newcommand*{\ns@Glsxtrlong}[2][]{%
7735 \new@ifnextchar[{\Glsxtrlong[#1]{#2}}{\Glsxtrlong[#1]{#2}[]}%
7736 }

    Read in the final optional argument:
7737 \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).
7738 \glsxtr@record[#1]{#2}{glslink}%
7739 \glsdoifexists{#2}%
7740 {%
7741 \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7742 \let\glsxtrifwasfirstuse\secondoftwo

```

```

7743 \let\glsifplural\@secondoftwo
7744 \let\glscapscase\@secondofthree
7745 \let\glsinsert\@empty
7746 \def\glscustomtext{%
7747   \glslongfont{\Glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7748   \ifglsxtrinsertinside\else#3\fi
7749 }%
7750 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7751 }%
7752 \glspostlinkhook
7753 }

```

### \GLSxtrlong

```
7754 \newrobustcmd*{\GLSxtrlong}{\gls@hyp@opt\ns@GLSxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7755 \newcommand*{\ns@GLSxtrlong}[2][]{%
7756   \new@ifnextchar[\{@GLSxtrlong{#1}{#2}\}{@GLSxtrlong{#1}{#2}}[]}%
7757 }

```

Read in the final optional argument:

```
7758 \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).

```

7759 \glsxtr@record{#1}{#2}{\glslink}%
7760 \glsdoifexists{#2}%
7761 {%
7762   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7763   \let\glsxtrifwasfirstuse\@secondoftwo
7764   \let\glsifplural\@secondoftwo
7765   \let\glscapscase\@thirdofthree
7766   \let\glsinsert\@empty
7767   \def\glscustomtext{%
7768     \mfirstrucMakeUppercase
7769     \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7770     \ifglsxtrinsertinside\else#3\fi
7771   }%
7772 }%
7773 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7774 }%
7775 \glspostlinkhook
7776 }

```

Plural short forms:

### \glsxtrshortpl

```
7777 \newrobustcmd*{\glsxtrshortpl}{\gls@hyp@opt\ns@glsxtrshortpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7778 \newcommand*{\ns@glsxtrshortpl}[2][]{%
```

```
7779 \new@ifnextchar[{\@glsxtrshortpl{#1}{#2}}{\@glsxtrshortpl{#1}{#2}[]}]%
7780 }
```

Read in the final optional argument:

```
7781 \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).

```
7782 \@glsxtr@record{#1}{#2}{glslink}%
7783 \glsdoifexists{#2}%
7784 {%
7785   \glssetabrvfmt{\glscategory{#2}}%
7786   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7787   \let\glsxtrifwasfirstuse\@secondoftwo
7788   \let\glsifplural\@firstoftwo
7789   \let\glscapscase\@firstofthree
7790   \let\glsinsert\@empty
7791   \def\glscustomtext{%
7792     \glsabbrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7793     \ifglsxtrinsertinside\else#3\fi
7794   }%
7795   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7796 }%
7797 \glspostlinkhook
7798 }
```

\Glsxtrshortpl

```
7799 \newrobustcmd*\Glsxtrshortpl{\gls@hyp@opt\ns@Glsxtrshortpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7800 \newcommand*\ns@Glsxtrshortpl[2][]{%
7801   \new@ifnextchar[{\@Glsxtrshortpl{#1}{#2}}{\@Glsxtrshortpl{#1}{#2}[]}]%
7802 }
```

Read in the final optional argument:

```
7803 \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).

```
7804 \@glsxtr@record{#1}{#2}{glslink}%
7805 \glsdoifexists{#2}%
7806 {%
7807   \glssetabrvfmt{\glscategory{#2}}%
7808   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7809   \let\glsxtrifwasfirstuse\@secondoftwo
7810   \let\glsifplural\@firstoftwo
7811   \let\glscapscase\@secondofthree
7812   \let\glsinsert\@empty
7813   \def\glscustomtext{%
7814     \glsabbrvfont{\Glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7815     \ifglsxtrinsertinside\else#3\fi
    }}
```

```

7816    }%
7817    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7818  }%
7819  \glspostlinkhook
7820 }

```

### \GLSxtrshortpl

```

7821 \newrobustcmd*\{\GLSxtrshortpl\}{\gls@hyp@opt\ns@GLSxtrshortpl}
Define the un-starred form. Need to determine if there is a final optional argument
7822 \newcommand*\{\ns@GLSxtrshortpl\}[2][]{%
7823   \new@ifnextchar[{\@GLSxtrshortpl{#1}{#2}}{\@GLSxtrshortpl{#1}{#2}[]}}
7824 }

```

Read in the final optional argument:

```
7825 \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).

```

7826  \glsxtr@record{#1}{#2}{\glslink}%
7827  \glsdoifexists{#2}%
7828  {%
7829    \glssetabrvfmt{\glscategory{#2}}%
7830    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7831    \let\glsxtrifwasfirstuse\@secondoftwo
7832    \let\glsifplural\@firstoftwo
7833    \let\glscapscase\@thirdofthree
7834    \let\glsinsert\@empty
7835    \def\glscustomtext{%
7836      \mfirstrucMakeUppercase
7837      {\glsabrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7838        \ifglsxtrinsertinside\else#3\fi
7839      }%
7840    }%
7841    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7842  }%
7843  \glspostlinkhook
7844 }

```

Plural long forms:

### \glsxtrlongpl

```

7845 \newrobustcmd*\{\glsxtrlongpl\}{\gls@hyp@opt\ns@glsxtrlongpl}
Define the un-starred form. Need to determine if there is a final optional argument
7846 \newcommand*\{\ns@glsxtrlongpl\}[2][]{%
7847   \new@ifnextchar[{\@glsxtrlongpl{#1}{#2}}{\@glsxtrlongpl{#1}{#2}[]}}
7848 }

```

Read in the final optional argument:

```
7849 \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).

```
7850  \glsxstr@record{#1}{#2}{glslink}%
7851  \glsdoifexists{#2}%
7852  {%
7853    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7854    \let\glsxtrifwasfirstuse\secondoftwo
7855    \let\glsifplural\firstoftwo
7856    \let\glscapscase\firstofthree
7857    \let\glsinsert\empty
7858    \def\glscustomtext{%
7859      \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7860      \ifglsxtrinsertinside\else#3\fi
7861    }%
7862    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7863  }%
7864  \glspostlinkhook
7865 }
```

\Glsxtrlongpl

```
7866 \newrobustcmd*\Glsxtrlongpl{\gls@hyp@opt\ns@Glsxtrlongpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7867 \newcommand*\ns@Glsxtrlongpl[2][]{%
7868   \new@ifnextchar{`}{\Glsxtrlongpl{#1}{#2}}{\Glsxtrlongpl{#1}{#2}[]}%
7869 }
```

Read in the final optional argument:

```
7870 \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).

```
7871  \glsxstr@record{#1}{#2}{glslink}%
7872  \glsdoifexists{#2}%
7873  {%
7874    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7875    \let\glsxtrifwasfirstuse\secondoftwo
7876    \let\glsifplural\firstoftwo
7877    \let\glscapscase\secondofthree
7878    \let\glsinsert\empty
7879    \def\glscustomtext{%
7880      \glslongfont{\Glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7881      \ifglsxtrinsertinside\else#3\fi
7882    }%
7883    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7884  }%
7885  \glspostlinkhook
7886 }
```

\GLSxtrlongpl

```

7887 \newrobustcmd*{\GLSxtrlongpl}{\gls@hyp@opt\ns@GLSxtrlongpl}
    Define the un-starred form. Need to determine if there is a final optional argument
7888 \newcommand*{\ns@GLSxtrlongpl}[2][]{%
7889   \new@ifnextchar[{\@\GLSxtrlongpl{#1}{#2}}{\@\GLSxtrlongpl{#1}{#2}[]}{%
7890 }

    Read in the final optional argument:
7891 \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).
7892  \@glsxtr@record{#1}{#2}{glslink}%
7893  \glsdoifexists{#2}%
7894  {%
7895    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7896    \let\glsxtrifwasfirstuse@secondoftwo
7897    \let\glsifplural@firstoftwo
7898    \let\glscapscase@thirdofthree
7899    \let\glsinsert@empty
7900    \def\glscustomtext{%
7901      \mfirstucMakeUppercase
7902      {\glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7903        \ifglsxtrinsertinside\else#3\fi
7904      }%
7905    }%
7906    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7907  }%
7908  \glspostlinkhook
7909 }

\glssetabbrvfmt Set the current format for the given category (or the abbreviation category if unset).
7910 \newcommand*{\glssetabbrvfmt}[1]{%
7911  \ifcsdef{\glsabrv@current@#1}{%
7912    {\glsxtr@applyabbrvfmt{\csname \glsabrv@current@#1\endcsname}}%
7913    {\glsxtr@applyabbrvfmt{\glsabrv@current@abbreviation}}%
7914 }

\glsuseabbrvfont Provide a way to use the abbreviation font for a given category for arbitrary text.
7915 \newrobustcmd*{\glsuseabbrvfont}[2]{{\glssetabbrvfmt{#2}\glsabrvfont{#1}}}

\glsuselongfont Provide a way to use the long font for a given category for arbitrary text.
7916 \newrobustcmd*{\glsuselongfont}[2]{{\glssetabbrvfmt{#2}\glslongfont{#1}}}

\sxtrogenabbrvfmt Similar to \glsgenacfmt, but for abbreviations.
7917 \newcommand*{\glsxtrgenabbrvfmt}{%
7918  \ifdefempty\glscustomtext{%
7919  {%
7920    \ifglsused\glslabel{%
7921      {%

```

Subsequent use:

```
7922     \glsifplural  
7923     {%
```

Subsequent plural form:

```
7924     \glscapscase  
7925     {%
```

Subsequent plural form, don't adjust case:

```
7926     \glsxtrsubsequentplfmt{\glslabel}{\glsinsert} %  
7927     }%  
7928     {%
```

Subsequent plural form, make first letter upper case:

```
7929     \Glsxtrsubsequentplfmt{\glslabel}{\glsinsert} %  
7930     }%  
7931     {%
```

Subsequent plural form, all caps:

```
7932     \mfirstucMakeUppercase  
7933     {\glsxtrsubsequentplfmt{\glslabel}{\glsinsert}} %  
7934     }%  
7935     }%  
7936     {%
```

Subsequent singular form

```
7937     \glscapscase  
7938     {%
```

Subsequent singular form, don't adjust case:

```
7939     \glsxtrsubsequentfmt{\glslabel}{\glsinsert} %  
7940     }%  
7941     {%
```

Subsequent singular form, make first letter upper case:

```
7942     \Glsxtrsubsequentfmt{\glslabel}{\glsinsert} %  
7943     }%  
7944     {%
```

Subsequent singular form, all caps:

```
7945     \mfirstucMakeUppercase  
7946     {\glsxtrsubsequentfmt{\glslabel}{\glsinsert}} %  
7947     }%  
7948     }%  
7949     }%  
7950     {%
```

First use:

```
7951     \glsifplural  
7952     {%
```

First use plural form:

```
7953     \glscapscase  
7954     {%
```

First use plural form, don't adjust case:

```
7955      \glsxtrfullplformat{\glslabel}{\glsinsert}%
7956      }%
7957      {%
```

First use plural form, make first letter upper case:

```
7958      \Glsxtrfullplformat{\glslabel}{\glsinsert}%
7959      }%
7960      {%
```

First use plural form, all caps:

```
7961      \mfirstucMakeUppercase
7962          {\glsxtrfullplformat{\glslabel}{\glsinsert}}%
7963      }%
7964      }%
7965      {%
```

First use singular form

```
7966      \glscapscase
7967      {%
```

First use singular form, don't adjust case:

```
7968      \glsxtrfullformat{\glslabel}{\glsinsert}%
7969      }%
7970      {%
```

First use singular form, make first letter upper case:

```
7971      \Glsxtrfullformat{\glslabel}{\glsinsert}%
7972      }%
7973      {%
```

First use singular form, all caps:

```
7974      \mfirstucMakeUppercase
7975          {\glsxtrfullformat{\glslabel}{\glsinsert}}%
7976      }%
7977      }%
7978      }%
7979      }%
7980      {%
```

User supplied text.

```
7981      \glscustomtext
7982      }%
7983 }
```

`trsubsequentfmt` Subsequent use format (singular no case change).

```
7984 \newcommand*{\glsxtrsubsequentfmt}[2]{%
7985     \glsabbrvfont{\glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
7986     \ifglsxtrinsertinside \else#2\fi
7987 }
7988 \let\glsxtrdefaultsubsequentfmt\glsxtrsubsequentfmt
```

```

subsequentplfmt Subsequent use format (plural no case change).
7989 \newcommand*{\glsxtrsubsequentplfmt}[2]{%
7990   \glsabbrvfont{\glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
7991   \ifglsxtrinsertinside \else#2\fi
7992 }
7993 \let\glsxtrdefaultsubsequentplfmt\glsxtrsubsequentplfmt

trsubsequentfmt Subsequent use format (singular, first letter uppercase).
7994 \newcommand*{\Glsxtrsubsequentfmt}[2]{%
7995   \glsabbrvfont{\Glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
7996   \ifglsxtrinsertinside \else#2\fi
7997 }
7998 \let\Glsxtrdefaultsubsequentfmt\Glsxtrsubsequentfmt

subsequentplfmt Subsequent use format (plural, first letter uppercase).
7999 \newcommand*{\Glsxtrsubsequentplfmt}[2]{%
8000   \glsabbrvfont{\Glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
8001   \ifglsxtrinsertinside \else#2\fi
8002 }
8003 \let\Glsxtrdefaultsubsequentplfmt\Glsxtrsubsequentplfmt

```

### 1.7.1 Abbreviation Styles Setup

```

abbreviationstyle
8004 \newcommand*{\setabbreviationstyle}[2][abbreviation]{%
8005   \ifcsundef{@glsabbrv@disestyle@setup@#2}%
8006   {%
8007     \PackageError{glossaries-extra}{Undefined abbreviation style ‘#2’}{}%
8008   }%
8009   {%
8010     \ifcsstring{@glsabbrv@current@#1}{#2}%
8011     {%
8012       }%
8013       {%
8014         \def@\glsxtr@dostylewarn{}%
8015         \glsforeachincategory{#1}{\@gls@type}{\@gls@label}%
8016         {%
8017           \def@\glsxtr@dostylewarn{\GlossariesWarning{Abbreviation
8018             style has been switched \MessageBreak
8019             for category ‘#1’, \MessageBreak
8020             but there have already been entries \MessageBreak
8021             defined for this category. Unwanted \MessageBreak
8022             side-effects may result}}%
8023           \endfortrue
8024         }%
8025         \@glsxtr@dostylewarn

```

Set up the style for the given category.

```
8026     \csdef{@glsabrv@current@#1}{#2}%
8027     \edef\glscategorylabel{#1}%
8028     \glsxtr@applyabbrvstyle{#2}%
8029   }%
8030 }%
8031 }
```

applyabbrvstyle Apply the abbreviation style without existence check.

```
8032 \newcommand*{\glsxtr@applyabbrvstyle}[1]{%
8033   \csuse{@glsabrv@dispstyle@setup@#1}%
8034   \csuse{@glsabrv@dispstyle@fmts@#1}%
8035 }
```

r@applyabbrvfmt Only apply the style formats.

```
8036 \newcommand*{\glsxtr@applyabbrvfmt}[1]{%
8037   \csuse{@glsabrv@dispstyle@fmts@#1}%
8038 }
```

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.

```
8039 \newcommand*{\newabbreviationstyle}[3]{%
8040   \ifcsdef{@glsabrv@dispstyle@setup@#1}%
8041   {}%
8042   \PackageError{glossaries-extra}{Abbreviation style '#1' already%
8043   defined}{}%
8044 }%
8045 {}%
8046   \csdef{@glsabrv@dispstyle@setup@#1}{%
```

Initialise hook to do nothing. The style may change this.

```
8047   \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
8048   #2}%
8049   \csdef{@glsabrv@dispstyle@fmts@#1}{%
```

Assume in-line form is the same as first use. The style may change this.

```
8050   \renewcommand*{\glsxtrinlinetfullformat}{\glsxtrfullformat}%
8051   \renewcommand*{\GlsXtrInLineFullFormat}{\GlsXtrFullFormat}%
8052   \renewcommand*{\glsxtrinlinetplformat}{\glsxtrfulltplformat}%
8053   \renewcommand*{\GlsXtrInLineFullPtlFormat}{\GlsXtrFullPtlFormat}
```

Reset \glsxtrsubsequentfmt etc in case a style changes this.

```
8054   \let\glsxtrsubsequentfmt\glsxtrdefaultsubsequentfmt
8055   \let\glsxtrsubsequentplfmt\glsxtrdefaultsubsequentplfmt
8056   \let\GlsXtrSubsequentFmt\GlsXtrDefaultSubsequentFmt
8057   \let\GlsXtrSubsequentPlFmt\GlsXtrDefaultSubsequentPlFmt
8058   #3}%
8059 }%
8060 }
```

```

abbreviationstyle
8061 \newcommand*{\renewabbreviationstyle}[3]{%
8062   \ifcsundef{@glsabrv@dispstyle@setup@#1}%
8063   {%
8064     \PackageError{glossaries-extra}{Abbreviation style '#1' not defined}{}%
8065   }%
8066   {%
8067     \csdef{@glsabrv@dispstyle@setup@#1}{%

```

Initialise hook to do nothing. The style may change this.

```

8068   \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
8069   #2}%
8070   \csdef{@glsabrv@dispstyle@fmts@#1}{%

```

Assume in-line form is the same as first use. The style may change this.

```

8071   \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}%
8072   \renewcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}%
8073   \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}%
8074   \renewcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}%
8075   #3}%
8076 }%
8077 }

```

**abbreviationstyle** Define a synonym for an abbreviation style. The first argument is the new name. The second argument is the original style's name.

```

8078 \newcommand*{\letabbreviationstyle}[2]{%
8079   \csletcs{@glsabrv@dispstyle@setup@#1}{@glsabrv@dispstyle@setup@#2}%
8080   \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
8081 }

```

cated@abbrstyle

```
\@glsxtr@deprecated@abbrstyle{\<old-name>}{\<new-name>}
```

Define a synonym for a deprecated abbreviation style.

```

8082 \newcommand*{\@glsxtr@deprecated@abbrstyle}[2]{%
8083   \csdef{@glsabrv@dispstyle@setup@#1}{%
8084     \GlsXtrWarnDeprecatedAbbrStyle{#1}{#2}%
8085   \csuse{@glsabrv@dispstyle@setup@#2}%
8086 }%
8087 \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
8088 }

```

ecatedAbbrStyle Generate warning for deprecated style use.

```

8089 \newcommand*{\GlsXtrWarnDeprecatedAbbrStyle}[2]{%
8090   \GlossariesExtraWarning{Deprecated abbreviation style name '#1',%
8091   use '#2' instead}%
8092 }

```

```

eAbbrStyleSetup
8093 \newcommand*{\GlsXtrUseAbbrStyleSetup}[1]{%
8094   \ifcsundef{@glsabbrv@dispstyle@setup@#1}{%
8095     {%
8096       \PackageError{glossaries-extra}{%
8097         Unknown abbreviation style definitions '#1'}{}%
8098     }%
8099   {%
8100     \csname @glsabbrv@dispstyle@setup@#1\endcsname
8101   }%
8102 }

seAbbrStyleFmts
8103 \newcommand*{\GlsXtrUseAbbrStyleFmts}[1]{%
8104   \ifcsundef{@glsabbrv@dispstyle@fmts@#1}{%
8105     {%
8106       \PackageError{glossaries-extra}{%
8107         Unknown abbreviation style formats '#1'}{}%
8108     }%
8109   {%
8110     \csname @glsabbrv@dispstyle@fmts@#1\endcsname
8111   }%
8112 }

```

### 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.

```

8113 \newif\ifglsxtrinsertinside
8114 \glsxtrinsertinsidefalse

```

`trlongshortname`

```

8115 \newcommand*{\glsxtrlongshortname}{%
8116   \protect\glsabbrvfont{\the\glsshorttok}%
8117 }

```

`long-short`

```

8118 \newabbreviationstyle{long-short}{%
8119 {%

```

Set accessibility attributes if enabled.

```
8120 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
8121 \renewcommand*\CustomAbbreviationFields{%
8122   name={\glsxtrlongshortname},
8123   sort={\the\glsshorttok},
8124   first={\protect\glsfirstlongfont{\the\glslongtok}%
8125     \protect\glsxtrfullsep{\the\glslabeltok}%
8126     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
8127   firstplural={\protect\glsfirstlongfont{\the\glslongpltok}%
8128     \protect\glsxtrfullsep{\the\glslabeltok}%
8129     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%
8130   plural={\protect\glsabbrvfont{\the\glsshortpltok}},%
8131   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8132   description={\the\glslongtok}}%
```

Unset the regular attribute if it has been set.

```
8133 \renewcommand*\GlsXtrPostNewAbbreviation{%
8134   \glshasattribute{\the\glslabeltok}{regular}%
8135   {%
8136     \glssetattribute{\the\glslabeltok}{regular}{false}%
8137   }%
8138   {}%
8139 }%
8140 }%
8141 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
8142 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
8143 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
8144 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
8145 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8146 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
8147 \renewcommand*\glsxtrfullformat[2]{%
8148   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8149   \ifglsxtrinsertinside\else##2\fi
8150   \glsxtrfullsep{##1}%
8151   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
8152 }%
8153 \renewcommand*\glsxtrfullplformat[2]{%
8154   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8155   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8156   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
8157 }%
8158 \renewcommand*\Glsxtrfullformat[2]{%
8159   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8160   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
```

```

8161     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
8162   }%
8163   \renewcommand*{\Glsxtrfullplformat}[2]{%
8164     \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8165     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8166     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
8167   }%
8168 }

```

Set this as the default style for general abbreviations:

```
8169 \setabbreviationstyle{long-short}
```

ngshortdescsort

```

8170 \newcommand*{\glsxtrlongshortdescsort}{%
8171   \expandonce\glsxtrorglong\space (\expandonce\glsxtrorgshort)%
8172 }

```

ngshortdescname

```

8173 \newcommand*{\glsxtrlongshortdescname}{%
8174   \protect\glslongfont{\the\glslongtok}%
8175   \glsxtrparen{\protect\glsabbrvfont{\the\glsshorttok}}%
8176 }

```

long-short-desc User supplies description. The long form is included in the name.

```

8177 \newabbreviationstyle{long-short-desc}%
8178 {%

```

Set accessibility attributes if enabled.

```
8179 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

8180 \renewcommand*{\CustomAbbreviationFields}{%
8181   name={\glsxtrlongshortdescname},%
8182   sort={\glsxtrlongshortdescsort},%
8183   first={\protect\glsfirstlongfont{\the\glslongtok}%
8184     \protect\glsxtrfullsep{\the\glslabeltok}%
8185     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
8186   firstplural={\protect\glsfirstlongfont{\the\glslongpltok}%
8187     \protect\glsxtrfullsep{\the\glslabeltok}%
8188     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%

```

The text key should only have the short form.

```

8189   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8190   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
8191 }

```

Unset the regular attribute if it has been set.

```

8192 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8193   \glshasattribute{\the\glslabeltok}{regular}%

```

```

8194     {%
8195         \glssetattribute{\the\glslabeltok}{regular}{false}%
8196     }%
8197     {}%
8198 }%
8199 }%
8200 {%
8201     \GlsXtrUseAbbrStyleFmts{long-short}%
8202 }

```

### trshortlongname

```

8203 \newcommand*\glsxtrshortlongname{%
8204     \protect\glsabbrvfont{\the\glsshorttok}%
8205 }

```

**short-long** Short form followed by long form in parenthesis on first use.

```

8206 \newabbreviationstyle{short-long}%
8207 {%

```

Set accessibility attributes if enabled.

```

8208 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel

```

Setup the default fields.

```

8209 \renewcommand*\CustomAbbreviationFields{%
8210     name={\glsxtrshortlongname},
8211     sort={\the\glsshorttok},
8212     description={\the\glslongtok},%
8213     first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
8214         \protect\glsxtrfullsep{\the\glslabeltok}%
8215         \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
8216     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
8217         \protect\glsxtrfullsep{\the\glslabeltok}%
8218         \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
8219     text={\protect\glsabbrvfont{\the\glsshorttok}},%
8220     plural={\protect\glsabbrvfont{\the\glsshortpltok}}}}

```

Unset the regular attribute if it has been set.

```

8221 \renewcommand*\GlsXtrPostNewAbbreviation{%
8222     \glshasattribute{\the\glslabeltok}{regular}%
8223     {}%
8224     \glssetattribute{\the\glslabeltok}{regular}{false}%
8225 }%
8226 {}%
8227 }%
8228 }%
8229 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8230 \renewcommand*\abrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
8231 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%

```

```

8232 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8233 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8234 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8235 \renewcommand*{\glsxtrfullformat}[2]{%
8236   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8237   \ifglsxtrinsertinside\else##2\fi
8238   \glsxtrfullsep{##1}%
8239   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8240 }%
8241 \renewcommand*{\glsxtrfullplformat}[2]{%
8242   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8243   \ifglsxtrinsertinside\else##2\fi
8244   \glsxtrfullsep{##1}%
8245   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
8246 }%
8247 \renewcommand*{\Glsxtrfullformat}[2]{%
8248   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8249   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8250   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8251 }%
8252 \renewcommand*{\Glsxtrfullplformat}[2]{%
8253   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8254   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8255   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
8256 }%
8257 }

```

#### ortlongdescsort

```
8258 \newcommand*{\glsxtrshortlongdescsort}{\the\glsshorttok}
```

#### ortlongdescname

```

8259 \newcommand*{\glsxtrshortlongdescname}{%
8260   \protect\glsabbrvfont{\the\glsshorttok}%
8261   \glsxtrparen{\protect\glslongfont{\the\glslongtok}}}%
8262 }

```

#### short-long-desc

User supplies description. The long form is included in the name.

```

8263 \newabbreviationstyle{short-long-desc}%
8264 {%

```

Set accessibility attributes if enabled.

```
8265 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

8266 \renewcommand*{\CustomAbbreviationFields}{%
8267   name={\glsxtrshortlongdescname},%
8268   sort={\glsxtrshortlongdescsort},%
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}}}%
8277 }%

```

Unset the regular attribute if it has been set.

```

8278 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8279   \glshasattribute{\the\glslabeltok}{regular}%
8280   {%
8281     \glssetattribute{\the\glslabeltok}{regular}{false}%
8282   }%
8283   {}%
8284 }%
8285 }%
8286 {%
8287 \GlsXtrUseAbbrStyleFmts{short-long}%
8288 }%

```

`ongfootnotefont` Only used by the “footnote” styles.

```
8289 \newcommand*{\glsfirstlongfootnotefont}[1]{\glslongfootnotefont{\#1}}%
```

`ongfootnotefont` Only used by the “footnote” styles.

```
8290 \newcommand*{\glslongfootnotefont}[1]{\glslongdefaultfont{\#1}}%
```

`trabrvfootnote`

`\glsxtrabrvfootnote{\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`).

```
8291 \newcommand*{\glsxtrabrvfootnote}[2]{\footnote{\#2}}
```

`xtrfootnotename`

```

8292 \newcommand*{\glsxtrfootnotename}{%
8293   \protect\glsabbrvfont{\the\glsshorttok}%
8294 }%

```

`footnote` Short form followed by long form in footnote on first use.

```

8295 \newabbreviationstyle{footnote}{%
8296 {%

```

Set accessibility attributes if enabled. (Add `firstshortaccess` since long form is hidden in a footnote on first use.)

```
8297 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
8298 \renewcommand*\CustomAbbreviationFields{%
8299   name={\glsxtrfootnotename},
8300   sort={\the\glsshorttok},
8301   description={\the\glslongtok},%
8302   first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
8303     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8304       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8305   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
8306     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8307       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
8308   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8309   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.

```
8310 \renewcommand*\GlsXtrPostNewAbbreviation{%
8311   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8312   \glshasattribute{\the\glslabeltok}{regular}%
8313   {%
8314     \glssetattribute{\the\glslabeltok}{regular}{false}%
8315   }%
8316   {}%
8317 }%
8318 }%
8319 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
8320 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
8321 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{\##1}}%
8322 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{\##1}}%
8323 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{\##1}}%
8324 \renewcommand*\glslongfont[1]{\glslongfootnotefont{\##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```
8325 \renewcommand*\glsxtrfullformat}[2]{%
8326   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
8327   \ifglsxtrinsertinside\else{\##2}\fi
8328   {\protect\glsxtrabbrvfootnote{\##1}%
8329     {\glsfirstlongfootnotefont{\glsaccesslong{\##1}}}}%
8330 }%
8331 \renewcommand*\glsxtrfullplformat}[2]{%
8332   \glsfirstabbrvfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside{\##2}\fi}%
8333   \ifglsxtrinsertinside\else{\##2}\fi
8334   {\protect\glsxtrabbrvfootnote{\##1}}%
```

```

8335     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8336   }%
8337 \renewcommand*{\Glsxtrfullformat}[2]{%
8338   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8339   \ifglsxtrinsertinside\else##2\fi
8340   \protect\glsxtrabrvfootnote{##1}%
8341   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8342 }%
8343 \renewcommand*{\Glsxtrfullplformat}[2]{%
8344   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8345   \ifglsxtrinsertinside\else##2\fi
8346   \protect\glsxtrabrvfootnote{##1}%
8347   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8348 }%

```

The first use full form and the inline full form use the short (long) style.

```

8349 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8350   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8351   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8352   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8353 }%
8354 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8355   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8356   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8357   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8358 }%
8359 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8360   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8361   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8362   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8363 }%
8364 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8365   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8366   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8367   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8368 }%
8369 }

```

#### short-footnote

```
8370 \letabbreviations{short-footnote}{footnote}
```

#### ootnotedescname

```

8371 \newcommand*{\glsxtrfootnotedescname}{%
8372   \protect\glsabbrvfont{\the\glsshorttok}%
8373   \protect\glsxtrfullsep{\the\glslabeltok}%
8374   \protect\glsxtrparen{\protect\glslongfont{\the\glslongtok}}%
8375 }

```

#### ootnotedescsort

```
8376 \newcommand*{\glsxtrfootnotedescsort}{\the\glsshorttok}
```

t-footnote-desc Like short-footnote but with user supplied description.

```
8377 \newabbreviationstyle{short-footnote-desc}{%
8378 {%
```

Set accessibility attributes if enabled

```
8379 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
8380 \renewcommand*{\CustomAbbreviationFields}{%
8381   name={\glsxtrfootnotedescname},
8382   sort={\glsxtrfootnotedescsort},
8383   first={\protect\glsfirstabbrvfont{\the\glsshorttok}\%
8384     \protect\glsxtrabbrvfootnote{\the\glslabeltok}\%
8385       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8386   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}\%
8387     \protect\glsxtrabbrvfootnote{\the\glslabeltok}\%
8388       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
8389   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8390   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.

```
8391 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8392   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}\%
8393   \glshasattribute{\the\glslabeltok}{regular}\%
8394   {}%
8395   \glssetattribute{\the\glslabeltok}{regular}{false}\%
8396   {}%
8397   {}%
8398 }%
8399 }%
8400 {%
8401 \GlsXtrUseAbbrStyleFmts{footnote}\%
8402 }
```

footnote-desc Synonym.

```
8403 \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.

```
8404 \newabbreviationstyle{postfootnote}{%
8405 {%
```

Set accessibility attributes if enabled. (Add firstshortaccess since long form is hidden in a footnote on first use.)

```
8406 \glsxtrAccSuppAbbrSetNameNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
8407 \renewcommand*{\CustomAbbreviationFields}{%
```

```

8408     name={\glsxtrfootnotename},
8409     sort={\the\glsshorttok},
8410     description={\the\glslongtok},%
8411     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
8412     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
8413     text={\protect\glsabbrvfont{\the\glsshorttok}},%
8414     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.

```

8415 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8416   \csdef{glsxtrpostlink\glscategorylabel}{%
8417     \glsxtrifwasfirstuse
8418   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

8419   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8420   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
8421 }%
8422 {}%
8423 }%
8424 \glshasattribute{\the\glslabeltok}{regular}%
8425 {}%
8426   \glssetattribute{\the\glslabeltok}{regular}{false}%
8427 }%
8428 {}%
8429 }%

```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```

8430 \renewcommand*{\glsxtrsetupfulldefs}{%
8431   \let\glsxtrifwasfirstuse\@secondoftwo
8432 }%
8433 }%
8434 {}%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8435 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8436 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{\##1}}%
8437 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{\##1}}%
8438 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{\##1}}%
8439 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{\##1}}%

```

The full format displays the short form. The long form is deferred.

```

8440 \renewcommand*{\glsxtrfullformat}[2]{%
8441   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
8442   \ifglsxtrinsertinside\else##2\fi
8443 }%
8444 \renewcommand*{\glsxtrfullplformat}[2]{%

```

```

8445   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8446   \ifglsxtrinsertinside\else##2\fi
8447 }%
8448 \renewcommand*\{\Glsxtrfullformat}[2]{%
8449   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8450   \ifglsxtrinsertinside\else##2\fi
8451 }%
8452 \renewcommand*\{\Glsxtrfullplformat}[2]{%
8453   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8454   \ifglsxtrinsertinside\else##2\fi
8455 }%

```

The first use full form and the inline full form use the short (long) style.

```

8456 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
8457   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8458   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8459   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8460 }%
8461 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
8462   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8463   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8464   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8465 }%
8466 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
8467   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8468   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8469   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8470 }%
8471 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
8472   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8473   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8474   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8475 }%
8476 }

```

#### rt-postfootnote

```
8477 \letabbreviationstyle{short-postfootnote}{postfootnote}
```

#### stfootnote-desc

Like short-postfootnote but with user supplied description.

```
8478 \newabbreviationstyle{short-postfootnote-desc}{}
```

```
8479 {%
```

Set accessibility attributes if enabled.

```
8480 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```

8481 \renewcommand*\{\CustomAbbreviationFields}{%
8482   name={\glsxtrfootnotedescname},
8483   sort={\glsxtrfootnotedescsort},
8484   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
8485   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%

```

```
8486     text={\protect\glsabbrvfont{\the\glsshorthtok}},%
8487     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.

```
8488 \renewcommand*\GlsXtrPostNewAbbreviation{%
8489   \csdef{glsxtrpostlink\glscategorylabel}{%
8490     \glsxtrifwasfirstuse
8491   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
8492   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8493   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
8494 }%
8495 {}%
8496 }%
8497 \glshasattribute{\the\glslabeltok}{regular}%
8498 {%
8499   \glssetattribute{\the\glslabeltok}{regular}{false}%
8500 }%
8501 {}%
8502 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
8503 \renewcommand*\glsxtrsetupfulldefs{%
8504   \let\glsxtrifwasfirstuse\@secondoftwo
8505 }%
8506 }%
8507 {}%
8508 \GlsXtrUseAbbrStyleFmts{postfootnote}%
8509 }
```

#### stfootnote-desc

```
8510 \letabbreviationstyle{postfootnote-desc}{short-postfootnote-desc}
```

#### shortnolongname

```
8511 \newcommand*\glsxtrshortnolongname{%
8512   \protect\glsabbrvfont{\the\glsshorthtok}%
8513 }
```

**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.

```
8514 \newabbreviationstyle{short}%
8515 {}
```

Set accessibility attributes if enabled.

```
8516 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
8517 \renewcommand*{\CustomAbbreviationFields}{%
8518   name={\glsxtrshortnolongname},
8519   sort={\the\glsshorttok},
8520   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
8521   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
8522   text={\protect\glsabbrvfont{\the\glsshorttok}},
8523   plural={\protect\glsabbrvfont{\the\glsshortpltok}},
8524   description={\the\glslongtok}}%
8525 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8526   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8527 }%
8528 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
8529 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8530 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
8531 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8532 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8533 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short form followed by the long form in parentheses.

```
8534 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8535   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
8536   \ifglsxtrinsertinside##2\fi}%
8537 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8538 \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8539 }%
8540 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8541   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
8542   \ifglsxtrinsertinside##2\fi}%
8543 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8544 \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
8545 }%
8546 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8547   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
8548   \ifglsxtrinsertinside##2\fi}%
8549 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8550 \glsxtrparen{\glsfirstlongfont{\Glsaccesslong{##1}}}%
8551 }%
8552 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8553   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
8554   \ifglsxtrinsertinside##2\fi}%
8555 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8556 \glsxtrparen{\glsfirstlongfont{\Glsaccesslongpl{##1}}}%
8557 }%
```

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.

```
8558 \renewcommand*{\glsxtrfullformat}[2]{%
8559   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
8560   \ifglsxtrinsertinside\else##2\fi
8561 }%
8562 \renewcommand*{\glsxtrfullplformat}[2]{%
8563   \glsfirstabbrvfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside##2\fi}%
8564   \ifglsxtrinsertinside\else##2\fi
8565 }%
8566 \renewcommand*{\Glsxtrfullformat}[2]{%
8567   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
8568   \ifglsxtrinsertinside\else##2\fi
8569 }%
8570 \renewcommand*{\Glsxtrfullplformat}[2]{%
8571   \glsfirstabbrvfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside##2\fi}%
8572   \ifglsxtrinsertinside\else##2\fi
8573 }%
8574 }
```

Set this as the default style for acronyms:

```
8575 \setabbreviationstyle[acronym]{short}
```

`short-nolong`

```
8576 \letabbreviationstyle{short-nolong}{short}
```

`rt-nolong-noreg` Like `short-nolong` but doesn't set the regular attribute.

```
8577 \newabbreviationstyle{short-nolong-noreg}%
8578 {%
8579   \GlsXtrUseAbbrStyleSetup{short-nolong}%

```

Unset the regular attribute if it has been set.

```
8580 \renewcommand*{\GlsXtrPostNewAbbreviation}%
8581   \glshasattribute{\the\glslabeltok}{regular}%
8582 {%
8583   \glssetattribute{\the\glslabeltok}{regular}{false}%
8584 }%
8585 {}%
8586 }%
8587 }%
8588 {}%
8589 \GlsXtrUseAbbrStyleFmts{short-nolong}%
8590 }
```

`trshortdescname`

```
8591 \newcommand*{\glsxtrshortdescname}%
8592   \protect\glsabbrvfont{\the\glsshorttok}%
8593 \protect\glsxtrfullsep{\the\glslabeltok}%
8594 \protect\glsxtrparen{\protect\glslongfont{\the\glslongtok}}%
8595 }
```

**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.

```
8596 \newabbreviationstyle{short-desc}%
8597 {%
```

Set accessibility attributes if enabled.

```
8598 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
8599 \renewcommand*{\CustomAbbreviationFields}{%
8600   name={\glsxtrshortdescname},
8601   sort={\the\glsshorttok},
8602   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
8603   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
8604   text={\protect\glsabbrvfont{\the\glsshorttok}},
8605   plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%
8606 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8607   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8608 }%
8609 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
8610 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8611 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
8612 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8613 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8614 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short format followed by the long form in parentheses.

```
8615 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8616   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8617   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8618   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8619 }%
8620 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8621   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8622   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8623   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8624 }%
8625 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8626   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8627   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8628   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8629 }%
8630 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8631   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8632   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8633   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8634 }%
```

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.

```
8635 \renewcommand*{\glsxtrfullformat}[2]{%
8636   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8637   \ifglsxtrinsertinside\else##2\fi
8638 }%
8639 \renewcommand*{\glsxtrfullplformat}[2]{%
8640   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8641   \ifglsxtrinsertinside\else##2\fi
8642 }%
8643 \renewcommand*{\Glsxtrfullformat}[2]{%
8644   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8645   \ifglsxtrinsertinside\else##2\fi
8646 }%
8647 \renewcommand*{\Glsxtrfullplformat}[2]{%
8648   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8649   \ifglsxtrinsertinside\else##2\fi
8650 }%
8651 }
```

short-nolong-desc

```
8652 \letabbreviationstyle{short-nolong-desc}{short-desc}
```

long-desc-noreg Like short-nolong-desc but doesn't set the regular attribute.

```
8653 \newabbreviationstyle{short-nolong-desc-noreg}%
8654 {%
8655   \GlsXtrUseAbbrStyleSetup{short-nolong-desc}%

```

Unset the regular attribute if it has been set.

```
8656 \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
8657   \glshasattribute{\the\glslabeltok}{regular}%
8658 {%
8659   \glssetattribute{\the\glslabeltok}{regular}{false}%
8660 }%
8661 {}%
8662 }%
8663 }%
8664 {%
8665   \GlsXtrUseAbbrStyleFmts{short-nolong-desc}%
8666 }
```

nolong-short Similar to short-nolong but the full form shows the long form followed by the short form in parentheses.

```
8667 \newabbreviationstyle{nolong-short}%
8668 {%
8669   \GlsXtrUseAbbrStyleSetup{short-nolong}%
8670 }%
8671 {%
8672   \GlsXtrUseAbbrStyleFmts{short-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```
8673 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8674   \protect\glsfirstlongfont{\glsaccesslong{##1}%
8675     \ifglsxtrinsertinside##2\fi}%
8676   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8677   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
8678 }%
8679 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8680   \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
8681     \ifglsxtrinsertinside##2\fi}%
8682   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8683   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
8684 }%
8685 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8686   \protect\glsfirstlongfont{\glsaccesslong{##1}%
8687     \ifglsxtrinsertinside##2\fi}%
8688   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8689   \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshort{##1}}}}%
8690 }%
8691 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8692   \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
8693     \ifglsxtrinsertinside##2\fi}%
8694   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8695   \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshortpl{##1}}}}%
8696 }%
8697 }
```

ong-short-noreg Like `nolong-short` but doesn't set the `regular` attribute.

```
8698 \newabbreviationstyle{nolong-short-noreg}{%
8699 }%
8700 \GlsXtrUseAbbrStyleSetup{nolong-short}
```

Unset the `regular` attribute if it has been set.

```
8701 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8702   \glshasattribute{\the\glslabeltok}{regular}%
8703   {%
8704     \glssetattribute{\the\glslabeltok}{regular}{false}%
8705   }%
8706   {}%
8707 }%
8708 }%
8709 {%
8710 \GlsXtrUseAbbrStyleFmts{nolong-short}%
8711 }
```

noshortdescname

```
8712 \newcommand*{\glsxtrlongnoshortdescname}{%
8713   \protect\glslongfont{\the\glslongtok}%
8714 }
```

`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.

```

8715 \newabbreviationstyle{long-desc}%
8716 {%
8717   \renewcommand*{\CustomAbbreviationFields}{%
8718     name={\glsxtrlongnoshortdescname},
8719     sort={\the\glslongtok},
8720     first={\protect\glsfirstlongfont{\the\glslongtok}},
8721     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
8722     text={\glslongfont{\the\glslongtok}},
8723     plural={\glslongfont{\the\glslongpltok}}%
8724   }%
8725   \renewcommand*{\GlsXtrPostNewAbbreviation}%
8726     \glssetattribute{\the\glslabeltok}{regular}{true}%
8727 }%
8728 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8729 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8730 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
8731 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8732 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8733 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8734 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8735   \glslongfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8736   \ifglsxtrinsertinside \else##2\fi
8737 }%
8738 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8739   \glslongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8740   \ifglsxtrinsertinside \else##2\fi
8741 }%
8742 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8743   \glslongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8744   \ifglsxtrinsertinside \else##2\fi
8745 }%
8746 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8747   \glslongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8748   \ifglsxtrinsertinside \else##2\fi
8749 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8750 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8751   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8752   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8753   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
8754 }%

```

```

8755 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8756   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8757   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8758   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
8759 }%
8760 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8761   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8762   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8763   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
8764 }%
8765 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8766   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8767   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8768   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
8769 }%

```

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.

```

8770 \renewcommand*{\glsxtrfullformat}[2]{%
8771   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8772   \ifglsxtrinsertinside\else##2\fi
8773 }%
8774 \renewcommand*{\glsxtrfullplformat}[2]{%
8775   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8776   \ifglsxtrinsertinside\else##2\fi
8777 }%
8778 \renewcommand*{\Glsxtrfullformat}[2]{%
8779   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8780   \ifglsxtrinsertinside\else##2\fi
8781 }%
8782 \renewcommand*{\Glsxtrfullplformat}[2]{%
8783   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8784   \ifglsxtrinsertinside\else##2\fi
8785 }%
8786 }

```

`ng-noshort-desc` Provide a synonym that matches similar styles.

```
8787 \letabbreviationstyle{long-noshort-desc}{long-desc}
```

`hort-desc-noreg` Like `long-noshort-desc` but doesn't set the regular attribute.

```

8788 \newabbreviationstyle{long-noshort-desc-noreg}%
8789 {%
8790   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%

```

Unset the regular attribute if it has been set.

```

8791 \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
8792   \glshasattribute{\the\glslabeltok}{regular}%
8793   {%
8794     \glssetattribute{\the\glslabeltok}{regular}{false}%
8795   }%

```

```
8796      {}%
8797  }%
8798 }%
8799 {%
8800   \GlsXtrUseAbbrStyleFmts{long-noshort-desc}%
8801 }
```

#### longnoshortname

```
8802 \newcommand*{\glsxtrlongnoshortname}{%
8803   \protect\glsabbrvfont{\the\glsshorttok}%
8804 }
```

**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.

```
8805 \newabbreviationstyle{long}%
8806 {%
```

Set accessibility attributes if enabled.

```
8807   \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
```

Setup the default fields.

```
8808   \renewcommand*{\CustomAbbreviationFields}{%
8809     name={\glsxtrlongnoshortname},
8810     sort={\the\glsshorttok},
8811     first={\protect\glsfirstlongfont{\the\glslongtok}},
8812     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
8813     text={\glslongfont{\the\glslongtok}},
8814     plural={\glslongfont{\the\glslongpltok}},%
8815     description={\the\glslongtok}%
8816   }%
8817   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8818     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8819 }%
8820 {%
8821   \GlsXtrUseAbbrStyleFmts{long-desc}%
8822 }
```

**long-noshort** Provide a synonym that matches similar styles.

```
8823 \letabbreviationstyle{long-noshort}{long}
```

**g-noshort-noreg** Like **long-noshort** but doesn't set the **regular** attribute.

```
8824 \newabbreviationstyle{long-noshort-noreg}%
8825 {%
8826   \GlsXtrUseAbbrStyleSetup{long-noshort}%

Unset the regular attribute if it has been set.
```

```
8827   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8828     \glshasattribute{\the\glslabeltok}{regular}}%
8829   {%
```

```

8830      \glssetattribute{\the\glslabeltok}{regular}{false}%
8831      }%
8832      {}%
8833      }%
8834 }%
8835 {%
8836 \GlsXtrUseAbbrStyleFmts{long-noshort}%
8837 }

```

### 1.7.3 Predefined Styles (Small Capitals)

These styles use `\textsc` for the short form.

`\glsxtrscfont` Maintained for backward-compatibility.

```
8838 \newcommand*{\glsxtrscfont}[1]{\textsc{#1}}
```

`\glsabbrvscfont` Added for consistent naming.

```
8839 \newcommand*{\glsabbrvscfont}{\glsxtrscfont}
```

`\sxtrfirstscfont` Maintained for backward-compatibility.

```
8840 \newcommand*{\sxtrfirstscfont}[1]{\glsabbrvscfont{#1}}
```

`\irstabbrvscfont` Added for consistent naming.

```
8841 \newcommand*{\irstabbrvscfont}{\sxtrfirstscfont}
```

and for the default short form suffix:

`\glsxtrscsuffix` \protect needs to come inside \s to avoid interfering with all caps.

```
8842 \newcommand*{\glsxtrscsuffix}{\protect\glsxtrfullsep{\glsxtrabbrypluralsuffix}}
```

`long-short-sc`

```
8843 \newabbreviationstyle{long-short-sc}{%
8844 {%
```

Set accessibility attributes if enabled.

```
8845 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```

8846 \renewcommand*{\CustomAbbreviationFields}{%
8847   name={\glsxtrlongshortname},%
8848   sort={\the\glsshorttok},%
8849   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
8850   \protect\glsxtrfullsep{\the\glslabeltok}%
8851   \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
8852   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
8853   \protect\glsxtrfullsep{\the\glslabeltok}%
8854   \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
8855   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8856   plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%

```

```

8857     description={\the\glslongtok}}%
8858 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8859     \glshasattribute{\the\glslabeltok}{regular}}%
8860     {}%
8861     \glssetattribute{\the\glslabeltok}{regular}{false}}%
8862     {}%
8863     {}%
8864     {}%
8865 }%
8866 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8867 \renewcommand*\abbrvpluralsuffix}{\glsxtrscsuffix}%
8868 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8869 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%

```

Use the default long fonts.

```

8870 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8871 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8872 \renewcommand*\glsxtrfullformat[2]{%
8873     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8874     \ifglsxtrinsertinside\else##2\fi
8875     \glsxtrfullsep{##1}%
8876     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8877 }%
8878 \renewcommand*\glsxtrfullplformat[2]{%
8879     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8880     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8881     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8882 }%
8883 \renewcommand*\Glsxtrfullformat[2]{%
8884     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8885     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8886     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8887 }%
8888 \renewcommand*\Glsxtrfullplformat[2]{%
8889     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8890     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8891     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8892 }%
8893 }

```

g-short-sc-desc

```

8894 \newabbreviationstyle{long-short-sc-desc}{%
8895 }%

```

Set accessibility attributes if enabled.

```

8896 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```
8897 \renewcommand*{\CustomAbbreviationFields}{%
8898   name={\glsxtrlongshortdescname},
8899   sort={\glsxtrlongshortdescsort},%
8900   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
8901     \protect\glsxtrfullsep{\the\glslabeltok}%
8902     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
8903   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
8904     \protect\glsxtrfullsep{\the\glslabeltok}%
8905     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
8906   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8907   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%
8908 }%
```

Unset the regular attribute if it has been set.

```
8909 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8910   \glshasattribute{\the\glslabeltok}{regular}%
8911   {%
8912     \glssetattribute{\the\glslabeltok}{regular}{false}%
8913   }%
8914   {}%
8915 }%
8916 }%
8917 {%
```

As long-short-sc style:

```
8918 \GlsXtrUseAbbrStyleFmts{long-short-sc}%
8919 }
```

short-sc-long Now the short (long) version

```
8920 \newabbreviationstyle{short-sc-long}%
8921 {%
```

Set accessibility attributes if enabled.

```
8922 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
8923 \renewcommand*{\CustomAbbreviationFields}{%
8924   name={\glsxtrshortlongname},
8925   sort={\the\glsshorttok},
8926   description={\the\glslongtok},%
8927   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
8928     \protect\glsxtrfullsep{\the\glslabeltok}%
8929     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8930   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
8931     \protect\glsxtrfullsep{\the\glslabeltok}%
8932     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8933   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8934   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```

8935 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8936   \glshasattribute{\the\glslabeltok}{regular}{}
8937   {%
8938     \glssetattribute{\the\glslabeltok}{regular}{false}{}
8939   }%
8940   {}{%
8941 }%
8942 }%
8943 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8944 \renewcommand*\abbrvpluralsuffix}{\glsxtrscsuffix}{%
8945 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}{%
8946 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}{%
8947 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}{%
8948 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}{%

```

The first use full form and the inline full form are the same for this style.

```

8949 \renewcommand*\glsxtrfullformat}[2]{%
8950   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}{%
8951   \ifglsxtrinsertinside\else##2\fi
8952   \glsxtrfullsep{##1}{%
8953   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}{%
8954 }%
8955 \renewcommand*\glsxtrfullplformat}[2]{%
8956   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}{%
8957   \ifglsxtrinsertinside\else##2\fi
8958   \glsxtrfullsep{##1}{%
8959   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}{%
8960 }%
8961 \renewcommand*\Glsxtrfullformat}[2]{%
8962   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}{%
8963   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{%
8964   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}{%
8965 }%
8966 \renewcommand*\Glsxtrfullplformat}[2]{%
8967   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}{%
8968   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{%
8969   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}{%
8970 }%
8971 }

```

`rt-sc-long-desc` As before but user provides description

```

8972 \newabbreviationstyle{short-sc-long-desc}{%
8973 }%

```

Set accessibility attributes if enabled.

```

8974 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

8975 \renewcommand*\CustomAbbreviationFields}{%

```

```

8976     name={\glsxtrshortlongdescname},
8977     sort={\glsxtrshortlongdescsort},
8978     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
8979       \protect\glsxtrfullsep{\the\glslabeltok}%
8980       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8981     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
8982       \protect\glsxtrfullsep{\the\glslabeltok}%
8983       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8984     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8985     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
8986   }%

```

Unset the regular attribute if it has been set.

```

8987   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8988     \glshasattribute{\the\glslabeltok}{regular}%
8989     {%
8990       \glssetattribute{\the\glslabeltok}{regular}{false}%
8991     }%
8992   }%
8993 }%
8994 }%
8995 {%

```

As short-sc-long style:

```

8996   \GlsXtrUseAbbrStyleFmts{short-sc-long}%
8997 }

```

#### short-sc

```

8998 \newabbreviationstyle{short-sc}%
8999 {%

```

Set accessibility attributes if enabled.

```

9000   \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel

```

Setup the default fields.

```

9001   \renewcommand*{\CustomAbbreviationFields}{%
9002     name={\glsxtrshortnolongname},
9003     sort={\the\glsshorttok},
9004     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
9005     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
9006     text={\protect\glsabbrvscfont{\the\glsshorttok}},
9007     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},
9008     description={\the\glslongtok}}%
9009   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9010     \glssetattribute{\the\glslabeltok}{regular}{true}}%
9011 }%
9012 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9013   \renewcommand*{\abbrvpluralsuffix}{\glsxtrscsuffix}%
9014   \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%

```

```

9015 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9016 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9017 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

9018 \renewcommand*\glsxtrinlinefullformat}[2]{%
9019   \protect\glsfirstabbrvscfont{\glsaccessshort{##1}}%
9020   \ifglsxtrinsertinside##2\fi}%
9021   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9022   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9023 }%
9024 \renewcommand*\glsxtrinlinefullplformat}[2]{%
9025   \protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}%
9026   \ifglsxtrinsertinside##2\fi}%
9027   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9028   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9029 }%
9030 \renewcommand*\Glsxtrinlinefullformat}[2]{%
9031   \protect\glsfirstabbrvscfont{\Glsaccessshort{##1}}%
9032   \ifglsxtrinsertinside##2\fi}%
9033   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9034   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9035 }%
9036 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
9037   \protect\glsfirstabbrvscfont{\Glsaccessshortpl{##1}}%
9038   \ifglsxtrinsertinside##2\fi}%
9039   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9040   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9041 }%

```

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.

```

9042 \renewcommand*\glsxtrfullformat}[2]{%
9043   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9044   \ifglsxtrinsertinside\else##2\fi
9045 }%
9046 \renewcommand*\glsxtrfullplformat}[2]{%
9047   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9048   \ifglsxtrinsertinside\else##2\fi
9049 }%
9050 \renewcommand*\Glsxtrfullformat}[2]{%
9051   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9052   \ifglsxtrinsertinside\else##2\fi
9053 }%
9054 \renewcommand*\Glsxtrfullplformat}[2]{%
9055   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9056   \ifglsxtrinsertinside\else##2\fi
9057 }%
9058 }

```

```

short-sc-nolong
9059 \letabbreviationstyle{short-sc-nolong}{short-sc}

short-sc-desc
9060 \newabbreviationstyle{short-sc-desc}%
9061 {%
  Set accessibility attributes if enabled.
9062   \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
  Setup the default fields.
9063   \renewcommand*\CustomAbbreviationFields{%
9064     name={\glsxtrshortdescname},
9065     sort={\the\glsshorttok},
9066     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
9067     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
9068     text={\protect\glsabbrvscfont{\the\glsshorttok}},
9069     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%
9070   \renewcommand*\GlsXtrPostNewAbbreviation{%
9071     \glssetattribute{\the\glslabeltok}{regular}{true}}%
9072 }%
9073 {%
  Use smallcaps and adjust the plural suffix to revert to upright.
9074   \renewcommand*\abbrvpluralsuffix{\glsxtrscsuffix}%
9075   \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\#1}}%
9076   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\#1}}%
9077   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\#1}}%
9078   \renewcommand*\glslongfont[1]{\glslongdefaultfont{\#1}}%
  The inline full form displays the short format followed by the long form in parentheses.
9079   \renewcommand*\glsxtrinlinefullformat[2]{%
9080     \glsfirstabbrvscfont{\glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
9081     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9082     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
9083 }%
9084   \renewcommand*\glsxtrinlinefullplformat[2]{%
9085     \glsfirstabbrvscfont{\glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
9086     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9087     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
9088 }%
9089   \renewcommand*\Glsxtrinlinefullformat[2]{%
9090     \glsfirstabbrvscfont{\Glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
9091     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9092     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
9093 }%
9094   \renewcommand*\Glsxtrinlinefullplformat[2]{%
9095     \glsfirstabbrvscfont{\Glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
9096     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9097     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
9098 }%

```

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.

```

9099 \renewcommand*{\glsxtrfullformat}[2]{%
9100   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9101   \ifglsxtrinsertinside\else##2\fi
9102 }%
9103 \renewcommand*{\glsxtrfullplformat}[2]{%
9104   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9105   \ifglsxtrinsertinside\else##2\fi
9106 }%
9107 \renewcommand*{\Glsxtrfullformat}[2]{%
9108   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9109   \ifglsxtrinsertinside\else##2\fi
9110 }%
9111 \renewcommand*{\Glsxtrfullplformat}[2]{%
9112   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9113   \ifglsxtrinsertinside\else##2\fi
9114 }%
9115 }

```

-sc-nolong-desc

```
9116 \letabbreviationstyle{short-sc-nolong-desc}{short-sc-desc}
```

nolong-short-sc

```

9117 \newabbreviationstyle{nolong-short-sc}%
9118 {%
9119   \GlsXtrUseAbbrStyleSetup{short-sc-nolong}%
9120 }%
9121 {%
9122   \GlsXtrUseAbbrStyleFmts{short-sc-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

9123 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9124   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
9125   \ifglsxtrinsertinside##2\fi}%
9126   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9127   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
9128 }%
9129 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9130   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
9131   \ifglsxtrinsertinside##2\fi}%
9132   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9133   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
9134 }%
9135 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9136   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
9137   \ifglsxtrinsertinside##2\fi}%
9138   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9139   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%

```

```

9140 }%
9141 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9142   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
9143   \ifglsxtrinsertinside##2\fi}%
9144   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9145   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
9146 }%
9147 }

```

`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.

```

9148 \newabbreviationstyle{long-noshort-sc}{%
9149 {%
9150   \renewcommand*{\CustomAbbreviationFields}{%
9151     name={\glsxtrlongnoshortname},
9152     sort={\the\glsshorttok},
9153     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
9154     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
9155     text={\protect\glslongdefaultfont{\the\glslongtok}},
9156     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
9157     description={\the\glslongtok}%
9158 }%
9159   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9160     \glssetattribute{\the\glslabeltok}{regular}{true}}%
9161 }%
9162 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9163 \renewcommand*{\abbrvpluralsuffix}{\glsxtrscsuffix}%
9164 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9165 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9166 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9167 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9168 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9169   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9170   \ifglsxtrinsertinside \else##2\fi
9171 }%
9172 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9173   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9174   \ifglsxtrinsertinside \else##2\fi
9175 }%
9176 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9177   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9178   \ifglsxtrinsertinside \else##2\fi
9179 }%
9180 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9181   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9182   \ifglsxtrinsertinside \else##2\fi

```

```
9183 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9184 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9185   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9186   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9187   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
9188 }%
9189 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9190   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9191   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9192   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
9193 }%
9194 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9195   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9196   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9197   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
9198 }%
9199 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9200   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9201   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9202   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
9203 }%
```

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.

```
9204 \renewcommand*{\glsxtrfullformat}[2]{%
9205   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9206   \ifglsxtrinsertinside\else##2\fi
9207 }%
9208 \renewcommand*{\glsxtrfullplformat}[2]{%
9209   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9210   \ifglsxtrinsertinside\else##2\fi
9211 }%
9212 \renewcommand*{\Glsxtrfullformat}[2]{%
9213   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9214   \ifglsxtrinsertinside\else##2\fi
9215 }%
9216 \renewcommand*{\Glsxtrfullplformat}[2]{%
9217   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9218   \ifglsxtrinsertinside\else##2\fi
9219 }%
9220 }
```

**long-sc** Backward compatibility:

```
9221 \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`.

```
9222 \newabbreviationstyle{long-noshort-sc-desc}{}
```

```

9223 {%
9224   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
9225 }%
9226 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9227 \renewcommand*{\abbrvpluralsuffix}{\glsxtrscsuffix}%
9228 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9229 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9230 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9231 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

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 }%
9240 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9241   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9242   \ifglsxtrinsertinside \else##2\fi
9243 }%
9244 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9245   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9246   \ifglsxtrinsertinside \else##2\fi
9247 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9248 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9249   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9250   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9251   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
9252 }%
9253 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9254   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9255   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9256   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
9257 }%
9258 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9259   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9260   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9261   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
9262 }%
9263 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9264   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9265   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9266   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
9267 }%

```

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.

```
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 \renewcommand*{\Glsxtrfullformat}[2]{%
9277   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9278   \ifglsxtrinsertinside\else##2\fi
9279 }%
9280 \renewcommand*{\Glsxtrfullplformat}[2]{%
9281   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9282   \ifglsxtrinsertinside\else##2\fi
9283 }%
9284 }
```

long-desc-sc Backward compatibility:

```
9285 \glsxtr@deprecated@abbrstyle{long-desc-sc}{long-noshort-sc-desc}
```

short-sc-footnote

```
9286 \newabbreviationstyle{short-sc-footnote}%
9287 {%
```

Set accessibility attributes if enabled.

```
9288 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
9289 \renewcommand*{\CustomAbbreviationFields}{%
9290   name={\glsxtrfootnotename},
9291   sort={\the\glsshorthttok},
9292   description={\the\glslongtok},%
9293   first={\protect\glsfirstabbrvscfont{\the\glsshorthttok}%
9294     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9295       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9296   firstplural={\protect\glsfirstabbrvscfont{\the\glsshorthplttok}%
9297     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9298       {\protect\glsfirstlongfootnotefont{\the\glslongplttok}}},%
9299   text={\protect\glsabbrvscfont{\the\glsshorthttok}},%
9300   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.

```
9301 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9302   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9303   \glshasattribute{\the\glslabeltok}{regular}%
9304 }%
```

```

9305     \glssetattribute{\the\glslabeltok}{regular}{false}%
9306   }%
9307   {}%
9308 }%
9309 }%
9310 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9311 \renewcommand*{\abbrvpluralsuffix}{\glsxtrscsuffix}%
9312 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9313 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9314 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
9315 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

9316 \renewcommand*{\glsxtrfullformat}[2]{%
9317   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9318   \ifglsxtrinsertinside\else##2\fi
9319   \protect\glsxtrabrvfootnote{##1}%
9320   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9321 }%
9322 \renewcommand*{\glsxtrfullplformat}[2]{%
9323   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9324   \ifglsxtrinsertinside\else##2\fi
9325   \protect\glsxtrabrvfootnote{##1}%
9326   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9327 }%
9328 \renewcommand*{\Glsxtrfullformat}[2]{%
9329   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9330   \ifglsxtrinsertinside\else##2\fi
9331   \protect\glsxtrabrvfootnote{##1}%
9332   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9333 }%
9334 \renewcommand*{\Glsxtrfullplformat}[2]{%
9335   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9336   \ifglsxtrinsertinside\else##2\fi
9337   \protect\glsxtrabrvfootnote{##1}%
9338   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9339 }%

```

The first use full form and the inline full form use the short (long) style.

```

9340 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9341   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9342   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9343   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9344 }%
9345 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9346   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9347   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9348   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9349 }%

```

```

9350 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9351   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9352   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9353   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9354 }%
9355 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9356   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9357   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9358   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9359 }%
9360 }

```

`footnote-sc` Backward compatibility:

```
9361 \@glsxtr@deprecated@abbrstyle{footnote-sc}{short-sc-footnote}
```

`c-footnote-desc` Like `short-sc-footnote` but with user supplied description.

```
9362 \newabbreviationstyle{short-sc-footnote-desc}%
9363 {%
```

Set accessibility attributes if enabled.

```
9364 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```

9365 \renewcommand*{\CustomAbbreviationFields}{%
9366   name={\glsxtrfootnotedescname},%
9367   sort={\glsxtrfootnotedescsort},%
9368   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
9369     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9370       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9371   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
9372     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9373       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9374   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9375   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.

```

9376 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9377   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9378   \glshasattribute{\the\glslabeltok}{regular}%
9379 {%
9380   \glssetattribute{\the\glslabeltok}{regular}{false}%
9381 }%
9382 {}%
9383 }%
9384 }%
9385 {%
9386 \GlsXtrUseAbbrStyleFmts{short-sc-footnote}%
9387 }

```

```
sc-postfootnote
```

```
9388 \newabbreviationstyle{short-sc-postfootnote}%
9389 {%
```

Set accessibility attributes if enabled.

```
9390 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
9391 \renewcommand*\CustomAbbreviationFields{%
9392   name={\glsxtrfootnotename},
9393   sort={\the\glsshorttok},
9394   description={\the\glslongtok},%
9395   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
9396   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
9397   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9398   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.

```
9399 \renewcommand*\GlsXtrPostNewAbbreviation{%
9400   \csdef{glsxtrpostlink\glscategorylabel}{%
9401     \glsxtrifwasfirstuse
9402   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
9403   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9404   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}%
9405 }%
9406 {}%
9407 }%
9408 \glshasattribute{\the\glslabeltok}{regular}%
9409 {}%
9410   \glssetattribute{\the\glslabeltok}{regular}{false}%
9411 }%
9412 {}%
9413 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
9414 \renewcommand*\glsxtrsetupfulldefs{%
9415   \let\glsxtrifwasfirstuse\@secondoftwo
9416 }%
9417 }%
9418 {}
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
9419 \renewcommand*\abbrvpluralsuffix{\glsxtrscsuffix}%
9420 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\##1}}%
9421 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\##1}}%
9422 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{\##1}}%
9423 \renewcommand*\glslongfont[1]{\glslongfootnotefont{\##1}}%
```

The full format displays the short form. The long form is deferred.

```
9424 \renewcommand*{\glsxtrfullformat}[2]{%
9425   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9426   \ifglsxtrinsertinside\else##2\fi
9427 }%
9428 \renewcommand*{\glsxtrfullplformat}[2]{%
9429   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9430   \ifglsxtrinsertinside\else##2\fi
9431 }%
9432 \renewcommand*{\Glsxtrfullformat}[2]{%
9433   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9434   \ifglsxtrinsertinside\else##2\fi
9435 }%
9436 \renewcommand*{\Glsxtrfullplformat}[2]{%
9437   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9438   \ifglsxtrinsertinside\else##2\fi
9439 }%
```

The first use full form and the inline full form use the short (long) style.

```
9440 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9441   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9442   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9443   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9444 }%
9445 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9446   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9447   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9448   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9449 }%
9450 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9451   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9452   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9453   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9454 }%
9455 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9456   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9457   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9458   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9459 }%
9460 }
```

postfootnote-sc Backward compatibility:

```
9461 @glsxtr@deprecated@abbrstyle{postfootnote-sc}{short-sc-postfootnote}
```

stfootnote-desc Like short-sc-footnote but with user supplied description.

```
9462 \newabbreviationstyle{short-sc-postfootnote-desc}%
9463 {%
```

Set accessibility attributes if enabled.

```
9464 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
9465 \renewcommand*{\CustomAbbreviationFields}{%
9466   name={\glsxtrfootnotedescname},
9467   sort={\glsxtrfootnotedescsort},
9468   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
9469   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
9470   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9471   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.

```
9472 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9473   \csdef{glsxtrpostlink\glscategorylabel}{%
9474     \glsxtrifwasfirstuse
9475   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
9476   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9477   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
9478 }%
9479 {}%
9480 }%
9481 \glshasattribute{\the\glslabeltok}{regular}%
9482 {}%
9483   \glssetattribute{\the\glslabeltok}{regular}{false}%
9484 }%
9485 {}%
9486 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
9487 \renewcommand*{\glsxtrsetupfulldefs}{%
9488   \let\glsxtrifwasfirstuse\@secondoftwo
9489 }%
9490 }%
9491 {}%
9492 \GlsXtrUseAbbrStyleFmts{short-sc-postfootnote}%
9493 }
```

#### 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.
9494 \newcommand*{\glsxtrsmfont}[1]{\textsmaller{#1}}
```

```
\glsabbrvsmfont Added for consistent naming.
9495 \newcommand*{\glsabbrvsmfont}{\glsxtrsmfont}
```

`sxtrfirstsmfont` Maintained for backward compatibility.

```
9496 \newcommand*{\glsxtrfirstsmfont}[1]{\glsabbrvsmfont{#1}}
```

`irstabbrvsmfont` Added for consistent naming.

```
9497 \newcommand*{\glsfirstabbrvsmfont}{\glsxtrfirstsmfont}
```

and for the default short form suffix:

```
\glsxtrsmsuffix
```

```
9498 \newcommand*{\glsxtrsmsuffix}{\glsxtrabbrvpluralsuffix}
```

`long-short-sm`

```
9499 \newabbreviationstyle{long-short-sm}%
9500 {%
```

Set accessibility attributes if enabled.

```
9501 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
9502 \renewcommand*{\CustomAbbreviationFields}{%
9503   name={\glsxtrlongshortname},
9504   sort={\the\glsshorttok},
9505   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
9506     \protect\glsxtrfullsep{\the\glslabeltok}%
9507     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
9508   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
9509     \protect\glsxtrfullsep{\the\glslabeltok}%
9510     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
9511   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9512   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},%
9513   description={\the\glslongtok}}%
9514 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9515   \glshasattribute{\the\glslabeltok}{regular}%
9516   {%
9517     \glssetattribute{\the\glslabeltok}{regular}{false}%
9518   }%
9519   {}%
9520 }%
9521 }%
9522 {%
```

```
9523 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9524 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9525 \renewcommand*{\abbrvpluralsuffix}{\glsxtrsmsuffix}%
```

Use the default long fonts.

```
9526 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9527 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
9528 \renewcommand*\glsxtrfullformat[2]{%
9529   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9530   \ifglsxtrinsertinside\else##2\fi
9531   \glsxtrfullsep{##1}%
9532   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9533 }%
9534 \renewcommand*\glsxtrfullplformat[2]{%
9535   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9536   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9537   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9538 }%
9539 \renewcommand*\Glsxtrfullformat[2]{%
9540   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9541   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9542   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9543 }%
9544 \renewcommand*\Glsxtrfullplformat[2]{%
9545   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9546   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9547   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9548 }%
9549 }
```

g-short-sm-desc

```
9550 \newabbreviationstyle{long-short-sm-desc}%
9551 {%
```

Set accessibility attributes if enabled.

```
9552 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
9553 \renewcommand*\CustomAbbreviationFields{%
9554   name={\glsxtrlongshortdescname},%
9555   sort={\glsxtrlongshortdescsort},%
9556   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
9557     \protect\glsxtrfullsep{\the\glslabeltok}%
9558     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
9559   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
9560     \protect\glsxtrfullsep{\the\glslabeltok}%
9561     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
9562   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9563   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}}%
9564 }%
```

Unset the regular attribute if it has been set.

```
9565 \renewcommand*\GlsXtrPostNewAbbreviation{%
9566   \glshasattribute{\the\glslabeltok}{regular}%
9567   {%
9568     \glssetattribute{\the\glslabeltok}{regular}{false}}%
```

```
9569    }%
9570    {}%
9571  }%
9572 }%
9573 {%
```

As long-short-sm style:

```
9574  \GlsXtrUseAbbrStyleFmts{long-short-sm}%
9575 }
```

**short-sm-long** Now the short (long) version

```
9576 \newabbreviationstyle{short-sm-long}{%
9577 {}%
```

Set accessibility attributes if enabled.

```
9578  \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
9579  \renewcommand*\{\CustomAbbreviationFields}{%
9580    name={\glsxtrshortlongname},
9581    sort={\the\glsshorttok},
9582    description={\the\glslongtok},%
9583    first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}}%
9584    \protect\glsxtrfullsep{\the\glslabeltok}%
9585    \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}},%
9586    firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}%
9587    \protect\glsxtrfullsep{\the\glslabeltok}%
9588    \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}},%
9589    text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9590    plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
9591  \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
9592    \glshasattribute{\the\glslabeltok}{regular}}%
9593  {}%
9594    \glssetattribute{\the\glslabeltok}{regular}{false}}%
9595  {}%
9596  {}%
9597 }%
9598 }%
9599 {}
```

```
9600  \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{\##1}}%
9601  \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{\##1}}%
9602  \renewcommand*\{\abbrvpluralsuffix}{\glsxtrmssuffix}%
9603  \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\##1}}%
9604  \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{\##1}}%
```

The first use full form and the inline full form are the same for this style.

```
9605  \renewcommand*\{\glsxtrfullformat}[2]{%
9606    \glsfirstabbrvsmfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}}%
```

```

9607   \ifglsxtrinsertinside\else##2\fi
9608   \glsxtrfullsep{##1}%
9609   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9610 }%
9611 \renewcommand*{\glsxtrfullplformat}[2]{%
9612   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9613   \ifglsxtrinsertinside\else##2\fi
9614   \glsxtrfullsep{##1}%
9615   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9616 }%
9617 \renewcommand*{\Glsxtrfullformat}[2]{%
9618   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9619   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9620   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9621 }%
9622 \renewcommand*{\Glsxtrfullplformat}[2]{%
9623   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9624   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9625   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9626 }%
9627 }

```

`rt-sm-long-desc` As before but user provides description

```

9628 \newabbreviationstyle{short-sm-long-desc}{%
9629 }%

```

Set accessibility attributes if enabled.

```

9630 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

9631 \renewcommand*{\CustomAbbreviationFields}{%
9632   name={\glsxtrshortlongdescname},
9633   sort={\glsxtrshortlongdescsort},
9634   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
9635   \protect\glsxtrfullsep{\the\glslabeltok}%
9636   \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9637   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
9638   \protect\glsxtrfullsep{\the\glslabeltok}%
9639   \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9640   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9641   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}
9642 }%

```

Unset the regular attribute if it has been set.

```

9643 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9644   \glshasattribute{\the\glslabeltok}{regular}%
9645   {%
9646     \glssetattribute{\the\glslabeltok}{regular}{false}%
9647   }%
9648 }%

```

```

9649  }%
9650 }%
9651 {%
    As short-sm-long style:
9652  \GlsXtrUseAbbrStyleFmts{short-sm-long}%
9653 }

short-sm
9654 \newabbreviationstyle{short-sm}{%
9655 {%
    Set accessibility attributes if enabled.
9656  \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
    Setup the default fields.
9657  \renewcommand*{\CustomAbbreviationFields}{%
9658      name={\glsxtrshortnolongname},
9659      sort={\the\glsshorttok},
9660      first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
9661      firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
9662      text={\protect\glsabbrvsmfont{\the\glsshorttok}},
9663      plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
9664      description={\the\glslongtok}}%
9665  \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9666      \glssetattribute{\the\glslabeltok}{regular}{true}}%
9667 }%
9668 {%
9669  \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9670  \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9671  \renewcommand*{\abbrvpluralsuffix}{\glsxtrsnsuffix}%
9672  \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9673  \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

    The inline full form displays the short form followed by the long form in parentheses.
9674  \renewcommand*{\glsxtrinlinefullformat}[2]{%
9675      \protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}%
9676      \ifglsxtrinsertinside##2\fi}%
9677      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9678      \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9679 }%
9680  \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9681      \protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}%
9682      \ifglsxtrinsertinside##2\fi}%
9683      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9684      \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9685 }%

9686  \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9687      \protect\glsfirstabbrvsmfont{\Glsaccessshort{##1}}%

```

```

9688     \ifglsxtrinsertinside##2\fi}%
9689     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9690     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9691 }%
9692 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
9693     \protect\glsfirstabbrvsmfont{\Glsaccessshortpl{##1}}%
9694     \ifglsxtrinsertinside##2\fi}%
9695     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9696     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9697 }%

```

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.

```

9698 \renewcommand*\{\glsxtrfullformat}[2]{%
9699     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9700     \ifglsxtrinsertinside\else##2\fi
9701 }%
9702 \renewcommand*\{\glsxtrfullplformat}[2]{%
9703     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9704     \ifglsxtrinsertinside\else##2\fi
9705 }%
9706 \renewcommand*\{\Glsxtrfullformat}[2]{%
9707     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9708     \ifglsxtrinsertinside\else##2\fi
9709 }%
9710 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9711     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9712     \ifglsxtrinsertinside\else##2\fi
9713 }%
9714 }

```

#### short-sm-nolong

```
9715 \letabbreviationstyle{short-sm-nolong}{short-sm}
```

#### short-sm-desc

```
9716 \newabbreviationstyle{short-sm-desc}%
9717 {%
```

Set accessibility attributes if enabled.

```
9718 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

9719 \renewcommand*\{\CustomAbbreviationFields}{%
9720     name={\glsxtrshortdescname},
9721     sort={\the\glsshorttok},
9722     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
9723     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
9724     text={\protect\glsabbrvsmfont{\the\glsshorttok}},
9725     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%
9726 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%

```

```

9727     \glssetattribute{\the\glslabeltok}{regular}{true}}%
9728 }%
9729 {%
9730 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9731 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9732 \renewcommand*\{\abrvpluralsuffix}{\glsxtrsuffix}%
9733 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9734 \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

9735 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
9736   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9737   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9738   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9739 }%
9740 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
9741   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9742   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9743   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9744 }%
9745 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
9746   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9747   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9748   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9749 }%
9750 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
9751   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9752   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9753   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9754 }%

```

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.

```

9755 \renewcommand*\{\glsxtrfullformat}[2]{%
9756   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9757   \ifglsxtrinsertinside\else##2\fi
9758 }%
9759 \renewcommand*\{\glsxtrfullplformat}[2]{%
9760   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9761   \ifglsxtrinsertinside\else##2\fi
9762 }%
9763 \renewcommand*\{\Glsxtrfullformat}[2]{%
9764   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9765   \ifglsxtrinsertinside\else##2\fi
9766 }%
9767 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9768   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9769   \ifglsxtrinsertinside\else##2\fi
9770 }%

```

```

9771 }

-sm-nolong-desc
9772 \let\abbreviationstyle{\short-sm-nolong-desc}{\short-sm-desc}

nolong-short-sm
9773 \newabbreviationstyle{nolong-short-sm}%
9774 {%
9775   \GlsXtrUseAbbrStyleSetup{short-sm-nolong}%
9776 }%
9777 {%
9778   \GlsXtrUseAbbrStyleFmts{short-sm-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

9779 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9780   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
9781     \ifglsxtrinsertinside##2\fi}%
9782     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9783     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9784 }%
9785 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9786   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
9787     \ifglsxtrinsertinside##2\fi}%
9788     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9789     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9790 }%
9791 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9792   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
9793     \ifglsxtrinsertinside##2\fi}%
9794     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9795     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9796 }%
9797 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9798   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
9799     \ifglsxtrinsertinside##2\fi}%
9800     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9801     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9802 }%
9803 }

```

long-noshort-sm The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

9804 \newabbreviationstyle{long-noshort-sm}%
9805 {%

```

Set accessibility attributes if enabled.

```

9806 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel

```

Setup the default fields.

```

9807 \renewcommand*{\CustomAbbreviationFields}{%

```

```

9808     name={\glsxtrlongnoshortname},
9809     sort={\the\glsshorttok},
9810     first=\protect\glsfirstlongdefaultfont{\the\glslongtok},
9811     firstplural=\protect\glsfirstlongdefaultfont{\the\glslongpltok},
9812     text=\protect\glslongdefaultfont{\the\glslongtok},
9813     plural=\protect\glslongdefaultfont{\the\glslongpltok},%
9814     description=\the\glslongtok}%
9815 }%
9816 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9817   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9818 }%
9819 {%
9820 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9821 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9822 \renewcommand*{\abbrvpluralsuffix}{\glsxtrmssuffix}%
9823 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9824 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9825 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9826   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9827   \ifglsxtrinsertinside \else##2\fi
9828 }%
9829 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9830   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9831   \ifglsxtrinsertinside \else##2\fi
9832 }%
9833 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9834   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9835   \ifglsxtrinsertinside \else##2\fi
9836 }%
9837 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9838   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9839   \ifglsxtrinsertinside \else##2\fi
9840 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9841 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9842   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9843   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9844 \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9845 }%
9846 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9847   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9848   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9849 \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9850 }%
9851 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9852   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}}%

```

```

9853     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9854     \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9855   }%
9856   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9857     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9858     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9859     \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9860   }%

```

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.

```

9861   \renewcommand*{\glsxtrfullformat}[2]{%
9862     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9863     \ifglsxtrinsertinside\else##2\fi
9864   }%
9865   \renewcommand*{\glsxtrfullplformat}[2]{%
9866     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9867     \ifglsxtrinsertinside\else##2\fi
9868   }%
9869   \renewcommand*{\Glsxtrfullformat}[2]{%
9870     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9871     \ifglsxtrinsertinside\else##2\fi
9872   }%
9873   \renewcommand*{\Glsxtrfullplformat}[2]{%
9874     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9875     \ifglsxtrinsertinside\else##2\fi
9876   }%
9877 }

```

#### long-sm Backward compatibility:

```
9878 @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`.

```

9879 \newabbreviationstyle{long-noshort-sm-desc}%
9880 {%
9881   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
9882 }%
9883 {%
9884   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9885   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9886   \renewcommand*{\abbrvpluralsuffix}{\glsxtrmsuffix}%
9887   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9888   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

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 }%
9897 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9898   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9899   \ifglsxtrinsertinside \else##2\fi
9900 }%
9901 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9902   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9903   \ifglsxtrinsertinside \else##2\fi
9904 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9905 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9906   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9907   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9908   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9909 }%
9910 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9911   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9912   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9913   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9914 }%
9915 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9916   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9917   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9918   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9919 }%
9920 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9921   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9922   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9923   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9924 }%

```

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.

```

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 \renewcommand*{\Glsxtrfullformat}[2]{%
9934   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9935   \ifglsxtrinsertinside\else##2\fi
9936 }%

```

```

9937 \renewcommand*\Glsxtrfullplformat}[2]{%
9938   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9939   \ifglsxtrinsertinside\else##2\fi
9940 }%
9941 }

long-desc-sm Backward compatibility:
9942 @glsxtr@deprecated@abbrstyle{long-desc-sm}{long-noshort-sm-desc}

short-sm-footnote
9943 \newabbreviationstyle{short-sm-footnote}%
9944 {%

  Set accessibility attributes if enabled.
9945 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel

  Setup the default fields.
9946 \renewcommand*\CustomAbbreviationFields}{%
9947   name={\glsxtrfootnotename},
9948   sort={\the\glsshorttok},
9949   description={\the\glslongtok},%
9950   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
9951     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9952       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9953   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
9954     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9955       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9956   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9957   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.

```

9958 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9959   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9960   \glshasattribute{\the\glslabeltok}{regular}%
9961 {%
9962   \glssetattribute{\the\glslabeltok}{regular}{false}%
9963 }%
9964 {}%
9965 }%
9966 }%
9967 {%

9968 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9969 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9970 \renewcommand*\abbrvpluralsuffix{\glsxtrmsuffix}%
9971 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
9972 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```

9973 \renewcommand*{\glsxtrfullformat}[2]{%
9974   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9975   \ifglsxtrinsertinside\else##2\fi
9976   \protect\glsxtrabrvfootnote{##1}%
9977   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9978 }%
9979 \renewcommand*{\glsxtrfullplformat}[2]{%
9980   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9981   \ifglsxtrinsertinside\else##2\fi
9982   \protect\glsxtrabrvfootnote{##1}%
9983   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9984 }%
9985 \renewcommand*{\Glsxtrfullformat}[2]{%
9986   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9987   \ifglsxtrinsertinside\else##2\fi
9988   \protect\glsxtrabrvfootnote{##1}%
9989   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9990 }%
9991 \renewcommand*{\Glsxtrfullplformat}[2]{%
9992   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9993   \ifglsxtrinsertinside\else##2\fi
9994   \protect\glsxtrabrvfootnote{##1}%
9995   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9996 }%

```

The first use full form and the inline full form use the short (long) style.

```

9997 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9998   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9999   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10000   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10001 }%
10002 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10003   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10004   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10005   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10006 }%
10007 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10008   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10009   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10010   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10011 }%
10012 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10013   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10014   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10015   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10016 }%
10017 }%

```

**footnote-sm Backward compatibility:**

```
10018 \glsxtr@deprecated@abbrstyle{footnote-sm}{short-sm-footnote}
```

m-footnote-desc Like short-footnote but with user supplied description.

```
10019 \newabbreviationstyle{short-sm-footnote-desc}%
10020 {%
```

Set accessibility attributes if enabled.

```
10021 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
10022 \renewcommand*\CustomAbbreviationFields{%
10023   name={\glsxtrfootnotedescname},
10024   sort={\glsxtrfootnotedescsort},
10025   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}\%
10026     \protect\glsxtrabbrvfootnote{\the\glslabeltok}\%
10027       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
10028   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}\%
10029     \protect\glsxtrabbrvfootnote{\the\glslabeltok}\%
10030       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
10031   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
10032   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.

```
10033 \renewcommand*\GlsXtrPostNewAbbreviation{%
10034   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
10035   \glshasattribute{\the\glslabeltok}{regular}%
10036   {%
10037     \glssetattribute{\the\glslabeltok}{regular}{false}%
10038   }%
10039   {}%
10040 }%
10041 }%
10042 {%
10043 \GlsXtrUseAbbrStyleFmts{short-sm-footnote}%
10044 }
```

sm-postfootnote

```
10045 \newabbreviationstyle{short-sm-postfootnote}%
10046 {%
```

Set accessibility attributes if enabled.

```
10047 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
10048 \renewcommand*\CustomAbbreviationFields{%
10049   name={\glsxtrfootnotename},
10050   sort={\the\glsshorttok},
10051   description={\the\glslongtok},%
10052   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
10053   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
10054   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
10055   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.

```
10056 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10057   \csdef{glsxtrpostlink\glscategorylabel}{%
10058     \glsxtrifwasfirstuse
10059   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
10060   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
10061   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
10062 }%
10063 {}%
10064 }%
10065 \glshasattribute{\the\glslabeltok}{regular}%
10066 {}%
10067   \glssetattribute{\the\glslabeltok}{regular}{false}%
10068 }%
10069 {}%
10070 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
10071 \renewcommand*\glsxtrsetupfulldefs}{%
10072   \let\glsxtrifwasfirstuse\@secondoftwo
10073 }%
10074 }%
10075 {}%

10076 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
10077 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
10078 \renewcommand*\abrvpluralsuffix{\glsxtrmssuffix}%
10079 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
10080 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form. The long form is deferred.

```
10081 \renewcommand*\glsxtrfullformat}[2]{%
10082   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10083   \ifglsxtrinsertinside\else##2\fi
10084 }%
10085 \renewcommand*\glsxtrfullplformat}[2]{%
10086   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10087   \ifglsxtrinsertinside\else##2\fi
10088 }%
10089 \renewcommand*\GlsXtrfullformat}[2]{%
10090   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10091   \ifglsxtrinsertinside\else##2\fi
10092 }%
10093 \renewcommand*\GlsXtrfullplformat}[2]{%
10094   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

10095     \ifglsxtrinsertinside\else##2\fi
10096   }%

```

The first use full form and the inline full form use the short (long) style.

```

10097   \renewcommand*{\glsxtrinlinefullformat}[2]{%
10098     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10099     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10100     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10101   }%
10102   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10103     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10104     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10105     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10106   }%
10107   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10108     \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10109     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10110     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10111   }%
10112   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10113     \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10114     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10115     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10116   }%
10117 }

```

#### postfootnote-sm Backward compatibility:

```
10118 @glsxtr@deprecated@abbrstyle{postfootnote-sm}{short-sm-postfootnote}
```

#### stfootnote-desc Like short-sm-postfootnote but with user supplied description.

```
10119 \newabbreviationstyle{short-sm-postfootnote-desc}{%
10120 }%
```

Set accessibility attributes if enabled.

```
10121 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
10122 \renewcommand*{\CustomAbbreviationFields}{%
10123   name={\glsxtrfootnotedescname},
10124   sort={\glsxtrfootnotedescsort},
10125   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
10126   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
10127   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
10128   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.

```
10129 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10130   \csdef{glsxtrpostlink\glscategorylabel}{%
10131     \glsxtrifwasfirstuse
10132   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
10133     \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
10134     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}%
10135     }%
10136     {}%
10137     }%
10138     \glshasattribute{\the\glslabeltok}{regular}%
10139     {}%
10140     \glssetattribute{\the\glslabeltok}{regular}{false}%
10141     }%
10142     {}%
10143     }%
```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```
10144 \renewcommand*{\glsxtrsetupfulldefs}{%
10145   \let\glsxtrifwasfirstuse\@secondoftwo
10146 }%
10147 }%
10148 {}%
10149 \GlsXtrUseAbbrStyleFmts{short-sm-postfootnote}%
10150 }
```

### 1.7.5 Predefined Styles (Emphasized)

These styles use `\emph` for the short form.

```
\glsabbrvemfont
10151 \newcommand*{\glsabbrvemfont}[1]{\emph{#1}}%
\irstabbrvemfont
10152 \newcommand*{\glsfirstabbrvemfont}[1]{\glsabbrvemfont{#1}}%
```

The default short form suffix:

```
\glsxtremsuffix
10153 \newcommand*{\glsxtremsuffix}{\glsxtrabbrvpluralsuffix}
```

`firstlongemfont` Only used by the “long-em” styles.

```
10154 \newcommand*{\glsfirstlongemfont}[1]{\glslongemfont{#1}}%
```

`\glslongemfont` Only used by the “long-em” styles.

```
10155 \newcommand*{\glslongemfont}[1]{\emph{#1}}%
```

`long-short-em` The long form is just set in the default long font.

```
10156 \newabbreviationstyle{long-short-em}%
10157 {}%
```

Set accessibility attributes if enabled.

```
10158 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
10159 \renewcommand*\CustomAbbreviationFields{%
10160   name={\glsxtrlongshortname},
10161   sort={\the\glsshorttok},
10162   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
10163     \protect\glsxtrfullsep{\the\glslabeltok}%
10164     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
10165   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
10166     \protect\glsxtrfullsep{\the\glslabeltok}%
10167     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
10168   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10169   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
10170   description={\the\glslongtok}}%
10171 \renewcommand*\GlsXtrPostNewAbbreviation{%
10172   \glshasattribute{\the\glslabeltok}{regular}%
10173   {%
10174     \glssetattribute{\the\glslabeltok}{regular}{false}%
10175   }%
10176   {}%
10177 }%
10178 }%
10179 {%
10180 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10181 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10182 \renewcommand*\abbrvpluralsuffix{\glsxtremsuffix}%
```

Use the default long fonts.

```
10183 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
10184 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
10185 \renewcommand*\glsxtrfullformat[2]{%
10186   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10187   \ifglsxtrinsertinside\else##2\fi
10188   \glsxtrfullsep{##1}%
10189   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
10190 }%
10191 \renewcommand*\glsxtrfullplformat[2]{%
10192   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10193   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10194   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
10195 }%
10196 \renewcommand*\Glsxtrfullformat[2]{%
10197   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10198   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10199   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
```

```

10200 }%
10201 \renewcommand*{\Glsxtrfullplformat}[2]{%
10202   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10203   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10204   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10205 }%
10206 }

```

#### g-short-em-desc

```

10207 \newabbreviationstyle{long-short-em-desc}{%
10208 {%
  Set accessibility attributes if enabled.
10209 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
  Setup the default fields.

```

```

10210 \renewcommand*{\CustomAbbreviationFields}{%
10211   name={\glsxtrlongshortdescname},%
10212   sort={\glsxtrlongshortdescsort},%
10213   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
10214   \protect\glsxtrfullsep{\the\glslabeltok}%
10215   \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
10216   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
10217   \protect\glsxtrfullsep{\the\glslabeltok}%
10218   \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
10219   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10220   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
10221 }%

```

Unset the regular attribute if it has been set.

```

10222 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10223   \glshasattribute{\the\glslabeltok}{regular}%
10224   {%
10225     \glssetattribute{\the\glslabeltok}{regular}{false}%
10226   }%
10227   {}%
10228 }%
10229 }%
10230 {%

```

As long-short-em style:

```

10231 \GlsXtrUseAbbrStyleFmts{long-short-em}%
10232 }

```

#### long-em-short-em

```

10233 \newabbreviationstyle{long-em-short-em}{%
10234 {%
  Set accessibility attributes if enabled.
10235 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel

```

Setup the default fields. `\glslongemfont` is used in the description since `\glsdesc` doesn't set the style.

```

10236 \renewcommand*\CustomAbbreviationFields{%
10237   name={\glsxtrlongshortname},
10238   sort={\the\glsshorttok},
10239   first={\protect\glsfirstlongemfont{\the\glslongtok}%
10240     \protect\glsxtrfullsep{\the\glslabeltok}%
10241     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
10242   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
10243     \protect\glsxtrfullsep{\the\glslabeltok}%
10244     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
10245   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10246   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
10247   description={\protect\glslongemfont{\the\glslongtok}}}

```

Unset the regular attribute if it has been set.

```

10248 \renewcommand*\GlsXtrPostNewAbbreviation{%
10249   \glshasattribute{\the\glslabeltok}{regular}%
10250   {%
10251     \glssetattribute{\the\glslabeltok}{regular}{false}%
10252   }%
10253   {}%
10254 }%
10255 }%
10256 {%
10257 \renewcommand*\abrvpluralsuffix}{\glsxtremsuffix}%
10258 \renewcommand*\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
10259 \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10260 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
10261 \renewcommand*\glslongfont}[1]{\glslongemfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10262 \renewcommand*\glsxtrfullformat}[2]{%
10263   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10264   \ifglsxtrinsertinside\else##2\fi
10265   \glsxtrfullsep{##1}%
10266   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
10267 }%
10268 \renewcommand*\glsxtrfullplformat}[2]{%
10269   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10270   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10271   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
10272 }%
10273 \renewcommand*\GlsXtrfullformat}[2]{%
10274   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10275   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10276   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
10277 }%

```

```

10278 \renewcommand*\Glsxtrfullplformat}[2]{%
10279   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10280   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10281   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10282 }%
10283 }

```

#### m-short-em-desc

```

10284 \newabbreviationstyle{long-em-short-em-desc}{%
10285 }%

```

Set accessibility attributes if enabled.

```
10286 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

10287 \renewcommand*\CustomAbbreviationFields}{%
10288   name={\glsxtrlongshortdescname},%
10289   sort={\glsxtrlongshortdescsort},%
10290   first={\protect\glsfirstlongemfont{\the\glslongtok}%
10291     \protect\glsxtrfullsep{\the\glslabeltok}%
10292     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
10293   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
10294     \protect\glsxtrfullsep{\the\glslabeltok}%
10295     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
10296   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10297   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
10298 }%

```

Unset the regular attribute if it has been set.

```

10299 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10300   \glshasattribute{\the\glslabeltok}{regular}%
10301   {%
10302     \glssetattribute{\the\glslabeltok}{regular}{false}%
10303   }%
10304   {}%
10305 }%
10306 }%
10307 {%
10308 \GlsXtrUseAbbrStyleFmts{long-em-short-em}%
10309 }

```

#### short-em-long Now the short (long) version

```

10310 \newabbreviationstyle{short-em-long}{%
10311 }%

```

Set accessibility attributes if enabled.

```
10312 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```

10313 \renewcommand*\CustomAbbreviationFields}{%
10314   name={\glsxtrshortlongname},%

```

```

10315     sort={\the\glsshorttok},
10316     description={\the\glslongtok},%
10317     first=\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10318       \protect\glsxtrfullsep{\the\glslabeltok}%
10319       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
10320     firstplural=\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10321       \protect\glsxtrfullsep{\the\glslabeltok}%
10322       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
10323     text=\protect\glsabbrvemfont{\the\glsshorttok},%
10324     plural=\protect\glsabbrvemfont{\the\glsshortpltok}}%

```

Unset the regular attribute if it has been set.

```

10325 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10326   \glshasattribute{\the\glslabeltok}{regular}%
10327   {%
10328     \glssetattribute{\the\glslabeltok}{regular}{false}%
10329   }%
10330   {}%
10331 }%
10332 }%
10333 {%

```

Mostly as short-long style:

```

10334 \renewcommand*\abrvpluralsuffix}{\glsxtremsuffix}%
10335 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10336 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10337 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
10338 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10339 \renewcommand*\glsxtrfullformat}[2]{%
10340   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10341   \ifglsxtrinsertinside\else##2\fi
10342   \glsxtrfullsep{##1}%
10343   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10344 }%
10345 \renewcommand*\glsxtrfullplformat}[2]{%
10346   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10347   \ifglsxtrinsertinside\else##2\fi
10348   \glsxtrfullsep{##1}%
10349   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10350 }%
10351 \renewcommand*\GlsXtrfullformat}[2]{%
10352   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10353   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10354   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10355 }%
10356 \renewcommand*\GlsXtrfullplformat}[2]{%
10357   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10358   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10359   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%

```

```

10360  }%
10361 }

rt-em-long-desc As before but user provides description
10362 \newabbreviationstyle{short-em-long-desc}%
10363 {%

    Set accessibility attributes if enabled.

10364 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

    Setup the default fields.

10365 \renewcommand*{\CustomAbbreviationFields}{%
10366     name={\glsxtrshortlongdescname},
10367     sort={\glsxtrshortlongdescsort},
10368     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10369         \protect\glsxtrfullsep{\the\glslabeltok}%
10370         \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
10371     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10372         \protect\glsxtrfullsep{\the\glslabeltok}%
10373         \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
10374     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10375     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
10376 }%
10377
10378     Unset the regular attribute if it has been set.

10379 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10380     \glsphasattribute{\the\glslabeltok}{regular}%
10381     {%
10382         \glssetattribute{\the\glslabeltok}{regular}{false}%
10383     }%
10384 }%
10385 {%
10386 \GlsXtrUseAbbrStyleFmts{short-em-long}%
10387 }

```

#### hort-em-long-em

```

10388 \newabbreviationstyle{short-em-long-em}%
10389 {%

    Set accessibility attributes if enabled.

10390 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel

    Setup the default fields. \glslongemfont is used in the description since \glsdesc doesn't
    set the style.

10391 \renewcommand*{\CustomAbbreviationFields}{%
10392     name={\glsxtrshortlongname},
10393     sort={\the\glsshorttok},
10394     description={\protect\glslongemfont{\the\glslongtok}},%
10395     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%

```

```

10396 \protect\glsxtrfullsep{\the\glslabeltok}%
10397 \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
10398 firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10399 \protect\glsxtrfullsep{\the\glslabeltok}%
10400 \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
10401 text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10402 plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}}%

```

Unset the regular attribute if it has been set.

```

10403 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10404 \glshasattribute{\glslabeltok}{regular}%
10405 {%
10406 \glssetattribute{\glslabeltok}{regular}{false}%
10407 }%
10408 {}%
10409 }%
10410 }%
10411 {%
10412 \renewcommand*\abrvpluralsuffix}{\glsxtremsuffix}%
10413 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10414 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10415 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongemfont{##1}}%
10416 \renewcommand*\glslongfont[1]{\glslongemfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10417 \renewcommand*\glsxtrfullformat}[2]{%
10418 \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10419 \ifglsxtrinsertinside\else##2\fi
10420 \glsxtrfullsep{##1}%
10421 \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}}%
10422 }%
10423 \renewcommand*\glsxtrfullplformat}[2]{%
10424 \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10425 \ifglsxtrinsertinside\else##2\fi
10426 \glsxtrfullsep{##1}%
10427 \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}}%
10428 }%
10429 \renewcommand*\Glsxtrfullformat}[2]{%
10430 \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10431 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10432 \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}}%
10433 }%
10434 \renewcommand*\Glsxtrfullplformat}[2]{%
10435 \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10436 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10437 \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}}%
10438 }%
10439 }%

```

em-long-em-desc

```
10440 \newabbreviationstyle{short-em-long-em-desc}%
10441 {%
    Set accessibility attributes if enabled.
10442 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
    Setup the default fields.
10443 \renewcommand*{\CustomAbbreviationFields}{%
10444     name={\glsxtrshortlongdescname},%
10445     sort={\glsxtrshortlongdescsort},%
10446     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10447         \protect\glsxtrfullsep{\the\glslabeltok}%
10448         \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
10449     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10450         \protect\glsxtrfullsep{\the\glslabeltok}%
10451         \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
10452     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10453     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
10454 }%
```

Unset the regular attribute if it has been set.

```
10455 \renewcommand*{\GlsXtrPostNewAbbreviation}%
10456     \glshasattribute{\the\glslabeltok}{regular}%
10457     {%
10458         \glssetattribute{\the\glslabeltok}{regular}{false}%
10459     }%
10460     {}%
10461 }%
10462 }%
10463 {%
10464 \GlsXtrUseAbbrStyleFmts{short-em-long-em}%
10465 }
```

short-em

```
10466 \newabbreviationstyle{short-em}%
10467 {%
```

Set accessibility attributes if enabled.

```
10468 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
10469 \renewcommand*{\CustomAbbreviationFields}{%
10470     name={\glsxtrshortnolongname},
10471     sort={\the\glsshorttok},
10472     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
10473     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
10474     text={\protect\glsabbrvemfont{\the\glsshorttok}},
10475     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},
10476     description={\the\glslongtok}}%
10477 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
```

```

10478     \glssetattribute{\the\glslabeltok}{regular}{true}}%
10479 }%
10480 {%
10481 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
10482 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10483 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10484 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
10485 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

10486 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10487   \protect\glsfirstabbrvemfont{\glsaccessshort{##1}}%
10488   \ifglsxtrinsertinside##2\fi}%
10489 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10490 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10491 }%
10492 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10493   \protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}%
10494   \ifglsxtrinsertinside##2\fi}%
10495 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10496 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10497 }%
10498 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10499   \protect\glsfirstabbrvemfont{\Glsaccessshort{##1}}%
10500   \ifglsxtrinsertinside##2\fi}%
10501 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10502 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10503 }%
10504 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10505   \protect\glsfirstabbrvemfont{\Glsaccessshortpl{##1}}%
10506   \ifglsxtrinsertinside##2\fi}%
10507 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10508 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10509 }%

```

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.

```

10510 \renewcommand*{\glsxtrfullformat}[2]{%
10511   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10512   \ifglsxtrinsertinside\else##2\fi
10513 }%
10514 \renewcommand*{\glsxtrfullplformat}[2]{%
10515   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10516   \ifglsxtrinsertinside\else##2\fi
10517 }%
10518 \renewcommand*{\Glsxtrfullformat}[2]{%
10519   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10520   \ifglsxtrinsertinside\else##2\fi

```

```

10521 }%
10522 \renewcommand*\Glsxtrfullplformat}[2]{%
10523   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10524   \ifglsxtrinsertinside\else##2\fi
10525 }%
10526 }

short-em-nolong
10527 \letabbreviationstyle{short-em-nolong}{short-em}

short-em-desc
10528 \newabbreviationstyle{short-em-desc}%
10529 {%

  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.

10530 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel

  Setup the default fields.

10531 \renewcommand*\CustomAbbreviationFields}{%
10532   name={\glsxtrshortdescname},
10533   sort={\the\glsshorttok},
10534   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
10535   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
10536   text={\protect\glsabbrvemfont{\the\glsshorttok}},
10537   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
10538 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10539   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10540 }%
10541 {%

10542 \renewcommand*\abbrvpluralsuffix}{\glsxtremsuffix}%
10543 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10544 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10545 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
10546 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

  The inline full form displays the short format followed by the long form in parentheses.

10547 \renewcommand*\glsxtrinlinefullformat}[2]{%
10548   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10549   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10550   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10551 }%
10552 \renewcommand*\glsxtrinlinefullplformat}[2]{%
10553   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10554   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10555   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10556 }%
10557 \renewcommand*\Glsxtrinlinefullformat}[2]{%
10558   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%

```

```

10559   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
1060   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
1061 }%
1062 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
1063   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
1064   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
1065   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
1066 }%

```

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.

```

1067 \renewcommand*{\glsxtrfullformat}[2]{%
1068   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
1069   \ifglsxtrinsertinside\else##2\fi
1070 }%
1071 \renewcommand*{\glsxtrfullplformat}[2]{%
1072   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
1073   \ifglsxtrinsertinside\else##2\fi
1074 }%
1075 \renewcommand*{\Glsxtrfullformat}[2]{%
1076   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
1077   \ifglsxtrinsertinside\else##2\fi
1078 }%
1079 \renewcommand*{\Glsxtrfullplformat}[2]{%
1080   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
1081   \ifglsxtrinsertinside\else##2\fi
1082 }%
1083 }

```

#### -em-nolong-desc

```
1084 \letabbreviationstyle{short-em-nolong-desc}{short-em-desc}
```

#### nolong-short-em

```

10585 \newabbreviationstyle{nolong-short-em}%
10586 {%
10587   \GlsXtrUseAbbrStyleSetup{short-em-nolong}%
10588 }%
10589 {%
10590   \GlsXtrUseAbbrStyleFmts{short-em-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

10591 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10592   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}}%
10593   \ifglsxtrinsertinside##2\fi}%
10594 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10595 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10596 }%
10597 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10598   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}%
10599   \ifglsxtrinsertinside##2\fi}%

```

```

10600 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10601 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10602 }%
10603 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10604   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}}%
10605     \ifglsxtrinsertinside##2\fi}%
10606   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10607   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10608 }%
10609 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10610   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
10611     \ifglsxtrinsertinside##2\fi}%
10612   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10613   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10614 }%
10615 }

```

long-noshort-em The short form is explicitly invoked through commands like \glsshort.

```

10616 \newabbreviationstyle{long-noshort-em}%
10617 {%

```

Set accessibility attributes if enabled.

```

10618 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel

```

Setup the default fields.

```

10619 \renewcommand*{\CustomAbbreviationFields}{%
10620   name={\glsxtrlongnoshortname},
10621   sort={\the\glsshorttok},
10622   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
10623   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
10624   text={\protect\glslongdefaultfont{\the\glslongtok}},
10625   plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
10626   description={\the\glslongtok}%
10627 }%
10628 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10629   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10630 }%
10631 {%
10632 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
10633 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10634 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10635 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
10636 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10637 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10638   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10639   \ifglsxtrinsertinside \else##2\fi
10640 }%
10641 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%

```

```

10642     \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10643     \ifglsxtrinsertinside \else##2\fi
10644 }%
10645 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10646     \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10647     \ifglsxtrinsertinside \else##2\fi
10648 }%
10649 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10650     \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10651     \ifglsxtrinsertinside \else##2\fi
10652 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

10653 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10654     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10655     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10656     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10657 }%
10658 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10659     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10660     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10661     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10662 }%
10663 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10664     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10665     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10666     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10667 }%
10668 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10669     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10670     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10671     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10672 }%

```

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.

```

10673 \renewcommand*{\glsxtrfullformat}[2]{%
10674     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10675     \ifglsxtrinsertinside\else##2\fi
10676 }%
10677 \renewcommand*{\glsxtrfullplformat}[2]{%
10678     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10679     \ifglsxtrinsertinside\else##2\fi
10680 }%
10681 \renewcommand*{\Glsxtrfullformat}[2]{%
10682     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10683     \ifglsxtrinsertinside\else##2\fi
10684 }%
10685 \renewcommand*{\Glsxtrfullplformat}[2]{%
10686     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

10687     \ifglsxtrinsertinside\else##2\fi
10688   }%
10689 }

long-em Backward compatibility:
10690 \@glsxtr@deprecated@abbrstyle{long-em}{long-noshort-em}

g-em-noshort-em The short form is explicitly invoked through commands like \glsshort.
10691 \newabbreviationstyle{long-em-noshort-em}%
10692 {%

  Set accessibility attributes if enabled.
10693 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel

  Setup the default fields.
10694 \renewcommand*\CustomAbbreviationFields}{%
10695   name={\glsxtrlongnoshortname},
10696   sort={\the\glsshorttok},
10697   first={\protect\glsfirstlongemfont{\the\glslongtok}},
10698   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
10699   text={\protect\glslongemfont{\the\glslongtok}},
10700   plural={\protect\glslongemfont{\the\glslongpltok}},%
10701   description={\protect\glslongemfont{\the\glslongtok}}%
10702 }%
10703 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10704   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10705 }%
10706 {%

10707 \renewcommand*\abrvpluralsuffix}{\glsxtremsuffix}%
10708 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10709 \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10710 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
10711 \renewcommand*\glslongfont}[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10712 \renewcommand*\glsxtrsubsequentfmt}[2]{%
10713   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10714   \ifglsxtrinsertinside \else##2\fi
10715 }%
10716 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
10717   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10718   \ifglsxtrinsertinside \else##2\fi
10719 }%
10720 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
10721   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10722   \ifglsxtrinsertinside \else##2\fi
10723 }%
10724 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
10725   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%

```

```
10726     \ifglsxtrinsertinside \else##2\fi  
10727 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
10728 \renewcommand*{\glsxtrinlinefullformat}[2]{%  
10729   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi} %  
10730   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1} %  
10731   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}} %  
10732 }%  
10733 \renewcommand*{\glsxtrinlinefullplformat}[2]{%  
10734   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi} %  
10735   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1} %  
10736   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}} %  
10737 }%  
10738 \renewcommand*{\Glsxtrinlinefullformat}[2]{%  
10739   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi} %  
10740   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1} %  
10741   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}} %  
10742 }%  
10743 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%  
10744   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi} %  
10745   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1} %  
10746   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}} %  
10747 }%
```

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.

```
10748 \renewcommand*{\glsxtrfullformat}[2]{%  
10749   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi} %  
10750   \ifglsxtrinsertinside\else##2\fi  
10751 }%  
10752 \renewcommand*{\glsxtrfullplformat}[2]{%  
10753   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi} %  
10754   \ifglsxtrinsertinside\else##2\fi  
10755 }%  
10756 \renewcommand*{\Glsxtrfullformat}[2]{%  
10757   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi} %  
10758   \ifglsxtrinsertinside\else##2\fi  
10759 }%  
10760 \renewcommand*{\Glsxtrfullplformat}[2]{%  
10761   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi} %  
10762   \ifglsxtrinsertinside\else##2\fi  
10763 }%  
10764 }
```

`oshort-em-noreg` Like `long-em-noshort-em` but doesn't set the regular attribute.

```
10765 \newabbreviationstyle{long-em-noshort-em-noreg}{%  
10766 {%
```

Set accessibility attributes if enabled.

```
10767 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
```

Setup the default fields.

```
10768 \GlsXtrUseAbbrStyleSetup{long-em-noshort-em}%
```

Unset the regular attribute if it has been set.

```
10769 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
10770   \glshasattribute{\the\glslabeltok}{regular}%
10771   {%
10772     \glssetattribute{\the\glslabeltok}{regular}{false}%
10773   }%
10774   {}%
10775 }%
10776 }%
10777 {%
10778 \GlsXtrUseAbbrStyleFmts{long-em-noshort-em}%
10779 }
```

noshort-em-desc The emphasized font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```
10780 \newabbreviationstyle{long-noshort-em-desc}%
10781 {%
10782 \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
10783 }%
10784 {%
10785 \renewcommand*\{\abbrvpluralsuffix}{\glsxtremsuffix}%
10786 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10787 \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10788 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
10789 \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
10790 \renewcommand*\{\glsxtrsubsequentfmt}[2]{%
10791   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10792   \ifglsxtrinsertinside \else##2\fi
10793 }%
10794 \renewcommand*\{\glsxtrsubsequentplfmt}[2]{%
10795   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10796   \ifglsxtrinsertinside \else##2\fi
10797 }%
10798 \renewcommand*\{\Glsxtrsubsequentfmt}[2]{%
10799   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10800   \ifglsxtrinsertinside \else##2\fi
10801 }%
10802 \renewcommand*\{\Glsxtrsubsequentplfmt}[2]{%
10803   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10804   \ifglsxtrinsertinside \else##2\fi
10805 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
10806 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
```

```

10807   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10808   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10809   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10810 }%
10811 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10812   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10813   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10814   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10815 }%
10816 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10817   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10818   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10819   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10820 }%
10821 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10822   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10823   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10824   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10825 }%

```

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.

```

10826 \renewcommand*{\glsxtrfullformat}[2]{%
10827   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10828   \ifglsxtrinsertinside\else##2\fi
10829 }%
10830 \renewcommand*{\glsxtrfullplformat}[2]{%
10831   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10832   \ifglsxtrinsertinside\else##2\fi
10833 }%
10834 \renewcommand*{\Glsxtrfullformat}[2]{%
10835   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10836   \ifglsxtrinsertinside\else##2\fi
10837 }%
10838 \renewcommand*{\Glsxtrfullplformat}[2]{%
10839   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10840   \ifglsxtrinsertinside\else##2\fi
10841 }%
10842 }

```

**long-desc-em** Backward compatibility:

```
10843 \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.

```

10844 \newabbreviationstyle{long-em-noshort-em-desc}%
10845 {%
10846   \renewcommand*{\CustomAbbreviationFields}{%
10847     name={\glsxtrlongnoshortdescname},

```

```

10848     sort={\the\glslongtok},
10849     first=\protect\glsfirstlongemfont{\the\glslongtok},
10850     firstplural=\protect\glsfirstlongemfont{\the\glslongpltok},
10851     text=\glslongemfont{\the\glslongtok},
10852     plural=\glslongemfont{\the\glslongpltok}%
10853 }%
10854 \renewcommand*\GlsXtrPostNewAbbreviation{%
10855   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10856 }%
10857 {%
10858 \renewcommand*\abbrvpluralsuffix{\glsxtremsuffix}%
10859 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10860 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10861 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongemfont{##1}}%
10862 \renewcommand*\glslongfont[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10863 \renewcommand*\glsxtrsubsequentfmt[2]{%
10864   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10865   \ifglsxtrinsertinside \else##2\fi
10866 }%
10867 \renewcommand*\glsxtrsubsequentplfmt[2]{%
10868   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10869   \ifglsxtrinsertinside \else##2\fi
10870 }%
10871 \renewcommand*\Glsxtrsubsequentfmt[2]{%
10872   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10873   \ifglsxtrinsertinside \else##2\fi
10874 }%
10875 \renewcommand*\Glsxtrsubsequentplfmt[2]{%
10876   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10877   \ifglsxtrinsertinside \else##2\fi
10878 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

10879 \renewcommand*\glsxtrinlinefullformat[2]{%
10880   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10881   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10882   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10883 }%
10884 \renewcommand*\glsxtrinlinefullplformat[2]{%
10885   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10886   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10887   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10888 }%
10889 \renewcommand*\Glsxtrinlinefullformat[2]{%
10890   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10891   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10892   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%

```

```

10893 }%
10894 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10895   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10896   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10897   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
10898 }%

```

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.

```

10899 \renewcommand*{\glsxtrfullformat}[2]{%
10900   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10901   \ifglsxtrinsertinside\else##2\fi
10902 }%
10903 \renewcommand*{\glsxtrfullplformat}[2]{%
10904   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10905   \ifglsxtrinsertinside\else##2\fi
10906 }%
10907 \renewcommand*{\Glsxtrfullformat}[2]{%
10908   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10909   \ifglsxtrinsertinside\else##2\fi
10910 }%
10911 \renewcommand*{\Glsxtrfullplformat}[2]{%
10912   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10913   \ifglsxtrinsertinside\else##2\fi
10914 }%
10915 }

```

t-em-desc-noreg Like long-em-noshort-em-desc but doesn't set the regular attribute.

```

10916 \newabbreviationstyle{long-em-noshort-em-desc-noreg}{%
10917 }%
10918 \GlsXtrUseAbbrStyleSetup{long-em-noshort-em-desc}%

```

Unset the regular attribute if it has been set.

```

10919 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10920   \glshasattribute{\the\glslabeltok}{regular}%
10921   }%
10922   \glssetattribute{\the\glslabeltok}{regular}{false}%
10923 }%
10924 }%
10925 }%
10926 }%
10927 }%
10928 \GlsXtrUseAbbrStyleFmts{long-em-noshort-em-desc}%
10929 }

```

ort-em-footnote

```

10930 \newabbreviationstyle{short-em-footnote}{%
10931 }%

```

Set accessibility attributes if enabled.

```

10932 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel

```

Setup the default fields.

```
10933 \renewcommand*\CustomAbbreviationFields{%
10934   name={\glsxtrfootnotename},
10935   sort={\the\glsshorttok},
10936   description={\the\glslongtok},%
10937   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10938     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10939       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
10940   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10941     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10942       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
10943   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10944   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.

```
10945 \renewcommand*\GlsXtrPostNewAbbreviation{%
10946   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
10947   \glshasattribute{\the\glslabeltok}{regular}%
10948 {%
10949   \glssetattribute{\the\glslabeltok}{regular}{false}%
10950 }%
10951 {}%
10952 }%
10953 }%
10954 {%

10955 \renewcommand*\abbrvpluralsuffix{\glsxtremsuffix}%
10956 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10957 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10958 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
10959 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```
10960 \renewcommand*\glsxtrfullformat}[2]{%
10961   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10962   \ifglsxtrinsertinside\else##2\fi
10963   \protect\glsxtrabbrvfootnote{##1}%
10964     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10965 }%
10966 \renewcommand*\glsxtrfullplformat}[2]{%
10967   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10968   \ifglsxtrinsertinside\else##2\fi
10969   \protect\glsxtrabbrvfootnote{##1}%
10970     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10971 }%
10972 \renewcommand*\GlsXtrfullformat}[2]{%
10973   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10974   \ifglsxtrinsertinside\else##2\fi
10975   \protect\glsxtrabbrvfootnote{##1}%
10976 }
```

```

10976      {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%  

10977  }%  

10978  \renewcommand*{\Glsxtrfullplformat}[2]{%  

10979      \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi} %  

10980      \ifglsxtrinsertinside\else##2\fi  

10981      \protect\glsxtrabrvfootnote{##1} %  

10982      {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%  

10983  }%

```

The first use full form and the inline full form use the short (long) style.

```

10984  \renewcommand*{\glsxtrinlinefullformat}[2]{%  

10985      \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi} %  

10986      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1} %  

10987      \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%  

10988  }%  

10989  \renewcommand*{\glsxtrinlinefullplformat}[2]{%  

10990      \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi} %  

10991      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1} %  

10992      \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%  

10993  }%  

10994  \renewcommand*{\Glsxtrinlinefullformat}[2]{%  

10995      \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi} %  

10996      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1} %  

10997      \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%  

10998  }%  

10999  \renewcommand*{\Glsxtrinlinefullplformat}[2]{%  

11000      \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi} %  

11001      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1} %  

11002      \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%  

11003  }%  

11004 }

```

**footnote-em** Backward compatibility:

```
11005 \glsxtr@deprecated@abbrstyle{footnote-em}{short-em-footnote}
```

**m-footnote-desc** Like short-em-footnote but with user supplied description.

```
11006 \newabbreviationstyle{short-em-footnote-desc}{%  
11007 }%
```

Set accessibility attributes if enabled.

```
11008 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```

11009  \renewcommand*{\CustomAbbreviationFields}{%  

11010      name={\glsxtrfootnotedescname},  

11011      sort={\glsxtrfootnotedescsort},  

11012      first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%  

11013      \protect\glsxtrabrvfootnote{\the\glslabeltok}}%  

11014      {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%  

11015      firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}%

```

```

11016     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
11017     {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
11018     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
11019     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.

```

11020 \renewcommand*\GlsXtrPostNewAbbreviation{%
11021   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
11022   \glshasattribute{\the\glslabeltok}{regular}%
11023   {}%
11024   \glssetattribute{\the\glslabeltok}{regular}{false}%
11025   {}%
11026   {}%
11027 }%
11028 }%
11029 {%
11030 \GlsXtrUseAbbrStyleFmts{short-em-footnote}%
11031 }

```

#### em-postfootnote

```

11032 \newabbreviationstyle{short-em-postfootnote}%
11033 {%

```

Set accessibility attributes if enabled.

```
11034 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

11035 \renewcommand*\CustomAbbreviationFields{%
11036   name={\glsxtrfootnotename},
11037   sort={\the\glsshorttok},
11038   description={\the\glslongtok},%
11039   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
11040   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
11041   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
11042   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.

```

11043 \renewcommand*\GlsXtrPostNewAbbreviation{%
11044   \csdef{glsxtrpostlink\glscategorylabel}{%
11045     \glsxtrifwasfirstuse
11046   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

11047   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
11048   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}%
11049   {}%
11050   {}%
11051 }%

```

```

11052 \glshasattribute{\the\glslabeltok}{regular}%
11053 {%
11054   \glssetattribute{\the\glslabeltok}{regular}{false}%
11055 }%
11056 {}%
11057 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

11058 \renewcommand*{\glsxtrsetupfulldefs}{%
11059   \let\glsxtrifwasfirstuse\@secondoftwo
11060 }%
11061 }%
11062 {}%
11063 \renewcommand*{\abrvpluralsuffix}{\glsxtremsuffix}%
11064 \renewcommand*{\glsabbrvfont[1]}{\glsabbrvemfont{##1}}%
11065 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
11066 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
11067 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

11068 \renewcommand*{\glsxtrfullformat}[2]{%
11069   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11070   \ifglsxtrinsertinside\else##2\fi
11071 }%
11072 \renewcommand*{\glsxtrfullplformat}[2]{%
11073   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11074   \ifglsxtrinsertinside\else##2\fi
11075 }%
11076 \renewcommand*{\Glsxtrfullformat}[2]{%
11077   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11078   \ifglsxtrinsertinside\else##2\fi
11079 }%
11080 \renewcommand*{\Glsxtrfullplformat}[2]{%
11081   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11082   \ifglsxtrinsertinside\else##2\fi
11083 }%

```

The first use full form and the inline full form use the short (long) style.

```

11084 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11085   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11086   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11087   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
11088 }%
11089 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11090   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11091   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11092   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11093 }%
11094 \renewcommand*{\Glsxtrinlinefullformat}[2]{%

```

```

11095 \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11096 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11097 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
11098 }%
11099 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11100 \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11101 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
11102 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
11103 }%
11104 }

```

postfootnote-em Backward compatibility:

```
11105 \@glsxtr@deprecated@abbrstyle{postfootnote-em}{short-em-postfootnote}
```

stfootnote-desc Like short-em-postfootnote but with user supplied description.

```

11106 \newabbreviationstyle{short-em-postfootnote-desc}{%
11107 }%

```

Set accessibility attributes if enabled.

```
11108 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```

11109 \renewcommand*{\CustomAbbreviationFields}{%
11110   name={\glsxtrfootnotedescname},%
11111   sort={\glsxtrfootnotedescsort},%
11112   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
11113   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
11114   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
11115   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.

```

11116 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11117   \csdef{glsxtrpostlink\glscategorylabel}{%
11118     \glsxtrifwasfirstuse
11119   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

11120   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
11121   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
11122 }%
11123 {}%
11124 }%
11125 \glshasattribute{\the\glslabeltok}{regular}%
11126 {}%
11127   \glssetattribute{\the\glslabeltok}{regular}{false}%
11128 }%
11129 {}%
11130 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```
11131 \renewcommand*{\glsxtrsetupfulldefs}{%
11132   \let\glsxtrifwasfirstuse\@secondoftwo
11133 }%
11134 }%
11135 {%
11136 \GlsXtrUseAbbrStyleFmts{short-em-postfootnote}%
11137 }
```

### 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.

```
11138 \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.

```
11139 \ifdef\glscurrentfieldvalue
11140 {
11141   \newcommand*{\glsxtruserparen}[2]{%
11142     \glsxtrfullsep{\#2}%
11143     \glsxtrparen
11144     {\#1\ifglsishasfield{\glsxtruserfield}{\#2}{, \glscurrentfieldvalue}{}}
11145   }
11146 }
11147 {
11148   \newcommand*{\glsxtruserparen}[2]{%
11149     \glsxtrfullsep{\#2}%
11150     \glsxtrparen
11151     {\#1\ifglsishasfield{\glsxtruserfield}{\#2}{, \glo@thisvalue}{}}
11152   }
11153 }
```

Font used for short form:

`lsabbrvuserfont`

```
11154 \newcommand*{\glsabbrvuserfont}[1]{\glsabbrvdefaultfont{\#1}}
```

Font used for short form on first use:

`stabbrvuserfont`

```
11155 \newcommand*{\glsfirststabbrvuserfont}[1]{\glsabbrvuserfont{\#1}}
```

Font used for long form:

```
glslonguserfont  
11156 \newcommand*{\glslonguserfont}[1]{\glslongdefaultfont{#1}}
```

Font used for long form on first use:

```
rstlonguserfont  
11157 \newcommand*{\glsfirstlonguserfont}[1]{\glslonguserfont{#1}}
```

The default short form suffix:

```
lsxtrusersuffix  
11158 \newcommand*{\glsxtrusersuffix}{\glsxtrabbrvpluralsuffix}
```

Description encapsulator.

```
userdescription The first argument is the description. The second argument is the label.  
11159 \newcommand*{\glsuserdescription}[2]{\glslonguserfont{#1}}
```

long-short-user

```
11160 \newabbreviationstyle{long-short-user}-%  
11161 {%
```

Set accessibility attributes if enabled.

```
11162 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11163 \renewcommand*{\CustomAbbreviationFields}{%  
11164   name={\glsxtrlongshortname},  
11165   sort={\the\glsshorttok},  
11166   first={\protect\glsfirstlonguserfont{\the\glslongtok}}%  
11167   \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%  
11168   {\the\glslabeltok}},%  
11169   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}}%  
11170   \protect\glsxtruserparen  
11171   {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%  
  
11172   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%  
11173   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%  
11174   description={\protect\glsuserdescription{\the\glslongtok}}%  
11175   {\the\glslabeltok}}}%
```

Unset the regular attribute if it has been set.

```
11176 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  
11177   \glshasattribute{\the\glslabeltok}{regular}}%  
11178   {}%  
11179   \glssetattribute{\the\glslabeltok}{regular}{false}}%  
11180   {}%  
11181   {}%  
11182 }%  
11183 }%  
11184 {}%
```

In case the user wants to mix and match font styles, these are redefined here.

```
11185 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
11186 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
11187 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
11188 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
11189 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
11190 \renewcommand*{\glsxtrfullformat}[2]{%
11191   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11192   \ifglsxtrinsertinside\else##2\fi
11193   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11194 }%
11195 \renewcommand*{\glsxtrfullplformat}[2]{%
11196   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11197   \ifglsxtrinsertinside\else##2\fi
11198   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11199 }%
11200 \renewcommand*{\Glsxtrfullformat}[2]{%
11201   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11202   \ifglsxtrinsertinside\else##2\fi
11203   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11204 }%
11205 \renewcommand*{\Glsxtrfullplformat}[2]{%
11206   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11207   \ifglsxtrinsertinside\else##2\fi
11208   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11209 }%
11210 }
```

-postshort-user Like long-short-user but defers the parenthetical matter to after the link.

```
11211 \newabbreviationstyle{long-postshort-user}%
11212 {%
```

Set accessibility attributes if enabled.

```
11213 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11214 \renewcommand*{\CustomAbbreviationFields}{%
11215   name={\glsxtrlongshortname},
11216   sort={\the\glsshorttok},
11217   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11218   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11219   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11220   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
11221   description={\protect\glsuserdescription{\the\glslongtok}%
11222     {\the\glslabeltok}}}%
11223 \renewcommand*{\GlsXtrPostNewAbbreviation}%
11224   \csdef{glsxtrpostlink\glscategorylabel}{%
```

```

11225      \glsxtrifwasfirstuse
11226      {%
11227          \glsxtruserparen
11228              {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}{%
11229                  {\glslabel}%
11230              }%
11231          {}%
11232      }%
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}}%

```

First use full form:

```

11246  \renewcommand*{\glsxtrfullformat}[2]{%
11247      \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11248      \ifglsxtrinsertinside\else##2\fi
11249  }%
11250  \renewcommand*{\glsxtrfullplformat}[2]{%
11251      \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11252      \ifglsxtrinsertinside\else##2\fi
11253  }%
11254  \renewcommand*{\Glsxtrfullformat}[2]{%
11255      \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11256      \ifglsxtrinsertinside\else##2\fi
11257  }%
11258  \renewcommand*{\Glsxtrfullplformat}[2]{%
11259      \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11260      \ifglsxtrinsertinside\else##2\fi
11261  }%

```

In-line format:

```

11262  \renewcommand*{\glsxtrinlinefullformat}[2]{%
11263      \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11264      \ifglsxtrinsertinside\else##2\fi
11265      \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11266  }%
11267  \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11268      \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

11269 \ifglsxtrinsertinside\else##2\fi
11270   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11271 }%
11272 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11273   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11274   \ifglsxtrinsertinside\else##2\fi
11275   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11276 }%
11277 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11278   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11279   \ifglsxtrinsertinside\else##2\fi
11280   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11281 }%
11282 }

```

#### ortuserdescname

```

11283 \newcommand*{\glsxtrlongshortuserdescname}{%
11284   \protect\glslonguserfont{\the\glslongtok}%
11285   \protect\glsxtruserparen
11286   {\protect\glsabbrvuserfont{\the\glsshorttok}}{\the\glslabeltok}%
11287 }

```

**short-user-desc** Like **long-postshort-user** but the user supplies the description.

```

11288 \newabbreviationstyle{long-postshort-user-desc}%
11289 {%

```

Set accessibility attributes if enabled.

```

11290 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11291 \renewcommand*{\CustomAbbreviationFields}{%
11292   name={\glsxtrlongshortuserdescname},
11293   sort={\the\glslongtok},
11294   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11295   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11296   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11297   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
11298 }%
11299 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11300   \csdef{glsxtrpostlink\glscategorylabel}{%
11301     \glsxtrifwasfirstuse
11302     {%
11303       \glsxtruserparen
11304         {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}%
11305         {\glslabel}%
11306     }%
11307     {}%
11308   }%
11309   \glshasattribute{\the\glslabeltok}{regular}%

```

```

11310    {%
11311      \glssetattribute{\the\glslabeltok}{regular}{false}%
11312    }%
11313    {}%
11314  }%
11315 }%
11316 {%
11317   \GlsXtrUseAbbrStyleFmts{long-postshort-user}%
11318 }

```

t-postlong-user Like short-long-user but defers the parenthetical matter to after the link.

```

11319 \newabbreviationstyle{short-postlong-user}%
11320 {%

```

Set accessibility attributes if enabled.

```
11321   \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```

11322   \renewcommand*{\CustomAbbreviationFields}{%
11323     name={\glsxtrshortlongname},
11324     sort={\the\glsshorttok},
11325     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11326     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11327     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11328     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
11329     description={\protect\glsuserdescription{\the\glslongtok}}%
11330     {\the\glslabeltok}}}}%
11331   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11332     \csdef{\glsxtrpostlink\glscategorylabel}{%
11333       \glsxtrifwasfirstuse
11334       {%
11335         \glsxtruserparen
11336           {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}%
11337           {\glslabel}}%
11338       }%
11339     }%
11340   }%
11341   \glshasattribute{\the\glslabeltok}{regular}%
11342   {%
11343     \glssetattribute{\the\glslabeltok}{regular}{false}%
11344   }%
11345   {}%
11346 }%
11347 }%
11348 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11349   \renewcommand*{\abrvpluralsuffix}{\glsxtrusersuffix}%
11350   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
11351   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%

```

```

11352 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
11353 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

11354 \renewcommand*{\glsxtrfullformat}[2]{%
11355   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11356   \ifglsxtrinsertinside\else##2\fi
11357 }%
11358 \renewcommand*{\glsxtrfullplformat}[2]{%
11359   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11360   \ifglsxtrinsertinside\else##2\fi
11361 }%
11362 \renewcommand*{\Glsxtrfullformat}[2]{%
11363   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11364   \ifglsxtrinsertinside\else##2\fi
11365 }%
11366 \renewcommand*{\Glsxtrfullplformat}[2]{%
11367   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11368   \ifglsxtrinsertinside\else##2\fi
11369 }%

```

In-line format:

```

11370 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11371   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11372   \ifglsxtrinsertinside\else##2\fi
11373   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}}%
11374 }%
11375 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11376   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11377   \ifglsxtrinsertinside\else##2\fi
11378   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}}%
11379 }%
11380 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11381   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11382   \ifglsxtrinsertinside\else##2\fi
11383   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}}%
11384 }%
11385 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11386   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11387   \ifglsxtrinsertinside\else##2\fi
11388   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}}%
11389 }%
11390 }

```

onguserdescname

```

11391 \newcommand*{\glsxtrshortlonguserdescname}{%
11392   \protect\glsabbrvuserfont{\the\glsshorttok}%
11393   \protect\glsxtruserparen
11394   {\protect\glslonguserfont{\the\glslongpltok}}%
11395   {\the\glslabeltok}%

```

```

11396 }

tlong-user-desc Like short-postlong-user but leaves the user to specify the description.
11397 \newabbreviationstyle{short-postlong-user-desc}{%
11398 {%
    Set accessibility attributes if enabled.
11399   \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
    Setup the default fields.
11400   \renewcommand*{\CustomAbbreviationFields}{%
11401     name={\glsxtrshortlonguserdescname},
11402     sort={\the\glsshorttok},%
11403     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11404     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11405     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11406     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
11407 }%
11408   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11409     \csdef{\glsxtrpostlink\glscategorylabel}{%
11410       \glsxtrifwasfirstuse
11411     }%
11412       \glsxtruserparen
11413         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}%
11414         {\glslabel}%
11415     }%
11416     {}%
11417   }%
11418   \glshasattribute{\the\glslabeltok}{regular}%
11419   {}%
11420     \glssetattribute{\the\glslabeltok}{regular}{false}%
11421   }%
11422   {}%
11423 }%
11424 }%
11425 {%
11426   \GlsXtrUseAbbrStyleFmts{short-postlong-user}%
11427 }

```

short-user-desc

```

11428 \newabbreviationstyle{long-short-user-desc}{%
11429 {%
    Set accessibility attributes if enabled.
11430   \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
    Setup the default fields.
11431   \renewcommand*{\CustomAbbreviationFields}{%
11432     name={\glsxtrlongshortuserdescname},
11433     sort={\glsxtrlongshortdescsort},%

```

```

11434     first={\protect\glsfirstlonguserfont{\the\glslongtok}%
11435         \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
11436             {\the\glslabeltok}},%
11437     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}%
11438         \protect\glsxtruserparen%
11439             {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%
11440     text={\protect\glsabbrvfont{\the\glsshorttok}},%
11441     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
11442 }%

```

Unset the regular attribute if it has been set.

```

11443 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11444     \glshasattribute{\the\glslabeltok}{regular}%
11445     {%
11446         \glssetattribute{\the\glslabeltok}{regular}{false}%
11447     }%
11448     {}%
11449 }%
11450 }%
11451 {%
11452 \GlsXtrUseAbbrStyleFmts{long-short-user}%
11453 }

```

## short-long-user

```

11454 \newabbreviationstyle{short-long-user}%
11455 {%

```

Set accessibility attributes if enabled.

```
11456 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

\glslonguserfont is used in the description since \glsdesc doesn't set the style. (Now in \glsuserdescription.)

```

11457 \renewcommand*{\CustomAbbreviationFields}{%
11458     name={\glsxtrshortlongname},%
11459     sort={\the\glsshorttok},%
11460     description={\protect\glsuserdescription{\the\glslongtok}%
11461         {\the\glslabeltok}},%
11462     first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
11463         \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
11464             {\the\glslabeltok}},%
11465     firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
11466         \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
11467             {\the\glslabeltok}},%
11468     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11469     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```
11470 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
```

```

11471 \glshasattribute{\the\glslabeltok}{regular}%
11472 {%
11473   \glssetattribute{\the\glslabeltok}{regular}{false}%
11474 }%
11475 {}%
11476 }%
11477 }%
11478 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11479 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
11480 \renewcommand*\glsabbrvfont[1]{\glsabbrvuserfont{##1}}%
11481 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
11482 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
11483 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

11484 \renewcommand*{\glsxtrfullformat}[2]{%
11485   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11486   \ifglsxtrinsertinside\else##2\fi
11487   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11488 }%
11489 \renewcommand*{\glsxtrfullplformat}[2]{%
11490   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11491   \ifglsxtrinsertinside\else##2\fi
11492   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11493 }%
11494 \renewcommand*{\Glsxtrfullformat}[2]{%
11495   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11496   \ifglsxtrinsertinside\else##2\fi
11497   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11498 }%
11499 \renewcommand*{\Glsxtrfullplformat}[2]{%
11500   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11501   \ifglsxtrinsertinside\else##2\fi
11502   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11503 }%
11504 }%

```

-long-user-desc

```

11505 \newabbreviationstyle{short-long-user-desc}%
11506 {%

```

Set accessibility attributes if enabled.

```

11507 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11508 \renewcommand*{\CustomAbbreviationFields}{%
11509   name={\glsxtrshortlonguserdescname},%
11510   sort={\glsxtrshortlongdescsort},%

```

```

11511     first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
11512         \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
11513             {\the\glslabeltok}},%
11514     firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
11515         \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
11516             {\the\glslabeltok}},%
11517     text={\protect\glsabbrvfont{\the\glsshorttok}},%
11518     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
11519 }%

```

Unset the regular attribute if it has been set.

```

11520 \renewcommand*\GlsXtrPostNewAbbreviation{%
11521     \glshasattribute{\the\glslabeltok}{regular}%
11522     {%
11523         \glssetattribute{\the\glslabeltok}{regular}{false}%
11524     }%
11525     {}%
11526 }%
11527 }%
11528 {%
11529     \GlsXtrUseAbbrStyleFmts{short-long-user}%
11530 }

```

### 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.

```

11531 \newrobustcmd*\glsxtrifhyphenstart}[3]{%
11532     \ifx\glsinsert\relax
11533         \expandafter\@glsxtrifhyphenstart\relax\relax
11534             \end\@glsxtrifhyphenstart{#2}{#3}%
11535     \else
11536         \glsxtrifhyphenstart\relax\relax\end\@glsxtrifhyphenstart{#2}{#3}%
11537     \fi
11538 }

```

**trifhyphenstart**

```

11539 \def\@glsxtrifhyphenstart#1#2\end\@glsxtrifhyphenstart#3#4{%
11540     \ifx-#1\relax#3\else #4\fi
11541 }

```

**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.

```
11542 \newcommand*\glsxtrlonghyphenshort}[4]{%
```

Grouping is needed to localise the redefinitions.

```
11543 {%
```

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.

```
11544 \glsxtrifhyphenstart[#4]{\def\glsxtrwordsep{-}}{}%
11545 \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside[#4]\fi}%
11546 \ifglsxtrinsertinside\else[#4]\fi
11547 \glsxtrfullsep{#1}%
11548 \glsxtrparen{\glsfirstabbrvhyphenfont{#3\ifglsxtrinsertinside[#4]\fi}%
11549 \ifglsxtrinsertinside\else[#4]\fi}%
11550 }%
11551 }
```

abbrvhypenfont

```
11552 \newcommand*\glsabbrvhypenfont}{\glsabbrvdefaultfont}%
```

abbrvhypenfont

```
11553 \newcommand*\glsfirstabbrvhypenfont}{\glsabbrvhypenfont}%
```

slonghypenfont

```
11554 \newcommand*\glslonghypenfont}{\glslongdefaultfont}%
```

tlonghypenfont

```
11555 \newcommand*\glsfirstlonghypenfont}{\glslonghypenfont}%
```

The default short form suffix:

xtrhypensuffix

```
11556 \newcommand*\glsxtrhypensuffix}{\glsxtrabbrvpluralsuffix}%
```

en-short-hyphen Designed for use with the `markwords` attribute.

```
11557 \newabbreviationstyle{long-hyphen-short-hyphen}{}%
```

```
11558 {%
```

Set accessibility attributes if enabled.

```
11559 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11560 \renewcommand*\CustomAbbreviationFields{}%
11561   name={\glsxtrlongshortname},
11562   sort={\the\glsshorttok},
```

```

11563   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}%
11564     \protect\glsxtrfullsep{\the\glslabeltok}%
11565     \glsxtrparen{\protect\glsfirststabrvhyphenfont{\the\glsshorttok}}},%
11566   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}%
11567     \protect\glsxtrfullsep{\the\glslabeltok}%
11568     \glsxtrparen{\protect\glsfirststabrvhyphenfont{\the\glsshortpltok}}},%
11569   text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
11570   plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}},%
11571   description={\protect\glslonghyphenfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```

11572   \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
11573     \glshasattribute{\the\glslabeltok}{regular}%
11574     {%
11575       \glssetattribute{\the\glslabeltok}{regular}{false}%
11576     }%
11577   }%
11578 }%
11579 }%
11580 {%
11581   \renewcommand*\{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
11582   \renewcommand*\{\glsabbrvfont}[1]{\glsabbrvhyphenfont{##1}}%
11583   \renewcommand*\{\glsfirststabrvfont}[1]{\glsfirststabrvhyphenfont{##1}}%
11584   \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
11585   \renewcommand*\{\glslongfont}[1]{\glslonghyphenfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

11586   \renewcommand*\{\glsxtrfullformat}[2]{%
11587     \glsxtrlonghyphenshort{##1}{\glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
11588   }%
11589   \renewcommand*\{\glsxtrfullplformat}[2]{%
11590     \glsxtrlonghyphenshort{##1}{\glsaccesslongpl{##1}}%
11591     {\glsaccessshortpl{##1}}{##2}%
11592   }%
11593   \renewcommand*\{\Glsxtrfullformat}[2]{%
11594     \glsxtrlonghyphenshort{##1}{\Glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
11595   }%
11596   \renewcommand*\{\Glsxtrfullplformat}[2]{%
11597     \glsxtrlonghyphenshort{##1}{\Glsaccesslongpl{##1}}%
11598     {\glsaccessshortpl{##1}}{##2}%
11599   }%
11600 }

```

`ort-hyphen-desc` Like long-hyphen-short-hyphen but the description must be supplied by the user.

```

11601 \newabbreviationstyle{long-hyphen-short-hyphen-desc}%
11602 {%

```

Set accessibility attributes if enabled.

```

11603 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11604 \renewcommand*{\CustomAbbreviationFields}{%
11605   name={\glsxtrlongshortdescname},
11606   sort={\glsxtrlongshortdescsort},
11607   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}%
11608     \protect\glsxtrfullsep{\the\glslabeltok}%
11609     \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
11610   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}%
11611     \protect\glsxtrfullsep{\the\glslabeltok}%
11612     \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}}},%
11613   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11614   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
11615 }%

```

Unset the regular attribute if it has been set.

```

11616 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11617   \glshasattribute{\the\glslabeltok}{regular}%
11618   {%
11619     \glssetattribute{\the\glslabeltok}{regular}{false}%
11620   }%
11621   {}%
11622 }%
11623 }%
11624 {%
11625 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%
11626 }

```

nghyphennoshort

```
\glsxtrlonghyphennoshort{\<label>}{\<long>}{\<insert>}
```

```
11627 \newcommand*{\glsxtrlonghyphennoshort}[3]{%
```

Grouping is needed to localise the redefinitions.

```
11628 {%
```

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.

```

11629   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
11630   \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#3}\fi}%
11631   \ifglsxtrinsertinside\else{#3}\fi
11632 }%
11633 }

```

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.

```

11634 \newabbreviationstyle{long-hyphen-noshort-desc-noreg}%
11635 {%
11636   \renewcommand*{\CustomAbbreviationFields}{%
11637     name={\glsxtrlongnoshortdescname},
11638     sort={\expandonce\glsxtrorglong},
11639     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
11640     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
11641     text={\protect\glslonghyphenfont{\the\glslongtok}},%
11642     plural={\protect\glslonghyphenfont{\the\glslongpltok}}%
11643 }%

```

Unset the regular attribute if it has been set.

```

11644 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11645   \glshasattribute{\the\glslabeltok}{regular}%
11646   {%
11647     \glssetattribute{\the\glslabeltok}{regular}{false}%
11648   }%
11649   {}%
11650 }%
11651 }%
11652 {%
11653 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11654 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
11655 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
11656 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
11657 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
11658 \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

11659 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
11660   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
11661 }%
11662 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
11663   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
11664 }%
11665 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
11666   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
11667 }%
11668 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
11669   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
1170 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

11671 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11672   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
11673   \glsxtrfullsep{##1}%
11674   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
11675 }%
11676 \renewcommand*{\glsxtrinlinefullplformat}[2]{%

```

```

11677 \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
11678 \glsxtrfullsep{##1}%
11679 \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
11680 }%
11681 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11682 \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
11683 \glsxtrfullsep{##1}%
11684 \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
11685 }%
11686 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11687 \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
11688 \glsxtrfullsep{##1}%
11689 \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
11690 }%

```

The first use full form only displays the long form.

```

11691 \renewcommand*{\glsxtrfullformat}[2]{%
11692 \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
11693 }%
11694 \renewcommand*{\glsxtrfullplformat}[2]{%
11695 \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
11696 }%
11697 \renewcommand*{\Glsxtrfullformat}[2]{%
11698 \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
11699 }%
11700 \renewcommand*{\Glsxtrfullplformat}[2]{%
11701 \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
11702 }%
11703 }

```

`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.

```

11704 \newabbreviationstyle{long-hyphen-noshort-noreg}%
11705 {%

```

Set accessibility attributes if enabled.

```

11706 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel

```

Setup the default fields.

```

11707 \renewcommand*{\CustomAbbreviationFields}{%
11708   name={\glsxtrlongnoshortname},
11709   sort={\the\glsshorttok},
11710   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
11711   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
11712   text={\protect\glslonghyphenfont{\the\glslongtok}},%
11713   plural={\protect\glslonghyphenfont{\the\glslongpltok}},%
11714   description={\the\glslongtok}%
11715 }%

```

Unset the regular attribute if it has been set.

```
11716 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11717   \glshasattribute{\the\glslabeltok}{regular}%
11718   {%
11719     \glssetattribute{\the\glslabeltok}{regular}{false}%
11720   }%
11721   {}%
11722 }%
11723 }%
11724 {}%
11725 \GlsXtrUseAbbrStyleFmts{long-hyphen-noshort-desc-noreg}%
11726 }
```

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.

```
11727 \newcommand*{\glsxtrlonghyphen}[3]{%
```

Grouping is needed to localise the redefinitions.

```
11728 {}%
11729   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
11730   \glsfirstlonghyphenfont{#1}%
11731 }%
11732 }
```

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.

```
11733 \newcommand*{\glsxtrposthyphenshort}[2]{%
11734 {}%
11735   \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
11736   \ifglsxtrinsertinside{\glsfirstlonghyphenfont{#2}}{\else{#2}\fi}%
11737   \glsxtrfullsep{#1}%
11738   \glsxtrparen%
11739   {\glsfirstabbrvhyphenfont{\glsentryshort{#1}\ifglsxtrinsertinside{#2}\fi}}%
11740   \ifglsxtrinsertinside{\else{#2}\fi}%
11741 }%
11742 }%
11743 }
```

yphensubsequent

```
\glsxtrposthyphensubsequent{\label}{\insert}
```

Format in the post-link hook for subsequent use. The label is ignored by default.

```
11744 \newcommand*{\glsxtrposthyphensubsequent}[2]{%
11745   \glsabbrvfont{\ifglsxtrinsertinside {\#2}\fi}%
11746   \ifglsxtrinsertinside \else{\#2}\fi
11747 }
```

ostshort-hyphen Like long-hyphen-short-hyphen but shifts the insert and parenthetical material to the post-link hook.

```
11748 \newabbreviationstyle{long-hyphen-postshort-hyphen}%
11749 {%
```

Set accessibility attributes if enabled.

```
11750 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11751 \renewcommand*{\CustomAbbreviationFields}{%
11752   name={\glsxtrlongshortname},
11753   sort={\the\glsshorttok},
11754   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
11755   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
11756   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11757   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
11758   description={\protect\glslonghypenfont{\the\glslongtok}}}
11759 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11760   \csdef{glsxtrpostlink\glscategorylabel}{%
11761     \glsxtrifwasfirstuse
11762     {%
11763       \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
11764     }%
11765   }%
```

Put the insertion into the post-link:

```
11766   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11767   }%
11768 }%
11769 \glshasattribute{\the\glslabeltok}{regular}%
11770 {%
11771   \glssetattribute{\the\glslabeltok}{regular}{false}%
11772 }%
11773 {}%
11774 }%
11775 }%
11776 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
11777 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
```

```

11778 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
11779 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
11780 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
11781 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

Subsequent use needs to omit the insertion:

```

11782 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
11783   \glsabbrvfont{\glsaccessshort{##1}}%
11784 }%
11785 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
11786   \glsabbrvfont{\glsaccessshortpl{##1}}%
11787 }%
11788 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
11789   \glsabbrvfont{\Glsaccessshort{##1}}%
11790 }%
11791 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
11792   \glsabbrvfont{\Glsaccessshortpl{##1}}%
11793 }%

```

First use full form:

```

11794 \renewcommand*{\glsxtrfullformat}[2]{%
11795   \glsxtrlonghypen{\glsaccesslong{##1}{##1}{##2}}%
11796 }%
11797 \renewcommand*{\glsxtrfullplformat}[2]{%
11798   \glsxtrlonghypen{\glsaccesslongpl{##1}{##1}{##2}}%
11799 }%
11800 \renewcommand*{\Glsxtrfullformat}[2]{%
11801   \glsxtrlonghypen{\Glsaccesslong{##1}{##1}{##2}}%
11802 }%
11803 \renewcommand*{\Glsxtrfullplformat}[2]{%
11804   \glsxtrlonghypen{\Glsaccesslongpl{##1}{##1}{##2}}%
11805 }%

```

In-line format.

```

11806 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11807   \glsfirstlonghypenfont{\glsaccesslong{##1}}%
11808   \ifglsxtrinsertinside{##2}\fi}%
11809   \ifglsxtrinsertinside \else{##2}\fi
11810 }%
11811 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11812   \glsfirstlonghypenfont{\glsaccesslongpl{##1}}%
11813   \ifglsxtrinsertinside{##2}\fi}%
11814   \ifglsxtrinsertinside \else{##2}\fi
11815 }%
11816 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11817   \glsfirstlonghypenfont{\Glsaccesslong{##1}}%
11818   \ifglsxtrinsertinside{##2}\fi}%
11819   \ifglsxtrinsertinside \else{##2}\fi
11820 }%
11821 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11822   \glsfirstlonghypenfont{\Glsaccesslongpl{##1}}%

```

```

11823     \ifglsxtrinsertinside{##2}\fi}%
11824     \ifglsxtrinsertinside \else{##2}\fi
11825   }%
11826 }

ort-hyphen-desc Like long-hyphen-postshort-hyphen but the description must be supplied by the user.
11827 \newabbreviationstyle{long-hyphen-postshort-hyphen-desc}{%
11828 {%

  Set accessibility attributes if enabled.
11829 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

  Setup the default fields.
11830 \renewcommand*\CustomAbbreviationFields{%
11831   name={\glsxtrlongshortdescname},%
11832   sort={\glsxtrlongshortdescsort},%
11833   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
11834   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
11835   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11836   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
11837 }%
11838 \renewcommand*\GlsXtrPostNewAbbreviation{%
11839   \csdef{\glsxtrpostlink\glscategorylabel}{%
11840     \glsxtrifwasfirstuse
11841     {%
11842       \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
11843     }%
11844   }%
}

  Put the insertion into the post-link:
11845   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11846   }%
11847 }%
11848 \glshasattribute{\the\glslabeltok}{regular}%
11849 {%
11850   \glssetattribute{\the\glslabeltok}{regular}{false}%
11851 }%
11852 {%
11853 }%
11854 }%
11855 {%
11856 \GlsXtrUseAbbrStyleFmts{long-hyphen-postshort-hyphen}%
11857 }

```

`shorthypenlong`

```
\glsxtrshorthypenlong{\label}{\short}{\long}{\insert}
```

The `\label` and `\short` arguments may be the plural form. The `\long` argument may also be the first letter uppercase form.

```

11858 \newcommand*{\glsxtrshorthyphenlong}[4]{%
  Grouping is needed to localise the redefinitions.
11859  {%
  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.)
11860  \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
11861  \glsfirstabbrvhypenfont{#2\ifglsxtrinsertinside{#4}\fi}%
11862  \ifglsxtrinsertinside\else{#4}\fi
11863  \glsxtrfullsep{#1}%
11864  \glsxtrparen{\glsfirstlonghypenfont{#3\ifglsxtrinsertinside{#4}\fi}%
11865  \ifglsxtrinsertinside\else{#4}\fi}%
11866 }%
11867 }

```

hen-long-hyphen Designed for use with the markwords attribute.

```

11868 \newabbreviationstyle{short-hyphen-long-hyphen}%
11869 {%

```

Set accessibility attributes if enabled.

```

11870 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel

```

Setup the default fields.

```

11871 \renewcommand*{\CustomAbbreviationFields}{%
11872   name={\glsxtrshortlongname},
11873   sort={\the\glsshorttok},
11874   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
11875     \protect\glsxtrfullsep{\the\glslabeltok}%
11876     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
11877   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
11878     \protect\glsxtrfullsep{\the\glslabeltok}%
11879     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
11880   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11881   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
11882   description={\protect\glslonghypenfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```

11883 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11884   \glshasattribute{\the\glslabeltok}{regular}%
11885   {%
11886     \glssetattribute{\the\glslabeltok}{regular}{false}%
11887   }%
11888   {}%
11889 }%
11890 }%
11891 {%
11892 \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
11893 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
11894 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%

```

```

11895 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
11896 \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

11897 \renewcommand*{\glsxtrfullformat}[2]{%
11898   \glsxtrshorthyphenlong{##1}{\glsaccessshort{##1}}{\glsaccesslong{##1}}{##2}%
11899 }%
11900 \renewcommand*{\glsxtrfullplformat}[2]{%
11901   \glsxtrshorthyphenlong{##1}%
11902     {\glsaccessshortpl{##1}}{\glsaccesslongpl{##1}}{##2}%
11903 }%
11904 \renewcommand*{\Glsxtrfullformat}[2]{%
11905   \glsxtrshorthyphenlong{##1}{\glsaccessshort{##1}}{\Glsaccesslong{##1}}{##2}%
11906 }%
11907 \renewcommand*{\Glsxtrfullplformat}[2]{%
11908   \glsxtrshorthyphenlong{##1}%
11909     {\glsaccessshortpl{##1}}{\Glsaccesslongpl{##1}}{##2}%
11910 }%
11911 }

```

`ong-hyphen-desc` Like short-hyphen-long-hyphen but the description must be supplied by the user.

```

11912 \newabbreviationstyle{short-hyphen-long-hyphen-desc}%
11913 {%

```

Set accessibility attributes if enabled.

```

11914 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11915 \renewcommand*{\CustomAbbreviationFields}{%
11916   name={\glsxtrshortlongdescname},%
11917   sort={\glsxtrshortlongdescsort},%
11918   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
11919     \protect\glsxtrfullsep{\the\glslabeltok}%
11920       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
11921   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
11922     \protect\glsxtrfullsep{\the\glslabeltok}%
11923       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
11924   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11925   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
11926 }%

```

Unset the regular attribute if it has been set.

```

11927 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11928   \glshasattribute{\the\glslabeltok}{regular}%
11929   {%
11930     \glssetattribute{\the\glslabeltok}{regular}{false}%
11931   }%
11932   {}%
11933 }%
11934 }%
11935 {%

```

```
11936 \GlsXtrUseAbbrStyleFmts{short-hyphen-long-hyphen}%
11937 }
```

sxtrshorthypen

```
\glsxtrshorthypen{\<short>}{\<label>}{\<insert>}
```

Used by short-hyphen-postlong-hyphen. The *<insert>* is checked to determine if it starts with a hyphen but isn't used here as it's moved to the post-link hook.

```
11938 \newcommand*\glsxtrshorthypen}[3]{%
```

Grouping is needed to localise the redefinitions.

```
11939 {%
11940   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
11941   \glsfirstabbrvhyphenfont{#1}%
11942 }%
11943 }
```

rposthypenlong

```
\glsxtrposthypenlong{\<label>}{\<insert>}
```

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.

```
11944 \newcommand*\glsxtrposthypenlong}[2]{%
11945 {%
11946   \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
11947   \ifglsxtrinsertinside{\glsfirstabbrvhyphenfont{#2}}\else{#2}\fi
11948   \glsxtrfullsep{#1}%
11949   \glsxtrparens
11950   {\glsfirstlonghyphenfont{\glsentrylong{#1}}\ifglsxtrinsertinside{#2}\fi}%
11951   \ifglsxtrinsertinside\else{#2}\fi
11952 }%
11953 }%
11954 }
```

postlong-hyphen Like short-hyphen-long-hyphen but shifts the insert and parenthetical material to the post-link hook.

```
11955 \newabbreviationstyle{short-hyphen-postlong-hyphen}%
11956 {%
```

Set accessibility attributes if enabled.

```
11957 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11958 \renewcommand*\CustomAbbreviationFields}{%
11959   name=\glsxtrshortlongname},
```

```

11960     sort={\the\glsshorttok},
11961     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
11962     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
11963     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11964     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
11965     description={\protect\glslonghypenfont{\the\glslongtok}}}%
11966 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11967     \csdef{glsxtrpostlink\glscategorylabel}{%
11968         \glsxtrifwasfirstuse
11969         {%
11970             \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
11971         }%
11972     }%

```

Put the insertion into the post-link:

```

11973     \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11974     }%
11975 }%
11976 \glshasattribute{\the\glslabeltok}{regular}%
11977 {%
11978     \glssetattribute{\the\glslabeltok}{regular}{false}%
11979 }%
11980 { }%
11981 }%
11982 }%
11983 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11984 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
11985 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
11986 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
11987 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
11988 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

Subsequent use needs to omit the insertion:

```

11989 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
11990     \glsabbrvfont{\glsaccessshort{##1}}%
11991 }%
11992 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
11993     \glsabbrvfont{\glsaccessshortpl{##1}}%
11994 }%
11995 \renewcommand*{\GlsXtrSubsequentFmt}[2]{%
11996     \glsabbrvfont{\GlsAccessShort{##1}}%
11997 }%
11998 \renewcommand*{\GlsXtrSubsequentPlFmt}[2]{%
11999     \glsabbrvfont{\GlsAccessShortPl{##1}}%
12000 }%

```

First use full form:

```

12001 \renewcommand*{\glsxtrfullformat}[2]{%
12002     \glsxtrshorthypen{\glsaccessshort{##1}}{##1}{##2}%

```

```

12003 }%
12004 \renewcommand*{\glsxtrfullplformat}[2]{%
12005   \glsxtrshorthypen{\glsaccessshortpl{##1}}{##1}{##2}%
12006 }%
12007 \renewcommand*{\Glsxtrfullformat}[2]{%
12008   \glsxtrshorthypen{\Glsaccessshort{##1}}{##1}{##2}%
12009 }%
12010 \renewcommand*{\Glsxtrfullplformat}[2]{%
12011   \glsxtrshorthypen{\Glsaccessshortpl{##1}}{##1}{##2}%
12012 }%

```

In-line format. Commands like `\glsxtrfull` set `\glsinsert` to empty. The entire link-text (provided by the following commands) is stored in `\glscustomtext`.

```

12013 \renewcommand*{\glsxtrinlinefullformat}[2]{%
12014   \glsfirstabbrvhyphenfont{\glsaccessshort{##1}}%
12015     \ifglsxtrinsertinside{##2}\fi}%
12016   \ifglsxtrinsertinside \else{##2}\fi
12017 }%
12018 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
12019   \glsfirstabbrvhyphenfont{\glsaccessshortpl{##1}}%
12020     \ifglsxtrinsertinside{##2}\fi}%
12021   \ifglsxtrinsertinside \else{##2}\fi
12022 }%
12023 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
12024   \glsfirstabbrvhyphenfont{\Glsaccessshort{##1}}%
12025     \ifglsxtrinsertinside{##2}\fi}%
12026   \ifglsxtrinsertinside \else{##2}\fi
12027 }%
12028 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
12029   \glsfirstabbrvhyphenfont{\Glsaccessshortpl{##1}}%
12030     \ifglsxtrinsertinside{##2}\fi}%
12031   \ifglsxtrinsertinside \else{##2}\fi
12032 }%
12033 }

```

`ong-hyphen-desc` Like `short-hyphen-postlong-hyphen` but the description must be supplied by the user.

```

12034 \newabbreviationstyle{short-hyphen-postlong-hyphen-desc}{%
12035 }%

```

Set accessibility attributes if enabled.

```
12036 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

12037 \renewcommand*{\CustomAbbreviationFields}{%
12038   name={\glsxtrshortlongdescname},%
12039   sort={\glsxtrshortlongdescsort},%
12040   first={\protect\glsfirstabbrvhyphenfont{\the\glsshorttok}},%
12041   firstplural={\protect\glsfirstabbrvhyphenfont{\the\glsshortpltok}},%
12042   text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
12043   plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}}%

```

```

12044 }%
12045 \renewcommand*\{\GlsXtrPostNewAbbreviation\}{%
12046   \csdef{glsxtrpostlink}{\glscategorylabel}{%
12047     \glsxtrifwasfirstuse
12048     {%
12049       \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
12050     }%
12051   }%

```

Put the insertion into the post-link:

```

12052   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
12053 }%
12054 }%
12055 \glshasattribute{\the\glslabeltok}{regular}%
12056 {%
12057   \glssetattribute{\the\glslabeltok}{regular}{false}%
12058 }%
12059 {}%
12060 }%
12061 }%
12062 {%
12063 \GlsXtrUseAbbrStyleFmts{short-hyphen-postlong-hyphen}%
12064 }

```

### 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
12065 \newcommand*\{\glsabbrvonlyfont\}{\glsabbrvdefaultfont}%

stabbrvonlyfont
12066 \newcommand*\{\glsfirstabbrvonlyfont\}{\glsabbrvonlyfont}%

glslongonlyfont
12067 \newcommand*\{\glslongonlyfont\}{\glslongdefaultfont}%

rstlongonlyfont
12068 \newcommand*\{\glsfirstlongonlyfont\}{\glslongonlyfont}%

```

The default short form suffix:

```

lsxtronlysuffix
12069 \newcommand*\{\glsxtronlysuffix\}{\glsxtrabbrvpluralsuffix}%

\glsxtronlyname The default name format for this style.
12070 \newcommand*\{\glsxtronlyname\}{%
12071   \protect\glsabbrvonlyfont{\the\glsshorttok}%
12072 }

```

only-short-only

```
12073 \newabbreviationstyle{long-only-short-only}%
12074 {%
    Set accessibility attributes if enabled.
12075   \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
    Setup the default fields.
12076   \renewcommand*\CustomAbbreviationFields{%
12077     name={\glsxtronlyname},
12078     sort={\the\glsshorttok},
12079     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
12080     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
12081     text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
12082     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}},%
12083     description={\protect\glslongonlyfont{\the\glslongtok}}}%
    Unset the regular attribute if it has been set.
12084   \renewcommand*\GlsXtrPostNewAbbreviation{%
12085     \glshasattribute{\the\glslabeltok}{regular}}%
12086     {%
12087       \glssetattribute{\the\glslabeltok}{regular}{false}}%
12088     }%
12089     {}%
12090   }%
12091 }%
12092 {%
12093   \renewcommand*\abrvpluralsuffix{\glsxtronlysuffix}%
12094   \renewcommand*\glsabbrvfont[1]{\glsabbrvonlyfont{##1}}%
12095   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvonlyfont{##1}}%
12096   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongonlyfont{##1}}%
12097   \renewcommand*\glslongfont[1]{\glslongonlyfont{##1}}%
```

The first use full form doesn't show the short form.

```
12098   \renewcommand*\glsxtrfullformat}[2]{%
12099     \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
12100     \ifglsxtrinsertinside\else##2\fi
12101   }%
12102   \renewcommand*\glsxtrfullplformat}[2]{%
12103     \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
12104     \ifglsxtrinsertinside\else##2\fi
12105   }%
12106   \renewcommand*\Glsxtrfullformat}[2]{%
12107     \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
12108     \ifglsxtrinsertinside\else##2\fi
12109   }%
12110   \renewcommand*\Glsxtrfullplformat}[2]{%
12111     \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
12112     \ifglsxtrinsertinside\else##2\fi
12113   }%
```

The inline full form does show the short form.

```
12114 \renewcommand*{\glsxtrinlinefullformat}[2]{%
12115   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
12116   \ifglsxtrinsertinside\else##2\fi
12117   \glsxtrfullsep{##1}%
12118   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshort{##1}}}}%
12119 }%
12120 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
12121   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
12122   \ifglsxtrinsertinside\else##2\fi
12123   \glsxtrfullsep{##1}%
12124   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}}%
12125 }%
12126 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
12127   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
12128   \ifglsxtrinsertinside\else##2\fi
12129   \glsxtrfullsep{##1}%
12130   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}}%
12131 }%
12132 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
12133   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
12134   \ifglsxtrinsertinside\else##2\fi
12135   \glsxtrfullsep{##1}%
12136   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\Glsaccessshortpl{##1}}}}%
12137 }%
12138 }
```

#### xtronlydescsort

```
12139 \newcommand*{\glsxtronlydescsort}{\the\glslongtok}
```

#### xtronlydescname

```
12140 \newcommand*{\glsxtronlydescname}{%
12141   \protect\glslongfont{\the\glslongtok}}%
12142 }
```

#### short-only-desc

```
12143 \newabbreviationstyle{long-only-short-only-desc}{%
12144 }%
```

Set accessibility attributes if enabled.

```
12145 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
12146 \renewcommand*{\CustomAbbreviationFields}{%
12147   name={\glsxtronlydescname},
12148   sort={\glsxtronlydescsort},%
12149   first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
12150   firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
12151   text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
```

```

12152     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}}%
12153   }%
    Unset the regular attribute if it has been set.
12154 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
12155   \glshasattribute{\the\glslabeltok}{regular}%
12156   {%
12157     \glssetattribute{\the\glslabeltok}{regular}{false}%
12158   }%
12159   {}%
12160 }%
12161 }%
12162 {%
12163 \GlsXtrUseAbbrStyleFmts{long-only-short-only}%
12164 }

```

## 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:

```
12165 \let\@glsxtr@org@markright\markright
```

Redefine (grouping not added in case it interferes with the original code):

```
12166 \renewcommand*{\markright}[1]{%
12167   \glsxtrmarkhook
```

```
12168 \@glsxtr@org@markright{\@glsxtrinmark#1\@glsxtrnotinmark}%
12169 \glsxtrrestoremarkhook
12170 }
```

\markboth Save original definition:

```
12171 \let\@glsxtr@org@markboth\markboth
```

Redefine (grouping not added in case it interferes with the original code):

```
12172 \renewcommand*\markboth[2]{%
12173 \glsxtrmarkhook
12174 \@glsxtr@org@markboth
12175 {\@glsxtrinmark#1\@glsxtrnotinmark}%
12176 {\@glsxtrinmark#2\@glsxtrnotinmark}%
12177 \glsxtrrestoremarkhook
12178 }
```

Also do this for \@starttoc

\@starttoc Save original definition:

```
12179 \let\@glsxtr@org@@starttoc\@starttoc
```

Redefine:

```
12180 \renewcommand*\@starttoc[1]{%
12181 \glsxtrmarkhook
12182 \@glsxtrinmark
12183 \@glsxtr@org@@starttoc{#1}%
12184 \@glsxtrnotinmark
12185 \glsxtrrestoremarkhook
12186 }
```

If this causes a problem provide a simple way of switching back to the original definitions:

sxtrRevertMarks

```
12187 \newcommand*\glsxtrRevertMarks{%
12188 \let\markright\@glsxtr@org@markright
12189 \let\markboth\@glsxtr@org@markboth
12190 \let\@starttoc\@glsxtr@org@@starttoc
12191 }
```

rRevertTocMarks Just restores \@starttoc.

```
12192 \newcommand*\glsxtrRevertTocMarks{%
12193 \let\@starttoc\@glsxtr@org@@starttoc
12194 }
```

\glsxtrifinmark

```
12195 \newcommand*\glsxtrifinmark[2]{#2}
```

\@glsxtrinmark

```
12196 \newrobustcmd*\@glsxtrinmark{%
12197 \let\glsxtrifinmark\@firstoftwo
12198 }
```

```

glsxtrnotinmark
12199 \newrobustcmd*{\glsxtrnotinmark}{%
12200   \let\glsxtrinmark\@secondoftwo
12201 }

eorpdfforheading
12202 \ifdef\texorpdfstring
12203 {
12204   \newcommand*{\glsxtrtitleorpdfforheading}[3]{\texorpdfstring{#1}{#2}}
12205 }
12206 {
12207   \newcommand*{\glsxtrtitleorpdfforheading}[3]{#1}
12208 }

\glsxtrmarkhook Hook used in new definition of \markboth and \markright to make some changes to apply
to the marks:
12209 \newcommand*{\glsxtrmarkhook}{%
  Save current definitions:
12210   \let\@glsxtr@org@MakeUppercase\MakeUppercase
12211   \let\@glsxtr@org@glsxtrtitleorpdfforheading\glsxtrtitleorpdfforheading
12212   \let\@glsxtr@org@glsxtrtitleshort\glsxtrtitleshort
12213   \let\@glsxtr@org@glsxtrtitleshortpl\glsxtrtitleshortpl
12214   \let\@glsxtr@org@Glsxtrtitleshort\Glsxtrtitleshort
12215   \let\@glsxtr@org@Glsxtrtitleshortpl\Glsxtrtitleshortpl
12216   \let\@glsxtr@org@glsxtrtitlename\glsxtrtitlename
12217   \let\@glsxtr@org@Glsxtrtitlename\Glsxtrtitlename
12218   \let\@glsxtr@org@glsxtrtitletext\glsxtrtitletext
12219   \let\@glsxtr@org@Glsxtrtitletext\Glsxtrtitletext
12220   \let\@glsxtr@org@glsxtrtitleplural\glsxtrtitleplural
12221   \let\@glsxtr@org@Glsxtrtitleplural\Glsxtrtitleplural
12222   \let\@glsxtr@org@glsxtrtitlefirst\glsxtrtitlefirst
12223   \let\@glsxtr@org@Glsxtrtitlefirst\Glsxtrtitlefirst
12224   \let\@glsxtr@org@glsxtrtitlefirstplural\glsxtrtitlefirstplural
12225   \let\@glsxtr@org@Glsxtrtitlefirstplural\Glsxtrtitlefirstplural
12226   \let\@glsxtr@org@glsxtrtitlelong\glsxtrtitlelong
12227   \let\@glsxtr@org@glsxtrtitlelongpl\glsxtrtitlelongpl
12228   \let\@glsxtr@org@Glsxtrtitlelong\Glsxtrtitlelong
12229   \let\@glsxtr@org@Glsxtrtitlelongpl\Glsxtrtitlelongpl
12230   \let\@glsxtr@org@glsxtrtitlefull\glsxtrtitlefull
12231   \let\@glsxtr@org@glsxtrtitlefullpl\glsxtrtitlefullpl
12232   \let\@glsxtr@org@Glsxtrtitlefull\Glsxtrtitlefull
12233   \let\@glsxtr@org@Glsxtrtitlefullpl\Glsxtrtitlefullpl

  New definitions
12234   \let\glsxtrinmark\@firstoftwo
12235   \let\MakeUppercase\MakeTextUppercase
12236   \let\glsxtrtitleorpdfforheading\@thirdofthree
12237   \let\glsxtrtitleshort\glsxtrheadshort
12238   \let\glsxtrtitleshortpl\glsxtrheadshortpl

```

```

12239 \let\Glsxtrtitleshort\Glsxtrheadshort
12240 \let\Glsxtrtitleshortpl\Glsxtrheadshortpl
12241 \let\glsxtrtitlename\glsxtrheadname
12242 \let\Glsxtrtitlename\Glsxtrheadname
12243 \let\glsxtrtitletext\glsxtrheadtext
12244 \let\Glsxtrtitletext\Glsxtrheadtext
12245 \let\glsxtrtitleplural\glsxtrheadplural
12246 \let\Glsxtrtitleplural\Glsxtrheadplural
12247 \let\glsxtrtitlefirst\glsxtrheadfirst
12248 \let\Glsxtrtitlefirst\Glsxtrheadfirst
12249 \let\glsxtrtitlefirstplural\glsxtrheadfirstplural
12250 \let\Glsxtrtitlefirstplural\Glsxtrheadfirstplural
12251 \let\glsxtrtitlelong\glsxtrheadlong
12252 \let\glsxtrtitlelongpl\glsxtrheadlongpl
12253 \let\Glsxtrtitlelong\Glsxtrheadlong
12254 \let\Glsxtrtitlelongpl\Glsxtrheadlongpl
12255 \let\glsxtrtitlefull\glsxtrheadfull
12256 \let\glsxtrtitlefullpl\glsxtrheadfullpl
12257 \let\Glsxtrtitlefull\Glsxtrheadfull
12258 \let\Glsxtrtitlefullpl\Glsxtrheadfullpl
12259 }

```

`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.)

```

12260 \newcommand*\glsxtrrestoremarkhook}{%
12261 \let\glsxtrifinmark\@secondoftwo
12262 \let\MakeUppercase\@glsxtr@org@MakeUppercase
12263 \let\glsxtrtitleorpdforheading\@glsxtr@org@glsxtrtitleorpdforheading
12264 \let\glsxtrtitleshort\@glsxtr@org@glsxtrtitleshort
12265 \let\glsxtrtitleshortpl\@glsxtr@org@glsxtrtitleshortpl
12266 \let\Glsxtrtitleshort\@glsxtr@org@Glsxtrtitleshort
12267 \let\Glsxtrtitleshortpl\@glsxtr@org@Glsxtrtitleshortpl
12268 \let\glsxtrtitlename\@glsxtr@org@glsxtrtitlename
12269 \let\Glsxtrtitlename\@glsxtr@org@Glsxtrtitlename
12270 \let\glsxtrtitletext\@glsxtr@org@glsxtrtitletext
12271 \let\Glsxtrtitletext\@glsxtr@org@Glsxtrtitletext
12272 \let\glsxtrtitleplural\@glsxtr@org@glsxtrtitleplural
12273 \let\Glsxtrtitleplural\@glsxtr@org@Glsxtrtitleplural
12274 \let\glsxtrtitlefirst\@glsxtr@org@glsxtrtitlefirst
12275 \let\Glsxtrtitlefirst\@glsxtr@org@Glsxtrtitlefirst
12276 \let\glsxtrtitlefirstplural\@glsxtr@org@glsxtrtitlefirstplural
12277 \let\Glsxtrtitlefirstplural\@glsxtr@org@Glsxtrtitlefirstplural
12278 \let\glsxtrtitlelong\@glsxtr@org@glsxtrtitlelong
12279 \let\glsxtrtitlelongpl\@glsxtr@org@glsxtrtitlelongpl
12280 \let\Glsxtrtitlelong\@glsxtr@org@Glsxtrtitlelong
12281 \let\Glsxtrtitlelongpl\@glsxtr@org@Glsxtrtitlelongpl
12282 \let\glsxtrtitlefull\@glsxtr@org@glsxtrtitlefull

```

```

12283 \let\glsxtrtitlefullpl\@glsxtr@org@glsxtrtitlefullpl
12284 \let\Glsxtrtitlefull\@glsxtr@org@Glsxtrtitlefull
12285 \let\Glsxtrtitlefullpl\@glsxtr@org@Glsxtrtitlefullpl
12286 }

```

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.

```

12287 \newcommand*\glsxtrheadshort[1]{%
12288 \protect\NoCaseChange
12289 {%
12290 \glsifattribute{#1}{headuc}{true}{%
12291 {%
12292 \GLSxtrshort [noindex,hyper=false]{#1}[]%
12293 }%
12294 {%
12295 \glsxtrshort [noindex,hyper=false]{#1}[]%
12296 }%
12297 }%
12298 }

```

`glsxtrtitleshort` Command to display short form of abbreviation in section title and table of contents.

```

12299 \newrobustcmd*\glsxtrtitleshort[1]{%
12300 \glsxtrshort [noindex,hyper=false]{#1}[]%
12301 }

```

`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.

```

12302 \newcommand*\glsxtrheadshortpl[1]{%
12303 \protect\NoCaseChange
12304 {%
12305 \glsifattribute{#1}{headuc}{true}{%
12306 {%
12307 \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
12308 }%
12309 {%
12310 \glsxtrshortpl [noindex,hyper=false]{#1}[]%
12311 }%
12312 }%
12313 }

```

`xtrtitleshortpl` Command to display plural short form of abbreviation in section title and table of contents.

```

12314 \newrobustcmd*\glsxtrtitleshortpl[1]{%
12315 \glsxtrshortpl [noindex,hyper=false]{#1}[]%
12316 }

```

Glsxtrheadshort Command used to display short form in the page header with the first letter converted to upper case.

```
12317 \newcommand*{\Glsxtrheadshort}[1]{%
12318   \protect\NoCaseChange
12319   {%
12320     \glsifattribute{#1}{headuc}{true}%
12321     {%
12322       \GLSxtrshort [noindex,hyper=false]{#1}[]%
12323     }%
12324   {%
12325     \Glsxtrshort [noindex,hyper=false]{#1}[]%
12326   }%
12327 }%
12328 }
```

lsxtrtitleshort Command to display short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
12329 \newrobustcmd*{\Glsxtrtitleshort}[1]{%
12330   \Glsxtrshort [noindex,hyper=false]{#1}[]%
12331 }
```

LSxtrtitleshort Command to display short form of abbreviation in section title and table of contents in all upper case.

```
12332 \newrobustcmd*{\GLSxtrtitleshort}[1]{%
12333   \GLSxtrshort [noindex,hyper=false]{#1}[]%
12334 }
```

sxtrheadshortpl Command used to display plural short form in the page header with the first letter converted to upper case.

```
12335 \newcommand*{\Glsxtrheadshortpl}[1]{%
12336   \protect\NoCaseChange
12337   {%
12338     \glsifattribute{#1}{headuc}{true}%
12339     {%
12340       \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
12341     }%
12342   {%
12343     \Glsxtrshortpl [noindex,hyper=false]{#1}[]%
12344   }%
12345 }%
12346 }
```

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
12347 \newrobustcmd*{\Glsxtrtitleshortpl}[1]{%
12348   \Glsxtrshortpl [noindex,hyper=false]{#1}[]%
12349 }
```

`xtrtitleshortpl` Command to display plural short form of abbreviation in section title and table of contents in all upper case.

```
12350 \newrobustcmd*\{\GLSxtrtitleshortpl\}[1]{%
12351   \GLSxtrshortpl[noindex,hyper=false]{#1}[]%
12352 }
```

`\glsxtrheadname` As above but for the name value.

```
12353 \newcommand*\{\glsxtrheadname\}[1]{%
12354   \protect\NoCaseChange
12355   {%
12356     \glsifattribute{#1}{headuc}{true}{%
12357       {%
12358         \GLSname[noindex,hyper=false]{#1}[]%
12359       }%
12360       {%
12361         \glsname[noindex,hyper=false]{#1}[]%
12362       }%
12363     }%
12364 }
```

`glsxtrtitlename` Command to display name value in section title and table of contents.

```
12365 \newrobustcmd*\{\glsxtrtitlename\}[1]{%
12366   \glsname[noindex,hyper=false]{#1}[]%
12367 }
```

`\Glsxtrheadname` First letter converted to upper case

```
12368 \newcommand*\{\Glsxtrheadname\}[1]{%
12369   \protect\NoCaseChange
12370   {%
12371     \glsifattribute{#1}{headuc}{true}{%
12372       {%
12373         \GLSname[noindex,hyper=false]{#1}[]%
12374       }%
12375       {%
12376         \Glsname[noindex,hyper=false]{#1}[]%
12377       }%
12378     }%
12379 }
```

`Glsxtrtitlename` Command to display name value in section title and table of contents with the first letter changed to upper case.

```
12380 \newrobustcmd*\{\Glsxtrtitlename\}[1]{%
12381   \Glsname[noindex,hyper=false]{#1}[]%
12382 }
```

`GLSxtrtitlename` Command to display name value in section title and table of contents in all upper case.

```
12383 \newrobustcmd*\{\GLSxtrtitlename\}[1]{%
12384   \GLSname[noindex,hyper=false]{#1}[]%
12385 }
```

\glsxtrheadtext As above but for the text value.

```
12386 \newcommand*{\glsxtrheadtext}[1]{%
12387   \protect\NoCaseChange
12388   {%
12389     \glsifattribute{#1}{headuc}{true}{%
12390       {%
12391         \GLStext[noindex,hyper=false]{#1}[]%
12392       }%
12393     {%
12394       \glstext[noindex,hyper=false]{#1}[]%
12395     }%
12396   }%
12397 }
```

\glsxtrtitletext Command to display text value in section title and table of contents.

```
12398 \newrobustcmd*{\glsxtrtitletext}[1]{%
12399   \glstext[noindex,hyper=false]{#1}[]%
12400 }
```

\Glsxtrheadtext First letter converted to upper case

```
12401 \newcommand*{\Glsxtrheadtext}[1]{%
12402   \protect\NoCaseChange
12403   {%
12404     \glsifattribute{#1}{headuc}{true}{%
12405       {%
12406         \GLStext[noindex,hyper=false]{#1}[]%
12407       }%
12408     {%
12409       \Glstext[noindex,hyper=false]{#1}[]%
12410     }%
12411   }%
12412 }
```

\Glsxtrtitletext Command to display text value in section title and table of contents with the first letter changed to upper case.

```
12413 \newrobustcmd*{\Glsxtrtitletext}[1]{%
12414   \Glstext[noindex,hyper=false]{#1}[]%
12415 }
```

\GLSxtrtitletext Command to display text value in section title and table of contents in all upper case.

```
12416 \newrobustcmd*{\GLSxtrtitletext}[1]{%
12417   \GLStext[noindex,hyper=false]{#1}[]%
12418 }
```

\sxtrheadplural As above but for the plural value.

```
12419 \newcommand*{\glsxtrheadplural}[1]{%
12420   \protect\NoCaseChange
12421   {%
```

```

12422 \glsifattribute{#1}{headuc}{true}%
12423 {%
12424   \GLSplural[noindex,hyper=false]{#1}[]%
12425 }%
12426 {%
12427   \glsplural[noindex,hyper=false]{#1}[]%
12428 }%
12429 }%
12430 }

```

`sxtrtitleplural` Command to display plural value in section title and table of contents.

```

12431 \newrobustcmd*\{\glsxtrtitleplural\}[1]{%
12432   \glsplural[noindex,hyper=false]{#1}[]%
12433 }

```

`lsxtrheadplural` Convert first letter to upper case.

```

12434 \newcommand*\{\Glsxtrheadplural\}[1]{%
12435   \protect\NoCaseChange
12436 {%
12437   \glsifattribute{#1}{headuc}{true}%
12438 }%
12439   \GLSplural[noindex,hyper=false]{#1}[]%
12440 }%
12441 {%
12442   \Glsplural[noindex,hyper=false]{#1}[]%
12443 }%
12444 }%
12445 }

```

`sxtrtitleplural` Command to display plural value in section title and table of contents with the first letter changed to upper case.

```

12446 \newrobustcmd*\{\Glsxtrtitleplural\}[1]{%
12447   \Glsplural[noindex,hyper=false]{#1}[]%
12448 }

```

`Sxtrtitleplural` Command to display plural value in section title and table of contents in all upper case.

```

12449 \newrobustcmd*\{\GLSxtrtitleplural\}[1]{%
12450   \GLSplural[noindex,hyper=false]{#1}[]%
12451 }

```

`glsxtrheadfirst` As above but for the first value.

```

12452 \newcommand*\{\glsxtrheadfirst\}[1]{%
12453   \protect\NoCaseChange
12454 {%
12455   \glsifattribute{#1}{headuc}{true}%
12456 }%
12457   \GLSfirst[noindex,hyper=false]{#1}[]%
12458 }%

```

```
12459     {%
12460         \glsfirst [noindex,hyper=false]{#1} []
12461     }%
12462 }%
12463 }
```

**lsxtrtitlefirst** Command to display first value in section title and table of contents.

```
12464 \newrobustcmd*{\glsxtrtitlefirst}[1]{%
12465     \glsfirst [noindex,hyper=false]{#1} []
12466 }
```

**Glsxtrheadfirst** First letter converted to upper case

```
12467 \newcommand*{\Glsxtrheadfirst}[1]{%
12468     \protect\NoCaseChange
12469     {%
12470         \glsifattribute{#1}{headuc}{true}%
12471         {%
12472             \GLSfirst [noindex,hyper=false]{#1} []
12473         }%
12474         {%
12475             \Glsfirst [noindex,hyper=false]{#1} []
12476         }%
12477     }%
12478 }
```

**lsxtrtitlefirst** Command to display first value in section title and table of contents with the first letter changed to upper case.

```
12479 \newrobustcmd*{\Glsxtrtitlefirst}[1]{%
12480     \Glsfirst [noindex,hyper=false]{#1} []
12481 }
```

**LSxtrtitlefirst** Command to display first value in section title and table of contents in all upper case.

```
12482 \newrobustcmd*{\GLSxtrtitlefirst}[1]{%
12483     \GLSfirst [noindex,hyper=false]{#1} []
12484 }
```

**headfirstplural** As above but for the firstplural value.

```
12485 \newcommand*{\glsxtrheadfirstplural}[1]{%
12486     \protect\NoCaseChange
12487     {%
12488         \glsifattribute{#1}{headuc}{true}%
12489         {%
12490             \GLSfirstplural [noindex,hyper=false]{#1} []
12491         }%
12492         {%
12493             \glsfirstplural [noindex,hyper=false]{#1} []
12494         }%
12495     }%
12496 }
```

`titlefirstplural` Command to display `firstplural` value in section title and table of contents.

```
12497 \newrobustcmd*{\glsxrttitlefirstplural}[1]{%
12498   \glsfirstplural[noindex,hyper=false]{#1}[]%
12499 }
```

`headfirstplural` First letter converted to upper case

```
12500 \newcommand*{\Glsxtrheadfirstplural}[1]{%
12501   \protect\NoCaseChange
12502   {%
12503     \glsifattribute{#1}{headuc}{true}%
12504     {%
12505       \GLSfirstplural[noindex,hyper=false]{#1}[]%
12506     }%
12507     {%
12508       \Glsfirstplural[noindex,hyper=false]{#1}[]%
12509     }%
12510   }%
12511 }
```

`titlefirstplural` Command to display first value in section title and table of contents with the first letter changed to upper case.

```
12512 \newrobustcmd*{\Glsxrttitlefirstplural}[1]{%
12513   \Glsfirstplural[noindex,hyper=false]{#1}[]%
12514 }
```

`titlefirstplural` Command to display first value in section title and table of contents in all upper case.

```
12515 \newrobustcmd*{\GLSxrttitlefirstplural}[1]{%
12516   \GLSfirstplural[noindex,hyper=false]{#1}[]%
12517 }
```

`\glsxtrheadlong` Command used to display long form in the page header.

```
12518 \newcommand*{\glsxtrheadlong}[1]{%
12519   \protect\NoCaseChange
12520   {%
12521     \glsifattribute{#1}{headuc}{true}%
12522     {%
12523       \GLSxtrlong[noindex,hyper=false]{#1}[]%
12524     }%
12525     {%
12526       \glsxtrlong[noindex,hyper=false]{#1}[]%
12527     }%
12528   }%
12529 }
```

`glsxrttitlelong` Command to display long form of abbreviation in section title and table of contents.

```
12530 \newrobustcmd*{\glsxrttitlelong}[1]{%
12531   \glsxtrlong[noindex,hyper=false]{#1}[]%
12532 }
```

`\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.

```
12533 \newcommand*{\glsxtrheadlongpl}[1]{%
12534   \protect\noCaseChange
12535   {%
12536     \glsifattribute{#1}{headuc}{true}%
12537     {%
12538       \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
12539     }%
12540     {%
12541       \glsxtrlongpl[noindex,hyper=false]{#1}[]%
12542     }%
12543   }%
12544 }
```

`\sxttitlelongpl` Command to display plural long form of abbreviation in section title and table of contents.

```
12545 \newrobustcmd*{\glsxtrtitlelongpl}[1]{%
12546   \glsxtrlongpl[noindex,hyper=false]{#1}[]%
12547 }
```

`\Glsxtrheadlong` Command used to display long form in the page header with the first letter converted to upper case.

```
12548 \newcommand*{\Glsxtrheadlong}[1]{%
12549   \protect\noCaseChange
12550   {%
12551     \glsifattribute{#1}{headuc}{true}%
12552     {%
12553       \GLSxtrlong[noindex,hyper=false]{#1}[]%
12554     }%
12555     {%
12556       \Glsxtrlong[noindex,hyper=false]{#1}[]%
12557     }%
12558   }%
12559 }
```

`\Glsxtrtitlelong` Command to display long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
12560 \newrobustcmd*{\Glsxtrtitlelong}[1]{%
12561   \Glsxtrlong[noindex,hyper=false]{#1}[]%
12562 }
```

`\GLSxtrtitlelong` Command to display long form of abbreviation in section title and table of contents in all upper case.

```
12563 \newrobustcmd*{\GLSxtrtitlelong}[1]{%
12564   \GLSxtrlong[noindex,hyper=false]{#1}[]%
12565 }
```

`lsxtrheadlongpl` Command used to display plural long form in the page header with the first letter converted to upper case.

```
12566 \newcommand*{\Glsxtrheadlongpl}[1]{%
12567   \protect\NoCaseChange
12568   {%
12569     \glsifattribute{#1}{headuc}{true}%
12570     {%
12571       \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
12572     }%
12573     {%
12574       \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
12575     }%
12576   }%
12577 }
```

`sxttitlelongpl` Command to display plural long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
12578 \newrobustcmd*{\Glsxtrtitlelongpl}[1]{%
12579   \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
12580 }
```

`Sxttitlelongpl` Command to display plural long form of abbreviation in section title and table of contents in all upper case.

```
12581 \newrobustcmd*{\GLSxtrtitlelongpl}[1]{%
12582   \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
12583 }
```

`\glsxtrheadfull` Command used to display full form in the page header.

```
12584 \newcommand*{\glsxtrheadfull}[1]{%
12585   \protect\NoCaseChange
12586   {%
12587     \glsifattribute{#1}{headuc}{true}%
12588     {%
12589       \GLSxtrfull[noindex,hyper=false]{#1}[]%
12590     }%
12591     {%
12592       \glsxtrfull[noindex,hyper=false]{#1}[]%
12593     }%
12594   }%
12595 }
```

`glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents.

```
12596 \newrobustcmd*{\glsxtrtitlefull}[1]{%
12597   \glsxtrfull[noindex,hyper=false]{#1}[]%
12598 }
```

`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.

```

12599 \newcommand*{\glsxtrheadfullpl}[1]{%
12600   \protect\noCaseChange
12601   {%
12602     \glsifattribute{#1}{headuc}{true}{%
12603       {%
12604         \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
12605       }%
12606     {%
12607       \glsxtrfullpl[noindex,hyper=false]{#1}[]%
12608     }%
12609   }%
12610 }

```

`sxttitlefullpl` Command to display plural full form of abbreviation in section title and table of contents.

```

12611 \newrobustcmd*{\glsxtrtitlefullpl}[1]{%
12612   \glsxtrfullpl[noindex,hyper=false]{#1}[]%
12613 }

```

`\Glsxtrheadfull` Command used to display full form in the page header with the first letter converted to upper case.

```

12614 \newcommand*{\Glsxtrheadfull}[1]{%
12615   \protect\noCaseChange
12616   {%
12617     \glsifattribute{#1}{headuc}{true}{%
12618       {%
12619         \GLSxtrfull[noindex,hyper=false]{#1}[]%
12620       }%
12621     {%
12622       \Glsxtrfull[noindex,hyper=false]{#1}[]%
12623     }%
12624   }%
12625 }

```

`Glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

12626 \newrobustcmd*{\Glsxtrtitlefull}[1]{%
12627   \Glsxtrfull[noindex,hyper=false]{#1}[]%
12628 }

```

`GLSxtrtitlefull` Command to display full form of abbreviation in section title and table of contents in all upper case.

```

12629 \newrobustcmd*{\GLSxtrtitlefull}[1]{%
12630   \GLSxtrfull[noindex,hyper=false]{#1}[]%
12631 }

```

`lsxtrheadfullpl` Command used to display plural full form in the page header with the first letter converted to upper case.

```

12632 \newcommand*{\Glsxtrheadfullpl}[1]{%

```

```

12633 \protect\NoCaseChange
12634 {%
12635   \glsifattribute{#1}{headuc}{true}{%
12636   {%
12637     \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
12638   }%
12639   {%
12640     \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
12641   }%
12642 }%
12643 }

```

`sxtrtitlefullpl` Command to display plural full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

12644 \newrobustcmd*\{\Glsxtrtitlefullpl\}[1]{%
12645   \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
12646 }

```

`Sxtrtitlefullpl` Command to display plural full form of abbreviation in section title and table of contents in all upper case.

```

12647 \newrobustcmd*\{\GLSxtrtitlefullpl\}[1]{%
12648   \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
12649 }

```

`\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.

```

12650 \ifdef\texorpdfstring
12651 {
12652   \newcommand*\{\glsfmtshort\}[1]{%
12653     \texorpdfstring
12654     {\glsxrtitleshort{#1}}%
12655     {\glsentryshort{#1}}%
12656   }
12657 }
12658 {
12659   \newcommand*\{\glsfmtshort\}[1]{%
12660     \glsxrtitleshort{#1}%
12661 }

```

Similarly for the plural version.

```

\glsfmtshortpl
12662 \ifdef\texorpdfstring
12663 {
12664   \newcommand*\{\glsfmtshortpl\}[1]{%
12665     \texorpdfstring
12666     {\glsxrtitleshortpl{#1}}%
12667     {\glsentryshortpl{#1}}%
12668 }

```

```

12669 }
12670 {
12671 \newcommand*{\glsfmtshortpl}[1]{%
12672   \glsxtrtitleshortpl{#1}}
12673 }

```

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).

```

12674 \ifdef\textorpdfstring
12675 {
12676 \newcommand*{\Glsfmtshort}[1]{%
12677   \textorpdfstring
12678     {\Glsxtrtitleshort{#1}}%
12679     {\glsentryshort{#1}}%
12680 }
12681 }
12682 {
12683 \newcommand*{\Glsfmtshort}[1]{%
12684   \Glsxtrtitleshort{#1}}
12685 }

```

\Glsfmtshortpl Plural form (first letter uppercase).

```

12686 \ifdef\textorpdfstring
12687 {
12688 \newcommand*{\Glsfmtshortpl}[1]{%
12689   \textorpdfstring
12690     {\Glsxtrtitleshortpl{#1}}%
12691     {\glsentryshortpl{#1}}%
12692 }
12693 }
12694 {
12695 \newcommand*{\Glsfmtshortpl}[1]{%
12696   \Glsxtrtitleshortpl{#1}}
12697 }

```

\glsfmtname As above but for the name value.

```

12698 \ifdef\textorpdfstring
12699 {
12700 \newcommand*{\glsfmtname}[1]{%
12701   \textorpdfstring
12702     {\glsxtrtitlename{#1}}%
12703     {\glsentryname{#1}}%
12704 }
12705 }
12706 {
12707 \newcommand*{\glsfmtname}[1]{%
12708   \glsxtrtitlename{#1}}
12709 }

```

\Glsfmtname First letter converted to upper case.

```
12710 \ifdef\textorpdfstring
12711 {
12712   \newcommand*\{\Glsfmtname}[1]{%
12713     \textorpdfstring
12714     {\Glsxtrtitlename{\#1}}%
12715     {\glsentryname{\#1}}%
12716   }
12717 }
12718 {
12719   \newcommand*\{\Glsfmtname}[1]{%
12720     \Glsxtrtitlename{\#1}}
12721 }
```

\GLSfmtname All upper case.

```
12722 \ifdef\textorpdfstring
12723 {
12724   \newcommand*\{\GLSfmtname}[1]{%
12725     \textorpdfstring
12726     {\GLSxtrtitlename{\#1}}%
12727     {\glsentryname{\#1}}%
12728   }
12729 }
12730 {
12731   \newcommand*\{\GLSfmtname}[1]{%
12732     \GLSxtrtitlename{\#1}}
12733 }
```

\glsfmttext As above but for the text value.

```
12734 \ifdef\textorpdfstring
12735 {
12736   \newcommand*\{\glsfmttext}[1]{%
12737     \textorpdfstring
12738     {\glsxtrtitletext{\#1}}%
12739     {\glsentrytext{\#1}}%
12740   }
12741 }
12742 {
12743   \newcommand*\{\glsfmttext}[1]{%
12744     \glsxtrtitletext{\#1}}
12745 }
```

\Glsfmttext First letter converted to upper case.

```
12746 \ifdef\textorpdfstring
12747 {
12748   \newcommand*\{\Glsfmttext}[1]{%
12749     \textorpdfstring
12750     {\Glsxtrtitletext{\#1}}%
12751     {\glsentrytext{\#1}}%
```

```

12752 }
12753 }
12754 {
12755 \newcommand*{\Glsfmttext}[1]{%
12756   \Glsxrttitletext{#1}}
12757 }

```

\GLSfmttext All upper case.

```

12758 \ifdef\textorpdfstring
12759 {
12760   \newcommand*{\GLSfmttext}[1]{%
12761     \textorpdfstring
12762     {\Glsxrttitletext{#1}}%
12763     {\glsentrytext{#1}}%
12764   }
12765 }
12766 {
12767   \newcommand*{\GLSfmttext}[1]{%
12768     \Glsxrttitletext{#1}}
12769 }

```

\glsfmtplural As above but for the plural value.

```

12770 \ifdef\textorpdfstring
12771 {
12772   \newcommand*{\glsfmtplural}[1]{%
12773     \textorpdfstring
12774     {\glsxrttitleplural{#1}}%
12775     {\glsentryplural{#1}}%
12776   }
12777 }
12778 {
12779   \newcommand*{\glsfmtplural}[1]{%
12780     \glsxrttitleplural{#1}}
12781 }

```

\Glsfmtplural First letter converted to upper case.

```

12782 \ifdef\textorpdfstring
12783 {
12784   \newcommand*{\Glsfmtplural}[1]{%
12785     \textorpdfstring
12786     {\Glsxrttitleplural{#1}}%
12787     {\glsentryplural{#1}}%
12788   }
12789 }
12790 {
12791   \newcommand*{\Glsfmtplural}[1]{%
12792     \Glsxrttitleplural{#1}}
12793 }

```

\GLSfmtplural All upper case.

```
12794 \ifdef\textorpdfstring
12795 {
12796   \newcommand*\{\GLSfmtplural}[1]{%
12797     \textorpdfstring
12798     {\GLSxrttitleplural{\#1}}%
12799     {\glsentryplural{\#1}}%
12800   }
12801 }
12802 {
12803   \newcommand*\{\GLSfmtplural}[1]{%
12804     \GLSxrttitleplural{\#1}}
12805 }
```

\glsfmtfirst As above but for the first value.

```
12806 \ifdef\textorpdfstring
12807 {
12808   \newcommand*\{\glsfmtfirst}[1]{%
12809     \textorpdfstring
12810     {\glsxrttitlefirst{\#1}}%
12811     {\glsentryfirst{\#1}}%
12812   }
12813 }
12814 {
12815   \newcommand*\{\glsfmtfirst}[1]{%
12816     \glsxrttitlefirst{\#1}}
12817 }
```

\Glsfmtfirst First letter converted to upper case.

```
12818 \ifdef\textorpdfstring
12819 {
12820   \newcommand*\{\Glsfmtfirst}[1]{%
12821     \textorpdfstring
12822     {\Glsxrttitlefirst{\#1}}%
12823     {\glsentryfirst{\#1}}%
12824   }
12825 }
12826 {
12827   \newcommand*\{\Glsfmtfirst}[1]{%
12828     \Glsxrttitlefirst{\#1}}
12829 }
```

\GLSfmtfirst All upper case.

```
12830 \ifdef\textorpdfstring
12831 {
12832   \newcommand*\{\GLSfmtfirst}[1]{%
12833     \textorpdfstring
12834     {\GLSxrttitlefirst{\#1}}%
12835     {\glsentryfirst{\#1}}%
```

```

12836 }
12837 }
12838 {
12839 \newcommand*{\GLSfmtfirst}[1]{%
12840   \Glsxrttitlefirst{#1}%
12841 }

```

\glsfmtfirstpl As above but for the firstplural value.

```

12842 \ifdef\textorpdfstring
12843 {
12844 \newcommand*{\glsfmtfirstpl}[1]{%
12845   \textorpdfstring
12846   {\Glsxrttitlefirstplural{#1}}%
12847   {\glsentryfirstplural{#1}}%
12848 }
12849 }
12850 {
12851 \newcommand*{\glsfmtfirstpl}[1]{%
12852   \Glsxrttitlefirstplural{#1}%
12853 }

```

\Glsfmtfirstpl First letter converted to upper case.

```

12854 \ifdef\textorpdfstring
12855 {
12856 \newcommand*{\Glsfmtfirstpl}[1]{%
12857   \textorpdfstring
12858   {\Glsxrttitlefirstplural{#1}}%
12859   {\glsentryfirstplural{#1}}%
12860 }
12861 }
12862 {
12863 \newcommand*{\Glsfmtfirstpl}[1]{%
12864   \Glsxrttitlefirstplural{#1}%
12865 }

```

\GLSfmtfirstpl All upper case.

```

12866 \ifdef\textorpdfstring
12867 {
12868 \newcommand*{\GLSfmtfirstpl}[1]{%
12869   \textorpdfstring
12870   {\GLSxrttitlefirstplural{#1}}%
12871   {\glsentryfirstplural{#1}}%
12872 }
12873 }
12874 {
12875 \newcommand*{\GLSfmtfirstpl}[1]{%
12876   \GLSxrttitlefirstplural{#1}%
12877 }

```

\glsfmtlong As above but for the long value.

```
12878 \ifdef\textorpdfstring
12879 {
12880   \newcommand*\glsfmtlong[1]{%
12881     \textorpdfstring
12882     {\glsxtrtitlelong{\#1}}%
12883     {\glsentrylong{\#1}}%
12884   }
12885 }
12886 {
12887   \newcommand*\glsfmtlong[1]{%
12888     \glsxtrtitlelong{\#1}}
12889 }
```

\Glsfmtlong First letter converted to upper case.

```
12890 \ifdef\textorpdfstring
12891 {
12892   \newcommand*\Glsfmtlong[1]{%
12893     \textorpdfstring
12894     {\Glsxtrtitlelong{\#1}}%
12895     {\glsentrylong{\#1}}%
12896   }
12897 }
12898 {
12899   \newcommand*\Glsfmtlong[1]{%
12900     \Glsxtrtitlelong{\#1}}
12901 }
```

\GLSfmtlong All upper case.

```
12902 \ifdef\textorpdfstring
12903 {
12904   \newcommand*\GLSfmtlong[1]{%
12905     \textorpdfstring
12906     {\GLSxtrtitlelong{\#1}}%
12907     {\glsentrylong{\#1}}%
12908   }
12909 }
12910 {
12911   \newcommand*\GLSfmtlong[1]{%
12912     \GLSxtrtitlelong{\#1}}
12913 }
```

\glsfmtlongpl As above but for the longplural value.

```
12914 \ifdef\textorpdfstring
12915 {
12916   \newcommand*\glsfmtlongpl[1]{%
12917     \textorpdfstring
12918     {\glsxtrtitlelongpl{\#1}}%
12919     {\glsentrylongpl{\#1}}%
```

```

12920  }
12921 }
12922 {
12923   \newcommand*{\glsfmtlongpl}[1]{%
12924     \glsxtrtitlelongpl{#1}%
12925 }
```

\Glsfmtlongpl First letter converted to upper case.

```

12926 \ifdef\texorpdfstring
12927 {
12928   \newcommand*{\Glsfmtlongpl}[1]{%
12929     \texorpdfstring
12930       {\Glsxtrtitlelongpl{#1}}%
12931       {\glsentrylongpl{#1}}%
12932   }
12933 }
12934 {
12935   \newcommand*{\Glsfmtlongpl}[1]{%
12936     \Glsxtrtitlelongpl{#1}%
12937 }
```

\GLSfmtlongpl All upper case.

```

12938 \ifdef\texorpdfstring
12939 {
12940   \newcommand*{\GLSfmtlongpl}[1]{%
12941     \texorpdfstring
12942       {\GLSxtrtitlelongpl{#1}}%
12943       {\glsentrylongpl{#1}}%
12944   }
12945 }
12946 {
12947   \newcommand*{\GLSfmtlongpl}[1]{%
12948     \GLSxtrtitlelongpl{#1}%
12949 }
```

\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.

```
12950 \newcommand*{\glspdffmtfull}[1]{\glsentrylong{#1} (\glsentryshort{#1})}%
```

glspdffmtfullpl Likewise for plural.

```
12951 \newcommand*{\glspdffmtfullpl}[1]{\glsentrylongpl{#1} (\glsentryshortpl{#1})}%
```

\glsfmtfull In-line full format.

```

12952 \ifdef\texorpdfstring
12953 {
12954   \newcommand*{\glsfmtfull}[1]{%
12955     \texorpdfstring
12956       {\glsxtrtitlefull{#1}}%
```

```

12957     {\glspdffmtfull{#1}}%
12958 }
12959 }
12960 {
12961 \newcommand*{\glsfmtfull}[1]{%
12962   \glsxrttitlefull{#1}}
12963 }

```

\Glsfmtfull First letter converted to upper case.

```

12964 \ifdef\texorpdfstring
12965 {
12966 \newcommand*{\Glsfmtfull}[1]{%
12967   \texorpdfstring
12968   {\Glsxrttitlefull{#1}}%
12969   {\glspdffmtfull{#1}{}}%
12970 }
12971 }
12972 {
12973 \newcommand*{\Glsfmtfull}[1]{%
12974   \Glsxrttitlefull{#1}}
12975 }

```

\GLSfmtfull All upper case.

```

12976 \ifdef\texorpdfstring
12977 {
12978 \newcommand*{\GLSfmtfull}[1]{%
12979   \texorpdfstring
12980   {\GLSxrttitlefull{#1}}%
12981   {\glspdffmtfull{#1}}%
12982 }
12983 }
12984 {
12985 \newcommand*{\GLSfmtfull}[1]{%
12986   \GLSxrttitlefull{#1}}
12987 }

```

\glsfmtfullpl In-line full plural format.

```

12988 \ifdef\texorpdfstring
12989 {
12990 \newcommand*{\glsfmtfullpl}[1]{%
12991   \texorpdfstring
12992   {\glsxrttitlefullpl{#1}}%
12993   {\glspdffmtfullpl{#1}}%
12994 }
12995 }
12996 {
12997 \newcommand*{\glsfmtfullpl}[1]{%
12998   \glsxrttitlefullpl{#1}}
12999 }

```

```
\Glsfmtfullpl First letter converted to upper case.

13000 \ifdef\texorpdfstring
13001 {
13002   \newcommand*{\Glsfmtfullpl}[1]{%
13003     \texorpdfstring
13004     {\Glsxrttitlefullpl{\#1}}%
13005     {\glspdffmtfullpl{\#1}{}}%
13006   }
13007 }
13008 {
13009   \newcommand*{\Glsfmtfullpl}[1]{%
13010     \Glsxrttitlefullpl{\#1}%
13011 }
```

\GLSfmtfullpl All upper case.

```
13012 \ifdef\texorpdfstring
13013 {
13014   \newcommand*{\GLSfmtfullpl}[1]{%
13015     \texorpdfstring
13016     {\GLSxrttitlefullpl{\#1}}%
13017     {\glspdffmtfullpl{\#1}{}}%
13018   }
13019 }
13020 {
13021   \newcommand*{\GLSfmtfullpl}[1]{%
13022     \GLSxrttitlefullpl{\#1}%
13023 }
```

## 1.9 Multi-Lingual Support

Add the facility to load language modules, if they are installed, but none are provided with this package.

sariesExtraLang

```
13024 \newcommand*{\RequireGlossariesExtraLang}[1]{%
13025   \@ifundefined{ver@glossariesxtr-\#1.ldf}{\input{glossariesxtr-\#1.ldf}}{}%
13026 }
```

sariesExtraLang

```
13027 \newcommand*{\ProvidesGlossariesExtraLang}[1]{%
13028   \ProvidesFile{glossariesxtr-\#1.ldf}%
13029 }
```

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.
```

```
13030 \newcommand{\glsxtr@loaddialect}{%
13031   \IfTrackedLanguageFileExists{\this@dialect}%
13032   {glossariesxtr-}%
13033   {.ldf}%
13034   {%
13035     \RequireGlossariesExtraLang{\CurrentTrackedTag}%
13036   }%
13037   {}% not found
```

If glossaries-extra-bib2gls has been loaded, \glsxtrdialecthook will check for the associated script, otherwise it will do nothing.

```
13038 \glsxtrdialecthook
13039 }

13040 @ifpackageloaded{tracklang}
13041 {%
13042   AnyTrackedLanguages
13043   {%
13044     \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
13045   }%
13046   {}%
13047 }
13048 {}
```

Load glossaries-extra-stylemods if required.

```
13049 @glsxtr@redefstyles
```

and set the style:

```
13050 @glsxtr@do@style
```

## 1.10 glossaries-extra-bib2gls.sty

This package provides additional support for bib2gls and is automatically loaded by the record option.

```
13051 \NeedsTeXFormat{LaTeX2e}
13052 \ProvidesPackage{glossaries-extra-bib2gls}[2020/04/01 v1.45 (NLCT)]
```

Provide convenient shortcut commands for predefined glossary types.

```
ntunsrtacronyms
```

```
13053 \ifglsacronym
13054   \providecommand*\printunsrtacronyms[1][]{%
13055     \printunsrtglossary[type=\acronymtype,#1]}%
13056 \fi
```

```
printunsrtindex
```

```
13057 \ifglossaryexists{index}
13058 {
```

```

13059  \providecommand*\printunsrtindex}[1] []{%
13060  \printunsrtglossary[type=index,#1]}%
13061 }{}


intunsrtsymbols
13062 \ifglossaryexists{symbols}
13063 {
13064  \providecommand*\printunsrtsymbols}[1] []{%
13065  \printunsrtglossary[type=symbols,#1]}%
13066 }{}


intunsrtnumbers
13067 \ifglossaryexists{numbers}
13068 {
13069  \providecommand*\printunsrtnumbers}[1] []{%
13070  \printunsrtglossary[type=numbers,#1]}%
13071 }{}


rtabbreviations
13072 \ifglossaryexists{abbreviations}
13073 {
13074  \providecommand*\printunsrtabbreviations}[1] []{%
13075  \printunsrtglossary[type=abbreviations,#1]}%
13076 }{}


splaynumberlist Allow \glsdisplaynumberlist and make it robust.
13077 \renewcommand*\glsdisplaynumberlist}[1]{%
13078  \glsdoifexists{\#1}{%
13079  {%
13080    {\let\bibglstodelim\glsnumlistsep
13081    \let\bibglstlastDelim\glsnumlistlastsep
13082    \glsxtrusefield{\#1}{location}}%
13083  }%
13084 }%
13085 }%
13086 \robustify\glsdisplaynumberlist


entrynumberlist
13087 \renewcommand*\glsentrynumberlist}[1]{\glsxtrusefield{\#1}{location}}


These are some convenient macros for use with custom rules.
```

```

\glshex
13088 \newcommand*\glshex}{\string\u}

lscapturedgroup
13089 \newcommand*\glscapturedgroup}{\string\$}
```

nZeroChildCount For use with bib2gls's save-child-count resource option.

```
13090 \newcommand*{\GlsXtrIfHasNonZeroChildCount}[3]{%
13091   \GlsXtrIfFieldNonZero{childcount}{#1}{#2}{#3}%
13092 }
```

rprovidecommand For use in @preamble, this behaves like \providecommand in the document but like \renewcommand in bib2gls.

```
13093 \newcommand*{\glsxtrprovidecommand}{\providecommand}
```

glsrenewcommand Like \renewcommand but only generates a warning rather than an error if the command isn't defined.

```
13094 \newcommand*{\glsrenewcommand}{\@star@or@long\glsxtr@renewcommand}
```

tr@renewcommand

```
13095 \newcommand*{\glsxtr@renewcommand}[1]{%
13096   \begingroup \escapechar\m@ne\xdef\@gtempa{{\string#1}}\endgroup
13097   \expandafter\@ifundefined\@gtempa
13098   {%
13099     \GlossariesExtraWarning{can't redefine \noexpand#1(not already defined)}%
13100   }%
13101   \relax
13102   \relax
13103   \let\@ifdefinable\@rc@ifdefinable
13104   \new@command#1%
13105 }
```

lossarylocation For use with indexcounter and bib2gls.

```
13106 \newcommand*{\glsxtr@wrglossarylocation}[2]{#1}
```

indexCounterLink

```
\GlsXtrIndexCounterLink{\text}{\label}
```

For use with indexcounter and bib2gls.

```
13107 \ifdef\hyperref
13108 {%
13109   \newcommand*{\GlsXtrIndexCounterLink}[2]{%
13110     \glsxtrifhasfield{indexcounter}{#2}%
13111     {\hyperref[wrglossary.\glscurrentfieldvalue]{#1}}%
13112     {#1}%
13113   }
13114 }
13115 {
13116   \newcommand*{\GlsXtrIndexCounterLink}[2]{#1}
13117 }
```

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.

```
13118 \newcommand*{\GlsXtrDualField}[1]{\ifx{#1}{dual}
```

XtrDualBackLink

```
\GlsXtrDualBackLink[<text>][<label>]
```

Adds a hyperlink to the dual entry.

```
13119 \newcommand*{\GlsXtrDualBackLink}[2]{%
13120   \glsxtrifhasfield{\GlsXtrDualField}{#2}%
13121   {\glshyperlink[#1]{\glscurrentfieldvalue}}%
13122   {#2}%
13123 }
```

TeXEntryAliases Convenient shortcut for use with entry-type-aliases to alias standard BIB<sub>T</sub>E<sub>X</sub> entry types to @bibtexentry.

```
13124 \newcommand*{\GlsXtrBibTeXEntryAliases}[0]{%
13125   article=bibtexentry,
13126   book=bibtexentry,
13127   booklet=bibtexentry,
13128   conference=bibtexentry,
13129   inbook=bibtexentry,
13130   incollection=bibtexentry,
13131   inproceedings=bibtexentry,
13132   manual=bibtexentry,
13133   mastersthesis=bibtexentry,
13134   misc=bibtexentry,
13135   phdthesis=bibtexentry,
13136   proceedings=bibtexentry,
13137   techreport=bibtexentry,
13138   unpublished=bibtexentry
13139 }
```

ideBibTeXFields Convenient shortcut to define the standard BIB<sub>T</sub>E<sub>X</sub> fields.

```
13140 \newcommand*{\GlsXtrProvideBibTeXFields}[0]{%
13141   \glsaddstoragekey{address}{}{\glsxtrbibaddress}%
13142   \glsaddstoragekey{author}{}{\glsxtrbibauthor}%
13143   \glsaddstoragekey{booktitle}{}{\glsxtrbibbooktitle}%
13144   \glsaddstoragekey{chapter}{}{\glsxtrbibchapter}%
13145   \glsaddstoragekey{edition}{}{\glsxtrbibedition}%
13146   \glsaddstoragekey{howpublished}{}{\glsxtrbibhowpublished}%
13147   \glsaddstoragekey{institution}{}{\glsxtrbibinstitution}%
13148 }
```

```

13148 \glsaddstoragekey{journal}{}{\glsxtrbibjournal}%
13149 \glsaddstoragekey{month}{}{\glsxtrbibmonth}%
13150 \glsaddstoragekey{note}{}{\glsxtrbibnote}%
13151 \glsaddstoragekey{number}{}{\glsxtrbibnumber}%
13152 \glsaddstoragekey{organization}{}{\glsxtrbiborganization}%
13153 \glsaddstoragekey{pages}{}{\glsxtrbibpages}%
13154 \glsaddstoragekey{publisher}{}{\glsxtrbibpublisher}%
13155 \glsaddstoragekey{school}{}{\glsxtrbibschool}%
13156 \glsaddstoragekey{series}{}{\glsxtrbibseries}%
13157 \glsaddstoragekey{title}{}{\glsxtrbibtitle}%
13158 \glsaddstoragekey{bibtexttype}{}{\glsxtrbibtype}%
13159 \glsaddstoragekey{volume}{}{\glsxtrbibvolume}%
13160 }

```

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.

```

13161 \newcommand*\glsxtrmultisupplocation[3]{%
13162 {%
13163   \def\glsxtrsupplocationurl{#2}%
13164   \glshypernumber{#1}%
13165 }%
13166 }

```

`rdisplaysupploc`

`\glsxtrdisplaysupploc{<prefix>}{<counter>}{<format>}{<src>}{<location>}`

This is like `\glsnoidxdisplayloc` but is used for supplementary locations and so requires an extra argument.

```

13167 \newcommand*\glsxtrdisplaysupploc[5]{%
13168   \setentrycounter[#1]{#2}%
13169   \glsxtrmultisupplocation{#5}{#4}{#3}%
13170 }

```

`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`.

```

13171 \ifundefined\hyperlink
13172 {
13173   \newcommand*\glsxtrdisplaylocnameref[8]{%
13174     \glsnoidxdisplayloc{#1}{#2}{#3}{#4}%

```

```
13175  }
13176 }
13177 {
```

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.

```
13178 \newcommand*{\glsxtrdisplaylocnameref}[8]{%
13179   \ifcsdef{glsxtr#2locfmt}{%
13180     {\glsxtrnamereflink{\#3}{\csuse{glsxtr#2locfmt}{\#4}{\#5}}{\#2.\#7}{\#8}}{%
13181       {%
13182         \ifstrempty{\#5}{%
13183           {%
```

No title, so just use the location as the link text.

```
13184   \glsxtrnamereflink{\#3}{\#4}{\#2.\#7}{\#8}{%
13185   }{%
13186   {%
13187     \ifstrequal{\#2}{page}{%
13188       {\glsxtrnamereflink{\#3}{\#4}{\#2.\#7}{\#8}}{%
13189         {\glsxtrnamereflink{\#3}{\#5}{\#2.\#7}{\#8}}{%
13190           {%
13191             }{%
13192           }{%
13193 }{}}
```

requestionlocfmt

```
\glsxtrequestionlocfmt{\location}{\title}
```

```
13194 \newcommand*{\glsxtrequestionlocfmt}[2]{(#1)}
```

sxtrnamereflink

```
\glsxtrfmtnamereflink{\format}{\title}{\href}{\externalfile}
```

```
13195 \newcommand*{\glsxtrnamereflink}[4]{%
```

Locally change `\glshypernumber` to `\@firstofone` to remove the normal location hyperlink.

```
13196 \begingroup
13197   \let\glshypernumber\@firstofone
```

If the `\externalfile` argument is empty, an internal link is used, otherwise an external one is needed.

```
13198   \ifstrempty{\#4}{%
13199     {\glsxtrfmtinternalnameref{\#3}{\#1}{\#2}}{}}
```

```

13200     {\glsxtrfmtexternalnameref{#3}{#1}{#2}{#4}}%
13201     \endgroup
13202 }

```

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.

```

13203 \newcommand{\glsxtrnameloclink}[6]{%
13204   \begingroup
13205   \setentrycounter[#1]{#2}%
13206   \def\glsxtr@locationhypertext[#5]%
13207   \let\glshypernumber\@firstofone
13208   \def\@glsnumberformat[#3]%
13209   \def\glsxtrs@locationurl[#6]%
13210   \toks@=\}%
13211   \@glsxtr@bibgls@removespaces#4 \@nil
13212   \endgroup
13213 }

```

ls@removespaces

```

13214 \def\@glsxtr@bibgls@removespaces#1 #2\@nil{%
13215   \toks@=\expandafter{\the\toks@#1}%
13216   \ifx\\#2\\%
13217     \edef\x{\the\toks@}%
13218     \ifx\x\empty
13219       \else
13220         \protected@edef\x{\glsentrycounter\@glo@counterprefix\the\toks@}%
13221         \ifdefvoid\glsxtrs@locationurl
13222         {%
13223           \expandafter\glsxtrfmtinternalnameref\expandafter{\x}%
13224           {\@glsnumberformat}{\glsxtr@locationhypertext}%
13225         }%
13226         {%
13227           \expandafter\glsxtrfmtexternalnameref\expandafter{\x}%
13228           {\@glsnumberformat}{\glsxtr@locationhypertext}{\glsxtrs@locationurl}%
13229         }%
13230       \fi
13231     \else
13232       \@gls@ReturnAfterFi{%
13233         \@glsxtr@bibgls@removespaces#2\@nil
13234       }%
13235     \fi
13236 }

```

internalnameref

```
\glsxtrfmtinternalnameref{\target}{\format}{\title}
```

```
13237 \newcommand*{\glsxtrfmtinternalnameref}[3]{%
13238   \csuse{#2}{\glsdohyperlink{#1}{#3}}%
13239 }
```

externalnameref

```
\glsxtrfmtexternalnameref{\target}{\format}{\title}{\file}
```

```
13240 \newcommand*{\glsxtrfmtexternalnameref}[4]{%
13241   \csuse{#2}{\hyperref[#4]{\#1}{#3}}%
13242 }
```

glsxtrSetWidest

```
\glsxtrSetWidest{\type}{\level}{\text}
```

As from **bib2gls** v1.8, this is used by the `set-widest` resource option for the `alttree` and the styles provided by the `glossary-longextra` package.

```
13243 \newcommand*{\glsxtrSetWidest}[3]{%
```

Check which style options have been provided. (The style packages may not have been loaded.)

```
13244 \ifdef\glsupdatewidest
13245 {%
13246   \ifdef\glslongextraUpdateWidest
13247   {%
```

Relevant style packages all loaded. If the `\type` has been given, append to glossary preamble.

```
13248   \ifstrempty{#1}
13249   {%
13250     \glsupdatewidest[#2]{#3}%
13251     \ifnum#2=0\relax
13252       \glslongextraUpdateWidest{#3}%
13253     \else
13254       \glslongextraUpdateWidestChild[#2]{#3}%
13255     \fi
13256   }%
13257   {%
13258     \apptoglossarypreamble[#1]{\glsupdatewidest[#2]{#3}}%
13259     \ifnum#2=0\relax
13260       \apptoglossarypreamble[#1]{\glslongextraUpdateWidest{#3}}%
13261     \else
```

```

13262      \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild[#2]{#3}}%
13263      \fi
13264  }%
13265 }%
13266 {%

```

Only alttree.

```

13267  \ifstrempty{#1}
13268  {%
13269      \glsupdatewidest[#2]{#3}%
13270  }%
13271  {%
13272      \apptoglossarypreamble[#1]{\glsupdatewidest[#2]{#3}}%
13273  }%
13274 }%
13275 }%
13276 {%

```

\glsupdatewidest hasn't been defined. This could just mean that the glossaries-extra-stylemods package hasn't been loaded.

```

13277  \ifdef{\glssetwidest}
13278  {%
13279      \ifdef{\glslongextraUpdateWidest}
13280  {%

```

Relevant glossary-tree and glossary-longextra have been loaded. If the *<type>* has been given, append to glossary preamble.

```

13281  \ifstrempty{#1}
13282  {%
13283      \glssetwidest[#2]{#3}%
13284      \ifnum#2=0\relax
13285          \glslongextraUpdateWidest{#3}%
13286      \else
13287          \glslongextraUpdateWidestChild[#2]{#3}%
13288      \fi
13289  }%
13290  {%
13291      \apptoglossarypreamble[#1]{\glssetwidest[#2]{#3}}%
13292      \ifnum#2=0\relax
13293          \apptoglossarypreamble[#1]{\glslongextraUpdateWidest{#3}}%
13294      \else
13295          \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild[#2]{#3}}%
13296      \fi
13297  }%
13298  }%
13299  {%

```

Only alttree.

```

13300  \ifstrempty{#1}
13301  {%
13302      \glssetwidest[#2]{#3}%

```

```

13303      }%
13304      {%
13305          \apptoglossarypreamble[#1]{\glssetwidest[#2]{#3}}%
13306      }%
13307      }%
13308      }%
13309      {%
13310          \ifdef{\glslongextraUpdateWidest}%
13311          {%
glossary-longextra has been loaded.

13312          \ifstrempty{#1}%
13313          {%
13314              \ifnum#2=0\relax
13315                  \glslongextraUpdateWidest{#3}%
13316              \else
13317                  \glslongextraUpdateWidestChild{#2}{#3}%
13318              \fi
13319          }%
13320          {%
13321              \ifnum#2=0\relax
13322                  \apptoglossarypreamble[#1]{\glslongextraUpdateWidest{#3}}%
13323              \else
13324                  \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild{#2}{#3}}%
13325              \fi
13326          }%
13327      }%
Neither glossary-tree nor glossary-longextra have been loaded. Do nothing.

13328      {}%
13329      }%
13330  }%
13331 }

```

tWidestFallback

```
\glsxtrSetWidestFallback{\langle max depth\rangle}{\langle list\rangle}
```

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).

```

13332 \newcommand*{\glsxtrSetWidestFallback}[2]{%
13333     \ifnum#1=0\relax
13334     \ifdef{\glsFindWidestTopLevelName}%
13335     {%
13336         \glsFindWidestTopLevelName[#2]%
13337     }%
13338     {%

```

```

13339     \GlossariesExtraWarning{You need stylemods={tree} to
13340         provide a fallback for set-widest}%
13341     }%
13342 \else
13343     \ifdef\glsFindWidestLevelTwo
13344     {%
13345         \glsFindWidestLevelTwo[#2]%
13346         \ifdef\glslongextraUpdateWidestChild
13347         {%
13348             \glslongextraUpdateWidestChild{#1}{\csuse{@glswidestnamei}}%
13349             \glslongextraUpdateWidestChild{#1}{\csuse{@glswidestnameii}}%
13350         }%
13351         {}%
13352     }%
13353     {}%
13354     \GlossariesExtraWarning{You need stylemods={tree} to
13355         provide a fallback for set-widest}%
13356     }%
13357 \fi
13358 }

```

r@labelprefixes List of label prefixes.

```
13359 \newcommand*{\glsxtr@labelprefixes}{}%
```

arlabelprefixes List of label prefixes.

```

13360 \newcommand*{\glsxtrclearlabelprefixes}{}%
13361   \renewcommand*{\glsxtr@labelprefixes}{}%
13362 }
```

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.

```

13363 \newcommand*{\glsxtrraddlabelprefix}[1]{%
13364   \ifstrempty{#1}%
13365   {\glsxtrraddlabelprefix{\empty}}%
13366   {}%
13367   \ifdefempty{\glsxtr@labelprefixes}%
13368   {\def\glsxtr@labelprefixes{#1}}%
13369   {\appto\glsxtr@labelprefixes{,#1}}%
13370 }%
13371 }
```

pendlabelprefix Inserts at the start of the list.

```

13372 \newcommand*{\glsxtrprependlabelprefix}[1]{%
13373   \ifstrempty{#1}%
13374   {\glsxtrprependlabelprefix{\empty}}%
13375   {}%
13376   \ifdefempty{\glsxtr@labelprefixes}
```

```

13377   {\def\@glsxtr@labelprefixes{#1}}%
13378   {\preto\@glsxtr@labelprefixes{#1,}}%
13379 }%
13380 }

```

### labelprefixlist

```
\glsxtrifinlabelprefixlist{\<prefix>}{\<true>}{\<false>}
```

Test if the given prefix is in the list.

```

13381 \newcommand*\glsxtrifinlabelprefixlist[3]{%
13382   \ifstrempty{#1}{%
13383     {\glsxtrifinlabelprefixlist{\empty}{#2}{#3}}%
13384   {%
13385     \DTLifinlist{#1}{\@glsxtr@labelprefixes}{#2}{#3}}%
13386 }%
13387 }

```

`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`.

```

13388 \AtBeginDocument{%
13389   \protected@write\auxout{}{\string\providecommand{\string\@glsxtr@prefixlabellist}[1]{}{}}%
13390   \protected@write\auxout{}{\string\@glsxtr@prefixlabellist{\@glsxtr@labelprefixes}}{}}%
13391 }

```

`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<sup>A</sup>T<sub>E</sub>X run, so the last prefix in the list needs to be the fallback one. Grouping is used in case of a nested for loop.

```

13392 \newcommand*\@glsxtr@get@prefixedlabel}[1]{%
13393   \begin{group}

```

Initialise to the unprefixed label in the event that the list is empty.

```

13394   \edef\@gls@thislabel{#1}%
13395   \for\@glsxtr@prefix:=\@glsxtr@labelprefixes\do
13396   {%
13397     \edef\@gls@thislabel{\@glsxtr@prefix#1}%
13398     \ifglsentryexists{\@gls@thislabel}{\endfortrue}{}}%
13399 }%
13400 \edef\x{\endgroup\noexpand\def\noexpand\@gls@thislabel{\@gls@thislabel}}\x
13401 }

```

`\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".

```
13402 \newrobustcmd*\dgls{\gls@hyp@opt\@dgls}
```

```

{@dgls
13403 \newcommand*{\@dgls}[2] []{%
13404   \glsxtr@get@prefixedlabel{#2}%
13405   \new@ifnextchar[{\@gls@{#1}{\gls@thislabel}}{\@gls@{#1}{\gls@thislabel}[]}%
13406 }

@dglsp
13407 \newrobustcmd*{\dglsp}{\gls@hyp@opt\@dglsp}

{@dglsp
13408 \newcommand*{\@dglsp}[2] []{%
13409   \glsxtr@get@prefixedlabel{#2}%
13410   \new@ifnextchar[{\@glspl@{#1}{\gls@thislabel}}{\@glspl@{#1}{\gls@thislabel}[]}%
13411 }

@dGls
13412 \newrobustcmd*{\dGls}{\gls@hyp@opt\@dGls}

{@dGls
13413 \newcommand*{\@dGls}[2] []{%
13414   \glsxtr@get@prefixedlabel{#2}%
13415   \new@ifnextchar[{\@Gls@{#1}{\gls@thislabel}}{\@Gls@{#1}{\gls@thislabel}[]}%
13416 }

@dGlspl
13417 \newrobustcmd*{\dGlspl}{\gls@hyp@opt\@dGlspl}

{@dGlspl
13418 \newcommand*{\@dGlspl}[2] []{%
13419   \glsxtr@get@prefixedlabel{#2}%
13420   \new@ifnextchar[{\@Glspl@{#1}{\gls@thislabel}}{\@Glspl@{#1}{\gls@thislabel}[]}%
13421 }

@dGLS
13422 \newrobustcmd*{\dGLS}{\gls@hyp@opt\@dGLS}

{@dGLS
13423 \newcommand*{\@dGLS}[2] []{%
13424   \glsxtr@get@prefixedlabel{#2}%
13425   \new@ifnextchar[{\@GLS@{#1}{\gls@thislabel}}{\@GLS@{#1}{\gls@thislabel}[]}%
13426 }

@dGLSp
13427 \newrobustcmd*{\dGLSp}{\gls@hyp@opt\@dGLSp}

```

```
\@dGLSp1
13428 \newcommand*{\@dGLSp1}[2] []{%
13429   \glsxtr@get@prefixedlabel{#2}%
13430   \new@ifnextchar[{\@GLSp1@{#1}{\gls@thislabel}}{\@GLSp1@{#1}{\gls@thislabel}[]}]{%
13431 }
```

\dglslink Like \glslink but tries the prefixes.

```
13432 \newrobustcmd*{\dglslink}[3] []{%
13433   \glsxtr@get@prefixedlabel{#2}%
13434   \glslink[#1]{\gls@thislabel}{#3}%
13435 }
```

\dglsdisp Like \glsdisp but tries the prefixes.

```
13436 \newrobustcmd*{\dglsdisp}[3] []{%
13437   \glsxtr@get@prefixedlabel{#2}%
13438   \glsdisp[#1]{\gls@thislabel}{#3}%
13439 }
```

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<sup>A</sup>T<sub>E</sub>X 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
13440 \providecommand*{\Alpha}{\mathrm{A}}
```

```
\Beta
13441 \providecommand*{\Beta}{\mathrm{B}}
```

```
\Epsilon
13442 \providecommand*{\Epsilon}{\mathrm{E}}
```

```
\Zeta
13443 \providecommand*{\Zeta}{\mathrm{Z}}
```

```
\Eta
13444 \providecommand*{\Eta}{\mathrm{H}}
```

```
\Iota
13445 \providecommand*{\Iota}{\mathrm{I}}
```

```
\Kappa
13446 \providecommand*{\Kappa}{\mathrm{K}}
```

```
\Mu
13447 \providecommand*{\Mu}{\mathrm{M}}
```

```

\Nu
13448 \providecommand*\Nu{\mathrm{N}}
```

```

\Omicron
13449 \providecommand*\Omicron{\mathrm{O}}
```

```

\Rho
13450 \providecommand*\Rho{\mathrm{P}}
```

```

\Tau
13451 \providecommand*\Tau{\mathrm{T}}
```

```

\Chi
13452 \providecommand*\Chi{\mathrm{X}}
```

```

\Digamma
13453 \providecommand*\Digamma{\mathrm{F}}
```

```

\omicron
13454 \providecommand*\omicron{\mathit{o}}
```

Provide corresponding upright characters if upgreek has been loaded. (The upper case characters are the same as above.)

```

13455 \@ifpackageloaded{upgreek}%
13456 {
```

```

\Upalpha
13457 \providecommand*\Upalpha{\mathrm{A}}
```

```

\Upbeta
13458 \providecommand*\Upbeta{\mathrm{B}}
```

```

\Upsilon
13459 \providecommand*\Upsilon{\mathrm{E}}
```

```

\Upzeta
13460 \providecommand*\Upzeta{\mathrm{Z}}
```

```

\Upeta
13461 \providecommand*\Upeta{\mathrm{H}}
```

```

\Upiota
13462 \providecommand*\Upiota{\mathrm{I}}
```

```

\Upkappa
13463 \providecommand*\Upkappa{\mathrm{K}}
```

```

\Upmu
13464 \providecommand*\Upmu{\mathrm{M}}
\Upnu
13465 \providecommand*\Upnu{\mathrm{N}}
\Upomicron
13466 \providecommand*\Upomicron{\mathrm{O}}
\Uprho
13467 \providecommand*\Uprho{\mathrm{P}}
\Uptau
13468 \providecommand*\Uptau{\mathrm{T}}
\Upchi
13469 \providecommand*\Upchi{\mathrm{X}}
\upomicron
13470 \providecommand*\upomicron{\mathrm{o}}
13471 }%
13472 {}% 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.

```
13473 \newcommand*{\glsxtrcontrolrules}{%
13474   \string'\glshex 200B\string'\string=\glshex 200C\string=\glshex 200D
13475   \string=\glshex 200E\string=\glshex 200F\string=\glshex 0000\string=\glshex 0001
13476   \string=\glshex 0002\string=\glshex 0003\string=\glshex 0004\string=\glshex 0005
13477   \string=\glshex 0006\string=\glshex 0007\string=\glshex 0008
13478   \string=\string'\glshex 0009\string'\string=\string'\glshex 000B\string',
13479   \string=\glshex 000E\string=\glshex 000F\string=\string'\glshex
13480 0010\string'\string=\glshex 0011
13481   \string=\glshex 0012\string=\glshex 0013\string=\glshex 0014\string=\glshex 0015
13482   \string=\glshex 0016\string=\glshex 0017\string=\glshex 0018\string=\glshex 0019
13483   \string=\glshex 001A\string=\glshex 001B\string=\glshex 001C\string=\glshex 001D
13484   \string=\glshex 001E\string=\glshex 001F\string=\glshex 007F\string=\glshex 0080
13485   \string=\glshex 0081\string=\glshex 0082\string=\glshex 0083\string=\glshex 0084
13486   \string=\glshex 0085\string=\glshex 0086\string=\glshex 0087\string=\glshex 0088
13487   \string=\glshex 0089\string=\glshex 008A\string=\glshex 008B\string=\glshex 008C
13488   \string=\glshex 008D\string=\glshex 008E\string=\glshex 008F\string=\glshex 0090
13489   \string=\glshex 0091\string=\glshex 0092\string=\glshex 0093\string=\glshex 0094
13490   \string=\glshex 0095\string=\glshex 0096\string=\glshex 0097\string=\glshex 0098
13491   \string=\glshex 0099\string=\glshex 009A\string=\glshex 009B\string=\glshex 009C
13492   \string=\glshex 009D\string=\glshex 009E\string=\glshex 009F
13493 }
```

lsxtrspacerules These are space characters.

```
13494 \newcommand*{\glsxtrspacerules}{%
13495   \string' \string'\string;
13496   \string'\glshex 00A0\string'\string;
13497   \string'\glshex 2000\string'\string;
13498   \string'\glshex 2001\string'\string;
13499   \string'\glshex 2002\string'\string;
13500   \string'\glshex 2003\string'\string;
13501   \string'\glshex 2004\string'\string;
13502   \string'\glshex 2005\string'\string;
13503   \string'\glshex 2006\string'\string;
13504   \string'\glshex 2007\string'\string;
13505   \string'\glshex 2008\string'\string;
13506   \string'\glshex 2009\string'\string;
13507   \string'\glshex 200A\string'\string;
13508   \string'\glshex 3000\string'
13509 }
```

nprintablerules These are non-printable characters (BOM, tabs, line feed and carriage return).

```
13510 \newcommand*{\glsxtrnonprintablerules}{%
13511   \string'\glshex FFFF\string'\string;
13512   \string'\glshex 000A\string'\string;
13513   \string'\glshex 0009\string'\string;
```

```
13514 \string'\glshex 000C\string'\string;
13515 \string'\glshex 000B\string'
13516 }
```

gdiacriticrules Combining diacritic marks. This is split into multiple macros.

```
13517 \newcommand*{\glsxtrcombiningdiacriticrules}{%
13518 \glsxtrcombiningdiacriticIrules\string;
13519 \glsxtrcombiningdiacriticIIrules\string;
13520 \glsxtrcombiningdiacriticIIIrules\string;
13521 \glsxtrcombiningdiacriticIVrules
13522 }
```

diacriticIrules First set of combining diacritic marks.

```
13523 \newcommand*{\glsxtrcombiningdiacriticIrules}{%
13524 \glshex 0301\string;% combining acute
13525 \glshex 0300\string;% combining grave
13526 \glshex 0306\string;% combining breve
13527 \glshex 0302\string;% combining circumflex
13528 \glshex 030C\string;% combining caron
13529 \glshex 030A\string;% combining ring
13530 \glshex 030D\string;% combining vertical line above
13531 \glshex 0308\string;% combining diaeresis
13532 \glshex 030B\string;% combining double acute
13533 \glshex 0303\string;% combining tilde
13534 \glshex 0307\string;% combining dot above
13535 \glshex 0304% combining macron
13536 }
```

diacriticIIrules Second set of combining diacritic marks.

```
13537 \newcommand*{\glsxtrcombiningdiacriticIIrules}{%
13538 \glshex 0337\string;% combining short solidus overlay
13539 \glshex 0327\string;% combining cedilla
13540 \glshex 0328\string;% combining ogonek
13541 \glshex 0323\string;% combining dot below
13542 \glshex 0332\string;% combining low line
13543 \glshex 0305\string;% combining overline
13544 \glshex 0309\string;% combining hook above
13545 \glshex 030E\string;% combining double vertical line above
13546 \glshex 030F\string;% combining double grave accent
13547 \glshex 0310\string;% combining candrabindu
13548 \glshex 0311\string;% combining inverted breve
13549 \glshex 0312\string;% combining turned comma above
13550 \glshex 0313\string;% combining comma above
13551 \glshex 0314\string;% combining reversed comma above
13552 \glshex 0315\string;% combining comma above right
13553 \glshex 0316\string;% combining grave accent below
13554 \glshex 0317% combining acute accent below
13555 }
```

acriticIIIrules Third set of combining diacritic marks.

```
13556 \newcommand{\glsxtrcombiningdiacriticIIIrules}{%
13557 \glshex{0318}{string};% combining left tack below
13558 \glshex{0319}{string};% combining right tack below
13559 \glshex{031A}{string};% combining left angle above
13560 \glshex{031B}{string};% combining horn
13561 \glshex{031C}{string};% combining left half ring below
13562 \glshex{031D}{string};% combining up tack below
13563 \glshex{031E}{string};% combining down tack below
13564 \glshex{031F}{string};% combining plus sign below
13565 \glshex{0320}{string};% combining minus sign below
13566 \glshex{0321}{string};% combining palatalized hook below
13567 \glshex{0322}{string};% combining retroflex hook below
13568 \glshex{0324}{string};% combining diaresis below
13569 \glshex{0325}{string};% combining ring below
13570 \glshex{0326}{string};% combining comma below
13571 \glshex{0329}{string};% combining vertical line below
13572 \glshex{032A}{string};% combining bridge below
13573 \glshex{032B}{string};% combining inverted double arch below
13574 \glshex{032C}{string};% combining caron below
13575 \glshex{032D}{string};% combining circumflex accent below
13576 \glshex{032E}{string};% combining breve below
13577 \glshex{032F}{string};% combining inverted breve below
13578 \glshex{0330}{string};% combining tilde below
13579 \glshex{0331}{string};% combining macron below
13580 \glshex{0333}{string};% combining double low line
13581 \glshex{0334}{string};% combining tilde overlay
13582 \glshex{0335}{string};% combining short stroke overlay
13583 \glshex{0336}{string};% combining long stroke overlay
13584 \glshex{0338}{string};% combining long solidus overlay
13585 \glshex{0339}{string};% combining combining right half ring below
13586 \glshex{033A}{string};% combining inverted bridge below
13587 \glshex{033B}{string};% combining square below
13588 \glshex{033C}{string};% combining seagull below
13589 \glshex{033D}{string};% combining x above
13590 \glshex{033E}{string};% combining vertical tilde
13591 \glshex{033F}{string};% combining double overline
13592 \glshex{0342}{string};% combining Greek perispomeni
13593 \glshex{0344}{string};% combining Greek dialytika tonos
13594 \glshex{0345}{string};% combining Greek ypogegrammeni
13595 \glshex{0360}{string};% combining double tilde
13596 \glshex{0361}{string};% combining double inverted breve
13597 \glshex{0483}{string};% combining Cyrillic titlo
13598 \glshex{0484}{string};% combining Cyrillic palatalization
13599 \glshex{0485}{string};% combining Cyrillic dasia pneumata
13600 \glshex{0486}{string};% combining Cyrillic psili pneumata
13601 }
```

iacriticIVrules Fourth set of combining diacritic marks.

```

13602 \newcommand*{\glsxtrcombiningdiacriticIVrules}{%
13603   \glshex 20D0\string;% combining left harpoon above
13604   \glshex 20D1\string;% combining right harpoon above
13605   \glshex 20D2\string;% combining long vertical line overlay
13606   \glshex 20D3\string;% combining short vertical line overlay
13607   \glshex 20D4\string;% combining anticlockwise arrow above
13608   \glshex 20D5\string;% combining clockwise arrow above
13609   \glshex 20D6\string;% combining left arrow above
13610  \glshex 20D7\string;% combining right arrow above
13611  \glshex 20D8\string;% combining ring overlay
13612  \glshex 20D9\string;% combining clockwise ring overlay
13613  \glshex 20DA\string;% combining anticlockwise ring overlay
13614  \glshex 20DB\string;% combining three dots above
13615  \glshex 20DC\string;% combining four dots above
13616  \glshex 20DD\string;% combining enclosing circle
13617  \glshex 20DE\string;% combining enclosing square
13618  \glshex 20DF\string;% combining enclosing diamond
13619  \glshex 20E0\string;% combining enclosing circle backslash
13620  \glshex 20E1% combining left right arrow above
13621 }

```

#### sxtrhyphenrules Hyphens.

```

13622 \newcommand*{\glsxtrhyphenrules}{%
13623   \string'\string-\string'\string%; ASCII hyphen
13624   \glshex 00AD\string;% soft hyphen
13625   \glshex 2010\string;% hyphen
13626   \glshex 2011\string;% non-breaking hyphen
13627   \glshex 2012\string;% figure dash
13628   \glshex 2013\string;% en dash
13629   \glshex 2014\string;% em dash
13630   \glshex 2015\string;% horizontal bar
13631   \glshex 2212\string=\glshex 207B\string=\glshex 208B% minus sign
13632 }

```

#### eneralpuncrules General punctuation.

```

13633 \newcommand*{\glsxtrgeneralpuncrules}{%
13634   \glsxtrgeneralpuncIrules
13635   \string<\glsxtrcurrencyrules
13636   \string<\glsxtrgeneralpuncIIrules
13637 }

```

#### ernalpuncIrules First set of general punctuation.

```

13638 \newcommand*{\glsxtrgeneralpuncIrules}{%
13639   \string'\glshex 005F\string'% underscore
13640   \string<\glshex 00AF% macron
13641   \string<\string'\glshex 002C\string'% comma
13642   \string<\string'\glshex 003B\string'% semi-colon
13643   \string<\string'\glshex 003A\string'% colon
13644   \string<\string'\glshex 0021\string'% exclamation mark

```

```

13645 \string<\glshex 00A1% inverted exclamation mark
13646 \string<\string'\glshex 003F\string'% question mark
13647 \string<\glshex 00BF% inverted question mark
13648 \string<\string'\glshex 002F\string'% solidus
13649 \string<\string'\glshex 002E\string'% full stop
13650 \string<\glshex 00B4% acute accent
13651 \string<\string'\glshex 0060\string'% grave accent
13652 \string<\string'\glshex 005E\string'% circumflex accent
13653 \string<\glshex 00A8% diaersis
13654 \string<\string'\glshex 007E\string'% tilde
13655 \string<\glshex 00B7% middle dot
13656 \string<\glshex 00B8% cedilla
13657 \string<\string'\glshex 0027\string'% straight apostrophe
13658 \string<\string'\glshex 0022\string'% straight double quote
13659 \string<\glshex 00AB% left guillemet
13660 \string<\glshex 00BB% right guillemet
13661 \string<\string'\glshex 0028\string'% left parenthesis
13662 \string=\glshex 207D\string=\glshex 208D% super/subscript left parenthesis
13663 \string<\string'\glshex 0029\string'% right parenthesis
13664 \string=\glshex 207E\string=\glshex 208E% super/subscript right parenthesis
13665 \string<\string'\glshex 005B\string'% left square bracket
13666 \string<\string'\glshex 005D\string'% right square bracket
13667 \string<\string'\glshex 007B\string'% left curly bracket
13668 \string<\string'\glshex 007D\string'% right curly bracket
13669 \string<\glshex 00A7% section sign
13670 \string<\glshex 00B6% pilcrow sign
13671 \string<\glshex 00A9% copyright sign
13672 \string<\glshex 00AE% registered sign
13673 \string<\string'\glshex 0040\string'% at sign
13674 }

```

#### trcurrencyrules General punctuation.

```

13675 \newcommand*\{\glsxtrcurrencyrules\}{%
13676 \glshex 00A4% currency sign
13677 \string<\glshex 0E3F% Thai currency symbol baht
13678 \string<\glshex 00A2% cent sign
13679 \string<\glshex 20A1% colon sign
13680 \string<\glshex 20A2% cruzeiro sign
13681 \string<\string'\glshex 0024\string'% dollar sign
13682 \string<\glshex 20AB% dong sign
13683 \string<\glshex 20AC% euro sign
13684 \string<\glshex 20A3% French franc sign
13685 \string<\glshex 20A4% lira sign
13686 \string<\glshex 20A5% mill sign
13687 \string<\glshex 20A6% naira sign
13688 \string<\glshex 20A7% peseta sign
13689 \string<\glshex 00A3% pound sign
13690 \string<\glshex 20A8% rupee sign
13691 \string<\glshex 20AA% new sheqel sign

```

```
13692 \string<\glshex 20A9% won sign
13693 \string<\glshex 00A5% yen sign
13694 }
```

eralpuncIIrules Second set of general punctuation.

```
13695 \newcommand*\glsxtrgeneralpuncIIrules}{%
13696 \string'\glshex 002A\string'% asterisk
13697 \string<\string'\glshex 005C\string'% backslash
13698 \string<\string'\glshex 0026\string'% ampersand
13699 \string<\string'\glshex 0023\string'% hash sign
13700 \string<\string'\glshex 0025\string'% percent sign
13701 \string<\string'\glshex 002B\string'% plus sign
13702 \string=\glshex 207A\string=\glshex 208A% super/subscript plus sign
13703 \string<\glshex 00B1% plus-minus sign
13704 \string<\glshex 00F7% division sign
13705 \string<\glshex 00D7% multiplication sign
13706 \string<\string'\glshex 003C\string'% less-than sign
13707 \string<\string'\glshex 003D\string'% equals sign
13708 \string<\string'\glshex 003E\string'% greater-than sign
13709 \string<\glshex 00AC% not sign
13710 \string<\string'\glshex 007C\string'% vertical bar (pipe)
13711 \string<\glshex 00A6% broken bar
13712 \string<\glshex 00B0% degree sign
13713 \string<\glshex 00B5% micron sign
13714 }
```

eralLatinIrules Basic Latin alphabet.

```
13715 \newcommand*\glsxtrGeneralLatinIrules}{%
13716 \glsxtrLatinA
13717 \string< b,B%
13718 \string< c,C%
13719 \string< d,D%
13720 \string<\glsxtrLatinE
13721 \string< f,F%
13722 \string< g,G%
13723 \string<\glsxtrLatinH
13724 \string<\glsxtrLatinI
13725 \string< j,J%
13726 \string<\glsxtrLatinK
13727 \string<\glsxtrLatinL
13728 \string<\glsxtrLatinM
13729 \string<\glsxtrLatinN
13730 \string<\glsxtrLatinO
13731 \string<\glsxtrLatinP
13732 \string< q,Q%
13733 \string< r,R%
13734 \string<\glsxtrLatinS
13735 \string<\glsxtrLatinT
13736 \string< u,U%
```

```

13737 \string<v,V%
13738 \string<w,W%
13739 \string<\glsxtrLatinX
13740 \string<y,Y%
13741 \string<z,Z
13742 }

```

`ralLatinIIrules` General Latin alphabet (eth between D and E, ß treated as SS).

```

13743 \newcommand*\{\glsxtrGeneralLatinIIrules\}{%
13744 \glsxtrLatinA
13745 \string<b,B%
13746 \string<c,C%
13747 \string<d,D%
13748 \string<\glsxtrLatinEth
13749 \string<\glsxtrLatinE
13750 \string<f,F%
13751 \string<g,G%
13752 \string<\glsxtrLatinH
13753 \string<\glsxtrLatinI
13754 \string<j,J%
13755 \string<\glsxtrLatinK
13756 \string<\glsxtrLatinL
13757 \string<\glsxtrLatinM
13758 \string<\glsxtrLatinN
13759 \string<\glsxtrLatinO
13760 \string<\glsxtrLatinP
13761 \string<q,Q%
13762 \string<r,R%
13763 \string<\glsxtrLatinS
13764 \string& SS \string, \glsxtrLatinEszettSs
13765 \string<\glsxtrLatinT
13766 \string<u,U%
13767 \string<v,V%
13768 \string<w,W%
13769 \string<\glsxtrLatinX
13770 \string<y,Y%
13771 \string<z,Z%
13772 }

```

`allLatinIIIrules` General Latin alphabet (eth between D and E, ß treated as SZ).

```

13773 \newcommand*\{\glsxtrGeneralLatinIIIrules\}{%
13774 \glsxtrLatinA
13775 \string<b,B%
13776 \string<c,C%
13777 \string<d,D%
13778 \string<\glsxtrLatinEth
13779 \string<\glsxtrLatinE
13780 \string<f,F%
13781 \string<g,G%

```

```

13782 \string<\glsxtrLatinH
13783 \string<\glsxtrLatinI
13784 \string<j,J%
13785 \string<\glsxtrLatinK
13786 \string<\glsxtrLatinL
13787 \string<\glsxtrLatinM
13788 \string<\glsxtrLatinN
13789 \string<\glsxtrLatinO
13790 \string<\glsxtrLatinP
13791 \string<q,Q%
13792 \string<r,R%
13793 \string<\glsxtrLatinS
13794 \string& SZ, \glsxtrLatinEszettSz
13795 \string<\glsxtrLatinT
13796 \string<u,U%
13797 \string<v,V%
13798 \string<w,W%
13799 \string<\glsxtrLatinX
13800 \string<y,Y%
13801 \string<z,Z%
13802 }

```

**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).

```

13803 \newcommand*{\glsxtrGeneralLatinIVrules}{%
13804 \glsxtrLatinA
13805 \string& AE , \glsxtrLatinAEligature
13806 \string<b,B%
13807 \string<c,C%
13808 \string<d,D%
13809 \string<\glsxtrLatinEth
13810 \string<\glsxtrLatinE
13811 \string<f,F%
13812 \string<g,G%
13813 \string<\glsxtrLatinH
13814 \string<\glsxtrLatinI
13815 \string<j,J%
13816 \string<\glsxtrLatinK
13817 \string<\glsxtrLatinL
13818 \string<\glsxtrLatinM
13819 \string<\glsxtrLatinN
13820 \string<\glsxtrLatinO
13821 \string& OE , \glsxtrLatinOEligature
13822 \string<\glsxtrLatinP
13823 \string<q,Q%
13824 \string<r,R%
13825 \string<\glsxtrLatinS
13826 \string& SS , \glsxtrLatinEszettSs
13827 \string<\glsxtrLatinT

```

```

13828 \string& th =\glshex 00DE
13829 \string& TH =\glshex 00FE
13830 \string<u,U%
13831 \string<v,V%
13832 \string<w,W%
13833 \string<\glsxtrLatinX
13834 \string<y,Y%
13835 \string<z,Z%
13836 }

```

eralLatinVrules General Latin alphabet (eth between D and E, ß treated as SS, Þ treated as TH).

```

13837 \newcommand*\{\glsxtrGeneralLatinVrules\}{%
13838 \glsxtrLatinA
13839 \string<b,B%
13840 \string<c,C%
13841 \string<d,D%
13842 \string<\glsxtrLatinEth
13843 \string<\glsxtrLatinE
13844 \string<f,F%
13845 \string<g,G%
13846 \string<\glsxtrLatinH
13847 \string<\glsxtrLatinI
13848 \string<j,J%
13849 \string<\glsxtrLatinK
13850 \string<\glsxtrLatinL
13851 \string<\glsxtrLatinM
13852 \string<\glsxtrLatinN
13853 \string<\glsxtrLatinO
13854 \string<\glsxtrLatinP
13855 \string<q,Q%
13856 \string<r,R%
13857 \string<\glsxtrLatinS
13858 \string& SS , \glsxtrLatinEszettSs
13859 \string<\glsxtrLatinT
13860 \string& th =\glshex 00DE
13861 \string& TH =\glshex 00FE
13862 \string<u,U%
13863 \string<v,V%
13864 \string<w,W%
13865 \string<\glsxtrLatinX
13866 \string<y,Y%
13867 \string<z,Z%
13868 }

```

ralLatinVIrules General Latin alphabet (eth between D and E, ß treated as SZ, Þ treated as TH).

```

13869 \newcommand*\{\glsxtrGeneralLatinVIrules\}{%
13870 \glsxtrLatinA
13871 \string<b,B%
13872 \string<c,C%

```

```

13873 \string<d,D%
13874 \string<\glsxtrLatinEth
13875 \string<\glsxtrLatinE
13876 \string<f,F%
13877 \string<g,G%
13878 \string<\glsxtrLatinH
13879 \string<\glsxtrLatinI
13880 \string<j,J%
13881 \string<\glsxtrLatinK
13882 \string<\glsxtrLatinL
13883 \string<\glsxtrLatinM
13884 \string<\glsxtrLatinN
13885 \string<\glsxtrLatinO
13886 \string<\glsxtrLatinP
13887 \string<q,Q%
13888 \string<r,R%
13889 \string<\glsxtrLatinS
13890 \string& SZ , \glsxtrLatinEszettSz
13891 \string<\glsxtrLatinT
13892 \string& th =\glshex 0ODE
13893 \string& TH =\glshex 0OFE
13894 \string<u,U%
13895 \string<v,V%
13896 \string<w,W%
13897 \string<\glsxtrLatinX
13898 \string<y,Y%
13899 \string<z,Z%
13900 }

```

**allLatinVIIrules** General Latin alphabet ( $\text{\textAE}$  between A and B, eth between D and E, insular G as G,  $\text{\textCE}$  between O and P, long S equivalent to S,  $\text{\textP}$  between T and U and wynn as W).

```

13901 \newcommand*\glsxtrGeneralLatinVIIrules}{%
13902 \glsxtrLatinA
13903 \string<\glsxtrLatinAEligature
13904 \string<b,B%
13905 \string<c,C%
13906 \string<d,D%
13907 \string<\glsxtrLatinEth
13908 \string<\glsxtrLatinE
13909 \string<f,F%
13910 \string<\glsxtrLatinInsularG
13911 \string<\glsxtrLatinH
13912 \string<\glsxtrLatinI
13913 \string<j,J%
13914 \string<\glsxtrLatinK
13915 \string<\glsxtrLatinL
13916 \string<\glsxtrLatinM
13917 \string<\glsxtrLatinN
13918 \string<\glsxtrLatinO

```

```

13919 \string<\glsxtrLatinOELigature
13920 \string<\glsxtrLatinP
13921 \string<q,Q%
13922 \string<r,R%
13923 \string<\glshex 017F=\glsxtrLatinS % s and long s
13924 \string<\glsxtrLatinT
13925 \string<\glsxtrLatinThorn
13926 \string<u,U%
13927 \string<v,V%
13928 \string< w\string=\glshex 01BF, W\string=\glshex 01F7
13929 \string<\glsxtrLatinX
13930 \string<y,Y%
13931 \string<z,Z%
13932 }

```

**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).

```

13933 \newcommand*\glsxtrGeneralLatinVIIIRules}{%
13934 \glsxtrLatinA
13935 \string& AE , \glsxtrLatinAELigature
13936 \string<b,B%
13937 \string<c,C%
13938 \string<\glshex 00F0\string;d,\glshex 00D0\string;D% D and eth
13939 \string<\glsxtrLatinE
13940 \string<f,F%
13941 \string<g,G%
13942 \string<\glsxtrLatinH
13943 \string<\glsxtrLatinI
13944 \string<j,J%
13945 \string<\glsxtrLatinK
13946 \string<\glshex 0142\string=\glsxtrLatinL\string=\glshex 0141% L and \L
13947 \string<\glsxtrLatinM
13948 \string<\glsxtrLatinN
13949 \string<\glshex 00F8\string=\glsxtrLatinO\string=\glshex 00D8% O and \O
13950 \string& OE , \glsxtrLatinOELigature
13951 \string<\glsxtrLatinP
13952 \string<q,Q%
13953 \string<r,R%
13954 \string<\glsxtrLatinS
13955 \string& SS , \glsxtrLatinEszettSs
13956 \string<\glsxtrLatinT
13957 \string& th =\glshex 00DE
13958 \string& TH =\glshex 00FE
13959 \string<u,U%
13960 \string<v,V%
13961 \string<w,W%
13962 \string<\glsxtrLatinX
13963 \string<y,Y%
13964 \string<z,Z%

```

```

13965 }

\glsxtrLatinA
13966 \newcommand*{\glsxtrLatinA}{%
13967   a\string=\glshex 00AA\string=\glshex 2090,A
13968 }

\glsxtrLatinE
13969 \newcommand*{\glsxtrLatinE}{%
13970   e\string=\glshex 2091,E
13971 }

\glsxtrLatinH
13972 \newcommand*{\glsxtrLatinH}{%
13973   h\string=\glshex 2095,H
13974 }

\glsxtrLatinI
13975 \newcommand*{\glsxtrLatinI}{%
13976   i\string=\glshex 2071,I
13977 }

\glsxtrLatinK
13978 \newcommand*{\glsxtrLatinK}{%
13979   k\string=\glshex 2096,K
13980 }

\glsxtrLatinL
13981 \newcommand*{\glsxtrLatinL}{%
13982   l\string=\glshex 2097,L
13983 }

\glsxtrLatinM
13984 \newcommand*{\glsxtrLatinM}{%
13985   m\string=\glshex 2098,M
13986 }

\glsxtrLatinN
13987 \newcommand*{\glsxtrLatinN}{%
13988   n\string=\glshex 207F\string=\glshex 2099,N
13989 }

\glsxtrLatinO
13990 \newcommand*{\glsxtrLatinO}{%
13991   o\string=\glshex 00BA\string=\glshex 2092,O
13992 }

```

```

\glsxtrLatinP
 13993 \newcommand*{\glsxtrLatinP}{%
 13994   p\string=\glshex{209A,P}
 13995 }

\glsxtrLatinS
 13996 \newcommand*{\glsxtrLatinS}{%
 13997   s\string=\glshex{209B,S}
 13998 }

\glsxtrLatinT
 13999 \newcommand*{\glsxtrLatinT}{%
 14000   t\string=\glshex{209C,T}
 14001 }

\glsxtrLatinX
 14002 \newcommand*{\glsxtrLatinX}{%
 14003   x\string=\glshex{2093,X}
 14004 }

lsxtrLatinSchwa Latin schwa (lower case, subscript and upper case).
 14005 \newcommand*{\glsxtrLatinSchwa}{%
 14006   \glshex{0259}\string=\glshex{2094},\glshex{018F}
 14007 }

trLatinEszettSs
 14008 \newcommand*{\glsxtrLatinEszettSs}{%
 14009   \glshex{00DF}\% eszett
 14010   \string=\glshex{017Fs} % long S s
 14011 }

trLatinEszettSz
 14012 \newcommand*{\glsxtrLatinEszettSz}{%
 14013   \glshex{00DF}\% eszett
 14014   \string=\glshex{017Fz} % long S z
 14015 }

\glsxtrLatinEth
 14016 \newcommand*{\glsxtrLatinEth}{%
 14017   \glshex{00F0},\glshex{00D0}\% eth
 14018 }

lsxtrLatinThorn
 14019 \newcommand*{\glsxtrLatinThorn}{%
 14020   \glshex{00FE},\glshex{00DE}\% thorn
 14021 }

```

```

LatinAELigature
14022 \newcommand*{\glsxtrLatinAELigature}{%
14023  \glshex 00E6,\glshex 00C6% AE-ligature
14024 }

LatinOELigature
14025 \newcommand*{\glsxtrLatinOELigature}{%
14026  \glshex 0153,\glshex 0152% OE-ligature
14027 }

\glsxtrLatinAA
14028 \newcommand*{\glsxtrLatinAA}{%
14029  \glshex 00E5=a\glshex 030A,% \aa
14030  \glshex 00C5=A\glshex 030A%\AA
14031 }

glsxtrLatinWynn
14032 \newcommand*{\glsxtrLatinWynn}{%
14033  \glshex 01BF,\glshex 01F7% wynn
14034 }

trLatinInsularG
14035 \newcommand*{\glsxtrLatinInsularG}{%
14036  \glshex 1D79,\glshex A77D% insular G
14037  \string; g, G
14038 }

sxtrLatinOslash
14039 \newcommand*{\glsxtrLatinOslash}{%
14040  \glshex 00F8,\glshex 00D8% \o, \O
14041 }

sxtrLatinLslash
14042 \newcommand*{\glsxtrLatinLslash}{%
14043  \glshex 0142,\glshex 0141% \l, \L
14044 }

thUpGreekIrules Includes digamma between epsilon and zeta.
14045 \newcommand*{\glsxtrMathUpGreekIrules}{%
14046  \glsxtrUpAlpha
14047  \string<\glsxtrUpBeta
14048  \string<\glsxtrUpGamma
14049  \string<\glsxtrUpDelta
14050  \string<\glsxtrUpEpsilon
14051  \string<\glsxtrUpDigamma
14052  \string<\glsxtrUpZeta
14053  \string<\glsxtrUpEta
14054  \string<\glsxtrUpTheta

```

```

14055 \string<\glsxtrUpIota
14056 \string<\glsxtrUpKappa
14057 \string<\glsxtrUpLambda
14058 \string<\glsxtrUpMu
14059 \string<\glsxtrUpNu
14060 \string<\glsxtrUpXi
14061 \string<\glsxtrUpOmicron
14062 \string<\glsxtrUpPi
14063 \string<\glsxtrUpRho
14064 \string<\glsxtrUpSigma
14065 \string<\glsxtrUpTau
14066 \string<\glsxtrUpUpsilon
14067 \string<\glsxtrUpPhi
14068 \string<\glsxtrUpChi
14069 \string<\glsxtrUpPsi
14070 \string<\glsxtrUpOmega
14071 }

```

`hUpGreekIIrules` Doesn't include digamma.

```

14072 \newcommand*{\glsxtrMathUpGreekIIrules}{%
14073 \glsxtrUpAlpha
14074 \string<\glsxtrUpBeta
14075 \string<\glsxtrUpGamma
14076 \string<\glsxtrUpDelta
14077 \string<\glsxtrUpEpsilon
14078 \string<\glsxtrUpZeta
14079 \string<\glsxtrUpEta
14080 \string<\glsxtrUpTheta
14081 \string<\glsxtrUpIota
14082 \string<\glsxtrUpKappa
14083 \string<\glsxtrUpLambda
14084 \string<\glsxtrUpMu
14085 \string<\glsxtrUpNu
14086 \string<\glsxtrUpXi
14087 \string<\glsxtrUpOmicron
14088 \string<\glsxtrUpPi
14089 \string<\glsxtrUpRho
14090 \string<\glsxtrUpSigma
14091 \string<\glsxtrUpTau
14092 \string<\glsxtrUpUpsilon
14093 \string<\glsxtrUpPhi
14094 \string<\glsxtrUpChi
14095 \string<\glsxtrUpPsi
14096 \string<\glsxtrUpOmega
14097 }

```

`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.

```
14098 \newcommand*{\glsxtrMathItalicGreekIrules}{%
```

```

14099 \glsxtrMathItalicAlpha
14100 \string<\glsxtrMathItalicBeta
14101 \string<\glsxtrMathItalicGamma
14102 \string<\glsxtrMathItalicDelta
14103 \string<\glsxtrMathItalicEpsilon
14104 \string<\glsxtrUpDigamma
14105 \string<\glsxtrMathItalicZeta
14106 \string<\glsxtrMathItalicEta
14107 \string<\glsxtrMathItalicTheta
14108 \string<\glsxtrMathItalicIota
14109 \string<\glsxtrMathItalicKappa
14110 \string<\glsxtrMathItalicLambda
14111 \string<\glsxtrMathItalicMu
14112 \string<\glsxtrMathItalicNu
14113 \string<\glsxtrMathItalicXi
14114 \string<\glsxtrMathItalicOmicron
14115 \string<\glsxtrMathItalicPi
14116 \string<\glsxtrMathItalicRho
14117 \string<\glsxtrMathItalicSigma
14118 \string<\glsxtrMathItalicTau
14119 \string<\glsxtrMathItalicUpsilon
14120 \string<\glsxtrMathItalicPhi
14121 \string<\glsxtrMathItalicChi
14122 \string<\glsxtrMathItalicPsi
14123 \string<\glsxtrMathItalicOmega
14124 }

```

licGreekIIrules Doesn't include digamma.

```

14125 \newcommand*\glsxtrMathItalicGreekIIrules}{%
14126 \glsxtrMathItalicAlpha
14127 \string<\glsxtrMathItalicBeta
14128 \string<\glsxtrMathItalicGamma
14129 \string<\glsxtrMathItalicDelta
14130 \string<\glsxtrMathItalicEpsilon
14131 \string<\glsxtrMathItalicZeta
14132 \string<\glsxtrMathItalicEta
14133 \string<\glsxtrMathItalicTheta
14134 \string<\glsxtrMathItalicIota
14135 \string<\glsxtrMathItalicKappa
14136 \string<\glsxtrMathItalicLambda
14137 \string<\glsxtrMathItalicMu
14138 \string<\glsxtrMathItalicNu
14139 \string<\glsxtrMathItalicXi
14140 \string<\glsxtrMathItalicOmicron
14141 \string<\glsxtrMathItalicPi
14142 \string<\glsxtrMathItalicRho
14143 \string<\glsxtrMathItalicSigma
14144 \string<\glsxtrMathItalicTau
14145 \string<\glsxtrMathItalicUpsilon

```

```

14146 \string<\glsxtrMathItalicPhi
14147 \string<\glsxtrMathItalicChi
14148 \string<\glsxtrMathItalicPsi
14149 \string<\glsxtrMathItalicOmega
14150 }

```

`upperGreekIrules` Upper case only (includes upright digamma).

```

14151 \newcommand*{\glsxtrMathItalicUpperGreekIrules}{%
14152 \glshex 1D6E2% upper case alpha (maths italic)
14153 \string<\glshex 1D6E3% upper case beta (maths italic)
14154 \string<\glshex 1D6E4% upper case gamma (maths italic)
14155 \string<\glshex 1D6E5% upper case delta (maths italic)
14156 \string<\glshex 1D6E6% upper case epsilon (maths italic)
14157 \string<\glshex 03DC% upper case digamma
14158 \string<\glshex 1D6E7% upper case zeta (maths italic)
14159 \string<\glshex 1D6E8% upper case eta (maths italic)
14160 \string<\glshex 1D6E9% upper case theta (maths italic)
14161 \string=\glshex 1D6F3% upper case theta variant (maths italic)
14162 \string<\glshex 1D6EA% upper case iota (maths italic)
14163 \string<\glshex 1D6EB% upper case kappa (maths italic)
14164 \string<\glshex 1D6EC% upper case lambda (maths italic)
14165 \string<\glshex 1D6ED% upper case mu (maths italic)
14166 \string<\glshex 1D6EE% upper case nu (maths italic)
14167 \string<\glshex 1D6EF% upper case xi (maths italic)
14168 \string<\glshex 1D6F0% upper case omicron (maths italic)
14169 \string<\glshex 1D6F1% upper case pi (maths italic)
14170 \string<\glshex 1D6F2% upper case rho (maths italic)
14171 \string<\glshex 1D6F4% upper case sigma (maths italic)
14172 \string<\glshex 1D6F5% upper case tau (maths italic)
14173 \string<\glshex 1D6F6% upper case upsilon (maths italic)
14174 \string<\glshex 1D6F7% upper case phi (maths italic)
14175 \string<\glshex 1D6F8% upper case chi (maths italic)
14176 \string<\glshex 1D6F9% upper case psi (maths italic)
14177 \string<\glshex 1D6FA% upper case omega (maths italic)
14178 }

```

`perGreekIIrules` Upper case only (doesn't include upright digamma).

```

14179 \newcommand*{\glsxtrMathItalicUpperGreekIIrules}{%
14180 \glshex 1D6E2% upper case alpha (maths italic)
14181 \string<\glshex 1D6E3% upper case beta (maths italic)
14182 \string<\glshex 1D6E4% upper case gamma (maths italic)
14183 \string<\glshex 1D6E5% upper case delta (maths italic)
14184 \string<\glshex 1D6E6% upper case epsilon (maths italic)
14185 \string<\glshex 1D6E7% upper case zeta (maths italic)
14186 \string<\glshex 1D6E8% upper case eta (maths italic)
14187 \string<\glshex 1D6E9% upper case theta (maths italic)
14188 \string=\glshex 1D6F3% upper case theta variant (maths italic)
14189 \string<\glshex 1D6EA% upper case iota (maths italic)
14190 \string<\glshex 1D6EB% upper case kappa (maths italic)

```

```

14191 \string<\glshex 1D6EC% upper case lambda (maths italic)
14192 \string<\glshex 1D6ED% upper case mu (maths italic)
14193 \string<\glshex 1D6EE% upper case nu (maths italic)
14194 \string<\glshex 1D6EF% upper case xi (maths italic)
14195 \string<\glshex 1D6F0% upper case omicron (maths italic)
14196 \string<\glshex 1D6F1% upper case pi (maths italic)
14197 \string<\glshex 1D6F2% upper case rho (maths italic)
14198 \string<\glshex 1D6F4% upper case sigma (maths italic)
14199 \string<\glshex 1D6F5% upper case tau (maths italic)
14200 \string<\glshex 1D6F6% upper case upsilon (maths italic)
14201 \string<\glshex 1D6F7% upper case phi (maths italic)
14202 \string<\glshex 1D6F8% upper case chi (maths italic)
14203 \string<\glshex 1D6F9% upper case psi (maths italic)
14204 \string<\glshex 1D6FA% upper case omega (maths italic)
14205 }

```

`owerGreekIrules` Lower case only (includes upright digamma).

```

14206 \newcommand*\{ \glsxtrMathItalicLowerGreekIrules\}{%
14207 \glshex 1D6FC% lower case alpha (maths italic)
14208 \string<\glshex 1D6FD% lower case beta (maths italic)
14209 \string<\glshex 1D6FE% lower case gamma (maths italic)
14210 \string<\glshex 1D6FF% lower case delta (maths italic)
14211 \string<\glshex 1D700% lower case epsilon (maths italic)
14212 \string=\glshex 1D716% lower case epsilon variant (maths italic)
14213 \string<\glshex 03DD% lower case digamma
14214 \string<\glshex 1D701% lower case zeta (maths italic)
14215 \string<\glshex 1D702% lower case eta (maths italic)
14216 \string<\glshex 1D703% lower case theta (maths italic)
14217 \string=\glshex 1D717% lower case theta variant (maths italic)
14218 \string<\glshex 1D704% lower case iota (maths italic)
14219 \string<\glshex 1D705% lower case kappa (maths italic)
14220 \string=\glshex 1D718% lower case kappa variant (maths italic)
14221 \string<\glshex 1D706% lower case lambda (maths italic)
14222 \string<\glshex 1D707% lower case mu (maths italic)
14223 \string<\glshex 1D708% lower case nu (maths italic)
14224 \string<\glshex 1D709% lower case xi (maths italic)
14225 \string<\glshex 1D70A% lower case omicron (maths italic)
14226 \string<\glshex 1D70B% lower case pi (maths italic)
14227 \string=\glshex 1D71B% lower case pi variant (maths italic)
14228 \string<\glshex 1D70C% lower case rho (maths italic)
14229 \string=\glshex 1D71A% lower case rho variant (maths italic)
14230 \string<\glshex 1D70D% lower case final sigma (maths italic)
14231 \string=\glshex 1D70E% lower case sigma (maths italic)
14232 \string<\glshex 1D70F% lower case tau (maths italic)
14233 \string<\glshex 1D710% lower case upsilon (maths italic)
14234 \string<\glshex 1D711% lower case phi (maths italic)
14235 \string=\glshex 1D719% lower case phi variant (maths italic)
14236 \string<\glshex 1D712% lower case chi (maths italic)
14237 \string<\glshex 1D713% lower case psi (maths italic)

```

```
14238 \string<\glshex 1D714% lower case omega (maths italic)
14239 }
```

werGreekIIrules Lower case only (doesn't includes upright digamma).

```
14240 \newcommand*\glsxtrMathItalicLowerGreekIIrules}{%
14241 \glshex 1D6FC% lower case alpha (maths italic)
14242 \string<\glshex 1D6FD% lower case beta (maths italic)
14243 \string<\glshex 1D6FE% lower case gamma (maths italic)
14244 \string<\glshex 1D6FF% lower case delta (maths italic)
14245 \string<\glshex 1D700% lower case epsilon (maths italic)
14246 \string=\glshex 1D716% lower case epsilon variant (maths italic)
14247 \string<\glshex 1D701% lower case zeta (maths italic)
14248 \string<\glshex 1D702% lower case eta (maths italic)
14249 \string<\glshex 1D703% lower case theta (maths italic)
14250 \string=\glshex 1D717% lower case theta variant (maths italic)
14251 \string<\glshex 1D704% lower case iota (maths italic)
14252 \string<\glshex 1D705% lower case kappa (maths italic)
14253 \string=\glshex 1D718% lower case kappa variant (maths italic)
14254 \string<\glshex 1D706% lower case lambda (maths italic)
14255 \string<\glshex 1D707% lower case mu (maths italic)
14256 \string<\glshex 1D708% lower case nu (maths italic)
14257 \string<\glshex 1D709% lower case xi (maths italic)
14258 \string<\glshex 1D70A% lower case omicron (maths italic)
14259 \string<\glshex 1D70B% lower case pi (maths italic)
14260 \string=\glshex 1D71B% lower case pi variant (maths italic)
14261 \string<\glshex 1D70C% lower case rho (maths italic)
14262 \string=\glshex 1D71A% lower case rho variant (maths italic)
14263 \string<\glshex 1D70D% lower case final sigma (maths italic)
14264 \string=\glshex 1D70E% lower case sigma (maths italic)
14265 \string<\glshex 1D70F% lower case tau (maths italic)
14266 \string<\glshex 1D710% lower case upsilon (maths italic)
14267 \string<\glshex 1D711% lower case phi (maths italic)
14268 \string=\glshex 1D719% lower case phi variant (maths italic)
14269 \string<\glshex 1D712% lower case chi (maths italic)
14270 \string<\glshex 1D713% lower case psi (maths italic)
14271 \string<\glshex 1D714% lower case omega (maths italic)
14272 }
```

MathGreekIrules Includes both upright and italic with digamma between epsilon and zeta.

```
14273 \newcommand*\glsxtrMathGreekIrules}{%
14274 \glsxtrMathItalicAlpha
14275 \string;\glsxtrUpAlpha
14276 \string<\glsxtrMathItalicBeta
14277 \string;\glsxtrUpBeta
14278 \string<\glsxtrMathItalicGamma
14279 \string;\glsxtrUpGamma
14280 \string<\glsxtrMathItalicDelta
14281 \string;\glsxtrUpDelta
14282 \string<\glsxtrMathItalicEpsilon
```

```

14283 \string;\glsxtrUpEpsilon
14284 \string<\glsxtrUpDigamma
14285 \string<\glsxtrMathItalicZeta
14286 \string;\glsxtrUpZeta
14287 \string<\glsxtrMathItalicEta
14288 \string;\glsxtrUpEta
14289 \string<\glsxtrMathItalicTheta
14290 \string;\glsxtrUpTheta
14291 \string<\glsxtrMathItalicIota
14292 \string;\glsxtrUpIota
14293 \string<\glsxtrMathItalicKappa
14294 \string;\glsxtrUpKappa
14295 \string<\glsxtrMathItalicLambda
14296 \string;\glsxtrUpLambda
14297 \string<\glsxtrMathItalicMu
14298 \string;\glsxtrUpMu
14299 \string<\glsxtrMathItalicNu
14300 \string;\glsxtrUpNu
14301 \string<\glsxtrMathItalicXi
14302 \string;\glsxtrUpXi
14303 \string<\glsxtrMathItalicOmicron
14304 \string;\glsxtrUpOmicron
14305 \string<\glsxtrMathItalicPi
14306 \string;\glsxtrUpPi
14307 \string<\glsxtrMathItalicRho
14308 \string;\glsxtrUpRho
14309 \string<\glsxtrMathItalicSigma
14310 \string;\glsxtrUpSigma
14311 \string<\glsxtrMathItalicTau
14312 \string;\glsxtrUpTau
14313 \string<\glsxtrMathItalicUpsilon
14314 \string;\glsxtrUpUpsilon
14315 \string<\glsxtrMathItalicPhi
14316 \string;\glsxtrUpPhi
14317 \string<\glsxtrMathItalicChi
14318 \string;\glsxtrUpChi
14319 \string<\glsxtrMathItalicPsi
14320 \string;\glsxtrUpPsi
14321 \string<\glsxtrMathItalicOmega
14322 \string;\glsxtrUpOmega
14323 }

```

`athGreekIIrules` Includes both upright and italic (digamma not included).

```

14324 \newcommand*\glsxtrMathGreekIIrules{\%
14325 \glsxtrMathItalicAlpha
14326 \string;\glsxtrUpAlpha
14327 \string<\glsxtrMathItalicBeta
14328 \string;\glsxtrUpBeta
14329 \string<\glsxtrMathItalicGamma

```

```

14330 \string;\glsxtrUpGamma
14331 \string<\glsxtrMathItalicDelta
14332 \string;\glsxtrUpDelta
14333 \string<\glsxtrMathItalicEpsilon
14334 \string;\glsxtrUpEpsilon
14335 \string<\glsxtrMathItalicZeta
14336 \string;\glsxtrUpZeta
14337 \string<\glsxtrMathItalicEta
14338 \string;\glsxtrUpEta
14339 \string<\glsxtrMathItalicTheta
14340 \string;\glsxtrUpTheta
14341 \string<\glsxtrMathItalicIota
14342 \string;\glsxtrUpIota
14343 \string<\glsxtrMathItalicKappa
14344 \string;\glsxtrUpKappa
14345 \string<\glsxtrMathItalicLambda
14346 \string;\glsxtrUpLambda
14347 \string<\glsxtrMathItalicMu
14348 \string;\glsxtrUpMu
14349 \string<\glsxtrMathItalicNu
14350 \string;\glsxtrUpNu
14351 \string<\glsxtrMathItalicXi
14352 \string;\glsxtrUpXi
14353 \string<\glsxtrMathItalicOmicron
14354 \string;\glsxtrUpOmicron
14355 \string<\glsxtrMathItalicPi
14356 \string;\glsxtrUpPi
14357 \string<\glsxtrMathItalicRho
14358 \string;\glsxtrUpRho
14359 \string<\glsxtrMathItalicSigma
14360 \string;\glsxtrUpSigma
14361 \string<\glsxtrMathItalicTau
14362 \string;\glsxtrUpTau
14363 \string<\glsxtrMathItalicUpsilon
14364 \string;\glsxtrUpUpsilon
14365 \string<\glsxtrMathItalicPhi
14366 \string;\glsxtrUpPhi
14367 \string<\glsxtrMathItalicChi
14368 \string;\glsxtrUpChi
14369 \string<\glsxtrMathItalicPsi
14370 \string;\glsxtrUpPsi
14371 \string<\glsxtrMathItalicOmega
14372 \string;\glsxtrUpOmega
14373 }

```

\glsxtrUpAlpha

```

14374 \newcommand*\glsxtrUpAlpha}{%
14375 \glshex 03B1,% lower case alpha
14376 \glshex 0391% upper case alpha

```

```

14377 }

\glsxtrUpBeta
14378 \newcommand*{\glsxtrUpBeta}{%
14379 \glshex{03B2},% lower case beta
14380 \glshex{0392}% upper case beta
14381 }

\glsxtrUpGamma
14382 \newcommand*{\glsxtrUpGamma}{%
14383 \glshex{03B3},% lower case gamma
14384 \glshex{0393}% upper case gamma
14385 }

\glsxtrUpDelta
14386 \newcommand*{\glsxtrUpDelta}{%
14387 \glshex{03B4},% lower case delta
14388 \glshex{0394}% upper case delta
14389 }

glsxtrUpEpsilon
14390 \newcommand*{\glsxtrUpEpsilon}{%
14391 \glshex{03B5},% lower case epsilon
14392 \string=\glshex{03F5},% lower case epsilon variant
14393 \glshex{0395}% upper case epsilon
14394 }

glsxtrUpDigamma
14395 \newcommand*{\glsxtrUpDigamma}{%
14396 \glshex{03DD},% lower case digamma
14397 \glshex{03DC}% upper case digamma
14398 }

\glsxtrUpZeta
14399 \newcommand*{\glsxtrUpZeta}{%
14400 \glshex{03B6},% lower case zeta
14401 \glshex{0396}% upper case zeta
14402 }

\glsxtrUpEta
14403 \newcommand*{\glsxtrUpEta}{%
14404 \glshex{03B7},% lower case eta
14405 \glshex{0397}% upper case eta
14406 }

\glsxtrUpTheta
14407 \newcommand*{\glsxtrUpTheta}{%
14408 \glshex{03B8}% lower case theta

```

```

14409 \string=\glshex 03D1,% lower case theta variant
14410 \glshex 0398% upper case theta
14411 }

\glsxtrUpIota
14412 \newcommand*\glsxtrUpIota{%
14413 \glshex 03B9,% lower case iota
14414 \glshex 0399% upper case iota
14415 }

\glsxtrUpKappa
14416 \newcommand*\glsxtrUpKappa{%
14417 \glshex 03BA% lower case kappa
14418 \string=\glshex 03F0,% lower case kappa variant
14419 \glshex 039A% upper case kappa
14420 }

\glsxtrUpLambda
14421 \newcommand*\glsxtrUpLambda{%
14422 \glshex 03BB,% lower lambda
14423 \glshex 039B% upper case lambda
14424 }

\glsxtrUpMu
14425 \newcommand*\glsxtrUpMu{%
14426 \glshex 03BC,% lower case mu
14427 \glshex 039C% upper case mu
14428 }

\glsxtrUpNu
14429 \newcommand*\glsxtrUpNu{%
14430 \glshex 03BD,% lower case nu
14431 \glshex 039D% upper case nu
14432 }

\glsxtrUpXi
14433 \newcommand*\glsxtrUpXi{%
14434 \glshex 03BE,% lower case xi
14435 \glshex 039E% upper case xi
14436 }

glsxtrUpOmicron
14437 \newcommand*\glsxtrUpOmicron{%
14438 \glshex 03BF,% lower case omicron
14439 \glshex 039F% upper case omicron
14440 }

```

```

\glsxtrUpPi
14441 \newcommand*{\glsxtrUpPi}{%
14442   \glshex{03C0} lower case pi
14443   \string=\glshex{03D6},% lower case pi variant
14444   \glshex{03A0} upper case pi
14445 }

\glsxtrUpRho
14446 \newcommand*{\glsxtrUpRho}{%
14447   \glshex{03C1} lower case rho
14448   \string=\glshex{03F1},% lower case rho variant
14449   \glshex{03A1} upper case rho
14450 }

\glsxtrUpSigma
14451 \newcommand*{\glsxtrUpSigma}{%
14452   \glshex{03C2} lower case sigma
14453   \string=\glshex{03C3},% lower case sigma
14454   \glshex{03A3} upper case sigma
14455 }

\glsxtrUpTau
14456 \newcommand*{\glsxtrUpTau}{%
14457   \glshex{03C4},% lower case tau
14458   \glshex{03A4} upper case tau
14459 }

glsxtrUpUpsilon
14460 \newcommand*{\glsxtrUpUpsilon}{%
14461   \glshex{03C5},% lower case upsilon
14462   \glshex{03A5} upper case upsilon
14463 }

\glsxtrUpPhi
14464 \newcommand*{\glsxtrUpPhi}{%
14465   \glshex{03C6} lower case phi
14466   \string=\glshex{03D5},% lower case phi variant
14467   \glshex{03A6} upper case phi
14468 }

\glsxtrUpChi
14469 \newcommand*{\glsxtrUpChi}{%
14470   \glshex{03C7},% lower case chi
14471   \glshex{03A7} upper case chi
14472 }

\glsxtrUpPsi
14473 \newcommand*{\glsxtrUpPsi}{%

```

```

14474 \glshex 03C8,% lower case psi
14475 \glshex 03A8% upper case psi
14476 }

\glsxtrUpOmega
14477 \newcommand*\glsxtrUpOmega{%
14478 \glshex 03C9,% lower case omega
14479 \glshex 03A9% upper case omega
14480 }

MathItalicAlpha
14481 \newcommand*\glsxtrMathItalicAlpha{%
14482 \glshex 1D6FC,% lower case alpha (maths italic)
14483 \glshex 1D6E2% upper case alpha (maths italic)
14484 }

rMathItalicBeta
14485 \newcommand*\glsxtrMathItalicBeta{%
14486 \glshex 1D6FD,% lower case beta (maths italic)
14487 \glshex 1D6E3% upper case beta (maths italic)
14488 }

MathItalicGamma
14489 \newcommand*\glsxtrMathItalicGamma{%
14490 \glshex 1D6FE,% lower case gamma (maths italic)
14491 \glshex 1D6E4% upper case gamma (maths italic)
14492 }

MathItalicDelta
14493 \newcommand*\glsxtrMathItalicDelta{%
14494 \glshex 1D6FF,% lower case delta (maths italic)
14495 \glshex 1D6E5% upper case delta (maths italic)
14496 }

thItalicEpsilon
14497 \newcommand*\glsxtrMathItalicEpsilon{%
14498 \glshex 1D700% lower case epsilon (maths italic)
14499 \string=\glshex 1D716,% lower case epsilon variant (maths italic)
14500 \glshex 1D6E6% upper case epsilon (maths italic)
14501 }

rMathItalicZeta
14502 \newcommand*\glsxtrMathItalicZeta{%
14503 \glshex 1D701,% lower case zeta (maths italic)
14504 \glshex 1D6E7% upper case zeta (maths italic)
14505 }

```

```

trMathItalicEta
14506 \newcommand*{\glsxtrMathItalicEta}{%
14507  \glshex 1D702,% lower case eta (maths italic)
14508  \glshex 1D6E8% upper case eta (maths italic)
14509 }

MathItalicTheta
14510 \newcommand*{\glsxtrMathItalicTheta}{%
14511  \glshex 1D703% lower case theta (maths italic)
14512  \string=\glshex 1D717,% lower case theta variant (maths italic)
14513  \glshex 1D6E9% upper case theta (maths italic)
14514  \string=\glshex 1D6F3% upper case theta variant (maths italic)
14515 }

rMathItalicIota
14516 \newcommand*{\glsxtrMathItalicIota}{%
14517  \glshex 1D704,% lower case iota (maths italic)
14518  \glshex 1D6EA% upper case iota (maths italic)
14519 }

MathItalicKappa
14520 \newcommand*{\glsxtrMathItalicKappa}{%
14521  \glshex 1D705% lower case kappa (maths italic)
14522  \string=\glshex 1D718,% lower case kappa variant (maths italic)
14523  \glshex 1D6EB% upper case kappa (maths italic)
14524 }

athItalicLambda
14525 \newcommand*{\glsxtrMathItalicLambda}{%
14526  \glshex 1D706,% lower case lambda (maths italic)
14527  \glshex 1D6EC% upper case lambda (maths italic)
14528 }

xtrMathItalicMu
14529 \newcommand*{\glsxtrMathItalicMu}{%
14530  \glshex 1D707,% lower case mu (maths italic)
14531  \glshex 1D6ED% upper case mu (maths italic)
14532 }

xtrMathItalicNu
14533 \newcommand*{\glsxtrMathItalicNu}{%
14534  \glshex 1D708,% lower case nu (maths italic)
14535  \glshex 1D6EE% upper case nu (maths italic)
14536 }

xtrMathItalicXi
14537 \newcommand*{\glsxtrMathItalicXi}{%
14538  \glshex 1D709,% lower case xi (maths italic)

```

```

14539 \glshex 1D6EF% upper case xi (maths italic)
14540 }

thItalicOmicron
14541 \newcommand*{\glsxtrMathItalicOmicron}{%
14542 \glshex 1D70A,% lower case omicron (maths italic)
14543 \glshex 1D6F0% upper case omicron (maths italic)
14544 }

xtrMathItalicPi
14545 \newcommand*{\glsxtrMathItalicPi}{%
14546 \glshex 1D70B% lower case pi (maths italic)
14547 \string=\glshex 1D71B,% lower case pi variant (maths italic)
14548 \glshex 1D6F1% upper case pi (maths italic)
14549 }

trMathItalicRho
14550 \newcommand*{\glsxtrMathItalicRho}{%
14551 \glshex 1D70C% lower case rho (maths italic)
14552 \string=\glshex 1D71A,% lower case rho variant (maths italic)
14553 \glshex 1D6F2% upper case rho (maths italic)
14554 }

MathItalicSigma
14555 \newcommand*{\glsxtrMathItalicSigma}{%
14556 \glshex 1D70D% lower case final sigma (maths italic)
14557 \string=\glshex 1D70E,% lower case sigma (maths italic)
14558 \glshex 1D6F4% upper case sigma (maths italic)
14559 }

trMathItalicTau
14560 \newcommand*{\glsxtrMathItalicTau}{%
14561 \glshex 1D70F,% lower case tau (maths italic)
14562 \glshex 1D6F5% upper case tau (maths italic)
14563 }

thItalicUpsilon
14564 \newcommand*{\glsxtrMathItalicUpsilon}{%
14565 \glshex 1D710,% lower case upsilon (maths italic)
14566 \glshex 1D6F6% upper case upsilon (maths italic)
14567 }

trMathItalicPhi
14568 \newcommand*{\glsxtrMathItalicPhi}{%
14569 \glshex 1D711% lower case phi (maths italic)
14570 \string=\glshex 1D719,% lower case phi variant (maths italic)
14571 \glshex 1D6F7% upper case phi (maths italic)
14572 }

```

```
trMathItalicChi
14573 \newcommand*{\glsxtrMathItalicChi}{%
14574 \glshex 1D712,% lower case chi (maths italic)
14575 \glshex 1D6F8% upper case chi (maths italic)
14576 }
```

```
trMathItalicPsi
14577 \newcommand*{\glsxtrMathItalicPsi}{%
14578 \glshex 1D713,% lower case psi (maths italic)
14579 \glshex 1D6F9% upper case psi (maths italic)
14580 }
```

```
MathItalicOmega
14581 \newcommand*{\glsxtrMathItalicOmega}{%
14582 \glshex 1D714,% lower case omega (maths italic)
14583 \glshex 1D6FA% upper case omega (maths italic)
14584 }
```

```
thItalicPartial
14585 \newcommand*{\glsxtrMathItalicPartial}{%
14586 \glshex 1D715% partial differential (maths italic)
14587 }
```

```
MathItalicNabla
14588 \newcommand*{\glsxtrMathItalicNabla}{%
14589 \glshex 1D6FB% nabla (maths italic)
14590 }
```

lsxtrdigirules Digits from the Basic Latin set and subscript and superscript digit rules.

```
14591 \newcommand*{\glsxtrdigirules}{%
14592 0\string=\glshex 2080\string=\glshex 2070
14593 \string<1\string=\glshex 2081\string=\glshex 00B9
14594 \string<2\string=\glshex 2082\string=\glshex 00B2
14595 \string<3\string=\glshex 2083\string=\glshex 00B3
14596 \string<4\string=\glshex 2084\string=\glshex 2074
14597 \string<5\string=\glshex 2085\string=\glshex 2075
14598 \string<6\string=\glshex 2086\string=\glshex 2076
14599 \string<7\string=\glshex 2087\string=\glshex 2077
14600 \string<8\string=\glshex 2088\string=\glshex 2078
14601 \string<9\string=\glshex 2089\string=\glshex 2079
14602 }
```

BasicDigirules Digits from the Basic Latin set.

```
14603 \newcommand*{\glsxtrBasicDigirules}{%
14604 0\string<1\string<2\string<3\string<4%
14605 \string<5\string<6\string<7\string<8\string<9%
14606 }
```

criptDigitrules Subscript digits.

```
14607 \newcommand{\glsxtrSubScriptDigitrules}{%
14608 \glshex 2080% subscript 0
14609 \string<\glshex 2081% subscript 1
14610 \string<\glshex 2082% subscript 2
14611 \string<\glshex 2083% subscript 3
14612 \string<\glshex 2084% subscript 4
14613 \string<\glshex 2085% subscript 5
14614 \string<\glshex 2086% subscript 6
14615 \string<\glshex 2087% subscript 7
14616 \string<\glshex 2088% subscript 8
14617 \string<\glshex 2089% subscript 9
14618 }
```

criptDigitrules Superscript digits.

```
14619 \newcommand{\glsxtrSuperScriptDigitrules}{%
14620 \glshex 2070% superscript 0
14621 \string<\glshex 00B9% superscript 1
14622 \string<\glshex 00B2% superscript 2
14623 \string<\glshex 00B3% superscript 3
14624 \string<\glshex 2074% superscript 4
14625 \string<\glshex 2075% superscript 5
14626 \string<\glshex 2076% superscript 6
14627 \string<\glshex 2077% superscript 7
14628 \string<\glshex 2078% superscript 8
14629 \string<\glshex 2079% superscript 9
14630 }
```

trfractionrules Vulgar fractions.

```
14631 \newcommand{\glsxtrfractionrules}{%
14632 \glshex 215F% fraction numerator one (1/)
14633 \string<\glshex 2189% zero thirds (0/3 = 0)
14634 \string<\glshex 2152% one tenth (1/10 = 0.1)
14635 \string<\glshex 2151% one ninth (1/9 ~ 0.111)
14636 \string<\glshex 215B% one eighth (1/8 = 0.125)
14637 \string<\glshex 2150% one seventh (1/7 ~ 0.143)
14638 \string<\glshex 2159% one sixth (1/6 ~ 0.167)
14639 \string<\glshex 2155% one fifth (1/5 = 0.2)
14640 \string<\glshex 00BC% one quarter (1/4 = 0.25)
14641 \string<\glshex 2153% one third (1/3 ~ 0.333)
14642 \string<\glshex 215C% three eighths (3/8 = 0.375)
14643 \string<\glshex 2156% two fifths (2/5 = 0.4)
14644 \string<\glshex 00BD% one half (1/2 = 0.5)
14645 \string<\glshex 2157% three fifths (3/5 = 0.6)
14646 \string<\glshex 215D% five eighths (5/8 = 0.625)
14647 \string<\glshex 2154% two thirds (2/3 ~ 0.667)
14648 \string<\glshex 00BE% three quarters (3/4 = 0.75)
14649 \string<\glshex 2158% four fifths (4/5 = 0.8)
14650 \string<\glshex 215A% five sixths (5/6 ~ 0.833)
```

```

14651 \string<\glshex 215E% seven eighths (7/8 = 0.875)
14652 }

sxtrdialecthook Check for scripts associated with the document dialects.

14653 \renewcommand{\@glsxtrdialecthook}{%
14654 \ifundef\CurrentTrackedScript
14655 {%
14656 \TrackLangIfHasDefaultScript{\CurrentTrackedLanguage}%
14657 {%
14658 \edef\CurrentTrackedScript{%
14659 \TrackLangGetDefaultScript\CurrentTrackedLanguage}%
14660 {%
14661 {}}%
14662 }%
14663 {}}%
14664 \ifdef\CurrentTrackedScript
14665 {%
14666 \let\gls@orgTrackLangRequireDialectPrefix\TrackLangRequireDialectPrefix
14667 \def\TrackLangRequireDialectPrefix{glossariesxtr-}%
14668 \let\CurrentTrackedTag\CurrentTrackedScript
14669 \IfExists{\TrackLangRequireDialectPrefix\CurrentTrackedTag.1df}
14670 {\RequireGlossariesExtraLang{\CurrentTrackedTag}}%
14671 {}}%
14672 \let\TrackLangRequireDialectPrefix\gls@orgTrackLangRequireDialectPrefix
14673 {%
14674 {}}%
14675 }

```

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.

```

14676 \ifdef\glsxtr@loaddialect
14677 {%
14678 \c@ifpackageloaded{tracklang}
14679 {%
14680 \AnyTrackedLanguages
14681 {%
14682 \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
14683 {%
14684 {}}%
14685 }%
14686 {}%
14687 }%
14688 {}

```

## 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:

```
14689 \NeedsTeXFormat{LaTeX2e}
14690 \ProvidesPackage{glossaries-extra-stylemods}[2020/04/01 v1.45 (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
14691 \newcommand*\{@glsxtr@loadstyles}{}%
```

all Provide all known styles.

```
14692 \DeclareOption{all}{%
14693   \appto\@glsxtr@loadstyles{%
14694     \RequirePackage{glossary-inline}%
14695     \RequirePackage{glossary-list}%
14696     \RequirePackage{glossary-tree}%
14697     \RequirePackage{glossary-mcols}%
14698     \RequirePackage{glossary-long}%
14699     \RequirePackage{glossary-longragged}%
14700     \RequirePackage{glossary-longbooktabs}%
14701     \RequirePackage{glossary-super}%
14702     \RequirePackage{glossary-superragged}%
14703     \RequirePackage{glossary-bookindex}%
14704     \RequirePackage{glossary-longextra}%
14705     \RequirePackage{glossary-topic}%
14706   }
14707 }

14708 \DeclareOption*{%
14709   \IfFileExists{glossary-\CurrentOption.sty}%
14710   {\appto\@glsxtr@loadstyles{%
14711     \noexpand\RequirePackage{glossary-\CurrentOption}}%
14712   }%
```

```

14713     {%
14714         \PackageError{glossaries-extra-styles}{%
14715             {Unknown option '\CurrentOption'}{}%
14716         }%
14717     }

```

Process the package options:

```
14718 \ProcessOptions
```

Load the required packages:

```
14719 \@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`.

```
14720 \providecommand*\{@glsxtrprelocation}{\space}
```

In case we have an old version of `glossaries`:

`ewglossarystyle`

```

14721 \providecommand{\renewglossarystyle}[2]{%
14722     \ifcsundef{@glsstyle@#1}{%
14723         {%
14724             \PackageError{glossaries-extra}{Glossary style '#1' isn't already defined}{}%
14725         }%
14726         {%
14727             \csdef{@glsstyle@#1}{#2}%
14728         }%
14729     }

```

## 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.

```

14730 \ifdef{@glsstyle@listdotted}%
14731 {%
14732     \renewglossarystyle{listdotted}{%
14733         \setglossarystyle{list}{%
14734             \renewcommand*\{@glossentry}{[2]{%
14735                 \item[]\makebox[\glslistdottedwidth][1]{%
14736                     \glsentryitem{##1}{%
14737                         \glstarget{##1}{\glossentryname{##1}}{%
14738                             \unskip\leaders\hbox to 2.9mm{\hss.\hfill\strut}}{%
14739                             \glossentrydesc{##1}\glspostdescription}%
14740                         \renewcommand*\{@subglossentry}{[3]{%
14741                             \item[]\makebox[\glslistdottedwidth][1]{%
14742                                 \glssubentryitem{##2}{%
14743                                     \glstarget{##2}{\glossentryname{##2}}{%
14744                                         \unskip\leaders\hbox to 2.9mm{\hss.\hfill\strut}}%

```

```
14745     \glossentrydesc{##2}\glspostdescription}%
14746 }
14747 }
14748 {%
```

Assume the style isn't required if it hasn't already been defined.

```
14749 }
```

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.

```
14750 \ifdef{\@glsstyle@list}
14751 {%
```

listprelocation Space before number list for top-level entries.

```
14752 \newcommand{\glslistprelocation}{\glsxtrprelocation}
```

childprelocation Space before number list for child entries.

```
14753 \newcommand{\glslistchildprelocation}{\glslistprelocation}
```

childpostlocation Full stop after number list.

```
14754 \newcommand{\glslistchildpostlocation}{.}
```

\glslistdesc

```
14755 \newcommand{\glslistdesc}[1]{\glossentrydesc{#1}\glspostdescription}
```

listgroupskip

```
14756 \newcommand{\glslistgroupskip}{\nobreak\indexspace\nobreak}
```

Redefine list to use these commands.

```
14757 \renewglossarystyle{list}{%
14758   \renewenvironment{theglossary}{%
14759     {\begin{description}}{\end{description}}%
14760     \renewcommand*{\glossaryheader}{\%}%
14761     \renewcommand*{\glsgroupheading}[1]{\%}%
14762     \renewcommand*{\glossentry}[2]{%
14763       \item[\glsentryitem{##1}%
14764         \glstarget{##1}{\glossentryname{##1}}]%
14765         \glslistdesc{##1}\glslistprelocation ##2\%}%
14766     \renewcommand*{\subglossentry}[3]{%
14767       \glssubentryitem{##2}\%
14768       \glstarget{##2}{\strut}\space%
14769       \glslistdesc{##2}\%
14770       \glslistchildprelocation ##3\glslistchildpostlocation\%}%
14771     \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glslistgroupskip\fi}\%
14772   }%
14773 }%
14774 {}
```

Similarly for altlist. Since it requires list, the new commands should have been defined above.

```
14775 \ifdef{@glsstyle@altlist}
14776 {%
14777   \renewglossarystyle{altlist}{%
14778     \setglossarystyle{list}%
14779     \renewcommand*\glossentry[2]{%
1480       \item[\glsentryitem{##1}%
1481         \glstarget{##1}{\glossentryname{##1}}]%
1482         \mbox{}\par\nobreak\@afterheading
1483         \glslistdesc{##1}\glslistprelocation ##2}%
1484       \renewcommand*\subglossentry[3]{%
1485         \par
1486         \glssubentryitem{##2}%
1487         \glstarget{##2}{\strut}\glslistdesc{##2}%
1488         \glslistchildprelocation ##3}%
1489     }%
1490   }%
1491 }
```

Redefine listgroup so that it discourages a break after group headings.

```
14792 \ifdef{@glsstyle@listgroup}
14793 {%
14794   \renewglossarystyle{listgroup}{%
14795     \setglossarystyle{list}%
14796     \renewcommand*\glsgroupheading[1]{%
14797       \item[\glslistgroupheaderfmt{\glsgetgroup{##1}}]%
14798         \mbox{}\par\nobreak\@afterheading
14799     }%
14800   }%
14801 }%
14802 }
```

Similarly for listhypergroup.

```
14803 \ifdef{@glsstyle@listhypergroup}
14804 {%
14805   \renewglossarystyle{listhypergroup}{%
14806     \setglossarystyle{list}%
14807     \renewcommand*\glossaryheader{%
14808       \glslistnavigationitem{\glsnavigation}%
14809     }%
14810     \renewcommand*\glsgroupheading[1]{%
14811       \item[\glslistgroupheaderfmt
14812         {\glsnavhypertarget{##1}{\glsgetgroup{##1}}}]%
14813         \mbox{}\par\nobreak\@afterheading
14814     }%
14815   }%
14816 }
```

Similarly for altlistgroup.

```
14817 \ifdef{@glsstyle@altlistgroup}
```

```

14818 {%
14819   \renewglossarystyle{altlistgroup}{%
14820     \setglossarystyle{altlist}%
14821     \renewcommand*{\glsgroupheading}[1]{%
14822       \item[\glsgroupheaderfmt{\glsgetgrouptitle{##1}}]%
14823       \mbox{}\par\nobreak\@afterheading
14824     }%
14825   }
14826 }
14827 {}
```

Similarly for `altlisthypergroup`.

```

14828 \ifdef{@glsstyle@altlisthypergroup}
14829 {%
14830   \renewglossarystyle{altlisthypergroup}{%
14831     \setglossarystyle{altlist}%
14832     \renewcommand*{\glossaryheader}{%
14833       \glstlistnavigationitem{\glsnavigation}}%
14834     \renewcommand*{\glsgroupheading}[1]{%
14835       \item[\glsgroupheaderfmt
14836         {\glshavhypertarget{##1}{\glsgetgrouptitle{##1}}}]%
14837       \mbox{}\par\nobreak\@afterheading
14838     }%
14839   }
14840 }
14841 {}
```

## 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`.

```

14842 \ifcsdef@glsstyle@long}
14843 {%
14844   \renewglossarystyle{long}{%
14845     \renewenvironment{theglossary}{%
14846       {\begin{longtable}{lp{\glsdescwidth}}}%
14847       {\end{longtable}}%
14848     \renewcommand*{\glossaryheader}{}%
14849     \renewcommand*{\glsgroupheading}[1]{}%
14850     \renewcommand{\glossentry}[2]{%
14851       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14852       \glossentrydesc{##1}\glspostdescription
14853       \glsxtrprelocation ##2\tabularnewline
14854     }%
14855     \renewcommand{\subglossentry}[3]{%
14856       &
14857       \glssubentryitem{##2}%
14858       \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
14859     }%
14860   }%
```

```

14859      \glsxtrprelocation ##3\tabularnewline
14860  }%
14861  \ifglsnogroupskip
14862    \renewcommand*\glsgroupskip{}%
14863  \else
14864    \renewcommand*\glsgroupskip{\& \tabularnewline}%
14865  \fi
14866 }
14867 }
14868 {}

```

Three column style:

```

14869 \ifcsdef{@glsstyle@long3col}
14870 {%
14871  \renewglossarystyle{long3col}{%
14872    \renewenvironment{theglossary}{%
14873      {\begin{longtable}{lp{\glsdescwidth}p{\glspagelistwidth}}}%
14874      {\end{longtable}}%
14875      \renewcommand*\glossaryheader{}%
14876      \renewcommand*\glsgroupheading[1]{}%
14877      \renewcommand{\glossentry}[2]{%
14878        \glsentryitem{\#1}\glstarget{\#1}{\glossentryname{\#1}} \&
14879        \glossentrydesc{\#1}\glspostdescription \& ##2\tabularnewline
14880      }%
14881      \renewcommand{\subglossentry}[3]{%
14882        \&
14883        \glssubentryitem{\#2}%
14884        \glstarget{\#2}{\strut}\glossentrydesc{\#2}\glspostdescription \&
14885        ##3\tabularnewline
14886      }%

```

Conditional needs to be outside of \glsgroupskip otherwise it can cause “Incomplete \iftrue” errors.

```

14887 \ifglsnogroupskip
14888   \renewcommand*\glsgroupskip{}%
14889 \else
14890   \renewcommand*\glsgroupskip{\& \tabularnewline}%
14891 \fi
14892 }
14893 }
14894 {}

```

Four column style:

```

14895 \ifcsdef{@glsstyle@long4col}
14896 {%
14897  \renewglossarystyle{long4col}{%
14898    \renewenvironment{theglossary}{%
14899      {\begin{longtable}{llll}}%
14900      {\end{longtable}}%
14901      \renewcommand*\glossaryheader{}%
14902      \renewcommand*\glsgroupheading[1]{}%

```

```

14903 \renewcommand{\glossentry}[2]{%
14904     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14905     \glossentrydesc{##1}\glspostdescription &
14906     \glossentrysymbol{##1} &
14907     ##2\tabularnewline
14908 }%
14909 \renewcommand{\subglossentry}[3]{%
14910     &
14911     \glssubentryitem{##2}%
14912     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
14913     \glossentrysymbol{##2} & ##3\tabularnewline
14914 }%
14915 \ifglsnogroupskip
14916     \renewcommand*\glsgroupskip{}%
14917 \else
14918     \renewcommand*\glsgroupskip{& & &\tabularnewline}%
14919 \fi
14920 }
14921 }
14922 {}
```

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`.

```

14923 \ifcsdef@glsstyle@longragged}%
14924 }%
14925 \renewglossarystyle{longragged}{%
14926     \renewenvironment{theglossary}%
14927         {\begin{longtable}{l>\raggedright p{\glsdescwidth}}}%
14928         {\end{longtable}}%
14929     \renewcommand*\glossaryheader{}%
14930     \renewcommand*\glsgroupheading[1]{}%
14931     \renewcommand{\glossentry}[2]{%
14932         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14933         \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
14934         \tabularnewline
14935 }%
14936     \renewcommand{\subglossentry}[3]{%
14937         &
14938         \glssubentryitem{##2}%
14939         \glstarget{##2}{\strut}\glossentrydesc{##2}%
14940         \glspostdescription\glsxtrprelocation ##3%
14941         \tabularnewline
```

```

14942    }%
14943    \ifglsnogroupskip
14944        \renewcommand*\glsgroupskip{}%
14945    \else
14946        \renewcommand*\glsgroupskip{\& \tabularnewline}%
14947    \fi
14948 }
14949 }
14950 {}

```

Three and four column styles don't use \glsxtrprelocation since the number list is in its own column.

```

14951 \ifcsdef{@glsstyle@longragged3col}%
14952 {%
14953     \renewglossarystyle{longragged3col}{%
14954         \renewenvironment{theglossary}{%
14955             {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}{%
14956                 >{\raggedright}p{\glspagelistwidth}}}%
14957             {\end{longtable}}{%
14958                 \renewcommand*\glossaryheader{}{%
14959                     \renewcommand*\glsgroupheading[1]{%
14960                         \renewcommand{\glossentry}[2]{%
14961                             \glsentryitem{\#\#1}\glstarget{\#\#1}{\glossentryname{\#\#1}} &
14962                             \glossentrydesc{\#\#1}\glspostdescription & ##2\tabularnewline
14963                         }%
14964                         \renewcommand{\subglossentry}[3]{%
14965                             &
14966                             \glssubentryitem{\#\#2}%
14967                             \glstarget{\#\#2}{\strut}\glossentrydesc{\#\#2}\glspostdescription &
14968                             ##3\tabularnewline
14969                         }%
14970                         \ifglsnogroupskip
14971                             \renewcommand*\glsgroupskip{}{%
14972                         \else
14973                             \renewcommand*\glsgroupskip{\& \tabularnewline}%
14974                         \fi
14975                     }%
14976                 }%
14977             {}}

```

Four column style:

```

14978 \ifcsdef{@glsstyle@altlongragged4col}%
14979 {%
14980     \renewglossarystyle{altlongragged4col}{%
14981         \renewenvironment{theglossary}{%
14982             {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}l}{%
14983                 >{\raggedright}p{\glspagelistwidth}}}%
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 & \glossentrysymbol{##1} &
14990     ##2\tabularnewline
14991 }%
14992 \renewcommand{\subglossentry}[3]{%
14993     &
14994     \glssubentryitem{##2}%
14995     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
14996     \glossentrysymbol{##2} & ##3\tabularnewline
14997 }%
14998 \ifglsnogroupskip
14999     \renewcommand*\glsgroupskip}{}%
15000 \else
15001     \renewcommand*\glsgroupskip}{\& \& \tabularnewline}%
15002 \fi
15003 }
15004 }
15005 {}
```

## 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`.

```

15006 \ifcsdef{@glsstyle@super}%
15007 {%
15008     \renewglossarystyle{super}{%
15009         \renewenvironment{theglossary}%
15010             {\tablehead{}\tabletail{}%
15011             \begin{supertabular}{lp{\glsdescwidth}}%
15012             \end{supertabular}}%
15013             \renewcommand*\glossaryheader}{}%
15014             \renewcommand*\glsgroupheading}[1]{%
15015             \renewcommand{\glossentry}[2]{%
15016                 \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
15017                 \glossentrydesc{##1}\glspostdescription
15018                 \glsxtrprelocation ##2\tabularnewline
15019 }%
15020             \renewcommand{\subglossentry}[3]{%
15021                 &
15022                 \glssubentryitem{##2}%
15023                 \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
15024                 \glsxtrprelocation ##3\tabularnewline
15025 }%
15026 \ifglsnogroupskip
15027     \renewcommand*\glsgroupskip}{}%
```

```

15028     \else
15029         \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
15030     \fi
15031 }
15032 }
15033 {}

```

Three column style:

```

15034 \ifcsdef{@glsstyle@super3col}%
15035 {%
15036     \renewglossarystyle{super3col}{%
15037         \renewenvironment{theglossary}{%
15038             {\tablehead{}\tabletail{}}%
15039             \begin{supertabular}{lp{\glsdescwidth}p{\glspagelistwidth}}}%
15040             {\end{supertabular}}%
15041             \renewcommand*{\glossaryheader}{\%}
15042             \renewcommand*{\glsgroupheading}[1]{\%}
15043             \renewcommand{\glossentry}[2]{\%
15044                 \glsentryitem{\#\#1}\glstarget{\#\#1}{\glossentryname{\#\#1}} &
15045                 \glossentrydesc{\#\#1}\glspostdescription & \#\#2\tabularnewline
15046             }%
15047             \renewcommand{\subglossentry}[3]{\%
15048                 &
15049                 \glssubentryitem{\#\#2}%
15050                 \glstarget{\#\#2}{\strut}\glossentrydesc{\#\#2}\glspostdescription &
15051                 \#\#3\tabularnewline
15052             }%
15053             \ifglsnogroupskip
15054                 \renewcommand*{\glsgroupskip}{\%}%
15055             \else
15056                 \renewcommand*{\glsgroupskip}{\& \&\tabularnewline}%
15057             \fi
15058 }
15059 }
15060 {}

```

Four column styles:

```

15061 \ifcsdef{@glsstyle@super4col}%
15062 {%
15063     \renewglossarystyle{super4col}{%
15064         \renewenvironment{theglossary}{%
15065             {\tablehead{}\tabletail{}}%
15066             \begin{supertabular}{llll}\%}
15067             {\end{supertabular}}%
15068             \renewcommand*{\glossaryheader}{\%}
15069             \renewcommand*{\glsgroupheading}[1]{\%}
15070             \renewcommand{\glossentry}[2]{\%
15071                 \glsentryitem{\#\#1}\glstarget{\#\#1}{\glossentryname{\#\#1}} &
15072                 \glossentrydesc{\#\#1}\glspostdescription \&

```

```

15073     \glossentrysymbol{##1} & ##2\tabularnewline
15074 }%
15075 \renewcommand{\subglossentry}[3]{%
15076     &
15077     \glssubentryitem{##2}%
15078     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
15079     \glossentrysymbol{##2} & ##3\tabularnewline
15080 }%
15081 \ifglsnogroupskip
15082     \renewcommand*{\glsgroupskip}{}%
15083 \else
15084     \renewcommand*{\glsgroupskip}{\& \&\tabularnewline}%
15085 \fi
15086 }
15087 }
15088 {}
```

## 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`.

```

15089 \ifcsdef{@glsstyle@superragged}%
15090 {}%
15091 \renewglossarystyle{superragged}{%
15092     \renewenvironment{theglossary}%
15093     {\tablehead{}\tabletail{}%
15094     \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}}%
15095     \end{supertabular}%
15096     \renewcommand*{\glossaryheader}{}%
15097     \renewcommand*{\glsgroupheading}[1]{}%
15098     \renewcommand{\glossentry}[2]{%
15099         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
15100         \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
15101         \tabularnewline
15102     }%
15103     \renewcommand{\subglossentry}[3]{%
15104         &
15105         \glssubentryitem{##2}%
15106         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
15107         \glsxtrprelocation ##3%
15108         \tabularnewline
15109     }%
15110 \ifglsnogroupskip
15111     \renewcommand*{\glsgroupskip}{}%
15112 \else
15113     \renewcommand*{\glsgroupskip}{\& \tabularnewline}%

```

```

15114     \fi
15115 }
15116 }
15117 {}

Three column style:

15118 \ifcsdef{@glsstyle@superragged3col}
15119 {%
15120   \renewglossarystyle{superragged3col}{%
15121     \renewenvironment{theglossary}{%
15122       {\tablehead{}\tabletail{}{%
15123         \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}%
15124           >{\raggedright}p{\glspagelistwidth}}}}{%
15125         \end{supertabular}}{%
15126         \renewcommand*\glossaryheader{}{%
15127           \renewcommand*\glsgroupheading}[1]{%
15128             \renewcommand{\glossentry}[2]{%
15129               \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
15130               \glossentrydesc{##1}\glspostdescription &
15131               ##2\tabularnewline
15132             }{%
15133               \renewcommand{\subglossentry}[3]{%
15134                 &
15135                   \glssubentryitem{##2}{%
15136                     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
15137                     ##3\tabularnewline
15138               }{%
15139                 \ifglsnogroupskip
15140                   \renewcommand*\glsgroupskip{}{%
15141                 \else
15142                   \renewcommand*\glsgroupskip{ & &\tabularnewline}{%
15143                 \fi
15144               }{%
15145             }{%
15146           }

```

Four columns:

```

15147 \ifcsdef{@glsstyle@altsuperragged4col}
15148 {%
15149   \renewglossarystyle{altsuperragged4col}{%
15150     \renewenvironment{theglossary}{%
15151       {\tablehead{}\tabletail{}{%
15152         \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}}}}{%
15153         \end{supertabular}}{%
15154         \renewcommand*\glossaryheader{}{%
15155           \renewcommand{\glossentry}[2]{%
15156             \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
15157             \glossentrydesc{##1}\glspostdescription &
```

```

15159      \glossentrysymbol{##1} & ##2\tabularnewline
15160  }%
15161  \renewcommand{\subglossentry}[3]{%
15162    &
15163    \glssubentryitem{##2}%
15164    \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
15165    \glossentrysymbol{##2} & ##3\tabularnewline
15166  }%
15167  \ifglsnogroupskip
15168    \renewcommand*{\glsgroupskip}{}%
15169  \else
15170    \renewcommand*{\glsgroupskip}{\& \& \&\tabularnewline}%
15171  \fi
15172 }
15173 }
15174 {}
```

## 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`.

```

15175 \ifdef{@glsstyle@inline}
15176 {%
15177   \renewcommand*{\glspostinline}{.\spacefactor\sfcodespace}%
Just use \glsxtrpostdescription instead of \glspostdescription.
15178   \renewcommand*{\glsinlinedescformat}[3]{%
15179     \space#1\glsxtrpostdescription}
15180   \renewcommand*{\glsinlinesubdescformat}[3]{%
15181     #1\glsxtrpostdescription}
```

The default settings don't show the location lists, so there's no adjustment for `\glsxtrprelocation`.

```

15182 }
15183 {}
```

## 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.

```

15184 \ifdef{\glstreenamefmt}
15185 {
edefaultnamefmt
15186 \newcommand{\glstreedefaultnamefmt}[1]{\textbf{#1}}
```

```
\glstreenamefmt
15187 \renewcommand{\glstreenamefmt}[1]{\glstreedefaultnamefmt{#1}}

```

`egroupheaderfmt` This command was only introduced to glossary-tree v4.22, so it may not be defined.

```
15188 \def\glstreegroupheaderfmt#1{\glstreedefaultnamefmt{#1}}
```

`eenavigationfmt` This command was only introduced to glossary-tree v4.22, so it may not be defined.

```
15189 \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.

```
15190 \newcommand{\glstreePreHeader}[2]{}
15191 }
15192 {}
```

The index style is redefined so that the space before the number list isn't hard coded.

```
15193 \ifdef{\@glsstyle@index}
15194 {
```

`treeprelocation` The space before the number list for top-level entries. This is shared by the other tree styles.

```
15195 \newcommand*{\glstreeprelocation}{\glsxtrprelocation}
```

`childprelocation` The space before the number list for child entries. This is shared by the other tree styles.

```
15196 \newcommand*{\glstreechildprelocation}{\glstreeprelocation}
```

Don't prohibit a page break at the start of a new group if there's no header.

`lstreegroupskip`

```
15197 \newcommand{\glstreegroupskip}{\indexspace}
```

`groupheaderskip` This doesn't include \afterheading as it can cause interference with some styles.

```
15198 \newcommand{\glstreegroupheaderskip}{\nopagebreak\glstreegroupskip\nobreak}
```

Modify the index style.

```
15199 \renewglossarystyle{index}{%
15200   \renewenvironment{theglossary}{%
15201     {\setlength{\parindent}{0pt}}%
15202     {\setlength{\parskip}{0pt plus 0.3pt}}%
15203     \let\item\glstreeitem
15204     \let\subitem\glstreesubitem
15205     \let\subsubitem\glstreesubsubitem
15206   }%
15207   {\par}%
15208   \renewcommand*{\glossaryheader}{%
15209     \renewcommand*{\glsgroupheading}[1]{%
15210       \renewcommand*{\glossentry}[2]{%
15211         \item\glsentryitem{##1}}%
15212     }%
15213   }%
15214 }
```

```

15212     \glstreeentryfmt{\glstarget{##1}{\glossentryname{##1}}}{%
15213     \glstreesymbol{##1}%
15214     \glstreeDescLoc{##1}{##2}%
15215 }%
15216 \renewcommand{\subglossentry}[3]{%
15217     \ifcase##1\relax
15218         \item
15219     \or
15220         \subitem
15221         \glssubentryitem{##2}%
15222     \else
15223         \subsubitem
15224     \fi
15225     \glstreeentryfmt{\glstarget{##2}{\glossentryname{##2}}}{%
15226     \glstreechildsymbol{##2}%
15227     \glstreeChildDescLoc{##2}{##3}%
15228 }%
15229 \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glstreegroupskip\fi}%
15230 }
15231 }
15232 {}
```

The `indexgroup` style is redefined to discourage a page break after the heading.

```

15233 \ifdef{\@glsstyle@indexgroup}
15234 {%
15235     \renewglossarystyle{indexgroup}{%
15236         \setglossarystyle{index}%
15237         \renewcommand*{\glsgroupheading}[1]{%
15238             \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
15239             \glstreePreHeader{##1}{\glsxtr@grptitle}%
15240             \item\glstreegroupheaderfmt{\glsxtr@grptitle}%
15241             \glstreegroupheaderskip\@afterheading
15242         }%
15243     }
15244 }
15245 {}
```

Similarly for `indexhypergroup`.

```

15246 \ifdef{\@glsstyle@indexhypergroup}
15247 {%
15248     \renewglossarystyle{indexhypergroup}{%
15249         \setglossarystyle{index}%
15250         \renewcommand*{\glossaryheader}{%
15251             \item\glstreenavigationfmt{\glsnavigation}%
15252             \glstreegroupheaderskip\@afterheading}%
15253         \renewcommand*{\glsgroupheading}[1]{%
15254             \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
15255             \glstreePreHeader{##1}{\glsxtr@grptitle}%
15256             \item\glstreegroupheaderfmt
15257                 {\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
```

```
15258     \glstreegroupheaderskip\@afterheading}%
15259 }%
15260 }%
15261 {}
```

Adjust tree style to remove hard coded space before number list.

```
15262 \ifdef{\glsstyle@tree}%
15263 {%
```

Provide a command for use with the tree styles that displays the pre-description separator, the description and post-description hook.

```
\glstreedesc
```

```
15264 \newcommand{\glstreedesc}[1]{%
15265   \glstreepredesc\glossentrydesc{#1}\glspostdescription
15266 }
```

```
\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.

```
15267 \newcommand{\glstreeDescLoc}[2]{%
15268   \ifglshasdesc{#1}%
15269     {\glstreedesc{#1}\glstreeprelocation}%
15270     {\ifglshassymbol{#1}{\glstreeprelocation}{\glstreeNoDescSymbolPreLocation}}%
15271     #2%
15272 }
```

```
mbolPreLocation
```

```
\glstreeNoDescSymbolPreLocation
```

```
15273 \newcommand{\glstreeNoDescSymbolPreLocation}{\space}
```

Similarly for the symbol.

```
\glstreesymbol
```

```
15274 \newcommand{\glstreesymbol}[1]{%
15275   \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{}%
15276 }
```

And for the child entries:

```

lstreechilddesc
15277 \newcommand{\glstreechilddesc}[1]{%
15278   \glstreechildpredesc\glossentrydesc{#1}\glspostdescription
15279 }%

```

```

reeChildDescLoc
15280 \newcommand{\glstreeChildDescLoc}[2]{%
15281   \ifglshasdesc{#1}%
15282     {\glstreechilddesc{#1}\glstreechildprelocation}%
15283     {\ifglshassymbol{#1}{\glstreechildprelocation}%
15284       {\glstreeNoDescSymbolPreLocation}%
15285     }%
15286   #2%
15287 }%

```

treechildsymbol This just behaves in the same way as the top-level.

```

15288 \newcommand{\glstreechildsymbol}[1]{%
15289   \glstreesymbol{#1}%
15290 }%
15291 \renewglossarystyle{tree}{%
15292   \renewenvironment{theglossary}%
15293     {\setlength{\parindent}{0pt}%
15294      \setlength{\parskip}{0pt plus 0.3pt}}%
15295   {}%
15296   \renewcommand*\glossaryheader{}%
15297   \renewcommand*\glsgroupheading[1]{}%
15298   \renewcommand{\glossentry}[2]{%
15299     \hangindent0pt\relax
15300     \parindent0pt\relax
15301     \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
15302     \glstreesymbol{##1}%
15303     \glstreeDescLoc{##1}{##2}\par
15304   }%
15305   \renewcommand{\subglossentry}[3]{%
15306     \hangindent##1\glstreeindent\relax
15307     \parindent##1\glstreeindent\relax
15308     \ifnum##1=1\relax
15309       \glssubentryitem{##2}%
15310     \fi
15311     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
15312     \glstreechildsymbol{##2}%
15313     \glstreeChildDescLoc{##2}{##3}\par
15314   }%
15315   \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\glstreegroupskip\fi}%
15316 }%
15317 }
15318 {}%

```

The treegroup style is redefined to discourage a page break after the heading.

```
15319 \ifdef{@glsstyle@treegroup}{%
15320 {%
15321   \renewglossarystyle{treegroup}{%
15322     \setglossarystyle{tree}{%
15323       \renewcommand{\glsgroupheading}[1]{%
15324         \glsxtrgetgroup{##1}{\glsxtr@grptitle}{%
15325           \glstreePreHeader{##1}{\glsxtr@grptitle}{%
15326             \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}{%
15327               \glstreegroupheaderskip\@afterheading}{%
15328             }%
15329           }%
15330         }%
15331 }
```

Similarly for treehypergroup

```
15331 \ifdef{@glsstyle@treehypergroup}{%
15332 {%
15333   \renewglossarystyle{treehypergroup}{%
15334     \setglossarystyle{tree}{%
15335       \renewcommand*{\glossaryheader}{%
15336         \par\noindent\glstreenavigationfmt{\glsnavigation}{%
15337           \glstreegroupheaderskip\@afterheading}{%
15338         \renewcommand*{\glsgroupheading}[1]{%
15339           \glsxtrgetgroup{##1}{\glsxtr@grptitle}{%
15340             \glstreePreHeader{##1}{\glsxtr@grptitle}{%
15341               \par\noindent
15342               \glstreegroupheaderfmt
15343                 {\glsnavhypertarget{##1}{\glsxtr@grptitle}}{%
15344               \glstreegroupheaderskip\@afterheading}{%
15345             }%
15346           }%
15347         }%
15348 }
```

Adjust treenoname style to remove hard coded space before number list.

```
15348 \ifdef{@glsstyle@treenoname}{%
15349 {%
```

Provide a command for use with the treenoname styles that displays the pre-description separator, the description and post-description hook.

streenonamedesc

```
15350 \newcommand{\glstreenonamedesc}[1]{%
15351   \glstreepredesc\glossentrydesc{#1}\glspostdescription
15352 }%
```

Similarly for the symbol.

reenonamesymbol

```
15353 \newcommand{\glstreenonamesymbol}[1]{%
15354   \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{}}%
15355 }%
```

```

enenameDescLoc
15356 \newcommand{\glstreenenameDescLoc}[2]{%
15357   \glstreenonamedesc{#1}\glstreeprelocation#2%
15358 }

nonamechilddesc The child entry doesn't have the pre-description separator as the name isn't displayed.
15359 \newcommand{\glstreenonamechilddesc}[1]{%
15360   \glossentrydesc{#1}\glspostdescription
15361 }%

ameChildDescLoc
15362 \newcommand{\glstreenonameChildDescLoc}[2]{%
15363   \glstreenonamechilddesc{#1}\glstreechildprelocation#2%
15364 }

15365 \renewglossarystyle{treenename}{%
15366   \renewenvironment{theglossary}{%
15367     \setlength{\parindent}{0pt}%
15368     \setlength{\parskip}{0pt plus 0.3pt}}{%
15369   }%
15370   \renewcommand*{\glossaryheader}{\relax}%
15371   \renewcommand*{\glsgroupheading}[1]{\relax}%
15372   \renewcommand{\glossentry}[2]{%
15373     \hangindent0pt\relax
15374     \parindent0pt\relax
15375     \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}\%
15376     \glstreenonamesymbol{##1}\%\\
15377     \glstreenonameDescLoc{##1}{##2}\par
15378   }%
15379   \renewcommand{\subglossentry}[3]{%
15380     \hangindent##1\glstreeindent\relax
15381     \parindent##1\glstreeindent\relax
15382     \ifnum##1=1\relax
15383       \glssubentryitem{##2}%
15384     \fi
15385     \glstarget{##2}{\strut}%
15386     \glstreenonameChildDescLoc{##2}{##3}\par
15387   }%
15388   \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glstreegroupskip\fi}%
15389 }
15390 }
15391 {}}

```

The treenamingroup style is redefined to discourage a page break after the heading.

```

15392 \ifdef{@glsstyle@treenamingroup}%
15393 {%
15394   \renewglossarystyle{treenamingroup}{%
15395     \setglossarystyle{treenename}{%

```

```

15396 \renewcommand{\glsgroupheading}[1]{%
15397   \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15398   \glstreePreHeader{##1}{\glsxtr@grptitle}%
15399   \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}%
15400   \glstreegroupheaderskip\@afterheading
15401 }%
15402 }
15403 }
15404 {}
```

Similarly for `treenonamehypergroup`

```

15405 \ifdef{@glsstyle@treenonamehypergroup}%
15406 {%
15407   \renewglossarystyle{treenonamehypergroup}{%
15408     \setglossarystyle{treenoname}%
15409     \renewcommand*{\glossaryheader}{%
15410       \par\noindent\glstreenavigationfmt{\glsnavigation}%
15411       \glstreegroupheaderskip\@afterheading}%
15412     \renewcommand*{\glsgroupheading}[1]{%
15413       \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15414       \glstreePreHeader{##1}{\glsxtr@grptitle}%
15415       \par\noindent
15416       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
15417       \glstreegroupheaderskip\@afterheading}%
15418 }%
15419 }
15420 {}
```

The `alttree` style is redefined to make it easier to made minor adjustments.

```

15421 \ifdef{@glsstyle@alttree}%
15422 {%
```

Only redefine this style if it's already been defined.

`boldDescLocation`

```
\glsxtralttreeSymbolDescLocation{<label>}{<location list>}
```

Layout the symbol, description and location for top-level entries.

```

15423 \newcommand{\glsxtralttreeSymbolDescLocation}[2]{%
15424   {%
15425     \let\par\glsxtrAlttreePar
15426     \ifglshassymbol{#1}{(\glossentrysymbol{#1})\space}{}%
15427     \glstreeDescLoc{#1}{#2}\par
15428   }%
15429 }
```

`trAltTreeIndent` Paragraph indent for subsequent paragraphs in multi-paragraph descriptions.

```

15430 \newlength\glsxtrAlttreeIndent
```

`lsxtrAltTreePar` Multi-paragraph descriptions need to keep the hanging indent.

```
15431 \newcommand{\glsxtrAltTreePar}{%
15432   \@@par
15433   \glsxtrAltTreeSetHangIndent
15434   \setlength{\parindent}{\dimexpr\hangindent+\glsxtrAltTreeIndent}%
15435 }
```

`bolDescLocation`

```
\glsxtralmtreeSubSymbolDescLocation{\langle level \rangle}{\langle label \rangle}{\langle location list \rangle}
```

Layout the symbol, description and location for sub-entries. Defaults to the same as the top-level.

```
15436 \newcommand{\glsxtralmtreeSubSymbolDescLocation}[3]{%
15437   \glsxtralmtreeSymbolDescLocation{#2}{#3}%
15438 }
```

`trtreeTopindent` 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.

```
15439 \newlength\glsxtrtrreetopindent
```

`sxtreeInit` User-level initialisation for the `almtree` style.

```
15440 \newcommand*{\glsxtralmtreeInit}{%
15441   \settowidth{\glsxtrtrreetopindent}{\glstreenamefmt{\glsgetwidestname\space}}%
15442   \glsxtrAltTreeIndent=\parindent
15443 }
```

`\glssetwidest` The original `\glssetwidest` only uses `\def`. This uses `\gdef`.

```
15444 \newcommand*{\glssetwidest}[2][0]{%
15445   \csgdef{@glswidestname\romannumeral#1}{#2}%
15446 }
```

`\eglssetwidest` The original `\glssetwidest` only uses `\def`. This uses `\protected@csedef`.

```
15447 \newcommand*{\eglssetwidest}[2][0]{%
15448   \protected@csedef{@glswidestname\romannumeral#1}{#2}%
15449 }
```

`\xglssetwidest` Like the above but uses `\protected@csxdef`.

```
15450 \newcommand*{\xglssetwidest}[2][0]{%
15451   \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
15452 }
```

`\glsupdatewidest` Only sets if new value is wider than old value.

```
15453 \newcommand*{\glsupdatewidest}[2][0]{%
15454   \ifcsundef{@glswidestname\romannumeral#1}%
15455     {\csdef{@glswidestname\romannumeral#1}{#2}}%
```

```

15456   {%
15457     \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
15458     \settowidth{\dimen@ii}{#2}%
15459     \ifdim\dimen@ii>\dimen@
15460       \csdef{@glswidestname\romannumeral#1}{#2}%
15461     \fi
15462   }%
15463 }

```

`glsupdatewidest` As above but global definition.

```

15464 \newcommand*{\gglswidest}[2][0]{%
15465   \ifcsundef{@glswidestname\romannumeral#1}%
15466     {\csgdef{@glswidestname\romannumeral#1}{#2}}%
15467   }%
15468     \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
15469     \settowidth{\dimen@ii}{#2}%
15470     \ifdim\dimen@ii>\dimen@
15471       \csgdef{@glswidestname\romannumeral#1}{#2}%
15472     \fi
15473   }%
15474 }

```

`glsupdatewidest` As `\glsupdatewidest` but expands value.

```

15475 \newcommand*{\eglsupdatewidest}[2][0]{%
15476   \ifcsundef{@glswidestname\romannumeral#1}%
15477     {\protected@csedef{@glswidestname\romannumeral#1}{#2}}%
15478   }%
15479     \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
15480     \settowidth{\dimen@ii}{#2}%
15481     \ifdim\dimen@ii>\dimen@
15482       \protected@csedef{@glswidestname\romannumeral#1}{#2}%
15483     \fi
15484   }%
15485 }

```

`glsupdatewidest` As above but global.

```

15486 \newcommand*{\xglsupdatewidest}[2][0]{%
15487   \ifcsundef{@glswidestname\romannumeral#1}%
15488     {\protected@csxdef{@glswidestname\romannumeral#1}{#2}}%
15489   }%
15490     \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
15491     \settowidth{\dimen@ii}{#2}%
15492     \ifdim\dimen@ii>\dimen@
15493       \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
15494     \fi
15495   }%
15496 }

```

`lsgetwidestname` Provide a user-level macro to obtain the widest top-level name.

```
15497 \newcommand*{\glsgetwidestname}{\@glswidestname}
```

`etwidestsubname` Provide a user-level macro to obtain the widest sub-entry name.

```
15498 \newcommand*{\glsgetwidestsubname}[1]{%
15499   \ifcsundef{@glswidestname\romannumeral#1}%
15500   { \@glswidestname}%
15501   { \csuse{@glswidestname\romannumeral#1}}%
15502 }
```

`estTopLevelName` CamelCase is easier for long command names. Provide a CamelCase synonym of `\glsfindwidesttoplevelname`.

```
15503 \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.

```
15504 \newrobustcmd*{\glsFindWidestUsedTopLevelName}[1][\glo@types]{%
15505   \dimen@=0pt\relax
15506   \gls@tmp@len=0pt\relax
15507   \forallglossaries[#1]{\gls@type}%
15508   {%
15509     \for\glsentries[\gls@type]{\glo@label}%
15510     {%
15511       \if\glsused{\glo@label}%
15512       {%
15513         \if\gls@hasparent{\glo@label}%
15514         {}%
15515         {%
15516           \settowidth{\dimen@}%
15517           {\gls@entrynamefmt{\glsentryname{\glo@label}}}%
15518           \ifdim\dimen@>\gls@tmp@len
15519             \gls@tmp@len=\dimen@
15520             \glssetwidest{\glsentryname{\glo@label}}%
15521           \fi
15522         }%
15523       }%
15524     }%
15525   }%
15526 }%
15527 }
```

`destUsedAnyName` Like the above but doesn't check the parent key. Useful if all levels should have the same width for the name.

```
15528 \newrobustcmd*{\glsFindWidestUsedAnyName}[1][\glo@types]{%
15529   \dimen@=0pt\relax
15530   \gls@tmp@len=0pt\relax
15531   \forallglossaries[#1]{\gls@type}%
15532   {%
```

```

15533 \forglsentries[\@gls@type]{\@glo@label}%
15534 {%
15535   \ifglsused{\@glo@label}%
15536   {%
15537     \settowidth{\dimen@}%
15538     {\glstreenamefmt{\glsentryname{\@glo@label}}}%
15539     \ifdim\dimen@>\gls@tmpplen
15540       \gls@tmpplen=\dimen@
15541       \eglssetwidest{\glsentryname{\@glo@label}}%
15542     \fi
15543   }%
15544   {}%
15545 }%
15546 }%
15547 }

```

`ndWidestAnyName` Like the above but doesn't check if the entry has been used.

```

15548 \newrobustcmd*\glsFindWidestAnyName[1][\@glo@types]{%
15549   \dimen@=0pt\relax
15550   \gls@tmpplen=0pt\relax
15551   \forallglossaries[#1]{\@gls@type}%
15552   {%
15553     \forglsentries[\@gls@type]{\@glo@label}%
15554     {%
15555       \settowidth{\dimen@}%
15556       {\glstreenamefmt{\glsentryname{\@glo@label}}}%
15557       \ifdim\dimen@>\gls@tmpplen
15558         \gls@tmpplen=\dimen@
15559         \eglssetwidest{\glsentryname{\@glo@label}}%
15560       \fi
15561     }%
15562   }%
15563 }

```

`estUsedLevelTwo` This is like `\glsFindWidestUsedTopLevelName` but also sets the first two sub-levels as well.

Any entry that has a great-grandparent is ignored.

```

15564 \newrobustcmd*\glsFindWidestUsedLevelTwo[1][\@glo@types]{%
15565   \dimen@=0pt\relax
15566   \dimen@i=0pt\relax
15567   \dimen@ii=0pt\relax
15568   \forallglossaries[#1]{\@gls@type}%
15569   {%
15570     \forglsentries[\@gls@type]{\@glo@label}%
15571     {%
15572       \ifglsused{\@glo@label}%
15573       {%
15574         \ifglshasparent{\@glo@label}%
15575         {%
15576           \edef\@glo@parent{\csuse{\glo@\glsdetoklabel{\@glo@label}@parent}}%

```

```

15577     \ifgls has parent{\@glo@parent}%
15578     {%
15579         \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@parent}}@parent}%
15580         \ifgls has parent{\@glo@parent}%
15581             {}%
15582             {%
15583                 \settowidth{\gls@tmp[1]}%
15584                     {\glstreenamefmt{\glsentryname{\@glo@label}}}%
15585                     \ifdim\gls@tmp[1]>\dimen@ii
15586                         \dimen@ii=\gls@tmp[1]
15587                         \eglssetwidest[2]{\glsentryname{\@glo@label}}%
15588                     \fi
15589             }%
15590             {}%
15591             {%
15592                 \settowidth{\gls@tmp[1]}%
15593                     {\glstreenamefmt{\glsentryname{\@glo@label}}}%
15594                     \ifdim\gls@tmp[1]>\dimen@i
15595                         \dimen@i=\gls@tmp[1]
15596                         \eglssetwidest[1]{\glsentryname{\@glo@label}}%
15597                     \fi
15598             }%
15599             {}%
15600             {%
15601                 \settowidth{\gls@tmp[1]}%
15602                     {\glstreenamefmt{\glsentryname{\@glo@label}}}%
15603                     \ifdim\gls@tmp[1]>\dimen@o
15604                         \dimen@o=\gls@tmp[1]
15605                         \eglssetwidest{\glsentryname{\@glo@label}}%
15606                     \fi
15607             }%
15608             {}%
15609             {}%
15610             {}%
15611             {}%
15612         }

```

`\dWidestLevelTwo` This is like `\glsFindWidestUsedLevelTwo` but doesn't check if the entry has been used.

```

15613     \newrobustcmd*{\glsFindWidestLevelTwo}[1][\@glo@types]%
15614         \dimen@=0pt\relax
15615         \dimen@i=0pt\relax
15616         \dimen@ii=0pt\relax
15617         \forallglossaries[#1]{\gls@type}%
15618         {}%
15619             \forglsentries[\gls@type]{\glo@label}%
15620             {}%
15621                 \ifgls has parent{\glo@label}%
15622                 {}%
15623                     \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\glo@label}}@parent}%

```

```

15624     \ifglshasparent{\@glo@parent}%
15625     {%
15626         \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@parent}}@parent}%
15627         \ifglshasparent{\@glo@parent}%
15628             {}%
15629             {%
15630                 \settowidth{\gls@tmp[2]}%
15631                     {\glstreenamefmt{\glsentryname{\@glo@label}}}%
15632                     \ifdim\gls@tmp[2]>\dimen@ii
15633                         \dimen@ii=\gls@tmp[2]
15634                         \glssetwidest[2]{\glsentryname{\@glo@label}}%
15635                     \fi
15636             }%
15637         }%
15638         {%
15639             \settowidth{\gls@tmp[1]}%
15640                 {\glstreenamefmt{\glsentryname{\@glo@label}}}%
15641                 \ifdim\gls@tmp[1]>\dimen@i
15642                     \dimen@i=\gls@tmp[1]
15643                     \glssetwidest[1]{\glsentryname{\@glo@label}}%
15644                 \fi
15645             }%
15646         }%
15647         {%
15648             \settowidth{\gls@tmp[0]}%
15649                 {\glstreenamefmt{\glsentryname{\@glo@label}}}%
15650                 \ifdim\gls@tmp[0]>\dimen@o
15651                     \dimen@o=\gls@tmp[0]
15652                     \glssetwidest{\glsentryname{\@glo@label}}%
15653                 \fi
15654             }%
15655         }%
15656     }%
15657 }

```

`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.

```

15658 \newrobustcmd*\glsFindWidestUsedAnyNameSymbol}[2][\@glo@types]{%
15659     \dimen@=0pt\relax
15660     \gls@tmp[2]=0pt\relax
15661     #2=0pt\relax
15662     \forallglossaries[#1]{\gls@type}%
15663     {%
15664         \forglsentries[\gls@type]{\glo@label}%
15665         {%
15666             \ifglsused{\glo@label}%
15667             {%
15668                 \settowidth{\dimen@}%
15669                     {\glstreenamefmt{\glsentryname{\glo@label}}}%

```

```

15670      \ifdim\dimen@>\gls@tmp{len}
15671          \gls@tmp{len}=\dimen@
15672          \eglssetwidest{\glsentryname{\@glo@label}}%
15673      \fi
15674      \settowidth{\dimen@}%
15675          {\glsentrysymbol{\@glo@label}}%
15676      \ifdim\dimen@>#2\relax
15677          #2=\dimen@
15678      \fi
15679  }%
15680  {}%
15681  }%
15682  }%
15683 }

```

`\stAnyNameSymbol` Like the above but doesn't check if the entry has been used.

```

15684 \newrobustcmd*{\glsFindWidestAnyNameSymbol}[2][\@glo@types]{%
15685     \dimen@=0pt\relax
15686     \gls@tmp{len}=0pt\relax
15687     #2=0pt\relax
15688     \forallglossaries[#1]{\gls@type}%
15689     {}%
15690     \forglsentries[\gls@type]{\glo@label}%
15691     {}%
15692     \settowidth{\dimen@}%
15693         {\glsentryname{\glo@label}}%
15694     \ifdim\dimen@>\gls@tmp{len}
15695         \gls@tmp{len}=\dimen@
15696         \eglssetwidest{\glo@label}%
15697     \fi
15698     \settowidth{\dimen@}%
15699         {\glsentrysymbol{\glo@label}}%
15700     \ifdim\dimen@>#2\relax
15701         #2=\dimen@
15702     \fi
15703 }%
15704 }%
15705 }

```

`\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. The length of the widest location list is stored in the third argument, which should also be a length register.

```

15706 \newrobustcmd*{\glsFindWidestUsedAnyNameSymbolLocation}[3][\@glo@types]{%
15707     \dimen@=0pt\relax
15708     \gls@tmp{len}=0pt\relax
15709     #2=0pt\relax
15710     #3=0pt\relax
15711     \forallglossaries[#1]{\gls@type}%

```

```

15712  {%
15713      \forglsentries[\@gls@type]{\@glo@label}%
15714  {%
15715      \ifglsused{\@glo@label}%
15716  {%
15717      \settowidth{\dimen@}%
15718          {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
15719      \ifdim\dimen@>\gls@tmpplen
15720          \gls@tmpplen=\dimen@
15721          \eglssetwidest{\glsentryname{\@glo@label}}%
15722      \fi
15723      \settowidth{\dimen@}%
15724          {\glsentrysymbol{\@glo@label}}%
15725      \ifdim\dimen@>\#2\relax
15726          \#2=\dimen@
15727      \fi
15728      \settowidth{\dimen@}%
15729          {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}}%
15730      \ifdim\dimen@>\#3\relax
15731          \#3=\dimen@
15732      \fi
15733  }%
15734  {}%
15735  }%
15736  }%
15737 }

```

`eSymbolLocation` Like the `\glsFindWidestUsedAnyNameSymbol` but doesn't check if the entry has been used.

```

15738  \newrobustcmd*{\glsFindWidestAnyNameSymbolLocation}[3][\@glo@types]{%
15739      \dimen@=0pt\relax
15740      \gls@tmpplen=0pt\relax
15741      \#2=0pt\relax
15742      \#3=0pt\relax
15743      \forallglossaries[#1]{\@gls@type}%
15744  {%
15745      \forglsentries[\@gls@type]{\@glo@label}%
15746  {%
15747      \settowidth{\dimen@}%
15748          {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
15749      \ifdim\dimen@>\gls@tmpplen
15750          \gls@tmpplen=\dimen@
15751          \eglssetwidest{\glsentryname{\@glo@label}}%
15752      \fi
15753      \settowidth{\dimen@}%
15754          {\glsentrysymbol{\@glo@label}}%
15755      \ifdim\dimen@>\#2\relax
15756          \#2=\dimen@
15757      \fi
15758      \settowidth{\dimen@}%

```

```

15759      {\GlsXtrFormatLocationList{\glsentrynumberlist{@glo@label}}}%
15760      \ifdim\dimen@>\relax
15761          #3=\dimen@
15762          \fi
15763      }%
15764  }%
15765 }

```

`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.

```

15766 \newrobustcmd*{\glsFindWidestUsedAnyNameLocation}[2][{@glo@types}]{%
15767     \dimen@=0pt\relax
15768     \gls@tmp@len=0pt\relax
15769     #2=0pt\relax
15770     \forallglossaries[#1]{\gls@type}{%
15771         {%
15772             \forglsentries[\gls@type]{\glo@label}{%
15773                 {%
15774                     \ifglsused{\glo@label}{%
15775                         {%
15776                             \settowidth{\dimen@}{%
15777                                 {\glstreenamefmt{\glsentryname{\glo@label}}}}%
15778                             \ifdim\dimen@>\gls@tmp@len
15779                                 \gls@tmp@len=\dimen@
15780                                 \glssetwidest{\glsentryname{\glo@label}}%
15781                             \fi
15782                             \settowidth{\dimen@}{%
15783                                 {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}}%
15784                             \ifdim\dimen@>#2\relax
15785                                 #2=\dimen@
15786                             \fi
15787                         }%
15788                         {%
15789                         }%
15790                     }%
15791             }%

```

`AnyNameLocation` Like the `\glsFindWidestAnyNameLocation` but doesn't check the `first use` flag.

```

15792 \newrobustcmd*{\glsFindWidestAnyNameLocation}[2][{@glo@types}]{%
15793     \dimen@=0pt\relax
15794     \gls@tmp@len=0pt\relax
15795     #2=0pt\relax
15796     \forallglossaries[#1]{\gls@type}{%
15797         {%
15798             \forglsentries[\gls@type]{\glo@label}{%
15799                 {%
15800                     \settowidth{\dimen@}{%
15801                         {\glstreenamefmt{\glsentryname{\glo@label}}}}%

```

```

15802         \ifdim\dimen@>\gls@tmp@len
15803             \gls@tmp@len=\dimen@
15804             \eglssetwidest{\glsentryname{\@glo@label}}%
15805         \fi
15806         \settowidth{\dimen@}%
15807             {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}%
15808         \ifdim\dimen@>\#2\relax
15809             #2=\dimen@
15810         \fi
15811     }%
15812 }%
15813 }

```

`mputeTreeIndent` 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`.

```

15814 \newcommand*{\glsxtrComputeTreeIndent}[1]{%
15815     \glstreeindent=\glsxtrtree@top@indent\relax
15816 }

```

`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.

```

15817 \newcommand*{\glsxtrComputeTreeSubIndent}[3]{%
15818     \ifcsundef{@glswidestname\romannumeral#1}%
15819     {}%
15820         \settowidth{\#3}{\glstreenamefmt{\@glswidestname\space}}%
15821     }%
15822     {}%
15823         \settowidth{\#3}{\glstreenamefmt{%
15824             \csname @glswidestname\romannumeral#1\endcsname\space}}%
15825     }%
15826 }

```

`eeSetHangIndent` Set `\hangindent` for top-level entries:

```
15827 \newcommand*{\glsxtrAltTreeSetHangIndent}{\hangindent\glstreeindent}
```

`etSubHangIndent` Set `\hangindent` for sub-entries:

```
15828 \newcommand*{\glsxtrAltTreeSetSubHangIndent}[1]{\hangindent\glstreeindent}
```

Redefine `alttree`:

```

15829 \renewglossarystyle{alttree}{%
15830     \renewenvironment{theglossary}{%

```

```

15831   {%
15832     \glsxtralttreeInit
15833     \def\@gls@prevlevel{-1}%
15834     \mbox{} \par}%
15835   {\par}%
15836   \renewcommand*\glossaryheader{}%
15837   \renewcommand*\glsgroupheading}[1]{}%
15838   \renewcommand{\glossentry}[2]{%
15839     \ifnum\@gls@prevlevel=0\relax
15840     \else
15841       \glsxtrComputeTreeIndent{##1}%
15842     \fi
15843     \parindent\glstreeindent
15844     \glsxtrAltTreeSetHangIndent
15845     \makebox[0pt][r]%
15846   {%
15847     \glstreenamebox{\glstreeindent}%
15848   {%
15849     \glsentryitem{##1}%
15850     \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
15851   }%
15852 }%
15853 \glsxtralttreeSymbolDescLocation{##1}{##2}%
15854 \def\@gls@prevlevel{0}%
15855 }
15856 \renewcommand{\subglossentry}[3]{%
15857   \ifnum##1=1\relax
15858     \glssubentryitem{##2}%
15859   \fi
15860   \ifnum\@gls@prevlevel=##1\relax
15861   \else
15862     \glsxtrComputeTreeSubIndent{##1}{##2}{\gls@tmpplen}%
15863     \ifnum\@gls@prevlevel<##1\relax
15864       \setlength\glstreeindent{\gls@tmpplen}
15865       \addtolength\glstreeindent\parindent
15866       \parindent\glstreeindent
15867     \else
15868       \ifnum\@gls@prevlevel=0\relax
15869         \glsxtrComputeTreeIndent{##2}%
15870       \else
15871         \glsxtrComputeTreeSubIndent{\@gls@prevlevel}{##2}{\glstreeindent}%
15872       \fi
15873       \addtolength\parindent{-\glstreeindent}%
15874       \setlength\glstreeindent\parindent
15875     \fi
15876   \fi
15877   \glsxtrAltTreeSetSubHangIndent{##1}%
15878   \makebox[0pt][r]{\glstreenamebox{\gls@tmpplen}{%
15879     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}}}%

```

```

15880      \glsxtralttreeSubSymbolDescLocation{##1}{##2}{##3}%
15881      \def\@gls@prevlevel{##1}%
15882  }%
15883  \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glstreegroupskip\fi}%
15884 }
15885 }%
15886 {%
15887 }

```

Redefine `alttreegroup` so that it discourages a break after group headings.

```

15888 \ifdef{\@glsstyle@alttreegroup}%
15889 {%
15890  \renewglossarystyle{alttreegroup}{%
15891    \setglossarystyle{alttree}%
15892    \renewcommand{\glsgroupheading}[1]{\par
15893      \def\@gls@prevlevel{-1}%
15894      \hangindent0pt\relax
15895      \parindent0pt\relax
15896      \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
15897      \glstreePreHeader{##1}{\glsxtr@grptitle}%
15898      \glstreegroupheaderfmt{\glsxtr@grptitle}%

```

Can't use `\@afterheading` here as it messes with the first item of the group.

```

15899  \glstreegroupheaderskip
15900  }%
15901 }%
15902 }%
15903 {%
15904 }

```

Similarly for `alttreehypergroup`.

```

15905 \ifdef{\@glsstyle@alttreehypergroup}%
15906 {%
15907  \renewglossarystyle{alttreehypergroup}{%
15908    \setglossarystyle{alttree}%
15909    \renewcommand*{\glossaryheader}{%
15910      \par
15911      \def\@gls@prevlevel{-1}%
15912      \hangindent0pt\relax
15913      \parindent0pt\relax
15914      \glstreenavigationfmt{\glsnavigation}%

```

Can't use `\@afterheading` here as it messes with the first item of the group.

```

15915  \glstreegroupheaderskip
15916  }%
15917  \renewcommand*{\glsgroupheading}[1]{%
15918    \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}%
15919    \glstreePreHeader{##1}{\glsxtr@grptitle}%
15920    \par
15921    \def\@gls@prevlevel{-1}%
15922    \hangindent0pt\relax

```

```

15923      \parindent0pt\relax
15924      \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
Can't use \@afterheading here as it messes with the first item of the group.
15925      \glstreegroupheaderskip
15926  }%
15927 }
15928 }%
15929 {%
15930 }

```

## 2.9 Multicolumn Styles

Adjust mcolindexgroup to discourage page breaks after the group headings.

```

15931 \ifdef{@glsstyle@mcolindexgroup}
15932 {%
15933   \renewglossarystyle{mcolindexgroup}{%
15934     \setglossarystyle{mcolindex}{%
15935       \renewcommand*{\glsgroupheading}[1]{%
15936         \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}}%
15937         \glstreePreHeader{##1}{\glsxtr@grptitle}}%
15938       \item\glstreegroupheaderfmt{\glsxtr@grptitle}}%
15939       \glstreegroupheaderskip\@afterheading
15940   }%
15941 }
15942 }%
15943 {%
15944 }

```

Similarly for mcolindexhypergroup.

```

15945 \ifdef{@glsstyle@mcolindexhypergroup}
15946 {%
15947   \renewglossarystyle{mcolindexhypergroup}{%
15948     \setglossarystyle{mcolindex}{%
15949       \renewcommand*{\glossaryheader}{%
15950         \item\glstreenavigationfmt{\glsnavigation}{%
15951           \glstreegroupheaderskip\@afterheading
15952   }%
15953   \renewcommand*{\glsgroupheading}[1]{%
15954     \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}}%
15955     \glstreePreHeader{##1}{\glsxtr@grptitle}}%
15956     \item\glstreegroupheaderfmt
15957       {\glsnavhypertarget{##1}{\glsxtr@grptitle}}}}%
15958     \glstreegroupheaderskip\@afterheading
15959   }%
15960 }
15961 }%
15962 {%
15963 }

```

Similarly for `mcolindexspannav`.

```
15964 \ifdef{@glsstyle@mcolindexspannav}{%
15965 {%
15966   \renewglossarystyle{mcolindexspannav}{%
15967     \setglossarystyle{index}{%
15968       \renewenvironment{theglossary}{%
15969         {%
15970           \begin{multicols}{\glsmcols}[\noindent\glstreenavigationfmt{\glsnavigation}]%
15971             \setlength{\parindent}{0pt}%
15972             \setlength{\parskip}{0pt plus 0.3pt}%
15973             \let\item\glstreeitem{%
15974           \end{multicols}}{%
15975             \renewcommand*\glsgroupheading[1]{%
15976               \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}{%
15977                 \glstreePreHeader{##1}{\glsxtr@grptitle}{%
15978                   \item\glstreegroupheaderfmt{%
15979                     {\glsnavhypertarget{##1}{\glsxtr@grptitle}}{%
15980                       \glstreegroupheaderskip\@afterheading{%
15981                         }{%
15982                       }{%
15983                     }{%
15984                   }{%
15985                 }}}{%
15986 \ifdef{@glsstyle@moltreegroup}{%
15987 {%
15988   \renewglossarystyle{moltreegroup}{%
15989     \setglossarystyle{moltree}{%
15990       \renewcommand*\glsgroupheading[1]{%
15991         \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}{%
15992           \glstreePreHeader{##1}{\glsxtr@grptitle}{%
15993             \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}{%
15994               \glstreegroupheaderskip\@afterheading{%
15995                 }{%
15996               }{%
15997             }{%
15998           }{%
15999         }}}{%
16000 \ifdef{@glsstyle@moltreehypergroup}{%
16001 {%
16002   \renewglossarystyle{moltreehypergroup}{%
16003     \setglossarystyle{moltree}{%
16004       \renewcommand*\glossaryheader{}{%
16005         \par\noindent\glstreenavigationfmt{\glsnavigation}{%
16006           \glstreegroupheaderskip{%
16007             }{%
16008             \renewcommand*\glsgroupheading[1]{%
```

Similarly for `moltreegroup`.

```
15986 \ifdef{@glsstyle@moltreegroup}{%
15987 {%
15988   \renewglossarystyle{moltreegroup}{%
15989     \setglossarystyle{moltree}{%
15990       \renewcommand*\glsgroupheading[1]{%
15991         \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}{%
15992           \glstreePreHeader{##1}{\glsxtr@grptitle}{%
15993             \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}{%
15994               \glstreegroupheaderskip\@afterheading{%
15995                 }{%
15996               }{%
15997             }{%
15998           }{%
15999         }}}{%
16000 \ifdef{@glsstyle@moltreehypergroup}{%
16001 {%
16002   \renewglossarystyle{moltreehypergroup}{%
16003     \setglossarystyle{moltree}{%
16004       \renewcommand*\glossaryheader{}{%
16005         \par\noindent\glstreenavigationfmt{\glsnavigation}{%
16006           \glstreegroupheaderskip{%
16007             }{%
16008             \renewcommand*\glsgroupheading[1]{%
```

Similarly for `moltreehypergroup`.

```
16000 \ifdef{@glsstyle@moltreehypergroup}{%
16001 {%
16002   \renewglossarystyle{moltreehypergroup}{%
16003     \setglossarystyle{moltree}{%
16004       \renewcommand*\glossaryheader{}{%
16005         \par\noindent\glstreenavigationfmt{\glsnavigation}{%
16006           \glstreegroupheaderskip{%
16007             }{%
16008             \renewcommand*\glsgroupheading[1]{%
```

```

16009      \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
16010      \glstreePreHeader{##1}{\glsxtr@grptitle}%
16011      \par\noindent
16012      \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
16013      \glstreegroupheaderskip\@afterheading
16014  }%
16015 }
16016 }%
16017 {%
16018 }

```

Similarly for mcoltreespannav.

```

16019 \ifdef{@glsstyle@mcoltreespannav}
16020 {%
16021   \renewglossarystyle{mcoltreespannav}{%
16022     \setglossarystyle{tree}%
16023     \renewenvironment{theglossary}%
16024     {%
16025       \begin{multicols}{\glsmcols}%
16026         [\noindent\glstreenavigation{\glsnavigation}]%
16027         \setlength{\parindent}{0pt}%
16028         \setlength{\parskip}{0pt plus 0.3pt}%
16029     }%
16030   {\end{multicols}}%
16031   \renewcommand*\glsgroupheading[1]{%
16032     \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
16033     \glstreePreHeader{##1}{\glsxtr@grptitle}%
16034     \par\noindent
16035     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
16036     \glstreegroupheaderskip\@afterheading
16037   }%
16038 }
16039 }%
16040 {%
16041 }

```

Similarly for mcoltreeonenamegroup.

```

16042 \ifdef{@glsstyle@mcoltreeonenamegroup}
16043 {%
16044   \renewglossarystyle{mcoltreeonenamegroup}{%
16045     \setglossarystyle{mcoltreeonename}%
16046     \renewcommand*\glsgroupheading[1]{%
16047       \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
16048       \glstreePreHeader{##1}{\glsxtr@grptitle}%
16049       \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}%
16050       \glstreegroupheaderskip\@afterheading
16051     }%
16052   }%
16053 }%
16054 {%

```

```
16055 }
```

Similarly for mcoltreeonenamehypergroup.

```
16056 \ifdef{@glsstyle@mcoltreeonenamehypergroup}{%
16057 {%
16058   \renewglossarystyle{mcoltreeonenamehypergroup}{%
16059     \setglossarystyle{mcoltreeonename}{%
16060       \renewcommand*\glossaryheader{%
16061         \par\noindent\glstreenavigationfmt{\glsnavigation}{%
16062           \glstreegroupheaderskip
16063         }%
16064       \renewcommand*\glsgroupheading[1]{%
16065         \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}{%
16066           \glstreePreHeader{##1}{\glsxtr@grptitle}{%
16067             \par\noindent
16068             \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}{%
16069               \glstreegroupheaderskip@afterheading}%
16070         }%
16071       }%
16072     }%
16073   }%
```

Similarly for mcoltreeonenamespannav.

```
16074 \ifdef{@glsstyle@mcoltreeonenamespannav}{%
16075 {%
16076   \renewglossarystyle{mcoltreeonenamespannav}{%
16077     \setglossarystyle{treenename}{%
16078       \renewenvironment{theglossary}{%
16079         {%
16080           \begin{multicols}{\glsmcols}{%
16081             [\noindent\glstreenavigationfmt{\glsnavigation}]%
16082             \setlength{\parindent}{0pt}%
16083             \setlength{\parskip}{0pt plus 0.3pt}%
16084           }%
16085           {\end{multicols}}%
16086           \renewcommand*\glsgroupheading[1]{%
16087             \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}{%
16088               \glstreePreHeader{##1}{\glsxtr@grptitle}{%
16089                 \par\noindent
16090                 \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}{%
16091                   \glstreegroupheaderskip@afterheading}%
16092             }%
16093           }%
16094     }%
16095   }%
```

mcolaltree needs adjusting so that it uses \glsxtralttreeInit This doesn't use \mbox{} \par which would unbalance the top of the columns.

```
16096 \ifdef{@glsstyle@mcolalttree}{%
16097 {%
16098   \renewglossarystyle{mcolalttree}{%
```

```

16099 \setglossarystyle{alttree}%
16100 \renewenvironment{theglossary}%
16101 {%
16102     \glsxtralttreeInit
16103     \def\@gls@prevlevel{-1}%
16104     \begin{multicols}{\glsmcols}%
16105 }%
16106 {\par\end{multicols}}%
16107 }
16108 }%
16109 {%
16110 }

```

Redefine mcolalttreegroup to discourage page breaks after the group headings.

```

16111 \ifdef{\@glsstyle@mcolalttreegroup}%
16112 {%
16113     \renewglossarystyle{mcolalttreegroup}{%
16114         \setglossarystyle{mcolalttree}%
16115         \renewcommand{\glsgroupheading}[1]{%
16116             \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
16117             \glstreePreHeader{##1}{\glsxtr@grptitle}%
16118             \par
16119             \def\@gls@prevlevel{-1}%
16120             \hangindent0pt\relax
16121             \parindent0pt\relax
16122             \glstreegroupheaderfmt{\glsxtr@grptitle}%
16123             \glstreegroupheaderskip
16124         }%
16125     }
16126 }%
16127 {%
16128 }

```

Similarly for mcolalttreehypergroup.

```

16129 \ifdef{\@glsstyle@mcolalttreehypergroup}%
16130 {%
16131     \renewglossarystyle{mcolalttreehypergroup}{%
16132         \setglossarystyle{mcolalttree}%
16133         \renewcommand*\glossaryheader{%
16134             \par
16135             \def\@gls@prevlevel{-1}%
16136             \hangindent0pt\relax
16137             \parindent0pt\relax
16138             \glstreenavigationfmt{\glsnavigation}%
16139             \glstreegroupheaderskip
16140         }%
16141         \renewcommand*\glsgroupheading[1]{%
16142             \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
16143             \glstreePreHeader{##1}{\glsxtr@grptitle}%
16144             \par

```

```

16145     \def\@gls@prevlevel{-1}%
16146     \hangindent0pt\relax
16147     \parindent0pt\relax
16148     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
16149     \glstreegroupheaderskip
16150   }%
16151 }
16152 }%
16153 {%
16154 }

```

Similarly for mcolaltreespannav.

```

16155 \ifdef{@glsstyle@mcolaltreespannav}
16156 {%
16157   \renewglossarystyle{mcolaltreespannav}{%
16158     \setglossarystyle{alttree}{%
16159       \renewenvironment{theglossary}{%
16160         {%
16161           \glsxtralttreeInit
16162           \def\@gls@prevlevel{-1}%
16163           \begin{multicols}{\glsmcols}{%
16164             [\noindent\glstreenavigationfmt{\glsnavigation}]%
16165           }%
16166           {\end{multicols}}%
16167           \renewcommand*\glsgroupheading[1]{%
16168             \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
16169             \glstreePreHeader{##1}{\glsxtr@grptitle}%
16170             \par
16171             \def\@gls@prevlevel{-1}%
16172             \hangindent0pt\relax
16173             \parindent0pt\relax
16174             \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
16175             \glstreegroupheaderskip
16176           }%
16177         }%
16178       }%
16179     }%
16180   }

```

Reset the default style

```

16181 \ifx@glossary@default@style\relax
16182 \else
16183   \setglossarystyle{@glsxtr@current@style}%
16184 \fi

```

## 3 bookindex style (glossary-bookindex.sty)

### 3.1 Package Initialisation and Options

```
16185 \NeedsTeXFormat{LaTeX2e}
16186 \ProvidesPackage{glossary-bookindex}[2020/04/01 v1.45 (NLCT)]
Load required packages.
16187 \RequirePackage{multicol}
16188 \RequirePackage{glossary-tree}

trbookindexcols Number of columns.
16189 \newcommand{\glsxtrbookindexcols}{2}

trbookindexname Format used for top-level entries. (Argument is the label.)
16190 \newcommand*{\glsxtrbookindexname}[1]{\glossentryname{\#1}}

bookindexsubname Format used for sub entries.
16191 \newcommand*{\glsxtrbookindexsubname}[1]{\glsxtrbookindexname{\#1}>

sxtrprelocation Provide in case glossaries-stylemods isn't loaded.
16192 \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.
16193 \newcommand*{\glsxtrbookindexprelocation}[1]{%
16194   \glsxtrifhasfield{location}{\#1}%
16195   {,\glsxtrprelocation}%
16196   {\glsxtrprelocation}%
16197 }

xsubprelocation Separator used before location list for sub-entries.
16198 \newcommand*{\glsxtrbookindexsubprelocation}[1]{%
16199   \glsxtrbookindexprelocation{\#1}%
16200 }
```

okindexlocation

```
\glsxtrbookindexlocation{\label}{\location}
```

Displays the location.

```
16201 \newcommand*{\glsxtrbookindexlocation}[2]{\#2}
```

ndexsublocation

```
\glsxtrbookindexlocation{\label}{\location}
```

Displays the location for sub-entries.

```
16202 \newcommand*{\glsxtrbookindexsublocation}{\glsxtrbookindexlocation}
```

xparentchildsep Separator used between top-level parent and child entry.

```
16203 \newcommand{\glsxtrbookindexparentchildsep}{\nopagebreak}
```

rentsubchildsep Separator used between sub-level parent and child entry.

```
16204 \newcommand{\glsxtrbookindexparentsubchildsep}{\glsxtrbookindexparentchildsep}
```

ookindexbetween Between two top-level entries identified by the labels in the arguments.

```
16205 \newcommand{\glsxtrbookindexbetween}[2]{}
```

indexsubbetween Between two level 1 entries identified by the labels in the arguments.

```
16206 \newcommand{\glsxtrbookindexsubbetween}[2]{}
```

exsubsubbetween Between two level 2 entries identified by the labels in the arguments.

```
16207 \newcommand{\glsxtrbookindexsubsubbetween}[2]{}
```

indexatendgroup At the end of a letter group. The argument is the index of the last top-level entry.

```
16208 \newcommand{\glsxtrbookindexatendgroup}[1]{}
```

exsubatendgroup At the end of a letter group. The argument is the index of the last level 1 entry.

```
16209 \newcommand{\glsxtrbookindexsubatendgroup}[1]{}
```

ubsubatendgroup At the end of a letter group. The argument is the index of the last level 2 entry.

```
16210 \newcommand{\glsxtrbookindexsubsubatendgroup}[1]{}
```

kindexgroupskip Group separator.

```
16211 \newcommand{\glsxtrbookindexgroupskip}{\ifglsnogroupskip\else\indexspace\fi}
```

Format group title.

dexformatheader Group separator.

```
16212 \newcommand*{\glsxtrbookindexformatheader}[1]{%
16213   \par{\centering\glstreegroupheaderfmt{\#1}\par}%
16214 }
```

okindexbookmark Book mark group heading if supported.

```
16215 \ifdef\pdfbookmark
16216 {%
16217   \newcommand*{\glsxtrbookindexbookmark}[2]{%
16218     \ifdefstring{\@glossarysec}{chapter}%
16219       {\pdfbookmark[1]{\#1}{\#2}}%
```

```

16220     {\pdfbookmark[2]{#1}{#2}}%
16221 }
16222 }
16223 {%
16224 \newcommand*{\glsxtrbookindexbookmark}[2]{}
16225 }

```

xbookmarkprefix Make the bookmark label prefix used for letter groups depend on the glossary label (instead of original hardcoded “index.”).

```
16226 \newcommand*{\glsxtrbookindexbookmarkprefix}{\currentglossary.}
```

kindexcolspread

```
16227 \newcommand*{\glsxtrbookindexcolspread}{}%
```

dexmulticolsenv

```
16228 \newcommand*{\glsxtrbookindexmulticolsenv}{multicols}
```

Define the style.

```

16229 \newglossarystyle{bookindex}{%
16230   \setglossarystyle{index}%
16231   \renewenvironment{theglossary}%
16232 {%
16233   \ifnum\glsxtrbookindexcols>1\relax
16234     \ifempty{\glsxtrbookindexcolspread}%
16235     {%
16236       \edef\glsxtr@beginbookindex{%
16237         \noexpand\begin{\glsxtrbookindexmulticolsenv}%
16238           {\glsxtrbookindexcols}%
16239         }%
16240     }%
16241     {%
16242       \edef\glsxtr@beginbookindex{%
16243         \noexpand\begin{\glsxtrbookindexmulticolsenv}%
16244           {\glsxtrbookindexcols}[\glsxtrbookindexcolspread]%
16245         }%
16246     }%
16247   \else
16248     \def\glsxtr@beginbookindex{}%
16249   \fi
16250   \glsxtr@beginbookindex
16251   \setlength{\parindent}{0pt}%
16252   \setlength{\parskip}{0pt plus 0.3pt}%
16253   \let@\glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
16254   \let@\glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
16255   \let@\glsxtr@bookindex@between@gobble
16256   \let@\glsxtr@bookindex@subbetween@gobble
16257   \let@\glsxtr@bookindex@subsubbetween@gobble
16258   \let@\glsxtr@bookindex@atendgroup\relax
16259   \let@\glsxtr@bookindex@subatendgroup\relax

```

```

16260     \let\@glsxtr@bookindex@subsubatendgroup\relax
16261     \let\@glsxtr@bookindexgroupskip\relax
16262   }%
16263   {%
Do end group hooks.
16264     \@glsxtr@bookindex@subsubatendgroup
16265     \@glsxtr@bookindex@subatendgroup
16266     \@glsxtr@bookindex@atendgroup
End multicols environment.
16267     \ifnum\glsxtrbookindexcols>1\relax
16268       \edef\glsxtr@endbookindex{%
16269         \noexpand\end{\glsxtrbookindexmulticolsenv}}%
16270       }%
16271     \else
16272       \def\glsxtr@endbookindex{}%
16273     \fi
16274     \glsxtr@endbookindex
16275   }%
Use ragged right as columns are likely to be narrow and indexes tend not to be fully justified.
16276   \renewcommand*{\glossaryheader}{\raggedright}%
Top level entry format.
16277   \renewcommand*{\glossentry}[2]{%
Do separator.
16278     \@glsxtr@bookindex@between{##1}%
Update separators.
16279     \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
16280     \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentschildsep
16281     \let\@glsxtr@bookindex@subbetween\@gobble
16282     \let\@glsxtr@bookindex@subsubbetween\@gobble
16283     \edef\@glsxtr@bookindex@between{%
16284       \noexpand\glsxtrbookindexbetween{##1}}%
16285     }%
16286     \edef\@glsxtr@bookindex@atendgroup{%
16287       \noexpand\glsxtrbookindexatendgroup{##1}}%
16288     }%
16289     \let\@glsxtr@bookindex@subatendgroup\relax
16290     \let\@glsxtr@bookindex@subsubatendgroup\relax
Format entry.
16291   \glstreeitem
16292     \glsentryitem{##1}%
16293     \glstarget{##1}{\glsxtrbookindexname{##1}}%
16294     \glsxtrbookindexprelocation{##1}%
16295     \glsxtrbookindexlocation{##1}{##2}%
16296   }%
16297   \renewcommand{\subglossentry}[3]{%
16298     \ifcase##1\relax

```

Level 0 (shouldn't happen as that's formatted with \glossentry).

```
16299      \glstreeitem
16300      \or
    Level 1.
16301      \@glsxtr@bookindex@sep
16302      \@glsxtr@bookindex@subbetween{##2}%
16303      \let\@glsxtr@bookindex@sep\relax
```

Update separators.

```
16304      \let\@glsxtr@bookindex@subsubbetween\@obble
16305      \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
16306      \edef\@glsxtr@bookindex@subbetween{%
16307          \noexpand\glsxtrbookindexsubbetween{##2}%
16308      }%
16309      \edef\@glsxtr@bookindex@atsubendgroup{%
16310          \noexpand\glsxtrbookindexatsubendgroup{##1}%
16311      }%
```

Start sub-item.

```
16312      \glstreesubitem
16313      \glssubentryitem{##2}%
16314      \else
```

All other levels.

```
16315      \@glsxtr@bookindex@subsep
16316      \@glsxtr@bookindex@subsubbetween{##2}%
```

Update separators.

```
16317      \let\@glsxtr@bookindex@subsep\relax
16318      \edef\@glsxtr@bookindex@subsubbetween{%
16319          \noexpand\glsxtrbookindexsubsubbetween{##2}%
16320      }%
16321      \edef\@glsxtr@bookindex@atsubsubendgroup{%
16322          \noexpand\glsxtrbookindexatsubsubendgroup{##1}%
16323      }%
```

Start sub-sub-item.

```
16324      \glstreesubsubitem
16325      \fi
```

Format entry.

```
16326      \glstarget{##2}{\glsxtrbookindexsubname{##2}}%
16327      \glsxtrbookindexsubprelocation{##2}%
16328      \glsxtrbookindexsublocation{##2}{##3}%
16329  }%
```

The group skip is moved to the group heading to avoid interfering with the end letter group hooks.

```
16330  \renewcommand*\glsgroupskip{}%
```

Group heading format.

```
16331  \renewcommand*\glsgroupheading[1]{%
```

Do end group hooks.

```
16332  \glsxtr@bookindex@subsubatendgroup
16333  \glsxtr@bookindex@subatendgroup
16334  \glsxtr@bookindex@atendgroup
16335  \glsxtr@bookindexgroupskip
```

Update separators.

```
16336  \let\glsxtr@bookindexgroupskip\glsxtrbookindexgroupskip
16337  \let\glsxtr@bookindex@between\gobble
16338  \let\glsxtr@bookindex@atendgroup\relax
16339  \let\glsxtr@bookindex@subatendgroup\relax
16340  \let\glsxtr@bookindex@subsubatendgroup\relax
```

Fetch the group title from the label supplied in #1.

```
16341  \glsxtrgetgroup{##1}{\glsxtrcurrentgrptitle}%
```

Do the PDF bookmark if supported.

```
16342  \glsxtrbookindexbookmark{\glsxtrcurrentgrptitle}{\glsxtrbookindexbookmarkprefix##1}%
```

Format the group title.

```
16343  \glsxtrbookindexformatheader{\glsxtrcurrentgrptitle}%
16344  \nopagebreak\indexspace\nopagebreak\@afterheading
16345 }%
16346 }
```

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.

```
16347 \newcommand{\glsxtrbookindexthepage}{%
16348 \ifdef{\currentglossary}{\currentglossary.\arabic{page}}{\arabic{page}}%
16349 }
```

`\bookindexmarkentry` Writes entry information to the .aux file. The argument is the entry label.

```
16350 \newcommand*{\glsxtrbookindexmarkentry}[1]{%
16351 \protected@write\auxout
16352 {\let\glsxtrbookindexthepage\relax}%
16353 {\string\glsxtr@setbookindexmark{\glsxtrbookindexthepage}{#1}}%
16354 }
```

`\etbookindexmark`

```
16355 \newcommand*{\glsxtr@setbookindexmark}[2]{%
16356 \ifcsundef{\glsxtr@idxfirstmark@#1}%
16357 {\csgdef{\glsxtr@idxfirstmark@#1}{#2}}%
16358 {}%
16359 \csgdef{\glsxtr@idxlastmark@#1}{#2}%
16360 }
```

```
dexfirstmarkfmt
16361 \newcommand*{\glsxtrbookindexfirstmarkfmt}[1]{%
16362   \glsentryname{#1}%
16363 }

kindexfirstmark
16364 \newcommand*{\glsxtrbookindexfirstmark}{%
16365   \letcs{\glsxtr@label}{\glsxtr@idxfirstmark@\glsxtrbookindexthe page}%
16366   \ifdef{\glsxtr@label}%
16367     {\glsxtrbookindexfirstmarkfmt{\glsxtr@label}}%
16368   {}%
16369 }

ndexlastmarkfmt
16370 \newcommand*{\glsxtrbookindexlastmarkfmt}[1]{%
16371   \glsentryname{#1}%
16372 }

okindexlastmark
16373 \newcommand*{\glsxtrbookindexlastmark}{%
16374   \letcs{\glsxtr@label}{\glsxtr@idxlastmark@\glsxtrbookindexthe page}%
16375   \ifdef{\glsxtr@label}%
16376     {\glsxtrbookindexlastmarkfmt{\glsxtr@label}}%
16377   {}%
16378 }
```

## 4 longextra styles (glossary-longextra.sty)

### 4.1 Package Initialisation and Options

Provides additional long styles.

```
16379 \NeedsTeXFormat{LaTeX2e}
16380 \ProvidesPackage{glossary-longextra}[2020/04/01 v1.45 (NLCT)]
Load required packages.
16381 \RequirePackage{glossary-longbooktabs}
```

ongextraNameFmt

```
\glslongextraNameFmt{\label}
```

Governs the way the name is displayed.

```
16382 \newcommand{\glslongextraNameFmt}[1]{%
16383   \glsentryitem{\#1}\glstarget{\#1}{\glossentryname{\#1}}%
16384 }
```

ongextraDescFmt

```
\glslongextraDescFmt{\label}
```

Governs the way the description is displayed.

```
16385 \newcommand{\glslongextraDescFmt}[1]{%
16386   \glossentrydesc{\#1}\glspostdescription
16387 }
```

gextraSymbolFmt

```
\glslongextraSymbolFmt{\label}
```

Governs the way the symbol is displayed.

```
16388 \newcommand{\glslongextraSymbolFmt}[1]{\glossentrysymbol{\#1}}
```

xtraLocationFmt

```
\glslongextraLocationFmt{\label}{\location list}
```

Governs the way the location is displayed.

```
16389 \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.

```
16390 \newcommand{\glslongextraSubNameFmt}[2]{%
16391   \glssubentryitem{#2}\glstarget{#2}{\strut}%
16392 }
```

extraSubDescFmt

```
\glslongextraSubDescFmt{\level}{\label}
```

Governs the way the child description is displayed.

```
16393 \newcommand{\glslongextraSubDescFmt}[2]{%
16394   \glslongextraDescFmt{#2}%
16395 }
```

traSubSymbolFmt

```
\glslongextraSubSymbolFmt{\level}{\label}
```

Governs the way the child symbol is displayed.

```
16396 \newcommand{\glslongextraSubSymbolFmt}[2]{%
16397   \glslongextraSymbolFmt{#2}%
16398 }
```

aSubLocationFmt

```
\glslongextraSubLocationFmt{\level}{\label}{\location list}
```

Governs the way the child location list is displayed.

```
16399 \newcommand{\glslongextraSubLocationFmt}[3]{#3}
```

```

gextraNameAlign Alignment for the name column.
16400 \newcommand{\glslongextraNameAlign}{l}

gextraDescAlign Alignment for the description column.
16401 \newcommand{\glslongextraDescAlign}{>{\raggedright}p{\glsdescwidth} }

xtraSymbolAlign Alignment for the symbol column.
16402 \newcommand{\glslongextraSymbolAlign}{c}

raLocationAlign Alignment for the location column.
16403 \newcommand{\glslongextraLocationAlign}{>{\raggedright}p{\glspagelistwidth} }

traGroupHeading 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).
16404 \newcommand{\glslongextraGroupHeading}[2]{}

traHeaderFormat Format for the column headers.
16405 \newcommand{\glslongextraHeaderFmt}[1]{\textbf{#1} }

aNameDescHeader
16406 \newcommand{\glslongextraNameDescHeader}{%
16407 \glslongextraNameDescTabularHeader\endhead
16408 \glslongextraNameDescTabularFooter\endfoot
16409 }

scTabularHeader
16410 \newcommand{\glslongextraNameDescTabularHeader}{%
16411 \toprule
16412 \glslongextraHeaderFmt\entryname &
16413 \glslongextraHeaderFmt\descriptionname\tabularnewline
16414 \midrule
16415 }

scTabularFooter
16416 \newcommand{\glslongextraNameDescTabularFooter}{%
16417 \bottomrule
16418 }

Unlike the altree style, there aren't different widths for the hierarchical levels.

gextraSetWidest Provide in case the tree styles haven't been loaded.
16419 \newcommand*{\glslongextraSetWidest}[1]{%
16420 \def\@glslongextrawidestname{#1}%
16421 }

extrawidestname Pick up the widest name from the altree style if it has been set. (Will expand to nothing
otherwise.)
16422 \newcommand*{\@glslongextrawidestname}{\csuse{@glswidestname}}

```

traUpdateWidest

```
16423 \newcommand*{\glslongextraUpdateWidest}[1]{%
16424   \ifundef\@glslongextrawidestname
16425   {\def\@glslongextrawidestname{\#1}}%
16426   {%
16427     \settowidth{\dimen@}{\@glslongextrawidestname}%
16428     \settowidth{\dimen@ii}{\#1}%
16429     \ifdim\dimen@ii>\dimen@
16430       \def\@glslongextrawidestname{\#1}%
16431     \fi
16432   }%
16433 }
```

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.

```
16434 \newcommand*{\glslongextraUpdateWidestChild}[2]{}
```

traSetDescWidth Computes the value of \glsdescwidth for the styles that only have name and description columns.

```
16435 \newcommand{\glslongextraSetDescWidth}{%
16436   \settowidth{\gls@tmp@len}{\glslongextraHeaderFmt\entryname}%

```

Has the widest name been set.

```
16437   \settowidth{\dimen@}{\glsnamefont{\@glslongextrawidestname}}%
16438   \ifdim\dimen@>\gls@tmp@len
16439     \gls@tmp@len=\dimen@
16440   \fi
```

Description width is \linewidth less 4\tabcolsep less the width of the name column.

```
16441   \setlength{\glsdescwidth}{\dimexpr\linewidth-4\tabcolsep-\gls@tmp@len}%
16442 }
```

SymSetDescWidth Computes the value of \glsdescwidth for the styles that only have name, symbol and description columns.

```
16443 \newcommand{\glslongextraSymSetDescWidth}{%
```

Work out the size for just the name and description style.

```
16444   \glslongextraSetDescWidth
```

Now work out the symbol column width. This is assuming that the column title will be the widest text in the column.

```
16445   \settowidth{\gls@tmp@len}{\glslongextraHeaderFmt\symbolname}%
```

Subtract 2\tabcolsep and the symbol header width.

```
16446 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\gls@tmp{len}}%
16447 }
```

**LocSetDescWidth** Computes the value of \glsdescwidth for the styles that only have name, location and description columns.

```
16448 \newcommand{\glslongextraLocSetDescWidth}{%
```

Work out the size for just the name and description style.

```
16449 \glslongextraSetDescWidth
```

Subtract 2\tabcolsep and the location list column width.

```
16450 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\glspagelistwidth}%
16451 }
```

**LocSetDescWidth** Computes the value of \glsdescwidth for the styles that have name, symbol, location and description columns.

```
16452 \newcommand{\glslongextraSymLocSetDescWidth}{%
```

Work out the size for just the name, symbol and description style.

```
16453 \glslongextraSymSetDescWidth
```

Subtract 2\tabcolsep and the location list column width.

```
16454 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\glspagelistwidth}%
16455 }
```

**ExtraUseTabular** If true use tabular instead of longtable. Obviously only intended for short glossaries that can fit into a single page.

```
16456 \newif\ifGlsLongExtraUseTabular
16457 \GlsLongExtraUseTabularfalse
```

**raTabularVAlign** Only used with the tabular setting.

```
16458 \newcommand*\glslongextraTabularVAlign[c]
```

**long-name-desc** Two column style with multi-lined descriptions and header. This is similar to the longragged-booktabs style.

```
16459 \newglossarystyle[long-name-desc]{%
16460 }%
16461 \ifGlsLongExtraUseTabular
16462 \renewenvironment{theglossary}{%
16463 }%
16464 \glslongextraSetDescWidth
16465 \edef\@glslongextra@begintab{%
16466 \noexpand\begin{tabular}[!ht]{l@{\hspace{0pt}}l}
16467 \expandonce\glslongextraNameAlign
16468 \expandonce\glslongextraDescAlign}%
16469 \@glslongextra@begintab
16470 }%
16471 }%
```

```

16472     \glslongextraNameDescTabularFooter
16473     \end{tabular}%
16474   }%
16475   \renewcommand*{\glossaryheader}{\glslongextraNameDescTabularHeader}%
16476 \else
16477   \renewenvironment{theglossary}%
16478   {%
16479     \glspatchLToutput
16480     \glslongextraSetDescWidth
16481     \edef\@glslongextra@begintab{%
16482       \noexpand\begin{longtable}{%
16483         \expandonce\glslongextraNameAlign
16484         \expandonce\glslongextraDescAlign}}%
16485     \glslongextra@begintab
16486   }%
16487   {\end{longtable}}%
16488   \renewcommand*{\glossaryheader}{\glslongextraNameDescHeader}%
16489 \fi
16490 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{2}{##1}}%
16491 \renewcommand{\glossentry}[2]{%
16492   \glslongextraNameFmt{##1} %
16493   \glslongextraDescFmt{##1}\tabularnewline
16494 }%
16495 \renewcommand{\subglossentry}[3]{%
16496   \glslongextraSubNameFmt{##1}{##2}%
16497   &
16498   \glslongextraSubDescFmt{##1}{##2}%
16499   \tabularnewline
16500 }%
16501 \ifglsnogroupskip
16502   \renewcommand*{\glsgroupskip}{}%
16503 \else
16504   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16505 \fi
16506 }

```

#### cLocationHeader

```

16507 \newcommand{\glslongextraNameDescLocationHeader}{%
16508   \glslongextraNameDescLocationTabularHeader\endhead
16509   \glslongextraNameDescLocationTabularFooter\endfoot
16510 }

```

#### onTabularHeader

```

16511 \newcommand{\glslongextraNameDescLocationTabularHeader}{%
16512   \toprule
16513   \glslongextraHeaderFmt\entryname %
16514   \glslongextraHeaderFmt\descriptionname %
16515   \glslongextraHeaderFmt\pagelistname\tabularnewline
16516   \midrule

```

```

16517 }

onTabularFooter
16518 \newcommand{\glslongextraNameDescLocationTabularFooter}{%
16519   \bottomrule
16520 }

g-name-desc-loc Three columns: name, description and location list.
16521 \newglossarystyle{long-name-desc-loc}{%
16522 {%
16523   \ifGlsLongExtraUseTabular
16524     \renewenvironment{theglossary}{%
16525       {%
16526         \glslongextraLocSetDescWidth
16527         \edef\@glslongextra@begintab{%
16528           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16529             \expandonce\glslongextraNameAlign
16530             \expandonce\glslongextraDescAlign
16531             \expandonce\glslongextraLocationAlign
16532           }{}}%
16533         \@glslongextra@begintab
16534       }%
16535       {%
16536         \glslongextraNameDescLocationTabularFooter
16537         \end{tabular}%
16538       }%
16539     \renewcommand*\glossaryheader{\glslongextraNameDescLocationTabularHeader}%
16540   \else
16541     \renewenvironment{theglossary}{%
16542       {%
16543         \glspatchLToutput
16544         \glslongextraLocSetDescWidth
16545         \edef\@glslongextra@begintab{%
16546           \noexpand\begin{longtable}{%
16547             \expandonce\glslongextraNameAlign
16548             \expandonce\glslongextraDescAlign
16549             \expandonce\glslongextraLocationAlign
16550           }{}}%
16551         \@glslongextra@begintab
16552       }%
16553       {\end{longtable}}%
16554     \renewcommand*\glossaryheader{\glslongextraNameDescLocationHeader}%
16555   \fi
16556 \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}%
16557 \renewcommand{\glossentry}[2]{%
16558   \glslongextraNameFmt{##1} &
16559   \glslongextraDescFmt{##1} &
16560   \glslongextraLocationFmt{##1}{##2}\tabularnewline
16561 }%

```

```

16562 \renewcommand{\subglossentry}[3]{%
16563   \glslongextraSubNameFmt{##1}{##2}&
16564   \glslongextraSubDescFmt{##1}{##2}&
16565   \glslongextraSubLocationFmt{##1}{##2}{##3}%
16566   \tabularnewline
16567 }%
16568 \ifglsnogroupskip
16569   \renewcommand*{\glsgroupskip}{}%
16570 \else
16571   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16572 \fi
16573 }

```

#### aDescNameHeader

```

16574 \newcommand{\glslongextraDescNameHeader}{%
16575   \glslongextraDescNameTabularHeader\endhead
16576   \glslongextraDescNameTabularFooter\endfoot
16577 }

```

#### meTabularHeader

```

16578 \newcommand{\glslongextraDescNameTabularHeader}{%
16579   \toprule
16580   \glslongextraHeaderFmt\descriptionname&
16581   \glslongextraHeaderFmt\entryname \tabularnewline
16582   \midrule
16583 }

```

#### meTabularFooter

```

16584 \newcommand{\glslongextraDescNameTabularFooter}{%
16585   \bottomrule
16586 }

```

**long-desc-name** Like name-desc but swaps the columns.

```

16587 \newglossarystyle{long-desc-name}{%
16588 }%
16589 \ifGlsLongExtraUseTabular
16590   \renewenvironment{theglossary}{%
16591     {%
16592       \glslongextraSetDescWidth
16593       \edef\@glslongextra@begintab{%
16594         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16595           \expandonce\glslongextraDescAlign
16596           \expandonce\glslongextraNameAlign}}%
16597       \@glslongextra@begintab
16598     }%
16599     {%
16600       \glslongextraDescNameTabularFooter
16601       \end{tabular}%
16602     }%

```

```

16603 \renewcommand{\glossaryheader}{\glslongextraDescNameTabularHeader}%
16604 \else
16605 \renewenvironment{theglossary}%
16606 {%
16607   \glspatchLToutput
16608   \glslongextraSetDescWidth
16609   \edef\@glslongextra@begintab{%
16610     \noexpand\begin{longtable}{%
16611       \expandonce\glslongextraDescAlign
16612       \expandonce\glslongextraNameAlign}}%
16613   \glslongextra@begintab
16614 }%
16615 { \end{longtable} }%
16616 \renewcommand{\glossaryheader}{\glslongextraDescNameHeader}%
16617 \fi
16618 \renewcommand{\glsgroupheading}[1]{\glslongextraGroupHeading{2}{##1}}%
16619 \renewcommand{\glossentry}[2]{%
16620   \glslongextraDescFmt{##1} &
16621   \glslongextraNameFmt{##1}\tabularnewline
16622 }%
16623 \renewcommand{\subglossentry}[3]{%
16624   \glslongextraSubDescFmt{##1}{##2} &
16625   \glslongextraSubNameFmt{##1}{##2}\tabularnewline
16626 }%
16627 \ifglsnogroupskip
16628   \renewcommand{\glsgroupskip}{}%
16629 \else
16630   \renewcommand{\glsgroupskip}{\glspenaltygroupskip}%
16631 \fi
16632 }

```

nDescNameHeader

```

16633 \newcommand{\glslongextraLocationDescNameHeader}%
16634 \glslongextraLocationDescNameTabularHeader\endhead
16635 \glslongextraLocationDescNameTabularFooter\endfoot
16636 }

```

meTabularHeader

```

16637 \newcommand{\glslongextraLocationDescNameTabularHeader}%
16638 \toprule
16639 \glslongextraHeaderFmt\pagelistname&
16640 \glslongextraHeaderFmt\descriptionname&
16641 \glslongextraHeaderFmt\entryname \tabularnewline
16642 \midrule
16643 }

```

meTabularFooter

```

16644 \newcommand{\glslongextraLocationDescNameTabularFooter}%
16645 \bottomrule

```

```

16646 }

g-loc-desc-name Three columns: location, description and name.
16647 \newglossarystyle{long-loc-desc-name}{%
16648 {%
16649   \ifGlsLongExtraUseTabular
16650   {%
16651     \glslongextraLocSetDescWidth
16652     \edef\@glslongextra@begintab{%
16653       \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16654         \expandonce\glslongextraLocationAlign
16655         \expandonce\glslongextraDescAlign
16656         \expandonce\glslongextraNameAlign}}%
16657     \@glslongextra@begintab
16658   }%
16659   {%
16660     \glslongextraLocationDescNameTabularFooter
16661     \end{tabular}%
16662   }%
16663   \renewcommand*\glossaryheader{\glslongextraLocationDescNameTabularHeader}%
16664 \else
16665 \renewenvironment{theglossary}{%
16666   {%
16667     \glspatchLToutput
16668     \glslongextraLocSetDescWidth
16669     \edef\@glslongextra@begintab{%
16670       \noexpand\begin{longtable}{%
16671         \expandonce\glslongextraLocationAlign
16672         \expandonce\glslongextraDescAlign
16673         \expandonce\glslongextraNameAlign}}%
16674     \@glslongextra@begintab
16675   }%
16676   {\end{longtable}}%
16677   \renewcommand*\glossaryheader{\glslongextraLocationDescNameHeader}%
16678 \fi
16679 \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}%
16680 \renewcommand{\glossentry}[2]{%
16681   \glslongextraLocationFmt{##1}{##2} %
16682   \glslongextraDescFmt{##1} %
16683   \glslongextraNameFmt{##1}\tabularnewline
16684 }%
16685 \renewcommand{\subglossentry}[3]{%
16686   \glslongextraSubLocationFmt{##1}{##2}{##3} %
16687   \glslongextraSubDescFmt{##1}{##2} %
16688   \glslongextraSubNameFmt{##1}{##2}\tabularnewline
16689 }%
16690 \ifglsnogroupskip
16691   \renewcommand*\glsgroupskip{}%
16692 \else

```

```

16693     \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16694     \fi
16695 }

meDescSymHeader
16696 \newcommand{\glslongextraNameDescSymHeader}{%
16697 \glslongextraNameDescSymTabularHeader\endhead
16698 \glslongextraNameDescSymTabularFooter\endfoot
16699 }

ymTabularHeader
16700 \newcommand{\glslongextraNameDescSymTabularHeader}{%
16701 \toprule
16702 \glslongextraHeaderFmt\entryname &
16703 \glslongextraHeaderFmt\descriptionname &
16704 \glslongextraHeaderFmt\symbolname\tabularnewline
16705 \midrule
16706 }

ymTabularFooter
16707 \newcommand{\glslongextraNameDescSymTabularFooter}{%
16708 \bottomrule
16709 }

g-name-desc-sym Three column style with symbol in the third column.

```

```

16710 \newglossarystyle{long-name-desc-sym}{%
16711 {%
16712 \ifGlsLongExtraUseTabular
16713 \renewenvironment{theglossary}{%
16714 {%
16715 \glslongextraSymSetDescWidth
16716 \edef\@glslongextra@begintab{%
16717 \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16718 \expandonce\glslongextraNameAlign
16719 \expandonce\glslongextraDescAlign
16720 \expandonce\glslongextraSymbolAlign
16721 }}%
16722 \glslongextra@begintab
16723 }%
16724 {%
16725 \glslongextraNameDescSymTabularFooter
16726 \end{tabular}%
16727 }%
16728 \renewcommand*{\glossaryheader}{\glslongextraNameDescSymTabularHeader}%
16729 \else
16730 \renewenvironment{theglossary}{%
16731 {%
16732 \glspatchLToutput
16733 \glslongextraSymSetDescWidth

```

```

16734     \edef\@glslongextra@begintab{%
16735         \noexpand\begin{longtable}{%
16736             \expandonce\glslongextraNameAlign
16737             \expandonce\glslongextraDescAlign
16738             \expandonce\glslongextraSymbolAlign
16739         }{}}%
16740     \glslongextra@begintab
16741     }%
16742     {\end{longtable}}%
16743     \renewcommand*\glossaryheader{\glslongextraNameDescSymHeader}%
16744     \fi
16745     \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}%
16746     \renewcommand*\glossentry[2]{%
16747         \glslongextraNameFmt{##1} &
16748         \glslongextraDescFmt{##1} &
16749         \glslongextraSymbolFmt{##1}\tabularnewline
16750     }%
16751     \renewcommand*\subglossentry[3]{%
16752         \glslongextraSubNameFmt{##1}{##2} &
16753         \glslongextraSubDescFmt{##1}{##2} &
16754         \glslongextraSubSymbolFmt{##1}{##2}%
16755         \tabularnewline
16756     }%
16757     \ifglsnogroupskip
16758         \renewcommand*\glsgroupskip{}%
16759     \else
16760         \renewcommand*\glsgroupskip{\glspenaltygroupskip}%
16761     \fi
16762 }

```

#### mLocationHeader

```

16763 \newcommand{\glslongextraNameDescSymLocationHeader}{%
16764     \glslongextraNameDescSymLocationTabularHeader\endhead
16765     \glslongextraNameDescSymLocationTabularFooter\endfoot
16766 }

```

#### onTabularHeader

```

16767 \newcommand{\glslongextraNameDescSymLocationTabularHeader}{%
16768     \toprule
16769     \glslongextraHeaderFmt\entryname &
16770     \glslongextraHeaderFmt\descriptionname &
16771     \glslongextraHeaderFmt\symbolname &
16772     \glslongextraHeaderFmt\pagelistname\tabularnewline
16773     \midrule
16774 }

```

#### onTabularFooter

```

16775 \newcommand{\glslongextraNameDescSymLocationTabularFooter}{%
16776     \bottomrule

```

```

16777 }

me-desc-sym-loc Four columns: name, description and location
16778 \newglossarystyle{long-name-desc-sym-loc}%
16779 {%
16780   \ifGlsLongExtraUseTabular
16781     \renewenvironment{theglossary}%
16782     {%
16783       \glslongextraSymLocSetDescWidth
16784       \edef\@glslongextra@begintab{%
16785         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16786           \expandonce\glslongextraNameAlign
16787           \expandonce\glslongextraDescAlign
16788           \expandonce\glslongextraSymbolAlign
16789           \expandonce\glslongextraLocationAlign
16790         }{}}%
16791       \@glslongextra@begintab
16792     }%
16793     {%
16794       \glslongextraNameDescSymLocationTabularFooter
16795       \end{tabular}%
16796     }%
16797     \renewcommand*{\glossaryheader}{\glslongextraNameDescSymLocationTabularHeader}%
16798   \else
16799     \renewenvironment{theglossary}%
16800     {%
16801       \glspatchLToutput
16802       \glslongextraSymLocSetDescWidth
16803       \edef\@glslongextra@begintab{%
16804         \noexpand\begin{longtable}{%
16805           \expandonce\glslongextraNameAlign
16806           \expandonce\glslongextraDescAlign
16807           \expandonce\glslongextraSymbolAlign
16808           \expandonce\glslongextraLocationAlign
16809         }{}}%
16810       \@glslongextra@begintab
16811     }%
16812     {\end{longtable}}%
16813     \renewcommand*{\glossaryheader}{\glslongextraNameDescSymLocationHeader}%
16814   \fi
16815   \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{4}{##1}}%
16816   \renewcommand{\glossentry}[2]{%
16817     \glslongextraNameFmt{##1} &
16818     \glslongextraDescFmt{##1} &
16819     \glslongextraSymbolFmt{##1}&
16820     \glslongextraLocationFmt{##1}{##2}\tabularnewline
16821   }%
16822   \renewcommand{\subglossentry}[3]{%
16823     \glslongextraSubNameFmt{##1}{##2} &

```

```

16824     \glslongextraSubDescFmt{##1}{##2} &
16825     \glslongextraSubSymbolFmt{##1}{##2}&
16826     \glslongextraSubLocationFmt{##1}{##2}{##3}%
16827     \tabularnewline
16828 }%
16829 \ifglsnogroupskip
16830   \renewcommand*\glsgroupskip{}%
16831 \else
16832   \renewcommand*\glsgroupskip{\glspenaltygroupskip}%
16833 \fi
16834 }

meSymDescHeader
16835 \newcommand{\glslongextraNameSymDescHeader}{%
16836   \glslongextraNameSymDescTabularHeader\endhead
16837   \glslongextraNameSymDescTabularFooter\endfoot
16838 }

scTabularHeader
16839 \newcommand{\glslongextraNameSymDescTabularHeader}{%
16840   \toprule
16841   \glslongextraHeaderFmt\entryname &
16842   \glslongextraHeaderFmt\symbolname &
16843   \glslongextraHeaderFmt\descriptionname\tabularnewline
16844   \midrule
16845 }

scTabularFooter
16846 \newcommand{\glslongextraNameSymDescTabularFooter}{%
16847   \bottomrule
16848 }

g-name-sym-desc Three column style with symbol in the second column.
16849 \newglossarystyle{long-name-sym-desc}{%
16850 }%
16851 \ifGlsLongExtraUseTabular
16852   \renewenvironment{theglossary}{%
16853     {%
16854       \glslongextraSymSetDescWidth
16855       \edef\@glslongextra@begintab{%
16856         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16857           \expandonce\glslongextraNameAlign
16858           \expandonce\glslongextraSymbolAlign
16859           \expandonce\glslongextraDescAlign
16860         }{}}%
16861       \@glslongextra@begintab
16862     }%
16863     {%
16864       \glslongextraNameSymDescTabularFooter

```

```

16865      \end{tabular}%
16866  }%
16867  \renewcommand*{\glossaryheader}{\glslongextraNameSymDescTabularHeader}%
16868 \else
16869 \renewenvironment{theglossary}%
16870 {%
16871   \glspatchLToutput
16872   \glslongextraSymSetDescWidth
16873   \edef\@glslongextra@begintab{%
16874     \noexpand\begin{longtable}{%
16875       \expandonce\glslongextraNameAlign
16876       \expandonce\glslongextraSymbolAlign
16877       \expandonce\glslongextraDescAlign
16878     }}%
16879   \glslongextra@begintab
16880 }%
16881 { \end{longtable} }%
16882 \renewcommand*{\glossaryheader}{\glslongextraNameSymDescHeader}%
16883 \fi
16884 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}}%
16885 \renewcommand{\glossentry}[2]{%
16886   \glslongextraNameFmt{##1} &
16887   \glslongextraSymbolFmt{##1} &
16888   \glslongextraDescFmt{##1}\tabularnewline
16889 }%
16890 \renewcommand{\subglossentry}[3]{%
16891   \glslongextraSubNameFmt{##1}{##2} &
16892   \glslongextraSubSymbolFmt{##1}{##2} &
16893   \glslongextraSubDescFmt{##1}{##2}\tabularnewline
16894 }%
16895 \ifglsnogroupskip
16896   \renewcommand*{\glsgroupskip}{}%
16897 \else
16898   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16899 \fi
16900 }

```

#### cLocationHeader

```

16901 \newcommand{\glslongextraNameSymDescLocationHeader}{%
16902   \glslongextraNameSymDescLocationTabularHeader\endhead
16903   \glslongextraNameSymDescLocationTabularFooter\endfoot
16904 }

```

#### onTabularHeader

```

16905 \newcommand{\glslongextraNameSymDescLocationTabularHeader}{%
16906   \toprule
16907   \glslongextraHeaderFmt\entryname &
16908   \glslongextraHeaderFmt\symbolname &
16909   \glslongextraHeaderFmt\descriptionname &

```

```

16910 \glslongextraHeaderFmt\pagelistname\tabularnewline
16911 \midrule
16912 }

onTabularFooter
16913 \newcommand{\glslongextraNameSymDescLocationTabularFooter}{%
16914 \bottomrule
16915 }

```

me-sym-desc-loc Four column style with symbol in the second column.

```

16916 \newglossarystyle{long-name-sym-desc-loc}%
16917 {%
16918   \ifGlsLongExtraUseTabular
16919     \renewenvironment{theglossary}%
16920     {%
16921       \glslongextraSymLocSetDescWidth
16922       \edef\@glslongextra@begintab{%
16923         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16924           \expandonce\glslongextraNameAlign
16925           \expandonce\glslongextraSymbolAlign
16926           \expandonce\glslongextraDescAlign
16927           \expandonce\glslongextraLocationAlign
16928         }{}}%
16929       \@glslongextra@begintab
16930     }%
16931     {%
16932       \glslongextraNameSymDescLocationTabularFooter
16933       \end{tabular}%
16934     }%
16935     \renewcommand*\glossaryheader{\glslongextraNameSymDescLocationTabularHeader}%
16936   \else
16937     \renewenvironment{theglossary}%
16938     {%
16939       \glspatchLToutput
16940       \glslongextraSymLocSetDescWidth
16941       \edef\@glslongextra@begintab{%
16942         \noexpand\begin{longtable}[%}
16943           \expandonce\glslongextraNameAlign
16944           \expandonce\glslongextraSymbolAlign
16945           \expandonce\glslongextraDescAlign
16946           \expandonce\glslongextraLocationAlign
16947         }{}}%
16948       \@glslongextra@begintab
16949     }%
16950     {\end{longtable}}%
16951     \renewcommand*\glossaryheader{\glslongextraNameSymDescLocationHeader}%
16952   \fi
16953   \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{4}{##1}}%
16954   \renewcommand{\glossentry}[2]{%

```

```

16955     \glslongextraNameFmt{##1} &
16956     \glslongextraSymbolFmt{##1} &
16957     \glslongextraDescFmt{##1} &
16958     \glslongextraLocationFmt{##1}{##2}\tabularnewline
16959 }%
16960 \renewcommand{\subglossentry}[3]{%
16961     \glslongextraSubNameFmt{##1}{##2} &
16962     \glslongextraSubSymbolFmt{##1}{##2} &
16963     \glslongextraSubDescFmt{##1}{##2} &
16964     \glslongextraSubLocationFmt{##1}{##2}{##3}\tabularnewline
16965 }%
16966 \ifglsnogroupskip
16967     \renewcommand*{\glsgroupskip}{}%
16968 \else
16969     \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16970 \fi
16971 }

mDescNameHeader
16972 \newcommand{\glslongextraSymDescNameHeader}{%
16973 \glslongextraSymDescNameTabularHeader\endhead
16974 \glslongextraSymDescNameTabularFooter\endfoot
16975 }

meTabularHeader
16976 \newcommand{\glslongextraSymDescNameTabularHeader}{%
16977 \toprule
16978 \glslongextraHeaderFmt\symbolname &
16979 \glslongextraHeaderFmt\descriptionname &
16980 \glslongextraHeaderFmt\entryname\tabularnewline
16981 \midrule
16982 }

meTabularFooter
16983 \newcommand{\glslongextraSymDescNameTabularFooter}{%
16984 \bottomrule
16985 }


```

`g-sym-desc-name` Three column style with symbol in the first column, description in the second and name in the third.

```

16986 \newglossarystyle{long-sym-desc-name}{%
16987 }%
16988 \ifGlsLongExtraUseTabular
16989 \renewenvironment{theglossary}{%
16990 }%
16991 \glslongextraSymSetDescWidth
16992 \edef\@glslongextra@begintab{%
16993 \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16994 \expandonce\glslongextraSymbolAlign
```

```

16995      \expandonce\glslongextraDescAlign
16996      \expandonce\glslongextraNameAlign
16997  } } %
16998  @glslongextra@begintab
16999  } %
17000  { %
17001  \glslongextraSymDescNameTabularFooter
17002  \end{tabular} %
17003  } %
17004  \renewcommand*{\glossaryheader}{\glslongextraSymDescNameTabularHeader} %
17005  \else
17006  \renewenvironment{theglossary}%
17007  { %
17008  \glspatchLToutput
17009  \glslongextraSymSetDescWidth
17010  \edef\@glslongextra@begintab{%
17011  \noexpand\begin{longtable}{%
17012  \expandonce\glslongextraSymbolAlign
17013  \expandonce\glslongextraDescAlign
17014  \expandonce\glslongextraNameAlign
17015  } } %
17016  \glslongextra@begintab
17017  } %
17018  {\end{longtable}} %
17019  \renewcommand*{\glossaryheader}{\glslongextraSymDescNameHeader} %
17020  \fi
17021  \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}} %
17022  \renewcommand{\glossentry}[2]{%
17023  \glslongextraSymbolFmt{##1} &
17024  \glslongextraDescFmt{##1} &
17025  \glslongextraNameFmt{##1}\tabularnewline
17026  } %
17027  \renewcommand{\subglossentry}[3]{%
17028  \glslongextraSubSymbolFmt{##1}{##2} &
17029  \glslongextraSubDescFmt{##1}{##2} &
17030  \glslongextraSubNameFmt{##1}{##2}\tabularnewline
17031  } %
17032  \ifglsnogroupskip
17033  \renewcommand*{\glsgroupskip}{} %
17034  \else
17035  \renewcommand*{\glsgroupskip}{\glspenaltygroupskip} %
17036  \fi
17037 }

mDescNameHeader
17038 \newcommand{\glslongextraLocationSymDescNameHeader}{%
17039  \glslongextraLocationSymDescNameTabularHeader\endhead
17040  \glslongextraLocationSymDescNameTabularFooter\endfoot
17041 }

```

```

meTabularHeader
17042 \newcommand{\glslongextraLocationSymDescNameTabularHeader}{%
17043   \toprule
17044   \glslongextraHeaderFmt\pagelistname &
17045   \glslongextraHeaderFmt\symbolname &
17046   \glslongextraHeaderFmt\descriptionname &
17047   \glslongextraHeaderFmt\entryname\tabularnewline
17048   \midrule
17049 }

meTabularFooter
17050 \newcommand{\glslongextraLocationSymDescNameTabularFooter}{%
17051   \bottomrule
17052 }

c-sym-desc-name Four column style with location list, symbol, description and name.
17053 \newglossarystyle{long-loc-sym-desc-name}{%
17054 {%
17055   \ifGlsLongExtraUseTabular
17056     \renewenvironment{theglossary}{%
17057       {%
17058         \glslongextraSymLocSetDescWidth
17059         \edef\@glslongextra@begintab{%
17060           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
17061             \expandonce\glslongextraLocationAlign
17062             \expandonce\glslongextraSymbolAlign
17063             \expandonce\glslongextraDescAlign
17064             \expandonce\glslongextraNameAlign
17065           }{}}%
17066         \@glslongextra@begintab
17067       }{%
17068       {%
17069         \glslongextraLocationSymDescNameTabularFooter
17070         \end{tabular}{}}%
17071       }{%
17072       \renewcommand*\glossaryheader{\glslongextraLocationSymDescNameTabularHeader}{%
17073     \else
17074       \renewenvironment{theglossary}{%
17075         {%
17076           \glspatchLToutput
17077           \glslongextraSymLocSetDescWidth
17078           \edef\@glslongextra@begintab{%
17079             \noexpand\begin{longtable}{%
17080               \expandonce\glslongextraLocationAlign
17081               \expandonce\glslongextraSymbolAlign
17082               \expandonce\glslongextraDescAlign
17083               \expandonce\glslongextraNameAlign
17084             }{}}%
17085           \@glslongextra@begintab

```

```

17086    }%
17087    {\end{longtable}}%
17088    \renewcommand*{\glossaryheader}{\glslongextraLocationSymDescNameHeader}%
17089    \fi
17090    \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{4}{##1}}%
17091    \renewcommand{\glossentry}[2]{%
17092        \glslongextraLocationFmt{##1}{##2} &
17093        \glslongextraSymbolFmt{##1} &
17094        \glslongextraDescFmt{##1} &
17095        \glslongextraNameFmt{##1}\tabularnewline
17096    }%
17097    \renewcommand{\subglossentry}[3]{%
17098        \glslongextraSubLocationFmt{##1}{##2}{##3} &
17099        \glslongextraSubSymbolFmt{##1}{##2} &
17100        \glslongextraSubDescFmt{##1}{##2} &
17101        \glslongextraSubNameFmt{##1}{##2}\tabularnewline
17102    }%
17103    \ifglsnogroupskip
17104        \renewcommand*{\glsgroupskip}{}%
17105    \else
17106        \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
17107    \fi
17108 }

scSymNameHeader
17109 \newcommand{\glslongextraDescSymNameHeader}{%
17110 \glslongextraDescSymNameTabularHeader\endhead
17111 \glslongextraDescSymNameTabularFooter\endfoot
17112 }

meTabularHeader
17113 \newcommand{\glslongextraDescSymNameTabularHeader}{%
17114 \toprule
17115 \glslongextraHeaderFmt\descriptionname &
17116 \glslongextraHeaderFmt\symbolname &
17117 \glslongextraHeaderFmt\entryname\tabularnewline
17118 \midrule
17119 }

meTabularFooter
17120 \newcommand{\glslongextraDescSymNameTabularFooter}{%
17121 \bottomrule
17122 }

g-desc-sym-name Three column style with description in the first column, symbol in the second and name in the third.
17123 \newglossarystyle{long-desc-sym-name}{%
17124 {%
17125     \ifGlsLongExtraUseTabular

```

```

17126 \renewenvironment{theglossary}%
17127 {%
17128   \glslongextraSymSetDescWidth
17129   \edef\@glslongextra@begintab{%
17130     \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
17131       \expandonce\glslongextraDescAlign
17132       \expandonce\glslongextraSymbolAlign
17133       \expandonce\glslongextraNameAlign
17134     }{}}%
17135   \glslongextra@begintab
17136 }%
17137 {%
17138   \glslongextraDescSymNameTabularFooter
17139   \end{tabular}%
17140 }%
17141 \renewcommand*\glossaryheader{\glslongextraDescSymNameTabularHeader}%
17142 \else
17143 \renewenvironment{theglossary}%
17144 {%
17145   \glspatchLToutput
17146   \glslongextraSymSetDescWidth
17147   \edef\@glslongextra@begintab{%
17148     \noexpand\begin{longtable}{%
17149       \expandonce\glslongextraDescAlign
17150       \expandonce\glslongextraSymbolAlign
17151       \expandonce\glslongextraNameAlign
17152     }{}}%
17153   \glslongextra@begintab
17154 }%
17155 { \end{longtable} }%
17156 \renewcommand*\glossaryheader{\glslongextraDescSymNameHeader}%
17157 \fi
17158 \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}%
17159 \renewcommand{\glossentry}[2]{%
17160   \glslongextraDescFmt{##1} &
17161   \glslongextraSymbolFmt{##1} &
17162   \glslongextraNameFmt{##1}\tabularnewline
17163 }%
17164 \renewcommand{\subglossentry}[3]{%
17165   \glslongextraSubDescFmt{##1}{##2} &
17166   \glslongextraSubSymbolFmt{##1}{##2} &
17167   \glslongextraSubNameFmt{##1}{##2}\tabularnewline
17168 }%
17169 \ifglsnogroupskip
17170   \renewcommand*\glsgroupskip{}%
17171 \else
17172   \renewcommand*\glsgroupskip{\glspenaltygroupskip}%
17173 \fi
17174 }

```

```

scSymNameHeader
17175 \newcommand{\glslongextraLocationDescSymNameHeader}{%
17176  \glslongextraLocationDescSymNameTabularHeader\endhead
17177  \glslongextraLocationDescSymNameTabularFooter\endfoot
17178 }

meTabularHeader
17179 \newcommand{\glslongextraLocationDescSymNameTabularHeader}{%
17180  \toprule
17181  \glslongextraHeaderFmt\pagelistname &
17182  \glslongextraHeaderFmt\descriptionname &
17183  \glslongextraHeaderFmt\symbolname &
17184  \glslongextraHeaderFmt\entryname\tabularnewline
17185  \midrule
17186 }

meTabularFooter
17187 \newcommand{\glslongextraLocationDescSymNameTabularFooter}{%
17188  \bottomrule
17189 }

c-desc-sym-name Four column style with location list, description, symbol and name.
17190 \newglossarystyle{long-loc-desc-sym-name}%
17191 {%
17192  \ifGlsLongExtraUseTabular
17193  \renewenvironment{theglossary}%
17194  {%
17195   \glslongextraSymLocSetDescWidth
17196   \edef\@glslongextra@begintab{%
17197     \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
17198       \expandonce\glslongextraLocationAlign
17199       \expandonce\glslongextraDescAlign
17200       \expandonce\glslongextraSymbolAlign
17201       \expandonce\glslongextraNameAlign
17202     }{}}%
17203   \glslongextra@begintab
17204 {%
17205 {%
17206   \glslongextraLocationDescSymNameTabularFooter
17207   \end{tabular}%
17208 }%
17209 \renewcommand*\glossaryheader{\glslongextraLocationDescSymNameTabularHeader}%
17210 \else
17211 \renewenvironment{theglossary}%
17212 {%
17213   \glspatchLToutput
17214   \glslongextraSymLocSetDescWidth
17215   \edef\@glslongextra@begintab{%
17216     \noexpand\begin{longtable}{%
```

```

17217      \expandonce\glslongextraLocationAlign
17218      \expandonce\glslongextraDescAlign
17219      \expandonce\glslongextraSymbolAlign
17220      \expandonce\glslongextraNameAlign
17221      } } %
17222      \glslongextra@begintab
17223      } %
17224      {\end{longtable}} %
17225      \renewcommand*{\glossaryheader}{\glslongextraLocationDescSymNameHeader}%
17226      \fi
17227      \renewcommand*{\glsgrouphheading}[1]{\glslongextraGroupHeading{4}{##1}}%
17228      \renewcommand{\glossentry}[2]{%
17229          \glslongextraLocationFmt{##1}{##2} &
17230          \glslongextraDescFmt{##1} &
17231          \glslongextraSymbolFmt{##1} &
17232          \glslongextraNameFmt{##1}\tabularnewline
17233      } %
17234      \renewcommand{\subglossentry}[3]{%
17235          \glslongextraSubLocationFmt{##1}{##2}{##3} &
17236          \glslongextraSubDescFmt{##1}{##2} &
17237          \glslongextraSubSymbolFmt{##1}{##2} &
17238          \glslongextraSubNameFmt{##1}{##2}\tabularnewline
17239      } %
17240      \ifglsnogroupskip
17241          \renewcommand*{\glsgroupskip}{}%
17242      \else
17243          \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
17244      \fi
17245 }

```

# 5 topic styles (glossary-topic.sty)

## 5.1 Package Initialisation and Options

Provides “topic” styles where top-level entries are considered a topic.

```
17246 \NeedsTeXFormat{LaTeX2e}
17247 \ProvidesPackage{glossary-topic}[2020/04/01 v1.45 (NLCT)]
```

Load required package.

```
17248 \RequirePackage{multicol}
```

The top-level entries act like headers. If the top-level entry has a description it's placed below the name.

topic

```
17249 \newglossarystyle{topic}{%
17250   \renewenvironment{theglossary}%
17251   {%
17252     \glstopicInit
17253     \def\glstopic@prechildren{}%
17254     \def\glstopic@prevlevel{-1}%
17255   }%
17256   {\par}%
17257   \renewcommand*\glossaryheader{}%
17258   \renewcommand*\glsgroupheading[1]{%
17259     \def\glstopic@prevlevel{-1}%
17260     \glstopicGroupHeading{\##1}%
17261   }%
17262   \renewcommand{\glossentry}[2]{%
17263     \hangindent0pt\relax
17264     \parindent\glstopicParIndent\relax
17265     \glstopicItem{\##1}{\##2}}%
```

If there isn't a description, penalise a page break.

```
17266   \ifglshasdesc{\##1}%
17267   {%
17268     \def\glstopic@prechildren{}%
17269   }%
17270   {%
17271     \def\glstopic@prechildren{\nopagebreak}%
17272   }%
17273 }%
17274 \renewcommand{\subglossentry}[3]{%
17275   \ifnum\glstopic@prevlevel=0\relax\glstopic@prechildren\fi
```

```

17276     \def\glstopic@prevlevel{##1}%
17277     \glstopicAssignSubIndent{##1}%
17278     \glstopicSubItem{##1}{##2}{##3}%
17279   }%
17280   \renewcommand*\glsgroupskip{}%
17281 }
```

`\picGroupHeading`

`\glstopicGroupHeading{\(group label)}`

May be redefined if letter group headings are required. For example:

```

\renewcommand*\glstopicGroupHeading[1]{%
  \glsxtrgetgroup{#1}{\thisgrp{}}%
  \section*\thisgrp{}%
}

17282 \newcommand*\glstopicGroupHeading[1]{}
```

`\glstopicItem`

`\glstopicItem{\(label)}{\(location list)}`

```

17283 \newcommand*\glstopicItem[2]{%
17284   \glspar\glstopicPreSkip\glspar\noindent
17285   \glstopicMarker{#1}%
17286   \glstopicTitleFont
17287   {%
17288     \glsentryitem{#1}\glstarget{#1}{\glstopicTitle{#1}}%
17289   }%
17290   \ifglshassdesc{#1}%
17291   {\glspar\nobreak\glstopicMidSkip\glspar\nobreak
17292     \afterheading\glstopicDesc{#1}\glspar\glstopicPostSkip}%
17293   {\glspar\nobreak\glstopicPostSkip}%
17294   \glstopicLoc{#1}{#2}%
17295 }
```

`\glstopicMarker` May be used to insert a bookmark etc if required.

```
17296 \newcommand*\glstopicMarker[1]{}
```

`\glstopicName`

```

17297 \newcommand*\glstopicTitle[1]{\Glossentryname{#1}%
17298   \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{}%
17299 }
```

`\topicTitleFont`

```
17300 \newcommand*\glstopicTitleFont[1]{\textbf{\large #1}}
```

```

\glstopicDesc
 17301 \newcommand*{\glstopicDesc}[1]{\Glossentrydesc{#1}\glspostdescription}

\glstopicLoc
 17302 \newcommand*{\glstopicLoc}[2]{}

topicParIndent
 17303 \newlength\glstopicParIndent
 17304 \setlength\glstopicParIndent{20pt}

topicSubIndent
 17305 \newlength\glstopicSubIndent
 17306 \setlength\glstopicSubIndent{20pt}

\glstopicInit
 17307 \newcommand{\glstopicInit}{} 

```

#### AssignSubIndent

`\glstopicAssignSubIndent{\<level>}`

Used to set the indentation for sub-levels.

```

17308 \newcommand*{\glstopicAssignSubIndent}[1]{%
 17309   \par
 17310   \parindent\dimexpr#1\glstopicSubIndent-\glstopicSubIndent\relax
 17311   \glstopicAssignWidest{#1}%
 17312   \hangindent\dimexpr\parindent+\glstopicwidest\relax
 17313 } 

```

#### \glstopicwidest

```
17314 \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.

```

17315 \newcommand*{\glstopicAssignWidest}[1]{%
 17316   \ifcsundef{@glswidestlength\romannumeral#1}%
 17317   {%
 17318     \ifcsdef{@glswidestname\romannumeral#1}%
 17319     {%
 17320       \settowidth{\glstopicwidest}{%

```

```

17321     \glstopicSubNameFont{\csuse{@glswidestname\romannumeral#1}}%
17322     \glstopicSubItemSep
17323   }%
17324 }%
17325 {\setlength{\glstopicwidest}{0pt}}%

Save the value so that it doesn't have to keep being recalculated.
17326   \csedef{@glswidestlength\romannumeral#1}{\the\glstopicwidest}%
17327 }%
17328 {\setlength{\glstopicwidest}{\csuse{@glswidestlength\romannumeral#1}}}%
17329 }

glstopicPreSkip
17330 \newcommand*{\glstopicPreSkip}{\medskip}

glstopicMidSkip
17331 \newcommand*{\glstopicMidSkip}{\smallskip}

lstopicPostSkip
17332 \newcommand*{\glstopicPostSkip}{\smallskip}

glstopicSubItem


\glstopicSubItem{\langle level \rangle}{\langle label \rangle}{\langle location list \rangle}


17333 \newcommand*{\glstopicSubItem}[3]{%
17334   \glstopicSubItemBox[#1]{\glstopicSubNameFont{\glsentryitem{#2}}%
17335     \glstarget{#2}{\glossentryname{#2}}}}%
17336   \glstopicSubItemSep
17337 }%
17338 \ifglsassymbol{#2}{(\glossentrysymbol{#2})\space}{}%
17339 \ifglsdesc{#2}{%
17340   {\glossentrydesc{#2}\glspostdescription\glstopicSubPreLocSep}{}%
17341 \glstopicSubLoc{#2}{#3}}%
17342 }

topicSubItemSep
17343 \newcommand*{\glstopicSubItemSep}{\quad}

topicSubItemBox


\glstopicSubItemBox{\langle level \rangle}{\langle text \rangle}


17344 \newcommand*{\glstopicSubItemBox}[2]{%
17345 \ifdim\glstopicwidest>0pt\relax\makebox[\glstopicwidest][1]{#2}\else#2\fi
17346 }

```

```

topicSubNameFont
17347 \newcommand*{\glstopicSubNameFont}[1]{\textbf{#1}}


picSubPreLocSep
17348 \newcommand*{\glstopicSubPreLocSep}{\space}

\glstopicSubLoc
17349 \newcommand*{\glstopicSubLoc}[2]{#2}

\glstopicCols
17350 \newcommand*{\glstopicCols}{2}

glstopicColsEnv
17351 \newcommand*{\glstopicColsEnv}{multicols}

topicmcols
17352 \newglossarystyle{topicmcols}{%
17353   \renewenvironment{theglossary}{%
17354     {%
17355       \glstopicInit
17356       \def\glstopic@prechildren{}%
17357       \def\glstopic@postchildren{}%
17358       \def\glstopic@prevlevel{-1}%
17359     }%
17360     {%
17361       \ifnum\glstopic@prevlevel>0\relax\glstopic@postchildren\fi
17362       \par
17363     }%
17364   \renewcommand*{\glossaryheader}{}%
17365   \renewcommand*{\glsgroupheading}[1]{%
17366     \ifnum\glstopic@prevlevel>0\relax\glstopic@postchildren\fi
17367     \def\glstopic@prevlevel{-1}%
17368     \glstopicGroupHeading{##1}%
17369   }%
17370   \renewcommand{\glossentry}[2]{%
17371     \ifnum\glstopic@prevlevel>0\relax\glstopic@postchildren\fi
17372     \def\glstopic@prevlevel{0}%
17373     \hangindent0pt\relax
17374     \parindent\glstopicParIndent\relax
17375     \glstopicItem{##1}{##2}%
17376     \ifnum\glstopicCols>1\relax
}
If there isn't a description, penalise a page break.
17377   \ifglshasdesc{##1}%
17378   {%
17379     \edef\glstopic@prechildren{%
17380       \noexpand\begin{\glstopicColsEnv}{\glstopicCols}%
17381     }%
17382   }%

```

```
17383     {%
17384         \edef\glstopic@prechildren{%
17385             \noexpand\nopagebreak
17386             \noexpand\begin{\glstopicColsEnv}{\glstopicCols}%
17387         }%
17388     }%
17389     \edef\glstopic@postchildren{\noexpand\end{\glstopicColsEnv}}%
17390     \fi
17391 }%
17392 \renewcommand{\subglossentry}[3]{%
17393     \ifnum\glstopic@prevlevel=0\relax\glstopic@prechildren\fi
17394     \def\glstopic@prevlevel{##1}%
17395     \glstopicAssignSubIndent{##1}%
17396     \glstopicSubItem{##1}{##2}{##3}%
17397 }%
17398 \renewcommand*{\glsgroupskip}{()}%
17399 }
```

# Glossary

**bib2gls** A command line Java application that selects entries from a .bib file and converts them to glossary definitions (like `bibtex` but also performs hierarchical sorting and collation, thus omitting the need for `xindy` or `makeindex`). Further details at: [http://www.dickimaw-books.com/software/bib2gls/..](http://www.dickimaw-books.com/software/bib2gls/)

**First use** The first time a glossary entry is used (from the start of the document or after a reset) with one of the following commands: `\gls`, `\Gls`, `\GLS`, `\glspl`, `\Glspl`, `\GLSpl` or `\glsdisp`. *see* **First use flag** & **First use text**

**First use flag** A conditional that determines whether or not the entry has been used according to the rules of **first use**.

**First use text** The text that is displayed on **first use**, which is governed by the first and first-plural keys of `\newglossaryentry`. (May be overridden by `\glsdisp`.)

**makeindex** An indexing application.

**xindy** An flexible indexing application with multilingual support written in Perl.

# Change History

0.1 (2015-11-22)

General: Initial experimental release ..... 5

0.2 (2015-11-30)

\Glsfmtshort: new ..... 365  
\glsfmtshort: new ..... 364  
\Glsfmtshortpl: new ..... 365  
\glsfmtshortpl: new ..... 364  
short: switched inline full form to short  
(long) ..... 256

0.3 (2015-12-02)

\@ACRlong: added redefinition ..... 91  
\@ACRlongpl: added redefinition ..... 92  
\@ACRshort: added redefinition ..... 89  
\@ACRshortpl: added redefinition ..... 90  
\@Acrlong: added redefinition ..... 91  
\@Acrlongpl: added redefinition ..... 92  
\@Acrshort: added redefinition ..... 89  
\@Acrshortpl: added redefinition ..... 90  
\@GLSdesc@: added redefinition ..... 85  
\@GLSdescplural@: added redefinition ..... 85  
\@GLSfirst@: added redefinition ..... 82  
\@GLSfirstplural@: added redefinition ..... 84  
\@GLSname@: added redefinition ..... 84  
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