

# **glossaries-extra.sty v1.23: 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}[2017/11/12 v1.23 (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 }%

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

```

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.

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

\@glsxtr@recordsee Does nothing by default.

```
77 \newcommand*{\glsxtr@recordsee}[2]{}
```

\@glsxtr@defaultnumberformat

```
78 \newcommand*{\@glsxtr@defaultnumberformat}{\glsnumberformat}%
```

\@glsxtr@defaultNumberFormat

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

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.

\@glsxtr@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.

```

82 \newcommand*{\@glsxtr@do@record@wrglossary}[1]{%
83   \begingroup
84     \ifKV@glslink@noindex
85     \else
86       \edef\@gls@label{\glsdetoklabel{#1}}%
87       \let\glslabel\@gls@label
88       \glswriteentry{#1}%
89     {%
90       \ifdefempty{\@glsxtr@thevalue}{%
91         {%
92           \ifx\@glsxtr@org@theHvalue\@glsxtr@theHvalue
93             \else
94               \let\theHglsentrycounter\@glsxtr@theHvalue
95             \fi
96             \glsxtr@saveentrycounter
97             \let\@@do@@wrglossary\@glsxtr@dorecord
98         }%
99       {%
100         \let\theHglsentrycounter\@glsxtr@thevalue
101         \let\theHglsentrycounter\@glsxtr@theHvalue
102         \let\@@do@@wrglossary\@glsxtr@dorecordnodefer
103       }%
104       \ifx\@glsxtr@record@setting\@glsxtr@record@setting@alsoindex
105         \glsxtr@do@wrglossary{#1}%
106       \else
107         \@@glsxtrwrglossmark
108         \@@do@@wrglossary
109       \fi
110     }%
111   \fi
112 \endgroup
113 }

```

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

```

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

```

@@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).

```

118 \newcommand*{\@@glsxtr@record}[3]{%
119   \ifglsentryexists{#2}{}{%
120     {%
121       \@@glsxtrwrglossmark

```

```

122 \begingroup
Save the label in case it's needed.
123 \edef\gls@label{\glsdetoklabel{#2}}%
124 \let\glslabel\gls@label
125 \let\glsnumberformat\glsxtr@defaultnumberformat
126 \def\glsxtr@thevalue{}%
127 \def\glsxtr@theHvalue{\glsxtr@thevalue}%
128 \let\glsxtr@org@theHvalue\glsxtr@theHvalue

Entry hasn't been defined, so we'll have to assume the page number by default.
129 \def\gls@counter{page}%

Check for default options (which may switch off indexing).
130 \gls@setdefault@glslink@opts
131 \setkeys{#3}{#1}%
132 \ifKV@glslink@noindex
133 \else
134 \glswriteentry{#2}%
135 {%

Check if thevalue has been set.
136 \ifdefempty{\glsxtr@thevalue}%
137 {%

Key thevalue hasn't been set, but check if theHvalue has been set. (Not particularly likely, but
allow for it.)
138 \ifx\glsxtr@org@theHvalue\glsxtr@theHvalue
139 \else
140 \let\theHglsentrycounter\glsxtr@theHvalue
141 \fi

Save the entry counter.
142 \glsxtr@saveentrycounter

Temporarily redefine @@do@@wrglossary for use with \glsxtr@@do@wrglossary.
143 \let\@do@wrglossary\glsxtr@dorecord
144 }%
145 {%

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.)
146 \let\theHglsentrycounter\glsxtr@thevalue
147 \let\theHglsentrycounter\glsxtr@theHvalue
148 \let\@do@wrglossary\glsxtr@dorecordnodefer
149 }%
150 \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
151 \glsxtr@@do@wrglossary{#2}%
152 \else

No need to escape special characters.
153 \@@do@wrglossary
154 \fi

```

```

155      }%
156      \fi
157      \endgroup
158  }%
159 }

```

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

```

160 \newcommand*\@glsxtr@dorecord{%
161   \global\let\@glsrecordlocref\theglsentrycounter
162   \let\@glsxtr@orgprefix\@glo@counterprefix
163   \ifx\theglsentrycounter\theHglsentrycounter
164     \def\@glo@counterprefix{}%
165   \else
166     \edef\@do@gls@getcounterprefix{\noexpand\@gls@getcounterprefix
167       {\theglsentrycounter}{\theHglsentrycounter}%
168     }%
169     \@do@gls@getcounterprefix
170   \fi
171   \protected@write\@auxout{\let\@glsrecordlocref\relax}{\string\glsxtr@record
172     {\@gls@label}{\@glo@counterprefix}{\@gls@counter}{\@glsnumberformat}%
173     {\@glsrecordlocref}}%
174   \glsxtr@counterrecordhook
175   \let\@glo@counterprefix\@glsxtr@orgprefix
176 }

```

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

```

177 \newcommand*\@glsxtr@dorecordnodefer{%
178   \ifx\theglsentrycounter\theHglsentrycounter
179     \protected@write\@auxout{}{\string\glsxtr@record
180       {\@gls@label}{}{\@gls@counter}{\@glsnumberformat}%
181       {\theglsentrycounter}}%
182   \else
183     \edef\@do@gls@getcounterprefix{\noexpand\@gls@getcounterprefix
184       {\theglsentrycounter}{\theHglsentrycounter}%
185     }%
186     \@do@gls@getcounterprefix
187     \protected@write\@auxout{}{\string\glsxtr@record
188       {\@gls@label}{\@glo@counterprefix}{\@gls@counter}{\@glsnumberformat}%
189       {\theglsentrycounter}}%
190   \fi
191   \glsxtr@counterrecordhook
192 }

```

`r@recordcounter`

```

193 \newcommand*{\@glsxtr@recordcounter}{%
194   \glsxtr@noop@recordcounter

```

```

195 }

p@recordcounter
196 \newcommand*{\glsxtr@noop@recordcounter}[1]{%
197   \PackageError{glossaries-extra}{\string\GlsXtrRecordCounter\space
198     requires record=only or record=alsoindex package option}{}}%
199 }

p@recordcounter
200 \newcommand*{\glsxtr@op@recordcounter}[1]{%
201   \appto{\glsxtr@counterrecordhook}{\noexpand\glsxtr@docounterrecord{\#1}}{}}%
202 }

lsxtr@recordsee Deal with \glssee in record mode.
203 \newcommand*{\glsxtr@recordsee}[2]{%
204   @@\glsxtrwrglossmark
205   \def{\glsxref{\#2}}{%
206     \onelevel@sanitize\glsxref
207     \protected@write{\auxout}{\string\glsxtr@recordsee{\#1}{\glsxref}}{}}%
208 }

srtglossaryunit
209 \newcommand{\printunsrtglossaryunit}{%
210   \print@noop{unsrtglossaryunit}
211 }

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

aveentrycounter Only store the entry counter information if the indexing is on.
213 \newcommand*{\glsxtr@indexonly@saveentrycounter}{%
214   \ifKV@glslink@noindex
215   \else
216     \glsxtr@saveentrycounter
217   \fi
218 }

addloclistfield
219 \newcommand*{\glsxtr@addloclistfield}{%
220   \key@ifundefined{glossentry}{loclist}{%
221     \%
222     \define@key{glossentry}{loclist}{\def{\glo@loclist{\##1}}{}}%
223     \appto{\gls@keymap}{\loclist{\loclist}}{}}%
224     \appto{\@newglossaryentryprehook}{\def{\glo@loclist{}}}{}}%
225     \appto{\@newglossaryentryposthook}{%
226       \gls@assign@field{\glo@label}{loclist}{\glo@loclist}{}}%
227     \%
228     \glssetnoexpandfield{loclist}{}}%
229   \%
230   \{}%

```

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

```
231 \key@ifundefined{glossentry}{location}%
232 {%
233 \define@key{glossentry}{location}{\def\@glo@location{##1}}%
234 \appto\@gls@keymap{, {location}{location}}%
235 \appto\@newglossaryentryprehook{\def\@glo@location{} }%
236 \appto\@newglossaryentryposthook{%
237 \gls@assign@field{}{\@glo@label}{location}{\@glo@location}}%
238 }%
239 \glssetnoexpandfield{location}%
240 }%
241 {}%
```

Add a key to store the group heading.

```
242 \key@ifundefined{glossentry}{group}%
243 {%
244 \define@key{glossentry}{group}{\def\@glo@group{##1}}%
245 \appto\@gls@keymap{, {group}{group}}%
246 \appto\@newglossaryentryprehook{\def\@glo@group{} }%
247 \appto\@newglossaryentryposthook{%
248 \gls@assign@field{}{\@glo@label}{group}{\@glo@group}}%
249 }%
250 \glssetnoexpandfield{group}%
251 }%
252 {}%
253 }
```

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

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

`ting@alsoindex`

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

`rd@setting@only`

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

`ord@setting@off`

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

Now define the record package option.

```
258 \define@choicekey{glossaries-extra.sty}{record}[\val\nr]%
259 {off,only,alsoindex}%
260 [only]%
261 {}%
262 \let\@glsxtr@record@setting\val
263 \ifcase\nr\relax
```

Don't record.

```
264 \def\glsxtr@setup@record{%
```

```

265     \renewcommand*{\@do@seeglossary}{\glsxtr@doseeglossary}%
266     \renewcommand*{\@glsxtr@record}[3]{}
267     \let\@do@wrglossary\glsxtr@do@wrglossary
268     \let\@gls@saveentrycounter\glsxtr@indexonly@saveentrycounter
269     \let\glsxtrundefaction\glsxtr@err@undefaction
270     \let\glsxtr@warnonexistsordo\gobble
271     \let\@glsxtr@recordcounter\glsxtr@noop@recordcounter
272     \def\printunsrtglossaryunit{\print@noop@unsrtglossaryunit}%
273     \undef\glsxtrsetaliasnoindex
274 }%
275 \or

```

Only record (don't index).

```

276     \def\glsxtr@setup@record{%
277         \@glsxtr@autoseeindexfalse
278         \let\@do@seeglossary\glsxtr@recordsee
279         \let\@glsxtr@record\@glsxtr@record
280         \let\@do@wrglossary\glsxtr@do@record@wrglossary
281         \let\@gls@saveentrycounter\relax
282         \let\glsxtrundefaction\glsxtr@warn@undefaction
283         \let\glsxtr@warnonexistsordo\glsxtr@warn@onexistsordo
284         \glsxtr@addloclistfield
285         \renewcommand*{\@glsxtr@autoindexcrossrefs}{}%
286         \let\@glsxtr@recordcounter\glsxtr@op@recordcounter
287         \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}%

```

Switch off the index suppression for aliased entries. (bib2gls will deal with them.)

```

288     \def\glsxtrsetaliasnoindex{}%
289     \@gls@setupsort@none was only introduced to glossaries v4.30, so it may not be available.
290     If it's defined, use it to remove the unnecessary overhead of escaping and sanitizing the sort
291     value.
292     \ifdef{\gls@setupsort@none}{\gls@setupsort@none}{}%
293 }%
294 \or

```

Record and index.

```

295     \def\glsxtr@setup@record{%
296         \renewcommand*{\@do@seeglossary}{\glsxtr@dosee@alsoindex@glossary}%
297         \let\@glsxtr@record\@glsxtr@record
298         \let\@do@wrglossary\glsxtr@do@alsoindex@wrglossary
299         \let\@gls@saveentrycounter\glsxtr@indexonly@saveentrycounter
300         \let\glsxtrundefaction\glsxtr@warn@undefaction
301         \let\glsxtr@warnonexistsordo\glsxtr@warn@onexistsordo
302         \glsxtr@addloclistfield
303         \let\@glsxtr@recordcounter\glsxtr@op@recordcounter
304         \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}%
305         \undef\glsxtrsetaliasnoindex
306 }%
307 \fi
308 }

```

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).  
306 \newcount\@glsxtr@docdefval

Need to provide conditional commands that are backward compatible:

```
if@glsxtrdocdef
307 \newcommand*{\if@glsxtrdocdef}{\ifnum\@glsxtr@docdefval>0 }
lsxtrdocdeftrue
308 \newcommand*{\@glsxtrdocdeftrue}{\@glsxtr@docdefval=1 }
sxtrdocdeffalse
309 \newcommand*{\@glsxtrdocdeffalse}{\@glsxtr@docdefval=0 }
```

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.

```
310 \define@choicekey{glossaries-extra.sty}{docdef}[\val\nr]%
311 {false,true,restricted}[true]%
312 {%
313   \@glsxtr@docdefval=\nr\relax
314   \ifnum\@glsxtr@docdefval=2\relax
315     \renewcommand*{\@glsdoifexistsorwarn}{\glsdoifexists}%
316   \fi
317 }
```

ocdefrestricted  
318 \newcommand\*{\if@glsxtrdocdefrestricted}{\ifnum\@glsxtr@docdefval=2 }

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).

```
319 \newcommand*{\@glsdoifexistsorwarn}{\glsdoifexistsorwarn}
```

indexcrossrefs Automatically index cross references at the end of the document

```
320 \define@boolkey{glossaries-extra.sty}[@glsxtr]{indexcrossrefs}[true]{%
321   \if@glsxtrindexcrossrefs
322   \else
323     \renewcommand*{\glsxtr@autoindexcrossrefs}{}%
324   \fi
325 }
```

Switch off since this can increase the build time.

```
326 \glsxtrindexcrossrefsfalse
```

But allow see key to switch it on automatically.

```
oindexcrossrefs
327 \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.
328 \define@boolkey{glossaries-extra.sty}[@glsxtr@]{autoseeindex}[true]{%
329 }
330 \@glsxtr@autoseeindextrue

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

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

334 \@glsxtr@declareoption{nowarn}{%
335   \let\GlossariesExtraWarning\@gobble
336   \let\GlossariesExtraWarningNoLine\@gobble
337   \glsxtr@dooption{nowarn}%
338 }

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

postdot Shortcut for nopostdot=false
340 \@glsxtr@declareoption{postdot}{%
341   \glsxtr@dooption{nopostdot=false}%
342   \renewcommand*{\@glsxtr@defpostpunc}{%
343     \renewcommand*{\glspostdescription}{%
344       \ifglsnopostdot\else.\spacefactor\sfcod\`e\.\fi}%
345   }%
346 }

nopostdot Needs to redefine \@glsxtr@defpostpunc
347 \define@choicekey{glossaries-extra.sty}{nopostdot}{true, false}[true]{%
348   \glsxtr@dooption{nopostdot=#1}%
349   \renewcommand*{\@glsxtr@defpostpunc}{%
350     \renewcommand*{\glspostdescription}{%
351       \ifglsnopostdot\else.\spacefactor\sfcod\`e\.\fi}%
352   }%
353 %
354 %
355 %\begin{option}{postpunc}
356 %Set the post-description punctuation. This also sets
```

```

357 %the \cs{ifglsnopostrdot} conditional, which now indicates if
358 %the post-description punctuation has been suppressed.
359 %\changes{1.21}{2017-11-03}{new}
360 %  \begin{macrocode}
361 \define@key{glossaries-extra.sty}{postpunc}{%
362   \glsxtr@dooption{nopostrdot=false}%
363   \ifstrequal{\#1}{dot}%
364   {%
365     \renewcommand*{\@glsxtr@defpostpunc}{%
366       \renewcommand*{\glspostdescription}{.\spacefactor\sfcodespace}%
367     }%
368   }%
369   {%
370     \ifstrequal{\#1}{comma}%
371     {%
372       \renewcommand*{\@glsxtr@defpostpunc}{%
373         \renewcommand*{\glspostdescription}{,}%
374       }%
375     }%
376     {%
377       \ifstrequal{\#1}{none}%
378       {%
379         \glsxtr@dooption{nopostrdot=true}%
380         \renewcommand*{\@glsxtr@defpostpunc}{%
381           \renewcommand*{\glspostdescription}{ }%
382         }%
383       }%
384     }%
385     \renewcommand*{\@glsxtr@defpostpunc}{%
386       \renewcommand*{\glspostdescription}{\#1}%
387     }%
388   }%
389 }%
390 }%
391 }

```

`glsxtrabbrvtype` Glossary type for abbreviations.

```
392 \newcommand*{\glsxtrabbrvtype}{\glsdefaulttype}
```

`bbreviationsdef` Set by `abbreviations` option.

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

`bbreviationsdef`

```

394 \newcommand*{\@glsxtr@doabbreviationsdef}{%
395   \@ifpackageloaded{babel}%
396   {\providecommand{\abbreviationsname}{\acronymname}}%
397   {\providecommand{\abbreviationsname}{Abbreviations}}%
398   \newglossary[glg-abr]{abbreviations}{gls-abr}{glo-abr}{\abbreviationsname}%
399   \renewcommand*{\glsxtrabbrvtype}{abbreviations}%

```

```

400 \newcommand*{\printabbreviations}[1] []{%
401   \printglossary[type=\glsxtrabbrvtype,##1]%
402 }%
403 \Disable@keys{glossaries-extra.sty}{abbreviations}%

```

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

```

404 \ifglsacronym
405 \else
406   \renewcommand*{\acronymtype}{\glsxtrabbrvtype}%
407 \fi
408 }%

```

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

```

409 \@glsxtr@declareoption{abbreviations}{%
410   \let\@glsxtr@abbreviationsdef\@glsxtr@doabbreviationsdef
411 }

```

`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).

```

412 \newcommand*{\GlsXtrDefineAbbreviationShortcuts}{%
413   \newcommand*{\ab}{\cglsls}%
414   \newcommand*{\abp}{\cglspl}%
415   \newcommand*{\as}{\glsxtrshort}%
416   \newcommand*{\asp}{\glsxtrshortpl}%
417   \newcommand*{\al}{\glsxtrlong}%
418   \newcommand*{\alp}{\glsxtrlongpl}%
419   \newcommand*{\af}{\glsxtrfull}%
420   \newcommand*{\afp}{\glsxtrfullpl}%
421   \newcommand*{\Ab}{\cGls}%
422   \newcommand*{\Abp}{\cGlspl}%
423   \newcommand*{\As}{\Glsxtrshort}%
424   \newcommand*{\Asp}{\Glsxtrshortpl}%
425   \newcommand*{\Al}{\Glsxtrlong}%
426   \newcommand*{\Alp}{\Glsxtrlongpl}%
427   \newcommand*{\Af}{\Glsxtrfull}%
428   \newcommand*{\Afp}{\Glsxtrfullpl}%
429   \newcommand*{\AB}{\cGLS}%
430   \newcommand*{\ABP}{\cGLSpl}%
431   \newcommand*{\AS}{\GLSxtrshort}%
432   \newcommand*{\ASP}{\GLSxtrshortpl}%
433   \newcommand*{\AL}{\GLSxtrlong}%
434   \newcommand*{\ALP}{\GLSxtrlongpl}%
435   \newcommand*{\AF}{\GLSxtrfull}%
436   \newcommand*{\AFP}{\GLSxtrfullpl}%

```

```

437 \providetcommand*{\newabbr}{\newabbreviation}%

```

Disable this command after it's been used.

```

438 \let\GlsXtrDefineAbbreviationShortcuts\relax

```

439 }

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

```
440 \newcommand*{\GlsXtrDefineAcShortcuts}{%
441   \newcommand*{\ac}{\cglsls}%
442   \newcommand*{\acp}{\cglspl}%
443   \newcommand*{\acs}{\glsxtrshort}%
444   \newcommand*{\acsp}{\glsxtrshortpl}%
445   \newcommand*{\acl}{\glsxtrlong}%
446   \newcommand*{\aclp}{\glsxtrlongpl}%
447   \newcommand*{\acf}{\glsxtrfull}%
448   \newcommand*{\acfp}{\glsxtrfullpl}%
449   \newcommand*{\Ac}{\cGls}%
450   \newcommand*{\Acp}{\cGlspl}%
451   \newcommand*{\Acs}{\Glsxtrshort}%
452   \newcommand*{\Acsp}{\Glsxtrshortpl}%
453   \newcommand*{\Acl}{\Glsxtrlong}%
454   \newcommand*{\Aclp}{\Glsxtrlongpl}%
455   \newcommand*{\Acf}{\Glsxtrfull}%
456   \newcommand*{\Acfp}{\Glsxtrfullpl}%
457   \newcommand*{\AC}{\cGLS}%
458   \newcommand*{\ACP}{\cGLSpl}%
459   \newcommand*{\ACS}{\GLSxtrshort}%
460   \newcommand*{\ACSP}{\GLSxtrshortpl}%
461   \newcommand*{\ACL}{\GLSxtrlong}%
462   \newcommand*{\ACLP}{\GLSxtrlongpl}%
463   \newcommand*{\ACF}{\GLSxtrfull}%
464   \newcommand*{\ACFP}{\GLSxtrfullpl}%
465   \providecommand*{\newabbr}{\newabbreviation}%

```

Disable this command after it's been used.

```
466 \let\GlsXtrDefineAcShortcuts\relax
467 }
```

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

```
468 \newcommand*{\GlsXtrDefineOtherShortcuts}{%
469   \newcommand*{\newentry}{\newglossaryentry}%
470   \ifdef\printsymbols
471   {%
472     \newcommand*{\newsym}{\glsxtrnewsymbol}%
473   }{%
474   \ifdef\printnumbers
475   {%
476     \newcommand*{\newnum}{\glsxtrnewnumber}%
477   }{%
478   \let\GlsXtrDefineOtherShortcuts\relax
479 }}
```

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.  
480 \newcommand*{\@glsxtr@setupshortcuts}{}  
  
tr@shortcutsval Store the value of the shortcuts option. (Needed by bib2gls.)  
481 \newcommand*{\@glsxtr@shortcutsval}{\ifglsacrshortcuts acro\else none\fi}%
```

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).

```
482 \define@choicekey{glossaries-extra.sty}{shortcuts}[\val\nr]{%  
483 {acronyms,acro,abbreviations,abbr,other,all,true,ac,none,false}[true]{%  
484 \let\@glsxtr@shortcutsval\val  
485 \ifcase\nr\relax % acronyms  
486 \renewcommand*{\@glsxtr@setupshortcuts}{%  
487 \glsacrshortcutstrue  
488 \DefineAcronymSynonyms  
489 }%  
490 \or % acro  
491 \renewcommand*{\@glsxtr@setupshortcuts}{%  
492 \glsacrshortcutstrue  
493 \DefineAcronymSynonyms  
494 }%  
495 \or % abbreviations  
496 \renewcommand*{\@glsxtr@setupshortcuts}{%  
497 \GlsXtrDefineAbbreviationShortcuts  
498 }%  
499 \or % abbr  
500 \renewcommand*{\@glsxtr@setupshortcuts}{%  
501 \GlsXtrDefineAbbreviationShortcuts  
502 }%  
503 \or % other  
504 \renewcommand*{\@glsxtr@setupshortcuts}{%  
505 \GlsXtrDefineOtherShortcuts  
506 }%  
507 \or % all  
508 \renewcommand*{\@glsxtr@setupshortcuts}{%  
509 \glsacrshortcutstrue  
510 \GlsXtrDefineAcShortcuts  
511 \GlsXtrDefineAbbreviationShortcuts  
512 \GlsXtrDefineOtherShortcuts  
513 }%  
514 \or % true  
515 \renewcommand*{\@glsxtr@setupshortcuts}{%
```

```

516     \glsacrshortcutstrue
517     \GlsXtrDefineAcShortcuts
518     \GlsXtrDefineAbbreviationShortcuts
519     \GlsXtrDefineOtherShortcuts
520 }
521 \or % ac
522 \renewcommand*{\@glsxtr@setupshortcuts}{%
523     \glsacrshortcutstrue
524     \GlsXtrDefineAcShortcuts
525 }

```

Leave none and false as last option.

```

526 \else % none, false
527 \renewcommand*{\@glsxtr@setupshortcuts}{}%
528 \fi
529 }

```

lsxtr@doaccsupp

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

accsupp If accsupp, load glossaries-accsupp package.

```

531 \@glsxtr@declareoption{accsupp}{%
532 \renewcommand*{\@glsxtr@doaccsupp}{\RequirePackage{glossaries-accsupp}}}

```

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

```

533 \newcommand{\glsxtrNoGlossaryWarning}[1]{%
534     \@glsxtr@defaultnoglossarywarning{#1}%
535 }
```

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

```

536 \define@choicekey{glossaries-extra.sty}{nomissingglstext}[\val\nr]{%
537 {true,false}[true]{%
538 \ifcase\nr\relax % true
539     \renewcommand{\glsxtrNoGlossaryWarning}[1]{%
540         \null
541     }%
542 \else % false
543     \renewcommand{\glsxtrNoGlossaryWarning}[1]{%
544         \@glsxtr@defaultnoglossarywarning{#1}%
545     }%
546 \fi
547 }}
```

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

xtr@redefstyles

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

```

stylemods

549 \define@key{glossaries-extra.sty}{stylemods}[default]{%
550   \ifstreq{\#1}{default}{%
551     {%
552       \renewcommand*{\@glsxtr@redefstyles}{%
553         \RequirePackage{glossaries-extra-stylemods}}%
554     }%
555     {%
556       \ifstreq{\#1}{all}{%
557         {%
558           \renewcommand*{\@glsxtr@redefstyles}{%
559             \PassOptionsToPackage{all}{glossaries-extra-stylemods}}%
560           \RequirePackage{glossaries-extra-stylemods}}%
561         }%
562       }%
563     {%
564       \renewcommand*{\@glsxtr@redefstyles}{}%
565       \@for\@glsxtr@tmp:=\#1\do{%
566         \IfFileExists{glossary-\@glsxtr@tmp.sty}{%
567           {%
568             \eappto\@glsxtr@redefstyles{%
569               \noexpand\RequirePackage{glossary-\@glsxtr@tmp}}%
570             }%
571           {%
572             \PackageError{glossaries-extra}{%
573               {Glossaries style package ‘glossary-\@glsxtr@tmp.sty’
574                 doesn’t exist (did you mean to use the ‘style’ key?)}}%
575             {The list of values (#1) in the ‘stylemods’ key should
576               match the glossary-xxx.sty files provided with
577               glossaries.sty}}%
578           }%
579         }%
580       \appto\@glsxtr@redefstyles{\RequirePackage{glossaries-extra-stylemods}}%
581     }%
582   }%
583 }

```

```

glsxtr@do@style

584 \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.

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

Defer actual style change:

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

Set this as the default style:

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

Set this style:

```
588 \setglossarystyle{#1}%
589 }%
590 }
```

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

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

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

```
592 \newcommand*\@glsxtrwrglossmark{}%
593 \AtBeginDocument{\renewcommand*\@glsxtrwrglossmark}{\@glsxtrwrglossmark}}
```

`sxtrwrglossmark` Does nothing by default.

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

`debug` Provide extra debug options.

```
595 \define@choicekey{glossaries-extra.sty}{debug}[\val\nr]%
596 {true,false,showtargets,showwrgloss,all}[true]{%
597 \ifcase\nr\relax % true
598   \glsxtr@dooption{debug=true}%
599   \renewcommand*\@glsxtrwrglossmark{}%
600 \or % false
601   \glsxtr@dooption{debug=false}%
602   \renewcommand*\@glsxtrwrglossmark{}%
603 \or % showtargets
604   \glsxtr@dooption{debug=showtargets}%
605 \or % showwrgloss
606   \glsxtr@dooption{debug=true}%
607   \renewcommand*\@glsxtrwrglossmark{\glsxtrwrglossmark}%
608 \or % all
609   \glsxtr@dooption{debug=showtargets}%
610   \renewcommand*\@glsxtrwrglossmark{\glsxtrwrglossmark}%
611 \fi
612 }
```

Pass all other options to glossaries.

```
613 \DeclareOptionX*{%
614   \expandafter\glsxtr@dooption\expandafter{\CurrentOption}}
```

Process options.

```
615 \ProcessOptionsX
```

Load glossaries if not already loaded.

```
616 \RequirePackage{glossaries}
```

Load the `glossaries-accsupp` package if required.

```
617 \@glsxtr@doaccsupp
```

Redefine \glspostdescription if required.

618 \glsxstr@defpostpunc

\glsshowtarget This command was introduced to glossaries v4.32 so it may not be defined. Therefore it's defined here using \def.

```
619 \def\glsshowtarget#1{%
620   \glsxtrtitleorpdforheading
621   {%
622     \ifmmode
623       \texttt{\small [#1]}%
624     \else
625       \ifinner
626         \texttt{\small [#1]}%
627       \else
628         \marginpar{\texttt{\small #1}}%
629       \fi
630     \fi
631   }%
632   {[#1]}%
633   {\texttt{\small [#1]}}%
634 }
```

g@doseeglossary Save original definition of \do@seeglossary  
635 \let\glsxstr@org@doseeglossary\do@seeglossary

r@doseeglossary

```
636 \newcommand*{\glsxstr@doseeglossary}[2]{%
637   \glsdoifexists{#1}%
638   {%
639     \@@glsxtrwrglossmark
640     \glsxstr@org@doseeglossary{#1}{#2}%
641   }%
642 }
```

oindex@glossary

```
643 \newcommand*{\glsxstr@dosee@alsoindex@glossary}[2]{%
644   \glsxstr@recordsee{#1}{#2}%
645   \glsxstr@doseeglossary{#1}{#2}%
646 }
```

@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.)

647 \let\glsxstr@org@gloautosee\glo@autosee

Check if user tried autoseeindex=false when it can't be supported.

```
648 \if@glsxstr@autoseeindex
649 \else
```

```

650 \ifdef\@glsxtr@org@gloautosee
651 {}%
652 {\PackageError{glossaries-extra}{‘autoseeindex=false’ package
653 option requires at least v4.30 of glossaries.sty}%
654 {You need to update the glossaries.sty package}%
655 }
656 \fi

\@glo@autosee If \@glo@autosee has been defined (glossaries v4.30 onwards), redefine it to test the autoseeindex option.
657 \ifdef\@glo@autosee
658 {}%
659 \renewcommand*\@glo@autosee{}%
660 \if@glsxtr@autoseeindex\@glsxtr@org@gloautosee\fi}%
661 }%
662 {}

checkseeallowed Don't prohibit the use of the see key before the indexing files have been opened if the automatic see indexing has been disabled, since it's no longer an issue.
663 \renewcommand*\@gls@checkseeallowed{}%
664 \if@glsxtr@autoseeindex\@gls@see@noindex\fi
665 }

    Define abbreviations glossaries if required.
666 \@glsxtr@abbreviationsdef
667 \let\@glsxtr@abbreviationsdef\relax

    Setup shortcuts if required.
668 \@glsxtr@setupshortcuts

    Redefine \@glsxtr@redef@forglsentries if required.
669 \@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:
670 \renewcommand{\glsxtr@dooption}[1]{\setupglossaries{#1}}%

    Now define the user command:
671 \newcommand*\@glossariesextrasetup[1]{%
672 \let\glsxtr@setup@record\relax
673 \let\@glsxtr@setupshortcuts\relax
674 \let\@glsxtr@redef@forglsentries\relax
675 \setkeys{glossaries-extra.sty}{#1}%
676 \@glsxtr@abbreviationsdef
677 \let\@glsxtr@abbreviationsdef\relax
678 \@glsxtr@setupshortcuts
679 \glsxtr@setup@record
680 \@glsxtr@redef@forglsentries
681 }

```

```

@@do@wrglossary Save original definition of @@do@wrglossary.
682 \let\glsxtr@org@@do@wrglossary@@do@wrglossary

@@do@wrglossary The new version adds code that can show a marker for debugging.
683 \newcommand*\glsxtr@do@wrglossary[1]{%
684   \glsxtrwrglossmark
685   \glsxtr@org@@do@wrglossary{#1}%
686 }

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

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

      Set up record option if required.
689 \glsxtr@setup@record

      Disable preamble-only options and switch on the undefined tag at the start of the docu-
ment.
690 \AtBeginDocument{%
691   \disable@keys{glossaries-extra.sty}{abbreviations,docdef,record}%
692   \def\glsxtrundeftag{\glsxtrundeftag}%
693 }

```

## 1.2 Extra Utilities

rifemptyglossary	\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.)

```

694 \newcommand{\glsxtrifemptyglossary}[3]{%
695   \ifcsdef{glolist@#1}{%
696     {%
697       \ifcsstring{glolist@#1}{,}{%
698         }{%
699           \glsxtrundefaction{Glossary type '#1' doesn't exist}{}%
700           #2%
701         }{%
702       }%
703     }%

```

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

```
704 \newcommand*{\glsxtrifkeydefined}[3]{%
705   \key@ifundefined{glossentry}{#1}{#3}{#2}%
706 }
```

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

```
707 \newcommand*{\glsxtrprovidestoragekey}{%
708   \@ifstar{\sglsxtr@provide@storagekey}{\glsxtr@provide@storagekey}%
709 }
```

vide@storagekey Unstarred version.

```
710 \newcommand*{\glsxtr@provide@storagekey}[3]{%
711   \key@ifundefined{glossentry}{#1}{%
712     {%
713       \define@key{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
714       \appto{\gls@keymap}{, #1{#1}}%
715       \appto{\newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
716       \appto{\newglossaryentryposthook}{%
717         \letcs{\glo@tmp}{@glo@#1}%
718         \gls@assign@field{#2}{\glo@label}{#1}{\glo@tmp}}%
719     }%
720 }
```

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

```
720   \ifblank{#3}%
721   {}%
722   {%
723     \newcommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
724   }%
725 }%
726 {%
```

Provide the no-link command if not already defined.

```
727   \ifblank{#3}%
728   {}%
729   {%
730     \providecommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
731   }%
732 }%
733 }
```

vide@storagekey Starred version.

```
734 \newcommand*{\glsxtr@provide@storagekey}[1]{%
735   \key@ifundefined{glossentry}{#1}{%
736     {%
737       \expandafter{\newcommand\expandafter*\expandafter}%
738       {\csname gls@assign@#1@field\endcsname}[2]{%
739         \gls@expand@field{##1}{#1}{##2}}%
740     }%
```

```

741 }%
742 {}%
743 \glsxstr@provide@addstoragekey{#1}%
744 }

```

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`

```

745 \newcommand{\GlsXtrFmtField}[useri]

```

`tDefaultOptions`

```

746 \newcommand{\GlsXtrFmtDefaultOptions}[noindex]

```

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

```

747 \newrobustcmd*\glsxtrfmt{\@ifstar{s@glsxtrfmt@glsxtrfmt}}

```

`\@glsxtrfmt` Unstarred form.

```

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

```

`\s@glsxtrfmt` Starred form.

```

749 \newcommand*{\s@glsxtrfmt}[3][]{%
750   \new@ifnextchar[\s@glsxtrfmt{#1}{#2}{#3}{}}%
751   {\@glsxtrfmt{#1}{#2}{#3}{}}%
752 }

```

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

```

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

```

`\@@glsxtrfmt` Actual inner working.

```

754 \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).

```

755 \begingroup
756 \def\glslabel{#2}%
757 \glsdoifexistsordo{#2}%
758 {%
759   \ifglshasfield{\GlsXtrFmtField}{#2}%
760   {%
761     \let\do@gls@link@checkfirsthyper\relax
762     \expandafter\gls@link\expandafter[\GlsXtrFmtDefaultOptions,#1]{#2}%
763     {\glsxtrfmtdisplay{\glscurrentfieldvalue}{#3}{#4}}%
764   }%
765   {\glsxtrfmtdisplay{@firstofone}{#3}{#4}}%
766 }%
767 {%

```

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

```

768   \begingroup
769     \@gls@setdefault@glslink@opts
770     \setkeys{glslink}{\GlsXtrFmtDefaultOptions,#1}%
771     \ifKV@glslink@noindex\else\glsadd{\#2}\fi
772   \endgroup
773   \glsxtrfmtdisplay{@firstofone}{#3}{#4}%
774 }%
775 \endgroup
776 }
```

`\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).

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

`\glsxtryentryfmt` No link or indexing.

```

778 \ifdef\texorpdfstring
779 {
780   \newcommand*{\glsxtryentryfmt}[2]{%
781     \texorpdfstring{\@glsxtryentryfmt{\#1}{\#2}}{\#2}%
782   }
783 }
784 {
785   \newcommand*{\glsxtryentryfmt}{\@glsxtryentryfmt}
786 }
```

`@glsxtryentryfmt`

```

787 \newrobustcmd*{\@glsxtryentryfmt}[2]{%
788   \glsdoifexistsord{\#1}%
789 {%
790   \ifglshasfield{\GlsXtrFmtField}{\#1}%
791   {%
792     \csuse{\glscurrentfieldvalue}{\#2}%
793   }%
794   {\#2}%
795 }%
796 {\#2}%
797 }
```

`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.

```

798 \newcommand*{\glsxtrfieldlistadd}[3]{%
799   \listcsadd{\glo@\glsdetoklabel{\#1}@{\#2}}{\#3}%
800 }
```

```

trfieldlistgadd  Similarly but uses \listcsgadd.
801 \newcommand*{\glsxtrfieldlistgadd}[3]{%
802   \listcsgadd{glo@\glsdetoklabel{#1}@#2}{#3}%
803 }

trfieldlisteadd  Similarly but uses \listcseadd.
804 \newcommand*{\glsxtrfieldlisteadd}[3]{%
805   \listcseadd{glo@\glsdetoklabel{#1}@#2}{#3}%
806 }

trfieldlistxadd  Similarly but uses \listcsxadd.
807 \newcommand*{\glsxtrfieldlistxadd}[3]{%
808   \listcsxadd{glo@\glsdetoklabel{#1}@#2}{#3}%
809 }

```

Now provide commands to iterate over these lists.

```

fielddolistloop
810 \newcommand*{\glsxtrfielddolistloop}[2]{%
811   \dolistcsloop{glo@\glsdetoklabel{#1}@#2}%
812 }

ieldforlistloop
813 \newcommand*{\glsxtrfieldforlistloop}[3]{%
814   \forlistcsloop{glo@\glsdetoklabel{#1}@#2}{#3}%
815 }

```

List element tests:

```

trfieldifinlist  First argument label, second argument field, third argument item, fourth true part and fifth
false part.
816 \newcommand*{\glsxtrfieldifinlist}[5]{%
817   \ifinlistcs{#3}{glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
818 }

rfieldxifinlist  Expands item.
819 \newcommand*{\glsxtrfieldxifinlist}[5]{%
820   \xifinlistcs{#3}{glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
821 }

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.
822 \newrobustcmd{\glsxtrifhasfield}{%
823   \@ifstar{\s@glsxtrifhasfield}{\glsxtrifhasfield}%
824 }

```

```

lsxtrifhasfield Unstarred version adds grouping.
825 \newcommand{\glsxtrifhasfield}[4]{%
826   {\s@glsxtrifhasfield{#1}{#2}{#3}{#4}}%
827 }

lsxtrifhasfield Starred version omits grouping.
828 \newcommand{\s@glsxtrifhasfield}[4]{%
829   \letcs{\glscurrentfieldvalue}{\glo@\glsdetoklabel{#2}@#1}%
830   \ifundefined\glscurrentfieldvalue
831     {#4}%
832   {%
833     \ifdefempty\glscurrentfieldvalue{#4}{#3}%
834   }%
835 }

```

  

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

Just uses `\ifcsundef`.

```

836 \newcommand{\GlsXtrIfFieldUndef}[2]{%
837   \ifcsundef{\glo@\glsdetoklabel{#2}@#1}%
838 }

```

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

```

839 \newcommand*{\glsxtrusefield}[2]{%
840   \gls@entry@field{#1}{#2}%
841 }

```

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

```

842 \newcommand*{\Glsxtrusefield}[2]{%
843   \gls@entry@field{#1}{#2}%
844 }

```

`\glsxtrdeffield` Just use `\csdef` to provide a field value for the given entry.

```

845 \newcommand*{\glsxtrdeffield}[2]{\csdef{\glo@\glsdetoklabel{#1}@#2}}

```

`\glsxtredeffield` Just use `\csedef` to provide a field value for the given entry.

```

846 \newcommand*{\glsxtredeffield}[2]{\csedef{\glo@\glsdetoklabel{#1}@#2}}

```

`setfieldifexists`

```

847 \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.

```

848 \newrobustcmd*{\GlsXtrSetField}[3]{%

```

```

849 \glsxtrsetfieldifexists{#1}{#2}%
850 {\csdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
851 }

\GlsXtrLetField Uses \cslet instead. Third argument should be a macro.
852 \newrobustcmd*\{\GlsXtrLetField}[3]{%
853 \glsxtrsetfieldifexists{#1}{#2}%
854 {\cslet{glo@\glsdetoklabel{#1}@#2}{#3}}%
855 }

\GlsXtrLetField Uses \csletcs instead. Third argument should be a control sequence name.
856 \newrobustcmd*\{\csGlsXtrLetField}[3]{%
857 \glsxtrsetfieldifexists{#1}{#2}%
858 {\csletcs{glo@\glsdetoklabel{#1}@#2}{glo@\glsdetoklabel{#3}@#4}}%
859 }

LetFieldToField Sets the field for one entry to the field for another entry. Third argument should be the other entry and the fourth argument that other field label.
860 \newrobustcmd*\{\GlsXtrLetFieldToField}[4]{%
861 \glsxtrsetfieldifexists{#1}{#2}%
862 {\csletcs{glo@\glsdetoklabel{#1}@#2}{glo@\glsdetoklabel{#3}@#4}}%
863 }

\GlsXtrSetField Allow the user to set a field. First argument entry label, second argument field label, third argument value.
864 \newrobustcmd*\{\GlsXtrSetField}[3]{%
865 \glsxtrsetfieldifexists{#1}{#2}%
866 {\csgdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
867 }

\xGlsXtrSetField
868 \newrobustcmd*\{\xGlsXtrSetField}[3]{%
869 \glsxtrsetfieldifexists{#1}{#2}%
870 {\protected@csxdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
871 }

\GlsXtrSetField
872 \newrobustcmd*\{\eGlsXtrSetField}[3]{%
873 \glsxtrsetfieldifexists{#1}{#2}%
874 {\protected@csedef{glo@\glsdetoklabel{#1}@#2}{#3}}%
875 }

\XtrIfFieldEqStr
876 \newrobustcmd*\{\GlsXtrIfFieldEqStr}[5]{%
877 \glsxtrifhasfield{#1}{#2}%
878 {%
879 \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}%
880 }%

```

```

881 {#5}%
882 }

\glsxtrpageref Like \glsrefentry but references the page number instead (if entry counting is on).
883 \ifglsentrycounter
884   \newcommand*{\glsxtrpageref}[1]{\pageref{glsentry-\glsdetoklabel{#1}}}
885 \else
886   \ifglssubentrycounter
887     \newcommand*{\glsxtrpageref}[1]{\pageref{glsentry-\glsdetoklabel{#1}}}
888   \else
889     \newcommand*{\glsxtrpageref}[1]{\gls{#1}}
890   \fi
891 \fi

lossarypreamble
892 \newcommand{\apptoglossarypreamble}[2][\glsdefaulttype]{%
893   \ifcsdef{glolist@#1}{%
894     {%
895       \ifcsundef{@glossarypreamble@#1}{%
896         {\csdef{@glossarypreamble@#1}{}{}}%
897       {}}%
898       \csappto{@glossarypreamble@#1}{#2}{%
899     }{%
900     {%
901       \GlossariesExtraWarning{Glossary '#1' is not defined}{%
902     }{%
903   }

```

lossarypreamble

```

904 \newcommand{\preglossarypreamble}[2][\glsdefaulttype]{%
905   \ifcsdef{glolist@#1}{%
906     {%
907       \ifcsundef{@glossarypreamble@#1}{%
908         {\csdef{@glossarypreamble@#1}{}{}}%
909       {}}%
910       \cspreto{@glossarypreamble@#1}{#2}{%
911     }{%
912     {%
913       \GlossariesExtraWarning{Glossary '#1' is not defined}{%
914     }{%
915   }

```

## 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.

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`

```
916 \renewcommand*{\longnewglossaryentry}{%
917   \@ifstar\@glsxtr@s@longnewglossaryentry\@glsxtr@longnewglossaryentry
918 }
```

`ewglossaryentry` Starred version.

```
919 \newcommand{\@glsxtr@s@longnewglossaryentry}[3]{%
920   \glsdoifnoexists{#1}%
921   {%
922     \bgroup
923       \let\@org@newglossaryentryprehook\@newglossaryentryprehook
924       \long\def\@newglossaryentryprehook{%
925         \long\def\@glo@desc{#3}%
926         \@org@newglossaryentryprehook
927       }%
928       \renewcommand*{\gls@assign@desc}[1]{%
929         \global\cslet{\glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%
930         \global\cslet{\glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
931       }
932       \gls@defglossaryentry{#1}{#2}%
933     \egroup
934   }%
935 }
```

`ewglossaryentry` Unstarred version.

```
936 \newcommand{\@glsxtr@longnewglossaryentry}[3]{%
937   \glsdoifnoexists{#1}%
938   {%
939     \bgroup
940       \let\@org@newglossaryentryprehook\@newglossaryentryprehook
941       \long\def\@newglossaryentryprehook{%
942         \long\def\@glo@desc{#3\glsxtrpostlongdescription}%
943         \@org@newglossaryentryprehook
944       }%
945       \renewcommand*{\gls@assign@desc}[1]{%
946         \global\cslet{\glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%
947         \global\cslet{\glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
948       }
949       \gls@defglossaryentry{#1}{#2}%
950     \egroup
951   }%
952 }
```

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

```
947         \global\cslet{\glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
948       }
949       \gls@defglossaryentry{#1}{#2}%
950     \egroup
951   }%
952 }
```

`longdescription` Hook at the end of the description when using the unstarred `\longnewglossaryentry`.  
953 `\newcommand*{\glsxtrpostlongdescription}{\leavevmode\nskip\nopostdesc}`

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

`ignoredglossary` Redefine to check for star.  
954 `\renewcommand{\newignoredglossary}{%`  
955 `@ifstar\glsxtr@s@newignoredglossary\glsxtr@org@newignoredglossary`  
956 `}`

`ignoredglossary` The original definition is patched to check for existence.  
957 `\newcommand*{\glsxtr@org@newignoredglossary}[1]{%`  
958 `@ifcsdef{glolist@#1}`  
959 `{%`  
960 `\glsxtrundefaction{Glossary type '#1' already exists}{}%`  
961 `}%`  
962 `{%`  
963 `\ifdefempty{\@ignored@glossaries}`  
964 `{%`  
965 `\edef{\@ignored@glossaries}{#1}%`  
966 `}%`  
967 `{%`  
968 `\appto{\@ignored@glossaries}{,#1}%`  
969 `}%`  
970 `\csgdef{glolist@#1}{,}%`  
971 `\ifcsundef{gls@#1@entryfmt}{%`  
972 `{%`  
973 `\def{\glsentryfmt[#1]}{\glsentryfmt}%`  
974 `}%`  
975 `}{}%`  
976 `\ifdefempty{\gls@nohyperlist}`  
977 `{%`  
978 `\renewcommand*{\gls@nohyperlist}{#1}%`  
979 `}%`  
980 `{%`  
981 `\appto{\gls@nohyperlist}{,#1}%`  
982 `}%`  
983 `}{}%`  
984 `}`

`ignoredglossary` Starred form.  
985 `\newcommand*{\glsxtr@s@newignoredglossary}[1]{%`  
986 `@ifcsdef{glolist@#1}`  
987 `{%`  
988 `\glsxtrundefaction{Glossary type '#1' already exists}{}%`  
989 `}{}%`  
990 `{%`  
991 `\ifdefempty{\@ignored@glossaries}`

```

992  {%
993    \edef\@ignored@glossaries{#1}%
994  }%
995  {%
996    \eappto\@ignored@glossaries{,#1}%
997  }%
998  \csgdef{glolist@#1}{,}%
999  \ifcsundef{gls@#1@entryfmt}%
1000  {%
1001    \def\glsentryfmt[#1]{\glsentryfmt}%
1002  }%
1003  {}%
1004 }%
1005 }

```

\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.

```

1006 \glsifusetranslator
1007 {%
1008   \renewcommand*{\glssettoctitle}[1]{%
1009     \ifcsdef{gls@tr@set@#1@toctitle}%
1010     {%
1011       \csuse{gls@tr@set@#1@toctitle}%
1012     }%
1013     {%
1014       \ifcsdef{@glotype@#1@title}%
1015         {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1016         {\def\glossarytoctitle{\glossarytitle}}%
1017     }%
1018   }%
1019 }
1020 {
1021   \renewcommand*{\glssettoctitle}[1]{%
1022     \ifcsdef{@glotype@#1@title}%
1023       {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1024       {\def\glossarytoctitle{\glossarytitle}}%
1025   }
1026 }

```

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

```

1027 \newcommand{\provideignoredglossary}{%
1028   @ifstar\glsxtr@s\provideignoredglossary\glsxtr@provideignoredglossary
1029 }

```

ignoredglossary Unstarred version.

```

1030 \newcommand*{\glsxtr@provideignoredglossary}[1]{%
1031   \ifcsdef{glolist@#1}%
1032   {}%
1033   {}%

```

```

1034 \ifdefempty{\ignored@glossaries}
1035 {%
1036   \edef\ignored@glossaries{#1}%
1037 }%
1038 {%
1039   \appto{\ignored@glossaries}{,#1}%
1040 }%
1041 \csgdef{glolist@#1}{,}%
1042 \ifcsundef{gls@#1@entryfmt}%
1043 {%
1044   \def\glsentryfmt[#1]{\glsentryfmt}%
1045 }%
1046 {()}%
1047 \ifdefempty{\gls@nohyperlist}
1048 {%
1049   \renewcommand*{\gls@nohyperlist}{#1}%
1050 }%
1051 {()}%
1052   \appto{\gls@nohyperlist}{,#1}%
1053 }%
1054 }%
1055 }

```

`ignoredglossary` Starred form.

```

1056 \newcommand*{\glsxtr@s@provideignoredglossary}[1]{%
1057   \ifcsdef{glolist@#1}%
1058   {()}%
1059 {%
1060   \ifdefempty{\ignored@glossaries}
1061   {%
1062     \edef\ignored@glossaries{#1}%
1063   }%
1064   {()}%
1065   \appto{\ignored@glossaries}{,#1}%
1066 }%
1067 \csgdef{glolist@#1}{,}%
1068 \ifcsundef{gls@#1@entryfmt}%
1069 {()}%
1070   \def\glsentryfmt[#1]{\glsentryfmt}%
1071 }%
1072 {()}%
1073 }%
1074 }

```

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

```

1075 \newcommand*{\glsxtrcopytoglossary}[2]{%
1076   \glsdoifexists{#1}%
1077   {()}%

```

```

1078 \ifcsdef{glolist@#2}
1079 {%
1080   \cseappto{glolist@#2}{#1,}%
1081 }%
1082 {%
1083   \glsxtrundefaction{Glossary type '#2' doesn't exist}{}%
1084 }%
1085 }%
1086 }

```

### 1.3.1 Existence Checks

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

```

1087 \renewcommand{\glsdoifexists}[2]{%
1088   \ifglsentryexists{#1}{#2}%
1089   {%

```

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

```

1090   \edef\glslabel{\glsdetoklabel{#1}}%
1091   \glsxtrundefaction{Glossary entry '\glslabel',
1092     has not been defined}{You need to define a glossary entry before
1093     you can reference it.}%
1094 }%
1095 }

```

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

```

1096 \renewcommand{\glsdoifnoexists}[2]{%
1097   \ifglsentryexists{#1}{%
1098     \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'%
1099       has already been defined}{}{#2}%
1100 }

```

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

```

1101 \ifdef{\glsdoifexistsordo}
1102 {%
1103   \renewcommand{\glsdoifexistsordo}[3]{%
1104     \ifglsentryexists{#1}{#2}{%
1105     {%
1106       \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'%
1107         has not been defined}{You need to define a glossary entry
1108         before you can use it.}%
1109       #3%
1110     }%
1111   }%
1112 }%
1113 {%
1114   \glsxtr@warnonexistsordo\glsdoifexistsordo

```

```

1115 \newcommand{\glsdoifexistsordo}[3]{%
1116   \ifglsentryexists{#1}{#2}%
1117   {%
1118     \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’}
1119     has not been defined}{You need to define a glossary entry
1120     before you can use it.}%
1121   #3%
1122 }%
1123 }%
1124 }

```

`arynoexistsordo` Similarly for `\doifglossarynoexistsordo`.

```

1125 \ifdef\doifglossarynoexistsordo
1126 {%
1127   \renewcommand{\doifglossarynoexistsordo}[3]{%
1128     \ifglossaryexists{#1}%
1129     {%
1130       \glsxtrundefaction{Glossary type ‘#1’ already exists}{}%
1131       #3%
1132     }%
1133   {#2}%
1134 }%
1135 }%
1136 {%
1137   \glsxtr@warnonexistsordo\doifglossarynoexistsordo
1138   \newcommand{\doifglossarynoexistsordo}[3]{%
1139     \ifglossaryexists{#1}%
1140     {%
1141       \glsxtrundefaction{Glossary type ‘#1’ already exists}{}%
1142       #3%
1143     }%
1144   {#2}%
1145 }%
1146 }%
1147

```

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

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

```

1148 \appto\@newglossaryentryposthook{%
1149   \ifdefvoid{@glo@see}%
1150   {\csxdef{glo@\glo@label}{@see}{}{}}%
1151   {%
1152     \csxdef{glo@\glo@label}{@see}{\glo@see}%
1153     \if@glsxtr@autoseeindex
1154       \glsxtr@autoindexcrossrefs
1155     \fi

```

```

1156     }%
1157 }
1158 \appto\@gls@keymap{,{see}{see}}

\glsxtrusesee Apply \glsseefORMAT to the see key if not empty.
1159 \newcommand*{\glsxtrusesee}[1]{%
1160   \glsdoifexists{#1}{%
1161     {%
1162       \letcs{\@glo@see}{\glsdetoklabel{#1}@see}{%
1163         \ifdefempty{\@glo@see}{%
1164           {}%
1165           {%
1166             \expandafter\glsxtr@usesee@\glo@see\end@glsxtr@usesee%
1167           }%
1168         }%
1169     }%
1170 \newcommand*{\glsxtr@usesee}[1][\seename]{%
1171   \glsxtr@usesee[#1]%
1172 }

\@glsxtr@usesee
1173 \def\@glsxtr@usesee[#1]#2\end@glsxtr@usesee{%
1174   \glsxtruseseeformat{#1}{#2}%
1175 }

xtruseseeformat The format used by \glsxtrusesee. The first argument is the tag (such as \seename). The second argument is the comma-separated list of cross-referenced labels.
1176 \newcommand*{\glsxtruseseeformat}[2]{%
1177   \glsseefORMAT[#1]{#2}{}}%
1178

\glsseeitemformat glossaries originally defined \glsseeitemformat to use \glsentryname but in v3.0 this was switched to use \glsentrytext due to problems occurring with the name field being sanitized. Since this is no longer a problem, glossaries-extra restores the original definition as it makes more sense to use the name in the cross-reference list. This still uses \glsaccesstext for abbreviations.
1179 \renewcommand*{\glsseeitemformat}[1]{%
1180   \ifglsashash{\glslabel}{\glsaccesstext{#1}}{\glsaccessname{#1}}%
1181 }

\glsxtruseseealso Apply \glsseefORMAT to the seealso key if not empty. There's no optional tag to worry about here.
1182 \newcommand*{\glsxtruseseealso}[1]{%
1183   \glsdoifexists{#1}{%
1184     {%
1185       \letcs{\@glo@see}{\glsdetoklabel{#1}@seealso}{%

```

```

1186 \ifdefempty{@glo@see}
1187 {}%
1188 {}%
1189     \expandafter\glsxtruseseealsoformat\expandafter{\@glo@see}%
1190 }%
1191 }%
1192 }

seseealsoformat The format used by \glsxtruseseealso. The argument is the comma-separated list of
cross-referenced labels.
1193 \newcommand*{\glsxtruseseealsoformat}[1]{%
1194     \glsseeformat[\seealsoname]{#1}{}%
1195 }

\glsxtrseelist Fully expands argument before passing to \glsseelist. (The argument to \glsseelist
must be a comma-separated list of entry labels.)
1196 \newrobustcmd{\glsxtrseelist}[1]{%
1197     \edef\@glo@tmp{\noexpand\glsseelist{#1}}\@glo@tmp
1198 }

\seealsoname In case this command hasn't been defined. (Should be provided by language packages.)
1199 \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.
1200 \ifdef\xdycrossrefhook
1201 {
    Add the cross-reference class definition to the hook.
1202 \appto\xdycrossrefhook{%
1203     \write\glswrite{(define-crossref-class \string"seealso\string"
1204         :unverified )}%
1205     \write\glswrite{(markup-crossref-list
1206         :class \string"seealso\string"^^J\space\space\space
1207         :open \string"\string\glsxtruseseealsoformat\glsopenbrace\string"
1208         :close \string"\glsclosebrace\string")}%
1209 }

    Append to class list.
1210 \appto\xdylocationclassorder{\space\string"seealso\string"}
    This essentially works like \@do@seeglossary but uses the seealso class.
1211 \newrobustcmd{\glsxtrindexseealso}[2]{%
1212     \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
1213         \@glsxtr@recordsee{#1}{#2}%
1214     \fi
1215     \glsdoifexists{#1}%
1216 }%

```

```

1217     \@@glsxtrwrglossmark
1218     \def\@gls@xref{\#2}%
1219     \onelevel@sanitize\@gls@xref
1220     \gls@checkmkidxchars\@gls@xref
1221     \gls@glossary{\csname glo@\#1@type\endcsname}{%
1222         (indexentry
1223             :tkey (\csname glo@\#1@index\endcsname)
1224             :xref (\string"\@gls@xref\string")
1225             :attr \string"seealso\string"
1226         )
1227     }%
1228   }%
1229 }
1230 }
1231 {

```

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

```

1232 \newrobustcmd*\glsxtrindexseealso{\glssee[\sealso]}
1233 }

```

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

```

1234 \ifdef\gls@set@xr@key
1235 {

```

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

```

1236 \define@key{glossentry}{alias}{%
1237   \gls@set@xr@key{alias}{\glo@alias}{#1}%
1238 }
1239 \define@key{glossentry}{seealso}{%
1240   \gls@set@xr@key{seealso}{\glo@seealso}{#1}%
1241 }

```

Add to the key mappings.

```

1242 \appto\gls@keymap{, {alias}{alias}, {seealso}{seealso}}

```

Set the default value.

```

1243 \appto\newglossaryentryprehook{\def\glo@alias{} \def\glo@seealso{}}

```

Assign the field values.

```

1244 \appto\newglossaryentryposthook{%
1245   \ifdefvoid\glo@seealso{%
1246     {\csxdef{\glo@\glo@label}{\glo@seealso}}%
1247   }%
1248   {\csxdef{\glo@\glo@label}{\glo@seealso}{\glo@seealso}}%
1249   \if@glsxtr@autoseealso

```

```
1250      \glsxtr@autoindexcrossrefs
1251      \fi
1252 }%
```

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

```
1253 \ifdefvoid{\glo@alias}
1254   {\csxdef{\glo@\glo@label}{\alias}{}}
1255   {%
1256     \csxdef{\glo@\glo@label}{\alias}{\glo@alias}%
1257   }%
1258 }
```

Provide user-level commands to access the values.

```
\glsxtralias
1259 \newcommand*{\glsxtralias}[1]{\gls@entry@field{#1}{alias}}
```

```
trseealsolabels
1260 \newcommand*{\glsxtrseealsolabels}[1]{\gls@entry@field{#1}{seealso}}
```

Add to the \glo@autosee hook.

```
1261 \appto{\glo@autoseehook}{%
1262   \ifdefvoid{\glo@alias}{%
1263     {%
1264       \ifdefvoid{\glo@seealso}{%
1265         {}%
1266       {%
1267         \edef{\do@glssee}{\noexpand\glsxtrindexseealso{%
1268           {\glo@label}{\glo@seealso}}}
1269         \do@glssee
1270       }%
1271     }%
1272   }%
1273 }
```

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

```
1273 \ifdefvoid{\glo@see}{%
1274   {%
1275     \edef{\do@glssee}{\noexpand\glssee{\glo@label}{\glo@alias}}%
1276     \do@glssee
1277   }%
1278   {}%
1279 }%
1280 }%
1281 }
1282 {
```

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

```
\glsxtralias
1283 \glsaddstoragekey*{\alias}{}{\glsxtralias}
```

```
trseealsolabels
```

```
1284 \glsaddstoragekey*{seealso}{}{\glsxtrseealsolabels}
```

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

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

```
1285 \appto\newglossaryentryposthook{%
1286   \ifcsvoid{\glo@\glo@label}{\alias}{%
1287     {%
1288       \ifcsvoid{\glo@\glo@label}{\seealso}{%
1289         {}{%
1290           {%
1291             \edef\do@glssee{\noexpand\glsxtrindexseealso
1292               {\glo@\label}{\csuse{\glo@\glo@label}{\seealso}}}}{%
1293               \do@glssee
1294             }{%
1295           }{%
1296           }}}{%
1297 }
```

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

```
1297   \ifdefvoid{\glo@see}{%
1298     {%
1299       \edef\do@glssee{\noexpand\glssee
1300         {\glo@\label}{\csuse{\glo@\glo@label}{\alias}}}}{%
1301         \do@glssee
1302       }{%
1303       }{%
1304     }{%
1305   }{%
1306 }
```

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

```
1307 \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.
```

```
1308 \newcommand*{\glsxtraddallcrossrefs}{%
1309   \forallglossaries{\glo@type}{%
1310     {%
1311       \forglsentries[\glo@type]{\glo@label}{%
1312         {%
1313           \ifglsused{\glo@label}{%
1314             {\expandafter\glsxtraddunusedxrefs\expandafter{\glo@label}}{%
1315             }{%
1316           }{%
1317         }}}{%
1318 }}
```

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

```
1318 \newcommand*{\@glsxtr@addunusedxrefs}[1]{%
1319   \letcs{\@glo@see}{\glo@\glsdetoklabel{#1}@see}%
1320   \ifdefvoid{\@glo@see}{}%
1321   {}%
1322   {}%
1323   \expandafter\glsxtr@addunused\@glo@see\@end@glsxtr@addunused
1324 }%
1325 \letcs{\@glo@see}{\glo@\glsdetoklabel{#1}@seealso}%
1326 \ifdefvoid{\@glo@see}{}%
1327 {}%
1328 {}%
1329 \expandafter\glsxtr@addunused\@glo@see\@end@glsxtr@addunused
1330 }%
1331 }
```

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

```
1332 \newcommand*{\glsxtr@addunused}[1][]{%
1333   \glsxtr@addunused
1334 }
```

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

```
1335 \def\@glsxtr@addunused#1\@end@glsxtr@addunused{%
1336   \for\@glsxtr@label:=#1\do
1337   {}%
1338   \ifglsused{\@glsxtr@label}{}%
1339   {}%
1340   \glsadd[format=glsxtrunusedformat]{\@glsxtr@label}%
1341   \glsunset{\@glsxtr@label}%
1342   \expandafter\@glsxtr@addunusedxrefs\expandafter{\@glsxtr@label}%
1343 }%
1344 }%
1345 }
```

`xtrunusedformat`

```
1346 \newcommand*{\glsxtrunusedformat}[1]{\unskip}
```

### 1.3.2 Document Definitions

`noidxglossaries` Modify `\makenoidxglossaries` so that it automatically switches off (unless the restricted setting is on) and disables the `docdef` key. This command isn't allow with the `record` option.

```
1347 \let\glsxtr@orgmakenoidxglossaries\makenoidxglossaries
1348 \renewcommand{\makenoidxglossaries}{%
1349   \ifdefequal{\glsxtr@record@setting}{\glsxtr@record@setting@off}%
1350   {}%
1351   \glsxtr@orgmakenoidxglossaries
```

Add marker to \cdo@seeglossary

```
1352     \renewcommand{\cdo@seeglossary}[2]{%
1353         \cdo@glstrwrglossmark
1354         \edef\cdo@label{\glstrtoklabel{##1}}%
1355         \protected@write\auxout{}{%
1356             \string\cdo@reference
1357             {\csname glo@\cdo@label\cdo@type\endcsname}%
1358             {\cdo@label}}%
1359             {%
1360                 \string\glseeformat##2{}%
1361             }%
1362         }%
1363     }%
```

Check for docdefs=restricted:

```
1364     \if@glstrdocdefrestricted
```

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

```
1365     \renewcommand*{\cdo@reference}[3]{%
1366         \ifcsundef{glsref##1}{\csgdef@glsref##1{}{}}{%
1367             \ifinlistcs##2{@glsref##1}{%
1368                 {}{%
1369                     {\listcsgadd@glsref##1##2}{%
1370                         \ifcsundef{glo@\glstrtoklabel##2@loclist}{%
1371                             {\csgdef@glo@\glstrtoklabel##2@loclist}{}}{%
1372                                 {}{%
1373                                     {\listcsgadd@glo@\glstrtoklabel##2@loclist}##3}{%
1374                                 }%
1375             }%
1376         }%
1377     }%
1378 }
```

Disable document definitions.

```
1376     \cdo@glstrdocdeffalse
1377     \fi
1378     \disable@keys{glossaries-extra.sty}{docdef}%
1379 }%
1380 {%
1381     \PackageError{glossaries-extra}{\string\makenoidxglossaries\space
1382         not permitted\MessageBreak
1383         with record=\cdo@glstr@record@setting\space package option}%
1384     {You may only use \string\makenoidxglossaries\ space with the
1385         record=off option}%
1386 }%
1387 }
```

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

```
1388 \renewcommand*{\gls@defdocnewglossaryentry}%
1389     \ifcase\cdo@glstr@docdefval
1390         docdef=false:
```

```

1390 \renewcommand*{\newglossaryentry}[2]{%
1391     \PackageError{glossaries-extra}{Glossary entries must
1392         be \MessageBreak defined in the preamble with \MessageBreak
1393         package option ‘docdef=false’}\MessageBreak(consider using
1394         ‘docdef=restricted’)\MessageBreak}{Move your glossary definitions to
1395         the preamble. You can also put them in a \MessageBreak separate file
1396         and load them with \string\loadglsentries.}%
1397 }%
1398 \or

```

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

```

1399 \let\gls@checkseeallowed\relax
1400 \let\newglossaryentry\new@glossaryentry
1401 \or

```

Restricted mode just needs to allow the see value.

```

1402 \let\gls@checkseeallowed\relax
1403 \fi
1404 }%

```

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

```

1405 \newcommand*{\GlsXtrEnableOnTheFly}{%
1406     \@ifstar@sGlsXtrEnableOnTheFly@\GlsXtrEnableOnTheFly
1407 }

```

**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.)

```

1408 \newcommand*{\@sGlsXtrEnableOnTheFly}{%
1409     \renewcommand*{\glsdetoklabel}[1]{%
1410         \expandafter@glsxtr@ifcsstart\string##1 \glsxtr@end@
1411     }%
1412     \expandafter\detokenize\expandafter{##1}%
1413 }%
1414 {\detokenize{##1}}%
1415 }%
1416 \@GlsXtrEnableOnTheFly
1417 }%
1418 \def@glsxtr@ifcsstart#1#2@glsxtr@end@#3#4{%
1419     \expandafter\if\glsbackslash#1%
1420     #3%
1421 \else
1422     #4%

```

```

1423   \fi
1424 }

sxtrstarflywarn
1425 \newcommand*{\glsxtrstarflywarn}{%
1426   \GlossariesExtraWarning{Experimental starred version of
1427   \string\GlsXtrEnableOnTheFly\space in use (please ensure you have
1428   read the warnings in the glossaries-extra user manual)}%
1429 }

```

rEnableOnTheFly

```
1430 \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
1431 \newcommand*{\glsxtrcat}{general}
```

```
\glsxtr
1432 \newcommand*{\glsxtr}[1][]{%
1433   \def\glsxtr@keylist{##1}%
1434   \@glsxtr
1435 }
```

```
\@glsxtr
1436 \newcommand*{\@glsxtr}[2][]{%
1437   \ifglsentryexists{##2}%
1438   {%
1439     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1440   }%
1441   {%
1442     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1443       description={\nopostdesc},##1}%
1444   }%
1445   \expandafter\gls\expandafter[\glsxtr@keylist]{##2}%
1446 }
```

```
\Glsxtr
1447 \newcommand*{\Glsxtr}[1][]{%
1448   \def\glsxtr@keylist{##1}%
1449   \@Glsxtr
1450 }
```

```
\@Glsxtr
1451 \newcommand*{\@Glsxtr}[2][]{%
1452   \ifglsentryexists{##2}%

```

```

1453  {%
1454    \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1455  }%
1456  {%
1457    \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1458      description={\nopostdesc},##1}%
1459  }%
1460  \expandafter\Gls\expandafter[\glsxtr@keylist]{##2}%
1461 }

\glsxtrpl
1462 \newcommand*{\glsxtrpl}[1] []{%
1463   \def\glsxtr@keylist{##1}%
1464   \glsxtrpl
1465 }

{@glsxtrpl
1466 \newcommand*{@glsxtrpl}[2] []{%
1467   \ifglsentryexists{##2}%
1468   {%
1469     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1470   }%
1471   {%
1472     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1473       description={\nopostdesc},##1}%
1474   }%
1475   \expandafter\glspl\expandafter[\glsxtr@keylist]{##2}%
1476 }

\Glsxtrpl
1477 \newcommand*{\Glsxtrpl}[1] []{%
1478   \def\glsxtr@keylist{##1}%
1479   \glsxtrpl
1480 }

{@Glsxtrpl
1481 \newcommand*{@Glsxtrpl}[2] []{%
1482   \ifglsentryexists{##2}%
1483   {%
1484     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1485   }%
1486   {%
1487     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1488       description={\nopostdesc},##1}%
1489   }%
1490   \expandafter\glspl\expandafter[\glsxtr@keylist]{##2}%
1491 }

\GlsXtrWarning

```

```

1492 \newcommand*{\GlsXtrWarning}[2]{%
1493   \def\@glsxtr@optlist{##1}%
1494   \onelevel@sanitize\@glsxtr@optlist
1495   \GlossariesExtraWarning{The options '\@glsxtr@optlist' have
1496   been ignored for entry '##2' as it has already been defined}%
1497 }

```

Disable commands after the glossary:

```

1498 \renewcommand{\printglossary}[2]{%
1499   \def\@glsxtr@printglossopts{##1}%
1500   \@glsxtr@orgprintglossary{##1}{##2}%
1501   \def\@glsxtr{\@glsxtr@disabledflycommand\glsxtr}%
1502   \def\@glsxtrpl{\@glsxtr@disabledflycommand\glsxtrpl}%
1503   \def\@Glsxtr{\@glsxtr@disabledflycommand\Glsxtr}%
1504   \def\@Glsxtrpl{\@glsxtr@disabledflycommand\Glsxtrpl}%
1505 }

```

`abledflycommand`

```

1506 \newcommand*{\@glsxtr@disabledflycommand}[1]{%
1507   \PackageError{glossaries-extra}%
1508   {\string##1\space can't be used after any of the \MessageBreak
1509    glossaries have been displayed}%
1510   {The on-the-fly commands enabled by
1511    \string\GlsXtrEnableOnTheFly\space may only be used \MessageBreak
1512    before the glossaries. If you want to use any entries \MessageBreak
1513    after any of the glossaries, you must use the standard \MessageBreak
1514    method of first defining the entry and then using the \MessageBreak
1515    entry with commands like \string\gls}%
1516   \@@glsxtr@disabledflycommand
1517 }%
1518 \newcommand*{\@glsxtr@disabledflycommand}[2][]{##2}

```

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

```

1519 \let\GlsXtrEnableOnTheFly\relax
1520 }%
1521 \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.

```
1522 \newcommand*{\@glsxtr@current@style}{\@glossary@default@style}
```

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

`etglossarystyle`

```
1523 \renewcommand{\setglossarystyle}[1]{%
```

```

1524 \ifcsundef{@glsstyle@#1}%
1525 {%
1526   \PackageError{glossaries-extra}{Glossary style '#1' undefined}{}%
1527 }%
1528 {%
1529   \csname @glsstyle@#1\endcsname

```

Only set the current style if it exists.

```

1530   \protected@edef{\glsxtr@current@style{#1}}%
1531 }%
1532 \ifx\glossary@default@style\relax
1533   \protected@edef{\glossary@default@style{#1}}%
1534 \fi
1535 }

```

In case we have an old version of glossaries:

```

1536 \ifdef{\glossary@default@style}%
1537 {}%
1538 {%
1539   \let{\glossary@default@style}\relax
1540 }

```

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

```

1541 \ifdef{\glslistdottedwidth}%
1542 {%
1543   \ifdim\glslistdottedwidth=.5\hsize
1544     \setlength{\glslistdottedwidth}{-\dimexpr\maxdimen-1sp\relax}%
1545     \AtBeginDocument{%
1546       \ifdim\glslistdottedwidth=-\dimexpr\maxdimen-1sp\relax
1547         \setlength{\glslistdottedwidth}{.5\columnwidth}%
1548       \fi
1549     }%
1550   \fi
1551 }
1552 {}%

```

Similarly for `\glsdescwidth`:

```

\glsdescwidth
1553 \ifdef{\glsdescwidth}%
1554 {%
1555   \ifdim\glsdescwidth=.6\hsize
1556     \setlength{\glsdescwidth}{-\dimexpr\maxdimen-1sp\relax}%
1557     \AtBeginDocument{%
1558       \ifdim\glsdescwidth=-\dimexpr\maxdimen-1sp\relax
1559         \setlength{\glsdescwidth}{.6\columnwidth}%
1560       \fi
1561     }%
1562   \fi

```

```
1563 }
1564 {}%
```

and for \glspagelistwidth:

lspagelistwidth

```
1565 \ifdef\glspagelistwidth
1566 {}%
1567   \ifdim\glspagelistwidth=.1\hsize
1568     \setlength{\glspagelistwidth}{-\dimexpr\maxdimen-1sp\relax}
1569   \AtBeginDocument{%
1570     \ifdim\glspagelistwidth=-\dimexpr\maxdimen-1sp\relax
1571       \setlength{\glspagelistwidth}{.1\columnwidth}%
1572     \fi
1573   }%
1574 \fi
1575 }
1576 {}%
```

aryentrynumbers Has the nonumberlist option been used?

```
1577 \def\org@glossaryentrynumbers#1{#1\gls@save@numberlist{#1}}%
1578 \ifx\org@glossaryentrynumbers\glossaryentrynumbers
1579   \glsnonumberlistfalse
1580   \renewcommand*\glossaryentrynumbers[1]{%
1581     \ifglsentryexists{\glscurrententrylabel}%
1582     {%
1583       \@glsxtrpreloctag
1584       \GlsXtrFormatLocationList{#1}%
1585       \@glsxtrpostloctag
1586       \gls@save@numberlist{#1}%
1587     }{}%
1588   }%
1589 \else
1590   \glsnonumberlisttrue
1591   \renewcommand*\glossaryentrynumbers[1]{%
1592     \ifglsentryexists{\glscurrententrylabel}%
1593     {%
1594       \gls@save@numberlist{#1}%
1595     }{}%
1596   }%
1597 \fi
```

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

```
1598 \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

```

1599 \newcommand*{\GlsXtrEnablePreLocationTag}[2]{%
1600   \let\@glsxtrpreloctag\@glsxtrpreloctag
1601   \let\@glsxtrpostloctag\@glsxtrpostloctag
1602   \renewcommand*{\@glsxtr@pagetag}{#1}%
1603   \renewcommand*{\@glsxtr@pagestag}{#2}%
1604   \renewcommand*{\@glsxtr@savepreloctag}[2]{%
1605     \csgdef{@glsxtr@preloctag##1}{##2}%
1606   }%
1607   \renewcommand*{\@glsxtr@doloctag}{%
1608     \ifcsundef{@glsxtr@preloctag@\glscurrententrylabel}%
1609     {%
1610       \GlossariesWarning{Missing pre-location tag for '\glscurrententrylabel'.}
1611       Rerun required}%
1612     }%
1613     {%
1614       \csuse{@glsxtr@preloctag@\glscurrententrylabel}%
1615     }%
1616   }%
1617 }
1618 \onlypreamble\GlsXtrEnablePreLocationTag

```

#### glsxtrpreloctag

```

1619 \newcommand*{\@glsxtrpreloctag}{%
1620   \let\@glsxtr@org@delimN\delimN
1621   \let\@glsxtr@org@delimR\delimR
1622   \let\@glsxtr@org@glsignore\glsignore
   \gdef is required as the delimiters may occur inside a scope.
1623   \gdef\@glsxtr@thisloctag{\@glsxtr@pagetag}%
1624   \renewcommand*{\delimN}{%
1625     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
1626     \@glsxtr@org@delimN}%
1627   \renewcommand*{\delimR}{%
1628     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
1629     \@glsxtr@org@delimR}%
1630   \renewcommand*{\glsignore}[1]{%
1631     \gdef\@glsxtr@thisloctag{\relax}%
1632     \@glsxtr@org@glsignore{##1}}%
1633   \glsxtr@doloctag
1634 }

```

#### glsxtrpreloctag

```

1635 \newcommand*{\@glsxtrpreloctag}{}

```

```

@glsxtr@pagetag
1636 \newcommand*{\@glsxtr@pagetag}{}%

glsxtr@pagestag
1637 \newcommand*{\@glsxtr@pagestag}{}%

lsxtrpostloctag
1638 \newcommand*{\@@glsxtrpostloctag}{}%
1639   \let\delimN\@glsxtr@org@delimN
1640   \let\delimR\@glsxtr@org@delimR
1641   \let\glsignore\@glsxtr@org@glsignore
1642   \protected@write\@auxout{%%
1643     {\string\@glsxtr@savepreloctag{\glscurrententrylabel}{\@glsxtr@thisloctag}}%
1644   }

lsxtrpostloctag
1645 \newcommand*{\@glsxtrpostloctag}{}%

lsxtr@preloctag
1646 \newcommand*{\@glsxtr@savepreloctag}[2] {}
1647 \protected@write\@auxout{%%
1648   \string\providecommand\string\@glsxtr@savepreloctag[2] {}}

glsxtr@doloctag
1649 \newcommand*{\@glsxtr@doloctag}{}%

ss@nonumberlist  Modify the nonumberlist key to use \GlsXtrFormatLocationList (and also save the number
list):
1650 \renewcommand*{\KV@printgloss@nonumberlist}[1]{%
1651   \XKV@plfalse
1652   \XKV@sttrue
1653   \XKV@checkchoice[\XKV@resa]{#1}{true,false}%
1654 {%
1655   \csname glsnonumberlist\XKV@resa\endcsname
1656   \ifglsnonumberlist
1657     \def\glossaryentrynumbers##1{\gls@save@numberlist{##1}}%
1658   \else
1659     \def\glossaryentrynumbers##1{%
1660       \glsxtrpreloctag
1661       \GlsXtrFormatLocationList{##1}%
1662       \glsxtrpostloctag
1663       \gls@save@numberlist{##1}}%
1664   \fi
1665 }%
1666 }

```

### 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.

```
1667 \renewcommand*{\glsentryfmt}{%
1668   \ifglshasshort{\glslabel}{\glssetabrvfmt{\glscategory{\glslabel}}}{}
1669   \glsifregular{\glslabel}%
1670   {\glsxtrregularfont{\glsentryfmt}}%
1671   {%
1672     \ifglshasshort{\glslabel}%
1673     {\glsxtrgenabrvfmt}%
1674     {\glsxtrregularfont{\glsentryfmt}}%
1675   }%
1676 }
```

sxtrregularfont Font used for regular entries.

```
1677 \newcommand*{\glsxtrregularfont}[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.

```
1678 \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).

```
1679  \@glsxtr@record{#2}{#3}{glslink}%
1680  \glsdoifexists{#3}%
1681  {%
```

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).

```
1682  \let\glsxtrorg@ifKV@glslink@hyper\ifKV@glslink@hyper
1683  \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
1684  \def\glscustomtext{#4}%
1685  \@glsxtr@field@linkdefs
1686  #1%
1687  \@gls@link[#2]{#3}{#4}%
1688  \let\ifKV@glslink@hyper\glsxtrorg@ifKV@glslink@hyper
1689  }%
```

```
1690 \glspostlinkhook  
1691 }
```

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.

```
1692 \let\@glsxtr@org@gls@\@gls@  
1693 \def\@gls@#1#2{  
1694   \@glsxtr@record{#1}{#2}{glslink}%">  
1695   \@glsxtr@org@gls@{#1}{#2}%">  
1696 }%
```

`\@glsp1@` Save the original definition and redefine.

```
1697 \let\@glsxtr@org@glsp1@\@glsp1@  
1698 \def\@glsp1@#1#2{  
1699   \@glsxtr@record{#1}{#2}{glslink}%">  
1700   \@glsxtr@org@glsp1@{#1}{#2}%">  
1701 }%
```

`\@Gls@` Save the original definition and redefine.

```
1702 \let\@glsxtr@org@Gls@\@Gls@  
1703 \def\@Gls@#1#2{  
1704   \@glsxtr@record{#1}{#2}{glslink}%">  
1705   \@glsxtr@org@Gls@{#1}{#2}%">  
1706 }%
```

`\@Glsp1@` Save the original definition and redefine.

```
1707 \let\@glsxtr@org@Glsp1@\@Glsp1@  
1708 \def\@Glsp1@#1#2{  
1709   \@glsxtr@record{#1}{#2}{glslink}%">  
1710   \@glsxtr@org@Glsp1@{#1}{#2}%">  
1711 }%
```

`\@GLS@` Save the original definition and redefine.

```
1712 \let\@glsxtr@org@GLS@\@GLS@  
1713 \def\@GLS@#1#2{  
1714   \@glsxtr@record{#1}{#2}{glslink}%">  
1715   \@glsxtr@org@GLS@{#1}{#2}%">  
1716 }%
```

`\@GLSp1@` Save the original definition and redefine.

```
1717 \let\@glsxtr@org@GLSp1@\@GLSp1@  
1718 \def\@GLSp1@#1#2{  
1719   \@glsxtr@record{#1}{#2}{glslink}%">  
1720   \@glsxtr@org@GLSp1@{#1}{#2}%">  
1721 }%
```

\@glsdisp Save the original definition and redefine. Can't save and restore \@glsdisp since it has an optional argument.

```
1722 \renewcommand*{\@glsdisp}[3] [] {%
1723   \@glsxtr@record{#1}{#2}{glslink}%
1724   \glsdoifexists{#2}{%
1725     \let\do@gls@link@checkfirsthyper\gls@link@checkfirsthyper
1726     \let\glsifplural\secondoftwo
1727     \let\glscapscase\firstofthree
1728     \def\glscustomtext{#3}%
1729     \def\glsinsert{}%
1730     \def\glo@text{\csname gls@\glstype @entryfmt\endcsname}%
1731     \gls@link[#1]{#2}{\glo@text}%
1732     \ifKV@glslink@local
1733       \glslocalunset{#2}%
1734     \else
1735       \glsunset{#2}%
1736     \fi
1737   }%
1738   \glspostlinkhook
1739 }
```

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

```
1740 \renewcommand*{\gls@link}[3] [] {%
1741   \@glsxtr@record{#1}{#2}{glslink}%
1742   \glsdoifexists{#2}{%
1743     {%
1744       \let\do@gls@link@checkfirsthyper\relax
1745       \gls@link[#1]{#2}{#3}%
1746     }%
1747     {%
1748       \glstextformat{#3}%
1749     }%
1750   \glspostlinkhook
1751 }
```

sxtrinitwrgloss Set the default if the wrgloss is omitted.

```
1752 \newcommand*{\glsxtrinitwrgloss}{}%
1753 \glsifattribute{\glslabel}{wrgloss}{after}%
1754 {%
1755   \glsxtrinitwrglossbeforefalse
1756 }%
1757 {%
1758   \glsxtrinitwrglossbeforetrue
1759 }%
1760 }
```

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

```
1761 \newif\ifglsxtrinitwrglossbefore
1762 \glsxtrinitwrglossbeforetrue
```

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

```
1763 \define@choicekey{glslink}{wrgloss}[\val\nr]{before,after}%
1764 {%
1765   \ifcase\nr\relax
1766     \glsxtrinitwrglossbeforetrue
1767   \or
1768     \glsxtrinitwrglossbeforefalse
1769   \fi
1770 }

1771 \define@key{glslink}{thevalue}{\def\@glsxtr@thevalue{\#1}}
1772 \define@key{glslink}{theHvalue}{\def\@glsxtr@theHvalue{\#1}}
```

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

```
1773 \define@boolkey{glslink}[\glsxtr@]{hyperoutside}[true]{}
1774 \glsxtr@hyperoutsidetrue
```

nithyperoutside Set the default if the hyperoutside is omitted.

```
1775 \newcommand*\glsxtrinithyperoutside{%
1776   \glsifattribute{\glslabel}{hyperoutside}{false}%
1777   {%
1778     \glsxtr@hyperoutsidefalse
1779   }%
1780   {%
1781     \glsxtr@hyperoutsidetrue
1782   }%
1783 }
```

\@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.

```
1784 \def\@gls@link[#1]#2#3{%
1785   \leavevmode
1786   \edef\glslabel{\glsdetoklabel{\#2}}%
1787   \def\@gls@link@opts{\#1}%
1788   \let\@gls@link@label\glslabel
1789   \let\@glsnumberformat\glsxtr@defaultnumberformat
1790   \edef\@gls@counter{\csname glo@\glslabel\endcsname\@counter\endcsname}%
1791   \edef\glstype{\csname glo@\glslabel\endcsname\@type\endcsname}%
1792   \let\org@ifKV@glslink@hyper\ifKV@glslink@hyper
```

Initialise thevalue and theHvalue (v1.19).

```
1793 \def\@glsxtr@thevalue{}%
1794 \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
```

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

```
1795 \glsxtrinitwrgloss
```

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

```
1796 \glsxtrinithyperoutside
```

As the original definition. Note that the default link options may override \glsxtrinitwrgloss.

```
1797 \@gls@setdefault@glslink@opts  
1798 \do@glsdisablehyperinlist  
1799 \do@gls@link@checkfirsthyper  
1800 \setkeys{glslink}{#1}%  
1801 \glslinkpostsetkeys
```

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

```
1802 \ifdefempty{\glsxtr@thevalue}{%  
1803 {  
1804     \@gls@saveentrycounter  
1805 }%  
1806 {  
1807     \let\the\glsentrycounter\glsxtr@thevalue  
1808     \def\theH\glsentrycounter{\glsxtr@theHvalue}{%  
1809 }%  
1810 \gls@setsort{\glslabel}{%
```

Check textformat attribute (new to v1.21).

```
1811 \glshasattribute{\glslabel}{textformat}{%  
1812 {  
1813     \edef\glsxtr@attrval{\glsgetattribute{\glslabel}{textformat}}%  
1814     \ifcsdef{\glsxtr@attrval}{%  
1815     {  
1816         \let\cs{\glsxtr@textformat}\glsxtr@attrval}{%  
1817     }%  
1818     {  
1819         \GlossariesExtraWarning{Unknown control sequence name  
1820             '\glsxtr@attrval' supplied in textformat attribute  
1821             for entry '\glslabel'. Reverting to default \string\glstextformat}{%  
1822             \let\glsxtr@textformat\glstextformat  
1823         }%  
1824     }%  
1825     {  
1826         \let\glsxtr@textformat\glstextformat  
1827     }%
```

Do write if it should occur before the link text:

```
1828 \ifglsxtrinitwrglossbefore  
1829     \do@wrglossary{#2}{%  
1830 \fi
```

Do the link text:

```
1831 \ifKV@glslink@hyper  
1832     \ifglsxtr@hyperoutside  
1833         \glslink{\glolinkprefix\glslabel}{\glsxtr@textformat{#3}}{  
1834     \else  
1835         \glsxtr@textformat{\glslink{\glolinkprefix\glslabel}{#3}}{
```

```

1836     \fi
1837 \else
1838     \ifglsxtr@hyperoutside
1839         \glsdonohyperlink{\glolinkprefix\glslabel}{\glsxtr@textformat{#3}}%
1840     \else
1841         \glsxtr@textformat{\glsdonohyperlink{\glolinkprefix\glslabel}{#3}}%
1842     \fi
1843 \fi

```

Do write if it should occur after the link text:

```

1844 \ifglsxtrinitwrglossbefore
1845 \else
1846     \do@wrglossary{#2}%
1847 \fi

```

As the original definition:

```

1848 \let\ifKV@glslink@hyper\org@ifKV@glslink@hyper
1849 }

```

```

1850 \define@key{glossadd}{thevalue}{\def\glsxtr@thevalue{#1}}
1851 \define@key{glossadd}{theHvalue}{\def\glsxtr@theHvalue{#1}}

```

\glsadd Redefine to include \glsxtr@record and suppress in headings

```

1852 \renewrobustcmd*\glsadd}[2][]{%
1853     \glsxtrifinmark
1854     {}%
1855     {}%
1856     \gls@adjustmode
1857     \glsxtr@record{#1}{#2}{glossadd}%
1858     \glsdoifexists{#2}%
1859     {}%
1860     \let\glsnumberformat\glsxtr@defaultnumberformat
1861     \edef\gls@counter{\csname glo@\glsdetoklabel{#2}@counter\endcsname}%
1862     \def\glsxtr@thevalue{}%
1863     \def\glsxtr@theHvalue{\glsxtr@thevalue}%
1864     \setkeys{glossadd}{#1}%
1865     \ifdefempty{\glsxtr@thevalue}%
1866     {}%
1867     \gls@saveentrycounter
1868     {}%
1869     {}%
1870     \let\the\glsentrycounter\glsxtr@thevalue
1871     \def\theH\glsentrycounter{\glsxtr@theHvalue}%
1872     {}%
1873     \do@wrglossary{#2}%
1874     {}%
1875 }%
1876 }

```

```

@field@linkdefs Default settings for \@gls@field@link
1877 \newcommand*{\@glsxtr@field@linkdefs}{%
1878   \let\glsxtrifwasfirstuse\@secondoftwo
1879   \let\glsifplural\@secondoftwo
1880   \let\glscapscase\@firstofthree
1881   \let\glsinsert\@empty
1882 }

```

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

#### assignfieldfont

```

1883 \newcommand*{\glsxtrassignfieldfont}[1]{%
1884   \ifglsentryexists{#1}%
1885   {%
1886     \ifglshasshort{#1}%
1887     {%
1888       \glssetabbrvfmt{\glscategory{#1}}%
1889       \glsifregular{#1}%
1890       {\let\@gls@field@font\glsxtrregularfont}%
1891       {\let\@gls@field@font\@firstofone}%
1892     }%
1893     {%
1894       \glsifnotregular{#1}%
1895       {\let\@gls@field@font\@firstofone}%
1896       {\let\@gls@field@font\glsxtrregularfont}%
1897     }%
1898   }%
1899   {%
1900     \let\@gls@field@font@gobble
1901   }%
1902 }

```

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

```

1903 \def\@glstext@#1#2[#3]{%
1904   \glsxtrassignfieldfont{#2}%
1905   \@gls@field@link{#1}{#2}{\@gls@field@font{\glsaccesstext{#2}#3}}%
1906 }

```

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

```

1907 \def\@GLStext@#1#2[#3]{%
1908   \glsxtrassignfieldfont{#2}%
1909   \@gls@field@link[\let\glscapscase\@thirdofthree]{#1}{#2}%
1910   {\@gls@field@font{\GLSaccesstext{#2}\mfirstrucMakeUppercase{#3}}}%
1911 }

```

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

```

1912 \def\@Glstext@#1#2[#3]{%
1913   \glsxtrassignfieldfont{#2}%

```

```

1914  \@gls@field@link[\let\glscapscase\@secondofthree]{#1}{#2}%
1915    {\@gls@field@font{\Glsaccesstext{#2}{#3}}}{%
1916 }

```

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

```

1917 \newcommand*{\glsxtrchecknohyperfirst}[1]{%
1918   \glsifattribute{#1}{nohyperfirst}{true}{\KV@glslink@hyperfalse}{\{}%
1919 }

```

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

```

1920 \def\@glsfirst@#1#2[#3]{%
1921   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirst honours the nohyperfirst attribute.

```

1922  \@gls@field@link
1923  [\let\glsxtrifwasfirstuse\@firstoftwo
1924    \glsxtrchecknohyperfirst{#2}%
1925  ]{#1}{#2}%
1926  {\@gls@field@font{\glsaccessfirst{#2}{#3}}}{%
1927 }

```

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

```

1928 \def\@Glsfirst@#1#2[#3]{%
1929   \glsxtrassignfieldfont{#2}%

```

Ensure that \Glsfirst honours the nohyperfirst attribute.

```

1930  \@gls@field@link
1931  [\let\glsxtrifwasfirstuse\@firstoftwo
1932    \let\glscapscase\@secondofthree
1933    \glsxtrchecknohyperfirst{#2}%
1934  ]%
1935  {#1}{#2}{\@gls@field@font{\Glsaccessfirst{#2}{#3}}}{%
1936 }

```

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

```

1937 \def\@GLSfirst@#1#2[#3]{%
1938   \glsxtrassignfieldfont{#2}%

```

Ensure that \GLSfirst honours the nohyperfirst attribute.

```

1939  \@gls@field@link
1940  [\let\glsxtrifwasfirstuse\@firstoftwo
1941    \let\glscapscase\@thirdofthree
1942    \glsxtrchecknohyperfirst{#2}%
1943  ]%
1944  {#1}{#2}{\@gls@field@font{\GLSaccessfirst{#2}{\mfirstuclMakeUppercase{#3}}}}{%
1945 }

```

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

```
1946 \def \@glsplural@#1#2[#3]{%
1947   \glsxtrassignfieldfont{#2}%
1948   \gls@field@link[\let\glsifplural\@firstoftwo]{#1}{#2}%
1949   {\gls@field@font{\glsaccessplural{#2}#3}}%
1950 }
```

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

```
1951 \def \@Glsplural@#1#2[#3]{%
1952   \glsxtrassignfieldfont{#2}%
1953   \gls@field@link
1954   [\let\glsifplural\@firstoftwo
1955   \let\glscapscase\@secondofthree
1956   ]%
1957   {#1}{#2}{\gls@field@font{\Glsaccessplural{#2}#3}}%
1958 }
```

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

```
1959 \def \@GLSplural@#1#2[#3]{%
1960   \glsxtrassignfieldfont{#2}%
1961   \gls@field@link
1962   [\let\glsifplural\@firstoftwo
1963   \let\glscapscase\@thirdofthree
1964   ]%
1965   {#1}{#2}{\gls@field@font{\GLSaccessplural{#2}\mfirstucMakeUppercase{#3}}}%
1966 }
```

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

```
1967 \def \@glsfirstplural@#1#2[#3]{%
1968   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
1969   \gls@field@link
1970   [\let\glsxtrifwasfirstuse\@firstoftwo
1971   \let\glsifplural\@firstoftwo
1972   \glsxtrchecknohyperfirst{#2}%
1973   ]%
1974   {#1}{#2}{\gls@field@font{\glsaccessfirstplural{#2}#3}}%
1975 }
```

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

```
1976 \def \@Glsfirstplural@#1#2[#3]{%
1977   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
1978   \gls@field@link
1979   [\let\glsxtrifwasfirstuse\@firstoftwo
1980   \let\glsifplural\@firstoftwo
1981   \let\glscapscase\@secondofthree
```

```

1982     \glsxtrchecknohyperfirst{#2}%
1983   ]%
1984   {#1}{#2}{\gls@field@font{\Glsaccessfirstplural{#2}#3}}%
1985 }
```

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

```

1986 \def\GLSfirstplural@#1#2[#3]{%
1987   \glsxtrassignfieldfont{#2}%


```

Ensure that `\glsfirstplural` honours the `nohyperfirst` attribute.

```

1988   \gls@field@link
1989   [\let\glsxtrifwasfirstuse\@firstoftwo
1990   \let\glsifplural\@firstoftwo
1991   \let\glscapscase\@thirdofthree
1992   \glsxtrchecknohyperfirst{#2}%
1993 ]%
1994 {#1}{#2}%
1995 {\gls@field@font{\Glsaccessfirstplural{#2}\mfirstucMakeUppercase{#3}}}%
1996 }
```

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

```

1997 \def\glsname@#1#2[#3]{%
1998   \glsxtrassignfieldfont{#2}%
1999   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccessname{#2}#3}}%
2000 }
```

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

```

2001 \def\Glsname@#1#2[#3]{%
2002   \glsxtrassignfieldfont{#2}%
2003   \gls@field@link
2004   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2005   {\gls@field@font{\Glsaccessname{#2}#3}}%
2006 }
```

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

```

2007 \def\GLSname@#1#2[#3]{%
2008   \glsxtrassignfieldfont{#2}%
2009   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2010   {#1}{#2}%
2011   {\gls@field@font{\Glsaccessname{#2}\mfirstucMakeUppercase{#3}}}%
2012 }
```

`\@glsdesc@`

```

2013 \def\glsdesc@#1#2[#3]{%
2014   \glsxtrassignfieldfont{#2}%
2015   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccessdesc{#2}#3}}%
2016 }
```

```

\@Glsdesc@ First letter uppercase version.
2017 \def\@Glsdesc@#1#2[#3]{%
2018   \glsxtrassignfieldfont{#2}%
2019   \gls@field@link
2020   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2021   {\gls@field@font{\Glsaccessdesc{#2}{#3}}}{%
2022 }

\@GLSdesc@ All uppercase version.
2023 \def\@GLSdesc@#1#2[#3]{%
2024   \glsxtrassignfieldfont{#2}%
2025   \gls@field@link[\let\glscapscase\@thirdoftwo]{%
2026     {#1}{#2}{\gls@field@font{\GLSaccessdesc{#2}\mfirstucMakeUppercase{#3}}}}{%
2027 }

@glsdescplural@ No case-changing version.
2028 \def\@glsdescplural@#1#2[#3]{%
2029   \glsxtrassignfieldfont{#2}%
2030   \gls@field@link
2031   [\let\glscapscase\@secondoftwo
2032     \let\glsifplural\@firstoftwo
2033   ]{#1}{#2}{\gls@field@font{\glsaccessdescplural{#2}{#3}}}{%
2034 }

@Glsdescplural@ First letter uppercase version.
2035 \def\@Glsdescplural@#1#2[#3]{%
2036   \glsxtrassignfieldfont{#2}%
2037   \gls@field@link
2038   [\let\glscapscase\@secondoftwo
2039     \let\glsifplural\@firstoftwo
2040   ]{#1}{#2}{\gls@field@font{\Glsaccessdescplural{#2}{#3}}}{%
2041 }

@GLSdescplural@ All uppercase version.
2042 \def\@GLSdesc@#1#2[#3]{%
2043   \glsxtrassignfieldfont{#2}%
2044   \gls@field@link
2045   [\let\glscapscase\@thirdoftwo
2046     \let\glsifplural\@firstoftwo
2047   ]{%
2048     {#1}{#2}%
2049     {\gls@field@font{\GLSaccessdescplural{#2}\mfirstucMakeUppercase{#3}}}}{%
2050 }

\@glssymbol@
2051 \def\@glssymbol@#1#2[#3]{%
2052   \glsxtrassignfieldfont{#2}%
2053   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccesssymbol{#2}{#3}}}{%
2054 }

```

\@Glssymbol@ First letter uppercase version.

```
2055 \def\@Glssymbol@#1#2[#3]{%
2056   \glsxtrassignfieldfont{#2}%
2057   \gls@field@link
2058   [\let\glscapscase\@secondoftwo]%
2059   {#1}{#2}{\gls@field@font{\Glsaccesssymbol{#2}{#3}}}{%
2060 }
```

\@GLSsymbol@ All uppercase version.

```
2061 \def\@GLSsymbol@#1#2[#3]{%
2062   \glsxtrassignfieldfont{#2}%
2063   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2064   {#1}{#2}{\gls@field@font{\GLSaccesssymbol{#2}\mfirstucMakeUppercase{#3}}}{%
2065 }
```

lssymbolplural@ No case-changing version.

```
2066 \def\@glssymbolplural@#1#2[#3]{%
2067   \glsxtrassignfieldfont{#2}%
2068   \gls@field@link
2069   [\let\glscapscase\@secondoftwo
2070     \let\glsifplural\@firstoftwo
2071   ]{#1}{#2}{\gls@field@font{\glsaccesssymbolplural{#2}{#3}}}{%
2072 }
```

lssymbolplural@ First letter uppercase version.

```
2073 \def\@Glssymbolplural@#1#2[#3]{%
2074   \glsxtrassignfieldfont{#2}%
2075   \gls@field@link
2076   [\let\glscapscase\@secondoftwo
2077     \let\glsifplural\@firstoftwo
2078   ]{#1}{#2}{\gls@field@font{\Glsaccesssymbolplural{#2}{#3}}}{%
2079 }
```

LSsymbolplural@ All uppercase version.

```
2080 \def\@GLSsymbol@#1#2[#3]{%
2081   \glsxtrassignfieldfont{#2}%
2082   \gls@field@link
2083   [\let\glscapscase\@thirdoftwo
2084     \let\glsifplural\@firstoftwo
2085   ]%
2086   {#1}{#2}{%
2087     \gls@field@font{\GLSaccesssymbolplural{#2}\mfirstucMakeUppercase{#3}}}{%
2088 }
```

\@Glsuseri@ First letter uppercase version.

```
2089 \def\@Glsuseri@#1#2[#3]{%
2090   \glsxtrassignfieldfont{#2}%
2091   \gls@field@link
```

```

2092  [\let\glscapscase\@secondoftwo]{#1}{#2}%
2093  {\@gls@field@font{\Glsentryuseri{#2}#3}}%
2094 }

\@GLSuseri@ All uppercase version.
2095 \def\@GLSuseri@#1#2[#3]{%
2096   \glsxtrassignfieldfont{#2}%
2097   \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2098     {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseri{#2}#3}}}%
2099 }

\@Glsuserii@ First letter uppercase version.
2100 \def\@Glsuserii@#1#2[#3]{%
2101   \glsxtrassignfieldfont{#2}%
2102   \@gls@field@link
2103   [\let\glscapscase\@secondoftwo]%
2104     {#1}{#2}{\@gls@field@font{\Glsentryuserii{#2}#3}}}%
2105 }

\@GLSuserii@ All uppercase version.
2106 \def\@GLSuserii@#1#2[#3]{%
2107   \glsxtrassignfieldfont{#2}%
2108   \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2109     {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuserii{#2}#3}}}%
2110 }

\@Glsuseriii@ First letter uppercase version.
2111 \def\@Glsuseriii@#1#2[#3]{%
2112   \glsxtrassignfieldfont{#2}%
2113   \@gls@field@link
2114   [\let\glscapscase\@secondoftwo]%
2115     {#1}{#2}{\@gls@field@font{\Glsentryuseriii{#2}#3}}}%
2116 }

\@GLSuseriii@ All uppercase version.
2117 \def\@GLSuseriii@#1#2[#3]{%
2118   \glsxtrassignfieldfont{#2}%
2119   \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2120     {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseriii{#2}#3}}}%
2121 }

\@Glsuseriv@ First letter uppercase version.
2122 \def\@Glsuseriv@#1#2[#3]{%
2123   \glsxtrassignfieldfont{#2}%
2124   \@gls@field@link
2125   [\let\glscapscase\@secondoftwo]%
2126     {#1}{#2}{\@gls@field@font{\Glsentryuseriv{#2}#3}}}%
2127 }

```

```

\@GLSuseriv@ All uppercase version.

2128 \def\@GLSuseriv@#1#2[#3]{%
2129   \glsxtrassignfieldfont{#2}%
2130   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2131   {#1}{#2}%
2132   {\gls@field@font{\mfirstucMakeUppercase{\glsentryuseriv{#2}{#3}}}}%
2133 }

```

```

\@Glsuserv@ First letter uppercase version.

2134 \def\@Glsuserv@#1#2[#3]{%
2135   \glsxtrassignfieldfont{#2}%
2136   \gls@field@link
2137   [\let\glscapscase\@secondoftwo]%
2138   {#1}{#2}{\gls@field@font{\Glsentryuserv{#2}{#3}}}%
2139 }

```

```

\@GLSuserv@ All uppercase version.

2140 \def\@GLSuserv@#1#2[#3]{%
2141   \glsxtrassignfieldfont{#2}%
2142   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2143   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuserv{#2}{#3}}}}%
2144 }

```

```

\@Glsuservi@ First letter uppercase version.

2145 \def\@Glsuservi@#1#2[#3]{%
2146   \glsxtrassignfieldfont{#2}%
2147   \gls@field@link
2148   [\let\glscapscase\@secondoftwo]%
2149   {#1}{#2}{\gls@field@font{\Glsentryuservi{#2}{#3}}}%
2150 }

```

```

\@GLSuservi@ All uppercase version.

2151 \def\@GLSuservi@#1#2[#3]{%
2152   \glsxtrassignfieldfont{#2}%
2153   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2154   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuservi{#2}{#3}}}}%
2155 }

```

Commands like \acrshort already set \glsifplural, but they don't set \glsxtrifwasfirstuse so they need adjusting.

```

\@acrshort No case change.

2156 \def\@acrshort#1#2[#3]{%
2157   \glsdoifexists{#2}%
2158   {%
2159     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2160     \let\glsxtrifwasfirstuse\@secondoftwo
2161     \let\glsifplural\@secondoftwo

```

```

2162   \let\glscapscase\@firstofthree
2163   \let\glsinsert\@empty
2164   \def\glscustomtext{%
2165     \acronymfont{\glsaccessshort{#2}}#3%
2166   }%
2167   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2168 }%
2169 \glspostlinkhook
2170 }

```

\@Acrshort First letter uppercase.

```

2171 \def\@Acrshort#1#2[#3]{%
2172   \glsdoifexists{#2}{%
2173     {%
2174       \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2175       \let\glsxtrifwasfirstuse\@secondoftwo
2176       \let\glsifplural\@secondoftwo
2177       \let\glscapscase\@secondofthree
2178       \let\glsinsert\@empty
2179       \def\glscustomtext{%
2180         \acronymfont{\Glsaccessshort{#2}}#3%
2181       }%
2182       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2183     }%
2184   \glspostlinkhook
2185 }

```

\@ACRshort All uppercase.

```

2186 \def\@ACRshort#1#2[#3]{%
2187   \glsdoifexists{#2}{%
2188     {%
2189       \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2190       \let\glsxtrifwasfirstuse\@secondoftwo
2191       \let\glsifplural\@secondoftwo
2192       \let\glscapscase\@thirdofthree
2193       \let\glsinsert\@empty
2194       \def\glscustomtext{%
2195         \mfirstucMakeUppercase{\acronymfont{\glsaccessshort{#2}}#3}%
2196       }%
2197       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2198     }%
2199   \glspostlinkhook
2200 }

```

\@acrshortpl No case change.

```

2201 \def\@acrshortpl#1#2[#3]{%
2202   \glsdoifexists{#2}{%
2203     {%
2204       \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper

```

```

2205   \let\glsxtrifwasfirstuse\@secondoftwo
2206   \let\glsifplural\@firstoftwo
2207   \let\glscapscase\@firstofthree
2208   \let\glsinsert\@empty
2209   \def\glscustomtext{%
2210     \acronymfont{\glsaccessshortpl{#2}}#3%
2211   }%
2212   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2213 }%
2214 \glspostlinkhook
2215 }

```

\@Acrshortpl First letter uppercase.

```

2216 \def\@Acrshortpl#1#2[#3]{%
2217   \glsdoifexists{#2}%
2218 {%
2219   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2220   \let\glsxtrifwasfirstuse\@secondoftwo
2221   \let\glsifplural\@firstoftwo
2222   \let\glscapscase\@secondofthree
2223   \let\glsinsert\@empty
2224   \def\glscustomtext{%
2225     \acronymfont{\Glsaccessshortpl{#2}}#3%
2226   }%
2227   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2228 }%
2229 \glspostlinkhook
2230 }

```

\@ACRshortpl All uppercase.

```

2231 \def\@ACRshortpl#1#2[#3]{%
2232   \glsdoifexists{#2}%
2233 {%
2234   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2235   \let\glsxtrifwasfirstuse\@secondoftwo
2236   \let\glsifplural\@firstoftwo
2237   \let\glscapscase\@thirdofthree
2238   \let\glsinsert\@empty
2239   \def\glscustomtext{%
2240     \mfirstrucMakeUppercase{\acronymfont{\glsaccessshortpl{#2}}#3}%
2241   }%
2242   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2243 }%
2244 \glspostlinkhook
2245 }

```

\@acrlong No case change.

```

2246 \def\@acrlong#1#2[#3]{%
2247   \glsdoifexists{#2}%

```

```

2248 {%
2249   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2250   \let\glsxtrifwasfirstuse\@secondoftwo
2251   \let\glsifplural\@secondoftwo
2252   \let\glscapscase\@firstofthree
2253   \let\glsinsert\@empty
2254   \def\glscustomtext{%
2255     \acronymfont{\glsaccesslong{#2}}#3%
2256   }%
2257   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2258 }%
2259 \glspostlinkhook
2260 }

```

\@Acrlong First letter uppercase.

```

2261 \def\@Acrlong#1#2[#3]{%
2262   \glsdoifexists{#2}{%
2263     {%
2264       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2265       \let\glsxtrifwasfirstuse\@secondoftwo
2266       \let\glsifplural\@secondoftwo
2267       \let\glscapscase\@secondofthree
2268       \let\glsinsert\@empty
2269       \def\glscustomtext{%
2270         \acronymfont{\Glsaccesslong{#2}}#3%
2271       }%
2272       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2273     }%
2274   \glspostlinkhook
2275 }

```

\@ACRlong All uppercase.

```

2276 \def\@ACRlong#1#2[#3]{%
2277   \glsdoifexists{#2}{%
2278     {%
2279       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2280       \let\glsxtrifwasfirstuse\@secondoftwo
2281       \let\glsifplural\@secondoftwo
2282       \let\glscapscase\@thirdofthree
2283       \let\glsinsert\@empty
2284       \def\glscustomtext{%
2285         \mfirstrucMakeUppercase{\acronymfont{\glsaccesslong{#2}}#3}%
2286       }%
2287       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2288     }%
2289   \glspostlinkhook
2290 }

```

\@acrlongpl No case change.

```

2291 \def\@acrlongpl#1#2[#3]{%
2292   \glsdoifexists{#2}{%
2293     {%
2294       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2295       \let\glsxtrifwasfirstuse\@secondoftwo
2296       \let\glsifplural\@firstoftwo
2297       \let\glscapscase\@firstofthree
2298       \let\glsinsert\@empty
2299       \def\glscustomtext{%
2300         \acronymfont{\glsaccesslongpl{#2}}#3%
2301       }%
2302       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2303     }%
2304   \glspostlinkhook
2305 }

```

\@Acrlongpl First letter uppercase.

```

2306 \def\@Acrlongpl#1#2[#3]{%
2307   \glsdoifexists{#2}{%
2308     {%
2309       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2310       \let\glsxtrifwasfirstuse\@secondoftwo
2311       \let\glsifplural\@firstoftwo
2312       \let\glscapscase\@secondofthree
2313       \let\glsinsert\@empty
2314       \def\glscustomtext{%
2315         \acronymfont{\Glsaccesslongpl{#2}}#3%
2316       }%
2317       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2318     }%
2319   \glspostlinkhook
2320 }

```

\@ACRlongpl All uppercase.

```

2321 \def\@ACRlongpl#1#2[#3]{%
2322   \glsdoifexists{#2}{%
2323     {%
2324       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2325       \let\glsxtrifwasfirstuse\@secondoftwo
2326       \let\glsifplural\@firstoftwo
2327       \let\glscapscase\@thirdofthree
2328       \let\glsinsert\@empty
2329       \def\glscustomtext{%
2330         \mfirstrucMakeUppercase{\acronymfont{\glsaccesslongpl{#2}}#3}%
2331       }%
2332       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2333     }%
2334   \glspostlinkhook
2335 }

```

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

```
\@glsaddkey
2336 \renewcommand*{\@glsaddkey}[7]{%
2337   \key@ifundefined{glossentry}{\#1}{%
2338     {%
2339       \define@key{glossentry}{\#1}{\csdef{@glo@#1}{##1}}{%
2340         \appto{\gls@keymap}{, \#1}{\#1}}{%
2341         \appto{\@newglossaryentryprehook}{\csdef{@glo@#1}{\#2}}{%
2342           \appto{\@newglossaryentryposthook}{%
2343             \letcs{\@glo@tmp}{\glo@#1}}{%
2344               \gls@assign@field{\#2}{\glo@label}{\#1}{\@glo@tmp}}{%
2345             }{%
2346             \newcommand*{\#3}[1]{\gls@entry@field{\##1}{\#1}}{%
2347             \newcommand*{\#4}[1]{\Gls@entry@field{\##1}{\#1}}{%
```

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

```
2348 \ifcsdef{@gls@user@#1@}{%
2349   {%
2350     \PackageError{glossaries}{%
2351       {Can't define '\string#5' as helper command}%
2352       {\expandafter\string\csname @gls@user@#1@\endcsname' already}%
2353       {exists}}{%
2354     }{%
2355   }{%
2356   {%
2357     \expandafter\newcommand\expandafter*\expandafter
2358       {\csname @gls@user@#1\endcsname}[2][]{%
2359         \new@ifnextchar[%
2360           {\csuse{@gls@user@#1@}{##1}{##2}}{%
2361             {\csuse{@gls@user@#1@}{##1}{##2}}[]}}{%
2362             \csdef{@gls@user@#1@}{##1}{##2}{%
2363               \gls@field@link{\##1}{\##2}{\#3}{\##2}{##3}}{%
2364             }{%
2365             \newrobustcmd*{\#5}{%
2366               \expandafter\gls@hyp@opt\csname @gls@user@#1\endcsname}}{%
2367             }{%
```

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

```
2368 \ifcsdef{@Gls@user@#1@}{%
2369   {%
2370     \PackageError{glossaries}{%
2371       {Can't define '\string#6' as helper command}%
2372       {\expandafter\string\csname @Gls@user@#1@\endcsname' already}%
2373       {exists}}{%
2374     }{%
2375   }{%
2376   {%
2377     \expandafter\newcommand\expandafter*\expandafter
```

```

2378     {\csname @Gls@user@#1\endcsname}[2] []{%
2379         \new@ifnextchar[%
2380             {\csuse{@Gls@user@#1@}{##1}{##2}}%
2381             {\csuse{@Gls@user@#1@}{##1}{##2}[]}}%
2382     \csdef{@Gls@user@#1@}##1##2##3}{%
2383         \@gls@field@link[\let\glscapscase\@secondofthree]%
2384             {##1}{##2}{##4{##2}##3}}%
2385     }%
2386     \newrobustcmd*{##6}{%
2387         \expandafter\gls@hyp@opt\csname @Gls@user@#1\endcsname}%
2388     }%

```

Finally the all caps version (modified):

```

2389     \ifcsdef{@GLS@user@#1@}{%
2390         }%
2391             \PackageError{glossaries}{%
2392                 {Can't define '\string#7' as helper command
2393                     '\expandafter\string\csname @GLS@user@#1@\endcsname' already
2394                     exists}}%
2395         }%
2396     }%
2397     }%
2398     \expandafter\newcommand\expandafter*\expandafter
2399     {\csname @GLS@user@#1\endcsname}[2] []{%
2400         \new@ifnextchar[%
2401             {\csuse{@GLS@user@#1@}{##1}{##2}}%
2402             {\csuse{@GLS@user@#1@}{##1}{##2}[]}}%
2403     \csdef{@GLS@user@#1@}##1##2##3}{%
2404         \@gls@field@link[\let\glscapscase\@thirdofthree]%
2405             {##1}{##2}{\mfirstucMakeUppercase{##3{##2}##3}}}}%
2406     }%
2407     \newrobustcmd*{##7}{%
2408         \expandafter\gls@hyp@opt\csname @GLS@user@#1\endcsname}%
2409     }%
2410 }%
2411 }%
2412     \PackageError{glossaries-extra}{Key '#1' already exists}{}%
2413 }%
2414 }

```

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

```
2415 \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.

```
2416 \let\glsxtr@org@checkfirsthyper\gls@link@checkfirsthyper
2417 \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.

```
2418 \ifglsused{\glslabel}%
2419   {\let\glsxtrifwasfirstuse@\secondoftwo}
2420   {\let\glsxtrifwasfirstuse@\firstoftwo}%
2421 
2422 Store the category label for convenience.
2423 
2424 \edef\glscategorylabel{\glscategory{\glslabel}}%
2425 \ifglsused{\glslabel}%
2426   {%
2427     \glsifcategoryattribute{\glscategorylabel}{nohypernext}{true}%
2428     {\KV@glslink@hyperfalse}{}%
2429   }%
2430   {%
2431     \glsifcategoryattribute{\glscategorylabel}{nohyperfirst}{true}%
2432     {\KV@glslink@hyperfalse}{}%
2433   }%
2434 
2435 \glslinkcheckfirsthyperhook
2436 }
```

`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.

```
2433 \ifdef\do@glsdisablehyperinlist
2434 {%
2435   \let@\glsxtr@do@glsdisablehyperinlist\do@glsdisablehyperinlist
2436   \renewcommand*\do@glsdisablehyperinlist{%
2437     \glsxtr@do@glsdisablehyperinlist
2438     \glsifattribute{\glslabel}{nohyper}{true}{\KV@glslink@hyperfalse}{}%
2439   }
2440 }
2441 {}
```

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

```
2442 \define@boolkey{glslink}{noindex}[true]{}
2443 \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`

```
2444 \ifdef\@gls@setdefault@glslink@opts
2445 {
2446   \renewcommand*\@gls@setdefault@glslink@opts{%
2447     \KV@glslink@noindexfalse
2448     \@glsxtrsetaliasnoindex
2449   }
2450 }
2451 {
```

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

```
2452 \newcommand*{\@gls@setdefault@glslink@opts}{%
2453   \KV@glslink@noindexfalse
2454   \glsxtrsetaliasnoindex
2455 }
2456 \preto\do@glsdisablehyperinlist{\@gls@setdefault@glslink@opts}
2457 }
```

`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.)

```
2458 \providecommand*{\glsxtrsetaliasnoindex}{%
2459   \KV@glslink@noindextrue
2460 }
```

`setaliasnoindex`

```
2461 \newcommand*{\@glsxtrsetaliasnoindex}{%
2462   \glsxtrifhasfield{alias}{\glslabel}%
2463   {%
2464     \let\glsxtrindexaliased\glsxtrindexaliased
2465     \glsxtrsetaliasnoindex
2466     \let\glsxtrindexaliased\@no@glsxtrindexaliased
2467   }%
2468 {}%
2469 }
```

`xtrindexaliased`

```
2470 \newcommand{\@glsxtrindexaliased}{%
2471   \ifKV@glslink@noindex
2472   \else
2473     \begingroup
2474     \let\@glsnumberformat\glsxtr@defaultnumberformat
2475     \edef\@gls@counter{\csname glo@\glsdetoklabel{\glslabel}@counter\endcsname}%
2476     \glsxtr@saveentrycounter
2477     \@@do@wrglossary{\glsxtralias{\glslabel}}%
2478     \endgroup
2479   \fi
2480 }
```

`xtrindexaliased`

```
2481 \newcommand{\@no@glsxtrindexaliased}{%
2482   \PackageError{glossaries-extra}{\string\glsxtrindexaliased\space
2483   not permitted outside definition of \string\glsxtrsetaliasnoindex}%
2484 {}%
2485 }
```

`xtrindexaliased` Provide a command to redirect alias indexing, but only allow it to be used within `\glsxtrsetaliasnoindex`.

```
2486 \let\glsxtrindexaliased\@no@glsxtrindexaliased
```

```

tDefaultGlsOpts Set the default options for \glslink etc.
2487 \newcommand*{\GlsXtrSetDefaultGlsOpts}[1]{%
2488   \renewcommand*{\@gls@setdefault@glslink@opts}{%
2489     \setkeys{glslink}{#1}%
2490     \glsxtrsetaliasnoindex
2491   }%
2492 }

lsxtrifindexing Provide user level command to access it in \glswriteentry.
2493 \newcommand*{\glsxtrifindexing}[2]{%
2494   \ifKV@glslink@noindex #2\else #1\fi
2495 }

\glswriteentry Redefine to test for indexonlyfirst category attribute.
2496 \renewcommand*{\glswriteentry}[2]{%
2497   \glsxtrifindexing
2498   {%
2499     \ifglsindexonlyfirst
2500       \ifglsused{#1}
2501         {\glsxtrdoautoindexname{#1}{dualindex}}%
2502         {#2}%
2503     \else
2504       \glsifattribute{#1}{indexonlyfirst}{true}%
2505       {\ifglsused{#1}
2506         {\glsxtrdoautoindexname{#1}{dualindex}}%
2507         {#2}}%
2508       {#2}%
2509     \fi
2510   }%
2511   {}%
2512 }

@do@@wrglossary Hook into glossary indexing command so that it can also use \index at the same time if
required and add user hook.
2513 \appto{@do@@wrglossary}{\glsxtr@do@@wrindex
2514   \glsxtrdownrglossaryhook{\gls@label}%
2515 }

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

Similarly for the “noidx” version:

s@noidxglossary
2516 \appto{\gls@noidxglossary}{\glsxtr@do@@wrindex
2517   \glsxtrdownrglossaryhook{\gls@label}%
2518 }

xtr@do@@wrindex
2519 \newcommand*{\glsxtr@do@@wrindex}{%

```

```
2520 \glsxtrdoautoindexname{@gls@label}{dualindex}%
2521 }
```

`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.)  
2522 `\newcommand*\{\glsxtrdownrglossaryhook\}[1]{}`

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

```
2523 \newcommand*{@gls@alt@hyp@opt\}[1]{%
2524 \let\glslinkvar\@firstofthree
2525 \let@gls@hyp@opt@cs\#1\relax
2526 \@ifstar{\s@gls@hyp@opt}{%
2527 \@\ifnextchar+{%
2528 {\@firstoftwo{\p@gls@hyp@opt}}%
2529 {%
2530 \expandafter\@\ifnextchar\@gls@alt@hyp@opt@char
2531 {\@firstoftwo{\@alt@gls@hyp@opt}}%
2532 {\#1}}%
2533 }%
2534 }%
2535 }
```

`alt@gls@hyp@opt` User version

```
2536 \newcommand*{@alt@gls@hyp@opt\}[1][]{%
2537 \let\glslinkvar\@firstofthree
2538 \expandafter\@gls@hyp@opt@cs\expandafter[\@gls@alt@hyp@opt@keys,\#1]}
```

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

```
2539 \newcommand*{@gls@alt@hyp@opt@char\}{}%
```

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

```
2540 \newcommand*{@gls@alt@hyp@opt@keys\}{}%
```

`rSetAltModifier`

```
2541 \newcommand*{@GlsXtrSetAltModifier\}[2]{%
2542 \let\@gls@hyp@opt\@gls@alt@hyp@opt
2543 \def\@gls@alt@hyp@opt@char{\#1}%
2544 \def\@gls@alt@hyp@opt@keys{\#2}%
2545 }
```

`org@dohyperlink`

```
2546 \let\glsxtr@org@dohyperlink\glsdohyperlink
```

`glsnavhyperlink` Now that `\glsdohyperlink` (used by `\glslink`) references `\glslabel` it's necessary to patch `\glsnavhyperlink` to avoid using it (since `\glslabel` won't be defined). This means temporarily redefining `\glsdohyperlink` to its original definition.

This command is provided by glossary-hypernav so it may not exist.

```
2547 \ifdef\glsnavhyperlink
2548 {
2549   \renewcommand*{\glsnavhyperlink}[3][\@glo@type]{%
2550     \edef\gls@grplabel{\#2}\protected@edef\@gls@grptitle{\#3}%

```

Scope:

```
2551   {%
2552     \let\glsdohyperlink\glsxtr@org@dohyperlink
2553     \glslink{\glsnavhyperlinkname{\#1}{\#2}}{\#3}%
2554   }%
2555 }%
2556 }
2557 {}
```

\glsdohyperlink 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.

```
2558 \renewcommand*{\glsdohyperlink}[2]{%
2559   \glshasattribute{\glslabel}{targeturl}%
2560   {%
2561     \glshasattribute{\glslabel}{targetname}%
2562     {%
2563       \glshasattribute{\glslabel}{targetcategory}%
2564       {%
2565         \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
2566           {\glsgetattribute{\glslabel}{targetcategory}}%
2567           {\glsgetattribute{\glslabel}{targetname}}%
2568           {{\glsxtrprotectlinks\#2}}%
2569         }%
2570       {%
2571         \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
2572           {}%
2573           {\glsgetattribute{\glslabel}{targetname}}%
2574           {{\glsxtrprotectlinks\#2}}%
2575         }%
2576       {%
2577         \href{\glsgetattribute{\glslabel}{targeturl}}{%
2578           {{\glsxtrprotectlinks\#2}}%
2579         }%
2580       }%
2581     }%
2582   }%
```

Check for alias.

```

2583 \glsfieldfetch{\glslabel}{alias}{\gloaliaslabel}%
2584 \ifdefvoid\gloaliaslabel
2585 {%
2586   \glsxtrhyperlink{\#1}{\glsxtrprotectlinks{\#2}}%
2587 }%
2588 {%

```

Redirect link to the alias target.

```

2589   \glsxtrhyperlink
2590     {\glolinkprefix\glsdetoklabel{\gloaliaslabel}}%
2591     {\glsxtrprotectlinks{\#2}}%
2592   }%
2593 }%
2594 }

```

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

```

2595 \ifdef{@glsshowtarget}
2596 {
2597   \newcommand{\glsxtrhyperlink}[2]{%
2598     \@glsshowtarget{\#1}%
2599     \hyperlink{\#1}{\#2}%
2600   }%
2601 }
2602 {
2603   \newcommand{\glsxtrhyperlink}[2]{\hyperlink{\#1}{\#2}}%
2604 }

```

`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.

```

2605 \renewrobustcmd*{\glshyperlink}[2][\glsentrytext{\glo@label}]{%
2606   \glsdoifexists{\#2}%
2607 {%
2608   \def\glo@label{\#2}%
2609   {\edef\glslabel{\#2}%
2610   \glslink{\glolinkprefix\glslabel}{\#1}}%
2611 }%
2612 }

```

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

```

2613 \renewcommand{\glsdisablehyper}{%
2614   \KV@glslink@hyperfalse
2615   \def\glslink{\glsdonohyperlink}%
2616   \let\glsstar@target\secondoftwo
2617 }

```

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

```
2618 \renewcommand{\glsenablehyper}{%
2619   \KV@glslink@hypertrue
2620   \def\@glslink{\glsdohyperlink}%
2621   \def\@glstarget{\glsdohypertarget}%
2622 }
```

\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.

```
2623 \def\glsdonohyperlink#1#2{{\glsxtrprotectlinks #2}}
```

\@glslink Reset \@glslink with patched versions:

```
2624 \ifcsundef{hyperlink}{%
2625   {%
2626     \def\@glslink{\glsdonohyperlink}%
2627   }%
2628   {%
2629     \def\@glslink{\glsdohyperlink}%
2630 }
```

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

```
2631 \newcommand*{\glsxtrprotectlinks}{%
2632   \KV@glslink@hyperfalse
2633   \KV@glslink@noindextrue
2634   \let@\gls@{\glsxtr@p@text@}
2635   \let@\Gls@{\Glsxtr@p@text@}
2636   \let@\GLS@{\GLSxtr@p@text@}
2637   \let@\glspl@{\glsxtr@p@plural@}
2638   \let@\Glspl@{\Glsxtr@p@plural@}
2639   \let@\GLSpl@{\GLSxtr@p@plural@}
2640   \let@\glsxtrshort@{\glsxtr@p@short@}
2641   \let@\Glsxtrshort@{\Glsxtr@p@short@}
2642   \let@\GLSxtrshort@{\GLSxtr@p@short@}
2643   \let@\glsxtrlong@{\glsxtr@p@long@}
2644   \let@\Glsxtrlong@{\Glsxtr@p@long@}
2645   \let@\GLSxtrlong@{\GLSxtr@p@long@}
2646   \let@\glsxtrshortpl@{\glsxtr@p@shortpl@}
2647   \let@\Glsxtrshortpl@{\Glsxtr@p@shortpl@}
2648   \let@\GLSxtrshortpl@{\GLSxtr@p@shortpl@}
2649   \let@\glsxtrlongpl@{\glsxtr@p@longpl@}
2650   \let@\Glsxtrlongpl@{\Glsxtr@p@longpl@}
2651   \let@\GLSxtrlongpl@{\GLSxtr@p@longpl@}
2652   \let@\acrshort@{\glsxtr@p@acrshort@}
2653   \let@\Acrshort@{\Glsxtr@p@acrshort@}
2654   \let@\ACRshort@{\GLSxtr@p@acrshort@}
```

```

2655 \let\@acrshortpl\@glsxtr@p@acrshortpl@
2656 \let\@Acrshortpl\@Glsxtr@p@acrshortpl@
2657 \let\@ACRshortpl\@GLSxtr@p@acrshortpl@
2658 \let\@acrlong\@glsxtr@p@acrlong@
2659 \let\@Acrlong\@Glsxtr@p@acrlong@
2660 \let\@ACRLong\@GLSxtr@p@acrlong@
2661 \let\@acrlongpl\@glsxtr@p@acrlongpl@
2662 \let\@Acrlongpl\@Glsxtr@p@acrlongpl@
2663 \let\@ACRLongpl\@GLSxtr@p@acrlongpl@
2664 }

```

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

```

@glsxtr@p@text@
2665 \def\@glsxtr@p@text@#1#2[#3]{{\@glstext@{#1}{#2}[#3]}}
@Glsxtr@p@text@
2666 \def\@Glsxtr@p@text@#1#2[#3]{{\@Glstext@{#1}{#2}[#3]}}
@GLSxtr@p@text@
2667 \def\@GLSxtr@p@text@#1#2[#3]{{\@GLStext@{#1}{#2}[#3]}}
lsxtr@p@plural@
2668 \def\@glsxtr@p@plural@#1#2[#3]{{\@glsplural@{#1}{#2}[#3]}}
lsxtr@p@plural@
2669 \def\@Glsxtr@p@plural@#1#2[#3]{{\@Glsplural@{#1}{#2}[#3]}}
LSxtr@p@plural@
2670 \def\@GLSxtr@p@plural@#1#2[#3]{{\@GLSplural@{#1}{#2}[#3]}}
glsxtr@p@short@
2671 \def\@glsxtr@p@short@#1#2[#3]{%
2672 {%
2673 \glssetabbrvfmt{\glscategory{#2}}%
2674 \glsabbrvfont{\glsentryshort{#2}}#3%
2675 }%
2676 }

Glsxtr@p@short@
2677 \def\@Glsxtr@p@short@#1#2[#3]{%
2678 {%
2679 \glssetabbrvfmt{\glscategory{#2}}%
2680 \glsabbrvfont{\Glsentryshort{#2}}#3%
2681 }%
2682 }

```

```

GLSxtr@p@short@  

2683 \def\@GLSxtr@p@short@#1#2[#3]{%  

2684   {%
```

- 2685 \glssetabrvfmt{\glscategory{#2}}%
- 2686 \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshort{#2}}#3}%
- 2687 }%
- 2688 }

```

sxtr@p@shortpl@  

2689 \def\@glsxtr@p@shortpl@#1#2[#3]{%  

2690   {%
```

- 2691 \glssetabrvfmt{\glscategory{#2}}%
- 2692 \glsabbrvfont{\glsentryshortpl{#2}}#3%
- 2693 }%
- 2694 }

```

sxtr@p@shortpl@  

2695 \def\@Glsxtr@p@shortpl@#1#2[#3]{%  

2696   {%
```

- 2697 \glssetabrvfmt{\glscategory{#2}}%
- 2698 \glsabbrvfont{\Glsentryshortpl{#2}}#3%
- 2699 }%
- 2700 }

```

Sxtr@p@shortpl@  

2701 \def\@GLSxtr@p@shortpl@#1#2[#3]{%  

2702   {%
```

- 2703 \glssetabrvfmt{\glscategory{#2}}%
- 2704 \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshortpl{#2}}#3}%
- 2705 }%
- 2706 }

```

@glsxtr@p@long@  

2707 \def\@glsxtr@p@long@#1#2[#3]{{\glsentrylong{#2}}#3}}
```

```

@Glsxtr@p@long@  

2708 \def\@Glsxtr@p@long@#1#2[#3]{{\Glsentrylong{#2}}#3}}
```

```

@GLSxtr@p@long@  

2709 \def\@GLSxtr@p@long@#1#2[#3]{%  

2710   {\mfirstucMakeUppercase{\glslongfont{\glsentrylong{#2}}#3}}}
```

```

lsxtr@p@longpl@  

2711 \def\@glsxtr@p@longpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}}
```

```

lsxtr@p@longpl@  

2712 \def\@Glsxtr@p@longpl@#1#2[#3]{{\Glsentrylongpl{#2}}#3}}
```

```

LSxtr@p@longpl@
2713 \def\@GLSxtr@p@longpl@#1#2[#3]{%
2714   {\mfirstucMakeUppercase{\glslongfont{\glsentrylongpl{#2}}#3}}}

xtr@p@acrshort@
2715 \def\@glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\glsentryshort{#2}}#3}>

xtr@p@acrshort@
2716 \def\@Glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\Glsentryshort{#2}}#3}>

xtr@p@acrshort@
2717 \def\@GLSxtr@p@acrshort@#1#2[#3]{%
2718   {\mfirstucMakeUppercase{\acronymfont{\glsentryshort{#2}}#3}}}

r@p@acrshortpl@
2719 \def\@glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\glsentryshortpl{#2}}#3}>

r@p@acrshortpl@
2720 \def\@Glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\Glsentryshortpl{#2}}#3}>

sxtr@p@acrlong@
2723 \def\@glsxtr@p@acrlong@#1#2[#3]{{\glsentrylong{#2}}#3}>

sxtr@p@acrlong@
2724 \def\@Glsxtr@p@acrlong@#1#2[#3]{{\Glsentrylong{#2}}#3}>

Sxtr@p@acrlong@
2725 \def\@GLSxtr@p@acrlong@#1#2[#3]{%
2726   {\mfirstucMakeUppercase{\glsentrylong{#2}}#3}}}

tr@p@acrlongpl@
2727 \def\@glsxtr@p@acrlongpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}>

tr@p@acrlongpl@
2728 \def\@Glsxtr@p@acrlongpl@#1#2[#3]{{\Glsentrylongpl{#2}}#3}>

tr@p@acrlongpl@
2729 \def\@GLSxtr@p@acrlongpl@#1#2[#3]{%
2730   {\mfirstucMakeUppercase{\glsentrylongpl{#2}}#3}}}

```

Commands to minimise conflict.

```

\@glsxtrp@opt
2731 \newcommand*{\@glsxtrp@opt}{hyper=false,noindex}

```

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

```
2732 \newcommand*{\glsxtrsetpopts}[1]{%
2733   \renewcommand*{\@glsxtrp@opt}{#1}%
2734 }
```

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

```
2735 \newcommand*{\glossxtrsetpopts}{%
2736   \glsxtrsetpopts{noindex}%
2737 }
```

```
\@@glsxtrp
```

```
2738 \newrobustcmd*{\@@glsxtrp}[2]{%
```

```
  Add scope.
```

```
2739 {%
2740   \let\glspostlinkhook\relax
2741   \csname#1\expandafter\endcsname\expandafter[\@glsxtrp@opt]{#2}[]%
2742 }%
2743 }
```

```
\@glsxtrp
```

```
2744 \newrobustcmd*{\@glsxtrp}[2]{%
2745   \ifcsdef{gls#1}%
2746   {%
2747     \@@glsxtrp{gls#1}{#2}%
2748   }%
2749   {%
2750     \ifcsdef{glsxtr#1}%
2751     {%
2752       \@@glsxtrp{glsxtr#1}{#2}%
2753     }%
2754     {%
2755       \PackageError{glossaries-extra}{‘#1’ not recognised by
2756         \string\glsxtrp}{}%
2757     }%
2758   }%
2759 }
```

```
\@Glsxtrp
```

```
2760 \newrobustcmd*{\@Glsxtrp}[2]{%
2761   \ifcsdef{Gls#1}%
2762   {%
2763     \@@glsxtrp{Gls#1}{#2}%
2764   }%
2765   {%
2766     \ifcsdef{Glsxtr#1}%
2767     {%
2768       \@@glsxtrp{Glsxtr#1}{#2}%
2769     }%
```

```

2770     {%
2771         \PackageError{glossaries-extra}{‘#1’ not recognised by
2772             \string\Glsxtrp\{}}%
2773     }%
2774 }%
2775 }

\@GLSxtrp
2776 \newrobustcmd*\@GLSxtrp}[2]{%
2777     \ifcsdef{GLS#1}{%
2778     {%
2779         \@@glsxtrp{GLS#1}{#2}}%
2780     }%
2781     {%
2782         \ifcsdef{GLSxtr#1}{%
2783             {%
2784                 \@@glsxtrp{GLSxtr#1}{#2}}%
2785             }%
2786             {%
2787                 \PackageError{glossaries-extra}{‘#1’ not recognised by
2788                     \string\GLSxtrp\{}}%
2789             }%
2790         }%
2791     }%
2791 }

\glsxtr@entry@p
2792 \newrobustcmd*\glsxtr@headentry@p}[2]{%
2793     \glsifattribute{#1}{headuc}{true}{%
2794     {%
2795         \mfirstucMakeUppercase{\gls@entry@field{#1}{#2}}%
2796     }%
2797     {%
2798         \gls@entry@field{#1}{#2}}%
2799     }%
2800 }

\glsxtrp Not robust as it needs to expand somewhat.
2801 \ifdef\texorpdfstring
2802 {
2803     \newcommand*\glsxtrp}[2]{%
2804         \protect\NoCaseChange
2805         {%
2806             \protect\texorpdfstring
2807             {%
2808                 \protect\glsxtrifinmark
2809                 {%
2810                     \ifcsdef{glsxtrhead#1}{%
2811                         {%
2812                             \protect\csuse{glsxtrhead#1}{#2}}%
2813                         }%
2814                     }%
2815                 }%
2816             }%
2817         }%
2818     }%
2819     {%
2820         \glsxtr@entry@p{#1}{#2}}%
2821 }

```

```

2813      }%
2814      {%
2815          \glsxstr@headentry@p{#2}{#1}%
2816      }%
2817      }%
2818      {%
2819          \glsxtrp{#1}{#2}%
2820      }%
2821      }%
2822      {%
2823          \protect\gls@entry@field{#2}{#1}%
2824      }%
2825      }%
2826  }
2827 }
2828 {
2829 \newcommand{\glsxtrp}[2]{%
2830     \protect\NoCaseChange
2831     {%
2832         \protect\glsxtrifinmark
2833         {%
2834             \ifcsdef{glsxtrhead#1}%
2835             {%
2836                 \protect\csuse{glsxtrhead#1}%
2837             }%
2838             {%
2839                 \glsxstr@headentry@p{#2}{#1}%
2840             }%
2841         }%
2842         {%
2843             \glsxtrp{#1}{#2}%
2844         }%
2845     }%
2846 }
2847 }

```

Provide short synonyms for the most common option.

```
\glsps
2848 \newcommand*{\glsps}{\glsxtrp{short}}
```

```
\glspt
2849 \newcommand*{\glspt}{\glsxtrp{text}}
```

**\Glsxtrp** As above but use first letter upper case (but not for the bookmarks, which can't process `\uppercase`).  
2850 \ifdef\texorpdfstring  
2851 {  
2852 \newcommand{\Glsxtrp}[2]{%

```

2853 \protect\NoCaseChange
2854 {%
2855   \protect\texorpdfstring
2856   {%
2857     \protect\glsxtrifinmark
2858     {%
2859       \ifcsdef{Glsxtrhead#1}%
2860       {%
2861         {\protect\csuse{Glsxtrhead#1}{#2}}%
2862       }%
2863       {%
2864         \protect{@Gls@entry@field{#2}{#1}}%
2865       }%
2866     }%
2867     {%
2868       \Glsxtrp{#1}{#2}%
2869     }%
2870   }%
2871   {%
2872     \protect{@gls@entry@field{#2}{#1}}%
2873   }%
2874 }
2875 }
2876 }
2877 {
2878 \newcommand{\Glsxtrp}[2]{%
2879   \protect\NoCaseChange
2880   {%
2881     \protect\glsxtrifinmark
2882     {%
2883       \ifcsdef{Glsxtrhead#1}%
2884       {%
2885         {\protect\csuse{Glsxtrhead#1}}%
2886       }%
2887       {%
2888         \protect{@Gls@entry@field{#2}{#1}}%
2889       }%
2890     }%
2891     {%
2892       \Glsxtrp{#1}{#2}%
2893     }%
2894   }%
2895 }
2896 }

```

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

```

2897 \ifdef\texorpdfstring
2898 {
2899 \newcommand{\GLSxtrp}[2]{%

```

```

2900 \protect\NoCaseChange
2901 {%
2902   \protect\texorpdfstring
2903   {%
2904     \protect\glsxtrifinmark
2905     {%
2906       \ifcsdef{GLSxtr#1}%
2907       {%
2908         {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
2909       }%
2910     {%
2911       \protect\mfirstucMakeUppercase
2912       {%
2913         \protect\@gls@entry@field{#2}{#1}%
2914       }%
2915     }%
2916   }%
2917   {%
2918     \@GLSxtrp{#1}{#2}%
2919   }%
2920 }%
2921 {%
2922   \protect\@gls@entry@field{#2}{#1}%
2923 }%
2924 }%
2925 }
2926 }
2927 {
2928 \newcommand{\GLSxtrp}[2]{%
2929   \protect\NoCaseChange
2930   {%
2931     \protect\glsxtrifinmark
2932     {%
2933       \ifcsdef{GLSxtr#1}%
2934       {%
2935         {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
2936       }%
2937     {%
2938       \protect\mfirstucMakeUppercase
2939       {%
2940         \protect\@gls@entry@field{#2}{#1}%
2941       }%
2942     }%
2943   }%
2944   {%
2945     \@GLSxtrp{#1}{#2}%
2946   }%
2947 }%
2948 }

```

```
2949 }
```

### 1.3.5 Entry Counting

The 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.

First adjust definitions of the unset and reset commands to provide a hook.

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

```
2950 \renewcommand*{\@glsunset}[1]{%
2951   \@@glsunset{#1}%
2952   \glsxtrpostunset{#1}%
2953 }%
```

```
glsxtrpostunset
```

```
2954 \newcommand*{\glsxtrpostunset}[1]{}
```

```
\@glslocalunset Local unset.
```

```
2955 \renewcommand*{\@glslocalunset}[1]{%
2956   \@@glslocalunset{#1}%
2957   \glsxtrpostlocalunset{#1}%
2958 }%
```

```
rpostlocalunset
```

```
2959 \newcommand*{\glsxtrpostlocalunset}[1]{}
```

```
\@glsreset Global reset.
```

```
2960 \renewcommand*{\@glsreset}[1]{%
2961   \@@glsreset{#1}%
2962   \glsxtrpostreset{#1}%
2963 }%
```

```
glsxtrpostreset
```

```
2964 \newcommand*{\glsxtrpostreset}[1]{}
```

```
\@glslocalreset Local reset.
```

```
2965 \renewcommand*{\@glslocalreset}[1]{%
2966   \@@glslocalreset{#1}%
2967   \glsxtrpostlocalreset{#1}%
2968 }%
```

```
rpostlocalreset
```

```
2969 \newcommand*{\glsxtrpostlocalreset}[1]{}
```

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

```
2970 \newcommand*{\GlsXtrEnableEntryCounting}[2]{%
```

Enable entry counting:

```
2971 \glsenableentrycount
```

Redefine \gls etc:

```
2972 \renewcommand*\gls{\c@gls}%
2973 \renewcommand*\Gls{\c@Gls}%
2974 \renewcommand*\glsp{*\c@glsp}%
2975 \renewcommand*\Glsp{*\c@Glsp}%
2976 \renewcommand*\GLS{*\c@GLS}%
2977 \renewcommand*\GLSp{*\c@GLSp}%
```

Set the entrycount attribute:

```
2978 \@glsxtr@setentrycountunsetattr{#1}{#2}%
```

In case this command is used again:

```
2979 \let\GlsXtrEnableEntryCounting\@glsxtr@setentrycountunsetattr
2980 \renewcommand*\GlsXtrEnableEntryUnitCounting[3]{%
2981   \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryUnitCounting\space
2982     can't be used with \string\GlsXtrEnableEntryCounting}%
2983   {Use one or other but not both commands}}%
2984 }
```

ycountunsetattr

```
2985 \newcommand*\@glsxtr@setentrycountunsetattr[2]{%
2986   \@for\@glsxtr@cat:=#1\do
2987   {%
2988     \ifdefempty{\@glsxtr@cat}{}%
2989     {%
2990       \glssetcategoryattribute{\@glsxtr@cat}{entrycount}{#2}%
2991     }%
2992   }%
2993 }
```

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

nableentrycount

```
2994 \renewcommand*\glsenableentrycount{}%
```

Enable new fields:

```
2995 \appto\@newglossaryentry@defcounters{\@newglossaryentry@defcounters}%
```

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

```
2996 \renewcommand*\gls@defdocnewglossaryentry{}%
2997 \renewcommand*\newglossaryentry[2]{%
2998   \PackageError{glossaries}{\string\newglossaryentry\space
2999     may only be used in the preamble when entry counting has
3000     been activated}{If you use \string\glsenableentrycount\space
3001     you must place all entry definitions in the preamble not in
3002     the document environment}}%
3003 }%
3004 }%
```

New commands to access new fields:

```
3005 \newcommand*{\glsentrycurrcount}[1]{%
3006   \ifcsundef{glo@\glsdetoklabel{##1}@currcount}%
3007   {0}{\gls@entry@field{##1}{currcount}}%
3008 }%
3009 \newcommand*{\glsentryprevcount}[1]{%
3010   \ifcsundef{glo@\glsdetoklabel{##1}@prevcount}%
3011   {0}{\gls@entry@field{##1}{prevcount}}%
3012 }%
```

Adjust post unset and reset:

```
3013 \let\@glsxtr@entrycount@org@unset\glsxtrpostunset
3014 \renewcommand*{\glsxtrpostunset}[1]{%
3015   \glsxtr@entrycount@org@unset{##1}%
3016   \gls@increment@currcount{##1}%
3017 }%
3018 \let\@glsxtr@entrycount@org@localunset\glsxtrpostlocalunset
3019 \renewcommand*{\glsxtrpostlocalunset}[1]{%
3020   \glsxtr@entrycount@org@localunset{##1}%
3021   \gls@local@increment@currcount{##1}%
3022 }%
3023 \let\@glsxtr@entrycount@org@reset\glsxtrpostreset
3024 \renewcommand*{\glsxtrpostreset}[1]{%
3025   \glsxtr@entrycount@org@reset{##1}%
3026   \csgdef{glo@\glsdetoklabel{##1}@currcount}{0}%
3027 }%
3028 \let\@glsxtr@entrycount@org@localreset\glsxtrpostlocalreset
3029 \renewcommand*{\glsxtrpostlocalreset}[1]{%
3030   \glsxtr@entrycount@org@localreset{##1}%
3031   \csdef{glo@\glsdetoklabel{##1}@currcount}{0}%
3032 }%
```

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

```
3033 \let\@cgls@\@@cgls@
3034 \let\@cglspl@\@@cglspl@

3035 \let\@cGls@\@@cGls@
3036 \let\@cGlspl@\@@cGlspl@
3037 \let\@cGLS@\@@cGLS@
3038 \let\@cGLSpl@\@@cGLSpl@
```

The rest is as the original definition.

```
3039 \AtEndDocument{\gls@write@entrycounts}%
3040 \renewcommand*{\gls@entry@count}[2]{%
3041   \csgdef{glo@\glsdetoklabel{##1}@prevcount}{##2}%
3042 }%
3043 \let\glsenableentrycount\relax
3044 \renewcommand*{\glsenableentryunitcount}{}%
3045   \PackageError{glossaries-extra}{\string\glsenableentryunitcount\space}
```

```

3046      can't be used with \string\glsenableentrycount}%
3047      {Use one or other but not both commands}%
3048  }%
3049 }

```

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.

```

3050 \renewcommand*{\gls@write@entrycounts}{%
3051   \immediate\write\auxout
3052   {\string\providecommand*{\string\gls@entry@count}[2]{}}%
3053   \count@=0\relax
3054   \forallglsentries{\glsentry}{%
3055     \glshasattribute{\glsentry}{entrycount}%
3056     {%
3057       \ifglsused{\glsentry}%
3058       {%
3059         \immediate\write\auxout
3060         {\string\gls@entry@count{\glsentry}\{\glsentrycurrcount{\glsentry}}}}%
3061       {}%
3062     {}%
3063     \advance\count@ by \one
3064   }%
3065   {}%
3066 }%
3067 \ifnum\count@=0
3068   \GlossariesExtraWarningNoLine{Entry counting has been enabled
3069   \MessageBreak with \string\glsenableentrycount\space but the
3070   \MessageBreak attribute 'entrycount' hasn't
3071   \MessageBreak been assigned to any of the defined
3072   \MessageBreak entries}%
3073 \fi
3074 }

```

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

```

3075 \newcommand*{\glsxtrifcounttrigger}[3]{%
3076   \glshasattribute{\#1}{entrycount}%
3077   {%
3078     \ifnum\glsentryprevcount{\#1}>\glsgetattribute{\#1}{entrycount}\relax
3079       #3%
3080     \else
3081       #2%
3082     \fi
3083   }%
3084   {\#3}%
3085 }

```

Actual internal definitions of \cgl{...} used when entry counting is enabled.

\@@cgl{...}

```
3086 \def\@@cgl[#1#2[#3]{%
3087   \glsxtrifcounttrigger{#2}%
3088   {%
3089     \cglformat{#2}{#3}%
3090     \glsunset{#2}%
3091   }%
3092   {%
3093     \gls@{#1}{#2}{#3}%
3094   }%
3095 }%
```

\@@cglsp{...}

```
3096 \def\@@cglsp[#1#2[#3]{%
3097   \glsxtrifcounttrigger{#2}%
3098   {%
3099     \cglspformat{#2}{#3}%
3100     \glsunset{#2}%
3101   }%
3102   {%
3103     \glspl@{#1}{#2}{#3}%
3104   }%
3105 }%
```

\@@cGls{...}

```
3106 \def\@@cGls[#1#2[#3]{%
3107   \glsxtrifcounttrigger{#2}%
3108   {%
3109     \cGlsformat{#2}{#3}%
3110     \glsunset{#2}%
3111   }%
3112   {%
3113     \Gls@{#1}{#2}{#3}%
3114   }%
3115 }%
```

\@@cGlspl{...}

```
3116 \def\@@cGlspl[#1#2[#3]{%
3117   \glsxtrifcounttrigger{#2}%
3118   {%
3119     \cGlsplformat{#2}{#3}%
3120     \glsunset{#2}%
3121   }%
3122   {%
3123     \Glspl@{#1}{#2}{#3}%
3124   }%
3125 }%
```

```

\@@cGLS@
3126 \def\@@cGLS@#1#2[#3]{%
3127   \glsxtrifcounttrigger{#2}%
3128   {%
3129     \cGLSformat{#2}{#3}%
3130     \glsunset{#2}%
3131   }%
3132   {%
3133     \cGLS@{#1}{#2}[#3]%
3134   }%
3135 }%


\@@cGLSpl@
3136 \def\@@cGLSpl@#1#2[#3]{%
3137   \glsxtrifcounttrigger{#2}%
3138   {%
3139     \cGLSplformat{#2}{#3}%
3140     \glsunset{#2}%
3141   }%
3142   {%
3143     \cGLSpl@{#1}{#2}[#3]%
3144   }%
3145 }%


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

\@cglss@
3146 \def\@cglss@#1#2[#3]{\gls@{#1}{#2}[#3]}

\@cGls@
3147 \def\@cGls@#1#2[#3]{\cGls@{#1}{#2}[#3]}

\@cglspl@
3148 \def\@cglspl@#1#2[#3]{\cGlspl@{#1}{#2}[#3]}

\@cGlspl@
3149 \def\@cGlspl@#1#2[#3]{\cGlspl@{#1}{#2}[#3]}

Add all upper case versions not provided by glossaries.

\cGLS
3150 \newrobustcmd*\cGLS{\gls@hyp@opt\cGLS}

\@cGLS Defined the un-starred form. Need to determine if there is a final optional argument
3151 \newcommand*\@cGLS[2][]{%
3152   \new@ifnextchar[\cGls@{#1}{#2}]{\cGls@{#1}{#2}[]}{%
3153 }

```

```

\@cGLS@

3154 \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.
3155 \newcommand*{\cGLSformat}[2]{%
3156   \expandafter\mfirstuc\expandafter{\cGLSformat{#1}{#2}}%
3157 }

\cGLSp1
3158 \newrobustcmd*{\cGLSp1}{\gls@hyp@opt\cGLSp1}

\@cGLSp1 Defined the un-starred form. Need to determine if there is a final optional argument
3159 \newcommand*{\@cGLSp1}[2][]{%
3160   \new@ifnextchar[{\@cGLSp1@{#1}{#2}}{\@cGLSp1@{#1}{#2}[]}%
3161 }

\@cGLSp1@
3162 \def\@cGLSp1@#1#2[#3]{\@GLSp1@{#1}{#2}[#3]}

\cGLSp1format Format used by \cGLSp1 if entry only used once on previous run. The first argument is the
label, the second argument is the insert text.
3163 \newcommand*{\cGLSp1format}[2]{%
3164   \expandafter\mfirstuc\expandafter{\cGLSp1format{#1}{#2}}%
3165 }

Modify the trigger formats to check for the regular attribute.

\cglformat
3166 \renewcommand*{\cglformat}[2]{%
3167   \glsifregular{#1}%
3168   {\glsentryfirst{#1}}%
3169   {\ifglshaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
3170 }

\cGlsformat
3171 \renewcommand*{\cGlsformat}[2]{%
3172   \glsifregular{#1}%
3173   {\Glsentryfirst{#1}}%
3174   {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
3175 }

\cglsp1format
3176 \renewcommand*{\cglsp1format}[2]{%
3177   \glsifregular{#1}%
3178   {\glsentryfirstplural{#1}}%
3179   {\ifglshaslong{#1}{\glsentrylongpl{#1}}{\glsentryfirstplural{#1}}}#2%
3180 }

```

```

\cGlsplformat
3181 \renewcommand*\cGlsplformat}[2]{%
3182   \glsifregular{#1}%
3183   {\Glsentryfirstplural{#1}}%
3184   {\ifglshaslong{#1}{\Glsentrylongpl{#1}}{\Glsentryfirstplural{#1}}}#2%
3185 }

```

New code similar to above for unit counting.

```

defunitcounters
3186 \newcommand*\@newglossaryentry@defunitcounters}{%
3187   \edef@\glo@countunit{\csuse{@glsxtr@categoryattr@@\glo@category @unitcount}}%
3188   \ifdefvoid@\glo@countunit
3189   {}%
3190   {}%
3191   \@glsxtr@ifunitcounter{\glo@countunit}%
3192   {}%
3193   {\expandafter\glsxtr@addunitcounter\expandafter{\glo@countunit}}%
3194 }%
3195 }


```

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

```

3196 \newcommand*\@glsxtr@unitcountlist}{}


```

```

@addunitcounter
3197 \newcommand*\@glsxtr@addunitcounter}[1]{%
3198   \listadd{\@glsxtr@unitcountlist}{#1}%
3199   \ifcsundef{glsxtr@theunit@#1}
3200   {}%
3201   \ifcsdef{theH#1}%
3202   {\csdef{glsxtr@theunit@#1}{\csuse{theH#1}}}%
3203   {\csdef{glsxtr@theunit@#1}{\csuse{the#1}}}%
3204 }%
3205 {}%
3206 }


```

```

r@ifunitcounter
3207 \newcommand*\@glsxtr@ifunitcounter}[3]{%
3208   \xifinlist{#1}{\@glsxtr@unitcountlist}{#2}{#3}}%
3209 }


```

```

urrentunitcount
3210 \newcommand*\@glsxtr@currentunitcount[1]{%
3211   glo@\glsdetoklabel{#1}@currunit@\glsgtattribute{#1}{unitcount}.%
3212   \csuse{glsxtr@theunit@\glsgtattribute{#1}{unitcount}}%
3213 }


```

```

eviousunitcount
3214 \newcommand*{\glsxtr@previousunitcount}[1]{%
3215   glo@\glsdetoklabel{#1}@prevunit@\glsgetattribute{#1}{unitcount}.%
3216   \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3217 }

t@currunitcount
3218 \newcommand*{\@gls@increment@currunitcount}[1]{%
3219   \glshasattribute{#1}{unitcount}%
3220   {%
3221     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{#1}}%
3222     \ifcsundef{\@glsxtr@csname}%
3223     {%
3224       \csgdef{\@glsxtr@csname}{1}%
3225       \listcsxadd
3226         {glo@\glsdetoklabel{#1}@unitlist}%
3227         {\glsgetattribute{#1}{unitcount}.%
3228           \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%}
3229     }%
3230   }%
3231   {%
3232     \csxdef{\@glsxtr@csname}%
3233     {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
3234   }%
3235 }%
3236 {}%
3237 }

t@currunitcount
3238 \newcommand*{\@gls@local@increment@currunitcount}[1]{%
3239   \glshasattribute{#1}{unitcount}%
3240   {%
3241     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{#1}}%
3242     \ifcsundef{\@glsxtr@csname}%
3243     {%
3244       \csdef{\@glsxtr@csname}{1}%
3245       \listcseadd
3246         {glo@\glsdetoklabel{#1}@unitlist}%
3247         {\glsgetattribute{#1}{unitcount}.%
3248           \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%}
3249     }%
3250   }%
3251   {%
3252     \csedef{\@glsxtr@csname}%
3253     {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
3254   }%
3255 }%
3256 {}%
3257 }

```

```

r@currunitcount
3258 \newcommand*{\glsxtr@currunitcount}[2]{%
3259   \ifcsundef
3260     {glo@\glsdetoklabel{#1}@currunit@#2}%
3261   {0}%
3262   {\csuse{glo@\glsdetoklabel{#1}@currunit@#2}}%
3263 }%

r@prevunitcount
3264 \newcommand*{\glsxtr@prevunitcount}[2]{%
3265   \ifcsundef
3266     {glo@\glsdetoklabel{#1}@prevunit@#2}%
3267   {0}%
3268   {\csuse{glo@\glsdetoklabel{#1}@prevunit@#2}}%
3269 }%

eentryunitcount
3270 \newcommand*{\glsenableentryunitcount}{%
  Enable new fields:
  3271   \appto{\newglossaryentry@defcounters{\@newglossaryentry@defunitcounters}}%
  Just in case the user has switched on the docdef option.
  3272   \renewcommand*{\gls@defdocnewglossaryentry}{%
  3273     \renewcommand*{\newglossaryentry}[2]{%
  3274       \PackageError{glossaries}{\string\newglossaryentry\space
  3275         may only be used in the preamble when entry counting has
  3276         been activated}{If you use \string\glsenableentryunitcount\space
  3277         you must place all entry definitions in the preamble not in
  3278         the document environment}%
  3279     }%
  3280   }%
  New commands to access new fields:
  3281   \newcommand*{\glsentrycurrcount}[1]{%
  3282     \glsxtr@currunitcount{##1}{\glsgetattribute{##1}{unitcount}.}%
  3283     \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
  3284   }%
  3285   \newcommand*{\glsentryprevcount}[1]{%
  3286     \glsxtr@prevunitcount{##1}{\glsgetattribute{##1}{unitcount}.}%
  3287     \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
  3288   }%
  Access total count:
  3289   \newcommand*{\glsentryprevtotalcount}[1]{%
  3290     \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
  3291     {0}%
  3292     {%
  3293       \number\csuse{glo@\glsdetoklabel{##1}@prevunittotal}%
  3294     }%
  3295   }%

```

Access max value:

```
3296 \newcommand*{\glsentryprevmaxcount}[1]{%
3297   \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
3298   {0}%
3299   {%
3300     \number\csuse{glo@\glsdetoklabel{##1}@prevunitmax}%
3301   }%
3302 }%
```

Adjust post unset and reset:

```
3303 \let\@glsxtr@entryunitcount@org@unset\glsxtrpostunset
3304 \renewcommand*{\glsxtrpostunset}[1]{%
3305   \@glsxtr@entryunitcount@org@unset{##1}%
3306   \@gls@increment@currunitcount{##1}%
3307 }%
3308 \let\@glsxtr@entryunitcount@org@localunset\glsxtrpostlocalunset
3309 \renewcommand*{\glsxtrpostlocalunset}[1]{%
3310   \@glsxtr@entryunitcount@org@localunset{##1}%
3311   \@gls@local@increment@currunitcount{##1}%
3312 }%
3313 \let\@glsxtr@entryunitcount@org@reset\glsxtrpostreset
3314 \renewcommand*{\glsxtrpostreset}[1]{%
3315   \glshasattribute{##1}{unitcount}%
3316   {%
3317     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
3318     \ifcsundef{\@glsxtr@csname}%
3319     {}%
3320     {\csgdef{\@glsxtr@csname}{0}}%
3321   }%
3322   {}%
3323 }%
3324 \let\@glsxtr@entryunitcount@org@localreset\glsxtrpostlocalreset
3325 \renewcommand*{\glsxtrpostlocalreset}[1]{%
3326   \@glsxtr@entryunitcount@org@localreset{##1}%
3327   \@gls@increment@currunitcount{##1}%
3328   {%
3329     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
3330     \ifcsundef{\@glsxtr@csname}%
3331     {}%
3332     {\csgdef{\@glsxtr@csname}{0}}%
3333   }%
3334   {}%
3335 }%
```

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

```
3336 \let\@cgls@\@@cgls@
3337 \let\@cglsp1@\@@cglsp1@
3338 \let\@cGls@\@@cGls@
```

```

3339 \let\@cGlsp1@\@@cGlsp1@
3340 \let\@cGLS@\@@cGLS@
3341 \let\@cGLSp1@\@@cGLSp1@

    Write information to the aux file.

3342 \AtEndDocument{\gls@write@entryunitcounts}%
3343 \renewcommand*{\gls@entry@unitcount}[3]{%
3344   \csgdef{glo@\glsdetoklabel{##1}@prevunit@##3}{##2}%
3345   \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
3346   {\csgdef{glo@\glsdetoklabel{##1}@prevunittotal}{##2}}%
3347   {%
3348     \csxdef{glo@\glsdetoklabel{##1}@prevunittotal}{%
3349       \number\numexpr\csuse{glo@\glsdetoklabel{##1}@prevunittotal}+##2}%
3350     }%
3351   \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
3352   {\csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}}%
3353   {%
3354     \ifnum\csuse{glo@\glsdetoklabel{##1}@prevunitmax}<##2
3355       \csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}%
3356     \fi
3357   }%
3358 }%
3359 \let\glsenableentryunitcount\relax
3360 \renewcommand*{\glsenableentrycount}{%
3361   \PackageError{glossaries-extra}{\string\glsenableentrycount\space
3362     can't be used with \string\glsenableentryunitcount}%
3363   {Use one or other but not both commands}%
3364 }%
3365 }
3366 \onlypreamble\glsenableentryunitcount

```

entry@unitcount

```

3367 \newcommand*{\gls@entry@unitcount}[3]{}

```

ryunitcounts@do

```

3368 \newcommand*{\gls@write@entryunitcounts@do}[1]{%
3369   \immediate\write\auxout
3370   {\string\gls@entry@unitcount
3371   {\string\glsentry}\%
3372   {\string\glsxtr@currunitcount{\string\glsentry}{#1}}%
3373   }%
3374   {#1}}%
3375 }

```

entryunitcounts

```

3376 \newcommand*{\gls@write@entryunitcounts}{%
3377   \immediate\write\auxout
3378   {\string\providecommand*{\string\gls@entry@unitcount}[3]{}{}}%
3379   \count@=0\relax

```

```

3380 \forallglsentries{@glsentry}{%
3381   \glshasattribute{@glsentry}{unitcount}{%
3382     {%
3383       \ifglsused{@glsentry}{%
3384         {%
3385           \forlistcsloop{%
3386             {\@gls@write@entryunitcounts@do}{%
3387               \glo@\glsdetoklabel{@glsentry}{unitlist}{%
3388             }{%
3389             {}{%
3390               \advance\count@ by \one{%
3391             }{%
3392             {}{%
3393             }{%
3394             \ifnum\count@=0{%
3395               \GlossariesExtraWarningNoLine{Entry counting has been enabled
3396                 \MessageBreak with \string\glsenableentryunitcount\space but the
3397                 \MessageBreak attribute ‘unitcount’ hasn’t
3398                 \MessageBreak been assigned to any of the defined
3399                 \MessageBreak entries}{%
3400             \fi{%
3401           }

```

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.

```
3402 \newcommand*\GlsXtrEnableEntryUnitCounting[3]{%
```

Enable entry counting:

```
3403 \glsenableentryunitcount
```

Redefine \gls etc:

```

3404 \renewcommand*\gls{\cgls}{%
3405 \renewcommand*\Gls{\cGls}{%
3406 \renewcommand*\glspl{\cglspl}{%
3407 \renewcommand*\Glspl{\cGlspl}{%
3408 \renewcommand*\GLS{\cGLS}{%
3409 \renewcommand*\GLSpl{\cGLSpl}{%

```

Set the entrycount attribute:

```
3410 \glsxtr@setentryunitcountunsetattr{#1}{#2}{#3}{}
```

In case this command is used again:

```

3411 \let\GlsXtrEnableEntryUnitCounting\glsxtr@setentryunitcountunsetattr
3412 \renewcommand*\GlsXtrEnableEntryCounting[2]{%
3413   \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryCounting\space
3414     can’t be used with \string\GlsXtrEnableEntryUnitCounting}{%
3415     {Use one or other but not both commands}}{%
3416   }

```

tcountunsetattr

```

3417 \newcommand*{\@glsxtr@setentryunitcountunsetattr}[3]{%
3418   \c@for\@glsxtr@cat:=#1\do
3419   {%
3420     \ifdefempty{\@glsxtr@cat}{}
3421     {%
3422       \glssetcategoryattribute{\@glsxtr@cat}{entrycount}{#2}%
3423       \glssetcategoryattribute{\@glsxtr@cat}{unitcount}{#3}%
3424     }%
3425   }%
3426 }

```

### 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`

```

3427 \renewcommand*{\SetGenericNewAcronym}{%
3428   \let\@Gls@entryname\@Gls@acrentryname
3429   \renewcommand{\newacronym}[4][]{%
3430     \ifdefempty{\@glsacronymlists}{%
3431       {%
3432         \def\@glo@type{\acronymtype}%
3433         \setkeys{glossentry}{##1}%
3434         \DeclareAcronymList{\@glo@type}%
3435       }%
3436     }%
3437     \glskeylisttok{##1}%
3438     \glslabeltok{##2}%
3439     \glsshorttok{##3}%
3440     \glslongtok{##4}%
3441     \newacronymhook
3442     \protected@edef\@do@newglossaryentry{%
3443       \noexpand\newglossaryentry{\the\glslabeltok}%
3444     }%
3445     type=\acronymtype,%
3446     name={\expandonce{\acronymentry{##2}}},%
3447     sort={\acronymsort{\the\glsshorttok}{\the\glslongtok}},%
3448     text={\the\glsshorttok},%
3449     short={\the\glsshorttok},%
3450     shortplural={\the\glsshorttok\noexpand\acrpluralsuffix},%
3451     long={\the\glslongtok},%
3452     longplural={\the\glslongtok\noexpand\acrpluralsuffix},%
3453     category=acronym,

```

```

3454     \GenericAcronymFields,%
3455     \the\glskeylisttok
3456   }%
3457 }%
3458 \cdo@newglossaryentry
3459 }%
3460 \renewcommand*{\acrfullfmt}[3]{%
3461   \glslink[##1]{##2}{\genacrfullformat{##2}{##3}}}%
3462 \renewcommand*{\Acrfullfmt}[3]{%
3463   \glslink[##1]{##2}{\Genacrfullformat{##2}{##3}}}%
3464 \renewcommand*{\ACRfullfmt}[3]{%
3465   \glslink[##1]{##2}{%
3466     \mfirstucMakeUppercase{\genacrfullformat{##2}{##3}}}}%
3467 \renewcommand*{\acrfullplfmt}[3]{%
3468   \glslink[##1]{##2}{\genplacrfullformat{##2}{##3}}}%
3469 \renewcommand*{\Acrfullplfmt}[3]{%
3470   \glslink[##1]{##2}{\Genplacrfullformat{##2}{##3}}}%
3471 \renewcommand*{\ACRfullplfmt}[3]{%
3472   \glslink[##1]{##2}{%
3473     \mfirstucMakeUppercase{\genplacrfullformat{##2}{##3}}}}%
3474 \renewcommand*{\glsentryfull}[1]{\genacrfullformat{##1}{}}%
3475 \renewcommand*{\Glsentryfull}[1]{\Genacrfullformat{##1}{}}%
3476 \renewcommand*{\glsentryfullpl}[1]{\genplacrfullformat{##1}{}}%
3477 \renewcommand*{\Glsentryfullpl}[1]{\Genplacrfullformat{##1}{}}%
3478 }%

```

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:

```

3479 \let\@glsxtr@org@setacronymstyle\setacronymstyle
3480 \let\@glsxtr@org@newacronymstyle\newacronymstyle

```

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

```

3481 \newcommand*{\MakeAcronymsAbbreviations}{%
3482   \renewcommand*{\newacronym}[4][]{%
3483     \glsxtr@newabbreviation{type=\acronymtype,category=acronym,##1}{##2}{##3}{##4}}%
3484   }%
3485 \renewcommand*{\firstacronymfont}[1]{\glsfirstabbrvfont{##1}}%
3486 \renewcommand*{\acronymfont}[1]{\glsabbrvfont{##1}}%
3487 \renewcommand*{\setacronymstyle}[1]{%
3488   \PackageError{glossaries-extra}{\string\setacronymstyle{##1}%
3489   unavailable.%
3490   Use \string\setabbreviationstyle\space instead.%
3491   The original acronym interface can be restored with%
3492   \string\RestoreAcronyms}{}}%
3493 }%
3494 \renewcommand*{\newacronymstyle}[1]{%

```

```

3495     \GlossariesExtraWarning{New acronym style ‘##1’ won’t be
3496     available unless you restore the original acronym interface with
3497     \string\RestoreAcronyms}%
3498     \@glsxtr@org@newacronymstyle{##1}%
3499   }%
3500 }

```

Switch acronyms to abbreviations:

```
3501 \MakeAcronymsAbbreviations
```

`RestoreAcronyms` Restore acronyms to glossaries interface.

```

3502 \newcommand*{\RestoreAcronyms}{%
3503   \SetGenericNewAcronym
3504   \renewcommand{\firstacronymfont}[1]{\acronymfont{##1}}%
3505   \renewcommand{\acronymfont}[1]{##1}%
3506   \let\setacronymstyle\@glsxtr@org@setacronymstyle
3507   \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.

```

3508 \renewcommand*{\gls@link@checkfirsthyper}{%
3509   \ifglsused{\glslabel}%
3510   { \let\glsxtrifwasfirstuse\@secondoftwo}
3511   { \let\glsxtrifwasfirstuse\@firstoftwo}%
3512   \glsxtr@org@checkfirsthyper
3513 }
3514 \glssetcategoryattribute{acronym}{regular}{false}%
3515 \setacronymstyle{long-short}%
3516 }

```

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

```

3517 \renewcommand*{\glsacspace}[1]{%
3518   \settowidth{\dimen@}{(\firstacronymfont{\glsentryshort{#1}})}%
3519   \ifdim\dimen@<\glsacspacemax\else\space\fi
3520 }

```

`\glsacspacemax` Value used in the above.

```
3521 \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

```
3522 \newcommand*{\@glsxtr@reg@glosslist}{}%
```

Save the original definition of \makeglossaries:

```
3523 \let\@glsxtr@org@makeglossaries\makeglossaries
```

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
```

```
3524 \renewcommand*\makeglossaries[1] []{%
3525   \ifx\@glsxtr@record@setting\@glsxtr@record@setting@only
3526     \PackageError{glossaries-extra}{\string\makeglossaries\space
3527       not permitted\MessageBreak with record=only package option}%
3528     {You may only use \string\makeglossaries\space with
3529       record=off or record=alsoindex options}%
3530   \else
3531     \ifblank{#1}%
3532       {\@glsxtr@org@makeglossaries}%
3533     {%
3534       \ifx\@glsxtr@record@setting\@glsxtr@record@setting@alsoindex
3535         \PackageError{glossaries-extra}{\string\makeglossaries[#1]\space
3536           not permitted\MessageBreak with record=alsoindex package option}%
3537         {You may only use the hybrid \string\makeglossaries[...]\space with
3538           record=off option}%
3539       \else
3540         \edef\@glsxtr@reg@glosslist{#1}%
3541         \ifundef{\glswrite}{\newwrite\glswrite}{}%
3542         \protected@write\@auxout{}{\string\providecommand
3543           \string@\glsorder[1]{}}
3544         \protected@write\@auxout{}{\string\providecommand
3545           \string@\istfilename[1]{}}
3546         \protected@write\@auxout{}{\string\@istfilename{\istfilename}}%
3547         \protected@write\@auxout{}{\string\glsorder{\glsorder}}
3548         \protected@write\@auxout{}{\string\glsxtr@makeglossaries{#1}}
3549         \write\@auxout{\string\providecommand\string@\gls@reference[3]{}}
3550     }%
```

Iterate through each supplied glossary type and activate it.

```
3550   \@for\@glo@type:=#1\do{%
3551     \ifdefempty{\@glo@type}{}{\@makeglossary{\@glo@type}}%
3552   }%
```

New glossaries must be created before \makeglossaries:

```
3553   \renewcommand*\newglossary[4] []{%
3554     \PackageError{glossaries}{New glossaries
3555       must be created before \string\makeglossaries}{You need
3556       to move \string\makeglossaries\space after all your
3557       \string\newglossary\space commands}}%
```

Any subsequence instances of this command should have no effect

```
3558   \let\@makeglossary\relax
3559   \let\makeglossary\relax
```

```

3560      \renewcommand{\makeglossaries}[1] [] {}%
Disable all commands that have no effect after \makeglossaries
3561      \@disable@onlypremakeg
Allow see key:
3562      \let\gls@checkseeallowed\relax
Adjust \do@seeglossary. This needs to check for the entries existence.
3563      \renewcommand*{\do@seeglossary}[2] {%
3564          \glsdoifexists{##1}%
3565          {%
3566              \edef@gls@label{\glsdetoklabel{##1}}%
3567              \edef@gls@type{\csname glo@\gls@label @type\endcsname}%
3568              \expandafter\DTLifinlist\expandafter{\gls@type}{\glsxtr@reg@glosslist}%
3569              {\glsxtr@org@doseeglossary{##1}{##2}}%
3570              {%
3571                  \glsxtrwrglossmark
3572                  \protected@write\auxout{}{%
3573                      \string@gls@reference
3574                      {\gls@type}{\gls@label}{\string\glsseeformat##2{}}%
3575                  }%
3576              }%
3577          }%
3578      }%

```

Adjust \do@wrglossary

```

3579      \let\glsxtr@do@wrglossary\do@wrglossary
3580      \def\do@wrglossary{%
3581          \edef@gls@type{\csname glo@\gls@label @type\endcsname}%
3582          \expandafter\DTLifinlist\expandafter{\gls@type}{\glsxtr@reg@glosslist}%
3583          {\glsxtr@do@wrglossary}%
3584          {\glsnoidxglossary}%
3585      }%

```

Suppress warning about no \makeglossaries

```

3586      \let\warn@nomakeglossaries\relax
3587      \def\warn@noprintglossary{%
3588          \GlossariesWarningNoLine{No \string\printglossary\space
3589          or \string\printglossaries\space
3590          found.^^J(Remove \string\makeglossaries\space if you don't want
3591          any glossaries.)^^JThis document will not have a glossary}%
3592      }%

```

Only warn for glossaries not listed.

```

3593      \renewcommand{\glsnoref@warn}[1] {%
3594          \edef@gls@type{##1}%
3595          \expandafter\DTLifinlist\expandafter{\gls@type}{\glsxtr@reg@glosslist}%
3596          {%
3597              \GlossariesExtraWarning{Can't use
3598                  \string\printnoidxglossary[type={\gls@type}]
3599                  when '\gls@type' is listed in the optional argument of

```

```

3600         \string\makeglossaries}%
3601     }%
3602     {%
3603         \GlossariesWarning{Empty glossary for
3604         \string\printnoidxglossary[type={##1}] .}
3605         Rerun may be required (or you may have forgotten to use
3606         commands like \string\gls)}%
3607     }%
3608 }%

```

Adjust display number list to check for type:

```

3609     \renewcommand*\{\glsdisplaynumberlist}[1]{%
3610         \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3611         {\@glsxtr@idx@displaynumberlist{##1}}%
3612         {\@glsxtr@noidx@displaynumberlist{##1}}%
3613     }%

```

Adjust entry list:

```

3614     \renewcommand*\{\glsentrynumberlist}[1]{%
3615         \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3616         {\@glsxtr@idx@entrynumberlist{##1}}%
3617         {\@glsxtr@noidx@entrynumberlist{##1}}%
3618     }%

```

Adjust number list loop

```

3619     \renewcommand*\{\glsnumberlistloop}[2]{%
3620         \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3621         {%
3622             \PackageError{glossaries-extra}{\string\glsnumberlistloop\space
3623             not available for glossary '##1'}{}%
3624         }%
3625         {\@glsxtr@noidx@numberlistloop{##1}{##2}}%
3626     }%

```

Only sanitize sort for normal indexing glossaries.

```

3627     \renewcommand*\{\glsprestandardsort}[3]{%
3628         \expandafter\DTLifinlist\expandafter{##2}{\@glsxtr@reg@glosslist}%
3629         {%
3630             \glsdosanitizesort
3631         }%
3632         {%
3633             \ifglsanitizesort
3634                 \gls@noidx@sanitizesort
3635             \else
3636                 \gls@noidx@nosanitizesort
3637             \fi
3638         }%
3639     }%

```

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

```

3640 \renewcommand*\new@glossaryentry[2]{%
3641     \PackageError{glossaries-extra}{Glossary entries must be defined
3642         in the preamble\MessageBreak when you use the optional argument
3643         of \string\makeglossaries}{Either move your definitions to the
3644         preamble or don't use the optional argument of
3645         \string\makeglossaries}%
3646 }%

```

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).

```

3647 \let\@glo@assign@sortkey\@glsxtr@mixed@assign@sortkey
3648 \renewcommand*{\@printgloss@setsort}{%

```

Need to extract just the type value.

```

3649     \expandafter\@glsxtr@gettype\expandafter,\@glsxtr@printglossopts,%
3650         type=\glsdefaulttype,\@end@glsxtr@gettype
3651     \def\@glo@sorttype{\@glo@default@sorttype}%
3652 }%

```

Check automake setting:

```

3653 \ifglsautomake
3654     \renewcommand*{\@gls@doautomake}{%
3655         \@for\@gls@type:=\@glsxtr@reg@glosslist\do{%
3656             \ifdefempty{\@gls@type}{}{\@gls@automake{\@gls@type}}%
3657         }%
3658     }%
3659 \fi

```

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

```

3660 \ifdef\@glo@check@sortallowed{\@glo@check@sortallowed\makeglossaries}{}%
3661 \fi
3662 }%
3663 \fi
3664 }

```

The optional argument version of \makeglossaries needs an adjustment to \@printglossary to allow \@glo@assign@sortkey to pick up the glossary type.

`\rgprintglossary` This no longer simply saves \@printglossary with \let but is actually defined to check for the existence of the title, since ignored glossaries don't have a title assigned. (bib2gls writes \provideignoredglossary to the glstex file for some settings, so the glossary might not have been defined.) (This command is also used for on-the-fly setting.)

```

3665 \newcommand{\@glsxtr@orgprintglossary}[2]{%
3666     \def\@glo@type{\glsdefaulttype}%

```

Add check here.

```

3667 \def\glossarytitle{%
3668     \ifcsdef{@glotype}{\@glo@type @title}{%
3669         {\@csuse{@glotype}{\@glo@type @title}}{%
3670             {\glossaryname}}{%
3671             \def\glossarytoctitle{\glossarytitle}%

```

```

3672 \let\org@glossarytitle\glossarytitle
3673 \def\@glossarystyle{%
3674   \ifx\@glossary@default@style\relax
3675     \GlossariesWarning{No default glossary style provided \MessageBreak
3676       for the glossary '\@glo@type'. \MessageBreak
3677       Using deprecated fallback. \MessageBreak
3678       To fix this set the style with \MessageBreak
3679       \string\setglossarystyle\space or use the \MessageBreak
3680       style key=value option}%
3681   \fi
3682 }%
3683 \def\gls@dotocitle{\glssettoctitle{\@glo@type}}%
3684 \let\@org@glossaryentrynumbers\glossaryentrynumbers
3685 \bgroup
3686   \@printgloss@setsort
3687   \setkeys{printgloss}{#1}%
3688   \ifx\glossarytitle\org@glossarytitle
3689   \else
3690     \cslet{@glotype@\@glo@type @title}{\glossarytitle}%
3691   \fi
3692   \let\currentglossary\@glo@type
3693   \let\org@glossaryentrynumbers\glossaryentrynumbers
3694   \let\glsnonextpages\@glsnonextpages
3695   \let\glsnextpages\@glsnextpages

3696   \glsxtractivenopost
3697   \gls@dotocitle
3698   \@glossarystyle
3699   \let\gls@org@glossaryentryfield\glossentry
3700   \let\gls@org@glossarysubentryfield\subglossentry
3701   \renewcommand{\glossentry}[1]{%
3702     \xdef\glscurrententrylabel{\glsdetoklabel{##1}}%
3703     \gls@org@glossaryentryfield{##1}%
3704   }%
3705   \renewcommand{\subglossentry}[2]{%
3706     \xdef\glscurrententrylabel{\glsdetoklabel{##2}}%
3707     \gls@org@glossarysubentryfield{##1}{##2}%
3708   }%
3709   \@gls@preglossaryhook
3710   #2%
3711 \egroup
3712 \global\let\glossaryentrynumbers\@org@glossaryentrynumbers
3713 \global\let\warn@noprintglossary\relax
3714 }

```

ractivatenopost Change \nopostdesc and \glsxtrnropostpunc to behave as they do in the glossary.

```

3715 \newcommand*{\glsxtractivenopost}{%
3716   \let\nopostdesc\@nopostdesc
3717   \let\glsxtrnropostpunc\@glsxtr@nopostpunc
3718 }

```

```

lsxtrnopostrpunc
3719 \newrobustcmd*{\glsxtrnopostrpunc}{}}

sxtr@nopostrpunc Provide a command that works like \no postdesc but only switches of the punctuation without suppressing the post-description hook.
3720 \newcommand{@glsxtr@nopostrpunc}{%
3721   \let@@glsxtr@org@postdescription\glspostdescription
3722   \ifglsnopostrdot
3723     \renewcommand{\glspostdescription}{%
3724       \glsnopostrdottrue
3725       \let\glspostdescription\@glsxtr@org@postdescription
3726       \let\glsxtrrestorepostrpunc@glsxtr@restore@postpunc
3727       \glsxtrpostdescription
3728       @glsxtr@nopostrpunc@postdesc}%
3729   \else
3730     \renewcommand{\glspostdescription}{%
3731       \let\glspostdescription\@glsxtr@org@postdescription
3732       \let\glsxtrrestorepostrpunc@glsxtr@restore@postpunc
3733       \glsxtrpostdescription
3734       @glsxtr@nopostrpunc@postdesc}%
3735   \fi
3736   \glsnopostrdotfalse
3737 }

stpunc@postdesc
3738 \newcommand*{\glsxtr@nopostrpunc@postdesc}{}}

estore@postpunc
3739 \newcommand*{\glsxtr@restore@postpunc}{%
3740   \def@glsxtr@nopostrpunc@postdesc{%
3741     @glsxtr@org@postdescription
3742     \let@\glsxtr@nopostrpunc@postdesc@empty
3743     \let\glsxtrrestorepostrpunc@empty
3744   }%
3745 }

restorepostrpunc Does nothing outside of glossary.
3746 \newcommand{\glsxtrrestorepostrpunc}{}}

\@printglossary Redefine.
3747 \renewcommand{\@printglossary}[2]{%
3748   \def@glsxtr@printglossopts{#1}%
3749   \glsxtr@orgprintglossary{#1}{#2}%
3750 }

Add a key that switches off the entry targets:
3751 \define@choicekey{printgloss}{target}[\val\nr]{true, false}[true]{%
3752   \ifcase\nr

```

```
3753     \let\@glstarget\glsdohypertarget
3754   \else
3755     \let\@glstarget\@secondoftwo
3756   \fi
3757 }
```

#### hypernameprefix

```
3758 \newcommand{\@glsxtrhypernameprefix}{}{}
```

New to v1.20:

```
3759 \define@key{printgloss}{targetnameprefix}{%
3760   \renewcommand{\@glsxtrhypernameprefix}{#1}%
3761 }
```

#### lsdohypertarget Redefine to insert \@glsxtrhypernameprefix before the target name.

```
3762 \let\@glsxtr@org@glsdohypertarget\glsdohypertarget
3763 \renewcommand{\glsdohypertarget}[2]{%
3764   \@glsxtr@org@glsdohypertarget{\@glsxtrhypernameprefix#1}{#2}%
3765 }
```

#### @makeglossaries For the benefit of makeglossaries

```
3766 \newcommand*{\glsxtr@makeglossaries}[1]{}{}
```

#### @glsxtr@gettype Get just the type.

```
3767 \def\@glsxtr@gettype#1,type=#2,#3@end@glsxtr@gettype{%
3768   \def\@glo@type{#2}%
3769 }
```

#### @assgn@sortkey Assign the sort key.

```
3770 \newcommand{\glsxtr@mixed@assgn@sortkey}[1]{%
3771   \edef\@glo@type{\@glo@type}%
3772   \expandafter\DTLifinlist\expandafter{\@glo@type}{\@glsxtr@reg@glosslist}%
3773   {%
3774     \@glo@no@assgn@sortkey{#1}%
3775   }%
3776   {%
3777     \@@glo@assgn@sortkey{#1}%
3778   }%
3779 }%
```

Display number list for the regular version:

#### splaynumberlist

```
3780 \let\@glsxtr@idx@displaynumberlist\glsdisplaynumberlist
```

Display number list for the “noidx” version:

```

splaynumberlist
3781 \newcommand*{\@glsxtr@noidx@displaynumberlist}[1]{%
3782   \letcs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@locist}%
3783   \ifdef{\@gls@loclist}
3784   {%
3785     \def{\@gls@noidxlocist@sep}{%
3786       \def{\@gls@noidxlocist@sep}{%
3787         \def{\@gls@noidxlocist@sep}{%
3788           \glsnumlistsep
3789         }%
3790         \def{\@gls@noidxlocist@finalsep}{\glsnumlistlastsep}%
3791       }%
3792     }%
3793     \def{\@gls@noidxlocist@finalsep}{%
3794       \def{\@gls@noidxlocist@prev}{%
3795         \forlistloop{\glsnoidxdisplaylocisthandler}{\@gls@locist}%
3796         \gls@noidxlocist@finalsep
3797         \gls@noidxlocist@prev
3798       }%
3799     }%
3800     \glsxtrundeftag
3801     \glsdoifexists{#1}%
3802   {%
3803     \GlossariesWarning{Missing location list for ‘#1’. Either
3804       a rerun is required or you haven’t referenced the entry.}%
3805   }%
3806 }%
3807 }%
3808

```

And for the number list loop:

```

@numberlistloop
3809 \newcommand*{\@glsxtr@noidx@numberlistloop}[3]{%
3810   \letcs{\@gls@locist}{\glo@\glsdetoklabel{#1}@locist}%
3811   \let{\@gls@org}{\glsnoidxdisplayloc\glsnoidxdisplayloc
3812   \let{\@gls@org}{\glsseeformat\glsseeformat
3813   \let{\glsnoidxdisplayloc#2}{\relax
3814   \let{\glsseeformat#3}{\relax
3815   \ifdef{\@gls@locist}
3816   {%
3817     \forlistloop{\glsnoidxnumberlistloophandler}{\@gls@locist}%
3818   }%
3819   {%
3820     \glsxtrundeftag
3821     \glsdoifexists{#1}%
3822   {%
3823     \GlossariesWarning{Missing location list for ‘##1’. Either

```

```

3824      a rerun is required or you haven't referenced the entry.}%
3825      }%
3826  }%
3827  \let\glsnoidxdisplayloc\gls@org@glsnoidxdisplayloc
3828  \let\glsseefORMAT\gls@org@glsseefORMAT
3829 }%

```

Same for entry number list.

#### entrynumberlist

```

3830 \newcommand*{\@glsxtr@noidx@entrynumberlist}[1]{%
3831   \letcs{\@gls@loclist}{\glsdetoklabel{#1}@loclist}%
3832   \ifdef{\gls@loclist}
3833   {%
3834     \glsnoidxloclist{\@gls@loclist}%
3835   }%
3836   {%
3837     \glsxtrundeftag
3838     \glsdoifexists{#1}%
3839   {%
3840     \GlossariesWarning{Missing location list for '#1'. Either
3841       a rerun is required or you haven't referenced the entry.}%
3842   }%
3843 }%
3844 }%

```

#### entrynumberlist

```
3845 \newcommand*{\@glsxtr@idx@entrynumberlist}[1]{\glsentrynumberlist{#1}}
```

#### x@grouptitle Patch.

```

3846 \renewcommand*{\@gls@noidx@grouptitle}[2]{%
3847   \protected@edef{\glsxtr@titlelabel{#1}}%
3848   \ifdefvoid{\glsxtr@titlelabel}
3849   {}%
3850   {%
3851     \protected@edef{\glsxtr@titlelabel}{\csuse{\glsxtr@grouptitle@#1}}%
3852   }%
3853   \ifdefvoid{\glsxtr@titlelabel}%
3854   {}%
3855   \DTLifint{#1}%
3856   {}%
3857   \ifnum#1<256\relax
3858     \edef{\char#1\relax}%
3859   \else
3860     \edef{\char#1}%
3861   \fi
3862 }%
3863 {}%
3864 \ifcsundef{\groupname}%

```

```

3865      {\def#2{#1}}%
3866      {\letcs#2{\#1groupname}}%
3867  }%
3868 }%
3869 {%
3870   \let#2\glsxtr@titlelabel
3871 }%
3872 }

g@getgroup title Save original definition of \gls@getgroup title
3873 \let\glsxtr@org@gotgroup 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.
3874 \newrobustcmd{\glsxtrgetgroup title}[2]{%
3875   \protected@edef\glsxtr@titlelabel{\glsxtr@group title@#1}%
3876   @onelevel@sanitize\glsxtr@titlelabel
3877   \ifcsdef{\@glsxtr@titlelabel}%
3878   {\letcs{\#2}{\@glsxtr@titlelabel}}%
3879   {\glsxtr@org@gotgroup title{\#1}{\#2}}%
3880 }%
3881 \let\gls@getgroup title\glsxtrgetgroup title

trsetgroup title Sets the title for the given group label.
3882 \newcommand{\glsxtrsetgroup title}[2]{%
3883   \protected@edef\glsxtr@titlelabel{\glsxtr@group title@#1}%
3884   @onelevel@sanitize\glsxtr@titlelabel
3885   \csxdef{\@glsxtr@titlelabel}{\#2}%
3886 }

\glsnavigation Redefine to use new user-level command.
3887 \renewcommand*{\glsnavigation}{%
3888   \def\gls@between{}%
3889   \ifcsundef{\gls@hypergroup list@\glo@type}%
3890   {}%
3891   \def\gls@list{}%
3892 }%
3893 {}%
3894   \expandafter\let\expandafter\gls@list
3895   \csname \gls@hypergroup list@\glo@type\endcsname
3896 }%
3897 \for\gls@tmp:=\gls@list\do{%
3898   \gls@between
3899   \glsxtrgetgroup title{\gls@tmp}{\gls@grptitle}%
3900   \glsnavhyperlink{\gls@tmp}{\gls@grptitle}%
3901   \let\gls@between\glshypernavsep
3902 }%
3903 }

```

```

@noidx@glossary
3904 \renewcommand*{\print@noidx@glossary}{%
3905   \ifcsdef{@glsref@\glo@type}%
3906   {%
3907     \ifcsdef{@glo@sortmacro@\glo@sorttype}%
3908     {%
3909       \csuse{@glo@sortmacro@\glo@sorttype}{\glo@type}%
3910     }%
3911     {%
3912       \PackageError{glossaries}{Unknown sort handler '\glo@sorttype'}{}%
3913     }%
3914     \glossarysection[\glossarytoctitle]{\glossarytitle}%
3915     \glossarypreamble

```

Moved this command definition outside of environment in case of scoping issues (e.g. in tabular-like styles).

```

3916   \def\@gls@currentlettergroup{}%
3917   \begin{theglossary}%
3918     \glossaryheader
3919     \glsresetentrylist
3920     \forlistcsloop{\@gls@noidx@do}{\glsref@\glo@type}%
3921     \end{theglossary}%
3922     \glossarypostamble
3923   }%
3924   {%

```

Add section header if there are actually entries defined in this glossary as the document is likely pending a re-run.

```

3925   \glsxtrifemptyglossary{\glo@type}%
3926   {}%
3927   {\glossarysection[\glossarytoctitle]{\glossarytitle}}%
3928   \gls@noref@warn{\glo@type}%
3929 }%
3930 }

```

noidxdisplayloc Patch to check for range formations.

```

3931 \renewcommand*{\glsnoidxdisplayloc}[4]{%
3932   \setentrycounter[#1]{#2}%
3933   \glsxtr@display@loc#3\empty\end@glsxtr@display@loc{#4}%
3934 }

```

xtr@display@loc Patch to check for range formations.

```

3935 \def\glsxtr@display@loc#1#2\end@glsxtr@display@loc#3{%
3936   \ifx#1(\relax
3937     \glsxtrdisplaystartloc{#2}{#3}%
3938   \else
3939     \ifx#1)\relax
3940       \glsxtrdisplayendloc{#2}{#3}%
3941     \else

```

```
3942     \glsxtrdisplaysingleloc{#1#2}{#3}%
3943     \fi
3944 \fi
3945 }
```

isplaysingleloc Single location.

```
3946 \newcommand*{\glsxtrdisplaysingleloc}[2]{%
3947   \csuse{#1}{#2}%
3948 }
```

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.

```
3949 \newcommand*{\glsxtrdisplaystartloc}[2]{%
3950   \edef\glsxtrlocrengefmt{#1}%
3951   \ifx\glsxtrlocrengefmt\empty
3952     \def\glsxtrlocrengefmt{\glsnumberformat}%
3953   \fi
3954   \expandafter\glsxtrdisplaysingleloc
3955   \expandafter{\glsxtrlocrengefmt}{#2}%
3956 }
```

trdisplayendloc End of a location range.

```
3957 \newcommand*{\glsxtrdisplayendloc}[2]{%
3958   \edef\@glsxtr@tmp{#1}%
3959   \ifdefempty{\@glsxtr@tmp}{\def\@glsxtr@tmp{\glsnumberformat}{}}
3960   \ifx\glsxtrlocrengefmt\@glsxtr@tmp
3961     \else
3962       \GlossariesExtraWarning{Mismatched end location range
3963         (start=\glsxtrlocrengefmt, end=\@glsxtr@tmp)}%
3964     \fi
3965   \expandafter\glsxtrdisplayendlohook\expandafter{\@glsxtr@tmp}{#2}%
3966   \expandafter\glsxtrdisplaysingleloc
3967   \expandafter{\glsxtrlocrengefmt}{#2}%
3968   \def\glsxtrlocrengefmt{}%
3969 }
```

splayendlohook Allow the user to hook into the end of range command.

```
3970 \newcommand*{\glsxtrdisplayendlohook}[2]{}
```

sxtrlocrengefmt Current range format. Empty if not in a range.

```
3971 \newcommand*{\glsxtrlocrengefmt}{}%
```

ls@removespaces Redefine to allow adjustments to location hyperlink.

```
3972 \def\gls@removespaces#1 #2@nil{%
3973   \toks@=\expandafter{\the\toks@#1}%
3974   \ifx\\#2\\%
```

```

3975 \edef\x{\the\toks@}%
3976 \ifx\x\empty
3977 \else
3978   \glsxtrlocationhyperlink{\glsentrycounter}{\glo@counterprefix}{\the\toks@}%
3979 \fi
3980 \else
3981   \gls@ReturnAfterFi{%
3982     \gls@removespaces#2@nil
3983   }%
3984 \fi
3985 }

cationhyperlink
3986 \newcommand*{\glsxtrlocationhyperlink}[3]{%
3987   \ifdefvoid{\glsxtrspplocationurl}
3988   {%
3989     \glsxtrhyperlink{#1#2#3}{#3}%
3990   }%
3991   {%
3992     \hyperref{\glsxtrspplocationurl}{}{#1#2#3}{#3}%
3993   }%
3994 }

supphypernumber
3995 \newcommand*{\glsxtrspphypernumber}[1]{%
3996   {%
3997     \glshasattribute{\glscurrententrylabel}{externalallocation}%
3998   }%
3999   \def{\glsxtrspplocationurl}{%
4000     \glsgetattribute{\glscurrententrylabel}{externalallocation}%
4001   }%
4002   {%
4003     \def{\glsxtrspplocationurl}{}%
4004   }%
4005   \glshypernumber{#1}%
4006 }%
4007 }

```

Give a bit of assistance to new users who are confused and don't know how to read transcript messages.

```

@print@glossary
4008 \renewcommand{\@print@glossary}{%
4009   \makeatletter
4010   \cinput{\jobname.\csname \glotype@\glo@type @in\endcsname}%
4011   \IfExists{\jobname.\csname \glotype@\glo@type @in\endcsname}%
4012   {}%
4013   {\glsxtrNoGlossaryWarning{\glo@type}}%
4014   \ifglsxindy

```

```

4015 \ifcsundef{@xdy@\glo@type @language}%
4016 {%
4017   \edef@\do@auxoutstuff{%
4018     \noexpand\AtEndDocument{%
4019       \noexpand\immediate\noexpand\write\@auxout{%
4020         \string\providecommand\string\@xdylanguage[2]{}{}}%
4021       \noexpand\immediate\noexpand\write\@auxout{%
4022         \string\@xdylanguage{\@glo@type}{\@xdy@main@language}}{}}%
4023     }{}}%
4024   }{}}%
4025 }{}}%
4026 {%
4027   \edef@\do@auxoutstuff{%
4028     \noexpand\AtEndDocument{%
4029       \noexpand\immediate\noexpand\write\@auxout{%
4030         \string\providecommand\string\@xdylanguage[2]{}{}}%
4031       \noexpand\immediate\noexpand\write\@auxout{%
4032         \string\@xdylanguage{\@glo@type}{\csname\@xdy@\glo@type
4033           @language\endcsname}}{}}%
4034     }{}}%
4035   }{}}%
4036 }{}}%
4037 \do@auxoutstuff
4038 \edef@\do@auxoutstuff{%
4039   \noexpand\AtEndDocument{%
4040     \noexpand\immediate\noexpand\write\@auxout{%
4041       \string\providecommand\string\@gls@codepage[2]{}{}}%
4042     \noexpand\immediate\noexpand\write\@auxout{%
4043       \string\@gls@codepage{\@glo@type}{\gls@codepage}}{}}%
4044     }{}}%
4045   }{}}%
4046 \do@auxoutstuff
4047 \fi
4048 \renewcommand*\@warn@nomakeglossaries{%
4049   \GlossariesWarningNoLine{\string\makeglossaries\space
4050     hasn't been used,^^Jthe glossaries will not be updated}{}}%
4051 }{}}%
4052 }

```

Setup the warning text to display if the external file for the given glossary is missing.

`\GlsWarningHead` Header message.

```

4053 \newcommand{\GlsXtrNoGlsWarningHead}[2]{%
4054 This document is incomplete. The external file associated with
4055 the glossary '#1' (which should be called \texttt{\#2})
4056 hasn't been created.%}
4057 }

```

`\GlsWarningEmptyStart` No entries have been added to the glossary.

```
4058 \newcommand{\GlsXtrNoGlsWarningEmptyStart}{%
4059   This has probably happened because there are no entries defined
4060   in this glossary.%}
4061 }
```

warningEmptyMain The default “main” glossary is empty.

```
4062 \newcommand{\GlsXtrNoGlsWarningEmptyMain}{%
4063   If you don't want this glossary,
4064   add \texttt{nomain} to your package option list when you load
4065   \texttt{glossaries-extra.sty}. For example:%}
4066 }
```

warningEmptyNotMain A glossary that isn't the default “main” glossary is empty.

```
4067 \newcommand{\GlsXtrNoGlsWarningEmptyNotMain}[1]{%
4068   Did you forget to use \texttt{type=#1} when you defined your
4069   entries? If you tried to load entries into this glossary with
4070   \texttt{\string\loadglsentries} did you remember to use
4071   \texttt{\string[#1]} as the optional argument? If you did, check that
4072   the definitions in the file you loaded all had the type set
4073   to \texttt{\string\glsdefaulttype}.%
4074 }
```

warningCheckFile Advisory message to check the file contents.

```
4075 \newcommand{\GlsXtrNoGlsWarningCheckFile}[1]{%
4076   Check the contents of the file \texttt{\#1}. If
4077   it's empty, that means you haven't indexed any of your entries in this
4078   glossary (using commands like \texttt{\string\gls} or
4079   \texttt{\string\glsadd}) so this list can't be generated.
4080   If the file isn't empty, the document build process hasn't been
4081   completed.%}
4082 }
```

warningAutoMake Message when automake option has been used.

```
4083 \newcommand{\GlsXtrNoGlsWarningAutoMake}[1]{%
4084   You may need to rerun \LaTeX. If you already have, it may be that
4085   \TeX's shell escape doesn't allow you to run
4086   \texttt{\ifglsxindy xindy\else makeindex\fi}. Check the
4087   transcript file \texttt{\jobname.log}. If the shell escape is
4088   disabled, try one of the following:
4089
4090 \begin{itemize}
4091   \item Run the external (Lua) application:
4092     \texttt{\makeglossaries-lite.lua \string"\jobname\string"}
4093   \item Run the external (Perl) application:
4094     \texttt{\makeglossaries \string"\jobname\string"}
4095 \end{itemize}
4096
4097 \end{document}
```

```
4099
4100 Then rerun \LaTeX\ on this document.
4101 \GlossariesExtraWarning{Rerun required to build the
4102 glossary '#1' or check TeX's shell escape allows
4103 you to run \ifglsxindy xindy\else makeindex\fi}%
4104 }
```

#### WarningMisMatch Mismatching \makenoidxglossaries.

```
4105 \newcommand{\GlsXtrNoGlsWarningMisMatch}{%
4106 You need to either replace \texttt{\string\makenoidxglossaries}
4107 with \texttt{\string\makeglossaries} or replace
4108 \texttt{\string\printglossary} (or \texttt{\string\printglossaries}) with
4109 \texttt{\string\printnoidxglossary}
4110 (or \texttt{\string\printnoidxglossaries}) and then rebuild
4111 this document.%
```

```
4112 }
```

#### WarningBuildInfo Build advice.

```
4113 \newcommand{\GlsXtrNoGlsWarningBuildInfo}{%
4114 Try one of the following:
4115 \begin{itemize}
4116 \item Add \texttt{automake} to your package option list when you load
4117 \texttt{glossaries-extra.sty}. For example:
4118
4119 \texttt{\string\usepackage[automake]%
4120 \glsopenbrace glossaries-extra\glsclosebrace}
4121
4122 \item Run the external (Lua) application:
4123
4124 \texttt{\string\makeglossaries-lite.lua \string"\jobname\string"}
4125
4126 \item Run the external (Perl) application:
4127
4128 \texttt{\string\makeglossaries \string"\jobname\string"}
4129 \end{itemize}
4130
4131 Then rerun \LaTeX\ on this document.%
```

```
4132 }
```

#### \GlsWarningTail Final paragraph.

```
4133 \newcommand{\GlsXtrNoGlsWarningTail}{%
4134 This message will be removed once the problem has been fixed.%
```

```
4135 }
```

#### GlsWarningNoOut No out file created. Build advice.

```
4136 \newcommand{\GlsXtrNoGlsWarningNoOut}[1]{%
4137 The file \texttt{\#1} doesn't exist. This most likely means you haven't used
4138 \texttt{\string\makeglossaries} or you have used
```

```
4139 \texttt{\string\nofiles}. If this is just a draft version of the
4140 document, you can suppress this message using the
4141 \texttt{nomissingglstext} package option.%  
4142 }
```

## glossarywarning

```
4143 \newcommand*{\@glsxtr@defaultnoglossarywarning}[1]{%
4144   \glossarysection[\glossarytoctitle]{\glossarytitle}
4145   \GlsXtrNoGlsWarningHead{\#1}{\jobname.\csname @glo@type @in\endcsname}
4146   \par
4147   \glsxtrifemptyglossary{\#1}%
4148 {%
4149   \GlsXtrNoGlsWarningEmptyStart\space
4150   \ifthenelse{\equal{\#1}{main}}{\GlsXtrNoGlsWarningEmptyMain\par
4151     \medskip
4152     \noindent\texttt{\string\usepackage[nomain\ifglsacronym ,acronym\fi]}%
4153       \glsopenbrace glossaries-extra\glsclosebrace}
4154     \medskip
4155   }%
4156   {\GlsXtrNoGlsWarningEmptyNotMain{\#1}}%
4157 }%
4158 {%
4159   \IfFileExists{\jobname.\csname @glo@type @out\endcsname}%
4160 {%
4161   \GlsXtrNoGlsWarningCheckFile
4162     {\jobname.\csname @glo@type @out\endcsname}
4163
4164   \ifglsautomake
4165
4166   \GlsXtrNoGlsWarningAutoMake{\#1}
4167
4168   \else
4169
4170   \ifthenelse{\equal{\#1}{main}}{%
4171     \GlsXtrNoGlsWarningEmptyMain\par
4172     \medskip
4173     \noindent\texttt{\string\usepackage[nomain]}%
4174       \glsopenbrace glossaries-extra\glsclosebrace}
4175     \medskip
4176   }%
4177   {}%
4178   {}%
4179
4180   \ifdef{\makeglossaries}{no}{makeglossaries}%
4181 {%
4182   \GlsXtrNoGlsWarningMisMatch
4183 }%
4184 {%
4185   \GlsXtrNoGlsWarningBuildInfo
```

```

4186      }%
4187      \fi
4188  }%
4189  {%
4190    \GlsXtrNoGlsWarningNoOut
4191    {\jobname.\csname @glo@type \out\endcsname}%
4192  }%
4193 }%
4194 \par
4195 \GlsXtrNoGlsWarningTail
4196 }

```

Provide some commands to accompany the record option for use with **bib2gls**.

**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.

```
4197 \newcommand*{\glsxtrresourcefile}[2] [] {%
```

The record option can't be set after this command.

```

4198 \disable@keys{glossaries-extra.sty}{record}%
4199 \glsxtr@writefields
4200 \protected@write\@auxout{\glsxtrresourceinit}{\string\glsxtr@resource{\#1}{\#2}}%
4201 \let@\glsxtr@org@see@noindex\gls@see@noindex
4202 \let@\gls@see@noindex\relax
4203 \IfFileExists{\#2.glstex}%
4204 {%

```

Can't scope \cinput so save and restore the category code of @ to allow for internal commands in the location list.

```

4205 \edef@\bibgls@restoreat{\noexpand\catcode\noexpand`\noexpand\@=\number\catcode`\@}%
4206 \makeatletter
4207 \cinput{\#2.glstex}%
4208 \bibgls@restoreat
4209 }%
4210 {%
4211 \GlossariesExtraWarning{No file '#2.glstex'}%
4212 }%
4213 \let@\gls@see@noindex\glsxtr@org@see@noindex
4214 }
4215 \onlypreamble\glsxtrresourcefile

```

**trresourcecount**

```
4216 \newcount\glsxtrresourcecount
```

**trLoadResources** Short cut that uses \glsxtrresourcefile with \jobname as the mandatory argument.

```

4217 \newcommand*{\GlsXtrLoadResources}[1] [] {%
4218 \ifnum\glsxtrresourcecount=0\relax
4219   \glsxtrresourcefile[#1]{\jobname}%
4220 \else
4221   \glsxtrresourcefile[#1]{\jobname-\the\glsxtrresourcecount}%

```

```

4222 \fi
4223 \advance\glsxtrresourcecount by 1\relax
4224 }

glsxtr@resource
4225 \newcommand*{\glsxtr@resource}[2]{}

\glsxtr@fields
4226 \newcommand*{\glsxtr@fields}[1]{}

xtr@texencoding
4227 \newcommand*{\glsxtr@texencoding}[1]{}

\glsxtr@langtag
4228 \newcommand*{\glsxtr@langtag}[1]{}

@pluralsuffixes
4229 \newcommand*{\glsxtr@pluralsuffixes}[4]{}

tr@shortcutsval
4230 \newcommand*{\glsxtr@shortcutsval}[1]{}

sxtr@linkprefix
4231 \newcommand*{\glsxtr@linkprefix}[1]{}

xtr@writefields This information only needs to be written once, so disable it after it's been used.
4232 \newcommand*{\glsxtr@writefields}{%
  4233 \protected@write\@auxout{ }{%
    4234 {\string\providet命令*{\string\glsxtr@fields}[1]{}}%
  4235 \protected@write\@auxout{ }{%
    4236 {\string\providet命令*{\string\glsxtr@resource}[2]{}}%
  4237 \protected@write\@auxout{ }{%
    4238 {\string\providet命令*{\string\glsxtr@pluralsuffixes}[4]{}}%
  4239 \protected@write\@auxout{ }{%
    4240 {\string\providet命令*{\string\glsxtr@shortcutsval}[1]{}}%
  4241 \protected@write\@auxout{ }{%
    4242 {\string\providet命令*{\string\glsxtr@linkprefix}[1]{}}%
  4243 \protected@write\@auxout{}{\string\glsxtr@fields{\@gls@keymap}}%
  4244 \protected@write\@auxout{ }{%
    4245 {\string\providet命令*{\string\glsxtr@record}[5]{}}%
  }
}

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.
4246 \ifdef\CurrentTrackedLanguageTag
4247 {%

```

```

4248 \protected@write\@auxout{}{%
4249   \string\glsxtr@langtag{\CurrentTrackedLanguageTag}}%
4250 }%
4251 {}%
4252 \protected@write\@auxout{}{\string\glsxtr@pluralsuffixes%
4253   {\glspluralsuffix}{\abbrvpluralsuffix}{\acrpluralsuffix}}%
4254   {\glsxtrabbrvpluralsuffix}}}%
4255 \ifdef\inputencodingname
4256 {%
4257   \protected@write\@auxout{}{\string\glsxtr@texencoding{\inputencodingname}}}%
4258 }%
4259 {}%

```

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.)

```

4260   @ifpackageloaded{fontspec}%
4261     {\protected@write\@auxout{}{\string\glsxtr@texencoding{utf8}}}}%
4262   {}%
4263 }%
4264 \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.

```

4265 \AtBeginDocument
4266   {\protected@write\@auxout{}{\string\glsxtr@linkprefix{\glolinkprefix}}}%
4267 \let\glsxtr@writefields\relax

```

If the automake option is on, try running `bib2gls` if the aux file exists. The double-quotes around `\jobname` have been removed (v1.19) since `\jobname` will include double-quotes if the file name has spaces.

```

4268 \ifglsautomake
4269   \IfFileExists{\jobname.aux}{%
4270     {\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`.

```

4271 \ifx@\gls@doautomake@\gls@doautomake@err
4272   \let\@gls@doautomake\relax
4273 \fi
4274 \fi
4275 }

```

`do@automake@err`

```

4276 \newcommand*{@gls@doautomake@err}{%
4277   \PackageError{glossaries}{You must use
4278   \string\makeglossaries\space with automake=true}%
4279   {}%
4280   Either remove the automake=true setting or
4281   add \string\makeglossaries\space to your document preamble.%}
4282 }%
4283 }

```

Allow locations specific to a particular counter to be recorded.

```
\glsxtr@record
4284 \newcommand*{\glsxtr@record}[5]{}
r@counterrecord Aux file command.
4285 \newcommand*{\glsxtr@counterrecord}[3]{%
4286   \glsxtrfieldlistgadd{#1}{record.#2}{#3}%
4287 }
```

```
unterrecordhook Hook used by \glsxtr@dorecord.
4288 \newcommand*{\glsxtr@counterrecordhook}{}{}
```

```
trRecordCounter Activate recording for a particular counter (identified in the argument).
4289 \newcommand*{\GlsXtrRecordCounter}[1]{%
4290   \@@glsxtr@recordcounter{#1}%
4291 }
4292 \onlypreamble\GlsXtrRecordCounter
```

```
docounterrecord
4293 \newcommand*{\glsxtr@docounterrecord}[1]{%
4294   \protected@write\auxout{}{\string\glsxtr@counterrecord
4295     {\@gls@label}{#1}{\csuse{the#1}}}}
4296 }
```

`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.

```
4297 \newcommand*{\glsxtrglossentry}[1]{%
4298   \glsxtrtitleorpdfforheading
4299   {\@glsxtrglossentry{#1}}%
4300   {\glsentryname{#1}}%
4301   {\glsxtrheadname{#1}}%
4302 }
```

`lsxtrglossentry` Another test is needed in case `\glsxtrglossentry` has been written to the table of contents.

```
4303 \newrobustcmd*{\@glsxtrglossentry}[1]{%
4304   \glsxtrtitleorpdfforheading
4305   {%
4306     \glsdoifexists{#1}%
4307     {%
4308       \begingroup
4309         \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
4310         \edef\currentglossary{\glsentrytype{\glscurrententrylabel}}%
```

```

4311      \ifglshasparent{#1}%
4312      {\glssubentryitem{#1}}%
4313      {\glsentryitem{#1}}%
4314      \glstarget{#1}{\glossentryname{#1}}%
4315      \endgroup
4316  }%
4317 }%
4318 {\glsentryname{#1}}%
4319 {\glsxtrheadname{#1}}%
4320 }

```

`glossentryother` As `\glsxtrglossentry` but uses a different field. First argument is command 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.

```

4321 \newcommand*{\glsxtrglossentryother}[3]{%
4322   \ifstrempty{#1}%
4323   {%
4324     \ifcsdef{glsxtrhead#3}%
4325     {%
4326       \glsxtrtitleorpdforheading
4327       {\@glsxtrglossentryother{#2}{#3}{#1}}%
4328       {\@gls@entry@field{#2}{#3}}%
4329       {\csuse{glsxtrhead#3}{#2}}%
4330     }%
4331   }%
4332   \glsxtrtitleorpdforheading
4333   {\@glsxtrglossentryother{#2}{#3}{#1}}%
4334   {\@gls@entry@field{#2}{#3}}%
4335   {\@gls@entry@field{\NoCaseChange{#2}}{#3}}%
4336 }%
4337 }%
4338 {%
4339   \glsxtrtitleorpdforheading
4340   {\@glsxtrglossentryother{#2}{#3}{#1}}%
4341   {\@gls@entry@field{#2}{#3}}%
4342   {#1}}%
4343 }%
4344 }

```

`glossentryother` As `\@glsxtrglossentry` but uses a different field.

```

4345 \newrobustcmd*{\@glsxtrglossentryother}[3]{%
4346   \glsxtrtitleorpdforheading
4347   {%
4348     \glsdoifexists{#1}%
4349   }%
4350   \begingroup
4351     \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
4352     \edef\currentglossary{\glsentrytype{\glscurrententrylabel}}%

```

```

4353     \ifglshasparent{#1}%
4354     {\glssubentryitem{#1}%
4355     {\glsentryitem{#1}%
4356     {\glstarget{#1}{\glossentrynameother{#1}{#2}}}%
4357     \endgroup
4358     }%
4359   }%
4360   {\@gls@entry@field{#1}{#2}}%
4361   {#3}%
4362 }

```

`ntunsrtglossary` Similar to `\printnoidxglossary` but it displays all entries defined for the given glossary without sorting.

```

4363 \newcommand*{\printunsrtglossary}{%
4364   \@ifstar{s@printunsrtglossary}{\printunsrtglossary}
4365 }

```

`ntunsrtglossary` Unstarred version.

```

4366 \newcommand*{\@printunsrtglossary}[1][]{%
4367   \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%
4368 }

```

`ntunsrtglossary` Starred version.

```

4369 \newcommand*{\s@printunsrtglossary}[2][]{%
4370   \begingroup
4371   #2%
4372   \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%
4373   \endgroup
4374 }

```

`unsrtglossaries` Similar to `\printnoidxglossaries` but it displays all entries defined for the given glossary without sorting.

```

4375 \newcommand*{\printunsrtglossaries}{%
4376   \forallglossaries{\@glo@type}{\printunsrtglossary[type=\@glo@type]}%
4377 }

```

`@unsrt@glossary`

```

4378 \newcommand*{\@print@unsrt@glossary}{%
4379   \glossarysection[\glossarytoctitle]{\glossarytitle}%
4380   \glossarypreamble
     check for empty list
4381   \glsxtrifemptyglossary{\@glo@type}%
4382   {%
4383     \GlossariesExtraWarning{No entries defined in glossary '\@glo@type'}%
4384   }%
4385   {%

```

```

4386 \key@ifundefined{glossentry}{group}%
4387 {\let\@gls@getgroupitle\@gls@noidx@getgroupitle}%
4388 {\let\@gls@getgroupitle\@glsxtr@unsrt@getgroupitle}%
4389 \def\@gls@currentlettergroup{}%

```

A loop within the tabular-like styles can cause problems, so move the loop outside.

```

4390 \def\@glsxtr@doglossary{%
4391   \begin{theglossary}%
4392     \glossaryheader
4393     \glsresetentrylist
4394   }%
4395   \expandafter\for\expandafter\glscurrententrylabel\expandafter
4396     :\expandafter=\csname glolist@\@glo@type\endcsname\do{%
4397       \ifdefempty{\glscurrententrylabel}%
4398         {}%
4399       {}%

```

Provide a hook (for example to measure width).

```

4400 \let\glsxtr@process\@firstofone
4401 \let\printunsrtglossaryskipentry
4402   \glsxtr@printunsrtglossaryskipentry
4403 \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%

```

Don't check group for child entries.

```

4404 \glsxtr@process
4405 {%
4406   \ifglshasparent{\glscurrententrylabel}{}%
4407   {%
4408     \glsxtr@checkgroup\glscurrententrylabel
4409     \expandafter\appto\expandafter\glsxtr@doglossary\expandafter
4410       {\glsxtr@groupheading}%
4411   }%
4412   \eappto\glsxtr@doglossary{%
4413     \noexpand\printunsrt@glossary@handler{\glscurrententrylabel}}%
4414   }%
4415 }%
4416 }%
4417 \appto\glsxtr@doglossary{\end{theglossary}}%
4418 \printunsrtglossarypredoglossary
4419 \glsxtr@doglossary
4420 }%
4421 \glossarypostamble
4422 }

```

ntryprocesshook

```
4423 \newcommand*\printunsrtglossaryentryprocesshook}[1]{}
```

ntryprocesshook

```
4424 \newcommand*\printunsrtglossaryskipentry}{%
4425 \PackageError{glossaries-extra}{\string\printunsrtglossaryskipentry\space}
```

```
4426 can only be used within \string\printunsrtglossaryentryprocesshook}{}%
4427 }
```

#### ntryprocesshook

```
4428 \newcommand*{\@glsxtr@printunsrtglossaryskipentry}{}%
4429   \let\glsxtr@process\@gobble
4430 }
```

#### rypredoglossary

```
4431 \newcommand*{\printunsrtglossarypredoglossary}{}%
```

#### lossary@handler

```
4432 \newcommand{\@printunsrt@glossary@handler}[1]{%
4433   \xdef\glscurrententrylabel{#1}%
4434   \printunsrtglossaryhandler\glscurrententrylabel
4435 }
```

#### glossaryhandler

```
4436 \newcommand{\printunsrtglossaryhandler}[1]{%
4437   \glsxtrunsrtdo{#1}%
4438 }
```

triflabelinlist 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.

```
4439 \newrobustcmd*{\glsxtriflabelinlist}[4]{%
4440   \protected@edef\@glsxtr@doiflabelinlist{\noexpand\@gls@ifinlist{#1}{#2}}%
4441   \@glsxtr@doiflabelinlist{#3}{#4}%
4442 }
```

#### srtglossaryunit

```
4443 \newcommand{\print@op@unsrtglossaryunit}[2][]{%
4444   \s@printunsrtglossary[type=\glsdefaulttype,#1]{%
4445     \printunsrtglossaryunitsetup{#2}%
4446   }%
4447 }
```

#### ossaryunitsetup

```
4448 \newcommand*{\printunsrtglossaryunitsetup}[1]{%
4449   \renewcommand{\printunsrtglossaryhandler}[1]{%
4450     \glsxtrfieldxifinlist{##1}{record.#1}{\csuse{the#1}}
4451     {\glsxtrunsrtdo{##1}}%
4452     {}%
4453   }%
```

Only the target names should have the prefixes adjusted as \gls etc need the original \glolinkprefix. The \@gobble part discards \glolinkprefix.

```
4454 \ifcsundef{theH#1}{}
```

```

4455  {%
4456    \renewcommand*{\@glsxtrhypernameprefix}{record.#1.\csuse{the#1}.\@gobble}%
4457  }%
4458  {%
4459    \renewcommand*{\@glsxtrhypernameprefix}{record.#1.\csuse{theH#1}.\@gobble}%
4460  }%
4461  \renewcommand*{\glossarysection}[2][]{%
4462  \appto\glossarypostamble{\glspar\medskip\glspar}%
4463 }

srtglossaryunit
4464 \newcommand{\print@noop@unsrtglossaryunit}[2][]{%
4465   \PackageError{glossaries-extra}{\string\printunsrtglossaryunit\space
4466   requires the record=only or record=alsoindex package option}{}}%
4467 }

t@getgroupitle
4468 \newrobustcmd*{\@glsxtr@unsrt@getgroupitle}[2]{%
4469   \protected@edef{\@glsxtr@titlelabel{\glsxtr@groupitle@#1}}%
4470   \onelevel@sanitize{\@glsxtr@titlelabel}%
4471   \ifcsdef{\@glsxtr@titlelabel}%
4472   {\letcs{\#2}{\@glsxtr@titlelabel}}%
4473   {\def{\#2{\#1}}}}%
4474 }

\glsxtrunsrtdo Provide a user-level call to \@glsxtr@noidx@do to make it easier to define a new handler.
4475 \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).
4476 \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@grouphheading, which will be empty if no heading is required.
4477 \newcommand*{\@glsxtr@checkgroup}[1]{%
4478   \def{\@glsxtr@grouphheading}{}%
4479   \key@ifundefined{glossentry}{group}{}%
4480   {%
4481     \letcs{\@gls@sort}{glo@\glsdetoklabel{\#1}@sort}%
4482     \expandafter\glo@grabfirst\@gls@sort{}{}\@nil
4483   }%
4484   {}%

```

```

4485   \protected@edef{\glo@thislettergrp}{%
4486     \csuse{glo@\glsdetoklabel{#1}@glsxtrgroupfield}}%
4487   }%
4488 \ifdefequal{\glo@thislettergrp}{\gls@currentlettergroup}%
4489 {}%
4490 {}%
4491   \ifdefempty{\gls@currentlettergroup}{}%
4492   {\def{\glsxtr@groupheading{\glsgroupskip}}{%
4493     \eappto{\glsxtr@groupheading}{%
4494       \noexpand\glsgroupheading{\expandonce{\glo@thislettergrp}}%
4495     }%
4496   }%
4497   \let{\gls@currentlettergroup}{\glo@thislettergrp}
4498 }

```

`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.

```

4499 \newcommand{\glsxtr@noidx@do}[1]{%
4500   \ifglsentryexists{#1}{%
4501     {}%
4502     \global\let\csuse{\gls@loclist}{\glo@\glsdetoklabel{#1}@loclist}%
4503     \global\let\csuse{\gls@location}{\glo@\glsdetoklabel{#1}@location}%
4504     \ifglshasparent{#1}{%
4505       {}%
4506       \gls@level=\csuse{\glo@\glsdetoklabel{#1}@level}\relax
4507       \ifdefvoid{\gls@location}{%
4508         {}%
4509         \ifdefvoid{\gls@loclist}{%
4510           {}%
4511           \subglossentry{\gls@level}{#1}{}%
4512         }%
4513       }%
4514       \subglossentry{\gls@level}{#1}%
4515       {}%
4516       \glossaryentrynumbers{\glsnoidxloclist{\gls@loclist}}%
4517     }%
4518   }%
4519 }%
4520 {}%
4521   \subglossentry{\gls@level}{#1}{\glossaryentrynumbers{\gls@location}}%
4522 }%
4523 }%
4524 {}%
4525 \ifdefvoid{\gls@location}{%
4526   {}%
4527   \ifdefvoid{\gls@loclist}{%
4528     {}%
4529     \glossentry{#1}{}%
4530   }%

```

```

4531      {%
4532          \glossentry{#1}%
4533          {%
4534              \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}%
4535          }%
4536      }%
4537  }%
4538  {%
4539      \glossentry{#1}%
4540      {%
4541          \glossaryentrynumbers{\@gls@location}}%
4542      }%
4543  }%
4544  }%
4545  }%
4546  {}%
4547 }

```

### 1.3.8 Support for bib2gls

Some useful commands for bib2gls users.

\glshex  
4548 \newcommand\*{\glshex}{\string\u}

xtrresourceinit Code used during the protected write operation.  
4549 \newcommand\*{\glsxtrresourceinit}{}{}

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  
4550 \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 thevalue where the value might contain commands.)

\glsxtrnewgls \glsxtrnewgls[*<options>*]{*<prefix>*}{*<cs>*}{*<inner cs name>*}

```

4551 \newcommand*{\glsxtrnewgls}[4]{%
4552   \ifdef{\#3}{%
4553   }{%
4554     \PackageError{glossaries-extra}{Command \string#\#3\space already}%
4555     defined}{}%

```

```

4556 }%
4557 {%
4558 \ifcsdef{##4like##2}%
4559 {%
4560   \advance\glsxtrnewgls@inner by \cne
4561   \def\glsxtrnewgls@innercsname{##4like\number\glsxtrnewgls@inner ##2}%
4562 }%
4563 {\def\glsxtrnewgls@innercsname{##4like##2}%
4564 \expandafter\newrobustcmd\expandafter*\expandafter
4565 #3\expandafter{\expandafter\gls@hyp@opt\csname\glsxtrnewgls@innercsname\endcsname}%
4566 \ifstrempty{##1}%
4567 {%
4568   \expandafter\newcommand\expandafter*\csname\glsxtrnewgls@innercsname\endcsname[2] []{%
4569     \new@ifnextchar[%
4570       {\csname##4@\endcsname{##1}{##2##2}}%
4571       {\csname##4@\endcsname{##1}{##2##2}[]}%
4572     }%
4573   }%
4574 {%
4575   \expandafter\newcommand\expandafter*\csname\glsxtrnewgls@innercsname\endcsname[2] []{%
4576     \new@ifnextchar[%
4577       {\csname##4@\endcsname{##1,##1}{##2##2}}%
4578       {\csname##4@\endcsname{##1,##1}{##2##2}[]}%
4579     }%
4580   }%
4581 }%
4582 }

```

\glsxtrnewgls \glsxtrnewgls[*options*]{*prefix*}{{*cs*}}

The first argument prepends to the options and the second argument is the prefix.

```

4583 \newrobustcmd*{\glsxtrnewgls}[3] []{%
4584   \glsxtrnewgls{##1}{##2}{##3}{gls}%
4585 }

```

**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.

```

4586 \newrobustcmd*{\glsxtrnewglslike}[6] []{%
4587   \glsxtrnewgls{##1}{##2}{##3}{gls}%
4588   \glsxtrnewgls{##1}{##2}{##4}{glspl}%
4589   \glsxtrnewgls{##1}{##2}{##5}{Gls}%
4590   \glsxtrnewgls{##1}{##2}{##6}{Glspl}%
4591 }

```

**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.

```
4592 \newrobustcmd*{\glsxtrnewGLSlike}[4] [] {%
4593   \@glsxtrnewgls{#1}{#2}{#3}{GLS}%
4594   \@glsxtrnewgls{#1}{#2}{#4}{GLSpl}%
4595 }
```

\glsxtrnewrgls As \glsxtrnewgls but for \rgls.

```
4596 \newrobustcmd*{\glsxtrnewrgls}[3] [] {%
4597   \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
4598 }
```

sxtrnewrglslike As \glsxtrnewglslike but for \rgls etc.

```
4599 \newrobustcmd*{\glsxtrnewrglslike}[6] [] {%
4600   \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
4601   \@glsxtrnewgls{#1}{#2}{#4}{rglsp1}%
4602   \@glsxtrnewgls{#1}{#2}{#5}{rGls}%
4603   \@glsxtrnewgls{#1}{#2}{#6}{rGlp1}%
4604 }
```

sxtrnewrGLSlike As \glsxtrnewGLSlike but for \rGLS etc.

```
4605 \newrobustcmd*{\glsxtrnewrGLSlike}[4] [] {%
4606   \@glsxtrnewgls{#1}{#2}{#3}{rGLS}%
4607   \@glsxtrnewgls{#1}{#2}{#4}{rGLSp1}%
4608 }
```

Provide easy access to record count fields.

totalRecordCount Access total record count. This is designed to be expandable. The argument is the label.

```
4609 \newcommand*{\GlsXtrTotalRecordCount}[1] {%
4610   \ifcsdef{glo@\glsdetoklabel{#1}@recordcount}%
4611     {\csname glo@\glsdetoklabel{#1}@recordcount\endcsname}%
4612   {0}%
4613 }
```

XtrRecordCount Access record count for a particular counter. The first argument is the label. The second argument is the counter name.

```
4614 \newcommand*{\GlsXtrRecordCount}[2] {%
4615   \ifcsdef{glo@\glsdetoklabel{#1}@recordcount.#2}%
4616     {\csname glo@\glsdetoklabel{#1}@recordcount.#2\endcsname}%
4617   {0}%
4618 }
```

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.

```
4619 \newcommand*{\GlsXtrLocationRecordCount}[3] {%
4620   \ifcsdef{glo@\glsdetoklabel{#1}@recordcount.#2.\glsxtrdetoklocation{#3}}%
```

```
4621 {\csname glo@\glsdetoklabel{\#1}@recordcount.\#2.\glsxtrdetoklocation{\#3}\endcsname}%
4622 {0}%
4623 }
```

```
trdetoklocation
4624 \newcommand*{\glsxtrdetoklocation}[1]{#1}
```

```
ablerecordcount
4625 \newcommand*{\glsxtrenablerecordcount}{%
4626   \renewcommand*{\gls}{\rgls}%
4627   \renewcommand*{\Gls}{\rGls}%
4628   \renewcommand*{\glspol}{\rglspol}%
4629   \renewcommand*{\Glpol}{\rGlpol}%
4630   \renewcommand*{\GLS}{\rGLS}%
4631   \renewcommand*{\GLSpol}{\rGLSpol}%
4632 }
```

**ordtriggervalue** The value used by the record trigger test. The argument is the entry's label.

```
4633 \newcommand*{\glsxtrrecordtriggervalue}[1]{%
4634   \GlsXtrTotalRecordCount{#1}%
4635 }
```

dCountAttribute

```
4636 \newcommand*{\GlsXtrSetRecordCountAttribute}[2]{%
4637   \@for\@glsxtr@cat:=#1\do
4638   {%
4639     \ifdefempty{\@glsxtr@cat}{%
4640       {%
4641         \glssetcategoryattribute{\@glsxtr@cat}{recordcount}{#2}%
4642       }%
4643     }%
4644 }
```

**rifrecordtrigger** \glsxtrifrecordtrigger{\label}{\trigger format}{\normal}

```
4645 \newcommand*{\glsxtrifrecordtrigger}[3]{%
4646   \glshasattribute{\#1}{recordcount}%
4647   {%
4648     \ifnum\glsxtrrecordtriggervalue{\#1}>\glsgetattribute{\#1}{recordcount}\relax
4649       #3%
4650     \else
4651       #2%
4652     \fi
4653   }%
4654   {\#3}%
4655 }
```

trigger@record Still need a record to ensure that bib2gls selects the entry.

```
4656 \newcommand*{\@glsxtr@rgltrigger@record}[3]{%
4657   \edef\glslabel{\glsdetoklabel{#2}}%
4658   \let\@gls@link@label\glslabel
4659   \def\@glsxtr@thevalue{}%
4660   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
4661   \def\@glsnumberformat{\glstriggerrecordformat}%
4662   \edef\@gls@counter{\csname glo@\glslabel @counter\endcsname}%
4663   \edef\glstype{\csname glo@\glslabel @type\endcsname}%
4664   \def\@glsxtr@thevalue{}%
4665   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
4666   \glsxtrinitwrgloss
4667   \setkeys{glslink}{#1}%
4668   \glslinkpostsetkeys
4669   \ifdefempty{\@glsxtr@thevalue}%
4670   {%
4671     \gls@saveentrycounter
4672   }%
4673   {%
4674     \let\theglsentrycounter\@glsxtr@thevalue
4675     \def\theHglsentrycounter{\@glsxtr@theHvalue}%
4676   }%
4677   \ifglsxtrinitwrglossbefore
4678     \do@wrglossary{#2}%
4679   \fi
4680   #3%
4681   \ifglsxtrinitwrglossbefore
4682   \else
4683     \do@wrglossary{#2}%
4684   \fi
4685   \ifKV@glslink@local
4686     \glslocalunset{#2}%
4687   \else
4688     \glsunset{#2}%
4689   \fi
4690 }
```

gerrecordformat Typically won't be used as it should be recognised as a special type of ignored location by bib2gls.

```
4691 \newcommand*{\glstriggerrecordformat}[1]{}%
```

```
\rgls
4692 \newrobustcmd*{\rgls}{\gls@hyp@opt\@rgls}
```

```
\@rgls
4693 \newcommand*{\@rgls}[2][]{%
4694   \new@ifnextchar[{\@rgls@{#1}{#2}}{\@rgls@{#1}{#2}}[]}%
4695 }
```

```

\@rgls@

4696 \def\@rgls@#1#2[#3]{%
4697   \glsxtrifrecordtrigger{#2}%
4698   {%
4699     \glsxtr@rglstrigger@record{#1}{#2}{\rglsformat{#2}{#3}}%
4700   }%
4701   {%
4702     \gls@{#1}{#2}[#3]%
4703   }%
4704 }%


\rglspl
4705 \newrobustcmd*\rglspl{\gls@hyp@opt\rglspl}

\@rglspl
4706 \newcommand*\rglspl[2][]{%
4707   \new@ifnextchar[\glspl@{#1}{#2}]{\glspl@{#1}{#2}[]}{%
4708 }

\@rglspl@
4709 \def\@rglspl@#1#2[#3]{%
4710   \glsxtrifrecordtrigger{#2}%
4711   {%
4712     \glsxtr@rglstrigger@record{#1}{#2}{\rglsplformat{#2}{#3}}%
4713   }%
4714   {%
4715     \glspl@{#1}{#2}[#3]%
4716   }%
4717 }%


\rGls
4718 \newrobustcmd*\rGls{\gls@hyp@opt\rGls}

\@rGls
4719 \newcommand*\rGls[2][]{%
4720   \new@ifnextchar[\rGls@{#1}{#2}]{\rGls@{#1}{#2}[]}{%
4721 }

\@rGls@
4722 \def\@rGls@#1#2[#3]{%
4723   \glsxtrifrecordtrigger{#2}%
4724   {%
4725     \glsxtr@rglstrigger@record{#1}{#2}{\rGlsformat{#2}{#3}}%
4726   }%
4727   {%
4728     \rGls@{#1}{#2}[#3]%
4729   }%
4730 }%

```

```

\rGlspl
4731 \newrobustcmd*\rGlspl{\gls@hyp@opt\rGlspl}

\@rGlspl
4732 \newcommand*\@rGlspl[2][]{%
4733   \new@ifnextchar[\@rGlspl[#1]{#2}{\@rGlspl[#1]{#2}[]}}%
4734 }

\@rGlspl@
4735 \def\@rGlspl#1#2[#3]{%
4736   \glsxtrifrecordtrigger{#2}%
4737   {%
4738     \glsxtr@rglstrigger@record[#1]{#2}{\rGlsplformat{#2}{#3}}%
4739   }%
4740   {%
4741     \@Glspl[#1]{#2}[#3]%
4742   }%
4743 }%

\rGLS
4744 \newrobustcmd*\rGLS{\gls@hyp@opt\@rGLS}

\@rGLS
4745 \newcommand*\@rGLS[2][]{%
4746   \new@ifnextchar[\@rGLS[#1]{#2}{\@rGLS[#1]{#2}[]}}%
4747 }

\@rGLS@
4748 \def\@rGLS#1#2[#3]{%
4749   \glsxtrifrecordtrigger{#2}%
4750   {%
4751     \glsxtr@rglstrigger@record[#1]{#2}{\rGLSformat{#2}{#3}}%
4752   }%
4753   {%
4754     \@GLS[#1]{#2}[#3]%
4755   }%
4756 }%

\rGLSpl
4757 \newrobustcmd*\rGLSpl{\gls@hyp@opt\@rGLSpl}

\@rGLSpl
4758 \newcommand*\@rGLSpl[2][]{%
4759   \new@ifnextchar[\@rGLSpl[#1]{#2}{\@rGLSpl[#1]{#2}[]}}%
4760 }

```

```

\@rGLSpl@

4761 \def\@rGLSpl@#1#2[#3]{%
4762   \glsxtrifrecordtrigger{#2}%
4763   {%
4764     \glsxtr@rglstrigger@record{#1}{#2}{\rGLSplformat{#2}{#3}}%
4765   }%
4766   {%
4767     \@GLSpl@{#1}{#2}{#3}%
4768   }%
4769 }%


\rglformat

4770 \newcommand*\rglformat[2]{%
4771   \glsifregular{#1}%
4772   {\glsentryfirst{#1}}%
4773   {\ifglshaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
4774 }

\rglsplformat

4775 \newcommand*\rglsplformat[2]{%
4776   \glsifregular{#1}%
4777   {\glsentryfirstplural{#1}}%
4778   {\ifglshaslong{#1}{\glsentrylongplural{#1}}{\glsentryfirstplural{#1}}}#2%
4779 }

\rGlsformat

4780 \newcommand*\rGlsformat[2]{%
4781   \glsifregular{#1}%
4782   {\Glsentryfirst{#1}}%
4783   {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
4784 }

\rGlsplformat

4785 \newcommand*\rGlsplformat[2]{%
4786   \glsifregular{#1}%
4787   {\Glsentryfirstplural{#1}}%
4788   {\ifglshaslong{#1}{\Glsentrylongplural{#1}}{\Glsentryfirstplural{#1}}}#2%
4789 }

\rGLSformat

4790 \newcommand*\rGLSformat[2]{%
4791   \expandafter\mfirstuc\expandafter{\rglformat{#1}{#2}}%
4792 }

\rGLSplformat

4793 \newcommand*\rGLSplformat[2]{%
4794   \expandafter\mfirstuc\expandafter{\rglsplformat{#1}{#2}}%
4795 }

```

## 1.4 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.

```
4796 \@ifpackageloaded{glossaries-accsupp}{%
4797 {%
```

Define (or redefine) commands to use the accessibility information.

\glsaccessname Display the name value (no link and no check for existence).

```
4798 \newcommand*{\glsaccessname}[1]{%
4799   \glsnameaccessdisplay
4800   {%
4801     \glsentryname{\#1}%
4802   }%
4803   {\#1}%
4804 }
```

\Glsaccessname Display the name value (no link and no check for existence) with the first letter converted to upper case.

```
4805 \newcommand*{\Glsaccessname}[1]{%
4806   \glsnameaccessdisplay
4807   {%
4808     \Glsentryname{\#1}%
4809   }%
4810   {\#1}%
4811 }
```

\GLSaccessname Display the name value (no link and no check for existence) converted to upper case.

```
4812 \newcommand*{\GLSaccessname}[1]{%
4813   \glsnameaccessdisplay
4814   {%
4815     \mfirstucMakeUppercase{\glsentryname{\#1}}%
4816   }%
4817   {\#1}%
4818 }
```

\glsaccesstext Display the text value (no link and no check for existence).

```
4819 \newcommand*{\glsaccesstext}[1]{%
4820   \glstextaccessdisplay
4821   {%
4822     \glsentrytext{\#1}%
4823   }%
4824   {\#1}%
4825 }
```

```

\Glsaccesstext Display the text value (no link and no check for existence) with the first letter converted to
upper case.
4826 \newcommand*{\Glsaccesstext}[1]{%
4827   \glstextaccessdisplay
4828   {%
4829     \Glsentrytext{#1}%
4830   }%
4831   {#1}%
4832 }

\GLSaccesstext Display the text value (no link and no check for existence) converted to upper case.
4833 \newcommand*{\GLSaccesstext}[1]{%
4834   \glstextaccessdisplay
4835   {%
4836     \mfirstucMakeUppercase{\glsentrytext{#1}}%
4837   }%
4838   {#1}%
4839 }

glsaccessplural Display the plural value (no link and no check for existence).
4840 \newcommand*{\glsaccessplural}[1]{%
4841   \glspluralaccessdisplay
4842   {%
4843     \glsentryplural{#1}%
4844   }%
4845   {#1}%
4846 }

Glsaccessplural Display the plural value (no link and no check for existence) with the first letter converted to
upper case.
4847 \newcommand*{\Glsaccessplural}[1]{%
4848   \glspluralaccessdisplay
4849   {%
4850     \Glsentryplural{#1}%
4851   }%
4852   {#1}%
4853 }

GLSaccessplural Display the plural value (no link and no check for existence) converted to upper case.
4854 \newcommand*{\GLSaccessplural}[1]{%
4855   \glspluralaccessdisplay
4856   {%
4857     \mfirstucMakeUppercase{\glsentryplural{#1}}%
4858   }%
4859   {#1}%
4860 }

\glsaccessfirst Display the first value (no link and no check for existence).

```

```
4861 \newcommand*{\glsaccessfirst}[1]{%
4862   \glsfirstaccessdisplay
4863   {%
4864     \glsentryfirst{#1}%
4865   }%
4866   {#1}%
4867 }
```

\Glsaccessfirst Display the first value (no link and no check for existence) with the first letter converted to upper case.

```
4868 \newcommand*{\Glsaccessfirst}[1]{%
4869   \glsfirstaccessdisplay
4870   {%
4871     \Glsentryfirst{#1}%
4872   }%
4873   {#1}%
4874 }
```

\GLSaccessfirst Display the first value (no link and no check for existence) converted to upper case.

```
4875 \newcommand*{\GLSaccessfirst}[1]{%
4876   \glsfirstaccessdisplay
4877   {%
4878     \mfirstucMakeUppercase{\glsentryfirst{#1}}%
4879   }%
4880   {#1}%
4881 }
```

cessfirstplural Display the firstplural value (no link and no check for existence).

```
4882 \newcommand*{\glsaccessfirstplural}[1]{%
4883   \glsfirstpluralaccessdisplay
4884   {%
4885     \glsentryfirstplural{#1}%
4886   }%
4887   {#1}%
4888 }
```

cessfirstplural Display the firstplural value (no link and no check for existence) with the first letter converted to upper case.

```
4889 \newcommand*{\Glsaccessfirstplural}[1]{%
4890   \glsfirstpluralaccessdisplay
4891   {%
4892     \Glsentryfirstplural{#1}%
4893   }%
4894   {#1}%
4895 }
```

cessfirstplural Display the firstplural value (no link and no check for existence) converted to upper case.

```
4896 \newcommand*{\GLSaccessfirstplural}[1]{%
```

```

4897   \glsfirstpluralaccessdisplay
4898   {%
4899     \mfirstucMakeUppercase{\glsentryfirstplural{#1}}%
4900   }%
4901   {#1}%
4902 }

```

`glsaccesssymbol` Display the symbol value (no link and no check for existence).

```

4903 \newcommand*{\glsaccesssymbol}[1]{%
4904   \glssymbolaccessdisplay
4905   {%
4906     \glsentrysymbol{#1}%
4907   }%
4908   {#1}%
4909 }

```

`Glsaccesssymbol` Display the symbol value (no link and no check for existence) with the first letter converted to upper case.

```

4910 \newcommand*{\Glsaccesssymbol}[1]{%
4911   \glssymbolaccessdisplay
4912   {%
4913     \Glsentrysymbol{#1}%
4914   }%
4915   {#1}%
4916 }

```

`GLSaccesssymbol` Display the symbol value (no link and no check for existence) converted to upper case.

```

4917 \newcommand*{\GLSaccesssymbol}[1]{%
4918   \glssymbolaccessdisplay
4919   {%
4920     \mfirstucMakeUppercase{\glsentrysymbol{#1}}%
4921   }%
4922   {#1}%
4923 }

```

`esssymbolplural` Display the symbolplural value (no link and no check for existence).

```

4924 \newcommand*{\glsaccesssymbolplural}[1]{%
4925   \glssymbolpluralaccessdisplay
4926   {%
4927     \glsentrysymbolplural{#1}%
4928   }%
4929   {#1}%
4930 }

```

`esssymbolplural` Display the symbolplural value (no link and no check for existence) with the first letter converted to upper case.

```

4931 \newcommand*{\Glsaccesssymbolplural}[1]{%
4932   \glssymbolpluralaccessdisplay

```

```
4933     {%
4934         \Glsentrysymbolplural{#1}%
4935     }%
4936     {#1}%
4937 }
```

`\esssymbolplural` Display the symbolplural value (no link and no check for existence) converted to upper case.

```
4938 \newcommand*{\GLSaccesssymbolplural}[1]{%
4939     \glssymbolpluralaccessdisplay
4940     {%
4941         \mfirstucMakeUppercase{\glsentrysymbolplural{#1}}%
4942     }%
4943     {#1}%
4944 }
```

`\glsaccessdesc` Display the desc value (no link and no check for existence).

```
4945 \newcommand*{\glsaccessdesc}[1]{%
4946     \glsdescriptionaccessdisplay
4947     {%
4948         \glsentrydesc{#1}%
4949     }%
4950     {#1}%
4951 }
```

`\Glsaccessdesc` Display the desc value (no link and no check for existence) with the first letter converted to upper case.

```
4952 \newcommand*{\Glsaccessdesc}[1]{%
4953     \glsdescriptionaccessdisplay
4954     {%
4955         \Glsentrydesc{#1}%
4956     }%
4957     {#1}%
4958 }
```

`\GLSaccessdesc` Display the desc value (no link and no check for existence) converted to upper case.

```
4959 \newcommand*{\GLSaccessdesc}[1]{%
4960     \glsdescriptionaccessdisplay
4961     {%
4962         \mfirstucMakeUppercase{\glsentrydesc{#1}}%
4963     }%
4964     {#1}%
4965 }
```

`\accessdescplural` Display the descplural value (no link and no check for existence).

```
4966 \newcommand*{\glsaccessdescplural}[1]{%
4967     \glsdescriptionpluralaccessdisplay
4968     {%
4969         \glsentrydescplural{#1}%
4970 }
```

```
4970    }%
4971    {#1}%
4972 }
```

`ccessdescplural` Display the descplural value (no link and no check for existence) with the first letter converted to upper case.

```
4973 \newcommand*{\Glsaccessdescplural}[1]{%
4974     \glsdescriptionplural\accessdisplay
4975     {%
4976         \Glsentrydescplural{#1}%
4977     }%
4978     {#1}%
4979 }
```

`ccessdescplural` Display the descplural value (no link and no check for existence) converted to upper case.

```
4980 \newcommand*{\GLSaccessdescplural}[1]{%
4981     \glsdescriptionplural\accessdisplay
4982     {%
4983         \mfirstucMakeUppercase{\glsentrydescplural{#1}}%
4984     }%
4985     {#1}%
4986 }
```

`\glsaccessshort` Display the short form (no link and no check for existence).

```
4987 \newcommand*{\glsaccessshort}[1]{%
4988     \glsshortaccessdisplay
4989     {%
4990         \glsentryshort{#1}%
4991     }%
4992     {#1}%
4993 }
```

`\Glsaccessshort` Display the short form with first letter converted to uppercase (no link and no check for existence).

```
4994 \newcommand*{\Glsaccessshort}[1]{%
4995     \glsshortaccessdisplay
4996     {%
4997         \Glsentryshort{#1}%
4998     }%
4999     {#1}%
5000 }
```

`\GLSaccessshort` Display the short value (no link and no check for existence) converted to upper case.

```
5001 \newcommand*{\GLSaccessshort}[1]{%
5002     \glsshortaccessdisplay
5003     {%
5004         \mfirstucMakeUppercase{\glsentryshort{#1}}%
5005     }%
```

```
5006     {#1}%
5007 }
```

\lsaccessshortpl Display the short plural form (no link and no check for existence).

```
5008 \newcommand*{\glsaccessshortpl}[1]{%
5009     \glsshortpluralaccessdisplay
5010     {%
5011         \glsentryshortpl{#1}%
5012     }%
5013     {#1}%
5014 }
```

\lsaccessshortpl Display the short plural form with first letter converted to uppercase (no link and no check for existence).

```
5015 \newcommand*{\Glsaccessshortpl}[1]{%
5016     \glsshortpluralaccessdisplay
5017     {%
5018         \Glsentryshortpl{#1}%
5019     }%
5020     {#1}%
5021 }
```

\LSaccessshortpl Display the shortplural value (no link and no check for existence) converted to upper case.

```
5022 \newcommand*{\GLSaccessshortpl}[1]{%
5023     \glsshortpluralaccessdisplay
5024     {%
5025         \mfirstucMakeUppercase{\glsentryshortpl{#1}}%
5026     }%
5027     {#1}%
5028 }
```

\glsaccesslong Display the long form (no link and no check for existence).

```
5029 \newcommand*{\glsaccesslong}[1]{%
5030     \glslongaccessdisplay{\glsentrylong{#1}}{#1}%
5031 }
```

\Glsaccesslong Display the long form (no link and no check for existence).

```
5032
5033 \newcommand*{\Glsaccesslong}[1]{%
5034     \glslongaccessdisplay{\Glsentrylong{#1}}{#1}%
5035 }
```

\GLSaccesslong Display the long value (no link and no check for existence) converted to upper case.

```
5036 \newcommand*{\GLSaccesslong}[1]{%
5037     \glslongaccessdisplay
5038     {%
5039         \mfirstucMakeUppercase{\glsentrylong{#1}}%
5040     }%
```

```

5041     {#1}%
5042 }

glsaccesslongpl  Display the long plural form (no link and no check for existence).
5043 \newcommand*{\glsaccesslongpl}[1]{%
5044     \glslongpluralaccessdisplay{\glsentrylongpl{#1}}{#1}%
5045 }

Glsaccesslongpl  Display the long plural form (no link and no check for existence).
5046
5047 \newcommand*{\Glsaccesslongpl}[1]{%
5048     \glslongpluralaccessdisplay{\Glsentrylongpl{#1}}{#1}%
5049 }

GLSaccesslongpl  Display the longplural value (no link and no check for existence) converted to upper case.
5050 \newcommand*{\GLSaccesslongpl}[1]{%
5051     \glslongpluralaccessdisplay
5052     {%
5053         \mfirstucMakeUppercase{\glsentrylongpl{#1}}%
5054     }%
5055     {#1}%
5056 }

```

End of if part

```

5057 }
5058 {

    No accessibility support. Just define these commands to do \glsentry<xxx>

\glsaccessname  Display the name value (no link and no check for existence).
5059 \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.
5060 \newcommand*{\Glsaccessname}[1]{\Glsentryname{#1}}


\GLSaccessname  Display the name value (no link and no check for existence). converted to upper case.
5061 \newcommand*{\GLSaccessname}[1]{%
5062     \protect\mfirstucMakeUppercase{\glsentryname{#1}}%


\glsaccesstext  Display the text value (no link and no check for existence).
5063 \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.
5064 \newcommand*{\Glsaccesstext}[1]{\Glsentrytext{#1}}

```

\GLSaccessstext Display the text value (no link and no check for existence). converted to upper case.

```
5065 \newcommand*{\GLSaccessstext}[1]{%
5066   \protect\mfirstucMakeUppercase{\glsentrytext{#1}}}
```

\glsaccessplural Display the plural value (no link and no check for existence).

```
5067 \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.

```
5068 \newcommand*{\Glsaccessplural}[1]{\Glsentryplural{#1}}
```

\GLSaccessplural Display the plural value (no link and no check for existence). converted to upper case.

```
5069 \newcommand*{\GLSaccessplural}[1]{%
5070   \protect\mfirstucMakeUppercase{\glsentryplural{#1}}}
```

\glsaccessfirst Display the first value (no link and no check for existence).

```
5071 \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.

```
5072 \newcommand*{\Glsaccessfirst}[1]{\Glsentryfirst{#1}}
```

\GLSaccessfirst Display the first value (no link and no check for existence). converted to upper case.

```
5073 \newcommand*{\GLSaccessfirst}[1]{%
5074   \protect\mfirstucMakeUppercase{\glsentryfirst{#1}}}
```

\cessfirstplural Display the firstplural value (no link and no check for existence).

```
5075 \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.

```
5076 \newcommand*{\Glsaccessfirstplural}[1]{\Glsentryfirstplural{#1}}
```

\cessfirstplural Display the firstplural value (no link and no check for existence). converted to upper case.

```
5077 \newcommand*{\GLSaccessfirstplural}[1]{%
5078   \protect\mfirstucMakeUppercase{\glsentryfirstplural{#1}}}
```

\glsaccesssymbol Display the symbol value (no link and no check for existence).

```
5079 \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.

```
5080 \newcommand*{\Glsaccesssymbol}[1]{\Glsentrysymbol{#1}}
```

\GLSaccesssymbol Display the symbol value (no link and no check for existence). converted to upper case.

```
5081 \newcommand*{\GLSaccesssymbol}[1]{%
5082   \protect\mfirstucMakeUppercase{\glsentrysymbol{#1}}}
```

esssymbolplural Display the symbolplural value (no link and no check for existence).  
 5083 \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.  
 5084 \newcommand\*{\Glsaccesssymbolplural}[1]{\Glsentrysymbolplural{\#1}}

esssymbolplural Display the symbolplural value (no link and no check for existence). converted to upper case.  
 5085 \newcommand\*{\GLSaccesssymbolplural}[1]{%  
 5086 \protect\mfirstucMakeUppercase{\glsentrysymbolplural{\#1}}}

\glsaccessdesc Display the desc value (no link and no check for existence).  
 5087 \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.  
 5088 \newcommand\*{\Glsaccessdesc}[1]{\Glsentrydesc{\#1}}

\GLSaccessdesc Display the desc value (no link and no check for existence). converted to upper case.  
 5089 \newcommand\*{\GLSaccessdesc}[1]{%  
 5090 \protect\mfirstucMakeUppercase{\glsentrydesc{\#1}}}

ccessdescplural Display the descplural value (no link and no check for existence).  
 5091 \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.  
 5092 \newcommand\*{\Glsaccessdescplural}[1]{\Glsentrydescplural{\#1}}

ccessdescplural Display the descplural value (no link and no check for existence). converted to upper case.  
 5093 \newcommand\*{\GLSaccessdescplural}[1]{%  
 5094 \protect\mfirstucMakeUppercase{\glsentrydescplural{\#1}}}

\glsaccessshort Display the short form (no link and no check for existence).  
 5095 \newcommand\*{\glsaccessshort}[1]{\glsentryshort{\#1}}

\Glsaccessshort Display the short form with first letter converted to uppercase (no link and no check for existence).  
 5096 \newcommand\*{\Glsaccessshort}[1]{\Glsentryshort{\#1}}

\GLSaccessshort Display the short value (no link and no check for existence). converted to upper case.  
 5097 \newcommand\*{\GLSaccessshort}[1]{%  
 5098 \protect\mfirstucMakeUppercase{\glsentryshort{\#1}}}

lsaccessshortpl Display the short plural form (no link and no check for existence).  
 5099 \newcommand\*{\glsaccessshortpl}[1]{\glsentryshortpl{\#1}}

```

lsaccessshortpl Display the short plural form with first letter converted to uppercase (no link and no check for existence).
5100 \newcommand*{\Glsaccessshortpl}[1]{\Glsentryshortpl{\#1}}


LSaccessshortpl Display the shortplural value (no link and no check for existence). converted to upper case.
5101 \newcommand*{\GLSaccessshortpl}[1]{%
5102 \protect\mfirstucMakeUppercase{\glsentryshortpl{\#1}}}

\glsaccesslong Display the long form (no link and no check for existence).
5103 \newcommand*{\glsaccesslong}[1]{\glsentrylong{\#1}}


\Glsaccesslong Display the long form (no link and no check for existence).
5104 \newcommand*{\Glsaccesslong}[1]{\Glsentrylong{\#1}}


\GLSaccesslong Display the long value (no link and no check for existence). converted to upper case.
5105 \newcommand*{\GLSaccesslong}[1]{%
5106 \protect\mfirstucMakeUppercase{\glsentrylong{\#1}}}

glsaccesslongpl Display the long plural form (no link and no check for existence).
5107 \newcommand*{\glsaccesslongpl}[1]{\glsentrylongpl{\#1}}


\Glsaccesslongpl Display the long plural form (no link and no check for existence).
5108 \newcommand*{\Glsaccesslongpl}[1]{\Glsentrylongpl{\#1}}


\GLSaccesslongpl Display the longplural value (no link and no check for existence). converted to upper case.
5109 \newcommand*{\GLSaccesslongpl}[1]{%
5110 \protect\mfirstucMakeUppercase{\glsentrylongpl{\#1}}}

      End of else part
5111 }

```

## 1.5 Categories

```

\glscategory Add a new storage key that can be used to indicate a category. The default category is general.
5112 \glsaddstoragekey{category}{general}{\glscategory}

\glsifcategory Convenient shortcut to determine if an entry has the given category.
5113 \newcommand{\glsifcategory}[4]{%
5114 \ifglsfieldeq{\#1}{category}{\#2}{\#3}{\#4}%
5115 }

      Categories can have attributes.

```

```
categoryattribute \glssetcategoryattribute{\category}{\attribute-label}{\value}
```

Set (or override if already set) an attribute for the given category.

```
5116 \newcommand*\glssetcategoryattribute[3]{%
5117   \csdef{@glsxtr@categoryattr@@#1@#2}{#3}%
5118 }
```

```
categoryattribute \glsgetcategoryattribute{\category}{\attribute-label}
```

Get the value of the given attribute for the given category. Does nothing if the attribute isn't defined.

```
5119 \newcommand*\glsgetcategoryattribute[2]{%
5120   \csuse{@glsxtr@categoryattr@@#1@#2}%
5121 }
```

```
categoryattribute \glshascategoryattribute{\category}{\attribute-label}{\true}{\false}
```

Tests if the category has the given attribute set.

```
5122 \newcommand*\glshascategoryattribute[4]{%
5123   \ifcscvoid{@glsxtr@categoryattr@@#1@#2}{#4}{#3}%
5124 }
```

```
\glssetattribute \glssetattribute{\entry_label}{\attribute-label}{\value}
```

Short cut where the category label is obtained from the entry information.

```
5125 \newcommand*\glssetattribute[3]{%
5126   \glssetcategoryattribute{\glscategory{#1}}{#2}{#3}%
5127 }
```

```
\glsgetattribute \glsgetattribute{\entry_label}{\attribute-label}
```

Short cut where the category label is obtained from the entry information.

```
5128 \newcommand*\glsgetattribute[2]{%
5129   \glsgetcategoryattribute{\glscategory{#1}}{#2}%
5130 }
```

```
\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.

```
5131 \newcommand*\glshasattribute[4]{%
5132   \ifglsentryexists{#1}%
5133   {\glshascategoryattribute{\glscategory{#1}}{#2}{#3}{#4}}%
5134   {#4}%
5135 }
```

```
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.

```
5136 \newcommand{\glsifcategoryattribute}[5]{%
5137   \ifcsundef{@glsxtr@categoryattr@@#1@#2}%
5138   {#5}%
5139   {\ifcsstring{@glsxtr@categoryattr@@#1@#2}{#3}{#4}{#5}}%
5140 }
```

```
\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.

```
5141 \newcommand{\glsifattribute}[5]{%
5142   \ifglsentryexists{#1}%
5143   {\glsifcategoryattribute{\glscategory{#1}}{#2}{#3}{#4}{#5}}%
5144   {#5}%
5145 }
```

Set attributes for the default general category:

```
5146 \glssetcategoryattribute{general}{regular}{true}
```

Acronyms are regular by default, since they're typically just treated like normal words.

```
5147 \glssetcategoryattribute{acronym}{regular}{true}
```

regularcategory Convenient shortcut to create add the regular attribute.

```
5148 \newcommand*\glssetregularcategory[1]{%
5149   \glssetcategoryattribute{#1}{regular}{true}}%
```

```
fregularcategory \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.

```
5151 \newcommand{\glsifregularcategory}[3]{%
5152   \glsifcategoryattribute{\#1}{regular}{true}{\#2}{\#3}%
5153 }
```

```
tregularcategory \glsifnotregularcategory{\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 false.

```
5154 \newcommand{\glsifnotregularcategory}[3]{%
5155   \glsifcategoryattribute{\#1}{regular}{false}{\#2}{\#3}%
5156 }
```

```
\glsifregular \glsifregular{\langle entry label \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

Short cut to determine if an entry has a regular attribute set to true.

```
5157 \newcommand{\glsifregular}[3]{%
5158   \glsifregularcategory{\glscategory{\#1}}{\#2}{\#3}%
5159 }
```

```
\glsifnotregular \glsifnotregular{\langle entry label \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

Short cut to determine if an entry has a regular attribute set to false.

```
5160 \newcommand{\glsifnotregular}[3]{%
5161   \glsifnotregularcategory{\glscategory{\#1}}{\#2}{\#3}%
5162 }
```

```
oreachincategory \glsforeachincategory[\langle glossary labels \rangle]{\langle category-label \rangle}
{\langle glossary-cs \rangle}{\langle label-cs \rangle}{\langle body \rangle}
```

Iterates through all entries in all the glossaries (or just those listed in *\langle glossary labels \rangle*) and does *\langle body \rangle* if the category matches *\langle category-label \rangle*. The control sequences *\langle glossary-cs \rangle* and *\langle label-cs \rangle* may be used in *\langle body \rangle* to access the glossary label and entry label for the current iteration.

```
5163 \newcommand{\glsforeachincategory}[5][\@glo@types]{%
```

```

5164 \forallglossaries[#1]{#3}%
5165 {%
5166   \forglsentries[#3]{#4}%
5167   {%
5168     \glsifcategory{#4}{#2}{#5}{()}%
5169   }%
5170 }%
5171 }

```

```

achwithattribute \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.

```

5172 \newcommand{\glsforeachwithattribute}[6][\@glo@types]{%
5173   \forallglossaries[#1]{#4}%
5174   {%
5175     \forglsentries[#4]{#5}%
5176     {%
5177       \glsifattribute{#5}{#2}{#3}{#6}{()}%
5178     }%
5179   }%
5180 }

```

If *\newterm* has been defined, redefine it so that it automatically sets the category label to *index* and add *\glsxtrpostdescription*.

```

5181 \ifdef\newterm
5182 {%

```

*\newterm*

```

5183 \renewcommand*\newterm[2][]{%
5184   \newglossaryentry[#2]{%
5185     type=index,category=index,name={#2},%
5186     description={\glsxtrpostdescription\nopostdesc},#1}%
5187 }

```

Indexed terms are regular by default.

```

5188 \glssetcategoryattribute[index]{regular}{true}

```

*\trpostdescindex*

```

5189 \newcommand*\glsxtrpostdescindex(){}
5190 {}
5191 {}

```

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.

```
5192 \ifdef\printsymbols  
5193 {%
```

`glsxtrnewsymbol` Unlike `\newterm`, this has a separate argument for the label (since the symbol will likely contain commands).

```
5194 \newcommand*\glsxtrnewsymbol[3][]{%  
5195   \newglossaryentry{#2}{name={#3},sort={#2},type=symbols,category=symbol,#1}%  
5196 }
```

Symbols are regular by default.

```
5197 \glssetcategoryattribute{symbol}{regular}{true}
```

`rpostdescsymbol`

```
5198 \newcommand*\glsxtrpostdescsymbol{}  
  
5199 }  
5200 {}
```

Similar for the numbers option.

```
5201 \ifdef\printnumbers  
5202 {%
```

`glsxtrnewnumber`

```
5203 \ifdef\printnumbers  
5204 \newcommand*\glsxtrnewnumber[3][]{%  
5205   \newglossaryentry{#2}{name={#3},sort={#2},type=numbers,category=number,#1}%  
5206 }
```

Numbers are regular by default.

```
5207 \glssetcategoryattribute{number}{regular}{true}
```

`rpostdescnumber`

```
5208 \newcommand*\glsxtrpostdescnumber{}  
  
5209 }  
5210 {}
```

`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.

```
5211 \newcommand*\glsxtrsetcategory[2]{%  
5212   \@for \@glsxtr@label:=#1\do  
5213   {  
5214     \glsfieldxdef{\@glsxtr@label}{category}{#2}%  
5215   }%  
5216 }
```

`\tcategoryforall` Set the category for all entries in the listed glossaries. The first argument is the list of glossary labels and the second argument is the category label.

```
5217 \newcommand*{\glsxtrsetcategoryforall}[2]{%
  5218   \forallglossaries[#1]{\@glsxtr@type}{%
    5219     \forglsentries[\@glsxtr@type]{\@glsxtr@label}{%
      5220       {%
        5221         \glsfieldxdef{\@glsxtr@label}{category}{#2}{%
          5222         }{%
            5223       }{%
          5224     }{%
        }}}}}%
```

\glsxstrfieldtitlecase{\textcolor{blue}{label}}{\textcolor{red}{field}}

Apply title casing to the contents of the given field.

```
5225 \newcommand*{\glsxtrfieldtitlecase}[2]{%
5226   \expandafter\glsxtrfieldtitlecasecs\expandafter
5227     {\csname glo@\glsdetoklabel{#1}@#2\endcsname}%
5228 }
```

`\glsxtrfieldtitlecase` The command used by `\glsxtrfieldtitlecase`. May be redefined to use a different command, for example, `\xcapitalisefmtwords`.

```
5229 \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.

```
5230 \@ifpackageloaded{glossaries-accsupp}{  
5231 {  
5232   \renewcommand*{\glossentrydesc}[1]{%  
5233     \glsdoifexistsorwarn{#1}{%  
5234       {%  
5235         \glssetabbrvfmt{\glscategory{#1}}%
```

As from version 1.04, allow the `glossdescfont` attribute to determine the font applied.

```
5236     \glshasattribute{#1}{glossdescfont}%
5237     {%
5238         \edef\@glsxstr@attrval{\glsgetattribute{#1}{glossdescfont}}%
5239         \ifcsdef{\@glsxstr@attrval}%
5240             {%
5241                 \letcs{\@glsxstr@glossdescfont}{\@glsxstr@attrval}%
5242             }%
5243             {%
5244                 \GlossariesExtraWarning{Unknown control sequence name
5245                   '\@glsxstr@attrval' supplied in glossdescfont attribute}
```

```

5246     for entry '#1'. Ignoring}%
5247     \let\@glsxtr@glossdescfont\@firstofone
5248   }%
5249 }%
5250 {\let\@glsxtr@glossdescfont\@firstofone}%
5251 \glsifattribute{#1}{glossdesc}{firstuc}%
5252 {%
5253   \@glsxtr@glossdescfont{\Glsaccessdesc{#1}}%
5254 }%
5255 {%
5256   \glsifattribute{#1}{glossdesc}{title}%
5257 {%
5258     \glsxtr@do@titlecaps@warn
5259     \glsdescriptionaccessdisplay
5260     {%
5261       \@glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
5262     }%
5263     {#1}%
5264   }%
5265   {%
5266     \@glsxtr@glossdescfont{\glsaccessdesc{#1}}%
5267   }%
5268 }%
5269 }%
5270 }%
5271 }
5272 {
5273 \renewcommand*\glossentrydesc}[1]{%
5274   \glsdoifexistsorwarn{#1}%
5275 {%
5276   \glssetabbrvfmt{\glscategory{#1}}%
5277   \glshasattribute{#1}{glossdescfont}%
5278 {%
5279     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%
5280     \ifcsdef{\@glsxtr@attrval}%
5281     {%
5282       \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}%
5283     }%
5284     {%
5285       \GlossariesExtraWarning{Unknown control sequence name
5286         '\@glsxtr@attrval' supplied in glossdescfont attribute
5287         for entry '#1'. Ignoring}%
5288       \let\@glsxtr@glossdescfont\@firstofone
5289     }%
5290   }%
5291 {\let\@glsxtr@glossdescfont\@firstofone}%
5292 \glsifattribute{#1}{glossdesc}{firstuc}%
5293 {%
5294   \@glsxtr@glossdescfont{\Glsentrydesc{#1}}%

```

```

5295 }%
5296 {%
5297     \glsifattribute{#1}{glossdesc}{title}%
5298     {%
5299         \glsxtr@do@titlecaps@warn
5300         \glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
5301     }%
5302     {%
5303         \glsxtr@glossdescfont{\glsentrydesc{#1}}%
5304     }%
5305     {%
5306     }%
5307 }
5308 }

```

\glossentryname If the glossname attribute is “firstuc” convert first letter to upper case. If the attribute is “title” use title case.

```

5309 \@ifpackageloaded{glossaries-accsupp}
5310 {%
5311     \renewcommand*\glossentryname[1]{%
5312         \glsdoifexistsorwarn{#1}%
5313     }%
5314     \glssetabbrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the glossnamefont attribute to determine the font applied.

```

5315     \glshasattribute{#1}{glossnamefont}%
5316     {%
5317         \edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5318         \ifcsdef{\glsxtr@attrval}%
5319             {%
5320                 \letcs{\glsxtr@glossnamefont}{\glsxtr@attrval}%
5321             }%
5322             {%
5323                 \GlossariesExtraWarning{Unknown control sequence name
5324                 ‘\glsxtr@attrval’ supplied in glossnamefont attribute
5325                 for entry ‘#1’. Reverting to default \string\glsnamefont}%
5326                 \let\glsxtr@glossnamefont\glsnamefont
5327             }%
5328         }%
5329         {\let\glsxtr@glossnamefont\glsnamefont}%
5330         \glsifattribute{#1}{glossname}{firstuc}%
5331         {%
5332             \glsnameaccessdisplay
5333             {%
5334                 \glsxtr@glossnamefont{\Glsentryname{#1}}%
5335             }%
5336             {#1}%
5337         }%
5338         {%
5339             \glsifattribute{#1}{glossname}{title}%

```

```

5340      {%
5341          \glsxstr@do@titlecaps@warn
5342          \glsnameaccessdisplay
5343          {%
5344              \glsxstr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
5345          }%
5346          {#1}%
5347      }%
5348      {%
5349          \glsifattribute{#1}{glossname}{uc}%
5350          {%
5351              \glsnameaccessdisplay
5352          }%

```

Hide the label from the upper-casing command.

```

5353          \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5354          \glsxstr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
5355          }%
5356          {#1}%
5357      }%
5358      {%
5359          \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5360          \glsnameaccessdisplay
5361          {%
5362              \expandafter\glsxstr@glossnamefont\expandafter{\glo@name}%
5363          }%
5364          {#1}%
5365      }%
5366      }%
5367  }%

```

Do post-name hook:

```

5368      \glsxtrpostnamehook{#1}%
5369  }%
5370 }
5371 }
5372 {
5373 \renewcommand*{\glossentryname}[1]{%
5374     \glsdoifexistsorwarn{#1}%
5375     {%
5376         \glssetabbrvfmt{\glscategory{#1}}%
5377         \glshasattribute{#1}{glossnamefont}%
5378     }%
5379     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5380     \ifcsdef{\@glsxtr@attrval}%
5381     {%
5382         \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5383     }%
5384     {%
5385         \GlossariesExtraWarning{Unknown control sequence name}

```

```

5386     '@glsxtr@attrval' supplied in glossnamefont attribute
5387     for entry '#1'. Reverting to default \string\glsnamefont}%
5388     \let\@glsxtr@glossnamefont\glsnamefont
5389     }%
5390   }%
5391   {\let\@glsxtr@glossnamefont\glsnamefont}%
5392   \glsifattribute{#1}{glossname}{firstuc}%
5393   {%
5394     \@glsxtr@glossnamefont{\Glsentryname{#1}}%
5395   }%
5396   {%
5397     \glsifattribute{#1}{glossname}{title}%
5398   }%
5399     \@glsxtr@do@titlecaps@warn
5400     \@glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
5401   }%
5402   {%
5403     \glsifattribute{#1}{glossname}{uc}%
5404   }%

```

Hide the label from the upper-casing command.

```

5405   \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5406   \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
5407   }%
5408   {%

```

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.

```

5409   \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5410   \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
5411   }%
5412   }%
5413 }%

```

Do post-name hook.

```

5414   \glsxtrpostnamehook{#1}%
5415   }%
5416 }
5417 }

```

\Glossentryname Redefine to set the abbreviation format and accessibility support.

```

5418 \ifpackageloaded{glossaries-accsupp}
5419 {
5420   \renewcommand*\Glossentryname[1]{%
5421     \glsdoifexistsorwarn{#1}%
5422   }%
5423   \glssetabbrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the glossnamefont attribute to determine the font applied.

```

5424   \glshasattribute{#1}{glossnamefont}%
5425   {%

```

```

5426     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5427     \ifcsdef{\@glsxtr@attrval}%
5428     {%
5429         \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5430     }%
5431     {%
5432         \GlossariesExtraWarning{Unknown control sequence name
5433             '\@glsxtr@attrval' supplied in glossnamefont attribute
5434             for entry '#1'. Reverting to default \string\glsnamefont}%
5435         \let\@glsxtr@glossnamefont\glsnamefont
5436     }%
5437 }%
5438 {\let\@glsxtr@glossnamefont\glsnamefont}%
5439 \glsnameaccessdisplay
5440 {%
5441     \@glsxtr@glossnamefont{\Glsentryname{#1}}%
5442 }%
5443 {#1}%

```

Do post-name hook:

```

5444     \glsxtrpostnamehook{#1}%
5445     }%
5446 }
5447 }
5448 {
5449 \renewcommand*\Glossentryname[1]{%
5450     \glsdoifexistsorwarn{#1}%
5451     {%
5452         \glssetabbrvfmt{\glscategory{#1}}%
5453         \glssetattribute{#1}{glossnamefont}%
5454     }%
5455     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5456     \ifcsdef{\@glsxtr@attrval}%
5457     {%
5458         \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5459     }%
5460     {%
5461         \GlossariesExtraWarning{Unknown control sequence name
5462             '\@glsxtr@attrval' supplied in glossnamefont attribute
5463             for entry '#1'. Reverting to default \string\glsnamefont}%
5464         \let\@glsxtr@glossnamefont\glsnamefont
5465     }%
5466 }%
5467 {\let\@glsxtr@glossnamefont\glsnamefont}%
5468 \@glsxtr@glossnamefont{\Glsentryname{#1}}%

```

Do post-name hook:

```

5469     \glsxtrpostnamehook{#1}%
5470     }%
5471 }

```

5472 }

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.

```
5473 \newcommand*{\glsxtrpostnamehook}[1]{%
5474   \let\@glsnumberformat\@glsxtr@defaultnumberformat
5475   \glsxtrdoautoindexname{#1}{indexname}}%
```

Allow categories to hook in here.

```
5476  \csuse{glsxtrpostname\glscategory{#1}}%
5477 }
```

setaccessdisplay

```
5478 \@ifpackageloaded{glossaries-accsupp}
5479 {
5480   \newcommand*{\glsxtr@setaccessdisplay}[1]{%
5481     \ifcsdef{gls#1accessdisplay}{%
5482       {\letcs{\glsxtr@accessdisplay}{gls#1accessdisplay}}%
5483     }{%
```

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.

```
5484   \edef\@gls@thisval{#1}%
5485   \for\@gls@map:=\@gls@keymap\do{%
5486     \edef\@this@key{\expandafter\@secondoftwo\@gls@map}%
5487     \ifdefequal{\@this@key}{\@gls@thisval}{%
5488       {%
5489         \edef\@gls@thisval{\expandafter\@firstoftwo\@gls@map}%
5490         \endfortrue
5491       }%
5492     }%
5493   }%
5494   \ifcsdef{gls\@gls@thisval accessdisplay}{%
5495     {\letcs{\glsxtr@accessdisplay}{gls\@gls@thisval accessdisplay}}%
5496     {\let\@glsxtr@accessdisplay\@firstoftwo}%
5497   }%
5498 }
5499 }
5500 {%
5501   \newcommand*{\glsxtr@setaccessdisplay}[1]{%
5502     \let\@glsxtr@accessdisplay\@firstoftwo}
5503 }
```

sentrynameother Provide a command that works like \glossentryname but accesses a different field (which must be supplied using its internal field label).

```

5504 \newrobustcmd*{\glossentrynameother}[2]{%
5505   \glsdoifexistsorwarn{#1}%
5506   {%
5507     \glsxtr@setaccessdisplay{#2}%
5508   }%
5509   Set the abbreviation format:%
5510   {%
5511     \glssetabbrvfmt{\glscategory{#1}}%
5512     \glshasattribute{#1}{glossnamefont}%
5513     {%
5514       \edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5515       \ifcsdef{\glsxtr@attrval}%
5516       {%
5517         \letcs{\glsxtr@glossnamefont}{\glsxtr@attrval}%
5518       }%
5519       {%
5520         \GlossariesExtraWarning{Unknown control sequence name
5521           '\glsxtr@attrval' supplied in glossnamefont attribute
5522           for entry '#1'. Reverting to default \string\glsnamefont}%
5523         \let\glsxtr@glossnamefont\glsnamefont
5524       }%
5525     }%
5526     {\glsxtr@glossnamefont\glsnamefont}%
5527     \glsifattribute{#1}{glossname}{firstuc}%
5528     {%
5529       \glsxtr@accessdisplay
5530       {\glsxtr@glossnamefont{\Gls@entry@field{#1}{#2}}{}}%
5531       {#1}%
5532     }%
5533     {%
5534       \glsifattribute{#1}{glossname}{title}%
5535       {%
5536         \glsxtr@do@titlecaps@warn
5537         \glsxtr@accessdisplay
5538         {\glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{#2}}{}}%
5539         {#1}%
5540       }%
5541       {\letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
5542         \glsxtr@accessdisplay
5543         {\glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}{}}%
5544         {#1}%
5545       }%
5546       {%
5547         \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
5548         \glsxtr@accessdisplay
5549         {\expandafter\glsxtr@glossnamefont\expandafter{\glo@name}}%
5550       }%
5551     }%
5552   }%
5553 }

```

```

5550      {#1}%
5551      }%
5552      }%
5553      }%
Do post-name hook.
5554      \glsxtrpostnamehook{#1}%
5555  }%
5556 }

```

`format@override` Determines if the format key should override the indexing attribute value.

```

5557 \newif\if@glsxtr@format@override
5558 \@glsxtr@format@overridedefalse

```

If overriding is enabled, the `\glshypernumber` command will have to be redefined in the index to use `\hyperpage` instead.

`xFormatOverride`

```

5559 \@ifpackageloaded{hyperref}
5560 {

```

If hyperref's hyperindex option is on, then hyperref will automatically add `\hyperpage`, so don't add it.

```

5561 \ifHy@hyperindex
5562   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
5563     \@glsxtr@format@overridetrue
5564     \appto\theindex{\let\glshypernumber\@firstofone}%
5565   }
5566 \else
5567   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
5568     \@glsxtr@format@overridetrue
5569     \appto\theindex{\let\glshypernumber\hyperpage}%
5570   }
5571 \fi
5572 }
5573 {
5574   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
5575     \@glsxtr@format@overridetrue
5576   }
5577 }
5578 \@onlypreamble\GlsXtrEnableIndexFormatOverride

```

`doautoindexname`

```

5579 \newcommand*{\glsxtrdoautoindexname}[2]{%
5580   \glshasattribute{#1}{#2}%
5581   {%

```

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.

```

5582   \@glsxtr@autoindex@setname{#1}%

```

If the attribute value is simply “true” don’t add an encap, otherwise use the value as the encap.

```
5583 \protected@edef{@glsxtr@attrval{\glsgetattribute{#1}{#2}}%  
5584 \if@glsxtr@format@override  
  
5585   \ifx@\glsnumberformat@glsxtr@defaultnumberformat  
5586   \else  
5587     \let@glsxtr@attrval@glsnumberformat  
5588   \fi  
5589 \fi  
5590 \ifdefstring{@glsxtr@attrval}{true}%  
5591 {}%  
5592 {\eappto@glo@name{@glsxtr@autoindex@encap@glsxtr@attrval}}%  
5593 \expandafter\glsxtrautoindex\expandafter{@glo@name}}%  
5594 {}%  
5595 {}%  
5596 }
```

#### glsxtrautoindex

```
5597 \newcommand*{\glsxtrautoindex}{}{\index}
```

toindex@setname Assign \glo@name for use with indexname attribute.

```
5598 \newcommand*{@glsxtr@autoindex@setname}[1]{%  
5599   \protected@edef{\glo@name{\glsxtrautoindexentry{#1}}}{%  
5600     \glsxtrautoindexassingsort{@glo@sort}{#1}}%  
5601   \gls@checkmkidxchars@glo@sort  
5602   \glsxtr@autoindex@doextra@esc@glo@sort  
5603   \epreto{\glo@name{@glo@sort@glsxtr@autoindex@at}}%  
5604 }
```

rautoindexentry Command used for the actual part when auto-indexing.

```
5605 \newcommand*{\glsxtrautoindexentry}[1]{\string\glsentryname{#1}}
```

trautoindexsort Used to assign the sort value when auto-indexing.

```
5606 \newcommand*{\glsxtrautoindexassingsort}[2]{%  
5607   \glsletentryfield{#1}{#2}{sort}}%  
5608 }
```

#### dex@doextra@esc

```
5609 \newcommand*{@glsxtr@autoindex@doextra@esc}[1]{%
```

Escape the escape character unless it has already been escaped.

```
5610   \ifx@\glsxtr@autoindex@esc@gls@quotechar  
5611   \else  
5612     \def{\gls@checkedmkidx}{%  
5613     \edef{\glsxtr@checkspch}{%  
5614       \noexpand@glsxtr@autoindex@escquote\expandonce{#1}}%  
5615       \noexpand\empty@glsxtr@autoindex@esc\noexpand\@nil  
5616       \glsxtr@autoindex@esc\noexpand\empty\noexpand@glsxtr@endescspch}}%  
5617     \glsxtr@checkspch
```

```

5618     \let#1\@gls@checkedmkidx\relax
5619 \fi

    Escape actual character unless it has already been escaped.

5620 \ifx\@glsxtr@autoindex@at\@gls@actualchar
5621 \else
5622     \def\@gls@checkedmkidx{}%
5623     \edef\@glsxtr@checkspch{}%
5624         \noexpand\@glsxtr@autoindex@escat\expandonce{#1}%
5625             \noexpand\@empty\@glsxtr@autoindex@at\noexpand\@nnil
5626                 \@glsxtr@autoindex@at\noexpand\@empty\noexpand\@glsxtr@endescspch}%
5627             \@@glsxtr@checkspch
5628     \let#1\@gls@checkedmkidx\relax
5629 \fi

    Escape level character unless it has already been escaped.

5630 \ifx\@glsxtr@autoindex@level\@gls@levelchar
5631 \else
5632     \def\@gls@checkedmkidx{}%
5633     \edef\@glsxtr@checkspch{}%
5634         \noexpand\@glsxtr@autoindex@eslevel\expandonce{#1}%
5635             \noexpand\@empty\@glsxtr@autoindex@level\noexpand\@nnil
5636                 \@glsxtr@autoindex@level\noexpand\@empty\noexpand\@glsxtr@endescspch}%
5637             \@@glsxtr@checkspch
5638     \let#1\@gls@checkedmkidx\relax
5639 \fi

    Escape encap character unless it has already been escaped.

5640 \ifx\@glsxtr@autoindex@encap\@gls@encapchar
5641 \else
5642     \def\@gls@checkedmkidx{}%
5643     \edef\@glsxtr@checkspch{}%
5644         \noexpand\@glsxtr@autoindex@escencap\expandonce{#1}%
5645             \noexpand\@empty\@glsxtr@autoindex@encap\noexpand\@nnil
5646                 \@glsxtr@autoindex@encap\noexpand\@empty\noexpand\@glsxtr@endescspch}%
5647             \@@glsxtr@checkspch
5648     \let#1\@gls@checkedmkidx\relax
5649 \fi
5650 }

```

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`.

```
5651 \newcommand*{\@glsxtr@autoindex@at}{}%
```

`trSetActiveChar` Set the actual character.

```
5652 \newcommand*{\GlsXtrSetActiveChar}[1]{%
5653     \gdef\@glsxtr@autoindex@at{#1}%
5654     \def\@glsxtr@autoindex@escat##1##2##3\@glsxtr@endescspch}{%
```

```

5655     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escat}{##1}{##2}{##3}%
5656   }%
5657 }
5658 \onlypreamble\GlsXtrSetActualChar
5659 \makeatother
5660 \GlsXtrSetActualChar{0}
5661 \makeatletter

autoindex@encap Encap character for use with \index.
5662 \newcommand*{\@glsxtr@autoindex@encap}{}}

XtrSetEncapChar Set the encap character.
5663 \newcommand*{\GlsXtrSetEncapChar}[1]{%
5664   \gdef\@glsxtr@autoindex@encap{#1}%
5665   \def\@glsxtr@autoindex@escencap##1##2##3\@glsxtr@endescspch{%
5666     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escencap}{##1}{##2}{##3}%
5667   }%
5668 }
5669 \GlsXtrSetEncapChar{1}
5670 \onlypreamble\GlsXtrSetEncapChar

autoindex@level Level character for use with \index.
5671 \newcommand*{\@glsxtr@autoindex@level}{}}

XtrSetLevelChar Set the encap character.
5672 \newcommand*{\GlsXtrSetLevelChar}[1]{%
5673   \gdef\@glsxtr@autoindex@level{#1}%
5674   \def\@glsxtr@autoindex@esclevel##1##2##3\@glsxtr@endescspch{%
5675     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@esclevel}{##1}{##2}{##3}%
5676   }%
5677 }
5678 \GlsXtrSetLevelChar{!}
5679 \onlypreamble\GlsXtrSetLevelChar

r@autoindex@esc Escape character for use with \index.
5680 \newcommand*{\@glsxtr@autoindex@esc}{"}

\GlsXtrSetEscChar Set the escape character.
5681 \newcommand*{\GlsXtrSetEscChar}[1]{%
5682   \gdef\@glsxtr@autoindex@esc{#1}%
5683   \def\@glsxtr@autoindex@escquote##1##2##3\@glsxtr@endescspch{%
5684     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escquote}{##1}{##2}{##3}%
5685   }%
5686 }
5687 \GlsXtrSetEscChar{"}
5688 \onlypreamble\GlsXtrSetEscChar

```

Set if defined. (For example, if doc package has been loaded.) Actual character \actualchar:

```
5689 \ifdef\actualchar
5690  {\expandafter\GlsXtrSetActualChar\expandafter{\actualchar}}
5691  {}
```

Quote character \quotechar:

```
5692 \ifdef\quotechar
5693  {\expandafter\GlsXtrSetEscChar\expandafter{\quotechar}}
5694  {}
```

Level character \levelchar:

```
5695 \ifdef\levelchar
5696  {\expandafter\GlsXtrSetLevelChar\expandafter{\levelchar}}
5697  {}
```

Encap character \encapchar:

```
5698 \ifdef\encapchar
5699  {\expandafter\GlsXtrSetEncapChar\expandafter{\encapchar}}
5700  {}
```

leto@endescspch

```
5701 \def\@glsxtr@gobbleto@endescspch#1\@glsxtr@endescspch{}
```

```
\@glsxtr@autoindex@escspch{\<char>}{\<cs>}{\<pre>}{\<mid>}{\<post>}
```

```
5702 \newcommand*\@glsxtr@autoindex@escspch}[5]{%
5703  \@gls@tmpb=\expandafter{\@gls@checkedmkidx}%
5704  \toks@={#3}%
5705  \ifx\@nnil#3\relax
5706   \def\@glsxtr@checkspch{\@glsxtr@gobbleto@endescspch#5\@glsxtr@endescspch}%
5707  \else
5708   \ifx\@nnil#4\relax
5709     \edef\@gls@checkedmkidx{\the\@gls@tmpb\the\toks@}%
5710     \def\@glsxtr@checkspch{\@glsxtr@gobbleto@endescspch
5711       #4#5\@glsxtr@endescspch}%
5712   \else
5713     \edef\@gls@checkedmkidx{\the\@gls@tmpb\the\toks@%
5714       \@glsxtr@autoindex@esc#1}%
5715     \def\@glsxtr@checkspch{\#2#5#1\@nnil#1\@glsxtr@endescspch}%
5716   \fi
5717 \fi
5718 \@@glsxtr@checkspch
5719 }
```

\Glossentrydesc Redefine to set the abbreviation format and accessibility support.

```
5720 \renewcommand*\Glossentrydesc}[1]{%
5721  \glsdoifexistsorwarn{\#1}{}
```

```

5722  {%
5723    \glssetabrvfmt{\glscategory{#1}}%
5724    \Glsaccessdesc{#1}%
5725  }%
5726 }

```

`lossentrysymbol` Redefine to set the abbreviation format and accessibility support.

```

5727 \renewcommand*{\glossentrysymbol}[1]{%
5728   \glsdoifexistsorwarn{#1}%
5729   {%
5730     \glssetabrvfmt{\glscategory{#1}}%
5731     \glsaccesssymbol{#1}%
5732   }%
5733 }

```

`lossentrysymbol` Redefine to set the abbreviation format and accessibility support.

```

5734 \renewcommand*{\Glossentrysymbol}[1]{%
5735   \glsdoifexistsorwarn{#1}%
5736   {%
5737     \glssetabrvfmt{\glscategory{#1}}%
5738     \Glsaccesssymbol{#1}%
5739   }%
5740 }

```

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.

```

5741 \newcommand*{\GlsXtrEnableInitialTagging}{%
5742   \@ifstar{s@glsxtr@enabletagging}{@glsxtr@enabletagging}%
5743 }%
5744 \@onlypreamble\GlsXtrEnableInitialTagging

```

`r@enabletagging` Starred version undefines command.

```

5745 \newcommand*{\s@glsxtr@enabletagging}[2]{%
5746   \undef#2%
5747   \@glsxtr@enabletagging{#1}{#2}%
5748 }

```

`r@enabletagging` Internal command.

```
5749 \newcommand*{\@glsxtr@enabletagging}[2]{%
```

Set attributes for categories given in the first argument.

```

5750  \@for\@glsxtr@cat:=#1\do
5751  {%
5752    \ifdefempty{\@glsxtr@cat}%
5753    {}%
5754    {\glssetcategoryattribute{\@glsxtr@cat}{tagging}{true}}%

```

```

5755 }%
5756 \newrobustcmd*#2[1]{##1}%
5757 \def\@glsxtr@taggingcs{#2}%
5758 \renewcommand*\@glsxtr@activate@initialtagging{%
5759   \let#2\@glsxtr@tag
5760 }%
5761 \ifundef\gls@preglossaryhook
5762 {\GlossariesExtraWarning{Initial tagging requires at least
5763   glossaries.sty v4.19 to work correctly}}%
5764 {}%
5765 }

```

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.

`\mfp@checkword@do` If this command hasn't been defined, then we have pre v2.02 of `mfirstuc`

```

5766 \ifundef\mfp@checkword@do
5767 {
5768   \newcommand*{\mfp@checkword@do}[1]{%
5769     \ifdefstring{\mfp@checkword@arg}{#1}%
5770     {}%
5771     \let\@mfp@domakefirstuc\@firstofone
5772     \listbreak
5773   }%
5774   {}%
5775 }

```

`\mfp@checkword` `\capitalisewords` was introduced in `mfirstuc` v1.06. If `\mfp@checkword` hasn't been defined `mfirstuc` is too old to support the title case attribute.

```

5776 \ifundef\mfp@checkword
5777 {
5778   \newcommand{\@glsxtr@do@titlecaps@warn}{%
5779     \GlossariesExtraWarning{mfirstuc.sty too old. Title Caps
5780       support not available}}

```

One warning should suffice.

```

5781   \let\@glsxtr@do@titlecaps@warn\relax
5782   }
5783 }
5784 {
5785   \renewcommand*{\mfp@checkword}[1]{%
5786     \def\mfp@checkword@arg{#1}%
5787     \let\@mfp@domakefirstuc\makefirstuc
5788     \forlistloop\mfp@checkword@do\@mfp@nocaplist
5789   }
5790 }
5791 }
5792 {}% no patch required

```

`@titlecaps@warn` Do warning if title case not supported.

```
5793 \newcommand*{\@glsxtr@do@titlecaps@warn}{}{}
```

@initialtagging Used in \printglossary but at least v4.19 of glossaries required.

```
5794 \newcommand*{\@glsxtr@activate@initialtagging}{}{}
```

\@glsxtr@tag Definition of tagging command when used in glossary.

```
5795 \newrobustcmd*{\@glsxtr@tag}[1]{%
5796   \glsifattribute{\glscurrententrylabel}{tagging}{true}%
5797   {\glsxtrtagfont{\#1}}{\#1}%
5798 }
```

\glsxtrtagfont Used in the glossary.

```
5799 \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.

```
5800 \ifdef{\gls@preglossaryhook}
5801 {
5802   \renewcommand*{\gls@preglossaryhook}{%
5803     \@glsxtr@activate@initialtagging
```

Since the glossaries are automatically scoped, \@glsxtr@org@postdescription shouldn't already be defined, but check anyway just as a precautionary measure.

```
5804   \ifundef{\glsxtr@org@postdescription}
5805   {%
5806     \let{\glsxtr@org@postdescription}{\glsxtr@org@postdescription}
5807     \renewcommand*{\glsxtr@org@postdescription}{%
5808       \ifglsentryexists{\glscurrententrylabel}%
5809       {%
5810         \glsxtr@org@postdescription
5811       }%
5812     }%
5813   }%
5814 }%
5815 }%
5816 }%
```

Enable the options used by \glossxtrsetopts:

```
5817   \glossxtrsetopts
5818 }%
5819 }
5820 {}
```

postdescription This command will only be used if \gls@preglossaryhook is available *and* the glossary style uses \glsxtr@org@postdescription 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.

```

5821 \newcommand*{\glsxtrpostdescription}{%
5822   \csuse{glsxtrpostdesc\glscategory{\glscurrententrylabel}}%
5823 }

postdescgeneral
5824 \newcommand*{\glsxtrpostdescgeneral}{}}

xtrpostdescterm
5825 \newcommand*{\glsxtrpostdescterm}{}}

postdescacronym
5826 \newcommand*{\glsxtrpostdescacronym}{}}

escabbreviation
5827 \newcommand*{\glsxtrpostdescabbreviation}{}}

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.
5828 \renewcommand*{\glspostlinkhook}{%
5829   \ifglsentryexists{\glslabel}{\glsxtrpostlinkhook}{}%
5830 }

xtrpostlinkhook The entry label should already be stored in \glslabel by \@gls@link.
5831 \newcommand*{\glsxtrpostlinkhook}{%
5832   \glsxtrdiscardperiod{\glslabel}%
5833   {\glsxtrpostlinkendsentence}%
5834   {\glsxtrifcustomdiscardperiod
5835     {\glsxtrifperiod{\glsxtrpostlinkendsentence}{\glsxtrpostlink}}%
5836     {\glsxtrpostlink}%
5837   }%
5838 }

omdiscardperiod Allow user to provide a custom check. Should expand to #2 if no check is required otherwise expand to #1.
5839 \newcommand*{\glsxtrifcustomdiscardperiod}[2]{#2}

\glsxtrpostlink
5840 \newcommand*{\glsxtrpostlink}{%
5841   \csuse{glsxtrpostlink\glscategory{\glslabel}}%
5842 }

linkendsentence Done by \glsxtrpostlinkhook if a full stop is discarded.
5843 \newcommand*{\glsxtrpostlinkendsentence}{%
5844   \ifcsdef{glsxtrpostlink\glscategory{\glslabel}}%
5845     {%
5846       \csuse{glsxtrpostlink\glscategory{\glslabel}}%

```

Put the full stop back.

```
5847   .\spacefactor\sfcodes`\. \relax
5848 }%
5849 {%
```

Assume the full stop was discarded because the entry ends with a period, so adjust the space-factor.

```
5850   \spacefactor\sfcodes`\. \relax
5851 }%
5852 }
```

`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.

```
5853 \newcommand*\glsxtrpostlinkAddDescOnFirstUse}{%
5854   \glsxtrifwasfirstuse{\space(\glsaccessdesc{\glslabel})}}{}%
5855 }
```

`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.

```
5856 \newcommand*\glsxtrpostlinkAddSymbolOnFirstUse}{%
5857   \glsxtrifwasfirstuse
5858 }%
5859   \ifglshassymbol{\glslabel}{\space(\glsaccesssymbol{\glslabel})}}{}%
5860 }%
5861 {}%
5862 }
```

`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).

```
5863 \newcommand*\glsxtrdiscardperiod}[3]{%
5864   \glsxtrifwasfirstuse
5865 }%
5866   \glsifattribute{#1}{retainfirstuseperiod}{true}%
5867   {#3}%
5868 }%
5869   \glsifattribute{#1}{discardperiod}{true}%
5870   {%
5871     \glsifplural
5872   }%
5873     \glsifattribute{#1}{pluraldiscardperiod}{true}%
5874     {\glsxtrifperiod{#2}{#3}}%
5875     {#3}%
5876   }%
5877   {%
5878     \glsxtrifperiod{#2}{#3}}%
5879 }
```

```

5880      }%
5881      {#3}%
5882      }%
5883      }%
5884      {%
5885      \glsifattribute{#1}{discardperiod}{true}%
5886      {%
5887          \glsifplural
5888          {%
5889              \glsifattribute{#1}{pluraldiscardperiod}{true}%
5890              {\glsxtrifperiod{#2}{#3}}%
5891              {#3}%
5892          }%
5893          {%
5894              \glsxtrifperiod{#2}{#3}%
5895          }%
5896      }%
5897      {#3}%
5898  }%
5899 }

```

`\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`

```

5900 \newcommand*{\glsxtrifperiod}[1]{\new@ifnextchar.{\@firstoftwo{#1}}}

```

Sometimes it's useful to test if there's a punctuation character following the glossary entry.

`glsxtr@punctlist` 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 ',').

```

5901 \newcommand*{\glsxtr@punctlist}{.,:;?!}

```

`punctuationmark` Add character to punctuation list.

```

5902 \newcommand*{\glsxtraddpunctuationmark}[1]{\appto\glsxtr@punctlist{#1}}

```

`punctuationmarks` Reset the punctuation list.

```

5903 \newcommand*{\glsxtrsetpunctuationmarks}[1]{\def\glsxtr@punctlist{#1}}

```

`\glsxtrifpunc` `\glsxtrifnextpunc{(true part)}{(false part)}`

Test if this is followed by a punctuation mark. (Adapted from `\new@ifnextchar`.)

```

5904 \newcommand*{\glsxtrifnextpunc}[2]{%
5905     \def\reserved@a{#1}%
5906     \def\reserved@b{#2}%
5907     \futurelet\glspunc@token\glsxtr@ifnextpunc
5908 }

```

```

sxtr@ifnextpunc
5909 \newcommand{\glsxtr@ifnextpunc}{%
5910   \glsxtr@ifpunctoken{\glspunc@token}{\let\reserved@b\reserved@a}{}}%
5911   \reserved@b
5912 }

xtr@ifpunctoken Test if the token given in the first argument is in the punctuation list.
5913 \newcommand{\glsxtr@ifpunctoken}[1]{%
5914   \expandafter\glsxtr@ifpunctoken\expandafter#1\glsxtr@punctlist\@nnil
5915 }

xtr@ifpunctoken
5916 \def\glsxtr@ifpunctoken#1#2{%
5917   \let\reserved@d=#2%
5918   \ifx\reserved@d\@nnil
5919     \let\glsxtr@next\glsxtr@notfoundinlist
5920   \else
5921     \ifx#1\reserved@d
5922       \let\glsxtr@next\glsxtr@foundinlist
5923     \else
5924       \let\glsxtr@next\glsxtr@ifpunctoken
5925     \fi
5926   \fi
5927   \glsxtr@next#1%
5928 }

xtr@foundinlist
5929 \def\glsxtr@foundinlist#1\@nnil{\@firstoftwo}

@notfoundinlist
5930 \def\glsxtr@notfoundinlist#1{\@secondoftwo}

```

`\glsxtrdopostpunc{<code>}`

If this is followed be a punctuation character, do `<code>` after the character otherwise do `<code>` before whatever comes next.

```

5931 \newcommand{\glsxtrdopostpunc}[1]{%
5932   \glsxtrifnextpunc{\glsxtr@swaptwo{#1}}{#1}%
5933 }

```

```

@glsxtr@swaptwo
5934 \newcommand{\glsxtr@swaptwo}[2]{#2#1}

```

## 1.6 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, apply it.

```
5935 \define@key{glsxtrabbrv}{category}{%
5936   \edef\glscategorylabel{\#1}%
5937   \ifcsdef{@glsabbrv@current@\#1}%
5938   {}%
```

Warning should already have been issued.

```
5939   \let\@glsxtr@orgwarndep\GlsXtrWarnDeprecatedAbbrStyle
5940   \let\GlsXtrWarnDeprecatedAbbrStyle\@gobbletwo
5941   \glsxtr@applyabbrvstyle{\csname@glsabbrv@current@\#1\endcsname}%
5942   \let\GlsXtrWarnDeprecatedAbbrStyle\@glsxtr@orgwarndep
5943 }%
5944 {}%
5945 }
```

Save the short plural form. This may be needed before the entry is defined.

```
5946 \define@key{glsxtrabbrv}{shortplural}{%
5947   \def\@gls@shortpl{\#1}%
5948 }
```

Similarly for the long plural form.

```
5949 \define@key{glsxtrabbrv}{longplural}{%
5950   \def\@gls@longpl{\#1}%
5951 }
```

Token registers for the short plural and long plural, provided for use in the abbreviation style definitions.

```
\glsshortpltok
5952 \newtoks\glsshortpltok

\glslongpltok
5953 \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.

```
5954 \newcommand*{\@glsxtr@insertdots}[2]{%
5955   \def#1{}%
5956   \glsxtr@insert@dots#1#2\@nnil
5957 }
```

```
xtr@insert@dots
5958 \newcommand*{\glsxtr@insert@dots}[2]{%
5959   \ifx\@nnil#2\relax
5960     \let\glsxtr@insert@dots@next\gobble
5961   \else
5962     \ifx\relax#2\relax
5963     \else
5964       \appto#1{#2.}%
5965     \fi
5966     \let\glsxtr@insert@dots@next\glsxtr@insert@dots
5967   \fi
5968   \glsxtr@insert@dots@next#1%
5969 }
```

Similarly provide a way of replacing spaces with \glsxtrwordsep, which first needs to be defined:

```
\glsxtrwordsep
5970 \newcommand*{\glsxtrwordsep}{\space}
```

Each word is marked with

```
\glsxtrword
5971 \newcommand*{\glsxtrword}[1]{#1}
```

```
tr@markwordseps
5972 \newcommand*{\glsxtr@markwordseps}[2]{%
5973   \def#1{}%
5974   \glsxtr@mark@wordseps#1#2 \@nnil
5975 }
```

```
r@mark@wordseps
5976 \def\glsxtr@mark@wordseps#1#2 #3{%
5977   \ifdefempty{#1}{%
5978     {\def#1{\protect\glsxtrword{#2}}}%
5979     {\appto#1{\protect\glsxtrwordsep\protect\glsxtrword{#2}}}%
5980   \ifx\@nnil#3\relax
5981     \let\glsxtr@mark@wordseps@next\relax
5982   \else
5983     \def\glsxtr@mark@wordseps@next{%
5984       \glsxtr@mark@wordseps#1#3}%
5985   \fi
5986   \glsxtr@mark@wordseps@next
5987 }
```

`newabbreviation` Define a new generic abbreviation.

```
5988 \newcommand*{\newabbreviation}[4][]{%
5989   \glsxtr@newabbreviation{#1}{#2}{#3}{#4}%
5990 }
```

`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.)

```

5991 \newcommand*{\glsxtr@newabbreviation}[4]{%
5992   \glskeylisttok{#1}%
5993   \glslabeltok{#2}%
5994   \glsshorttok{#3}%
5995   \glslongtok{#4}%

```

Save the original short and long values (before attribute settings modify them).

```

5996 \def\glsxtrorgshort{#3}%
5997 \def\glsxtrorglong{#4}%

```

Get the category.

```

5998 \def\glscategorylabel{abbreviation}%
5999 \glsxtr@applyabbrvstyle{@glsabbrv@current@abbreviation}%

```

Ignore the shortplural and longplural keys.

```

6000 \setkeys*{glsxtrabbrv}{[shortplural, longplural]{#1}}%

```

Set the default long plural

```

6001 \def@gls@longpl{#4\glspluralsuffix}%
6002 \let@gls@default@longpl@gls@longpl

```

Has the markwords attribute been set?

```

6003 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
6004 {%
6005   @glsxtr@markwordseps@gls@long{#4}%
6006   \expandafter\def\expandafter@gls@longpl\expandafter
6007     {@gls@long\glspluralsuffix}%
6008   \let@gls@default@longpl@gls@longpl

```

Update `\glslongtok`.

```

6009 \expandafter\glslongtok\expandafter{@gls@long}%
6010 }%
6011 {}%

```

Has the markshortwords attribute been set? (Not compatible with `insertdots`.)

```

6012 \glsifcategoryattribute{\glscategorylabel}{markshortwords}{true}%
6013 {%
6014   @glsxtr@markwordseps@gls@short{#3}%
6015 }%
6016 {}%

```

Has the `insertdots` attribute been set?

```

6017 \glsifcategoryattribute{\glscategorylabel}{insertdots}{true}%
6018 {%
6019   @glsxtr@insertdots@gls@short{#3}%
6020   \expandafter\glsshorttok\expandafter{@gls@short\spacefactor1000 \relax}%
6021 }%
6022 {\def@gls@short{#3}}%
6023 }%

```

Has the `aposplural` attribute been set? (Not compatible with `noshortplural`.)

```
6024 \glsifcategoryattribute{\glscategorylabel}{aposplural}{true}%
6025 {%
6026   \expandafter\def\expandafter@\gls@shortpl\expandafter{\gls@short
6027     '\abrvpluralsuffix}%
6028 }%
6029 {%
```

Has the `noshortplural` attribute been set?

```
6030 \glsifcategoryattribute{\glscategorylabel}{noshortplural}{true}%
6031 {%
6032   \let@\gls@shortpl\gls@short
6033 }%
6034 {%
6035   \expandafter\def\expandafter@\gls@shortpl\expandafter{\gls@short
6036     '\abrvpluralsuffix}%
6037 }%
6038 {%
```

Update `\glsshorttok`:

```
6039 \expandafter\glsshorttok\expandafter{\gls@short}%
```

Hook for further customisation if required:

```
6040 \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).

```
6041 \setkeys*{\glsxtrabbrv}[category]{#1}%
```

Has the plural been explicitly set?

```
6042 \ifx@\gls@default@longpl\gls@longpl
6043 \else
```

Has the `markwords` attribute been set?

```
6044 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
6045 {%
6046   \expandafter@\glsxtr@markwordseps\expandafter@\gls@longpl\expandafter
6047     {\gls@longpl}%
6048 }%
6049 {}%
6050 \fi
```

Set the plural token registers so the values can be accessed by the abbreviation styles.

```
6051 \expandafter\glsshortpltok\expandafter{\gls@shortpl}%
6052 \expandafter\glslongpltok\expandafter{\gls@longpl}%
```

Do any extra setup provided by hook:

```
6053 \newabbreviationhook
```

Define this entry:

```
6054 \protected@edef\do@newglossaryentry{%
6055   \noexpand\newglossaryentry{\the\glslabeltok}%
6056 }%
```

```

6057     type=\glsxtrabbrvtype,%
6058     category=abbreviation,%
6059     short={\the\glsshorttok},%
6060     shortplural={\the\glsshortpltok},%
6061     long={\the\glslongtok},%
6062     longplural={\the\glslongpltok},%
6063     name={\the\glsshorttok},%
6064     \CustomAbbreviationFields,%
6065     \the\glskeylisttok
6066   }%
6067 }%
6068 \@do@newglossaryentry
6069 \GlsXtrPostNewAbbreviation
6070 }

```

**evpresetkeyhook** Hook for extra stuff in \newabbreviation  
 6071 \newcommand\*{\glsxtrnewabbrevresetkeyhook}[3]{}

**NewAbbreviation** Hook used by abbreviation styles.  
 6072 \newcommand\*{\GlsXtrPostNewAbbreviation}{}{}

**bbreventionhook** Hook for use with \newabbreviation.  
 6073 \newcommand\*{\newabbreviationhook}{}{}

**reviationFields**  
 6074 \newcommand\*{\CustomAbbreviationFields}{}{}

**\glsxtrparen** For the parenthetical styles.  
 6075 \newcommand\*{\glsxtrparen}[1]{(#1)}

**lsxtrfullformat** Full format without case change.  
 6076 \newcommand\*{\glsxtrfullformat}[2]{%
 6077 \glsfirstlongfont{\glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
 6078 \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
 6079 }

**lsxtrfullformat** Full format with case change.  
 6080 \newcommand\*{\Glsxtrfullformat}[2]{%
 6081 \glsfirstlongfont{\Glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
 6082 \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
 6083 }

**xtrfullplformat** Plural full format without case change.  
 6084 \newcommand\*{\glsxtrfullplformat}[2]{%
 6085 \glsfirstlongfont{\glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
 6086 \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}%
 6087 }

```

xtrfullplformat Plural full format with case change.
6088 \newcommand*{\Glsxtrfullplformat}[2]{%
6089   \glsfirstlongfont{\Glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
6090   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}}%
6091 }

\glsxtrfullsep Separator used by full format is a space by default. The argument is the entry's label.
6092 \newcommand*{\glsxtrfullsep}[1]{\space}

In-line formats in case first use isn't compatible with \glsentryfull (for example, first use suppresses the long form or uses a footnote).

nlinefullformat Full format without case change.
6093 \newcommand*{\glsxtrinelinefullformat}{\glsxtrfullformat}

nlinefullformat Full format with case change.
6094 \newcommand*{\Glsxtrinelinefullformat}{\Glsxtrfullformat}

xtrfullplformat Plural full format without case change.
6095 \newcommand*{\glsxtrinelinefullplformat}{\glsxtrfullplformat}

inefullplformat Plural full format with case change.
6096 \newcommand*{\Glsxtrinelinefullplformat}{\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
6097 \renewcommand*{\glsentryfull}[1]{\glsxtrinelinefullformat{#1}{}}


\Glsentryfull
6098 \renewcommand*{\Glsentryfull}[1]{\Glsxtrinelinefullformat{#1}{}}



\glsentryfullpl
6099 \renewcommand*{\glsentryfullpl}[1]{\glsxtrinelinefullplformat{#1}{}}



\Glsentryfullpl
6100 \renewcommand*{\Glsentryfullpl}[1]{\Glsxtrinelinefullplformat{#1}{}}



sfirstabrvfont Font changing command used for the abbreviation on first use or in the full format.
6101 \newcommand*{\glsfirstabrvfont}[1]{\glsfirstabrvdefaultfont{#1}}



bbrvdefaultfont Font changing command used for the abbreviation on first use or in the full format.
6102 \newcommand*{\glsfirstabrvdefaultfont}[1]{\glsabrvfont{#1}}



\glsabrvfont Font changing command used for the abbreviation on subsequent use.
6103 \newcommand*{\glsabrvfont}[1]{\glsabrvdefaultfont{#1}}


```

```

bbrvdefaultfont
6104 \newcommand*{\glsabbrvdefaultfont}[1]{#1}

\glslongfont  Font changing command used for the long form in commands like \glsxtrlong.
6105 \newcommand*{\glslongfont}[1]{\glslongdefaultfont{#1}}


longdefaultfont Default font changing command used for the long form in commands like \glsxtrlong.
6106 \newcommand*{\glslongdefaultfont}[1]{#1}

lsfirstlongfont Font changing command used for the long form on first use or in the full format.
6107 \newcommand*{\glsfirstlongfont}[1]{\glslongfont{#1}}


longdefaultfont
6108 \newcommand*{\glsfirstlongdefaultfont}[1]{\glslongdefaultfont{#1}}


brvpluralsuffix Default plural suffix. Allow an alternative default suffix for abbreviations.
6109 \newcommand*{\glsxtrabbrvpluralsuffix}{\glspluralsuffix}

brvpluralsuffix Default plural suffix.
6110 \newcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}

\glsxtrfull Full form (no case-change).
6111 \newrobustcmd*{\glsxtrfull}{\@gls@hyp@opt\ns@glsxtrfull}
6112 \newcommand*\ns@glsxtrfull[2][]{%
6113   \new@ifnextchar{[\@glsxtr@full{#1}{#2}]%}
6114     {\@glsxtr@full{#1}{#2}[]}%
6115 }

\@glsxtr@full Low-level macro:
6116 \def\@glsxtr@full#1#2[#3]{%
6117   \glsdoifexists{#2}%
6118   {%
6119     \glssetabbrvfmt{\glscategory{#2}}%
6120     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6121     \let\glsifplural\@secondoftwo
6122     \let\glscapscase\@firstofthree
6123     \let\glsinsert\@empty
6124     \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.

6125   \glsxtrsetupfulldefs
6126   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6127 }%
6128 \glspostlinkhook
6129 }

```

```

trsetupfulldefs
6130 \newcommand*{\glsxtrsetupfulldefs}{%
6131   \let\glsxtrifwasfirstuse\@firstoftwo
6132 }

\Glsxtrfull Full form (first letter uppercase).
6133 \newrobustcmd*{\Glsxtrfull}{\@gls@hyp@opt\ns@Glsxtrfull}
6134 \newcommand*\ns@Glsxtrfull[2][]{%
6135   \new@ifnextchar[\{@Glsxtr@full{#1}{#2}}{%
6136     {\@Glsxtr@full{#1}{#2}[]}}%
6137 }

\@Glsxtr@full Low-level macro:
6138 \def\@Glsxtr@full#1#2[#3]{%
6139   \glsdoifexists{#2}%
6140   {%
6141     \glssetabrvfmt{\glscategory{#2}}%
6142     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6143     \let\glsifplural\@secondoftwo
6144     \let\glscapscase\@secondofthree
6145     \let\glsinsert\@empty
6146     \def\glscustomtext{\Glsxtrinlinefullformat{#2}{#3}}%
6147     \glsxtrsetupfulldefs
6148     \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6149   }%
6150   \glspostlinkhook
6151 }

\GLSxtrfull Full form (all uppercase).
6152 \newrobustcmd*{\GLSxtrfull}{\@gls@hyp@opt\ns@GLSxtrfull}
6153 \newcommand*\ns@GLSxtrfull[2][]{%
6154   \new@ifnextchar[\{@GLSxtr@full{#1}{#2}}{%
6155     {\@GLSxtr@full{#1}{#2}[]}}%
6156 }

\@GLSxtr@full Low-level macro:
6157 \def\@GLSxtr@full#1#2[#3]{%
6158   \glsdoifexists{#2}%
6159   {%
6160     \glssetabrvfmt{\glscategory{#2}}%
6161     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6162     \let\glsifplural\@secondoftwo
6163     \let\glscapscase\@thirdofthree
6164     \let\glsinsert\@empty
6165     \def\glscustomtext{\mfirstucMakeUppercase{\glsxtrinlinefullformat{#2}{#3}}}%
6166     \glsxtrsetupfulldefs
6167     \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6168   }%
6169   \glspostlinkhook

```

6170 }

\glsxtrfullpl Plural full form (no case-change).

```
6171 \newrobustcmd*\glsxtrfullpl{\gls@hyp@opt\ns@glsxtrfullpl}
6172 \newcommand*\ns@glsxtrfullpl[2][]{%
6173   \new@ifnextchar[\glsxtr@fullpl{#1}{#2}]{%
6174     \glsxtr@fullpl{#1}{#2}[] }%
6175 }
```

\@glsxtr@fullpl Low-level macro:

```
6176 \def\glsxtr@fullpl#1#2[#3]{%
6177   \glsdoifexists{#2}{%
6178     {%
6179       \glssetabrvfmt{\glscategory{#2}}{%
6180         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6181         \let\glsifplural\firstoftwo
6182         \let\glscapscase\firstofthree
6183         \let\glsinsert\empty
6184         \def\glscustomtext{\glsxtrinlinefullplformat{#2}{#3}}{%
6185           \glsxtrsetupfulldefs
6186           \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}{%
6187             }{%
6188             \glspostlinkhook
6189           }}
```

\Glsxtrfullpl Plural full form (first letter uppercase).

```
6190 \newrobustcmd*\Glsxtrfullpl{\gls@hyp@opt\ns@Glsxtrfullpl}
6191 \newcommand*\ns@Glsxtrfullpl[2][]{%
6192   \new@ifnextchar[\Glsxtr@fullpl{#1}{#2}]{%
6193     \Glsxtr@fullpl{#1}{#2}[] }%
6194 }
```

\@Glsxtr@fullpl Low-level macro:

```
6195 \def\Glsxtr@fullpl#1#2[#3]{%
6196   \glsdoifexists{#2}{%
6197     {%
6198       \glssetabrvfmt{\glscategory{#2}}{%
6199         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6200         \let\glsifplural\firstoftwo
6201         \let\glscapscase\secondofthree
6202         \let\glsinsert\empty
6203         \def\glscustomtext{\Glsxtrinlinefullplformat{#2}{#3}}{%
6204           \glsxtrsetupfulldefs
6205           \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}{%
6206             }{%
6207             \glspostlinkhook
6208           }}
```

\GLSxtrfullpl Plural full form (all upper case).

```

6209 \newrobustcmd*\{ \GLSxtrfullpl\} { \gls@hyp@opt \ns@GLSxtrfullpl}
6210 \newcommand* \ns@GLSxtrfullpl [2] [] {%
6211   \new@ifnextchar [{ \gls@ifnextchar {\ns@GLSxtr@fullpl{\#1}{\#2}} {%
6212     \gls@GLSxtr@fullpl{\#1}{\#2} [] } } %
6213 }

```

\@GLSxtr@fullpl Low-level macro:

```

6214 \def \@GLSxtr@fullpl#1#2[#3]{%
6215   \glsdoifexists{\#2}{%
6216     {%
6217       \let \do@gls@link@checkfirsthyper \gls@link@nocheckfirsthyper
6218       \let \glsifplural \firstoftwo
6219       \let \glscapscase \thirdofthree
6220       \let \glsinsert \empty
6221       \def \glscustomtext {%
6222         \mfirstucMakeUppercase{\glsxtrinlinefullplformat{\#2}{\#3}} } %
6223       \glsxtrsetupfulldefs
6224       \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname} } %
6225     }%
6226   \glspostlinkhook
6227 }

```

The short and long forms work in a similar way to acronyms.

\glsxtrshort

```

6228 \newrobustcmd*\{ \glsxtrshort\} { \gls@hyp@opt \ns@glsxtrshort}
Define the un-starred form. Need to determine if there is a final optional argument
6229 \newcommand* \ns@glsxtrshort [2] [] {%
6230   \new@ifnextchar [{ \glsxtrshort{\#1}{\#2}} { \glsxtrshort{\#1}{\#2} [] } } %
6231 }

```

Read in the final optional argument:

```

6232 \def \@glsxtrshort#1#2[#3]{%
6233   \glsdoifexists{\#2}{%
6234     {%

```

Need to make sure \glsabrvfont is set correctly.

```

6235   \glssetabrvfmt{\glscategory{\#2}} %
6236   \let \do@gls@link@checkfirsthyper \gls@link@nocheckfirsthyper
6237   \let \glsxtrifwasfirstuse \secondoftwo
6238   \let \glsifplural \secondoftwo
6239   \let \glscapscase \firstofthree
6240   \let \glsinsert \empty
6241   \def \glscustomtext {%
6242     \glsabrvfont{\glsaccessshort{\#2}\ifglsxtrinsertinside#3\fi} %
6243     \ifglsxtrinsertinside\else#3\fi
6244   }%
6245   \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname} } %
6246 }%
6247 \glspostlinkhook

```

```
6248 }
```

## \Glsxtrshort

```
6249 \newrobustcmd*{\Glsxtrshort}{\gls@hyp@opt\ns@Glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
6250 \newcommand*{\ns@Glsxtrshort}[2] []{%
```

```
6251   \new@ifnextchar[{\ns@Glsxtrshort[#1]{#2}}{\ns@Glsxtrshort[#1]{#2}[]}%
```

```
6252 }
```

Read in the final optional argument:

```
6253 \def\@Glsxtrshort#1#2[#3]{%
```

```
6254   \glsdoifexists{#2} %
```

```
6255 {%
```

```
6256   \glssetabrvfmt{\glscategory{#2}} %
```

```
6257   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
```

```
6258   \let\glsxtrifwasfirstuse@secondoftwo
```

```
6259   \let\glsifplural@secondoftwo
```

```
6260   \let\glscapscase@secondofthree
```

```
6261   \let\glsinsert@\empty
```

```
6262   \def\glscustomtext{%
```

```
6263     \glsabbrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi} %
```

```
6264     \ifglsxtrinsertinside\else#3\fi
```

```
6265   } %
```

```
6266   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname} %
```

```
6267 } %
```

```
6268 \glspostlinkhook
```

```
6269 }
```

## \GLSxtrshort

```
6270 \newrobustcmd*{\GLSxtrshort}{\gls@hyp@opt\ns@GLSxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
6271 \newcommand*{\ns@GLSxtrshort}[2] []{%
```

```
6272   \new@ifnextchar[{\ns@GLSxtrshort[#1]{#2}}{\ns@GLSxtrshort[#1]{#2}[]}%
```

```
6273 }
```

Read in the final optional argument:

```
6274 \def\@GLSxtrshort#1#2[#3]{%
```

```
6275   \glsdoifexists{#2} %
```

```
6276 {%
```

```
6277   \glssetabrvfmt{\glscategory{#2}} %
```

```
6278   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
```

```
6279   \let\glsxtrifwasfirstuse@secondoftwo
```

```
6280   \let\glsifplural@secondoftwo
```

```
6281   \let\glscapscase@thirdofthree
```

```
6282   \let\glsinsert@\empty
```

```
6283   \def\glscustomtext{%
```

```
6284     \mfirstucMakeUppercase
```

```
6285     \glsabbrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi} %
```

```
6286     \ifglsxtrinsertinside\else#3\fi
```

```

6287      }%
6288      }%
6289      \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6290      }%
6291      \glspostlinkhook
6292 }

```

### \glsxtrlong

```
6293 \newrobustcmd*\glsxtrlong{\gls@hyp@opt\ns@glsxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

6294 \newcommand*{\ns@glsxtrlong}[2][]{%
6295   \new@ifnextchar{`}{\glsxtrlong[#1]{#2}}{\glsxtrlong[#1]{#2}[]}
6296 }

```

Read in the final optional argument:

```

6297 \def\glsxtrlong#1#2[#3]{%
6298   \glsdoifexists{#2}%
6299   {%
6300     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6301     \let\glsxtrifwasfirstuse\secondoftwo
6302     \let\glsifplural\secondoftwo
6303     \let\glscapscase\firstofthree
6304     \let\glsinsert\empty
6305     \def\glscustomtext{%
6306       \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
6307       \ifglsxtrinsertinside\else#3\fi
6308     }%
6309     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6310   }%
6311   \glspostlinkhook
6312 }

```

### \Glsxtrlong

```
6313 \newrobustcmd*\Glsxtrlong{\gls@hyp@opt\ns@Glsxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

6314 \newcommand*{\ns@Glsxtrlong}[2][]{%
6315   \new@ifnextchar{`}{\Glsxtrlong[#1]{#2}}{\Glsxtrlong[#1]{#2}[]}
6316 }

```

Read in the final optional argument:

```

6317 \def\Glsxtrlong#1#2[#3]{%
6318   \glsdoifexists{#2}%
6319   {%
6320     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6321     \let\glsxtrifwasfirstuse\secondoftwo
6322     \let\glsifplural\secondoftwo
6323     \let\glscapscase\secondofthree
6324     \let\glsinsert\empty
6325     \def\glscustomtext{%

```

```

6326      \glslongfont{\Glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
6327      \ifglsxtrinsertinside\else#3\fi
6328  }%
6329  \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6330 }%
6331 \glspostlinkhook
6332 }

```

## \GLSxtrlong

```
6333 \newrobustcmd*\{\GLSxtrlong\}{\gls@hyp@opt\ns@GLSxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

6334 \newcommand*\{\ns@GLSxtrlong\}[2] []{%
6335  \new@ifnextchar[\{@GLSxtrlong{#1}{#2}\}{\@GLSxtrlong{#1}{#2}[]}%
6336 }

```

Read in the final optional argument:

```

6337 \def\@GLSxtrlong#1#2[#3]{%
6338  \glsdoifexists{#2}%
6339  {%
6340    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6341    \let\glsxtrifwasfirstuse\secondoftwo
6342    \let\glsifplural\secondoftwo
6343    \let\glscapscase\thirdofthree
6344    \let\glsinsert\empty
6345    \def\glscustomtext{%
6346      \mfirstrucMakeUppercase
6347      {\glslongfont{\Glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
6348       \ifglsxtrinsertinside\else#3\fi
6349     }%
6350   }%
6351   \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6352 }%
6353 \glspostlinkhook
6354 }

```

Plural short forms:

## \glsxtrshortpl

```
6355 \newrobustcmd*\{\glsxtrshortpl\}{\gls@hyp@opt\ns@glsxtrshortpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

6356 \newcommand*\{\ns@glsxtrshortpl\}[2] []{%
6357  \new@ifnextchar[\{@glsxtrshortpl{#1}{#2}\}{\@glsxtrshortpl{#1}{#2}[]}%
6358 }

```

Read in the final optional argument:

```

6359 \def\@glsxtrshortpl#1#2[#3]{%
6360  \glsdoifexists{#2}%
6361  {%
6362    \glssetabrvfmt{\glscategory{#2}}%

```

```

6363   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6364   \let\glsxtrifwasfirstuse\@secondoftwo
6365   \let\glsifplural\@firstoftwo
6366   \let\glscapscase\@firstofthree
6367   \let\glsinsert\@empty
6368   \def\glscustomtext{%
6369     \glsabbrvfont{\glsaccessshortpl{\#2}\ifglsxtrinsertinside#3\fi}%
6370     \ifglsxtrinsertinside\else#3\fi
6371   }%
6372   \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
6373 }%
6374 \glspostlinkhook
6375 }

```

### \Glsxtrshortpl

```

6376 \newrobustcmd*{\Glsxtrshortpl}{\gls@hyp@opt\ns@Glsxtrshortpl}
Define the un-starred form. Need to determine if there is a final optional argument
6377 \newcommand*{\ns@Glsxtrshortpl}[2][]{%
6378   \new@ifnextchar[{\@Glsxtrshortpl{\#1}{\#2}}{\@Glsxtrshortpl{\#1}{\#2}[]}}%
6379 }

```

Read in the final optional argument:

```

6380 \def{@Glsxtrshortpl#1#2[#3]}{%
6381   \glsdoifexists{\#2}{%
6382     \glssetabbrvfmt{\glscategory{\#2}}%
6383     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6384     \let\glsxtrifwasfirstuse\@secondoftwo
6385     \let\glsifplural\@firstoftwo
6386     \let\glscapscase\@secondofthree
6387     \let\glsinsert\@empty
6388     \def\glscustomtext{%
6389       \glsabbrvfont{\Glsaccessshortpl{\#2}\ifglsxtrinsertinside#3\fi}%
6390       \ifglsxtrinsertinside\else#3\fi
6391     }%
6392     \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
6393   }%
6394 }%
6395 \glspostlinkhook
6396 }

```

### \GLSxtrshortpl

```

6397 \newrobustcmd*{\GLSxtrshortpl}{\gls@hyp@opt\ns@GLSxtrshortpl}
Define the un-starred form. Need to determine if there is a final optional argument
6398 \newcommand*{\ns@GLSxtrshortpl}[2][]{%
6399   \new@ifnextchar[{\@GLSxtrshortpl{\#1}{\#2}}{\@GLSxtrshortpl{\#1}{\#2}[]}}%
6400 }

```

Read in the final optional argument:

```

6401 \def{@GLSxtrshortpl#1#2[#3]}{%

```

```

6402 \glsdoifexists{#2}%
6403 {%
6404   \glssetabrvfmt{\glscategory{#2}}%
6405   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6406   \let\glsxtrifwasfirstuse@secondoftwo
6407   \let\glsifplural@firstoftwo
6408   \let\glscapscase@thirdofthree
6409   \let\glsinsert@\empty
6410   \def\glscustomtext{%
6411     \mfirstucMakeUppercase
6412     {\glsabbrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
6413      \ifglsxtrinsertinside\else#3\fi
6414    }%
6415  }%
6416  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6417 }%
6418 \glspostlinkhook
6419 }

```

Plural long forms:

```
\glsxtrlongpl
6420 \newrobustcmd*\glsxtrlongpl{\gls@hyp@opt\ns@glsxtrlongpl}
Define the un-starred form. Need to determine if there is a final optional argument
6421 \newcommand*\ns@glsxtrlongpl[2][]{%
6422   \new@ifnextchar[\glsxtrlongpl{#1}{#2}]{\glsxtrlongpl{#1}{#2}[]}{%
6423 }


```

Read in the final optional argument:

```

6424 \def\glsxtrlongpl#1#2[#3]{%
6425   \glsdoifexists{#2}%
6426 {%
6427   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6428   \let\glsxtrifwasfirstuse@secondoftwo
6429   \let\glsifplural@firstoftwo
6430   \let\glscapscase@firstofthree
6431   \let\glsinsert@\empty
6432   \def\glscustomtext{%
6433     \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
6434     \ifglsxtrinsertinside\else#3\fi
6435   }%
6436   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6437 }%
6438 \glspostlinkhook
6439 }

```

```
\Glsxtrlongpl
6440 \newrobustcmd*\Glsxtrlongpl{\gls@hyp@opt\ns@Glsxtrlongpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
6441 \newcommand*{\ns@Glsxtrlongpl}[2] []{%
6442   \new@ifnextchar[{\@\Glsxtrlongpl{#1}{#2}}{\@\Glsxtrlongpl{#1}{#2}[] }%
6443 }
```

Read in the final optional argument:

```
6444 \def\@Glsxtrlongpl#1#2[#3]{%
6445   \glsdoifexists{#2}%
6446   {%
6447     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6448     \let\glsxtrifwasfirstuse\@secondoftwo
6449     \let\glsifplural\@firstoftwo
6450     \let\glscapscase\@secondofthree
6451     \let\glsinsert\@empty
6452     \def\glscustomtext{%
6453       \glslongfont{\Glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
6454       \ifglsxtrinsertinside\else#3\fi
6455     }%
6456     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6457   }%
6458   \glspostlinkhook
6459 }
```

## \GLSxtrlongpl

```
6460 \newrobustcmd*{\GLSxtrlongpl}{\gls@hyp@opt\ns@GLSxtrlongpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
6461 \newcommand*{\ns@GLSxtrlongpl}[2] []{%
6462   \new@ifnextchar[{\@\GLSxtrlongpl{#1}{#2}}{\@\GLSxtrlongpl{#1}{#2}[] }%
6463 }
```

Read in the final optional argument:

```
6464 \def\@GLSxtrlongpl#1#2[#3]{%
6465   \glsdoifexists{#2}%
6466   {%
6467     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6468     \let\glsxtrifwasfirstuse\@secondoftwo
6469     \let\glsifplural\@firstoftwo
6470     \let\glscapscase\@thirdofthree
6471     \let\glsinsert\@empty
6472     \def\glscustomtext{%
6473       \mfirstucMakeUppercase
6474       \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
6475       \ifglsxtrinsertinside\else#3\fi
6476     }%
6477   }%
6478   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6479 }%
6480 \glspostlinkhook
6481 }
```

\glssetabbrvfmt Set the current format for the given category (or the abbreviation category if unset).

```
6482 \newcommand*\glssetabbrvfmt[1]{%
6483   \ifcsdef{@glsabbrv@current@#1}{%
6484     {\glsxtr@applyabbrvfmt{\csname@glsabbrv@current@#1\endcsname}}{%
6485       {\glsxtr@applyabbrvfmt{\glsabbrv@current@abbreviation}}{%
6486     }}}
```

\glsuseabbrvfont Provide a way to use the abbreviation font for a given category for arbitrary text.

```
6487 \newrobustcmd*\glsuseabbrvfont[2]{{\glssetabbrvfmt{#2}\glsabbrvfont{#1}}}
```

\glsuselongfont Provide a way to use the long font for a given category for arbitrary text.

```
6488 \newrobustcmd*\glsuselongfont[2]{{\glssetabbrvfmt{#2}\glslongfont{#1}}}
```

\sxtrgenabbrvfmt Similar to \glsgenacfmt, but for abbreviations.

```
6489 \newcommand*\glsxtrgenabbrvfmt{%
6490   \ifdefempty{\glscustomtext}{%
6491     {%
6492       \ifglsused{\glslabel}{%
6493         {}}
```

Subsequent use:

```
6494   \glsifplural
6495   {}}
```

Subsequent plural form:

```
6496   \glscapscase
6497   {}}
```

Subsequent plural form, don't adjust case:

```
6498   \glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
6499   {%
6500   {}}
```

Subsequent plural form, make first letter upper case:

```
6501   \Glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
6502   {%
6503   {}}
```

Subsequent plural form, all caps:

```
6504   \mfirstucMakeUppercase
6505   {\glsxtrsubsequentplfmt{\glslabel}{\glsinsert}}%
6506   {%
6507   {%
6508   {}}
```

Subsequent singular form

```
6509   \glscapscase
6510   {}}
```

Subsequent singular form, don't adjust case:

```
6511      \glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
6512      }%
6513      {%
```

Subsequent singular form, make first letter upper case:

```
6514      \Glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
6515      }%
6516      {%
```

Subsequent singular form, all caps:

```
6517      \mfirstucMakeUppercase
6518      {\glsxtrsubsequentfmt{\glslabel}{\glsinsert}}%
6519      }%
6520      }%
6521      }%
6522      {%
```

First use:

```
6523      \glsifplural
6524      {%
```

First use plural form:

```
6525      \glscapscase
6526      {%
```

First use plural form, don't adjust case:

```
6527      \glsxtrfullplformat{\glslabel}{\glsinsert}%
6528      }%
6529      {%
```

First use plural form, make first letter upper case:

```
6530      \Glsxtrfullplformat{\glslabel}{\glsinsert}%
6531      }%
6532      {%
```

First use plural form, all caps:

```
6533      \mfirstucMakeUppercase
6534      {\glsxtrfullplformat{\glslabel}{\glsinsert}}%
6535      }%
6536      }%
6537      {%
```

First use singular form

```
6538      \glscapscase
6539      {%
```

First use singular form, don't adjust case:

```
6540      \glsxtrfullformat{\glslabel}{\glsinsert}%
6541      }%
6542      {%
```

First use singular form, make first letter upper case:

```
6543      \Glsxtrfullformat{\glslabel}{\glsinsert}%
6544      }%
6545      {%
```

First use singular form, all caps:

```
6546      \mfirstucMakeUppercase
6547      {\Glsxtrfullformat{\glslabel}{\glsinsert}}%
6548      }%
6549      }%
6550      }%
6551      }%
6552      {%
```

User supplied text.

```
6553      \glscustomtext
6554      }%
6555 }
```

trsubsequentfmt Subsequent use format (singular no case change).

```
6556 \newcommand*{\Glsxtrsubsequentfmt}[2]{%
6557   \glsabbrvfont{\glsaccessshort{\#1}\ifglsxtrinsertinside #2\fi}%
6558   \ifglsxtrinsertinside \else#2\fi
6559 }
6560 \let\glsxtrdefaultsubsequentfmt\glsxtrsubsequentfmt
```

subsequentplfmt Subsequent use format (plural no case change).

```
6561 \newcommand*{\Glsxtrsubsequentplfmt}[2]{%
6562   \glsabbrvfont{\glsaccessshortpl{\#1}\ifglsxtrinsertinside #2\fi}%
6563   \ifglsxtrinsertinside \else#2\fi
6564 }
6565 \let\glsxtrdefaultsubsequentplfmt\glsxtrsubsequentplfmt
```

trsubsequentfmt Subsequent use format (singular, first letter uppercase).

```
6566 \newcommand*{\Glsxtrsubsequentfmt}[2]{%
6567   \glsabbrvfont{\Glsaccessshort{\#1}\ifglsxtrinsertinside #2\fi}%
6568   \ifglsxtrinsertinside \else#2\fi
6569 }
6570 \let\Glsxtrdefaultsubsequentfmt\Glsxtrsubsequentfmt
```

subsequentplfmt Subsequent use format (plural, first letter uppercase).

```
6571 \newcommand*{\Glsxtrsubsequentplfmt}[2]{%
6572   \glsabbrvfont{\Glsaccessshortpl{\#1}\ifglsxtrinsertinside #2\fi}%
6573   \ifglsxtrinsertinside \else#2\fi
6574 }
6575 \let\Glsxtrdefaultsubsequentplfmt\Glsxtrsubsequentplfmt
```

### 1.6.1 Abbreviation Styles Setup

```
abbreviationstyle
6576 \newcommand*{\setabbreviationstyle}[2] [abbreviation]{%
6577   \ifcsundef{@glsabbrv@dispstyle@setup@#2}%
6578   {%
6579     \PackageError{glossaries-extra}{Undefined abbreviation style '#2'}{}%
6580   }%
6581   {%
6582     Have abbreviations already been defined for this category?%
6583     \ifcsstring{@glsabbrv@current@#1}{#2}%
6584     {%
6585       Style already set.%
6586       }%
6587       \def\@glsxtr@dostylewarn{}%
6588       \glsforeachincategory{#1}{\@gls@type}{\@gls@label}%
6589       {%
6590         \def\@glsxtr@dostylewarn{\GlossariesWarning{Abbreviation%
6591           style has been switched \MessageBreak%
6592           for category '#1', \MessageBreak%
6593           but there have already been entries \MessageBreak%
6594           defined for this category. Unwanted \MessageBreak%
6595           side-effects may result}}%
6596         \@endfortrue%
6597       }%
6598       \@glsxtr@dostylewarn
6599     Set up the style for the given category.%
6600     \csdef{@glsabbrv@current@#1}{#2}%
6601     \glsxtr@applyabbrvstyle{#2}%
6602   }%
6603 }
```

applyabbrvstyle Apply the abbreviation style without existence check.

```
6603 \newcommand*{\glsxtr@applyabbrvstyle}[1]{%
6604   \csuse{@glsabbrv@dispstyle@setup@#1}%
6605   \csuse{@glsabbrv@dispstyle@fmts@#1}%
6606 }
```

r@applyabbrvfmt Only apply the style formats.

```
6607 \newcommand*{\glsxtr@applyabbrvfmt}[1]{%
6608   \csuse{@glsabbrv@dispstyle@fmts@#1}%
6609 }
```

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.

```

6610 \newcommand*{\newabbreviationstyle}[3]{%
6611   \ifcsdef{glsabrv@dispstyle@setup@#1}{%
6612     {%
6613       \PackageError{glossaries-extra}{Abbreviation style '#1' already
6614         defined}{}{}}%
6615   }%
6616   {%
6617     \csdef{glsabrv@dispstyle@setup@#1}{%

```

Initialise hook to do nothing. The style may change this.

```

6618   \renewcommand*{\GlsXtrPostNewAbbreviation}{}{%
6619     #2}{%
6620     \csdef{glsabrv@dispstyle@fmts@#1}{%

```

Assume in-line form is the same as first use. The style may change this.

```

6621   \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}{%
6622     \renewcommand*{\GlsXtrInlineFullFormat}{\GlsXtrFullFormat}{%
6623       \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}{%
6624         \renewcommand*{\GlsXtrInlineFullPLFormat}{\GlsXtrFullPLFormat}{%

```

Reset \glsxtrsubsequentfmt etc in case a style changes this.

```

6625   \let\glsxtrsubsequentfmt\glsxtrdefaultsubsequentfmt
6626   \let\glsxtrsubsequentplfmt\glsxtrdefaultsubsequentplfmt
6627   \let\GlsXtrSubsequentFmt\GlsXtrDefaultSubsequentFmt
6628   \let\GlsXtrSubsequentPlFmt\GlsXtrDefaultSubsequentPlFmt
6629   #3}{%
6630 }%
6631 }

```

breviationstyle

```

6632 \newcommand*{\renewabbreviationstyle}[3]{%
6633   \ifcsundef{glsabrv@dispstyle@setup@#1}{%
6634     {%
6635       \PackageError{glossaries-extra}{Abbreviation style '#1' not defined}{}{}}%
6636     }%
6637     {%
6638       \csdef{glsabrv@dispstyle@setup@#1}{%

```

Initialise hook to do nothing. The style may change this.

```

6639   \renewcommand*{\GlsXtrPostNewAbbreviation}{}{%
6640     #2}{%
6641     \csdef{glsabrv@dispstyle@fmts@#1}{%

```

Assume in-line form is the same as first use. The style may change this.

```

6642   \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}{%
6643     \renewcommand*{\GlsXtrInlineFullFormat}{\GlsXtrFullFormat}{%
6644       \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}{%
6645         \renewcommand*{\GlsXtrInlineFullPLFormat}{\GlsXtrFullPLFormat}{%
6646         #3}{%
6647     }%
6648 }

```

abbreviationstyle Define a synonym for an abbreviation style. The first argument is the new name. The second argument is the original style's name.

```
6649 \newcommand*{\letabbreviationstyle}[2]{%
6650   \csletcs{@glsabbrv@dispstyle@setup@#1}{@glsabbrv@dispstyle@setup@#2}%
6651   \csletcs{@glsabbrv@dispstyle@fmts@#1}{@glsabbrv@dispstyle@fmts@#2}%
6652 }
```

ecated@abbrstyle \glsxtr@deprecated@abbrstyle{<old-name>}{<new-name>}

Define a synonym for a deprecated abbreviation style.

```
6653 \newcommand*{\@glsxtr@deprecated@abbrstyle}[2]{%
6654   \csdef{@glsabbrv@dispstyle@setup@#1}{%
6655     \GlsXtrWarnDeprecatedAbbrStyle{#1}{#2}%
6656     \csuse{@glsabbrv@dispstyle@setup@#2}%
6657   }%
6658   \csletcs{@glsabbrv@dispstyle@fmts@#1}{@glsabbrv@dispstyle@fmts@#2}%
6659 }
```

ecatedAbbrStyle Generate warning for deprecated style use.

```
6660 \newcommand*{\GlsXtrWarnDeprecatedAbbrStyle}[2]{%
6661   \GlossariesExtraWarning{Deprecated abbreviation style name '#1',
6662   use '#2' instead}%
6663 }
```

eAbbrStyleSetup

```
6664 \newcommand*{\GlsXtrUseAbbrStyleSetup}[1]{%
6665   \ifcsundef{@glsabbrv@dispstyle@setup@#1}%
6666   {%
6667     \PackageError{glossaries-extra}%
6668     {Unknown abbreviation style definitions '#1'}{}%
6669   }%
6670   {%
6671     \csname @glsabbrv@dispstyle@setup@#1\endcsname
6672   }%
6673 }
```

seAbbrStyleFmts

```
6674 \newcommand*{\GlsXtrUseAbbrStyleFmts}[1]{%
6675   \ifcsundef{@glsabbrv@dispstyle@fmts@#1}%
6676   {%
6677     \PackageError{glossaries-extra}%
6678     {Unknown abbreviation style formats '#1'}{}%
6679   }%
6680   {%
6681     \csname @glsabbrv@dispstyle@fmts@#1\endcsname
6682   }%
6683 }
```

## 1.6.2 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.

```
6684 \newif\ifglsxtrinsertinside  
6685 \glsxtrinsertinsidetru
```

long-short

```
6686 \newabbreviationstyle{long-short}{%  
6687 {  
6688   \renewcommand*{\CustomAbbreviationFields}{%  
6689     name={\protect\glsabbrvfont{\the\glsshorttok}},  
6690     sort={\the\glsshorttok},  
6691     first={\protect\glsfirstlongfont{\the\glslongtok}}%  
6692     \protect\glsxtrfullsep{\the\glslabeltok}%  
6693     \glsxtrparen{\protect\glsfirststabrvfont{\the\glsshorttok}}},%  
6694     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}}%  
6695     \protect\glsxtrfullsep{\the\glslabeltok}%  
6696     \glsxtrparen{\protect\glsfirststabrvfont{\the\glsshortpltok}}},%  
6697     plural={\protect\glsabbrvfont{\the\glsshortpltok}},%  
6698     description={\the\glslongtok}}%
```

Unset the regular attribute if it has been set.

```
6699 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  
6700   \glshasattribute{\the\glslabeltok}{regular}}%  
6701   {}%  
6702   \glssetattribute{\the\glslabeltok}{regular}{false}}%  
6703   {}%  
6704   {}%  
6705 }%  
6706 {}%  
6707 {}%
```

In case the user wants to mix and match font styles, these are redefined here.

```
6708 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%  
6709 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%  
6710 \renewcommand*{\glsfirststabrvfont}[1]{\glsfirststabrvdefaultfont{##1}}%  
6711 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%  
6712 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
6713 \renewcommand*{\glsxtrfullformat}[2]{%
6714   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
6715   \ifglsxtrinsertinside\else##2\fi
6716   \glsxtrfullsep{##1}%
6717   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
6718 }%
6719 \renewcommand*{\glsxtrfullplformat}[2]{%
6720   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
6721   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6722   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
6723 }%
6724 \renewcommand*{\Glsxtrfullformat}[2]{%
6725   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
6726   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6727   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
6728 }%
6729 \renewcommand*{\Glsxtrfullplformat}[2]{%
6730   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
6731   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6732   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
6733 }%
6734 }
```

Set this as the default style for general abbreviations:

```
6735 \setabbreviationstyle{long-short}
```

ngshortdescsort

```
6736 \newcommand*{\glsxtrlongshortdescsort}{%
6737   \expandonce\glsxtrorglong\space (\expandonce\glsxtrorgshort)%
6738 }
```

ngshortdescname

```
6739 \newcommand*{\glsxtrlongshortdescname}{%
6740   \protect\glslongfont{\the\glslongtok}%
6741   \glsxtrparen{\protect\glsabbrvfont{\the\glsshorttok}}}%
6742 }
```

long-short-desc User supplies description. The long form is included in the name.

```
6743 \newabbreviationstyle{long-short-desc}%
6744 {%
6745   \renewcommand*{\CustomAbbreviationFields}{%
6746     name={\glsxtrlongshortdescname},
6747     sort={\glsxtrlongshortdescsort},%
6748     first={\protect\glsfirstlongfont{\the\glslongtok}%
6749       \protect\glsxtrfullsep{\the\glslabeltok}},%
6750       \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
6751     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}%
6752       \protect\glsxtrfullsep{\the\glslabeltok}}%
```

```

6753     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%
The text key should only have the short form.
6754     text={\protect\glsabbrvfont{\the\glsshorttok}},%
6755     plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%
6756 }%

```

Unset the regular attribute if it has been set.

```

6757 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
6758   \glshasattribute{\the\glslabeltok}{regular}%
6759   {%
6760     \glssetattribute{\the\glslabeltok}{regular}{false}%
6761   }%
6762   {}%
6763 }%
6764 }%
6765 {%
6766 \GlsXtrUseAbbrStyleFmts{long-short}%
6767 }%

```

**short-long** Short form followed by long form in parenthesis on first use.

```

6768 \newabbreviationstyle{short-long}%
6769 {%
6770 \renewcommand*{\CustomAbbreviationFields}{%
6771   name={\protect\glsabbrvfont{\the\glsshorttok}},%
6772   sort={\the\glsshorttok},%
6773   description={\the\glslongtok},%
6774   first={\protect\glsfirstabbrvfont{\the\glsshorttok}}%
6775   \protect\glsxtrfullsep{\the\glslabeltok}%
6776   \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
6777   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}}%
6778   \protect\glsxtrfullsep{\the\glslabeltok}%
6779   \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
6780   plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

6781 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
6782   \glshasattribute{\the\glslabeltok}{regular}%
6783   {%
6784     \glssetattribute{\the\glslabeltok}{regular}{false}%
6785   }%
6786   {}%
6787 }%
6788 }%
6789 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

6790 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
6791 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%

```

```

6792 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
6793 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
6794 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

6795 \renewcommand*{\glsxtrfullformat}[2]{%
6796   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6797   \ifglsxtrinsertinside\else##2\fi
6798   \glsxtrfullsep{##1}%
6799   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
6800 }%
6801 \renewcommand*{\glsxtrfullplformat}[2]{%
6802   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6803   \ifglsxtrinsertinside\else##2\fi
6804   \glsxtrfullsep{##1}%
6805   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
6806 }%
6807 \renewcommand*{\Glsxtrfullformat}[2]{%
6808   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6809   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6810   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
6811 }%
6812 \renewcommand*{\Glsxtrfullplformat}[2]{%
6813   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6814   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6815   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
6816 }%
6817 }

```

ortlongdescsort

```
6818 \newcommand*{\glsxtrshortlongdescsort}{\the\glsshorttok}
```

ortlongdescname

```

6819 \newcommand*{\glsxtrshortlongdescname}{%
6820   \protect\glsabbrvfont{\the\glsshorttok}%
6821   \glsxtrparen{\protect\glslongfont{\the\glslongtok}}}%
6822 }

```

short-long-desc User supplies description. The long form is included in the name.

```

6823 \newabbreviationstyle{short-long-desc}%
6824 {%
6825   \renewcommand*{\CustomAbbreviationFields}{%
6826     name={\glsxtrshortlongdescname},
6827     sort={\glsxtrshortlongdescsort},
6828     first={\protect\glsfirstabbrvfont{\the\glsshorttok}}%
6829     \protect\glsxtrfullsep{\the\glslabeltok}%
6830     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
6831     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}}%
6832     \protect\glsxtrfullsep{\the\glslabeltok}%
6833     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%

```

```

6834     text={\protect\glsabbrvfont{\the\glsshorttok}},%
6835     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
6836 }%

```

Unset the regular attribute if it has been set.

```

6837 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
6838   \glshasattribute{\the\glslabeltok}{regular}%
6839   {%
6840     \glssetattribute{\the\glslabeltok}{regular}{false}%
6841   }%
6842   {}%
6843 }%
6844 }%
6845 {%
6846 \GlsXtrUseAbbrStyleFmts{short-long}%
6847 }

```

`ongfootnotefont` Only used by the “footnote” styles.

```
6848 \newcommand*{\glsfirstlongfootnotefont}[1]{\glslongfootnotefont{#1}}%
```

`ongfootnotefont` Only used by the “footnote” styles.

```
6849 \newcommand*{\glslongfootnotefont}[1]{\glslongdefaultfont{#1}}%
```

`xtrabbrvfootnote` `\glsxtrabbrvfootnote{\langle label \rangle}{\langle long \rangle}`

Command used by footnote abbreviation styles. The default definition ignores the first argument. The second argument `\langle long \rangle` includes the font changing command and may be the singular or plural form, depending on the command that was used (for example, `\gls` or `\glspl`).

```
6850 \newcommand*{\glsxtrabbrvfootnote}[2]{\footnote{#2}}
```

`footnote` Short form followed by long form in footnote on first use.

```

6851 \newabbreviationstyle{footnote}{%
6852 {%
6853   \renewcommand*{\CustomAbbreviationFields}{%
6854     name={\protect\glsabbrvfont{\the\glsshorttok}},%
6855     sort={\the\glsshorttok},%
6856     description={\the\glslongtok},%
6857     first={\protect\glsfirstabbrvfont{\the\glsshorttok}}%
6858     {\protect\glsxtrabbrvfootnote{\the\glslabeltok}}%,%
6859     {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
6860     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}}%
6861     {\protect\glsxtrabbrvfootnote{\the\glslabeltok}}%
6862     {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%

```

```

6863     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.
6864 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
6865   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
6866   \glshasattribute{\the\glslabeltok}{regular}%
6867   {%
6868     \glssetattribute{\the\glslabeltok}{regular}{false}%
6869   }%
6870   {}%
6871 }%
6872 }%
6873 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

6874 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
6875 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
6876 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
6877 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
6878 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

6879 \renewcommand*{\glsxtrfullformat}[2]{%
6880   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6881   \ifglsxtrinsertinside\else##2\fi
6882   \protect\glsxtrabbrvfootnote{##1}%
6883   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6884 }%
6885 \renewcommand*{\glsxtrfullplformat}[2]{%
6886   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6887   \ifglsxtrinsertinside\else##2\fi
6888   \protect\glsxtrabbrvfootnote{##1}%
6889   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6890 }%
6891 \renewcommand*{\Glsxtrfullformat}[2]{%
6892   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6893   \ifglsxtrinsertinside\else##2\fi
6894   \protect\glsxtrabbrvfootnote{##1}%
6895   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6896 }%
6897 \renewcommand*{\Glsxtrfullplformat}[2]{%
6898   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6899   \ifglsxtrinsertinside\else##2\fi
6900   \protect\glsxtrabbrvfootnote{##1}%
6901   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6902 }%

```

The first use full form and the inline full form use the short (long) style.

```

6903 \renewcommand*{\glsxtrinlinefullformat}[2]{%
6904   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%

```

```

6905     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6906     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6907   }%
6908   \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
6909     \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6910     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6911     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6912   }%
6913   \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
6914     \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6915     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6916     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6917   }%
6918   \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
6919     \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6920     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6921     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6922   }%
6923 }

```

#### short-footnote

```
6924 \letabbreviationstyle{short-footnote}{footnote}
```

**postfootnote** Similar to the above 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.

```

6925 \newabbreviationstyle{postfootnote}%
6926 {%
6927   \renewcommand*\{\CustomAbbreviationFields}{%
6928     name={\protect\glsabbrvfont{\the\glsshorttok}},%
6929     sort={\the\glsshorttok},%
6930     description={\the\glslongtok},%
6931     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
6932     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
6933     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.

```

6934 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
6935   \csdef{glsxtrpostlink\glscategorylabel}{%
6936     \glsxtrifwasfirstuse
6937   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

6938   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
6939   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
6940 }

```

```

6941     {}%
6942   }%
6943   \glshasattribute{\the\glslabeltok}{regular}%
6944   {}%
6945     \glssetattribute{\the\glslabeltok}{regular}{false}%
6946   }%
6947   {}%
6948 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

6949 \renewcommand*{\glsxtrsetupfulldefs}{%
6950   \let\glsxtrifwasfirstuse\secondoftwo
6951 }%
6952 }%
6953 {}%

```

In case the user wants to mix and match font styles, these are redefined here.

```

6954 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbbrvpluralsuffix}%
6955 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
6956 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
6957 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
6958 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

6959 \renewcommand*{\glsxtrfullformat}[2]{%
6960   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6961   \ifglsxtrinsertinside\else##2\fi
6962 }%
6963 \renewcommand*{\glsxtrfullplformat}[2]{%
6964   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6965   \ifglsxtrinsertinside\else##2\fi
6966 }%
6967 \renewcommand*{\Glsxtrfullformat}[2]{%
6968   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6969   \ifglsxtrinsertinside\else##2\fi
6970 }%
6971 \renewcommand*{\Glsxtrfullplformat}[2]{%
6972   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6973   \ifglsxtrinsertinside\else##2\fi
6974 }%

```

The first use full form and the inline full form use the short (long) style.

```

6975 \renewcommand*{\glsxtrinlinetfullformat}[2]{%
6976   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6977   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6978   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6979 }%
6980 \renewcommand*{\glsxtrinlinetfullplformat}[2]{%
6981   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6982   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%

```

```

6983     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6984   }%
6985   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
6986     \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6987     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6988     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6989   }%
6990   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
6991     \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6992     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6993     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6994   }%
6995 }

```

#### rt-postfootnote

```
6996 \letabbreviationstyle{short-postfootnote}{postfootnote}
```

**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.

```

6997 \newabbreviationstyle{short}{%
6998 }%
6999 \renewcommand*{\CustomAbbreviationFields}{%
7000   name={\protect\glsabbrvfont{\the\glsshorttok}},%
7001   sort={\the\glsshorttok},%
7002   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
7003   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
7004   text={\protect\glsabbrvfont{\the\glsshorttok}},%
7005   plural={\protect\glsabbrvfont{\the\glsshortpltok}},%
7006   description={\the\glslongtok}}%
7007 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7008   \glssetattribute{\the\glslabeltok}{regular}{true}}%
7009 }%
7010 }%

```

In case the user wants to mix and match font styles, these are redefined here.

```

7011 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7012 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7013 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
7014 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7015 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

7016 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7017   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
7018   \ifglsxtrinsertinside##2\fi}%
7019   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7020   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}}%
7021 }%

```

```

7022 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7023   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
7024   \ifglsxtrinsertinside##2\fi}%
7025   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7026   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7027 }%
7028 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7029   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
7030   \ifglsxtrinsertinside##2\fi}%
7031   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7032   \glsxtrparen{\glsfirstlongfont{\Glsaccesslong{##1}}}%
7033 }%
7034 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7035   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
7036   \ifglsxtrinsertinside##2\fi}%
7037   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7038   \glsxtrparen{\glsfirstlongfont{\Glsaccesslongpl{##1}}}%
7039 }%

```

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.

```

7040 \renewcommand*{\glsxtrfullformat}[2]{%
7041   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7042   \ifglsxtrinsertinside\else##2\fi
7043 }%
7044 \renewcommand*{\glsxtrfullplformat}[2]{%
7045   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7046   \ifglsxtrinsertinside\else##2\fi
7047 }%
7048 \renewcommand*{\Glsxtrfullformat}[2]{%
7049   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7050   \ifglsxtrinsertinside\else##2\fi
7051 }%
7052 \renewcommand*{\Glsxtrfullplformat}[2]{%
7053   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7054   \ifglsxtrinsertinside\else##2\fi
7055 }%
7056 }

```

Set this as the default style for acronyms:

```
7057 \setabbreviationstyle[acronym]{short}
```

#### short-nolong

```
7058 \letabbreviationstyle{short-nolong}{short}
```

#### short-nolong-noreg

Like short-nolong but doesn't set the regular attribute.

```

7059 \newabbreviationstyle{short-nolong-noreg}%
7060 {%
7061   \GlsXtrUseAbbrStyleSetup{short-nolong}%

```

Unset the regular attribute if it has been set.

```
7062 \renewcommand*\GlsXtrPostNewAbbreviation{%
7063   \glshasattribute{\the\glslabeltok}{regular}%
7064   {%
7065     \glssetattribute{\the\glslabeltok}{regular}{false}%
7066   }%
7067   {}%
7068 }%
7069 }%
7070 {}%
7071 \GlsXtrUseAbbrStyleFmts{short-nolong}%
7072 }
```

trshortdescname

```
7073 \newcommand*\glsxtrshortdescname{%
7074   \protect\glsabbrvfont{\the\glsshorttok}%
7075 }
```

**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.

```
7076 \newabbreviationstyle{short-desc}%
7077 {}%
7078 \renewcommand*\CustomAbbreviationFields{%
7079   name={\glsxtrshortdescname},
7080   sort={\the\glsshorttok},
7081   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
7082   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
7083   text={\protect\glsabbrvfont{\the\glsshorttok}},
7084   plural={\protect\glsabbrvfont{\the\glsshortpltok}},
7085   description={\the\glslongtok}}%
7086 \renewcommand*\GlsXtrPostNewAbbreviation{%
7087   \glssetattribute{\the\glslabeltok}{regular}{true}}%
7088 }%
7089 {}%
```

In case the user wants to mix and match font styles, these are redefined here.

```
7090 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
7091 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{\##1}}%
7092 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{\##1}}%
7093 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\##1}}%
7094 \renewcommand*\glslongfont[1]{\glslongdefaultfont{\##1}}%
```

The inline full form displays the short format followed by the long form in parentheses.

```
7095 \renewcommand*\glsxtrinlinefullformat}[2]{%
7096   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
7097   \ifglsxtrinsertinside\else{\##2}\fi\glsxtrfullsep{\##1}}%
7098   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{\##1}}}%
7099 }%
7100 \renewcommand*\glsxtrinlinefullplformat}[2]{%
7101   \glsfirstabbrvfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside{\##2}\fi}%
```

```

7102 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7103 \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7104 }%
7105 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7106   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7107   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7108   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7109 }%
7110 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7111   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7112   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7113   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7114 }%

```

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.

```

7115 \renewcommand*{\glsxtrfullformat}[2]{%
7116   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7117   \ifglsxtrinsertinside\else##2\fi
7118 }%
7119 \renewcommand*{\glsxtrfullplformat}[2]{%
7120   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7121   \ifglsxtrinsertinside\else##2\fi
7122 }%
7123 \renewcommand*{\Glsxtrfullformat}[2]{%
7124   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7125   \ifglsxtrinsertinside\else##2\fi
7126 }%
7127 \renewcommand*{\Glsxtrfullplformat}[2]{%
7128   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7129   \ifglsxtrinsertinside\else##2\fi
7130 }%
7131 }

```

#### short-nolong-desc

```
7132 \letabbreviationstyle{short-nolong-desc}{short-desc}
```

#### long-desc-noreg

Like short-nolong-desc but doesn't set the regular attribute.

```

7133 \newabbreviationstyle{short-nolong-desc-noreg}{%
7134 {%
7135   \GlsXtrUseAbbrStyleSetup{short-nolong-desc}}%

```

Unset the regular attribute if it has been set.

```

7136 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7137   \glshasattribute{\the\glslabeltok}{regular}%
7138   {%
7139     \glssetattribute{\the\glslabeltok}{regular}{false}%
7140   }%
7141   {}%
7142 }%

```

```

7143 }%
7144 {%
7145   \GlsXtrUseAbbrStyleFmts{short-nolong-desc}%
7146 }

```

`nolong-short` Similar to `short-nolong` but the full form shows the long form followed by the short form in parentheses.

```

7147 \newabbreviationstyle{nolong-short}%
7148 {%
7149   \GlsXtrUseAbbrStyleSetup{short-nolong}%
7150 }%
7151 {%
7152   \GlsXtrUseAbbrStyleFmts{short-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

7153 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
7154   \protect\glsfirstlongfont{\glsaccesslong{##1}%
7155     \ifglsxtrinsertinside##2\fi}%
7156     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7157     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
7158 }%
7159 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
7160   \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
7161     \ifglsxtrinsertinside##2\fi}%
7162     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7163     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
7164 }%
7165 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
7166   \protect\glsfirstlongfont{\glsaccesslong{##1}%
7167     \ifglsxtrinsertinside##2\fi}%
7168     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7169     \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshort{##1}}}}%
7170 }%
7171 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
7172   \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
7173     \ifglsxtrinsertinside##2\fi}%
7174     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7175     \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshortpl{##1}}}}%
7176 }%
7177 }

```

`ong-short-noreg` Like `nolong-short` but doesn't set the regular attribute.

```

7178 \newabbreviationstyle{nolong-short-noreg}%
7179 {%
7180   \GlsXtrUseAbbrStyleSetup{nolong-short}%

```

Unset the regular attribute if it has been set.

```

7181 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
7182   \glshasattribute{\the\glslabeltok}{regular}%
7183   {%

```

```

7184     \glssetattribute{\the\glslabeltok}{regular}{false}%
7185     }%
7186     {}%
7187     }%
7188 }%
7189 {%
7190 \GlsXtrUseAbbrStyleFmts{nolong-short}%
7191 }

```

**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.

```

7192 \newabbreviationstyle{long-desc}%
7193 {%
7194 \renewcommand*\CustomAbbreviationFields{%
7195   name={\protect\protect\glslongfont{\the\glslongtok}},%
7196   sort={\the\glslongtok},%
7197   first={\protect\glsfirstlongfont{\the\glslongtok}},%
7198   firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},%
7199   text={\glslongfont{\the\glslongtok}},%
7200   plural={\glslongfont{\the\glslongpltok}}%
7201 }%
7202 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7203   \glssetattribute{\the\glslabeltok}{regular}{true}%
7204 }%
7205 %

```

In case the user wants to mix and match font styles, these are redefined here.

```

7206 \renewcommand*\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7207 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{\##1}}%
7208 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{\##1}}%
7209 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\##1}}%
7210 \renewcommand*\glslongfont[1]{\glslongdefaultfont{\##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

7211 \renewcommand*\glsxtrsubsequentfmt}[2]{%
7212   \glslongfont{\glsaccesslong{\##1}\ifglsxtrinsertinside ##2\fi}%
7213   \ifglsxtrinsertinside \else##2\fi
7214 }%
7215 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
7216   \glslongfont{\glsaccesslongpl{\##1}\ifglsxtrinsertinside ##2\fi}%
7217   \ifglsxtrinsertinside \else##2\fi
7218 }%
7219 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
7220   \glslongfont{\Glsaccesslong{\##1}\ifglsxtrinsertinside ##2\fi}%
7221   \ifglsxtrinsertinside \else##2\fi
7222 }%
7223 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
7224   \glslongfont{\Glsaccesslongpl{\##1}\ifglsxtrinsertinside ##2\fi}%
7225   \ifglsxtrinsertinside \else##2\fi

```

```
7226 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
7227 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7228   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7229   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7230   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
7231 }%
7232 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7233   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7234   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7235   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
7236 }%
7237 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7238   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7239   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7240   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
7241 }%
7242 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7243   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7244   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7245   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
7246 }%
```

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.

```
7247 \renewcommand*{\glsxtrfullformat}[2]{%
7248   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7249   \ifglsxtrinsertinside\else##2\fi
7250 }%
7251 \renewcommand*{\glsxtrfullplformat}[2]{%
7252   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7253   \ifglsxtrinsertinside\else##2\fi
7254 }%
7255 \renewcommand*{\Glsxtrfullformat}[2]{%
7256   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7257   \ifglsxtrinsertinside\else##2\fi
7258 }%
7259 \renewcommand*{\Glsxtrfullplformat}[2]{%
7260   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7261   \ifglsxtrinsertinside\else##2\fi
7262 }%
7263 }
```

`ng-noshort-desc` Provide a synonym that matches similar styles.

```
7264 \letabbreviationstyle{long-noshort-desc}{long-desc}
```

`hort-desc-noreg` Like `long-noshort-desc` but doesn't set the regular attribute.

```
7265 \newabbreviationstyle{long-noshort-desc-noreg}%
7266 {%
```

```

7267 \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
    Unset the regular attribute if it has been set.
7268 \renewcommand*\GlsXtrPostNewAbbreviation{%
7269     \glshasattribute{\the\glslabeltok}{regular}%
7270     {%
7271         \glssetattribute{\the\glslabeltok}{regular}{false}%
7272     }%
7273     {}%
7274 }%
7275 }%
7276 {%
7277 \GlsXtrUseAbbrStyleFmts{long-noshort-desc}%
7278 }

```

`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.

```

7279 \newabbreviationstyle{long}%
7280 {%
7281 \renewcommand*\CustomAbbreviationFields{%
7282     name={\protect\glsabbrvfont{\the\glsshorttok}},%
7283     sort={\the\glsshorttok},%
7284     first={\protect\glsfirstlongfont{\the\glslongtok}},%
7285     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},%
7286     text={\glslongfont{\the\glslongtok}},%
7287     plural={\glslongfont{\the\glslongpltok}},%
7288     description={\the\glslongtok}%
7289 }%
7290 \renewcommand*\GlsXtrPostNewAbbreviation{%
7291     \glssetattribute{\the\glslabeltok}{regular}{true}%
7292 }%
7293 {%
7294 \GlsXtrUseAbbrStyleFmts{long-desc}%
7295 }

```

`long-noshort` Provide a synonym that matches similar styles.

```
7296 \letabbreviationstyle{long-noshort}{long}
```

`g-noshort-noreg` Like `long-noshort` but doesn't set the regular attribute.

```

7297 \newabbreviationstyle{long-noshort-noreg}%
7298 {%
7299 \GlsXtrUseAbbrStyleSetup{long-noshort}%
    Unset the regular attribute if it has been set.
7300 \renewcommand*\GlsXtrPostNewAbbreviation{%
7301     \glshasattribute{\the\glslabeltok}{regular}%
7302     {%
7303         \glssetattribute{\the\glslabeltok}{regular}{false}%

```

```

7304      }%
7305      {}%
7306  }%
7307 }%
7308 {%
7309   \GlsXtrUseAbbrStyleFmts{long-noshort}%
7310 }

```

### 1.6.3 Predefined Styles (Small Capitals)

These styles use `\textsc` for the short form.

`\glsxtrscfont` Maintained for backward-compatibility.

```
7311 \newcommand*{\glsxtrscfont}[1]{\textsc{#1}}
```

`\glsabbrvscfont` Added for consistent naming.

```
7312 \newcommand*{\glsabbrvscfont}{\glsxtrscfont}
```

`\sxtrfirstscfont` Maintained for backward-compatibility.

```
7313 \newcommand*{\sxtrfirstscfont}[1]{\glsabbrvscfont{#1}}
```

`\irstabbrvscfont` Added for consistent naming.

```
7314 \newcommand*{\irstabbrvscfont}{\sxtrfirstscfont}
```

and for the default short form suffix:

`\glsxtrscsuffix`

```
7315 \newcommand*{\glsxtrscsuffix}{\glstextup{\glsxtrabbrvpluralsuffix}}
```

`long-short-sc`

```

7316 \newabbreviationstyle{long-short-sc}{%
7317 {}%
7318   \renewcommand*{\CustomAbbreviationFields}{%
7319     name={\protect\glsabbrvscfont{\the\glsshorttok}},%
7320     sort={\the\glsshorttok},%
7321     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
7322       \protect\glsxtrfullsep{\the\glslabeltok}%
7323         \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
7324     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
7325       \protect\glsxtrfullsep{\the\glslabeltok}%
7326         \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
7327     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%
7328     description={\the\glslongtok}}%
7329   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7330     \glshasattribute{\the\glslabeltok}{regular}%
7331     {}%
7332       \glssetattribute{\the\glslabeltok}{regular}{false}%
7333     }%
7334   {}%

```

```
7335 }%
7336 }%
7337 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
7338 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7339 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7340 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
```

Use the default long fonts.

```
7341 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7342 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
7343 \renewcommand*{\glsxtrfullformat}[2]{%
7344   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7345   \ifglsxtrinsertinside\else##2\fi
7346   \glsxtrfullsep{##1}%
7347   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7348 }%
7349 \renewcommand*{\glsxtrfullplformat}[2]{%
7350   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7351   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7352   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7353 }%
7354 \renewcommand*{\Glsxtrfullformat}[2]{%
7355   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7356   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7357   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7358 }%
7359 \renewcommand*{\Glsxtrfullplformat}[2]{%
7360   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7361   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7362   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7363 }%
7364 }
```

#### g-short-sc-desc

```
7365 \newabbreviationstyle{long-short-sc-desc}%
7366 {%
7367 \renewcommand*{\CustomAbbreviationFields}{%
7368   name={\glsxtrlongshortdescname},
7369   sort={\glsxtrlongshortdescsort},%
7370   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
7371     \protect\glsxtrfullsep{\the\glslabeltok}%
7372     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
7373   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
7374     \protect\glsxtrfullsep{\the\glslabeltok}%
7375     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
7376   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
```

```
7377     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
7378 }
```

Unset the regular attribute if it has been set.

```
7379 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7380   \glshasattribute{\the\glslabeltok}{regular}}%
7381 {%
7382   \glssetattribute{\the\glslabeltok}{regular}{false}}%
7383 }%
7384 {}%
7385 }%
7386 }%
7387 {%
```

As long-short-sc style:

```
7388 \GlsXtrUseAbbrStyleFmts{long-short-sc}%
7389 }
```

Now the short (long) version

```
7390 \newabbreviationstyle{short-sc-long}{%
7391 {%
7392   \renewcommand*\CustomAbbreviationFields}{%
7393     name={\protect\glsabbrvscfont{\the\glsshorttok}},%
7394     sort={\the\glsshorttok},%
7395     description={\the\glslongtok},%
7396     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}}%
7397       \protect\glsxtrfullsep{\the\glslabeltok}%
7398       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}},%
7399     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}}%
7400       \protect\glsxtrfullsep{\the\glslabeltok}%
7401       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}},%
7402     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
7403 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7404   \glshasattribute{\the\glslabeltok}{regular}}%
7405 {%
7406   \glssetattribute{\the\glslabeltok}{regular}{false}}%
7407 }%
7408 {}%
7409 }%
7410 }%
7411 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
7412 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7413 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\#1}}%
7414 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\#1}}%
7415 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\#1}}%
7416 \renewcommand*\glslongfont[1]{\glslongdefaultfont{\#1}}%
```

The first use full form and the inline full form are the same for this style.

```

7417 \renewcommand*{\glsxtrfullformat}[2]{%
7418   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7419   \ifglsxtrinsertinside\else##2\fi
7420   \glsxtrfullsep{##1}%
7421   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7422 }%
7423 \renewcommand*{\glsxtrfullplformat}[2]{%
7424   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7425   \ifglsxtrinsertinside\else##2\fi
7426   \glsxtrfullsep{##1}%
7427   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
7428 }%
7429 \renewcommand*{\Glsxtrfullformat}[2]{%
7430   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7431   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7432   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7433 }%
7434 \renewcommand*{\Glsxtrfullplformat}[2]{%
7435   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7436   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7437   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
7438 }%
7439 }

```

As before but user provides description

```

7440 \newabbreviationstyle{short-sc-long-desc}%
7441 {%
7442   \renewcommand*{\CustomAbbreviationFields}{%
7443     name={\glsxtrshortlongdescname},
7444     sort={\glsxtrshortlongdescsort},
7445     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
7446       \protect\glsxtrfullsep{\the\glslabeltok}%
7447       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
7448     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
7449       \protect\glsxtrfullsep{\the\glslabeltok}%
7450       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
7451     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
7452     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
7453   }%

```

Unset the regular attribute if it has been set.

```

7454 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7455   \glshasattribute{\the\glslabeltok}{regular}%
7456   {%
7457     \glssetattribute{\the\glslabeltok}{regular}{false}%
7458   }%
7459   {}%
7460 }%
7461 }%
7462 {%

```

As short-sc-long style:

```
7463 \GlsXtrUseAbbrStyleFmts{short-sc-long}%
7464 }

short-sc
7465 \newabbreviationstyle{short-sc}%
7466 {%
7467 \renewcommand*{\CustomAbbreviationFields}{%
7468   name={\protect\glsabbrvscfont{\the\glsshorttok}},%
7469   sort={\the\glsshorttok},%
7470   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
7471   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
7472   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
7473   plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%
7474   description={\the\glslongtok}}%
7475 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7476   \glssetattribute{\the\glslabeltok}{regular}{true}}%
7477 }%
7478 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
7479 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7480 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\#1}}%
7481 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\#1}}%
7482 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\#1}}%
7483 \renewcommand*\glslongfont[1]{\glslongdefaultfont{\#1}}%
```

The inline full form displays the short form followed by the long form in parentheses.

```
7484 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7485   \protect\glsfirstabbrvscfont{\glsaccessshort{\#1}}%
7486   \ifglsxtrinsertinside##2\fi}%
7487   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
7488   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
7489 }%
7490 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7491   \protect\glsfirstabbrvscfont{\glsaccessshortpl{\#1}}%
7492   \ifglsxtrinsertinside##2\fi}%
7493   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
7494   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{\#1}}}%
7495 }%

7496 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7497   \protect\glsfirstabbrvscfont{\Glsaccessshort{\#1}}%
7498   \ifglsxtrinsertinside##2\fi}%
7499   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
7500   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
7501 }%
7502 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7503   \protect\glsfirstabbrvscfont{\Glsaccessshortpl{\#1}}%
7504   \ifglsxtrinsertinside##2\fi}%
```

```

7505     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7506     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
7507 }%

```

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.

```

7508 \renewcommand*\glsxtrfullformat[2]{%
7509   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7510   \ifglsxtrinsertinside\else##2\fi
7511 }%
7512 \renewcommand*\glsxtrfullplformat[2]{%
7513   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7514   \ifglsxtrinsertinside\else##2\fi
7515 }%
7516 \renewcommand*\Glsxtrfullformat[2]{%
7517   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7518   \ifglsxtrinsertinside\else##2\fi
7519 }%
7520 \renewcommand*\Glsxtrfullplformat[2]{%
7521   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7522   \ifglsxtrinsertinside\else##2\fi
7523 }%
7524 }

```

#### short-sc-nolong

```
7525 \letabbreviationstyle{short-sc-nolong}{short-sc}
```

#### short-sc-desc

```

7526 \newabbreviationstyle{short-sc-desc}{%
7527 }%
7528 \renewcommand*\CustomAbbreviationFields{%
7529   name={\glsxtrshortdescname},
7530   sort={\the\glsshorttok},
7531   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
7532   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
7533   text={\protect\glsabbrvscfont{\the\glsshorttok}},
7534   plural={\protect\glsabbrvscfont{\the\glsshortpltok}},
7535   description={\the\glslongtok}}%
7536 \renewcommand*\GlsXtrPostNewAbbreviation{%
7537   \glssetattribute{\the\glslabeltok}{regular}{true}}%
7538 }%
7539 }%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7540 \renewcommand*\abrvpluralsuffix}{\protect\glsxtrscsuffix}%
7541 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7542 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
7543 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7544 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```
7545 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7546   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7547   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7548   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7549 }%
7550 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7551   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7552   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7553   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
7554 }%
7555 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7556   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7557   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7558   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7559 }%
7560 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7561   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7562   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7563   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
7564 }%
```

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.

```
7565 \renewcommand*{\glsxtrfullformat}[2]{%
7566   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7567   \ifglsxtrinsertinside\else##2\fi
7568 }%
7569 \renewcommand*{\glsxtrfullplformat}[2]{%
7570   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7571   \ifglsxtrinsertinside\else##2\fi
7572 }%
7573 \renewcommand*{\Glsxtrfullformat}[2]{%
7574   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7575   \ifglsxtrinsertinside\else##2\fi
7576 }%
7577 \renewcommand*{\Glsxtrfullplformat}[2]{%
7578   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7579   \ifglsxtrinsertinside\else##2\fi
7580 }%
7581 }
```

-sc-nolong-desc

```
7582 \letabbreviationstyle{short-sc-nolong-desc}{short-sc-desc}
```

nolong-short-sc

```
7583 \newabbreviationstyle{nolong-short-sc}%
7584 {%
7585   \GlsXtrUseAbbrStyleSetup{short-sc-nolong}%
}
```

```

7586 }%
7587 {%
7588   \GlsXtrUseAbbrStyleFmts{short-sc-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

7589   \renewcommand*{\glsxtrinlinefullformat}[2]{%
7590     \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
7591       \ifglsxtrinsertinside##2\fi}%
7592     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7593     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7594 }%
7595   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7596     \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
7597       \ifglsxtrinsertinside##2\fi}%
7598     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7599     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7600 }%
7601   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7602     \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
7603       \ifglsxtrinsertinside##2\fi}%
7604     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7605     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7606 }%
7607   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7608     \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
7609       \ifglsxtrinsertinside##2\fi}%
7610     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7611     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7612 }%
7613 }

```

`long-noshort-sc` The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsxtrshort`.

```

7614 \newabbreviationstyle{long-noshort-sc}{%
7615 {%
7616   \renewcommand*{\CustomAbbreviationFields}{%
7617     name={\protect\glsabrvscfont{\the\glsshorttok}},%
7618     sort={\the\glsshorttok},%
7619     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},%
7620     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},%
7621     text={\protect\glslongdefaultfont{\the\glslongtok}},%
7622     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
7623     description={\the\glslongtok}}%
7624 }%
7625   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7626     \glssetattribute{\the\glslabeltok}{regular}{true}}%
7627 }%
7628 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7629 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7630 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7631 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
7632 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7633 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

7634 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
7635   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7636   \ifglsxtrinsertinside \else##2\fi
7637 }%
7638 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
7639   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7640   \ifglsxtrinsertinside \else##2\fi
7641 }%
7642 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
7643   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7644   \ifglsxtrinsertinside \else##2\fi
7645 }%
7646 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
7647   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7648   \ifglsxtrinsertinside \else##2\fi
7649 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

7650 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7651   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7652   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7653   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7654 }%
7655 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7656   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7657   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7658   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7659 }%
7660 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7661   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7662   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7663   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7664 }%
7665 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7666   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7667   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7668   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7669 }%

```

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.

```

7670 \renewcommand*{\glsxtrfullformat}[2]{%
7671   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7672   \ifglsxtrinsertinside\else##2\fi

```

```

7673 }%
7674 \renewcommand*{\glsxtrfullplformat}[2]{%
7675   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7676   \ifglsxtrinsertinside\else##2\fi
7677 }%
7678 \renewcommand*{\Glsxtrfullformat}[2]{%
7679   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7680   \ifglsxtrinsertinside\else##2\fi
7681 }%
7682 \renewcommand*{\Glsxtrfullplformat}[2]{%
7683   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7684   \ifglsxtrinsertinside\else##2\fi
7685 }%
7686 }

```

**long-sc Backward compatibility:**

```
7687 @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`.

```

7688 \newabbreviationstyle{long-noshort-sc-desc}%
7689 {%
7690   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
7691 }%
7692 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7693 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7694 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvscfont{##1}}%
7695 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvscfont{##1}}%
7696 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7697 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

7698 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
7699   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7700   \ifglsxtrinsertinside\else##2\fi
7701 }%
7702 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
7703   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7704   \ifglsxtrinsertinside\else##2\fi
7705 }%
7706 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
7707   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7708   \ifglsxtrinsertinside\else##2\fi
7709 }%
7710 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
7711   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7712   \ifglsxtrinsertinside\else##2\fi
7713 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```
7714 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7715   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7716   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7717   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7718 }%
7719 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7720   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7721   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7722   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7723 }%
7724 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7725   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7726   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7727   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7728 }%
7729 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7730   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7731   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7732   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7733 }%
```

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.

```
7734 \renewcommand*{\glsxtrfullformat}[2]{%
7735   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7736   \ifglsxtrinsertinside\else##2\fi
7737 }%
7738 \renewcommand*{\glsxtrfullplformat}[2]{%
7739   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7740   \ifglsxtrinsertinside\else##2\fi
7741 }%
7742 \renewcommand*{\Glsxtrfullformat}[2]{%
7743   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7744   \ifglsxtrinsertinside\else##2\fi
7745 }%
7746 \renewcommand*{\Glsxtrfullplformat}[2]{%
7747   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7748   \ifglsxtrinsertinside\else##2\fi
7749 }%
7750 }
```

**long-desc-sc** Backward compatibility:

```
7751 @glsxtr@deprecated@abbrstyle{long-desc-sc}{long-noshort-sc-desc}
```

**short-sc-footnote**

```
7752 \newabbreviationstyle{short-sc-footnote}%
7753 {%
7754   \renewcommand*{\CustomAbbreviationFields}{%
```

```

7755   name={\protect\glsabbrvscfont{\the\glsshorttok}},  

7756   sort={\the\glsshorttok},  

7757   description={\the\glslongtok},%  

7758   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}}%  

7759     \protect\glsxtrabbrrvfootnote{\the\glslabeltok}%  

7760       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%  

7761   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}}%  

7762     \protect\glsxtrabbrrvfootnote{\the\glslabeltok}%  

7763       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%  

7764   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.

```

7765 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  

7766   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}}%  

7767   \glshasattribute{\the\glslabeltok}{regular}}%  

7768 {  

7769   \glssetattribute{\the\glslabeltok}{regular}{false}}%  

7770 }%  

7771 {}%  

7772 }%  

7773 }%  

7774 {}%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7775 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%  

7776 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%  

7777 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%  

7778 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%  

7779 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

7780 \renewcommand*{\glsxtrfullformat}[2]{%  

7781   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

7782   \ifglsxtrinsertinside\else##2\fi  

7783   \protect\glsxtrabbrrvfootnote{##1}}%  

7784   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%  

7785 }%  

7786 \renewcommand*{\glsxtrfullplformat}[2]{%  

7787   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

7788   \ifglsxtrinsertinside\else##2\fi  

7789   \protect\glsxtrabbrrvfootnote{##1}}%  

7790   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%  

7791 }%  

7792 \renewcommand*{\GlsXtrfullformat}[2]{%  

7793   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

7794   \ifglsxtrinsertinside\else##2\fi  

7795   \protect\glsxtrabbrrvfootnote{##1}}%  

7796   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%  

7797 }%  

7798 \renewcommand*{\GlsXtrfullplformat}[2]{%

```

```

7799   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7800   \ifglsxtrinsertinside\else##2\fi
7801   \protect\glsxtrabbrvfootnote{##1}%
7802   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7803 }%

```

The first use full form and the inline full form use the short (long) style.

```

7804 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7805   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7806   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7807   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7808 }%
7809 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7810   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7811   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7812   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7813 }%
7814 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7815   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7816   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7817   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7818 }%
7819 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7820   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7821   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7822   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7823 }%
7824 }%

```

#### footnote-sc Backward compatibility:

```
7825 @glsxtr@deprecated@abbrstyle{footnote-sc}{short-sc-footnote}
```

#### sc-postfootnote

```

7826 \newabbreviationstyle{short-sc-postfootnote}%
7827 {%
7828 \renewcommand*{\CustomAbbreviationFields}{%
7829   name={\protect\glsabbrvscfont{\the\glsshorttok}},%
7830   sort={\the\glsshorttok},%
7831   description={\the\glslongtok},%
7832   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
7833   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
7834   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.

```

7835 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7836   \csdef{glsxtrpostlink\glscategorylabel}{%
7837     \glsxtrifwasfirstuse
7838   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

7839      \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
7840      {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}{}}
7841  }%
7842  {}%
7843 }%
7844 \glshasattribute{\the\glslabeltok}{regular}%
7845 {}%
7846 \glssetattribute{\the\glslabeltok}{regular}{false}%
7847 }%
7848 {}%
7849 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

7850 \renewcommand*{\glsxtrsetupfulldefs}{%
7851   \let\glsxtrifwasfirstuse\@secondoftwo
7852 }%
7853 }%
7854 {}%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7855 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7856 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7857 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
7858 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
7859 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

7860 \renewcommand*{\glsxtrfullformat}[2]{%
7861   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7862   \ifglsxtrinsertinside\else##2\fi
7863 }%
7864 \renewcommand*{\glsxtrfullplformat}[2]{%
7865   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7866   \ifglsxtrinsertinside\else##2\fi
7867 }%
7868 \renewcommand*{\Glsxtrfullformat}[2]{%
7869   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7870   \ifglsxtrinsertinside\else##2\fi
7871 }%
7872 \renewcommand*{\Glsxtrfullplformat}[2]{%
7873   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7874   \ifglsxtrinsertinside\else##2\fi
7875 }%

```

The first use full form and the inline full form use the short (long) style.

```

7876 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7877   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7878   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%

```

```

7879   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7880 }%
7881 \renewcommand*{\glsxtrinlinelinefullplformat}[2]{%
7882   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7883   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7884   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7885 }%
7886 \renewcommand*{\Glsxtrinlinelinefullformat}[2]{%
7887   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7888   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7889   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7890 }%
7891 \renewcommand*{\Glsxtrinlinelinefullplformat}[2]{%
7892   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7893   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7894   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7895 }%
7896 }

```

`postfootnote-sc` Backward compatibility:

```
7897 @glsxtr@deprecated@abbrstyle{postfootnote-sc}{short-sc-postfootnote}
```

#### 1.6.4 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.

```
7898 \newcommand*{\glsxtrsmfont}[1]{\textsmaller{#1}}
```

`\glsabbrvsmfont` Added for consistent naming.

```
7899 \newcommand*{\glsabbrvsmfont}{\glsxtrsmfont}
```

`\sxtrfirstsmfont` Maintained for backward compatibility.

```
7900 \newcommand*{\sxtrfirstsmfont}[1]{\glsabbrvsmfont{#1}}
```

`\irstabbrvsmfont` Added for consistent naming.

```
7901 \newcommand*{\irstabbrvsmfont}{\sxtrfirstsmfont}
```

and for the default short form suffix:

`\glsxtrsmsuffix`

```
7902 \newcommand*{\glsxtrsmsuffix}{\glsxtrabbrvpluralsuffix}
```

`long-short-sm`

```

7903 \newabbreviationstyle{long-short-sm}%
7904 {%
7905   \renewcommand*{\CustomAbbreviationFields}{%

```

```

7906   name={\protect\glsabbrvsmfont{\the\glsshorttok}},  

7907   sort={\the\glsshorttok},  

7908   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%  

7909     \protect\glsxtrfullsep{\the\glslabeltok}%"  

7910     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%  

7911   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%  

7912     \protect\glsxtrfullsep{\the\glslabeltok}%"  

7913     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%  

7914   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}},%  

7915   description={\the\glslongtok}}%  

7916 \renewcommand*\GlsXtrPostNewAbbreviation{%
7917   \glshasattribute{\the\glslabeltok}{regular}}%  

7918 {%
7919   \glssetattribute{\the\glslabeltok}{regular}{false}}%  

7920 }%  

7921 {}%  

7922 }%  

7923 }%  

7924 {}%  

7925 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%  

7926 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%  

7927 \renewcommand*\abrvpluralsuffix{\protect\glsxtrsuffix}%

```

Use the default long fonts.

```

7928 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%  

7929 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

7930 \renewcommand*\glsxtrfullformat[2]{%
7931   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%  

7932   \ifglsxtrinsertinside\else##2\fi  

7933   \glsxtrfullsep{##1}}%  

7934   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%  

7935 }%  

7936 \renewcommand*\glsxtrfullplformat[2]{%
7937   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%  

7938   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

7939   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%  

7940 }%  

7941 \renewcommand*\Glsxtrfullformat[2]{%
7942   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%  

7943   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

7944   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%  

7945 }%  

7946 \renewcommand*\Glsxtrfullplformat[2]{%
7947   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%  

7948   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

7949   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%  

7950 }%  

7951 }

```

g-short-sm-desc

```
7952 \newabbreviationstyle{long-short-sm-desc}%
7953 {%
7954   \renewcommand*{\CustomAbbreviationFields}{%
7955     name={\glsxtrlongshortdescname},
7956     sort={\glsxtrlongshortdescsort},%
7957     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
7958       \protect\glsxtrfullsep{\the\glslabeltok}%
7959       \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
7960     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
7961       \protect\glsxtrfullsep{\the\glslabeltok}%
7962       \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
7963     text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
7964     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}%
7965   }%
```

Unset the regular attribute if it has been set.

```
7966 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7967   \glshasattribute{\the\glslabeltok}{regular}%
7968   {%
7969     \glssetattribute{\the\glslabeltok}{regular}{false}%
7970   }%
7971   {}%
7972 }%
7973 }%
7974 {%
```

As long-short-sm style:

```
7975 \GlsXtrUseAbbrStyleFmts{long-short-sm}%
7976 }
```

short-sm-long Now the short (long) version

```
7977 \newabbreviationstyle{short-sm-long}%
7978 {%
7979   \renewcommand*{\CustomAbbreviationFields}{%
7980     name={\protect\glsabbrvsmfont{\the\glsshorttok}},%
7981     sort={\the\glsshorttok},%
7982     description={\the\glslongtok},%
7983     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
7984       \protect\glsxtrfullsep{\the\glslabeltok}%
7985       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
7986     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
7987       \protect\glsxtrfullsep{\the\glslabeltok}%
7988       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
7989     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
7990 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7991   \glshasattribute{\the\glslabeltok}{regular}%
7992   {}%
```

```

7993     \glssetattribute{\the\glslabeltok}{regular}{false}%
7994   }%
7995   {}%
7996 }%
7997 }%
7998 {%
7999   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8000   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8001   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsnsuffix}%
8002   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8003   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8004   \renewcommand*{\glsxtrfullformat}[2]{%
8005     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8006     \ifglsxtrinsertinside\else##2\fi
8007     \glsxtrfullsep{##1}%
8008     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8009   }%
8010   \renewcommand*{\glsxtrfullplformat}[2]{%
8011     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8012     \ifglsxtrinsertinside\else##2\fi
8013     \glsxtrfullsep{##1}%
8014     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8015   }%
8016   \renewcommand*{\Glsxtrfullformat}[2]{%
8017     \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8018     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8019     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8020   }%
8021   \renewcommand*{\Glsxtrfullplformat}[2]{%
8022     \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8023     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8024     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8025   }%
8026 }

```

`rt-sm-long-desc` As before but user provides description

```

8027 \newabbreviationstyle{short-sm-long-desc}{%
8028 {%
8029   \renewcommand*{\CustomAbbreviationFields}{%
8030     name={\glsxtrshortlongdescname},
8031     sort={\glsxtrshortlongdescsort},
8032     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
8033       \protect\glsxtrfullsep{\the\glslabeltok}%
8034       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8035     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
8036       \protect\glsxtrfullsep{\the\glslabeltok}%
8037       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8038     text={\protect\glsabbrvsmfont{\the\glsshorttok}},%

```

```
8039     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}%
8040 }%
```

Unset the regular attribute if it has been set.

```
8041 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8042     \glshasattribute{\the\glslabeltok}{regular}%
8043     {%
8044         \glssetattribute{\the\glslabeltok}{regular}{false}%
8045     }%
8046     {}%
8047 }%
8048 }%
8049 {%
```

As short-sm-long style:

```
8050 \GlsXtrUseAbbrStyleFmts{short-sm-long}%
8051 }
```

#### short-sm

```
8052 \newabbreviationstyle{short-sm}%
8053 {%
8054 \renewcommand*{\CustomAbbreviationFields}{%
8055     name={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8056     sort={\the\glsshorttok},%
8057     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
8058     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
8059     text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8060     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},%
8061     description={\the\glslongtok}}%
8062 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8063     \glssetattribute{\the\glslabeltok}{regular}{true}%
8064 }%
8065 {%
8066 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8067 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8068 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsnsuffix}%
8069 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8070 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short form followed by the long form in parentheses.

```
8071 \renewcommand*{\glsxtrinlinelinefullformat}[2]{%
8072     \protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}%
8073     \ifglsxtrinsertinside##2\fi}%
8074     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8075     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8076 }%
8077 \renewcommand*{\glsxtrinlinelinefullplformat}[2]{%
8078     \protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}%
8079     \ifglsxtrinsertinside##2\fi}%
8080     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8081 }
```

```

8081     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8082 }

8083 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8084     \protect\glsfirstabbrvsmfont{\Glsaccessshort{##1}}%
8085     \ifglsxtrinsertinside##2\fi}%
8086     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8087     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8088 }%
8089 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8090     \protect\glsfirstabbrvsmfont{\Glsaccessshortpl{##1}}%
8091     \ifglsxtrinsertinside##2\fi}%
8092     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8093     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8094 }%

```

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.

```

8095 \renewcommand*{\glsxtrfullformat}[2]{%
8096     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8097     \ifglsxtrinsertinside\else##2\fi
8098 }%
8099 \renewcommand*{\glsxtrfullplformat}[2]{%
8100     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8101     \ifglsxtrinsertinside\else##2\fi
8102 }%
8103 \renewcommand*{\Glsxtrfullformat}[2]{%
8104     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8105     \ifglsxtrinsertinside\else##2\fi
8106 }%
8107 \renewcommand*{\Glsxtrfullplformat}[2]{%
8108     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8109     \ifglsxtrinsertinside\else##2\fi
8110 }%
8111 }

```

#### short-sm-nolong

```
8112 \letabbreviationstyle{short-sm-nolong}{short-sm}
```

#### short-sm-desc

```

8113 \newabbreviationstyle{short-sm-desc}{%
8114 }%
8115 \renewcommand*{\CustomAbbreviationFields}{%
8116     name={\glsxtrshortdescname},
8117     sort={\the\glsshorttok},
8118     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
8119     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
8120     text={\protect\glsabbrvsmfont{\the\glsshorttok}},
8121     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
```

```

8122     description={\the\glslongtok}}%
8123 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8124     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8125 }%
8126 {%
8127 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8128 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8129 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsnsuffix}%
8130 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8131 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

8132 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8133     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8134     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8135     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%
8136 }%
8137 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8138     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8139     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8140     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%
8141 }%
8142 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8143     \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8144     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8145     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%
8146 }%
8147 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8148     \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8149     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8150     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%
8151 }%

```

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.

```

8152 \renewcommand*{\glsxtrfullformat}[2]{%
8153     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8154     \ifglsxtrinsertinside\else##2\fi
8155 }%
8156 \renewcommand*{\glsxtrfullplformat}[2]{%
8157     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8158     \ifglsxtrinsertinside\else##2\fi
8159 }%
8160 \renewcommand*{\Glsxtrfullformat}[2]{%
8161     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8162     \ifglsxtrinsertinside\else##2\fi
8163 }%
8164 \renewcommand*{\Glsxtrfullplformat}[2]{%
8165     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8166     \ifglsxtrinsertinside\else##2\fi

```

```

8167 }%
8168 }

-sm-nolong-desc
8169 \letabbreviationstyle{short-sm-nolong-desc}{short-sm-desc}

```

#### nolong-short-sm

```

8170 \newabbreviationstyle{nolong-short-sm}%
8171 {%
8172   \GlsXtrUseAbbrStyleSetup{short-sm-nolong}%
8173 }%
8174 {%
8175   \GlsXtrUseAbbrStyleFmts{short-sm-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

8176 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8177   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
8178     \ifglsxtrinsertinside##2\fi}%
8179   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8180   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
8181 }%
8182 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8183   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
8184     \ifglsxtrinsertinside##2\fi}%
8185   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8186   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8187 }%
8188 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8189   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
8190     \ifglsxtrinsertinside##2\fi}%
8191   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8192   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
8193 }%
8194 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8195   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
8196     \ifglsxtrinsertinside##2\fi}%
8197   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8198   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8199 }%
8200 }

```

**long-noshort-sm** The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

8201 \newabbreviationstyle{long-noshort-sm}%
8202 {%
8203   \renewcommand*{\CustomAbbreviationFields}{%
8204     name={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8205     sort={\the\glsshorttok},%
8206     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},%

```

```

8207   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},  

8208   text={\protect\glslongdefaultfont{\the\glslongtok}},  

8209   plural={\protect\glslongdefaultfont{\the\glslongpltok}},%  

8210   description={\the\glslongtok}%
8211 }%
8212 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8213   \glssetattribute{\the\glslabeltok}{regular}{true}%
8214 }%
8215 {%
8216   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8217   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8218   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsuffix}%
8219   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8220   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8221 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8222   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8223   \ifglsxtrinsertinside \else##2\fi
8224 }%
8225 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8226   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8227   \ifglsxtrinsertinside \else##2\fi
8228 }%
8229 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8230   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8231   \ifglsxtrinsertinside \else##2\fi
8232 }%
8233 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8234   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8235   \ifglsxtrinsertinside \else##2\fi
8236 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8237 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8238   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8239   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8240   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8241 }%
8242 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8243   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8244   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8245   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8246 }%
8247 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8248   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8249   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8250   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8251 }%
8252 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%

```

```

8253   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8254     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8255   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8256 }%

```

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.

```

8257 \renewcommand*\glsxtrfullformat[2]{%
8258   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8259   \ifglsxtrinsertinside\else##2\fi
8260 }%
8261 \renewcommand*\glsxtrfullplformat[2]{%
8262   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8263   \ifglsxtrinsertinside\else##2\fi
8264 }%
8265 \renewcommand*\Glsxtrfullformat[2]{%
8266   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8267   \ifglsxtrinsertinside\else##2\fi
8268 }%
8269 \renewcommand*\Glsxtrfullplformat[2]{%
8270   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8271   \ifglsxtrinsertinside\else##2\fi
8272 }%
8273 }

```

#### long-sm Backward compatibility:

```
8274 \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`.

```

8275 \newabbreviationstyle{long-noshort-sm-desc}%
8276 {%
8277   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
8278 }%
8279 {%
8280   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8281   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8282   \renewcommand*\abbrvpluralsuffix{\protect\glsxtrmsuffix}%
8283   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8284   \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8285 \renewcommand*\glsxtrsubsequentfmt[2]{%
8286   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8287   \ifglsxtrinsertinside \else##2\fi
8288 }%
8289 \renewcommand*\glsxtrsubsequentplfmt[2]{%
8290   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8291   \ifglsxtrinsertinside \else##2\fi
8292 }%

```

```

8293 \renewcommand*\{\Glsxtrsubsequentfmt\}[2]{%
8294   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8295   \ifglsxtrinsertinside \else##2\fi
8296 }%
8297 \renewcommand*\{\Glsxtrsubsequentplfmt\}[2]{%
8298   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8299   \ifglsxtrinsertinside \else##2\fi
8300 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8301 \renewcommand*\{\glsxtrinlinefullformat\}[2]{%
8302   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8303   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8304   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
8305 }%
8306 \renewcommand*\{\glsxtrinlinefullplformat\}[2]{%
8307   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8308   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8309   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8310 }%
8311 \renewcommand*\{\Glsxtrinlinefullformat\}[2]{%
8312   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8313   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8314   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
8315 }%
8316 \renewcommand*\{\Glsxtrinlinefullplformat\}[2]{%
8317   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8318   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8319   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8320 }%

```

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.

```

8321 \renewcommand*\{\glsxtrfullformat\}[2]{%
8322   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8323   \ifglsxtrinsertinside\else##2\fi
8324 }%
8325 \renewcommand*\{\glsxtrfullplformat\}[2]{%
8326   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8327   \ifglsxtrinsertinside\else##2\fi
8328 }%
8329 \renewcommand*\{\Glsxtrfullformat\}[2]{%
8330   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8331   \ifglsxtrinsertinside\else##2\fi
8332 }%
8333 \renewcommand*\{\Glsxtrfullplformat\}[2]{%
8334   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8335   \ifglsxtrinsertinside\else##2\fi
8336 }%
8337 }

```

long-desc-sm Backward compatibility:

```
8338 \@glsxtr@deprecated@abbrstyle{long-desc-sm}{long-noshort-sm-desc}
```

short-sm-footnote

```
8339 \newabbreviationstyle{short-sm-footnote}%
8340 {%
8341   \renewcommand*{\CustomAbbreviationFields}{%
8342     name={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8343     sort={\the\glsshorttok},%
8344     description={\the\glslongtok},%
8345     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
8346       \protect\glsxtrabrvfootnote{\the\glslabeltok}%
8347         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8348     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
8349       \protect\glsxtrabrvfootnote{\the\glslabeltok}%
8350         {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
8351     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.

```
8352 \renewcommand*{\GlsXtrPostNewAbbreviation}%
8353   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8354   \glshasattribute{\the\glslabeltok}{regular}%
8355   {%
8356     \glssetattribute{\the\glslabeltok}{regular}{false}%
8357   }%
8358   {}%
8359 }%
8360 }%
8361 {%
8362   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8363   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8364   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsnsuffix}%
8365   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8366   \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```
8367 \renewcommand*{\glsxtrfullformat}[2]{%
8368   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8369   \ifglsxtrinsertinside\else##2\fi
8370   \protect\glsxtrabrvfootnote{##1}%
8371   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8372 }%
8373 \renewcommand*{\glsxtrfullplformat}[2]{%
8374   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8375   \ifglsxtrinsertinside\else##2\fi
8376   \protect\glsxtrabrvfootnote{##1}%
8377   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8378 }%
8379 \renewcommand*{\Glsxtrfullformat}[2]{%
```

```

8380   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8381   \ifglsxtrinsertinside\else##2\fi
8382   \protect\glsxtrabbrvfootnote{##1}%
8383   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8384 }%
8385 \renewcommand*{\Glsxtrfullplformat}[2]{%
8386   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8387   \ifglsxtrinsertinside\else##2\fi
8388   \protect\glsxtrabbrvfootnote{##1}%
8389   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8390 }%

```

The first use full form and the inline full form use the short (long) style.

```

8391 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8392   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8393   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8394   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8395 }%
8396 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8397   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8398   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8399   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8400 }%
8401 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8402   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8403   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8404   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8405 }%
8406 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8407   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8408   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8409   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8410 }%
8411 }

```

**footnote-sm Backward compatibility:**

```
8412 \glsxtr@deprecated@abbrstyle{footnote-sm}{short-sm-footnote}
```

**sm-postfootnote**

```

8413 \newabbreviationstyle{short-sm-postfootnote}%
8414 {%
8415   \renewcommand*{\CustomAbbreviationFields}{%
8416     name={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8417     sort={\the\glsshorttok},%
8418     description={\the\glslongtok},%
8419     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
8420     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
8421     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.

```
8422 \renewcommand*\GlsXtrPostNewAbbreviation{%
8423   \csdef{glsxtrpostlink\glscategorylabel}{%
8424     \glsxtrifwasfirstuse
8425   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
8426   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8427   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
8428 }%
8429 {}%
8430 }%
8431 \glshasattribute{\the\glslabeltok}{regular}%
8432 {}%
8433 \glssetattribute{\the\glslabeltok}{regular}{false}%
8434 }%
8435 {}%
8436 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
8437 \renewcommand*\glsxtrsetupfulldefs{%
8438   \let\glsxtrifwasfirstuse\@secondoftwo
8439 }%
8440 }%
8441 {}%
8442 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8443 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8444 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsmsuffix}%
8445 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8446 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form. The long form is deferred.

```
8447 \renewcommand*\glsxtrfullformat}[2]{%
8448   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8449   \ifglsxtrinsertinside\else##2\fi
8450 }%
8451 \renewcommand*\glsxtrfullplformat}[2]{%
8452   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8453   \ifglsxtrinsertinside\else##2\fi
8454 }%
8455 \renewcommand*\GlsXtrfullformat}[2]{%
8456   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8457   \ifglsxtrinsertinside\else##2\fi
8458 }%
8459 \renewcommand*\Glsxtrfullplformat}[2]{%
8460   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8461   \ifglsxtrinsertinside\else##2\fi
```

```

8462 }%
The first use full form and the inline full form use the short (long) style.
8463 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8464   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8465   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8466   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8467 }%
8468 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8469   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8470   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8471   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8472 }%
8473 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8474   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8475   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8476   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8477 }%
8478 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8479   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8480   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8481   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8482 }%
8483 }

```

`postfootnote-sm` Backward compatibility:

```
8484 \@glsxtr@deprecated@abbrstyle{postfootnote-sm}{short-sm-postfootnote}
```

### 1.6.5 Predefined Styles (Emphasized)

These styles use `\emph` for the short form.

```
\glsabbrvemfont
8485 \newcommand*{\glsabbrvemfont}[1]{\emph{#1}}%
```

```
\irstabbrvemfont
8486 \newcommand*{\glsfirstabbrvemfont}[1]{\glsabbrvemfont{#1}}%
```

The default short form suffix:

```
\glsxtremsuffix
8487 \newcommand*{\glsxtremsuffix}{\glsxtrabbrvpluralsuffix}
```

`firstlongemfont` Only used by the “long-em” styles.

```
8488 \newcommand*{\glsfirstlongemfont}[1]{\glslongemfont{#1}}%
```

`\glslongemfont` Only used by the “long-em” styles.

```
8489 \newcommand*{\glslongemfont}[1]{\emph{#1}}%
```

long-short-em The long form is just set in the default long font.

```
8490 \newabbreviationstyle{long-short-em}{%
8491 {%
8492   \renewcommand*{\CustomAbbreviationFields}{%
8493     name={\protect\glsabbrvemfont{\the\glsshorttok}},%
8494     sort={\the\glsshorttok},%
8495     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
8496     \protect\glsxtrfullsep{\the\glslabeltok}%
8497     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
8498     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
8499     \protect\glsxtrfullsep{\the\glslabeltok}%
8500     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
8501     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
8502     description={\the\glslongtok}}%
8503   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8504     \glshasattribute{\the\glslabeltok}{regular}}%
8505     {%
8506       \glssetattribute{\the\glslabeltok}{regular}{false}}%
8507     }%
8508   {}%
8509 }%
8510 }%
8511 {%
8512   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
8513   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
8514   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrtmsuffix}
```

Use the default long fonts.

```
8515 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8516 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
8517 \renewcommand*{\glsxtrfullformat}[2]{%
8518   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8519   \ifglsxtrinsertinside\else##2\fi
8520   \glsxtrfullsep{##1}%
8521   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
8522 }%
8523 \renewcommand*{\glsxtrfullplformat}[2]{%
8524   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8525   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8526   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
8527 }%
8528 \renewcommand*{\Glsxtrfullformat}[2]{%
8529   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8530   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8531   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
8532 }%
8533 \renewcommand*{\Glsxtrfullplformat}[2]{%
8534   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

8535     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8536     \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8537 }%
8538 }

g-short-em-desc
8539 \newabbreviationstyle{long-short-em-desc}{%
8540 {%
8541   \renewcommand*{\CustomAbbreviationFields}{%
8542     name={\glsxtrlongshortdescname},%
8543     sort={\glsxtrlongshortdescsort},%
8544     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
8545       \protect\glsxtrfullsep{\the\glslabeltok}}%
8546       \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
8547     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
8548       \protect\glsxtrfullsep{\the\glslabeltok}}%
8549       \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
8550     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8551     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
8552 }%

```

Unset the regular attribute if it has been set.

```

8553 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8554   \glshasattribute{\the\glslabeltok}{regular}%
8555   {%
8556     \glssetattribute{\the\glslabeltok}{regular}{false}%
8557   }%
8558   {}%
8559 }%
8560 }%
8561 {%

```

As long-short-em style:

```

8562 \GlsXtrUseAbbrStyleFmts{long-short-em}%
8563 }

```

ong-em-short-em

```

8564 \newabbreviationstyle{long-em-short-em}{%
8565 {%
  \glslongemfont is used in the description since \glsdesc doesn't set the style.
8566 \renewcommand*{\CustomAbbreviationFields}{%
8567   name={\protect\glsabbrvemfont{\the\glsshorttok}},%
8568   sort={\the\glsshorttok},%
8569   first={\protect\glsfirstlongemfont{\the\glslongtok}%
8570     \protect\glsxtrfullsep{\the\glslabeltok}}%
8571     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
8572   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
8573     \protect\glsxtrfullsep{\the\glslabeltok}}%
8574     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%

```

```

8575     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
8576     description={\protect\glslongemfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```

8577     \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8578         \glshasattribute{\the\glslabeltok}{regular}%
8579         {%
8580             \glssetattribute{\the\glslabeltok}{regular}{false}%
8581         }%
8582         {}%
8583     }%
8584 }%
8585 {%
8586     \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8587     \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
8588     \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
8589     \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
8590     \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8591     \renewcommand*{\glsxtrfullformat}[2]{%
8592         \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8593         \ifglsxtrinsertinside\else##2\fi
8594         \glsxtrfullsep{##1}%
8595         \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8596     }%
8597     \renewcommand*{\glsxtrfullplformat}[2]{%
8598         \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8599         \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8600         \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8601     }%
8602     \renewcommand*{\Glsxtrfullformat}[2]{%
8603         \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8604         \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8605         \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8606     }%
8607     \renewcommand*{\Glsxtrfullplformat}[2]{%
8608         \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8609         \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8610         \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8611     }%
8612 }

```

m-short-em-desc

```

8613 \newabbreviationstyle{long-em-short-em-desc}{%
8614 {%
8615     \renewcommand*{\CustomAbbreviationFields}{%
8616         name={\glsxtrlongshortdescname},%
8617         sort={\glsxtrlongshortdescsort},%
8618         first={\protect\glsfirstlongemfont{\the\glslongtok}}%

```

```

8619      \protect\glsxtrfullsep{\the\glslabeltok}%
8620      \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
8621      firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}}%
8622      \protect\glsxtrfullsep{\the\glslabeltok}%
8623      \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
8624      text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8625      plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
8626  }%

```

Unset the regular attribute if it has been set.

```

8627  \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8628      \glshasattribute{\the\glslabeltok}{regular}%
8629      {%
8630          \glssetattribute{\the\glslabeltok}{regular}{false}%
8631      }%
8632      {}%
8633  }%
8634 }%
8635 {%
8636  \GlsXtrUseAbbrStyleFmts{long-em-short-em}%
8637 }

```

`short-em-long` Now the short (long) version

```

8638 \newabbreviationstyle{short-em-long}%
8639 {%
8640  \renewcommand*{\CustomAbbreviationFields}{%
8641      name={\protect\glsabbrvemfont{\the\glsshorttok}},%
8642      sort={\the\glsshorttok},%
8643      description={\the\glslongtok},%
8644      first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%
8645      \protect\glsxtrfullsep{\the\glslabeltok}%
8646      \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8647      firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}%
8648      \protect\glsxtrfullsep{\the\glslabeltok}%
8649      \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8650      plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

8651  \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8652      \glshasattribute{\the\glslabeltok}{regular}%
8653      {%
8654          \glssetattribute{\the\glslabeltok}{regular}{false}%
8655      }%
8656      {}%
8657  }%
8658 }%
8659 {%

```

Mostly as short-long style:

```
8660  \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%

```

```

8661 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
8662 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
8663 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8664 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8665 \renewcommand*\glsxtrfullformat[2]{%
8666   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8667   \ifglsxtrinsertinside\else##2\fi
8668   \glsxtrfullsep{##1}%
8669   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8670 }%
8671 \renewcommand*\glsxtrfullplformat[2]{%
8672   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8673   \ifglsxtrinsertinside\else##2\fi
8674   \glsxtrfullsep{##1}%
8675   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8676 }%
8677 \renewcommand*\Glsxtrfullformat[2]{%
8678   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8679   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8680   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8681 }%
8682 \renewcommand*\Glsxtrfullplformat[2]{%
8683   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8684   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8685   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8686 }%
8687 }

```

`rt-em-long-desc` As before but user provides description

```

8688 \newabbreviationstyle{short-em-long-desc}{%
8689 {%
8690   \renewcommand*\CustomAbbreviationFields{%
8691     name={\glsxtrshortlongdescname},
8692     sort={\glsxtrshortlongdescsort},
8693     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
8694       \protect\glsxtrfullsep{\the\glslabeltok}%
8695       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8696     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
8697       \protect\glsxtrfullsep{\the\glslabeltok}%
8698       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8699     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8700     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}}
8701 }%

```

Unset the regular attribute if it has been set.

```

8702 \renewcommand*\GlsXtrPostNewAbbreviation{%
8703   \glshasattribute{\the\glslabeltok}{regular}%
8704   {%

```

```

8705      \glssetattribute{\the\glslabeltok}{regular}{false}%
8706  }%
8707  {}%
8708 }%
8709 }%
8710 {}%
8711 \GlsXtrUseAbbrStyleFmts{short-em-long}%
8712 }

```

## hort-em-long-em

```

8713 \newabbreviationstyle{short-em-long-em}%
8714 {}%
     \glslongemfont is used in the description since \glsdesc doesn't set the style.
8715 \renewcommand*{\CustomAbbreviationFields}{%
8716   name={\protect\glsabbrvemfont{\the\glsshorttok}},%
8717   sort={\the\glsshorttok},%
8718   description={\protect\glslongemfont{\the\glslongtok}},%
8719   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%
8720   \protect\glsxtrfullsep{\the\glslabeltok}%
8721   \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}},%
8722   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}%
8723   \protect\glsxtrfullsep{\the\glslabeltok}%
8724   \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}},%
8725   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

8726 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8727   \glshasattribute{\the\glslabeltok}{regular}%
8728   {}%
8729   \glssetattribute{\the\glslabeltok}{regular}{false}%
8730   }%
8731  {}%
8732 }%
8733 {}%
8734 {}%
8735 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8736 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{\##1}}%
8737 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{\##1}}%
8738 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{\##1}}%
8739 \renewcommand*{\glslongfont}[1]{\glslongemfont{\##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8740 \renewcommand*{\glsxtrfullformat}[2]{%
8741   \glsfirstabbrvemfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
8742   \ifglsxtrinsertinside\else##2\fi
8743   \glsxtrfullsep{\##1}%
8744   \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{\##1}}}}%
8745 }%
8746 \renewcommand*{\glsxtrfullplformat}[2]{%

```

```

8747 \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8748 \ifglsxtrinsertinside\else##2\fi
8749 \glsxtrfullsep{##1}%
8750 \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}%
8751 }%
8752 \renewcommand*{\Glsxtrfullformat}[2]{%
8753 \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8754 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8755 \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}%
8756 }%
8757 \renewcommand*{\Glsxtrfullplformat}[2]{%
8758 \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8759 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8760 \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}%
8761 }%
8762 }

```

#### em-long-em-desc

```

8763 \newabbreviationstyle{short-em-long-em-desc}%
8764 {%
8765 \renewcommand*{\CustomAbbreviationFields}{%
8766 name={\glsxtrshortlongdescname},%
8767 sort={\glsxtrshortlongdescsort},%
8768 first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
8769 \protect\glsxtrfullsep{\the\glslabeltok}%
8770 \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
8771 firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
8772 \protect\glsxtrfullsep{\the\glslabeltok}%
8773 \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
8774 text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8775 plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
8776 }%

```

Unset the regular attribute if it has been set.

```

8777 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8778 \glshasattribute{\the\glslabeltok}{regular}%
8779 {%
8780 \glssetattribute{\the\glslabeltok}{regular}{false}%
8781 }%
8782 {}%
8783 }%
8784 }%
8785 {%
8786 \GlsXtrUseAbbrStyleFmts{short-em-long-em}%
8787 }

```

#### short-em

```

8788 \newabbreviationstyle{short-em}%
8789 {%
8790 \renewcommand*{\CustomAbbreviationFields}{%

```

```

8791     name={\protect\glsabbrvemfont{\the\glsshorttok}},  

8792     sort={\the\glsshorttok},  

8793     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},  

8794     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},  

8795     text={\protect\glsabbrvemfont{\the\glsshorttok}},  

8796     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},  

8797     description={\the\glslongtok}}%  

8798 \renewcommand*\GlsXtrPostNewAbbreviation{  

8799   \glssetattribute{\the\glslabeltok}{regular}{true}}%  

8800 }%  

8801 {  

8802   \renewcommand*\abrvpluralsuffix{\protect\glsxtremsuffix}%  

8803   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%  

8804   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%  

8805   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%  

8806   \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

8807 \renewcommand*\glsxtrinlinefullformat[2]{  

8808   \protect\glsfirstabbrvemfont{\glsaccessshort{##1}}%  

8809   \ifglsxtrinsertinside##2\fi}%  

8810   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%  

8811   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%  

8812 }%  

8813 \renewcommand*\glsxtrinlinefullplformat[2]{  

8814   \protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}%  

8815   \ifglsxtrinsertinside##2\fi}%  

8816   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%  

8817   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%  

8818 }%  

8819 \renewcommand*\Glsxtrinlinefullformat[2]{  

8820   \protect\glsfirstabbrvemfont{\Glsaccessshort{##1}}%  

8821   \ifglsxtrinsertinside##2\fi}%  

8822   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%  

8823   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%  

8824 }%  

8825 \renewcommand*\Glsxtrinlinefullplformat[2]{  

8826   \protect\glsfirstabbrvemfont{\Glsaccessshortpl{##1}}%  

8827   \ifglsxtrinsertinside##2\fi}%  

8828   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%  

8829   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%  

8830 }%

```

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.

```

8831 \renewcommand*\glsxtrfullformat[2]{  

8832   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

8833 \ifglsxtrinsertinside\else##2\fi  

8834 }%

```

```

8835 \renewcommand*{\glsxtrfullplformat}[2]{%
8836   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8837   \ifglsxtrinsertinside\else##2\fi
8838 }%
8839 \renewcommand*{\Glsxtrfullformat}[2]{%
8840   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8841   \ifglsxtrinsertinside\else##2\fi
8842 }%
8843 \renewcommand*{\Glsxtrfullplformat}[2]{%
8844   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8845   \ifglsxtrinsertinside\else##2\fi
8846 }%
8847 }

```

#### short-em-nolong

```
8848 \letabbreviationstyle{short-em-nolong}{short-em}
```

#### short-em-desc

```

8849 \newabbreviationstyle{short-em-desc}{%
8850 {%
8851   \renewcommand*{\CustomAbbreviationFields}{%
8852     name={\glsxtrshortdescname},
8853     sort={\the\glsshorttok},
8854     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
8855     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
8856     text={\protect\glsabbrvemfont{\the\glsshorttok}},
8857     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},
8858     description={\the\glslongtok}}%
8859   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8860     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8861 }%
8862 {%
8863   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8864   \renewcommand*{\glsabbrvfont[1]}{\glsabbrvemfont{##1}}%
8865   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
8866   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8867   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

8868 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8869   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8870   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8871   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8872 }%
8873 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8874   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8875   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8876   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8877 }%
8878 \renewcommand*{\Glsxtrinlinefullformat}[2]{%

```

```

8879 \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8880 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8881 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8882 }%
8883 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8884   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8885   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8886   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8887 }%

```

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.

```

8888 \renewcommand*{\glsxtrfullformat}[2]{%
8889   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8890   \ifglsxtrinsertinside\else##2\fi
8891 }%
8892 \renewcommand*{\glsxtrfullplformat}[2]{%
8893   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8894   \ifglsxtrinsertinside\else##2\fi
8895 }%
8896 \renewcommand*{\Glsxtrfullformat}[2]{%
8897   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8898   \ifglsxtrinsertinside\else##2\fi
8899 }%
8900 \renewcommand*{\Glsxtrfullplformat}[2]{%
8901   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8902   \ifglsxtrinsertinside\else##2\fi
8903 }%
8904 }

```

#### -em-nolong-desc

```
8905 \letabbreviationstyle{short-em-nolong-desc}{short-em-desc}
```

#### nolong-short-em

```

8906 \newabbreviationstyle{nolong-short-em}%
8907 {%
8908   \GlsXtrUseAbbrStyleSetup{short-em-nolong}%
8909 }%
8910 {%
8911   \GlsXtrUseAbbrStyleFmts{short-em-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

8912 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8913   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}}%
8914   \ifglsxtrinsertinside##2\fi}%
8915 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8916 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8917 }%
8918 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8919   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}%

```

```

8920      \ifglsxtrinsertinside##2\fi}%
8921      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8922      \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8923  }%
8924  \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
8925      \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}}%
8926      \ifglsxtrinsertinside##2\fi}%
8927      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8928      \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8929  }%
8930  \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
8931      \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
8932      \ifglsxtrinsertinside##2\fi}%
8933      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8934      \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8935  }%
8936 }

```

long-noshort-em The short form is explicitly invoked through commands like \glsshort.

```

8937 \newabbreviationstyle{long-noshort-em}%
8938 {%
8939  \renewcommand*\{\CustomAbbreviationFields}{%
8940      name={\protect\glsabbrvemfont{\the\glsshorttok}},%
8941      sort={\the\glsshorttok},%
8942      first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},%
8943      firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},%
8944      text={\protect\glslongdefaultfont{\the\glslongtok}},%
8945      plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
8946      description={\the\glslongtok}%
8947  }%
8948  \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
8949      \glssetattribute{\the\glslabeltok}{regular}{true}%
8950 }%
8951 {%
8952  \renewcommand*\{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8953  \renewcommand*\{\glsabbrvfont[1]{\glsabbrvemfont{##1}}}%
8954  \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
8955  \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8956  \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8957  \renewcommand*\{\glsxtrsubsequentfmt}[2]{%
8958      \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8959      \ifglsxtrinsertinside \else##2\fi
8960  }%
8961  \renewcommand*\{\glsxtrsubsequentplfmt}[2]{%
8962      \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8963      \ifglsxtrinsertinside \else##2\fi
8964  }%
8965  \renewcommand*\{\Glsxtrsubsequentfmt}[2]{%

```

```

8966   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8967   \ifglsxtrinsertinside \else##2\fi
8968 }%
8969 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8970   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8971   \ifglsxtrinsertinside \else##2\fi
8972 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8973 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8974   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8975   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8976   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8977 }%
8978 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8979   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8980   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8981   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8982 }%
8983 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8984   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8985   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8986   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8987 }%
8988 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8989   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8990   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8991   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8992 }%

```

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.

```

8993 \renewcommand*{\glsxtrfullformat}[2]{%
8994   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8995   \ifglsxtrinsertinside\else##2\fi
8996 }%
8997 \renewcommand*{\glsxtrfullplformat}[2]{%
8998   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8999   \ifglsxtrinsertinside\else##2\fi
9000 }%
9001 \renewcommand*{\Glsxtrfullformat}[2]{%
9002   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9003   \ifglsxtrinsertinside\else##2\fi
9004 }%
9005 \renewcommand*{\Glsxtrfullplformat}[2]{%
9006   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9007   \ifglsxtrinsertinside\else##2\fi
9008 }%
9009 }

```

long-em Backward compatibility:

```
9010 \glsxtr@deprecated@abbrstyle{long-em}{long-noshort-em}
```

g-em-noshort-em The short form is explicitly invoked through commands like \glsshort.

```
9011 \newabbreviationstyle{long-em-noshort-em}%
9012 {%
9013   \renewcommand*{\CustomAbbreviationFields}{%
9014     name={\protect\glsabbrvemfont{\the\glsshorttok}},%
9015     sort={\the\glsshorttok},%
9016     first={\protect\glsfirstlongemfont{\the\glslongtok}},%
9017     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},%
9018     text={\protect\glslongemfont{\the\glslongtok}},%
9019     plural={\protect\glslongemfont{\the\glslongpltok}},%
9020     description={\protect\glslongemfont{\the\glslongtok}}%
9021 }%
9022   \renewcommand*{\GlsXtrPostNewAbbreviation}%
9023     {\glssetattribute{\the\glslabeltok}{regular}{true}}%
9024 }%
9025 {%
9026   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9027   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{\##1}}%
9028   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{\##1}}%
9029   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{\##1}}%
9030   \renewcommand*{\glslongfont}[1]{\glslongemfont{\##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
9031 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9032   \glslongemfont{\glsaccesslong{\##1}\ifglsxtrinsertinside \##2\fi}%
9033   \ifglsxtrinsertinside \else##2\fi
9034 }%
9035 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9036   \glslongemfont{\glsaccesslongpl{\##1}\ifglsxtrinsertinside \##2\fi}%
9037   \ifglsxtrinsertinside \else##2\fi
9038 }%
9039 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9040   \glslongemfont{\Glsaccesslong{\##1}\ifglsxtrinsertinside \##2\fi}%
9041   \ifglsxtrinsertinside \else##2\fi
9042 }%
9043 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9044   \glslongemfont{\Glsaccesslongpl{\##1}\ifglsxtrinsertinside \##2\fi}%
9045   \ifglsxtrinsertinside \else##2\fi
9046 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9047 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9048   \glsfirstlongemfont{\glsaccesslong{\##1}\ifglsxtrinsertinside##2\fi}%
9049   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\##1}%
9050   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{\##1}}}}%
9051 }%
9052 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
```

```

9053   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9054     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9055     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9056   }%
9057   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9058     \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9059     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9060     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9061   }%
9062   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9063     \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9064     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9065     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9066   }%

```

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.

```

9067   \renewcommand*{\glsxtrfullformat}[2]{%
9068     \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9069     \ifglsxtrinsertinside\else##2\fi
9070   }%
9071   \renewcommand*{\glsxtrfullplformat}[2]{%
9072     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9073     \ifglsxtrinsertinside\else##2\fi
9074   }%
9075   \renewcommand*{\Glsxtrfullformat}[2]{%
9076     \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9077     \ifglsxtrinsertinside\else##2\fi
9078   }%
9079   \renewcommand*{\Glsxtrfullplformat}[2]{%
9080     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9081     \ifglsxtrinsertinside\else##2\fi
9082   }%
9083 }

```

`oshort-em-noreg` Like `long-em-noshort-em` but doesn't set the regular attribute.

```

9084 \newabbreviationstyle{long-em-noshort-em-noreg}{%
9085 {%
9086   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em}%

```

Unset the regular attribute if it has been set.

```

9087   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9088     \glshasattribute{\the\glslabeltok}{regular}%
9089     {%
9090       \glssetattribute{\the\glslabeltok}{regular}{false}%
9091     }%
9092     {}%
9093   }%
9094 }%
9095 {%

```

```
9096 \GlsXtrUseAbbrStyleFmts{long-em-noshort-em}%
9097 }
```

noshort-em-desc The emphasized font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```
9098 \newabbreviationstyle{long-noshort-em-desc}%
9099 {%
9100 \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
9101 }%
9102 {%
9103 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9104 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
9105 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9106 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9107 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
9108 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9109   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9110   \ifglsxtrinsertinside \else##2\fi
9111 }%
9112 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9113   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9114   \ifglsxtrinsertinside \else##2\fi
9115 }%
9116 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9117   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9118   \ifglsxtrinsertinside \else##2\fi
9119 }%
9120 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9121   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9122   \ifglsxtrinsertinside \else##2\fi
9123 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9124 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9125   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9126   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9127   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9128 }%
9129 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9130   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9131   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9132   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9133 }%
9134 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9135   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9136   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9137   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9138 }%
```

```

9139 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9140   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9141   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9142   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9143 }%

```

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.

```

9144 \renewcommand*{\glsxtrfullformat}[2]{%
9145   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9146   \ifglsxtrinsertinside\else##2\fi
9147 }%
9148 \renewcommand*{\glsxtrfullplformat}[2]{%
9149   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9150   \ifglsxtrinsertinside\else##2\fi
9151 }%
9152 \renewcommand*{\Glsxtrfullformat}[2]{%
9153   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9154   \ifglsxtrinsertinside\else##2\fi
9155 }%
9156 \renewcommand*{\Glsxtrfullplformat}[2]{%
9157   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9158   \ifglsxtrinsertinside\else##2\fi
9159 }%
9160 }

```

**long-desc-em Backward compatibility:**

```
9161 \glsxtr@deprecated@abbrstyle{long-desc-em}{long-noshort-em-desc}
```

**noshort-em-desc** The short form is explicitly invoked through commands like \glsshort. The long form is emphasized.

```

9162 \newabbreviationstyle{long-em-noshort-em-desc}%
9163 {%
9164 \renewcommand*{\CustomAbbreviationFields}{%
9165   name={\protect\protect\glslongemfont{\the\glslongtok}},%
9166   sort={\the\glslongtok},%
9167   first={\protect\glsfirstlongemfont{\the\glslongtok}},%
9168   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},%
9169   text={\glslongemfont{\the\glslongtok}},%
9170   plural={\glslongemfont{\the\glslongpltok}}%
9171 }%
9172 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9173   \glssetattribute{\the\glslabeltok}{regular}{true}%
9174 }%
9175 {%
9176 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9177 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9178 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9179 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
9180 \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```
9181 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9182   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9183   \ifglsxtrinsertinside \else##2\fi
9184 }%
9185 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9186   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9187   \ifglsxtrinsertinside \else##2\fi
9188 }%
9189 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9190   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9191   \ifglsxtrinsertinside \else##2\fi
9192 }%
9193 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9194   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9195   \ifglsxtrinsertinside \else##2\fi
9196 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9197 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9198   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9199   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9200   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9201 }%
9202 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9203   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9204   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9205   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9206 }%
9207 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9208   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9209   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9210   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9211 }%
9212 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9213   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9214   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9215   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9216 }%
```

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.

```
9217 \renewcommand*{\glsxtrfullformat}[2]{%
9218   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9219   \ifglsxtrinsertinside\else##2\fi
9220 }%
9221 \renewcommand*{\glsxtrfullplformat}[2]{%
9222   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9223   \ifglsxtrinsertinside\else##2\fi
9224 }%
```

```

9225 \renewcommand*{\Glsxtrfullformat}[2]{%
9226   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9227   \ifglsxtrinsertinside\else##2\fi
9228 }%
9229 \renewcommand*{\Glsxtrfullplformat}[2]{%
9230   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9231   \ifglsxtrinsertinside\else##2\fi
9232 }%
9233 }

```

`t-em-desc-noreg` Like `long-em-noshort-em-desc` but doesn't set the regular attribute.

```

9234 \newabbreviationstyle{long-em-noshort-em-desc-noreg}{%
9235 {%
9236   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em-desc}}%

```

Unset the regular attribute if it has been set.

```

9237 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9238   \glshasattribute{\the\glslabeltok}{regular}%
9239   {%
9240     \glssetattribute{\the\glslabeltok}{regular}{false}%
9241   }%
9242   {}%
9243 }%
9244 }%
9245 {%
9246   \GlsXtrUseAbbrStyleFmts{long-em-noshort-em-desc}%
9247 }

```

`short-em-footnote`

```

9248 \newabbreviationstyle{short-em-footnote}{%
9249 {%
9250   \renewcommand*{\CustomAbbreviationFields}{%
9251     name={\protect\glsabbrvemfont{\the\glsshorttok}},%
9252     sort={\the\glsshorttok},%
9253     description={\the\glslongtok},%
9254     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
9255       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9256       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9257     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
9258       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9259       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9260     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.

```

9261 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9262   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9263   \glshasattribute{\the\glslabeltok}{regular}%
9264   {%
9265     \glssetattribute{\the\glslabeltok}{regular}{false}%

```

```

9266    }%
9267    {}%
9268  }%
9269 }%
9270 {%
9271 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9272 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9273 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9274 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
9275 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

9276 \renewcommand*{\glsxtrfullformat}[2]{%
9277   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9278   \ifglsxtrinsertinside\else##2\fi
9279   \protect\glsxtrabrvfootnote{##1}%
9280   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9281 }%
9282 \renewcommand*{\glsxtrfullplformat}[2]{%
9283   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9284   \ifglsxtrinsertinside\else##2\fi
9285   \protect\glsxtrabrvfootnote{##1}%
9286   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9287 }%
9288 \renewcommand*{\Glsxtrfullformat}[2]{%
9289   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9290   \ifglsxtrinsertinside\else##2\fi
9291   \protect\glsxtrabrvfootnote{##1}%
9292   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9293 }%
9294 \renewcommand*{\Glsxtrfullplformat}[2]{%
9295   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9296   \ifglsxtrinsertinside\else##2\fi
9297   \protect\glsxtrabrvfootnote{##1}%
9298   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9299 }%

```

The first use full form and the inline full form use the short (long) style.

```

9300 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9301   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9302   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9303   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9304 }%
9305 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9306   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9307   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9308   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9309 }%
9310 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9311   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%

```

```

9312     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9313     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9314   }%
9315   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9316     \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9317     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9318     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9319   }%
9320 }

```

`footnote-em` Backward compatibility:

```
9321 \glsxtr@deprecated@abbrstyle{footnote-em}{short-em-footnote}
```

`em-postfootnote`

```

9322 \newabbreviationstyle{short-em-postfootnote}%
9323 {%
9324   \renewcommand*{\CustomAbbreviationFields}{%
9325     name={\protect\glsabbrvemfont{\the\glsshorttok}},%
9326     sort={\the\glsshorttok},%
9327     description={\the\glslongtok},%
9328     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
9329     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
9330     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.

```

9331 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9332   \csdef{glsxtrpostlink\glscategorylabel}{%
9333     \glsxtrifwasfirstuse
9334   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

9335   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9336   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
9337 }%
9338 {}%
9339 }%
9340 \glshasattribute{\glslabeltok}{regular}%
9341 {}%
9342   \glssetattribute{\glslabeltok}{regular}{false}%
9343 {}%
9344 {}%
9345 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

9346 \renewcommand*{\glsxtrsetupfulldefs}{%
9347   \let\glsxtrifwasfirstuse\@secondoftwo
9348 }%

```

```

9349 }%
9350 {%
9351   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9352   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
9353   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9354   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
9355   \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

9356   \renewcommand*{\glsxtrfullformat}[2]{%
9357     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9358     \ifglsxtrinsertinside\else##2\fi
9359   }%
9360   \renewcommand*{\glsxtrfullplformat}[2]{%
9361     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9362     \ifglsxtrinsertinside\else##2\fi
9363   }%
9364   \renewcommand*{\Glsxtrfullformat}[2]{%
9365     \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9366     \ifglsxtrinsertinside\else##2\fi
9367   }%
9368   \renewcommand*{\Glsxtrfullplformat}[2]{%
9369     \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9370     \ifglsxtrinsertinside\else##2\fi
9371   }%

```

The first use full form and the inline full form use the short (long) style.

```

9372   \renewcommand*{\glsxtrinlinefullformat}[2]{%
9373     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9374     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9375     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9376   }%
9377   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9378     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9379     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9380     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9381   }%
9382   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9383     \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9384     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9385     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9386   }%
9387   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9388     \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9389     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9390     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9391   }%
9392 }

```

postfootnote-em Backward compatibility:

```
9393 \@glsxtr@deprecated@abbrstyle{postfootnote-em}{short-em-postfootnote}
```

## 1.6.6 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.

```
9394 \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.

```
9395 \ifdef\glscurrentfieldvalue
9396 {
9397   \newcommand*\glsxtruserparen[2]{%
9398     \glsxtrfullsep{\#2}%
9399     \glsxtrparen
9400     {\#1\ifglshasfield{\glsxtruserfield}{\#2}{, \glscurrentfieldvalue}{}%}
9401   }
9402 }
9403 {
9404   \newcommand*\glsxtruserparen[2]{%
9405     \glsxtrfullsep{\#2}%
9406     \glsxtrparen
9407     {\#1\ifglshasfield{\glsxtruserfield}{\#2}{, \glo@thisvalue}{}%}
9408   }
9409 }
```

Font used for short form:

`lsabrvuserfont`

```
9410 \newcommand*\glsabrvuserfont[1]{\glsabrvdefaultfont{\#1}}
```

Font used for short form on first use:

`stabrvuserfont`

```
9411 \newcommand*\glsfirststabrvuserfont[1]{\glsabrvuserfont{\#1}}
```

Font used for long form:

`glslonguserfont`

```
9412 \newcommand*\glslonguserfont[1]{\glslongdefaultfont{\#1}}
```

Font used for long form on first use:

`rstlonguserfont`

```
9413 \newcommand*\glsfirstlonguserfont[1]{\glslonguserfont{\#1}}
```

The default short form suffix:

```

lsxtrusersuffix
9414 \newcommand*{\glsxtrusersuffix}{\glsxtrabbrvpluralsuffix}

long-short-user
9415 \newabbreviationstyle{long-short-user}%
9416 {%
9417   \renewcommand*{\CustomAbbreviationFields}{%
9418     name={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9419     sort={\the\glsshorttok},%
9420     first={\protect\glsfirstlonguserfont{\the\glslongtok}}%
9421       \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%%
9422         {\the\glslabeltok},%
9423     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}}%
9424       \protect\glsxtruserparen%
9425         {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok},%
9426     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
9427     description={\protect\glslonguserfont{\the\glslongtok}}}%
9428 
9429   Unset the regular attribute if it has been set.
9430   \renewcommand*{\GlsXtrPostNewAbbreviation}%
9431     \glshasattribute{\the\glslabeltok}{regular}%
9432   {%
9433     \glssetattribute{\the\glslabeltok}{regular}{false}%
9434   }%
9435 }%
9436 {%
9437 
9438   In case the user wants to mix and match font styles, these are redefined here.
9439   \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9440   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{\##1}}%
9441   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{\##1}}%
9442   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{\##1}}%
9443   \renewcommand*{\glslongfont}[1]{\glslonguserfont{\##1}}%
9444 
9445   The first use full form and the inline full form are the same for this style.
9446   \renewcommand*{\glsxtrfullformat}[2]{%
9447     \glsfirstlonguserfont{\glsaccesslong{\##1}\ifglsxtrinsertinside{\##2}\fi}%
9448     \ifglsxtrinsertinside\else{\##2}\fi%
9449     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{\##1}}{\##1}}%
9450   }%
9451   \renewcommand*{\glsxtrfullplformat}[2]{%
9452     \glsfirstlonguserfont{\glsaccesslongpl{\##1}\ifglsxtrinsertinside{\##2}\fi}%
9453     \ifglsxtrinsertinside\else{\##2}\fi%
9454     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{\##1}}{\##1}}%
9455   }%
9456   \renewcommand*{\Glsxtrfullformat}[2]{%
9457     \glsfirstlonguserfont{\Glsaccesslong{\##1}\ifglsxtrinsertinside{\##2}\fi}%
9458   }%

```

```

9454     \ifglsxtrinsertinside\else##2\fi
9455     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9456   }%
9457   \renewcommand*{\Glsxtrfullplformat}[2]{%
9458     \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9459     \ifglsxtrinsertinside\else##2\fi
9460     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9461   }%
9462 }

```

-postshort-user Like long-short-user but defers the parenthetical matter to after the link.

```

9463 \newabbreviationstyle{long-postshort-user}%
9464 {%
9465   \renewcommand*{\CustomAbbreviationFields}{%
9466     name={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9467     sort={\the\glsshorttok},%
9468     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9469     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9470     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
9471     description={\protect\glslonguserfont{\the\glslongtok}}}%
9472   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9473     \csdef{glsxtrpostlink\glscategorylabel}{%
9474       \glsxtrifwasfirstuse
9475     }%
9476     \glsxtruserparen
9477       {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}{%
9478         \glslabel}%
9479     }%
9480     {}%
9481   }%
9482   \glshasattribute{\the\glslabeltok}{regular}%
9483   {}%
9484     \glssetattribute{\the\glslabeltok}{regular}{false}%
9485   }%
9486   {}%
9487 }%
9488 }%
9489 }%

```

In case the user wants to mix and match font styles, these are redefined here.

```

9490   \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9491   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
9492   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
9493   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
9494   \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

9495   \renewcommand*{\Glsxtrfullformat}[2]{%
9496     \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%

```

```

9497     \ifglsxtrinsertinside\else##2\fi
9498 }%
9499 \renewcommand*{\glsxtrfullplformat}[2]{%
9500   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9501   \ifglsxtrinsertinside\else##2\fi
9502 }%
9503 \renewcommand*{\Glsxtrfullformat}[2]{%
9504   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9505   \ifglsxtrinsertinside\else##2\fi
9506 }%
9507 \renewcommand*{\Glsxtrfullplformat}[2]{%
9508   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9509   \ifglsxtrinsertinside\else##2\fi
9510 }%

```

In-line format:

```

9511 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9512   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9513   \ifglsxtrinsertinside\else##2\fi
9514   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9515 }%
9516 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9517   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9518   \ifglsxtrinsertinside\else##2\fi
9519   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9520 }%
9521 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9522   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9523   \ifglsxtrinsertinside\else##2\fi
9524   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9525 }%
9526 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9527   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9528   \ifglsxtrinsertinside\else##2\fi
9529   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9530 }%
9531 }

```

`short-user-desc` Like `long-postshort-user` but the user supplies the description.

```

9532 \newabbreviationstyle{long-postshort-user-desc}%
9533 {%
9534 \renewcommand*{\CustomAbbreviationFields}{%
9535   name={\protect\glslonguserfont{\the\glslongtok}}%
9536   \protect\glsxtruserparen
9537   {\protect\glsabbrvuserfont{\the\glsshorttok}}{\the\glslabeltok}},%
9538   sort={\the\glslongtok},
9539   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9540   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9541   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%

```

```

9542     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
9543   }%
9544 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9545   \csdef{glsxtrpostlink\glscategorylabel}{%
9546     \glsxtrifwasfirstuse
9547   }%
9548   \glsxtruserparen
9549     {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}}%
9550     {\glslabel}%
9551   }%
9552   {}%
9553 }%
9554 \glshasattribute{\the\glslabeltok}{regular}%
9555 {}%
9556   \glssetattribute{\the\glslabeltok}{regular}{false}%
9557 }%
9558 {}%
9559 }%
9560 }%
9561 {}%
9562 \GlsXtrUseAbbrStyleFmts{long-postshort-user}%
9563 }

```

t-postlong-user Like short-long-user but defers the parenthetical matter to after the link.

```

9564 \newabbreviationstyle{short-postlong-user}{%
9565 }%
9566 \renewcommand*{\CustomAbbreviationFields}{%
9567   name={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9568   sort={\the\glsshorttok},%
9569   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9570   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9571   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
9572   description={\protect\glslonguserfont{\the\glslongtok}}}%
9573 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9574   \csdef{glsxtrpostlink\glscategorylabel}{%
9575     \glsxtrifwasfirstuse
9576   }%
9577   \glsxtruserparen
9578     {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}}%
9579     {\glslabel}%
9580   }%
9581   {}%
9582 }%
9583 \glshasattribute{\the\glslabeltok}{regular}%
9584 {}%
9585   \glssetattribute{\the\glslabeltok}{regular}{false}%
9586 }%
9587 {}%
9588 }%

```

```
9589 }%
9590 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
9591 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9592 \renewcommand*{\glsabrvfont}[1]{\glsabrvuserfont{##1}}%
9593 \renewcommand*{\glsfirstabrvfont}[1]{\glsfirstabrvuserfont{##1}}%
9594 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
9595 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%
```

First use full form:

```
9596 \renewcommand*{\glsxtrfullformat}[2]{%
9597   \glsfirstabrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9598   \ifglsxtrinsertinside\else##2\fi
9599 }%
9600 \renewcommand*{\glsxtrfullplformat}[2]{%
9601   \glsfirstabrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9602   \ifglsxtrinsertinside\else##2\fi
9603 }%
9604 \renewcommand*{\Glsxtrfullformat}[2]{%
9605   \glsfirstabrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9606   \ifglsxtrinsertinside\else##2\fi
9607 }%
9608 \renewcommand*{\Glsxtrfullplformat}[2]{%
9609   \glsfirstabrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9610   \ifglsxtrinsertinside\else##2\fi
9611 }%
```

In-line format:

```
9612 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9613   \glsfirstabrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9614   \ifglsxtrinsertinside\else##2\fi
9615   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}{##1}}%
9616 }%
9617 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9618   \glsfirstabrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9619   \ifglsxtrinsertinside\else##2\fi
9620   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}{##1}}%
9621 }%
9622 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9623   \glsfirstabrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9624   \ifglsxtrinsertinside\else##2\fi
9625   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}{##1}}%
9626 }%
9627 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9628   \glsfirstabrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9629   \ifglsxtrinsertinside\else##2\fi
9630   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}{##1}}%
9631 }%
9632 }
```

tlong-user-desc Like short-postlong-user but leaves the user to specify the description.

```
9633 \newabbreviationstyle{short-postlong-user-desc}%
9634 {%
9635   \renewcommand*{\CustomAbbreviationFields}{%
9636     name={\protect\glsabbrvuserfont{\the\glsshorttok}%
9637       \protect\glsxtruserparen
9638         {\protect\glslonguserfont{\the\glslongpltok}}%
9639         {\the\glslabeltok}},%
9640     sort={\the\glsshorttok},%
9641     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9642     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9643     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9644     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
9645 }%
9646 \renewcommand*{\GlsXtrPostNewAbbreviation}%
9647   \csdef{glsxtrpostlink\glscategorylabel}{%
9648     \glsxtrifwasfirstuse
9649     {%
9650       \glsxtruserparen
9651         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}%
9652         {\glslabel}%
9653     }%
9654     {}%
9655   }%
9656   \glshasattribute{\the\glslabeltok}{regular}%
9657   {%
9658     \glssetattribute{\the\glslabeltok}{regular}{false}%
9659   }%
9660   {}%
9661 }%
9662 }%
9663 {%
9664   \GlsXtrUseAbbrStyleFmts{short-postlong-user}%
9665 }
```

short-user-desc

```
9666 \newabbreviationstyle{long-short-user-desc}%
9667 {%
9668   \renewcommand*{\CustomAbbreviationFields}{%
9669     name={\glsxtrlongshortdescname},%
9670     sort={\glsxtrlongshortdescsort},%
9671     first={\protect\glsfirstlonguserfont{\the\glslongtok}%
9672       \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
9673       {\the\glslabeltok}},%
9674     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}%
9675       \protect\glsxtruserparen
9676         {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%
9677     text={\protect\glsabbrvfont{\the\glsshorttok}},%
```

```
9678     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
9679 }
```

Unset the regular attribute if it has been set.

```
9680 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9681   \glshasattribute{\the\glslabeltok}{regular}%
9682   {%
9683     \glssetattribute{\the\glslabeltok}{regular}{false}%
9684   }%
9685   {}%
9686 }%
9687 }%
9688 {%
9689 \GlsXtrUseAbbrStyleFmts{long-short-user}%
9690 }
```

### short-long-user

```
9691 \newabbreviationstyle{short-long-user}%
9692 {%
```

\glslonguserfont is used in the description since \glsdesc doesn't set the style.

```
9693 \renewcommand*{\CustomAbbreviationFields}{%
9694   name={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9695   sort={\the\glsshorttok},%
9696   description={\protect\glslonguserfont{\the\glslongtok}},%
9697   first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
9698   \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
9699   {\the\glslabeltok}},%
9700   firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}%
9701   \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
9702   {\the\glslabeltok}},%
9703   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
9704 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9705   \glshasattribute{\the\glslabeltok}{regular}%
9706   {%
9707     \glssetattribute{\the\glslabeltok}{regular}{false}%
9708   }%
9709   {}%
9710 }%
9711 }%
9712 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
9713 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9714 \renewcommand*\glsabbrvfont[1]{\glsabbrvuserfont{\##1}}%
9715 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvuserfont{\##1}}%
9716 \renewcommand*\glsfirstlongfont[1]{\glsfirstlonguserfont{\##1}}%
9717 \renewcommand*\glslongfont[1]{\glslonguserfont{\##1}}%
```

The first use full form and the inline full form are the same for this style.

```
9718 \renewcommand*{\glsxtrfullformat}[2]{%
9719   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9720   \ifglsxtrinsertinside\else##2\fi
9721   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
9722 }%
9723 \renewcommand*{\glsxtrfullplformat}[2]{%
9724   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9725   \ifglsxtrinsertinside\else##2\fi
9726   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
9727 }%
9728 \renewcommand*{\Glsxtrfullformat}[2]{%
9729   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9730   \ifglsxtrinsertinside\else##2\fi
9731   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
9732 }%
9733 \renewcommand*{\Glsxtrfullplformat}[2]{%
9734   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9735   \ifglsxtrinsertinside\else##2\fi
9736   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
9737 }%
9738 }
```

-long-user-desc

```
9739 \newabbreviationstyle{short-long-user-desc}%
9740 {%
9741   \renewcommand*{\CustomAbbreviationFields}{%
9742     name={\glsxtrshortlongdescname},
9743     sort={\glsxtrshortlongdescsort},%
9744     first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
9745       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
9746       {\the\glslabeltok}},%
9747     firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
9748       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
9749       {\the\glslabeltok}},%
9750     text={\protect\glsabbrvfont{\the\glsshorttok}},%
9751     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
9752   }%
```

Unset the regular attribute if it has been set.

```
9753 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9754   \glshasattribute{\the\glslabeltok}{regular}%
9755   {%
9756     \glssetattribute{\the\glslabeltok}{regular}{false}%
9757   }%
9758   {}%
9759 }%
9760 }%
9761 {%
```

```

9762 \GlsXtrUseAbbrStyleFmts{short-long-user}%
9763 }

```

### 1.6.7 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.

```

9764 \newrobustcmd*\glsxtrifhyphenstart}[3]{%
9765 \ifx\glsinsert#1\relax
9766 \expandafter\@glsxtrifhyphenstart#1\relax\relax
9767 \end\@glsxtrifhyphenstart{#2}{#3}%
9768 \else
9769 \@glsxtrifhyphenstart#1\relax\relax\end\@glsxtrifhyphenstart{#2}{#3}%
9770 \fi
9771 }

```

`trifhyphenstart`

```

9772 \def\@glsxtrifhyphenstart#1#2\end\@glsxtrifhyphenstart#3#4{%
9773 \ifx-#1\relax#3\else #4\fi
9774 }

```

`rlonghyphenshort`

`\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.

```

9775 \newcommand*\glsxtrlonghyphenshort}[4]{%

```

Grouping is needed to localise the redefinitions.

```

9776 {%

```

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.

```

9777 \glsxtrifhyphenstart[#4]{\def\glsxtrwordsep{-}}{}%
9778 \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#4}\fi}%
9779 \ifglsxtrinsertinside\else{#4}\fi
9780 \glsxtrfullsep{#1}%
9781 \glsxtrparen{\glsfirstabbrvhyphenfont{#3\ifglsxtrinsertinside{#4}\fi}%
9782 \ifglsxtrinsertinside\else{#4}\fi}%
9783 }%
9784 }

```

```

abbrvhypenfont
9785 \newcommand*{\glsabbrvhypenfont}{\glsabbrvdefaultfont}%

abbrvhypenfont
9786 \newcommand*{\glsfirstabbrvhypenfont}{\glsabbrvhypenfont}%

slonghypenfont
9787 \newcommand*{\glslonghypenfont}{\glslongdefaultfont}%

tlonghypenfont
9788 \newcommand*{\glsfirstlonghypenfont}{\glslonghypenfont}%

The default short form suffix:

xtrhyphensuffix
9789 \newcommand*{\glsxtrhyphensuffix}{\glsxtrabbrvpluralsuffix}

en-short-hyphen Designed for use with the markwords attribute.
9790 \newabbreviationstyle{long-hyphen-short-hyphen}%
9791 {%
9792   \renewcommand*{\CustomAbbreviationFields}{%
9793     name={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
9794     sort={\the\glsshorttok},%
9795     first={\protect\glsfirstlonghypenfont{\the\glslongtok}}%
9796     \protect\glsxtrfullsep{\the\glslabeltok}%
9797     \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
9798     firstplural={\protect\glsfirstlonghypenfont{\the\glslongpltok}}%
9799     \protect\glsxtrfullsep{\the\glslabeltok}%
9800     \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}}},%
9801     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
9802     description={\protect\glslonghypenfont{\the\glslongtok}}}%

Unset the regular attribute if it has been set.

9803 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9804   \glshasattribute{\the\glslabeltok}{regular}%
9805   {%
9806     \glssetattribute{\the\glslabeltok}{regular}{false}%
9807   }%
9808   {}%
9809 }%
9810 }%
9811 {%
9812   \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
9813   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
9814   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
9815   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
9816   \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```
9817 \renewcommand*\glsxtrfullformat[2]{%
9818   \glsxtrlonghyphenshort{##1}{\glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
9819 }%
9820 \renewcommand*\glsxtrfullplformat[2]{%
9821   \glsxtrlonghyphenshort{##1}{\glsaccesslongpl{##1}}%
9822   {\glsaccessshortpl{##1}}{##2}%
9823 }%
9824 \renewcommand*\Glsxtrfullformat[2]{%
9825   \glsxtrlonghyphenshort{##1}{\Glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
9826 }%
9827 \renewcommand*\Glsxtrfullplformat[2]{%
9828   \glsxtrlonghyphenshort{##1}{\Glsaccesslongpl{##1}}%
9829   {\glsaccessshortpl{##1}}{##2}%
9830 }%
9831 }
```

ort-hyphen-desc Like long-hyphen-short-hyphen but the description must be supplied by the user.

```
9832 \newabbreviationstyle{long-hyphen-short-hyphen-desc}{%
9833 }%
9834 \renewcommand*\CustomAbbreviationFields{%
9835   name={\glsxtrlongshortdescname},
9836   sort={\glsxtrlongshortdescsort},
9837   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}%
9838     \protect\glsxtrfullsep{\the\glslabeltok}%
9839     \glsxtrparen{\protect\glsfirstabbrvhyphenfont{\the\glsshorttok}}},%
9840   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}%
9841     \protect\glsxtrfullsep{\the\glslabeltok}%
9842     \glsxtrparen{\protect\glsfirstabbrvhyphenfont{\the\glsshortpltok}}},%
9843   text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
9844   plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}}%
9845 }%
```

Unset the regular attribute if it has been set.

```
9846 \renewcommand*\GlsXtrPostNewAbbreviation{%
9847   \glshasattribute{\the\glslabeltok}{regular}%
9848   {%
9849     \glssetattribute{\the\glslabeltok}{regular}{false}%
9850   }%
9851   {}%
9852 }%
9853 }%
9854 {}%
9855 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%
9856 }
```

\glsxtrlonghyphennoshort{\label}{\long}{\insert}

```

9857 \newcommand*{\glsxtrlonghyphennoshort}[3]{%
  Grouping is needed to localise the redefinitions.
9858 {%
  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.) No change is made to \glsxtrwordsep if <insert> doesn't start with a hyphen.
9859   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
9860   \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#3}\fi}%
9861   \ifglsxtrinsertinside\else{#3}\fi
9862 }%
9863 }

```

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.

```

9864 \newabbreviationstyle{long-hyphen-noshort-desc-noreg}{%
9865 {%
9866   \renewcommand*{\CustomAbbreviationFields}{%
9867     name={\protect\protect\glslonghyphenfont{\the\glslongtok}},%
9868     sort={\expandonce\glsxtrorglong},%
9869     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
9870     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
9871     plural={\protect\glslonghyphenfont{\the\glslongpltok}}%
9872 }%

```

Unset the regular attribute if it has been set.

```

9873 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9874   \glshasattribute{\the\glslabeltok}{regular}%
9875   {%
9876     \glssetattribute{\the\glslabeltok}{regular}{false}%
9877   }%
9878   {}%
9879 }%
9880 }%
9881 {%
9882 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%

```

In case the user wants to mix and match font styles, these are redefined here.

```

9883 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
9884 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
9885 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
9886 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
9887 \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9888 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9889   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}{##2}}%
9890 }%

```

```

9891 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9892   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
9893 }%
9894 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9895   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
9896 }%
9897 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9898   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
9899 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9900 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9901   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
9902   \glsxtrfullsep{##1}%
9903   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
9904 }%
9905 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9906   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
9907   \glsxtrfullsep{##1}%
9908   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
9909 }%
9910 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9911   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
9912   \glsxtrfullsep{##1}%
9913   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
9914 }%
9915 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9916   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
9917   \glsxtrfullsep{##1}%
9918   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
9919 }%

```

The first use full form only displays the long form.

```

9920 \renewcommand*{\glsxtrfullformat}[2]{%
9921   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
9922 }%
9923 \renewcommand*{\glsxtrfullplformat}[2]{%
9924   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
9925 }%
9926 \renewcommand*{\Glsxtrfullformat}[2]{%
9927   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
9928 }%
9929 \renewcommand*{\Glsxtrfullplformat}[2]{%
9930   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
9931 }%
9932 }

```

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 (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.

```

9933 \newabbreviationstyle{long-hyphen-noshort-noreg}%
9934 {%
9935   \renewcommand*{\CustomAbbreviationFields}{%
9936     name={\protect\glsabbrvfont{\the\glsshorttok}},%
9937     sort={\the\glsshorttok},%
9938     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
9939     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
9940     text={\protect\glslonghyphenfont{\the\glslongtok}},%
9941     plural={\protect\glslonghyphenfont{\the\glslongpltok}},%
9942     description={\the\glslongtok}%
9943 }%

```

Unset the regular attribute if it has been set.

```

9944 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9945   \glshasattribute{\the\glslabeltok}{regular}%
9946   {%
9947     \glssetattribute{\the\glslabeltok}{regular}{false}%
9948   }%
9949   {}%
9950 }%
9951 }%
9952 {%
9953   \GlsXtrUseAbbrStyleFmts{long-desc}%
9954 }

```

`\glsxtrlonghyphen{<long>}{<label>}{<insert>}`

Used by long-hyphen-postshort-hyphen. The *<insert>* is check to determine if it starts with a hyphen but isn't used here as it's moved to the post-link hook.

```
9955 \newcommand*{\glsxtrlonghyphen}[3]{%
```

Grouping is needed to localise the redefinitions.

```

9956 {%
9957   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
9958   \glsfirstlonghyphenfont{#1}%
9959 }%
9960 }

```

`\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.

```

9961 \newcommand*{\glsxtrposthyphenshort}[2]{%
9962   {%

```

```

9963 \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
9964 \ifglsxtrinsertinside{\glsfirstlonghyphenfont{#2}}\else{#2}\fi
9965 \glsxtrfullsep{#1}%
9966 \glsxtrparens
9967 {\glsfirstabbrvhyphenfont{\glsentryshort{#1}\ifglsxtrinsertinside{#2}\fi}%
9968 \ifglsxtrinsertinside\else{#2}\fi
9969 }%
9970 }%
9971 }

```

\glsxtrposthyphensubsequent{\label}{\insert}

Format in the post-link hook for subsequent use. The label is ignored by default.

```

9972 \newcommand*\glsxtrposthyphensubsequent}[2]{%
9973 \glsabrvfont{\ifglsxtrinsertinside {#2}\fi}%
9974 \ifglsxtrinsertinside \else{#2}\fi
9975 }

```

**ostshort-hyphen** Like long-hyphen-short-hyphen but shifts the insert and parenthetical material to the post-link hook.

```

9976 \newabbreviationstyle{long-hyphen-postshort-hyphen}%
9977 {%
9978 \renewcommand*\CustomAbbreviationFields}{%
9979 name={\protect\glsabrvhyphenfont{\the\glsshorttok}},%
9980 sort={\the\glsshorttok},%
9981 first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
9982 firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
9983 plural={\protect\glsabrvhyphenfont{\the\glsshortpltok}},%
9984 description={\protect\glslonghyphenfont{\the\glslongtok}}}%
9985 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9986 \csdef{glsxtrpostlink\glscategorylabel}{%
9987 \glsxtrifwasfirstuse
9988 {%
9989 \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
9990 }%
9991 }%

```

Put the insertion into the post-link:

```

9992 \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
9993 }%
9994 }%
9995 \glshasattribute{\the\glslabeltok}{regular}%
9996 {%
9997 \glssetattribute{\the\glslabeltok}{regular}{false}%
9998 }%
9999 {}%
10000 }%

```

```
10001 }%
10002 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
10003 \renewcommand*\{\abbrvpluralsuffix\}{\glsxtrabbrvpluralsuffix}%
10004 \renewcommand*\{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10005 \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10006 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10007 \renewcommand*\{\glslongfont}[1]{\glslonghypenfont{##1}}%
```

Subsequent use needs to omit the insertion:

```
10008 \renewcommand*\{\glsxtrsubsequentfmt}[2]{%
10009   \glsabbrvfont{\glsaccessshort{##1}}%
10010 }%
10011 \renewcommand*\{\glsxtrsubsequentplfmt}[2]{%
10012   \glsabbrvfont{\glsaccessshortpl{##1}}%
10013 }%
10014 \renewcommand*\{\Glsxtrsubsequentfmt}[2]{%
10015   \glsabbrvfont{\Glsaccessshort{##1}}%
10016 }%
10017 \renewcommand*\{\Glsxtrsubsequentplfmt}[2]{%
10018   \glsabbrvfont{\Glsaccessshortpl{##1}}%
10019 }%
```

First use full form:

```
10020 \renewcommand*\{\glsxtrfullformat}[2]{%
10021   \glsxtrlonghypen{\glsaccesslong{##1}{##1}{##2}}%
10022 }%
10023 \renewcommand*\{\glsxtrfullplformat}[2]{%
10024   \glsxtrlonghypen{\glsaccesslongpl{##1}{##1}{##2}}%
10025 }%
10026 \renewcommand*\{\Glsxtrfullformat}[2]{%
10027   \glsxtrlonghypen{\Glsaccesslong{##1}{##1}{##2}}%
10028 }%
10029 \renewcommand*\{\Glsxtrfullplformat}[2]{%
10030   \glsxtrlonghypen{\Glsaccesslongpl{##1}{##1}{##2}}%
10031 }%
```

In-line format.

```
10032 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
10033   \glsfirstlonghypenfont{\glsaccesslong{##1}}%
10034     \ifglsxtrinsertinside{##2}\fi}%
10035   \ifglsxtrinsertinside \else{##2}\fi
10036 }%
10037 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
10038   \glsfirstlonghypenfont{\glsaccesslongpl{##1}}%
10039     \ifglsxtrinsertinside{##2}\fi}%
10040   \ifglsxtrinsertinside \else{##2}\fi
10041 }%
10042 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
10043   \glsfirstlonghypenfont{\Glsaccesslong{##1}}%
```

```

10044     \ifglsxtrinsertinside{##2}\fi}%
10045     \ifglsxtrinsertinside \else{##2}\fi
10046   }%
10047 \renewcommand*\Glsxtrinlinefullplformat[2]{%
10048   \glsfirstlonghyphenfont{\Glsaccesslongpl{##1}}%
10049   \ifglsxtrinsertinside{##2}\fi}%
10050   \ifglsxtrinsertinside \else{##2}\fi
10051 }%
10052 }

```

`ort-hyphen-desc` Like `long-hyphen-postshort-hyphen` but the description must be supplied by the user.

```

10053 \newabbreviationstyle{long-hyphen-postshort-hyphen-desc}{%
10054 {%
10055   \renewcommand*\CustomAbbreviationFields{%
10056     name={\glsxtrlongshortdescname},%
10057     sort={\glsxtrlongshortdescsort},%
10058     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10059     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10060     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10061     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10062 }%
10063 \renewcommand*\GlsXtrPostNewAbbreviation{%
10064   \csdef{glsxtrpostlink}{\glscategorylabel}{%
10065     \glsxtrifwasfirstuse
10066   }%
10067   \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
10068 }%
10069 }%

```

Put the insertion into the post-link:

```

10070   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10071 }%
10072 }%
10073 \glshasattribute{\the\glslabeltok}{regular}%
10074 {%
10075   \glssetattribute{\the\glslabeltok}{regular}{false}%
10076 }%
10077 {}%
10078 }%
10079 }%
10080 {%
10081 \GlsXtrUseAbbrStyleFmts{long-hyphen-postshort-hyphen}%
10082 }

```

```
\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.

```
10083 \newcommand*{\glsxtrshorthypenlong}[4]{%
```

Grouping is needed to localise the redefinitions.

```
10084 {%
```

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.)

```
10085 \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
10086 \glsfirstabbrvhypenfont{#2\ifglsxtrinsertinside{#4}\fi}%
10087 \ifglsxtrinsertinside\else{#4}\fi
10088 \glsxtrfullsep{#1}%
10089 \glsxtrparen{\glsfirstlonghypenfont{#3\ifglsxtrinsertinside{#4}\fi}%
10090 \ifglsxtrinsertinside\else{#4}\fi}%
10091 }%
10092 }
```

hen-long-hyphen Designed for use with the `markwords` attribute.

```
10093 \newabbreviationstyle{short-hyphen-long-hyphen}%
10094 {%
10095 \renewcommand*{\CustomAbbreviationFields}{%
10096   name={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10097   sort={\the\glsshorttok},%
10098   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
10099     \protect\glsxtrfullsep{\the\glslabeltok}%
10100   \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
10101   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
10102     \protect\glsxtrfullsep{\the\glslabeltok}%
10103     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
10104   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10105   description={\protect\glslonghypenfont{\the\glslongtok}}}%

```

Unset the `regular` attribute if it has been set.

```
10106 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10107   \glshasattribute{\the\glslabeltok}{regular}%
10108   {%
10109     \glssetattribute{\the\glslabeltok}{regular}{false}%
10110   }%
10111   {}%
10112 }%
10113 }%
10114 {%
10115 \renewcommand*{\abbrvpluralsuffix}{\glsxtrhypensuffix}%
10116 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10117 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10118 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10119 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```

10120 \renewcommand*{\glsxtrfullformat}[2]{%
10121   \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\glsaccesslong{##1}}{##2}%
10122 }%
10123 \renewcommand*{\glsxtrfullplformat}[2]{%
10124   \glsxtrshorthypenlong{##1}%
10125   {\glsaccessshortpl{##1}}{\glsaccesslongpl{##1}}{##2}%
10126 }%
10127 \renewcommand*{\Glsxtrfullformat}[2]{%
10128   \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\Glsaccesslong{##1}}{##2}%
10129 }%
10130 \renewcommand*{\Glsxtrfullplformat}[2]{%
10131   \glsxtrshorthypenlong{##1}%
10132   {\glsaccessshortpl{##1}}{\Glsaccesslongpl{##1}}{##2}%
10133 }%
10134 }

```

`ong-hyphen-desc` Like short-hyphen-long-hyphen but the description must be supplied by the user.

```

10135 \newabbreviationstyle{short-hyphen-long-hyphen-desc}{%
10136 }%
10137 \renewcommand*{\CustomAbbreviationFields}{%
10138   name={\glsxtrshortlongdescname},
10139   sort={\glsxtrshortlongdescsort},
10140   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
10141     \protect\glsxtrfullsep{\the\glslabeltok}%
10142     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
10143   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
10144     \protect\glsxtrfullsep{\the\glslabeltok}%
10145     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
10146   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10147   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10148 }%

```

Unset the regular attribute if it has been set.

```

10149 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10150   \glshasattribute{\the\glslabeltok}{regular}%
10151 }%
10152   \glssetattribute{\the\glslabeltok}{regular}{false}%
10153 }%
10154 }%
10155 }%
10156 }%
10157 }%
10158 \GlsXtrUseAbbrStyleFmts{short-hyphen-long-hyphen}%
10159 }

```

`\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.

```
10160 \newcommand*{\glsxtrshorthypen}[3]{%
```

Grouping is needed to localise the redefinitions.

```
10161 {%
10162   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
10163   \glsfirstabbrvhypenfont{#1}%
10164 }%
10165 }
```

```
trposthypenlong \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.

```
10166 \newcommand*{\glsxtrposthypenlong}[2]{%
10167 {%
10168   \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
10169   \ifglsxtrinsertinside{\glsfirstabbrvhypenfont{#2}}\else{#2}\fi
10170   \glsxtrfullsep{#1}%
10171   \glsxtrparen
10172   {\glsfirstlonghypenfont{\glsentrylong{#1}\ifglsxtrinsertinside{#2}\fi}%
10173     \ifglsxtrinsertinside\else{#2}\fi
10174   }%
10175 }%
10176 }
```

`postlong-hyphen` Like short-hyphen-long-hyphen but shifts the insert and parenthetical material to the post-link hook.

```
10177 \newabbreviationstyle{short-hyphen-postlong-hyphen}{%
10178 {%
10179   \renewcommand*{\CustomAbbreviationFields}{%
10180     name={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10181     sort={\the\glsshorttok},%
10182     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
10183     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
10184     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10185     description={\protect\glslonghypenfont{\the\glslongtok}}}%
10186   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10187     \csdef{glsxtrpostlink\glscategorylabel}{%
10188       \glsxtrifwasfirstuse
10189       {%
10190         \glsxtrposthypenlong{\glslabel}{\glsinsert}%
10191       }%
10192     }%
```

Put the insertion into the post-link:

```
10193     \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10194     }%
10195 }%
10196 \glshasattribute{\the\glslabeltok}{regular}%
10197 {%
10198     \glssetattribute{\the\glslabeltok}{regular}{false}%
10199 }%
10200 {%
10201 }%
10202 }%
10203 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
10204 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
10205 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10206 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10207 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10208 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%
```

Subsequent use needs to omit the insertion:

```
10209 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10210     \glsabbrvfont{\glsaccessshort{##1}}%
10211 }%
10212 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
10213     \glsabbrvfont{\glsaccessshortpl{##1}}%
10214 }%
10215 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10216     \glsabbrvfont{\Glsaccessshort{##1}}%
10217 }%
10218 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10219     \glsabbrvfont{\Glsaccessshortpl{##1}}%
10220 }%
```

First use full form:

```
10221 \renewcommand*{\glsxtrfullformat}[2]{%
10222     \glsxtrshortyphen{\glsaccessshort{##1}{##1}{##2}}%
10223 }%
10224 \renewcommand*{\glsxtrfullplformat}[2]{%
10225     \glsxtrshortyphen{\glsaccessshortpl{##1}{##1}{##2}}%
10226 }%
10227 \renewcommand*{\Glsxtrfullformat}[2]{%
10228     \glsxtrshortyphen{\Glsaccessshort{##1}{##1}{##2}}%
10229 }%
10230 \renewcommand*{\Glsxtrfullplformat}[2]{%
10231     \glsxtrshortyphen{\Glsaccessshortpl{##1}{##1}{##2}}%
10232 }%
```

In-line format. Commands like \glsxtrfull set \glsinsert to empty. The entire link-text (provided by the following commands) is stored in \glscustomtext.

```
10233 \renewcommand*{\glsxtrinlinefullformat}[2]{%
```

```

10234     \glsfirstabbrvhypenfont{\glsaccessshort{##1}%
10235         \ifglsxtrinsertinside{##2}\fi}%
10236         \ifglsxtrinsertinside \else{##2}\fi
10237     }%
10238     \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
10239         \glsfirstabbrvhypenfont{\glsaccessshortpl{##1}%
10240             \ifglsxtrinsertinside{##2}\fi}%
10241             \ifglsxtrinsertinside \else{##2}\fi
10242     }%
10243     \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
10244         \glsfirstabbrvhypenfont{\Glsaccessshort{##1}%
10245             \ifglsxtrinsertinside{##2}\fi}%
10246             \ifglsxtrinsertinside \else{##2}\fi
10247     }%
10248     \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
10249         \glsfirstabbrvhypenfont{\Glsaccessshortpl{##1}%
10250             \ifglsxtrinsertinside{##2}\fi}%
10251             \ifglsxtrinsertinside \else{##2}\fi
10252     }%
10253 }

```

`ong-hyphen-desc` Like short-hyphen-postlong-hyphen but the description must be supplied by the user.

```

10254 \newabbreviationstyle{short-hyphen-postlong-hyphen-desc}{%
10255 {%
10256     \renewcommand*\{\CustomAbbreviationFields}{%
10257         name={\glsxtrshortlongdescname},
10258         sort={\glsxtrshortlongdescsort},%
10259         first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
10260         firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
10261         text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10262         plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10263     }%
10264     \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
10265         \csdef{glsxtrpostlink\glscategorylabel}{%
10266             \glsxtrifwasfirstuse
10267             {%
10268                 \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
10269             }%
10270         }%

```

Put the insertion into the post-link:

```

10271         \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10272             }%
10273     }%
10274     \glshasattribute{\the\glslabeltok}{regular}%
10275     {%
10276         \glssetattribute{\the\glslabeltok}{regular}{false}%
10277     }%
10278     {}%
10279 }

```

```

10280 }%
10281 {%
10282   \GlsXtrUseAbbrStyleFmts{short-hyphen-postlong-hyphen}%
10283 }

```

### 1.6.8 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
10284 \newcommand*\{\glsabbrvonlyfont\}{\glsabbrvdefaultfont}%

stabbrvonlyfont
10285 \newcommand*\{\glsfirstabbrvonlyfont\}{\glsabbrvonlyfont}%

glslongonlyfont
10286 \newcommand*\{\glslongonlyfont\}{\glslongdefaultfont}%

rstlongonlyfont
10287 \newcommand*\{\glsfirstlongonlyfont\}{\glslongonlyfont}%

```

The default short form suffix:

```

lsxtronlysuffix
10288 \newcommand*\{\glsxtronlysuffix\}{\glsxtrabbrvpluralsuffix}%

only-short-only
10289 \newabbreviationstyle{long-only-short-only}%
10290 {%
10291   \renewcommand*\{\CustomAbbreviationFields\}{%
10292     name={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
10293     sort={\the\glsshorttok},%
10294     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
10295     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
10296     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}},%
10297     description={\protect\glslongonlyfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```

10298 \renewcommand*\{\GlsXtrPostNewAbbreviation\}{%
10299   \glshasattribute{\the\glslabeltok}{regular}%
10300   {%
10301     \glssetattribute{\the\glslabeltok}{regular}{false}%
10302   }%
10303   {}%
10304 }%
10305 }%
10306 {%
10307 \renewcommand*\{\abbrvpluralsuffix\}{\protect\glsxtronlysuffix}%
10308 \renewcommand*\{\glsabbrvfont\}[1]{\glsabbrvonlyfont{\##1}}%

```

```

10309 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvonlyfont{##1}}%
10310 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongonlyfont{##1}}%
10311 \renewcommand*{\glslongfont}[1]{\glslongonlyfont{##1}}%

```

The first use full form doesn't show the short form.

```

10312 \renewcommand*{\glsxtrfullformat}[2]{%
10313   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10314   \ifglsxtrinsertinside\else##2\fi
10315 }%
10316 \renewcommand*{\glsxtrfullplformat}[2]{%
10317   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10318   \ifglsxtrinsertinside\else##2\fi
10319 }%
10320 \renewcommand*{\Glsxtrfullformat}[2]{%
10321   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10322   \ifglsxtrinsertinside\else##2\fi
10323 }%
10324 \renewcommand*{\Glsxtrfullplformat}[2]{%
10325   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10326   \ifglsxtrinsertinside\else##2\fi
10327 }%

```

The inline full form does show the short form.

```

10328 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10329   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10330   \ifglsxtrinsertinside\else##2\fi
10331   \glsxtrfullsep{##1}%
10332   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshort{##1}}}%
10333 }%
10334 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10335   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10336   \ifglsxtrinsertinside\else##2\fi
10337   \glsxtrfullsep{##1}%
10338   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
10339 }%
10340 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10341   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10342   \ifglsxtrinsertinside\else##2\fi
10343   \glsxtrfullsep{##1}%
10344   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
10345 }%
10346 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10347   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10348   \ifglsxtrinsertinside\else##2\fi
10349   \glsxtrfullsep{##1}%
10350   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\Glsaccessshortpl{##1}}}%
10351 }%
10352 }

```

xtronlydescsort

```

10353 \newcommand*{\glsxtronlydescsort}{\the\glslongtok}

xtronlydescname
10354 \newcommand*{\glsxtronlydescname}{%
10355   \protect\glslongfont{\the\glslongtok}%
10356 }

short-only-desc
10357 \newabbreviationstyle{long-only-short-only-desc}{%
10358 {%
10359   \renewcommand*{\CustomAbbreviationFields}{%
10360     name={\glsxtronlydescname},%
10361     sort={\glsxtronlydescsort},%
10362     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
10363     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
10364     text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
10365     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}}%
10366   }%
10367   Unset the regular attribute if it has been set.
10368   \glshasattribute{\the\glslabeltok}{regular}%
10369   {%
10370     \glssetattribute{\the\glslabeltok}{regular}{false}%
10371   }%
10372   {}%
10373 }%
10374 }%
10375 {%
10376   \GlsXtrUseAbbrStyleFmts{long-only-short-only}%
10377 }

```

## 1.7 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 `\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:

```
10378 \let\@glsxtr@org@markright\markright
```

Redefine (grouping not added in case it interferes with the original code):

```
10379 \renewcommand*\{\markright}[1]{%
10380   \glsxtrmarkhook
10381   \@glsxtr@org@markright{\@glsxtrinmark#1\@glsxtrnotinmark}%
10382   \glsxtrrestoremarkhook
10383 }
```

\markboth Save original definition:

```
10384 \let\@glsxtr@org@markboth\markboth
```

Redefine (grouping not added in case it interferes with the original code):

```
10385 \renewcommand*\{\markboth}[2]{%
10386   \glsxtrmarkhook
10387   \@glsxtr@org@markboth
10388   {\@glsxtrinmark#1\@glsxtrnotinmark}%
10389   {\@glsxtrinmark#2\@glsxtrnotinmark}%
10390   \glsxtrrestoremarkhook
10391 }
```

Also do this for \@starttoc

\@starttoc Save original definition:

```
10392 \let\@glsxtr@org@@starttoc\@starttoc
```

Redefine:

```
10393 \renewcommand*\{\@starttoc}[1]{%
10394   \glsxtrmarkhook
10395   \@glsxtrinmark
10396   \@glsxtr@org@@starttoc{#1}%
10397   \@glsxtrnotinmark
10398   \glsxtrrestoremarkhook
10399 }
```

If this causes a problem provide a simple way of switching back to the original definitions:

sxtrRevertMarks

```
10400 \newcommand*\{\glsxtrRevertMarks}{%
10401   \let\markright\@glsxtr@org@markright
```

```

10402 \let\markboth\@glsxtr@org@markboth
10403 \let\@starttoc\@glsxtr@org@\starttoc
10404 }

\glsxtrifinmark
10405 \newcommand*{\glsxtrifinmark}[2]{#2}

\@glsxtrinmark
10406 \newrobustcmd*{\@glsxtrinmark}{%
10407 \let\glsxtrifinmark\@firstoftwo
10408 }

glsxtrnotinmark
10409 \newrobustcmd*{\@glsxtrnotinmark}{%
10410 \let\glsxtrifinmark\@secondoftwo
10411 }

eorpdforheading
10412 \ifdef\texorpdfstring
10413 {
10414 \newcommand*{\glsxtrtitleorpdforheading}[3]{\texorpdfstring{#1}{#2}}
10415 }
10416 {
10417 \newcommand*{\glsxtrtitleorpdforheading}[3]{#1}
10418 }

```

\glsxtrmarkhook Hook used in new definition of \markboth and \markright to make some changes to apply to the marks:

```

10419 \newcommand*{\glsxtrmarkhook}{%
  Save current definitions:
10420 \let\@glsxtr@org@MakeUppercase\MakeUppercase
10421 \let\@glsxtr@org@glsxtrtitleorpdforheading\glsxtrtitleorpdforheading
10422 \let\@glsxtr@org@glsxtrtitleshort\glsxtrtitleshort
10423 \let\@glsxtr@org@glsxtrtitleshortpl\glsxtrtitleshortpl
10424 \let\@glsxtr@org@Glsxtrtitleshort\Glsxtrtitleshort
10425 \let\@glsxtr@org@Glsxtrtitleshortpl\Glsxtrtitleshortpl
10426 \let\@glsxtr@org@glsxtrtitlename\glsxtrtitlename
10427 \let\@glsxtr@org@Glsxtrtitlename\Glsxtrtitlename
10428 \let\@glsxtr@org@glsxtrtitletext\glsxtrtitletext
10429 \let\@glsxtr@org@Glsxtrtitletext\Glsxtrtitletext
10430 \let\@glsxtr@org@glsxtrtitleplural\glsxtrtitleplural
10431 \let\@glsxtr@org@Glsxtrtitleplural\Glsxtrtitleplural
10432 \let\@glsxtr@org@glsxtrtitlefirst\glsxtrtitlefirst
10433 \let\@glsxtr@org@Glsxtrtitlefirst\Glsxtrtitlefirst
10434 \let\@glsxtr@org@glsxtrtitlefirstplural\glsxtrtitlefirstplural
10435 \let\@glsxtr@org@Glsxtrtitlefirstplural\Glsxtrtitlefirstplural
10436 \let\@glsxtr@org@glsxtrtitlelong\glsxtrtitlelong
10437 \let\@glsxtr@org@glsxtrtitlelongpl\glsxtrtitlelongpl

```

```

10438 \let\@glsxtr@org@Glsxtrtitlelong\Glsxtrtitlelong
10439 \let\@glsxtr@org@Glsxtrtitlelongpl\Glsxtrtitlelongpl
10440 \let\@glsxtr@org@glsxtrtitlefull\glsxtrtitlefull
10441 \let\@glsxtr@org@glsxtrtitlefullpl\glsxtrtitlefullpl
10442 \let\@glsxtr@org@Glsxtrtitlefull\Glsxtrtitlefull
10443 \let\@glsxtr@org@Glsxtrtitlefullpl\Glsxtrtitlefullpl

```

#### New definitions

```

10444 \let\glsxtrifinmark\@firstoftwo
10445 \let\MakeUppercase\MakeTextUppercase
10446 \let\glsxtrtitleorpdforheading\@thirdofthree
10447 \let\glsxtrtitleshort\glsxtrheadshort
10448 \let\glsxtrtitleshortpl\glsxtrheadshortpl
10449 \let\Glsxtrtitleshort\Glsxtrheadshort
10450 \let\Glsxtrtitleshortpl\Glsxtrheadshortpl
10451 \let\glsxtrtitlename\glsxtrheadname
10452 \let\Glsxtrtitlename\Glsxtrheadname
10453 \let\glsxtrtitletext\glsxtrheadtext
10454 \let\Glsxtrtitletext\Glsxtrheadtext
10455 \let\glsxtrtitleplural\glsxtrheadplural
10456 \let\Glsxtrtitleplural\Glsxtrheadplural
10457 \let\glsxtrtitlefirst\glsxtrheadfirst
10458 \let\Glsxtrtitlefirst\Glsxtrheadfirst
10459 \let\glsxtrtitlefirstplural\glsxtrheadfirstplural
10460 \let\Glsxtrtitlefirstplural\Glsxtrheadfirstplural
10461 \let\glsxtrtitlelong\glsxtrheadlong
10462 \let\glsxtrtitlelongpl\glsxtrheadlongpl
10463 \let\Glsxtrtitlelong\Glsxtrheadlong
10464 \let\Glsxtrtitlelongpl\Glsxtrheadlongpl
10465 \let\glsxtrtitlefull\glsxtrheadfull
10466 \let\glsxtrtitlefullpl\glsxtrheadfullpl
10467 \let\Glsxtrtitlefull\Glsxtrheadfull
10468 \let\Glsxtrtitlefullpl\Glsxtrheadfullpl
10469 }

```

`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.)

```

10470 \newcommand*\glsxtrrestoremarkhook}{%
10471 \let\glsxtrifinmark\@secondoftwo
10472 \let\MakeUppercase\glsxtr@org@MakeUppercase
10473 \let\glsxtrtitleorpdforheading\glsxtr@org@glsxtrtitleorpdforheading
10474 \let\glsxtrtitleshort\glsxtr@org@glsxtrtitleshort
10475 \let\glsxtrtitleshortpl\glsxtr@org@glsxtrtitleshortpl
10476 \let\Glsxtrtitleshort\glsxtr@org@Glsxtrtitleshort
10477 \let\Glsxtrtitleshortpl\glsxtr@org@Glsxtrtitleshortpl
10478 \let\glsxtrtitlename\glsxtr@org@glsxtrtitlename
10479 \let\Glsxtrtitlename\glsxtr@org@Glsxtrtitlename

```

```

10480 \let\glsxtrtitletext@glsxtr@org@glsxtrtitletext
10481 \let\Glsxtrtitletext@glsxtr@org@Glsxtrtitletext
10482 \let\glsxtrtitleplural@glsxtr@org@glsxtrtitleplural
10483 \let\Glsxtrtitleplural@glsxtr@org@Glsxtrtitleplural
10484 \let\glsxtrtitlefirst@glsxtr@org@glsxtrtitlefirst
10485 \let\Glsxtrtitlefirst@glsxtr@org@Glsxtrtitlefirst
10486 \let\glsxtrtitlefirstplural@glsxtr@org@glsxtrtitlefirstplural
10487 \let\Glsxtrtitlefirstplural@glsxtr@org@Glsxtrtitlefirstplural
10488 \let\glsxtrtitlelong@glsxtr@org@glsxtrtitlelong
10489 \let\glsxtrtitlelongpl@glsxtr@org@glsxtrtitlelongpl
10490 \let\Glsxtrtitlelong@glsxtr@org@Glsxtrtitlelong
10491 \let\Glsxtrtitlelongpl@glsxtr@org@Glsxtrtitlelongpl
10492 \let\glsxtrtitlefull@glsxtr@org@glsxtrtitlefull
10493 \let\glsxtrtitlefullpl@glsxtr@org@glsxtrtitlefullpl
10494 \let\Glsxtrtitlefull@glsxtr@org@Glsxtrtitlefull
10495 \let\Glsxtrtitlefullpl@glsxtr@org@Glsxtrtitlefullpl
10496 }

```

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.

```

10497 \newcommand*{\glsxtrheadshort}[1]{%
10498   \protect\NoCaseChange
10499   {%
10500     \glsifattribute{#1}{headuc}{true}%
10501     {%
10502       \GLSxtrshort [noindex,hyper=false]{#1}[]%
10503     }%
10504     {%
10505       \glsxtrshort [noindex,hyper=false]{#1}[]%
10506     }%
10507   }%
10508 }

```

`lsxtrtitleshort` Command to display short form of abbreviation in section title and table of contents.

```

10509 \newrobustcmd*{\glsxtrtitleshort}[1]{%
10510   \glsxtrshort [noindex,hyper=false]{#1}[]%
10511 }

```

`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.

```

10512 \newcommand*{\glsxtrheadshortpl}[1]{%
10513   \protect\NoCaseChange
10514   {%
10515     \glsifattribute{#1}{headuc}{true}%
10516     {%
10517       \GLSxtrshortpl [noindex,hyper=false]{#1}[]%

```

```
10518 }%
10519 {%
10520 \glsxtrshortpl [noindex,hyper=false]{#1}[]%
10521 }%
10522 }%
10523 }
```

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents.

```
10524 \newrobustcmd*\{\glsxtrtitleshortpl\}[1]{%
10525 \glsxtrshortpl [noindex,hyper=false]{#1}[]%
10526 }
```

Glsxtrheadshort Command used to display short form in the page header with the first letter converted to upper case.

```
10527 \newcommand*\{\Glsxtrheadshort\}[1]{%
10528 \protect\NoCaseChange
10529 {%
10530 \glsifattribute{#1}{headuc}{true}%
10531 {%
10532 \GLSxtrshort [noindex,hyper=false]{#1}[]%
10533 }%
10534 {%
10535 \Glsxtrshort [noindex,hyper=false]{#1}[]%
10536 }%
10537 }%
10538 }
```

lsxtrtitleshort Command to display short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10539 \newrobustcmd*\{\Glsxtrtitleshort\}[1]{%
10540 \Glsxtrshort [noindex,hyper=false]{#1}[]%
10541 }
```

sxtrheadshortpl Command used to display plural short form in the page header with the first letter converted to upper case.

```
10542 \newcommand*\{\Glsxtrheadshortpl\}[1]{%
10543 \protect\NoCaseChange
10544 {%
10545 \glsifattribute{#1}{headuc}{true}%
10546 {%
10547 \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
10548 }%
10549 {%
10550 \Glsxtrshortpl [noindex,hyper=false]{#1}[]%
10551 }%
10552 }%
10553 }
```

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10554 \newrobustcmd*\{\Glsxtrtitleshortpl\}[1]{%
10555   \Glsxtrshortpl[noindex,hyper=false]{#1}[]%
10556 }
```

\glsxtrheadname As above but for the name value.

```
10557 \newcommand*\{\glsxtrheadname\}[1]{%
10558   \protect\NoCaseChange
10559   {%
10560     \glsifattribute{#1}{headuc}{true}%
10561     {%
10562       \GLSname[noindex,hyper=false]{#1}[]%
10563     }%
10564     {%
10565       \glsname[noindex,hyper=false]{#1}[]%
10566     }%
10567   }%
10568 }
```

glsxtrtitlename Command to display name value in section title and table of contents.

```
10569 \newrobustcmd*\{\glsxtrtitlename\}[1]{%
10570   \glsname[noindex,hyper=false]{#1}[]%
10571 }
```

\Glsxtrheadname First letter converted to upper case

```
10572 \newcommand*\{\Glsxtrheadname\}[1]{%
10573   \protect\NoCaseChange
10574   {%
10575     \glsifattribute{#1}{headuc}{true}%
10576     {%
10577       \GLSname[noindex,hyper=false]{#1}[]%
10578     }%
10579     {%
10580       \Glsname[noindex,hyper=false]{#1}[]%
10581     }%
10582   }%
10583 }
```

Glsxtrtitlename Command to display name value in section title and table of contents with the first letter changed to upper case.

```
10584 \%changes{1.21}{2017-11-03}{new}
10585 \newrobustcmd*\{\Glsxtrtitlename\}[1]{%
10586   \Glsname[noindex,hyper=false]{#1}[]%
10587 }
```

\glsxtrheadtext As above but for the text value.

```
10588 \newcommand*\{\glsxtrheadtext\}[1]{%
```

```

10589 \protect\NoCaseChange
10590 {%
10591   \glsifattribute{#1}{headuc}{true}%
10592   {%
10593     \GLStext[noindex,hyper=false]{#1}[]%
10594   }%
10595   {%
10596     \glstext[noindex,hyper=false]{#1}[]%
10597   }%
10598 }%
10599 }

```

`\glsxtrtitletext` Command to display text value in section title and table of contents.

```

10600 \newrobustcmd*\glsxtrtitletext}[1]{%
10601   \glstext[noindex,hyper=false]{#1}[]%
10602 }

```

`\Glsxtrheadtext` First letter converted to upper case

```

10603 \newcommand*\Glsxtrheadtext}[1]{%
10604   \protect\NoCaseChange
10605 {%
10606   \glsifattribute{#1}{headuc}{true}%
10607   {%
10608     \GLStext[noindex,hyper=false]{#1}[]%
10609   }%
10610   {%
10611     \Glstext[noindex,hyper=false]{#1}[]%
10612   }%
10613 }%
10614 }

```

`\Glsxtrtitletext` Command to display text value in section title and table of contents with the first letter changed to upper case.

```

10615 \newrobustcmd*\Glsxtrtitletext}[1]{%
10616   \Glstext[noindex,hyper=false]{#1}[]%
10617 }

```

`\sxtrheadplural` As above but for the plural value.

```

10618 \newcommand*\glsxtrheadplural}[1]{%
10619   \protect\NoCaseChange
10620 {%
10621   \glsifattribute{#1}{headuc}{true}%
10622   {%
10623     \GLSplural[noindex,hyper=false]{#1}[]%
10624   }%
10625   {%
10626     \glsplural[noindex,hyper=false]{#1}[]%
10627   }%
10628 }%

```

```
10629 }
```

**sxtrtitleplural** Command to display plural value in section title and table of contents.

```
10630 \newrobustcmd*\{\glsxtrtitleplural\}[1]{%
10631   \glsplural[noindex,hyper=false]{#1}[]%
10632 }
```

**lsxtrheadplural** Convert first letter to upper case.

```
10633 \newcommand*\{\Glsxtrheadplural\}[1]{%
10634   \protect\NoCaseChange
10635   {%
10636     \glsifattribute{#1}{headuc}{true}%
10637     {%
10638       \GLSplural[noindex,hyper=false]{#1}[]%
10639     }%
10640     {%
10641       \Glsplural[noindex,hyper=false]{#1}[]%
10642     }%
10643   }%
10644 }
```

**sxtrtitleplural** Command to display plural value in section title and table of contents with the first letter changed to upper case.

```
10645 \newrobustcmd*\{\Glsxtrtitleplural\}[1]{%
10646   \Glsplural[noindex,hyper=false]{#1}[]%
10647 }
```

**glsxtrheadfirst** As above but for the first value.

```
10648 \newcommand*\{\glsxtrheadfirst\}[1]{%
10649   \protect\NoCaseChange
10650   {%
10651     \glsifattribute{#1}{headuc}{true}%
10652     {%
10653       \GLSfirst[noindex,hyper=false]{#1}[]%
10654     }%
10655     {%
10656       \glsfirst[noindex,hyper=false]{#1}[]%
10657     }%
10658   }%
10659 }
```

**lsxtrtitlefirst** Command to display first value in section title and table of contents.

```
10660 \newrobustcmd*\{\glsxtrtitlefirst\}[1]{%
10661   \glsfirst[noindex,hyper=false]{#1}[]%
10662 }
```

**Glsxtrheadfirst** First letter converted to upper case

```
10663 \newcommand*\{\Glsxtrheadfirst\}[1]{%
```

```

10664 \protect\NoCaseChange
10665 {%
10666   \glsifattribute{#1}{headuc}{true}%
10667   {%
10668     \GLSfirst[noindex,hyper=false]{#1}[]%
10669   }%
10670   {%
10671     \Glsfirst[noindex,hyper=false]{#1}[]%
10672   }%
10673 }%
10674 }

```

`lsxtrtitlefirst` Command to display first value in section title and table of contents with the first letter changed to upper case.

```

10675 \newrobustcmd*\Glsxtrtitlefirst}[1]{%
10676   \Glsfirst[noindex,hyper=false]{#1}[]%
10677 }

```

`headfirstplural` As above but for the firstplural value.

```

10678 \newcommand*\glsxtrheadfirstplural}[1]{%
10679   \protect\NoCaseChange
10680   {%
10681     \glsifattribute{#1}{headuc}{true}%
10682     {%
10683       \GLSfirstplural[noindex,hyper=false]{#1}[]%
10684     }%
10685     {%
10686       \glsfirstplural[noindex,hyper=false]{#1}[]%
10687     }%
10688   }%
10689 }

```

`titlefirstplural` Command to display firstplural value in section title and table of contents.

```

10690 \newrobustcmd*\glsxrttitlefirstplural}[1]{%
10691   \glsfirstplural[noindex,hyper=false]{#1}[]%
10692 }

```

`headfirstplural` First letter converted to upper case

```

10693 \newcommand*\Glsxtrheadfirstplural}[1]{%
10694   \protect\NoCaseChange
10695   {%
10696     \glsifattribute{#1}{headuc}{true}%
10697     {%
10698       \GLSfirstplural[noindex,hyper=false]{#1}[]%
10699     }%
10700     {%
10701       \Glsfirstplural[noindex,hyper=false]{#1}[]%
10702     }%
10703   }%

```

```

10704 }

titlefirstplural Command to display first value in section title and table of contents with the first letter
changed to upper case.
10705 \newrobustcmd*\{\Glsxrttitlefirstplural\}[1]{%
10706   \Glsfirstplural[noindex,hyper=false]{#1}[]%
10707 }

\glsxtrheadlong Command used to display long form in the page header.
10708 \newcommand*\{\glsxtrheadlong\}[1]{%
10709   \protect\NoCaseChange
10710   {%
10711     \glsifattribute{#1}{headuc}{true}%
10712     {%
10713       \GLSxtrlong[noindex,hyper=false]{#1}[]%
10714     }%
10715     {%
10716       \glsxtrlong[noindex,hyper=false]{#1}[]%
10717     }%
10718   }%
10719 }

glsxrttitlelong Command to display long form of abbreviation in section title and table of contents.
10720 \newrobustcmd*\{\glsxrttitlelong\}[1]{%
10721   \glsxtrlong[noindex,hyper=false]{#1}[]%
10722 }

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.
10723 \newcommand*\{\glsxtrheadlongpl\}[1]{%
10724   \protect\NoCaseChange
10725   {%
10726     \glsifattribute{#1}{headuc}{true}%
10727     {%
10728       \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
10729     }%
10730     {%
10731       \glsxtrlongpl[noindex,hyper=false]{#1}[]%
10732     }%
10733   }%
10734 }

sxtrttitlelongpl Command to display plural long form of abbreviation in section title and table of contents.
10735 \newrobustcmd*\{\glsxrttitlelongpl\}[1]{%
10736   \glsxtrlongpl[noindex,hyper=false]{#1}[]%
10737 }

```

\Glsxtrheadlong Command used to display long form in the page header with the first letter converted to upper case.

```
10738 \newcommand*{\Glsxtrheadlong}[1]{%
10739   \protect\NoCaseChange
10740   {%
10741     \glsifattribute{#1}{headuc}{true}%
10742     {%
10743       \GLSxtrlong[noindex,hyper=false]{#1}[]%
10744     }%
10745     {%
10746       \Glsxtrlong[noindex,hyper=false]{#1}[]%
10747     }%
10748   }%
10749 }
```

Glsxrttitlelong Command to display long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10750 \newrobustcmd*{\Glsxrttitlelong}[1]{%
10751   \Glsxtrlong[noindex,hyper=false]{#1}[]%
10752 }
```

lsxtrheadlongpl Command used to display plural long form in the page header with the first letter converted to upper case.

```
10753 \newcommand*{\Glsxtrheadlongpl}[1]{%
10754   \protect\NoCaseChange
10755   {%
10756     \glsifattribute{#1}{headuc}{true}%
10757     {%
10758       \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
10759     }%
10760     {%
10761       \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
10762     }%
10763   }%
10764 }
```

sxtrttitlelongpl Command to display plural long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10765 \newrobustcmd*{\Glsxrttitlelongpl}[1]{%
10766   \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
10767 }
```

\glsxtrheadfull Command used to display full form in the page header.

```
10768 \newcommand*{\glsxtrheadfull}[1]{%
10769   \protect\NoCaseChange
10770   {%
10771     \glsifattribute{#1}{headuc}{true}%
10772     {%
```

```

10773     \GLSxtrfull[noindex,hyper=false]{#1}[]%
10774   }%
10775   {%
10776     \glsxtrfull[noindex,hyper=false]{#1}[]%
10777   }%
10778 }%
10779 }

```

`glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents.

```

10780 \newrobustcmd*\{\glsxtrtitlefull\}[1]{%
10781   \glsxtrfull[noindex,hyper=false]{#1}[]%
10782 }

```

`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.

```

10783 \newcommand*\{\glsxtrheadfullpl\}[1]{%
10784   \protect\NoCaseChange
10785   {%
10786     \glsifattribute{#1}{headuc}{true}%
10787   }%
10788     \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
10789   }%
10790   {%
10791     \glsxtrfullpl[noindex,hyper=false]{#1}[]%
10792   }%
10793 }%
10794 }

```

`sxtrtitlefullpl` Command to display plural full form of abbreviation in section title and table of contents.

```

10795 \newrobustcmd*\{\glsxtrtitlefullpl\}[1]{%
10796   \glsxtrfullpl[noindex,hyper=false]{#1}[]%
10797 }

```

`\Glsxtrheadfull` Command used to display full form in the page header with the first letter converted to upper case.

```

10798 \newcommand*\{\Glsxtrheadfull\}[1]{%
10799   \protect\NoCaseChange
10800   {%
10801     \glsifattribute{#1}{headuc}{true}%
10802   }%
10803     \GLSxtrfull[noindex,hyper=false]{#1}[]%
10804   }%
10805   {%
10806     \Glsxtrfull[noindex,hyper=false]{#1}[]%
10807   }%
10808 }%
10809 }

```

Glsxtrtitlefull Command to display full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10810 \newrobustcmd*\{\Glsxtrtitlefull\}[1]{%
10811   \Glsxtrfull[noindex,hyper=false]{#1}[]%
10812 }
```

Glsxtrheadfullpl Command used to display plural full form in the page header with the first letter converted to upper case.

```
10813 \newcommand*\{\Glsxtrheadfullpl\}[1]{%
10814   \protect\NoCaseChange
10815   {%
10816     \glsifattribute{#1}{headuc}{true}%
10817     {%
10818       \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
10819     }%
10820     {%
10821       \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
10822     }%
10823   }%
10824 }
```

Sxttitlefullpl Command to display plural full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10825 \newrobustcmd*\{\Glsxtrtitlefullpl\}[1]{%
10826   \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
10827 }
```

\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.

```
10828 \ifdef\texorpdfstring
10829 {
10830   \newcommand*\{\glsfmtshort\}[1]{%
10831     \texorpdfstring
10832     {\glsxtrtitleshort{#1}}%
10833     {\glsentryshort{#1}}%
10834   }
10835 }
10836 {
10837   \newcommand*\{\glsfmtshort\}[1]{%
10838     \glsxtrtitleshort{#1}%
10839 }
```

Similarly for the plural version.

```
\glsfmtshortpl
10840 \ifdef\texorpdfstring
10841 {
10842   \newcommand*\{\glsfmtshortpl\}[1]{%
```

```

10843     \texorpdfstring
10844         {\glsxrttitleshortpl{#1}}%
10845         {\glsentryshortpl{#1}}%
10846     }
10847 }
10848 {
10849 \newcommand*{\glsfmtshortpl}[1]{%
10850     \glsxrttitleshortpl{#1}%
10851 }

```

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).

```

10852 \ifdef\texorpdfstring
10853 {
10854 \newcommand*{\Glsfmtshort}[1]{%
10855     \texorpdfstring
10856         {\Glsxrttitleshort{#1}}%
10857         {\glsentryshort{#1}}%
10858 }
10859 }
10860 {
10861 \newcommand*{\Glsfmtshort}[1]{%
10862     \Glsxrttitleshort{#1}%
10863 }

```

\Glsfmtshortpl Plural form (first letter uppercase).

```

10864 \ifdef\texorpdfstring
10865 {
10866 \newcommand*{\Glsfmtshortpl}[1]{%
10867     \texorpdfstring
10868         {\Glsxrttitleshortpl{#1}}%
10869         {\glsentryshortpl{#1}}%
10870 }
10871 }
10872 {
10873 \newcommand*{\Glsfmtshortpl}[1]{%
10874     \Glsxrttitleshortpl{#1}%
10875 }

```

\glsfmtname As above but for the name value.

```

10876 \ifdef\texorpdfstring
10877 {
10878 \newcommand*{\glsfmtname}[1]{%
10879     \texorpdfstring
10880         {\glsxrttitlename{#1}}%
10881         {\glsentryname{#1}}%
10882 }

```

```
10883 }
10884 {
10885   \newcommand*{\glsfmtname}[1]{%
10886     \glsxtrtitlename{#1}}
10887 }
```

\glsfmtname First letter converted to upper case.

```
10888 \ifdef\textorpdfstring
10889 {
10890   \newcommand*{\Glsfmtname}[1]{%
10891     \textorpdfstring
10892       {\glsxtrtitlename{#1}}%
10893       {\glsentryname{#1}}%
10894   }
10895 }
10896 {
10897   \newcommand*{\Glsfmtname}[1]{%
10898     \glsxtrtitlename{#1}}
10899 }
```

\glsfmttext As above but for the text value.

```
10900 \ifdef\textorpdfstring
10901 {
10902   \newcommand*{\glsfmttext}[1]{%
10903     \textorpdfstring
10904       {\glsxtrtitletext{#1}}%
10905       {\glsentrytext{#1}}%
10906   }
10907 }
10908 {
10909   \newcommand*{\glsfmttext}[1]{%
10910     \glsxtrtitletext{#1}}
10911 }
```

\glsfmttext First letter converted to upper case.

```
10912 \ifdef\textorpdfstring
10913 {
10914   \newcommand*{\Glsfmttext}[1]{%
10915     \textorpdfstring
10916       {\glsxtrtitletext{#1}}%
10917       {\glsentrytext{#1}}%
10918   }
10919 }
10920 {
10921   \newcommand*{\Glsfmttext}[1]{%
10922     \glsxtrtitletext{#1}}
10923 }
```

\glsfmtplural As above but for the plural value.

```

10924 \ifdef\textorpdfstring
10925 {
10926   \newcommand*\glsfmtplural[1]{%
10927     \textorpdfstring
10928     {\glsxrttitleplural{\#1}}%
10929     {\glsentryplural{\#1}}%
10930   }
10931 }
10932 {
10933   \newcommand*\glsfmtplural[1]{%
10934     \glsxrttitleplural{\#1}%
10935 }

```

\glsfmtplural First letter converted to upper case.

```

10936 \ifdef\textorpdfstring
10937 {
10938   \newcommand*\Glsfmtplural[1]{%
10939     \textorpdfstring
10940     {\Glsxrttitleplural{\#1}}%
10941     {\glsentryplural{\#1}}%
10942   }
10943 }
10944 {
10945   \newcommand*\Glsfmtplural[1]{%
10946     \Glsxrttitleplural{\#1}%
10947 }

```

\glsfmtfirst As above but for the first value.

```

10948 \ifdef\textorpdfstring
10949 {
10950   \newcommand*\glsfmtfirst[1]{%
10951     \textorpdfstring
10952     {\glsxrttitlefirst{\#1}}%
10953     {\glsentryfirst{\#1}}%
10954   }
10955 }
10956 {
10957   \newcommand*\glsfmtfirst[1]{%
10958     \glsxrttitlefirst{\#1}%
10959 }

```

\Glsfmtfirst First letter converted to upper case.

```

10960 \ifdef\textorpdfstring
10961 {
10962   \newcommand*\Glsfmtfirst[1]{%
10963     \textorpdfstring
10964     {\Glsxrttitlefirst{\#1}}%
10965     {\glsentryfirst{\#1}}%
10966   }

```

```
10967 }
10968 {
10969   \newcommand*{\Glsfmtfirst}[1]{%
10970     \Glsxrttitlefirst{#1}%
10971 }
```

\glsfmtfirstpl As above but for the firstplural value.

```
10972 \ifdef\textorpdfstring
10973 {
10974   \newcommand*{\glsfmtfirstpl}[1]{%
10975     \textorpdfstring
10976       {\Glsxrttitlefirstplural{#1}}%
10977       {\glsentryfirstplural{#1}}%
10978 }
10979 }
10980 {
10981   \newcommand*{\glsfmtfirstpl}[1]{%
10982     \Glsxrttitlefirstplural{#1}%
10983 }
```

\Glsfmtfirstpl First letter converted to upper case.

```
10984 \ifdef\textorpdfstring
10985 {
10986   \newcommand*{\Glsfmtfirstpl}[1]{%
10987     \textorpdfstring
10988       {\Glsxrttitlefirstplural{#1}}%
10989       {\glsentryfirstplural{#1}}%
10990 }
10991 }
10992 {
10993   \newcommand*{\Glsfmtfirstpl}[1]{%
10994     \Glsxrttitlefirstplural{#1}%
10995 }
```

\glsfmtlong As above but for the long value.

```
10996 \ifdef\textorpdfstring
10997 {
10998   \newcommand*{\glsfmtlong}[1]{%
10999     \textorpdfstring
11000       {\Glsxrttitlelong{#1}}%
11001       {\glsentrylong{#1}}%
11002 }
11003 }
11004 {
11005   \newcommand*{\glsfmtlong}[1]{%
11006     \Glsxrttitlelong{#1}%
11007 }
```

\Glsfmtlong First letter converted to upper case.

```

11008 \ifdef\textorpdfstring
11009 {
11010   \newcommand*{\Glsfmtlong}[1]{%
11011     \textorpdfstring
11012     {\Glsxrttitlelong{#1}}%
11013     {\glsentrylong{#1}}%
11014   }
11015 }
11016 {
11017   \newcommand*{\Glsfmtlong}[1]{%
11018     \Glsxrttitlelong{#1}%
11019 }

```

\glsfmtlongpl As above but for the longplural value.

```

11020 \ifdef\textorpdfstring
11021 {
11022   \newcommand*{\glsfmtlongpl}[1]{%
11023     \textorpdfstring
11024     {\Glsxrttitlelongpl{#1}}%
11025     {\glsentrylongpl{#1}}%
11026   }
11027 }
11028 {
11029   \newcommand*{\glsfmtlongpl}[1]{%
11030     \Glsxrttitlelongpl{#1}%
11031 }

```

\Glsfmtlongpl First letter converted to upper case.

```

11032 \ifdef\textorpdfstring
11033 {
11034   \newcommand*{\Glsfmtlongpl}[1]{%
11035     \textorpdfstring
11036     {\Glsxrttitlelongpl{#1}}%
11037     {\glsentrylongpl{#1}}%
11038   }
11039 }
11040 {
11041   \newcommand*{\Glsfmtlongpl}[1]{%
11042     \Glsxrttitlelongpl{#1}%
11043 }

```

\glsfmtfull In-line full format.

```

11044 \ifdef\textorpdfstring
11045 {
11046   \newcommand*{\glsfmtfull}[1]{%
11047     \textorpdfstring
11048     {\Glsxrttitlefull{#1}}%
11049     {\glsxtrinlinefullformat{#1}{}}%
11050   }

```

```
11051 }
11052 {
11053   \newcommand*{\glsfmtfull}[1]{%
11054     \glsxtrtitlefull{#1}}
11055 }
```

\Glsfmtfull First letter converted to upper case.

```
11056 \ifdef\textorpdfstring
11057 {
11058   \newcommand*{\Glsfmtfull}[1]{%
11059     \textorpdfstring
11060       {\Glsxtrtitlefull{#1}}%
11061       {\Glsxtrinlinefullformat{#1}{}}
11062   }
11063 }
11064 {
11065   \newcommand*{\Glsfmtfull}[1]{%
11066     \Glsxtrtitlefull{#1}}
11067 }
```

\glsfmtfullpl In-line full plural format.

```
11068 \ifdef\textorpdfstring
11069 {
11070   \newcommand*{\glsfmtfullpl}[1]{%
11071     \textorpdfstring
11072       {\glsxtrtitlefullpl{#1}}%
11073       {\glsxtrinlinefullplformat{#1}{}}
11074   }
11075 }
11076 {
11077   \newcommand*{\glsfmtfullpl}[1]{%
11078     \glsxtrtitlefullpl{#1}}
11079 }
```

\Glsfmtfullpl First letter converted to upper case.

```
11080 \ifdef\textorpdfstring
11081 {
11082   \newcommand*{\Glsfmtfullpl}[1]{%
11083     \textorpdfstring
11084       {\Glsxtrtitlefullpl{#1}}%
11085       {\Glsxtrinlinefullplformat{#1}{}}
11086   }
11087 }
11088 {
11089   \newcommand*{\Glsfmtfullpl}[1]{%
11090     \Glsxtrtitlefullpl{#1}}
11091 }
```

## 1.8 Multi-Lingual Support

Add the facility to load language modules, if they are installed, but none are provided with this package.

sariesExtraLang

```
11092 \newcommand*\RequireGlossariesExtraLang}[1]{%
11093   \@ifundefined{ver@glossariesxtr-\#1.ldf}{\input{glossariesxtr-\#1.ldf}}{}%
11094 }
```

sariesExtraLang

```
11095 \newcommand*\ProvidesGlossariesExtraLang}[1]{%
11096   \ProvidesFile{glossariesxtr-\#1.ldf}%
11097 }
```

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.)

```
11098 \@ifpackageloaded{tracklang}%
11099 {%
11100   \AnyTrackedLanguages
11101   {%
11102     \ForEachTrackedDialect{\this@dialect}{%
11103       \IfTrackedLanguageFileExists{\this@dialect}%
11104         {glossariesxtr-\% prefix
11105           \%.ldf}\%
11106           {%
11107             \RequireGlossariesExtraLang{\CurrentTrackedTag}\%
11108           }%
11109           {%
11110             \%
11111             }%
11112           }%
11113           {}%
11114     }%
11115   }}
```

Load glossaries-extra-stylemod if required.

```
11116 @glsxtr@redefstyles
```

and set the style:

```
11117 @glsxtr@do@style
```

## 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:

```
11118 \NeedsTeXFormat{LaTeX2e}
11119 \ProvidesPackage{glossaries-extra-stylemods}[2017/11/12 v1.23 (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
11120 \newcommand*\{@glsxtr@loadstyles}{}%
```

all Provide all known styles.

```
11121 \DeclareOption{all}{%
11122   \appto\@glsxtr@loadstyles{%
11123     \RequirePackage{glossary-inline}%
11124     \RequirePackage{glossary-list}%
11125     \RequirePackage{glossary-tree}%
11126     \RequirePackage{glossary-mcols}%
11127     \RequirePackage{glossary-long}%
11128     \RequirePackage{glossary-longragged}%
11129     \RequirePackage{glossary-longbooktabs}%
11130     \RequirePackage{glossary-super}%
11131     \RequirePackage{glossary-superragged}%
11132     \RequirePackage{glossary-bookindex}%
11133   }%
11134 }

11135 \DeclareOption*{%
11136   \IfFileExists{glossary-\CurrentOption.sty}%
11137   {\appto\@glsxtr@loadstyles{%
11138     \noexpand\RequirePackage{glossary-\CurrentOption}}%
11139   }%
11140   {%
11141     \PackageError{glossaries-extra-styles}%
}
```

```

11142     {Unknown option '\CurrentOption'}{}%
11143   }%
11144 }

```

Process the package options:

```
11145 \ProcessOptions
```

Load the required packages:

```
11146 \@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`.

```
11147 \providecommand*{\glsxtrprelocation}{\space}
```

In case we have an old version of glossaries:

`ewglossarystyle`

```

11148 \providecommand{\renewglossarystyle}[2]{%
11149   \ifcsundef{@glsstyle@#1}{%
11150     {%
11151       \PackageError{glossaries-extra}{Glossary style '#1' isn't already defined}{}%
11152     }%
11153     {%
11154       \csdef{@glsstyle@#1}{#2}%
11155     }%
11156   }

```

## 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.

```

11157 \ifdef{\@glsstyle@listdotted}{%
11158 {%
11159   \renewglossarystyle{listdotted}{%
11160     \setglossarystyle{list}{%
11161       \renewcommand*{\glossentry}[2]{%
11162         \item[]\makebox[\glslistdottedwidth][l]{%
11163           \glsentryitem{##1}%
11164           \glstarget{##1}{\glossentryname{##1}}%
11165           \unskip\leaders\hbox to 2.9mm{\hss.}\hfill\strut}%
11166           \glossentrydesc{##1}\glspostdescription}%
11167       \renewcommand*{\subglossentry}[3]{%
11168         \item[]\makebox[\glslistdottedwidth][l]{%
11169           \glssubentryitem{##2}%
11170           \glstarget{##2}{\glossentryname{##2}}%
11171           \unskip\leaders\hbox to 2.9mm{\hss.}\hfill\strut}%
11172           \glossentrydesc{##2}\glspostdescription}%
11173   }

```

```
11174 }  
11175 {%
```

Assume the style isn't required if it hasn't already been defined.

```
11176 }
```

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.

```
11177 \ifdef{@glsstyle@list}  
11178 {%
```

listprelocation Space before number list for top-level entries.

```
11179 \newcommand{\glslistprelocation}{\glsxtrprelocation}
```

childprelocation Space before number list for child entries.

```
11180 \newcommand{\glslistchildprelocation}{\glslistprelocation}
```

childpostlocation Full stop after number list.

```
11181 \newcommand{\glslistchildpostlocation}{.}
```

Redefine list to use these commands.

```
11182 \renewglossarystyle{list}{%  
11183   \renewenvironment{theglossary}{%  
11184     {\begin{description}}{\end{description}}%  
11185     \renewcommand*\glossaryheader{}%  
11186     \renewcommand*\glsgroupheading[1]{}%  
11187     \renewcommand*\glossentry[2]{%  
11188       \item[\glsentryitem{##1}%  
11189         \glstarget{##1}{\glossentryname{##1}}]  
11190         \glossentrydesc{##1}\glspostdescription\glslistprelocation ##2}%  
11191     \renewcommand*\subglossentry[3]{%  
11192       \glssubentryitem{##2}%  
11193       \glstarget{##2}{\strut}\space  
11194       \glossentrydesc{##2}\glspostdescription  
11195       \glslistchildprelocation ##3\glslistchildpostlocation}%  
11196     \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\indexspace\fi}%  
11197   }  
11198 }  
11199 {}
```

Similarly for altlist. Since it requires list, the new commands should have been defined above.

```
11200 \ifdef{@glsstyle@altlist}  
11201 {  
11202   \renewglossarystyle{altlist}{%  
11203     \setglossarystyle{list}{%  
11204     \renewcommand*\glossentry[2]{%  
11205       \item[\glsentryitem{##1}%
```

```

11206     \glstarget{##1}{\glossentryname{##1}}]%
11207     \mbox{}\par\nobreak\@afterheading
11208     \glossentrydesc{##1}\glspostdescription\glslistprelocation ##2}%
11209     \renewcommand{\subglossentry}[3]{%
11210         \par
11211         \glssubentryitem{##2}%
11212         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
11213         \glslistchildprelocation ##3}%
11214     }
11215 }
11216 {}

```

Redefine `listgroup` so that it discourages a break after group headings.

```

11217 \ifdef{\glsstyle@listgroup}
11218 {%
11219     \renewglossarystyle{listgroup}{%
11220         \setglossarystyle{list}%
11221         \renewcommand*\glsgroupheading[1]{%
11222             \item[\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}]%
11223             \mbox{}\par\nobreak\@afterheading
11224         }%
11225     }
11226 }
11227 {}

```

Similarly for `listhypergroup`.

```

11228 \ifdef{\glsstyle@listhypergroup}
11229 {%
11230     \renewglossarystyle{listhypergroup}{%
11231         \setglossarystyle{list}%
11232         \renewcommand*\glossaryheader{%
11233             \glslistnavigationitem{\glsnavigation}}%
11234         \renewcommand*\glsgroupheading[1]{%
11235             \item[\glslistgroupheaderfmt
11236                 {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}]%
11237             \mbox{}\par\nobreak\@afterheading
11238         }%
11239     }
11240 }
11241 {}

```

Similarly for `altlistgroup`.

```

11242 \ifdef{\glsstyle@altlistgroup}
11243 {%
11244     \renewglossarystyle{altlistgroup}{%
11245         \setglossarystyle{altlist}%
11246         \renewcommand*\glsgroupheading[1]{%
11247             \item[\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}]%
11248             \mbox{}\par\nobreak\@afterheading
11249         }%
11250     }

```

```

11251 }
11252 {}

Similarly for altlisthypergroup.

11253 \ifdef{\@glsstyle@altlisthypergroup}
11254 {%
11255   \renewglossarystyle{altlisthypergroup}{%
11256     \setglossarystyle{altlist}{%
11257       \renewcommand*{\glossaryheader}{%
11258         \glslistnavigationitem{\glsnavigation}}%
11259       \renewcommand*{\glsgroupheading}[1]{%
11260         \item[\glslistgroupheaderfmt
11261           {\glsnavhypertarget{\#\#1}{\glsgetgrouptitle{\#\#1}}}]%
11262         \mbox{}\par\nobreak\@afterheading
11263       }%
11264     }%
11265   }%
11266 }

```

## 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`.

```

11267 \ifcsdef{@glsstyle@long}
11268 {%
11269   \renewglossarystyle{long}{%
11270     \renewenvironment{theglossary}{%
11271       {\begin{longtable}{lp{\glsdescwidth}}}%
11272     {\end{longtable}}%
11273     \renewcommand*{\glossaryheader}{}%
11274     \renewcommand*{\glsgroupheading}[1]{}%
11275     \renewcommand{\glossentry}[2]{%
11276       \glsentryitem{\#\#1}\glstarget{\#\#1}{\glossentryname{\#\#1}} &
11277       \glossentrydesc{\#\#1}\glspostdescription
11278       \glsxtrprelocation ##2\tabularnewline
11279     }%
11280     \renewcommand{\subglossentry}[3]{%
11281       &
11282       \glssubentryitem{\#\#2}%
11283       \glstarget{\#\#2}{\strut}\glossentrydesc{\#\#2}\glspostdescription
11284       \glsxtrprelocation ##3\tabularnewline
11285     }%
11286     \ifglsnogroupskip
11287       \renewcommand*{\glsgroupskip}{}%
11288     \else
11289       \renewcommand*{\glsgroupskip}{\&\tabularnewline}%
11290     \fi
11291   }

```

```
11292 }
11293 {}
```

Three column style:

```
11294 \ifcsdef{@glsstyle@long3col}
11295 {%
11296   \renewglossarystyle{long3col}{%
11297     \renewenvironment{theglossary}{%
11298       {\begin{longtable}{lp{\glsdescwidth}p{\glspagelistwidth}}}%
11299       {\end{longtable}}%
11300     \renewcommand*\glossaryheader{}{%
11301       \renewcommand*\glsgroupheading}[1]{}}{%
11302       \renewcommand{\glossentry}[2]{%
11303         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11304           \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
11305       }{%
11306         \renewcommand{\subglossentry}[3]{%
11307           &
11308             \glosssubentryitem{##2}{%
11309               \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
11310                 ##3\tabularnewline
11311             }{%
11312             \ifglsnogroupskip
11313               \renewcommand*\glsgroupskip{}{%
11314               \else
11315                 \renewcommand*\glsgroupskip}{\& \&\tabularnewline}{%
11316               \fi
11317             }{%
11318           }{%
11319         }{%
11320         \ifcsdef{@glsstyle@long4col}
11321 {%
11322           \renewglossarystyle{long4col}{%
11323             \renewenvironment{theglossary}{%
11324               {\begin{longtable}{llll}}{%
11325               {\end{longtable}}{%
11326             \renewcommand*\glossaryheader{}{%
11327               \renewcommand*\glsgroupheading}[1]{}}{%
11328               \renewcommand{\glossentry}[2]{%
11329                 \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11330                   \glossentrydesc{##1}\glspostdescription &
11331                     \glossentrysymbol{##1} &
11332                       ##2\tabularnewline
11333             }{%
11334               \renewcommand{\subglossentry}[3]{%
11335                 &
```

Conditional needs to be outside of \glsgroupskip otherwise it can cause “Incomplete \iftrue” errors.

```
11312             \ifglsnogroupskip
11313               \renewcommand*\glsgroupskip{}{%
11314               \else
11315                 \renewcommand*\glsgroupskip}{\& \&\tabularnewline}{%
11316               \fi
11317             }{%
11318           }{%
11319         }{%
11320         \ifcsdef{@glsstyle@long4col}
11321 {%
11322           \renewglossarystyle{long4col}{%
11323             \renewenvironment{theglossary}{%
11324               {\begin{longtable}{llll}}{%
11325               {\end{longtable}}{%
11326             \renewcommand*\glossaryheader{}{%
11327               \renewcommand*\glsgroupheading}[1]{}}{%
11328               \renewcommand{\glossentry}[2]{%
11329                 \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11330                   \glossentrydesc{##1}\glspostdescription &
11331                     \glossentrysymbol{##1} &
11332                       ##2\tabularnewline
11333             }{%
11334               \renewcommand{\subglossentry}[3]{%
11335                 &
```

Four column style:

```
11320 \ifcsdef{@glsstyle@long4col}
11321 {%
11322   \renewglossarystyle{long4col}{%
11323     \renewenvironment{theglossary}{%
11324       {\begin{longtable}{llll}}{%
11325       {\end{longtable}}{%
11326     \renewcommand*\glossaryheader{}{%
11327       \renewcommand*\glsgroupheading}[1]{}}{%
11328       \renewcommand{\glossentry}[2]{%
11329         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11330           \glossentrydesc{##1}\glspostdescription &
11331             \glossentrysymbol{##1} &
11332               ##2\tabularnewline
11333     }{%
11334       \renewcommand{\subglossentry}[3]{%
11335         &
```

```

11336     \glssubentryitem{##2}%
11337     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
11338     \glossentrysymbol{##2} & ##3\tabularnewline
11339   }%
11340   \ifglsnogroupskip
11341     \renewcommand*\glsgroupskip{}%
11342   \else
11343     \renewcommand*\glsgroupskip{\& \&\tabularnewline}%
11344   \fi
11345 }
11346 }
11347 {}
```

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.

```

11348 \ifcsdef@glsstyle@longragged}
11349 {%
11350   \renewglossarystyle{longragged}{%
11351     \renewenvironment{theglossary}{%
11352       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}}%
11353       {\end{longtable}}%
11354     \renewcommand*\glossaryheader{}%
11355     \renewcommand*\glsgroupheading[1]{}%
11356     \renewcommand{\glossentry}[2]{%
11357       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11358       \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
11359       \tabularnewline
11360     }%
11361     \renewcommand{\subglossentry}[3]{%
11362       &
11363       \glssubentryitem{##2}%
11364       \glstarget{##2}{\strut}\glossentrydesc{##2}%
11365       \glspostdescription\glsxtrprelocation ##3%
11366       \tabularnewline
11367     }%
11368   \ifglsnogroupskip
11369     \renewcommand*\glsgroupskip{}%
11370   \else
11371     \renewcommand*\glsgroupskip{\& \tabularnewline}%
11372   \fi
11373 }
11374 }
```

```
11375 {}
```

Three and four column styles don't use \glsxtrprelocation since the number list is in its own column.

```
11376 \ifcsdef{@glsstyle@longragged3col}
11377 {%
11378   \renewglossarystyle{longragged3col}{%
11379     \renewenvironment{theglossary}{%
11380       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}{%
11381         >{\raggedright}p{\glspagelistwidth}}}}{%
11382       {\end{longtable}}}}{%
11383     \renewcommand*\glossaryheader{}{%
11384       \renewcommand*\glsgroupheading}[1]{}}{%
11385       \renewcommand{\glossentry}[2]{%
11386         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11387           \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
11388     }{%
11389       \renewcommand{\subglossentry}[3]{%
11390         &
11391           \glssubentryitem{##2}{%
11392             \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
11393               ##3\tabularnewline
11394     }{%
11395       \ifglsnogroupskip
11396         \renewcommand*\glsgroupskip{}{%
11397       \else
11398         \renewcommand*\glsgroupskip}{\& \&\tabularnewline}{%
11399       \fi
11400     }{%
11401   }{%
11402 }}
```

Four column style:

```
11403 \ifcsdef{@glsstyle@altlongragged4col}
11404 {%
11405   \renewglossarystyle{altlongragged4col}{%
11406     \renewenvironment{theglossary}{%
11407       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}}{%
11408         >{\raggedright}p{\glspagelistwidth}}}}{%
11409       {\end{longtable}}}}{%
11410     \renewcommand*\glossaryheader{}{%
11411       \renewcommand*\glsgroupheading}[1]{}}{%
11412       \renewcommand{\glossentry}[2]{%
11413         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11414           \glossentrydesc{##1}\glspostdescription & \glossentrysymbol{##1} &
11415             ##2\tabularnewline
11416     }{%
11417       \renewcommand{\subglossentry}[3]{%
11418         &
```

```

11419     \glssubentryitem{##2}%
11420     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
11421     \glossentrysymbol{##2} & ##3\tabularnewline
11422 }%
11423 \ifglsnogroupskip
11424     \renewcommand*\glsgroupskip{}%
11425 \else
11426     \renewcommand*\glsgroupskip{\& \&\tabularnewline}%
11427 \fi
11428 }
11429 }
11430 {}
```

## 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`.

```

11431 \ifcsdef{@glsstyle@super}%
11432 {}%
11433 \renewglossarystyle{super}{%
11434     \renewenvironment{theglossary}{%
11435         {\tablehead{}\tabletail{}}%
11436         \begin{supertabular}{lp{\glsdescwidth}}{}}%
11437         \end{supertabular}}%
11438 \renewcommand*\glossaryheader{}%
11439 \renewcommand*\glsgroupheading[1]{}%
11440 \renewcommand{\glossentry}[2]{%
11441     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11442     \glossentrydesc{##1}\glspostdescription
11443     \glsxtrprelocation ##2\tabularnewline
11444 }%
11445 \renewcommand{\subglossentry}[3]{%
11446     &
11447     \glssubentryitem{##2}%
11448     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
11449     \glsxtrprelocation ##3\tabularnewline
11450 }%
11451 \ifglsnogroupskip
11452     \renewcommand*\glsgroupskip{}%
11453 \else
11454     \renewcommand*\glsgroupskip{\& \tabularnewline}%
11455 \fi
11456 }
11457 }
11458 {}
```

Three column style:

```
11459 \ifcsdef{@glsstyle@super3col}
```

```

11460 {%
11461   \renewglossarystyle{super3col}{%
11462     \renewenvironment{theglossary}%
11463       {\tablehead{}\tabletail{}%
11464         \begin{supertabular}{lp{\glscolumnwidth}p{\glspagelistwidth}}}}%
11465       {\end{supertabular}}%
11466     \renewcommand*\glossaryheader{}%
11467     \renewcommand*\glsgroupheading[1]{}%
11468     \renewcommand{\glossentry}[2]{%
11469       \glsentryitem{\#1}\glstarget{\#1}{\glossentryname{\#1}} &
11470         \glossentrydesc{\#1}\glspostdescription & ##2\tabularnewline
11471     }%
11472     \renewcommand{\subglossentry}[3]{%
11473       &
11474       \glssubentryitem{\#2}%
11475       \glstarget{\#2}{\strut}\glossentrydesc{\#2}\glspostdescription &
11476         ##3\tabularnewline
11477     }%
11478   \ifglsnogroupskip
11479     \renewcommand*\glsgroupskip{}%
11480   \else
11481     \renewcommand*\glsgroupskip{\&\tabularnewline}%
11482   \fi
11483 }
11484 }
11485 {}
```

Four column styles:

```

11486 \ifcsdef{@glsstyle@super4col}%
11487 {%
11488   \renewglossarystyle{super4col}{%
11489     \renewenvironment{theglossary}%
11490       {\tablehead{}\tabletail{}%
11491         \begin{supertabular}{llll}\%%
11492         \end{supertabular}}%
11493     \renewcommand*\glossaryheader{}%
11494     \renewcommand*\glsgroupheading[1]{}%
11495     \renewcommand{\glossentry}[2]{%
11496       \glsentryitem{\#1}\glstarget{\#1}{\glossentryname{\#1}} &
11497         \glossentrydesc{\#1}\glspostdescription &
11498           \glossentrysymbol{\#1} & ##2\tabularnewline
11499     }%
11500     \renewcommand{\subglossentry}[3]{%
11501       &
11502       \glssubentryitem{\#2}%
11503       \glstarget{\#2}{\strut}\glossentrydesc{\#2}\glspostdescription &
11504         \glossentrysymbol{\#2} & ##3\tabularnewline
11505     }%
```

```

11506     \ifglsnogroupskip
11507         \renewcommand*{\glsgroupskip}{}%
11508     \else
11509         \renewcommand*{\glsgroupskip}{\& & \tabularnewline}%
11510     \fi
11511 }
11512 }
11513 {}

```

## 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`.

```

11514 \ifcsdef{@glsstyle@superragged}{%
11515 {%
11516     \renewglossarystyle{superragged}{%
11517         \renewenvironment{theglossary}{%
11518             {\tablehead{}\tabletail{}%
11519             \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}}{}}%
11520             \end{supertabular}}{%
11521             \renewcommand*{\glossaryheader}{}%
11522             \renewcommand*{\glsgroupheading}[1]{}%
11523             \renewcommand{\glossentry}[2]{%
11524                 \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11525                 \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
11526                 \tabularnewline
11527             }%
11528             \renewcommand{\subglossentry}[3]{%
11529                 &
11530                 \glssubentryitem{##2}%
11531                 \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
11532                 \glsxtrprelocation ##3%
11533                 \tabularnewline
11534             }%
11535             \ifglsnogroupskip
11536                 \renewcommand*{\glsgroupskip}{}%
11537             \else
11538                 \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
11539             \fi
11540 }
11541 }
11542 {}}

```

Three column style:

```

11543 \ifcsdef{@glsstyle@superragged3col}{%
11544 {%
11545     \renewglossarystyle{superragged3col}{%

```

```

11546 \renewenvironment{theglossary}%
11547   {\tablehead{}\tabletail{}%
11548     \begin{supertabular}{l>{\raggedright\p{\glscdescwidth}}%
11549       >{\raggedright\p{\glspagelistwidth}}}%
11550     \end{supertabular}%
11551   \renewcommand*\glossaryheader{}%
11552   \renewcommand*\glsgrouphheading}[1]{}%
11553   \renewcommand{\glossentry}[2]{%
11554     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11555     \glossentrydesc{##1}\glspostdescription &
11556     ##2\tabularnewline
11557   }%
11558   \renewcommand{\subglossentry}[3]{%
11559     &
11560     \glssubentryitem{##2}%
11561     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
11562     ##3\tabularnewline
11563   }%
11564   \ifglsnogroupskip
11565     \renewcommand*\glsgroupskip{}%
11566   \else
11567     \renewcommand*\glsgroupskip}{ & \tabularnewline}%
11568   \fi
11569 }
11570 }
11571 {}
```

Four columns:

```

11572 \ifcsdef{@glsstyle@altsuperragged4col}%
11573 {}%
11574   \renewglossarystyle{altsuperragged4col}{%
11575     \renewenvironment{theglossary}%
11576       {\tablehead{}\tabletail{}%
11577         \begin{supertabular}{l>{\raggedright\p{\glscdescwidth}l}%
11578           >{\raggedright\p{\glspagelistwidth}}}%
11579         \end{supertabular}%
11580       \renewcommand*\glossaryheader{}%
11581       \renewcommand{\glossentry}[2]{%
11582         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11583         \glossentrydesc{##1}\glspostdescription &
11584         \glossentrysymbol{##1} & ##2\tabularnewline
11585   }%
11586   \renewcommand{\subglossentry}[3]{%
11587     &
11588     \glssubentryitem{##2}%
11589     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
11590     \glossentrysymbol{##2} & ##3\tabularnewline
11591   }%
```

```

11592     \ifglsnogroupskip
11593         \renewcommand*\glsgroupskip{}%
11594     \else
11595         \renewcommand*\glsgroupskip{& & &\tabularnewline}%
11596     \fi
11597 }
11598 }
11599 {}

```

## 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`.

```

11600 \ifdef{@glsstyle@inline}
11601 {%
11602     \renewcommand*\glspostinline{.\spacefactor\sfcode`\.}
Just use \glsxtrpostdescription instead of \glspostdescription.
11603     \renewcommand*\glsinlinedescformat[3]{%
11604         \space#1\glsxtrpostdescription}
11605     \renewcommand*\glsinlinesubdescformat[3]{%
11606         #1\glsxtrpostdescription}

```

The default settings don't show the location lists, so there's no adjustment for `\glsxtrprelocation`.

```

11607 }
11608 {}

```

## 2.8 Tree Styles

The index style is redefined so that the space before the number list isn't hard coded.

```

11609 \ifdef{@glsstyle@index}
11610 {%

```

`treeprelocation` The space before the number list for top-level entries. This is shared by the other tree styles.

```

11611     \newcommand*\glstreeprelocation{\glsxtrprelocation}

```

`childprelocation` The space before the number list for child entries. This is shared by the other tree styles.

```

11612     \newcommand*\glstreechildprelocation{\glstreeprelocation}

```

```

11613     \renewglossarystyle{index}{%
11614         \renewenvironment{theglossary}{%
11615             {\setlength{\parindent}{0pt}}%
11616             \setlength{\parskip}{0pt plus 0.3pt}}%
11617             \let\item\glstreeitem
11618             \let\subitem\glstreesubitem

```

```

11619     \let\subsubitem\glstreesubsubitem
11620     }%
11621 {\par}%
11622 \renewcommand*\glossaryheader{}%
11623 \renewcommand*\glsgroupheading}[1]{%
11624 \renewcommand*\glossentry}[2]{%
11625     \item\glstreeentryitem{##1}%
11626     \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
11627     \ifglshassymbol{##1}{\space(\glossentrysymbol{##1})}{}%
11628     \glstreepredesc \glossentrydesc{##1}\glspostdescription
11629     \glstreeprelocation ##2%
11630 }%
11631 \renewcommand{\subglossentry}[3]{%
11632     \ifcase##1\relax
11633         \item
11634     \or
11635         \subitem
11636         \glssubentryitem{##2}%
11637     \else
11638         \subsubitem
11639     \fi
11640     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
11641     \ifglshassymbol{##2}{\space(\glossentrysymbol{##2})}{}%
11642     \glstreechildpredesc\glossentrydesc{##2}\glspostdescription
11643     \glstreechildprelocation ##3%
11644 }%
11645 \renewcommand*\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
11646 }
11647 }
11648 {}
```

The `indexgroup` style is redefined to discourage a page break after the heading.

```

11649 \ifdef{@glsstyle@indexgroup}%
11650 {%
11651     \renewglossarystyle{indexgroup}{%
11652         \setglossarystyle{index}%
11653         \renewcommand*\glsgroupheading}[1]{%
11654             \item\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
11655             \nopagebreak\indexspace
11656             \nobreak\@afterheading
11657         }%
11658     }
11659 }
11660 {}
```

Similarly for `indexhypergroup`.

```

11661 \ifdef{@glsstyle@indexhypergroup}%
11662 {%
11663     \renewglossarystyle{indexhypergroup}{%
11664         \setglossarystyle{index}%
```

```

11665 \renewcommand*\glossaryheader}{%
11666     \item\glstreenavigationfmt{\glsnavigation}%
11667     \nobreak\@afterheading\indexspace}%
11668 \renewcommand*\glsgroupheading}[1]{%
11669     \item\glstreegroupheaderfmt
11670     {\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
11671     \nopagebreak\indexspace
11672     \nobreak\@afterheading}%
11673 }%
11674 }%
11675 {}
```

Adjust tree style to remove hard coded space before number list.

```

11676 \ifdef{@glsstyle@tree}%
11677 {%
11678     \renewglossarystyle{tree}{%
11679         \renewenvironment{theglossary}%
11680             {\setlength{\parindent}{0pt}%
11681                 \setlength{\parskip}{0pt plus 0.3pt}}%
11682             {}%
11683         \renewcommand*\glossaryheader}{%
11684         \renewcommand*\glsgroupheading}[1]{%
11685         \renewcommand{\glossentry}[2]{%
11686             \hangindent0pt\relax
11687             \parindent0pt\relax
11688             \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
11689             \ifglshassymbol{##1}{\space(\glossentrysymbol{##1})}{}%
11690             \glstreepredesc\glossentrydesc{##1}\glspostdescription
11691             \glstreeprelocation##2\par
11692             }%
11693         \renewcommand{\subglossentry}[3]{%
11694             \hangindent##1\glstreeindent\relax
11695             \parindent##1\glstreeindent\relax
11696             \ifnum##1=1\relax
11697                 \glssubentryitem{##2}%
11698             \fi
11699             \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
11700             \ifglshassymbol{##2}{\space(\glossentrysymbol{##2})}{}%
11701             \glstreechildpredesc\glossentrydesc{##2}\glspostdescription
11702             \glstreechildprelocation ##3\par
11703             }%
11704         \renewcommand*\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
11705     }%
11706 }%
11707 {}
```

The treegroup style is redefined to discourage a page break after the heading.

```

11708 \ifdef{@glsstyle@treegroup}%
11709 {%
11710     \renewglossarystyle{treegroup}{%
```

```

11711 \setglossarystyle{tree}%
11712 \renewcommand{\glsgroupheding}[1]{\par
11713   \noindent\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}\par
11714   \nopagebreak\indexspace\nobreak\@afterheading}%
11715 }
11716 }
11717 {}

```

Similarly for treehypergroup

```

11718 \ifdef{\@glsstyle@treehypergroup}{%
11719 {%
11720   \renewglossarystyle{treehypergroup}{%
11721     \setglossarystyle{tree}%
11722     \renewcommand*\glossaryheader{%
11723       \par\noindent\glstreenavigationfmt{\glsnavigation}\par
11724       \nobreak\@afterheading\indexspace}%
11725     \renewcommand*\glsgroupheding[1]{%
11726       \par\noindent
11727       \glstreegroupheaderfmt
11728       {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}\par
11729       \nopagebreak\indexspace\nobreak\@afterheading}%
11730   }
11731 }
11732 {}}

```

Adjust treenoname style to remove hard coded space before number list.

```

11733 \ifdef{\@glsstyle@treenoname}{%
11734 {%
11735   \renewglossarystyle{treenoname}{%
11736     \renewenvironment{theglossary}{%
11737       {\setlength{\parindent}{0pt}%
11738         \setlength{\parskip}{0pt plus 0.3pt}}%
11739       {}%
11740     \renewcommand*\glossaryheader{}%
11741     \renewcommand*\glsgroupheding[1]{}%
11742     \renewcommand{\glossentry}[2]{%
11743       \hangindent0pt\relax
11744       \parindent0pt\relax
11745       \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
11746       \ifglshassymbol{##1}{\space(\glossentrysymbol{##1})}{}%
11747       \glstreepredesc\glossentrydesc{##1}\glspostdescription
11748       \glstreeprelocation##2\par
11749     }%
11750     \renewcommand{\subglossentry}[3]{%
11751       \hangindent##1\glstreeindent\relax
11752       \parindent##1\glstreeindent\relax
11753       \ifnum##1=1\relax
11754         \glssubentryitem{##2}%
11755       \fi
11756       \glstarget{##2}{\strut}%

```

```

11757     \glossentrydesc{##2}\glspostdescription\glstreechildprelocation##3\par
11758   }%
11759   \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
11760 }
11761 }
11762 {}

```

The treenonamegroup style is redefined to discourage a page break after the heading.

```

11763 \ifdef{@glsstyle@treenonamegroup}%
11764 {%
11765   \renewglossarystyle{treenonamegroup}{%
11766     \setglossarystyle{treenoname}%
11767     \renewcommand{\glsgroupheading}[1]{\par
11768       \noindent\glstreegroupheaderfmt
11769       {\glsgetgroupname{##1}}%
11770       \nopagebreak\indexspace\nobreak\@afterheading
11771     }%
11772   }%
11773 }
11774 {}

```

Similarly for treenamehypergroup

```

11775 \ifdef{@glsstyle@treenamehypergroup}%
11776 {%
11777   \renewglossarystyle{treenamehypergroup}{%
11778     \setglossarystyle{treenoname}%
11779     \renewcommand*{\glossaryheader}{%
11780       \par\noindent\glstreenavigationfmt{\glsnavigation}\par
11781       \nobreak\@afterheading\indexspace}%
11782     \renewcommand*{\glsgroupheading}[1]{%
11783       \par\noindent
11784       \glstreegroupheaderfmt
11785       {\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
11786       \nopagebreak\indexspace\nobreak\@afterheading}%
11787   }%
11788 }
11789 {}

```

The alttree style is redefined to make it easier to made minor adjustments.

```

11790 \ifdef{@glsstyle@alttree}%
11791 {%

```

Only redefine this style if it's already been defined.

```
\glsxtralttreeSymbolDescLocation{<label>}{{<location list>}}
```

Layout the symbol, description and location for top-level entries.

```

11792 \newcommand{\glsxtralttreeSymbolDescLocation}[2]{%

```

```

11793   {%
11794     \let\par\glsxtrAltTreePar
11795     \ifglshassymbol{#1}{(\glossentrysymbol{#1})\space}{}%
11796     \glossentrydesc{#1}\glspostdescription\glstreeprelocation #2\par
11797   }%
11798 }

```

**trAltTreeIndent** Paragraph indent for subsequent paragraphs in multi-paragraph descriptions.

```
11799 \newlength\glsxtrAltTreeIndent
```

**lsxtrAltTreePar** Multi-paragraph descriptions need to keep the hanging indent.

```

11800 \newcommand{\glsxtrAltTreePar}{%
11801   \@@par
11802   \glsxtrAltTreeSetHangIndent
11803   \setlength{\parindent}{\dimexpr\hangindent+\glsxtrAltTreeIndent}%
11804 }

```

**mbolDescLocation** `\glsxtralmtreeSubSymbolDescLocation{<level>}{<label>}{<location list>}`

Layout the symbol, description and location for sub-entries. Defaults to the same as the top-level.

```

11805 \newcommand{\glsxtralmtreeSubSymbolDescLocation}[3]{%
11806   \glsxtralmtreeSymbolDescLocation{#2}{#3}%
11807 }

```

**trtreeopindent** The original style has to keep computing the width of the name at each entry. This register allows the style to compute it once for the top-level at the start of the glossary.

```
11808 \newlength\glsxtrtrreetopindent
```

**sxtalmtreeInit** User-level initialisation for the almtree style.

```

11809 \newcommand*{\glsxtralmtreeInit}{%
11810   \settowidth{\glsxtrtrreetopindent}{\glstreenamefmt{\glsgetwidestname\space}}%
11811   \glsxtrAltTreeIndent=\parindent
11812 }

```

**\gglsetwidest** The original `\glssetwidest` only uses `\def`. This uses `\gdef`.

```

11813 \newcommand*{\gglsetwidest}[2][0]{%
11814   \csgdef{@glswidestname\romannumeral#1}{#2}%
11815 }

```

**\eglsetwidest** The original `\glssetwidest` only uses `\def`. This uses `\protected@csedef`.

```

11816 \newcommand*{\eglsetwidest}[2][0]{%
11817   \protected@csedef{@glswidestname\romannumeral#1}{#2}%
11818 }

```

```

\xglssetwidest Like the above but uses \protected@csxdef.
11819  \newcommand*{\xglssetwidest}[2][0]{%
11820    \protected@csxdef{@\glswidestname\romannumeral#1}{#2}%
11821  }

glsupdatewidest Only sets if new value is wider than old value.
11822  \newcommand*{\glsupdatewidest}[2][0]{%
11823    \ifcsundef{@\glswidestname\romannumeral#1}%
11824      {\csdef{@\glswidestname\romannumeral#1}{#2}}%
11825      {%
11826        \settowidth{\dimen@}{\csuse{@\glswidestname\romannumeral#1}}%
11827        \settowidth{\dimen@ii}{#2}%
11828        \ifdim\dimen@ii>\dimen@
11829          \csdef{@\glswidestname\romannumeral#1}{#2}%
11830        \fi
11831      }%
11832  }

glsupdatewidest As above but global definition.
11833  \newcommand*{\gglsupdatewidest}[2][0]{%
11834    \ifcsundef{@\glswidestname\romannumeral#1}%
11835      {\csgdef{@\glswidestname\romannumeral#1}{#2}}%
11836      {%
11837        \settowidth{\dimen@}{\csuse{@\glswidestname\romannumeral#1}}%
11838        \settowidth{\dimen@ii}{#2}%
11839        \ifdim\dimen@ii>\dimen@
11840          \csgdef{@\glswidestname\romannumeral#1}{#2}%
11841        \fi
11842      }%
11843  }

glsupdatewidest As \glsupdatewidest but expands value.
11844  \newcommand*{\eglsupdatewidest}[2][0]{%
11845    \ifcsundef{@\glswidestname\romannumeral#1}%
11846      {\protected@csedef{@\glswidestname\romannumeral#1}{#2}}%
11847      {%
11848        \settowidth{\dimen@}{\csuse{@\glswidestname\romannumeral#1}}%
11849        \settowidth{\dimen@ii}{#2}%
11850        \ifdim\dimen@ii>\dimen@
11851          \protected@csedef{@\glswidestname\romannumeral#1}{#2}%
11852        \fi
11853      }%
11854  }

glsupdatewidest As above but global.
11855  \newcommand*{\xglsupdatewidest}[2][0]{%
11856    \ifcsundef{@\glswidestname\romannumeral#1}%
11857      {\protected@csxdef{@\glswidestname\romannumeral#1}{#2}}%
11858      {%

```

```

11859      \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
11860      \settowidth{\dimen@ii}{#2}%
11861      \ifdim\dimen@ii>\dimen@
11862          \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
11863      \fi
11864  }%
11865 }

```

`lsgetwidestname` Provide a user-level macro to obtain the widest top-level name.

```
11866 \newcommand*{\glsgetwidestname}{\glswidestname}
```

`etwidestsubname` Provide a user-level macro to obtain the widest sub-entry name.

```

11867 \newcommand*{\glsgetwidestsubname}[1]{%
11868     \ifcsundef{@glswidestname\romannumeral#1}%
11869     {\glswidestname}%
11870     {\csuse{@glswidestname\romannumeral#1}}%
11871 }

```

`estTopLevelName` CamelCase is easier for long command names. Provide a CamelCase synonym of `\glsfindwidesttoplevelname`

```
11872 \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.

```

11873 \newrobustcmd*{\glsFindWidestUsedTopLevelName}[1][\glo@types]{%
11874     \dimen@=0pt\relax
11875     \gls@tmp@len=0pt\relax
11876     \forallglossaries[#1]{\gls@type}%
11877     {%
11878         \forglsentries[\gls@type]{\glo@label}%
11879     }%
11880     \ifglsused{\glo@label}%
11881     {%
11882         \ifglshasparent{\glo@label}%
11883         {}%
11884         {}%
11885         \settowidth{\dimen@}%
11886         {\glsentryname{\glo@label}}%
11887         \ifdim\dimen@>\gls@tmp@len
11888             \gls@tmp@len=\dimen@
11889             \eglssetwidest{\glsentryname{\glo@label}}%
11890         \fi
11891     }%
11892     {}%
11893     {}%
11894 }%
11895 }%
11896 }

```

`destUsedAnyName` Like the above but doesn't check the parent key. Useful if all levels should have the same width for the name.

```
11897 \newrobustcmd*\glsFindWidestUsedAnyName}[1][\@glo@types]{%
11898     \dimen@=0pt\relax
11899     \gls@tmpplen=0pt\relax
11900     \forallglossaries[#1]{\gls@type}%
11901 {%
11902     \forglsentries[\gls@type]{\glo@label}%
11903     {%
11904         \ifglsused{\glo@label}%
11905         {%
11906             \settowidth{\dimen@}%
11907             {\glstreenamefmt{\glsentryname{\glo@label}}}%
11908             \ifdim\dimen@>\gls@tmpplen
11909                 \gls@tmpplen=\dimen@
11910                 \eglssetwidest{\glsentryname{\glo@label}}%
11911                 \fi
11912             }%
11913             {}%
11914         }%
11915     }%
11916 }
```

`ndWidestAnyName` Like the above but doesn't check if the entry has been used.

```
11917 \newrobustcmd*{\glsFindWidestAnyName}[1][\@glo@types]{%
11918   \dimen@=0pt\relax
11919   \gls@tmp@len=0pt\relax
11920   \forallglossaries[#1]{\gls@type}%
11921   {%
11922     \forglsentries[\gls@type]{\glo@label}%
11923     {%
11924       \settowidth{\dimen@}%
11925       {\glstreenamefmt{\glsentryname{\glo@label}}}%
11926       \ifdim\dimen@>\gls@tmp@len
11927         \gls@tmp@len=\dimen@
11928         \glssetwidest{\glsentryname{\glo@label}}%
11929       \fi
11930     }%
11931   }%
11932 }
```

`\glsFindWidestUsedTopLevelName` This is like `\glsFindWidestUsedTopLevelName` but also sets the first two sub-levels as well. Any entry that has a great-grandparent is ignored.

```
11933 \newrobustcmd*\glsFindWidestUsedLevelTwo}[1][\@glo@types]{%
11934     \dimen@=0pt\relax
11935     \dimen@i=0pt\relax
11936     \dimen@ii=0pt\relax
11937     \forallglossaries[#1]{\@gls@type}%
11938     {%
```

```

11939 \forglsentries[\@gls@type]{\@glo@label}%
11940 {%
11941   \ifglsused{\@glo@label}%
11942   {%
11943     \ifglshasparent{\@glo@label}%
11944     {%
11945       \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@label}}@parent}%
11946       \ifglshasparent{\@glo@parent}%
11947       {%
11948         \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@parent}}@parent}%
11949         \ifglshasparent{\@glo@parent}%
11950         {}%
11951         {%
11952           \settowidth{\gls@tmp[1]}%
11953             {\glstreenamefmt{\glsentryname{\@glo@label}}}%
11954             \ifdim\gls@tmp[1]>\dimen@ii
11955               \dimen@ii=\gls@tmp[1]
11956               \eglssetwidest[2]{\glsentryname{\@glo@label}}%
11957             \fi
11958           }%
11959         }%
11960         {%
11961           \settowidth{\gls@tmp[1]}%
11962             {\glstreenamefmt{\glsentryname{\@glo@label}}}%
11963             \ifdim\gls@tmp[1]>\dimen@i
11964               \dimen@i=\gls@tmp[1]
11965               \eglssetwidest[1]{\glsentryname{\@glo@label}}%
11966             \fi
11967           }%
11968         }%
11969         {%
11970           \settowidth{\gls@tmp[1]}%
11971             {\glstreenamefmt{\glsentryname{\@glo@label}}}%
11972             \ifdim\gls@tmp[1]>\dimen@o
11973               \dimen@o=\gls@tmp[1]
11974               \eglssetwidest{\glsentryname{\@glo@label}}%
11975             \fi
11976           }%
11977         }%
11978         {}%
11979       }%
11980     }%
11981   }

```

`dWidestLevelTwo` This is like `\glsFindWidestUsedLevelTwo` but doesn't check if the entry has been used.

```

11982 \newrobustcmd*\glsFindWidestLevelTwo[1][\@glo@types]{%
11983   \dimen@=0pt\relax
11984   \dimen@i=0pt\relax
11985   \dimen@ii=0pt\relax

```

```

11986 \forallglossaries[#1]{\@gls@type}%
11987 {%
11988   \forglsentries[\@gls@type]{\@glo@label}%
11989   {%
11990     \ifglshasparent{\@glo@label}%
11991     {%
11992       \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@label}}@parent}%
11993       \ifglshasparent{\@glo@parent}%
11994       {%
11995         \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@parent}}@parent}%
11996         \ifglshasparent{\@glo@parent}%
11997         {}%
11998         {%
11999           \settowidth{\gls@tmp[1]}%
12000             {\glstreenamefmt{\glsentryname{\@glo@label}}}%
12001             \ifdim\gls@tmp[1]>\dimen@ii
12002               \dimen@ii=\gls@tmp[1]
12003               \eglssetwidest[2]{\glsentryname{\@glo@label}}%
12004             \fi
12005           }%
12006         }%
12007       {%
12008         \settowidth{\gls@tmp[1]}%
12009           {\glstreenamefmt{\glsentryname{\@glo@label}}}%
12010           \ifdim\gls@tmp[1]>\dimen@i
12011             \dimen@i=\gls@tmp[1]
12012             \eglssetwidest[1]{\glsentryname{\@glo@label}}%
12013           \fi
12014         }%
12015       }%
12016     {%
12017       \settowidth{\gls@tmp[1]}%
12018         {\glstreenamefmt{\glsentryname{\@glo@label}}}%
12019         \ifdim\gls@tmp[1]>\dimen@o
12020           \dimen@o=\gls@tmp[1]
12021           \eglssetwidest{\glsentryname{\@glo@label}}%
12022         \fi
12023       }%
12024     }%
12025   }%
12026 }

```

`\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.

```

12027 \newrobustcmd*\glsFindWidestUsedAnyNameSymbol}[2][\@glo@types]{%
12028   \dimen@=0pt\relax
12029   \gls@tmp[1]=0pt\relax
12030   #2=0pt\relax
12031   \forallglossaries[#1]{\@gls@type}%

```

```

12032  {%
12033    \forglsentries[\@gls@type]{\@glo@label}%
12034    {%
12035      \ifglsused{\@glo@label}%
12036      {%
12037        \settowidth{\dimen@}%
12038        {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
12039        \ifdim\dimen@>\gls@tmp{%
12040          \gls@tmp=\dimen@%
12041          \glssetwidest{\glsentryname{\@glo@label}}%
12042        \fi%
12043        \settowidth{\dimen@}%
12044        {\glsentrysymbol{\@glo@label}}%
12045        \ifdim\dimen@>#2\relax%
12046          #2=\dimen@%
12047        \fi%
12048      }%
12049      {}%
12050    }%
12051  }%
12052 }

```

`\stAnyNameSymbol` Like the above but doesn't check if the entry has been used.

```

12053  \newrobustcmd*\glsFindWidestAnyNameSymbol}[2][\@glo@types]{%
12054    \dimen@=0pt\relax%
12055    \gls@tmp=0pt\relax%
12056    #2=0pt\relax%
12057    \forallglossaries[#1]{\@gls@type}%
12058    {%
12059      \forglsentries[\@gls@type]{\@glo@label}%
12060      {%
12061        \settowidth{\dimen@}%
12062        {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
12063        \ifdim\dimen@>\gls@tmp{%
12064          \gls@tmp=\dimen@%
12065          \glssetwidest{\glsentryname{\@glo@label}}%
12066        \fi%
12067        \settowidth{\dimen@}%
12068        {\glsentrysymbol{\@glo@label}}%
12069        \ifdim\dimen@>#2\relax%
12070          #2=\dimen@%
12071        \fi%
12072      }%
12073    }%
12074  }

```

`\glsFindWidestUsedAnyNameSymbol` Like the `\glsFindWidestUsedAnyNameSymbol` but also measures the location list. This requires `\glsentrynumberlist`. The length of the widest symbol is stored in the second argument should be a length register. The length of the widest location list is stored in the third

argument, which should also be a length register.

```
12075 \newrobustcmd*\{\glsFindWidestUsedAnyNameSymbolLocation\}[3][\@glo@types]{%
12076   \dimen@=0pt\relax
12077   \gls@tmp@len=0pt\relax
12078   #2=0pt\relax
12079   #3=0pt\relax
12080   \forallglossaries[#1]{\gls@type}{%
12081   {%
12082     \forglsentries[\gls@type]{\glo@label}{%
12083     {%
12084       \ifglsused{\glo@label}{%
12085       {%
12086         \settowidth{\dimen@}{%
12087           {\glsentryname{\glo@label}}}}%
12088         \ifdim\dimen@>\gls@tmp@len
12089           \gls@tmp@len=\dimen@
12090           \glssetwidest{\glsentryname{\glo@label}}{%
12091             \fi
12092             \settowidth{\dimen@}{%
12093               {\glsentrysymbol{\glo@label}}}}%
12094             \ifdim\dimen@>#2\relax
12095               #2=\dimen@
12096             \fi
12097             \settowidth{\dimen@}{%
12098               {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}}%
12099             \ifdim\dimen@>#3\relax
12100               #3=\dimen@
12101             \fi
12102           }%
12103           {}%
12104         }%
12105       }%
12106     }%
```

`eSymbolLocation` Like the `\glsFindWidestUsedAnyNameSymbol` but doesn't check if the entry has been used.

```
12107 \newrobustcmd*\{\glsFindWidestAnyNameSymbolLocation\}[3][\@glo@types]{%
12108   \dimen@=0pt\relax
12109   \gls@tmp@len=0pt\relax
12110   #2=0pt\relax
12111   #3=0pt\relax
12112   \forallglossaries[#1]{\gls@type}{%
12113   {%
12114     \forglsentries[\gls@type]{\glo@label}{%
12115     {%
12116       \settowidth{\dimen@}{%
12117         {\glsentryname{\glo@label}}}}%
12118       \ifdim\dimen@>\gls@tmp@len
12119         \gls@tmp@len=\dimen@
12120         \glssetwidest{\glsentryname{\glo@label}}{%
```

```

12121     \fi
12122     \settowidth{\dimen@}%
12123     {\glsentrysymbol{@glo@label}}%
12124     \ifdim\dimen@>\#2\relax
12125         #2=\dimen@
12126     \fi
12127     \settowidth{\dimen@}%
12128     {\GlsXtrFormatLocationList{\glsentrynumberlist{@glo@label}}}%
12129     \ifdim\dimen@>\#3\relax
12130         #3=\dimen@
12131     \fi
12132     }%
12133 }%
12134 }

```

`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.

```

12135 \newrobustcmd*{\glsFindWidestUsedAnyNameLocation}[2][{@glo@types}]{%
12136     \dimen@=0pt\relax
12137     \gls@tmp@len=0pt\relax
12138     #2=0pt\relax
12139     \forallglossaries[#1]{\gls@type}%
12140     {%
12141         \forglsentries[\gls@type]{\glo@label}%
12142         {%
12143             \ifglsused{\glo@label}%
12144             {%
12145                 \settowidth{\dimen@}%
12146                 {\glstreenamefmt{\glsentryname{\glo@label}}}%
12147                 \ifdim\dimen@>\gls@tmp@len
12148                     \gls@tmp@len=\dimen@
12149                     \glssetwidest{\glsentryname{\glo@label}}%
12150                 \fi
12151                 \settowidth{\dimen@}%
12152                 {\GlsXtrFormatLocationList{\glsentrynumberlist{@glo@label}}}%
12153                 \ifdim\dimen@>\#2\relax
12154                     #2=\dimen@
12155                 \fi
12156             }%
12157             {}%
12158         }%
12159     }%
12160 }

```

`AnyNameLocation` Like the `\glsFindWidestAnyNameLocation` but doesn't check the `first use` flag.

```

12161 \newrobustcmd*{\glsFindWidestAnyNameLocation}[2][{@glo@types}]{%
12162     \dimen@=0pt\relax
12163     \gls@tmp@len=0pt\relax

```

```

12164     #2=0pt\relax
12165     \forallglossaries[#1]{\@gls@type}%
12166     {%
12167         \forglentries[\@gls@type]{\@glo@label}%
12168         {%
12169             \settowidth{\dimen@}%
12170             {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
12171             \ifdim\dimen@>\gls@tmpplen
12172                 \gls@tmpplen=\dimen@
12173                 \eglssetwidest{\glsentryname{\@glo@label}}%
12174             \fi
12175             \settowidth{\dimen@}%
12176             {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}}%
12177             \ifdim\dimen@#2\relax
12178                 #2=\dimen@
12179             \fi
12180         }%
12181     }%
12182 }

```

`\computeTreeIndent` Compute the value of `\glstreeindent`. Argument is the entry label. (Ignored in default definition, but this command may be redefined to take the particular entry into account.) Note that the sub-levels modify `\glstreeindent`.

```

12183 \newcommand*{\glsxtrComputeTreeIndent}[1]{%
12184     \glstreeindent=\glsxtrtreeopindent\relax
12185 }

```

`\computeTreeSubIndent` `\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.

```

12186 \newcommand*{\glsxtrComputeTreeSubIndent}[3]{%
12187     \ifcsundef{\glswidestname\romannumeral#1}%
12188     {%
12189         \settowidth{#3}{\glstreenamefmt{\@glswidestname\space}}%
12190     }%
12191     {%
12192         \settowidth{#3}{\glstreenamefmt{%
12193             \csname\glswidestname\romannumeral#1\endcsname\space}}%
12194     }%
12195 }

```

`\setHangIndent` Set `\hangindent` for top-level entries:

```

12196 \newcommand*{\glsxtrAltTreeSetHangIndent}{\hangindent\glstreeindent}

```

etSubHangIndent Set \hangindent for sub-entries:

```
12197 \newcommand*{\glsxtrAltTreeSetSubHangIndent}[1]{\hangindent\glstreeindent}
```

Redefine alttree:

```
12198 \renewglossarystyle{alttree}{%
12199   \renewenvironment{theglossary}{%
12200     {%
12201       \glsxtralttreeInit
12202       \def\@gls@prevlevel{-1}%
12203       \mbox{}\par}%
12204     {\par}%
12205     \renewcommand*{\glossaryheader}{}%
12206     \renewcommand*{\glsgroupheading}[1]{}%
12207     \renewcommand{\glossentry}[2]{%
12208       \ifnum\@gls@prevlevel=0\relax
12209       \else
12210         \glsxtrComputeTreeIndent{##1}%
12211       \fi
12212       \parindent\glstreeindent
12213       \glsxtrAltTreeSetHangIndent
12214       \makebox[0pt][r]%
12215     {%
12216       \glstreenamebox{\glstreeindent}%
12217     {%
12218       \glsentryitem{##1}%
12219       \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
12220     }%
12221   }%
12222   \glsxtralttreeSymbolDescLocation{##1}{##2}%
12223   \def\@gls@prevlevel{0}%
12224 }
12225 \renewcommand{\subglossentry}[3]{%
12226   \ifnum##1=1\relax
12227     \glssubentryitem{##2}%
12228   \fi
12229   \ifnum\@gls@prevlevel=##1\relax
12230   \else
12231     \glsxtrComputeTreeSubIndent{##1}{##2}{\gls@tmp{len}}%
12232     \ifnum\@gls@prevlevel<##1\relax
12233       \setlength\glstreeindent{\gls@tmp{len}}
12234       \addtolength\glstreeindent\parindent
12235       \parindent\glstreeindent
12236     \else
12237       \ifnum\@gls@prevlevel=0\relax
12238         \glsxtrComputeTreeIndent{##2}%
12239       \else
12240         \glsxtrComputeTreeSubIndent{\@gls@prevlevel}{##2}{\glstreeindent}%
12241       \fi
12242     \addtolength\parindent{-\glstreeindent}%

```

```

12243      \setlength\glstreeindent\parindent
12244      \fi
12245      \fi
12246      \glsxtrAltTreeSetSubHangIndent{##1}%
12247      \makebox[0pt][r]{\glstreenamebox{\gls@tmplen}{%
12248          \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}}}%
12249      \glsxtralttreeSubSymbolDescLocation{##1}{##2}{##3}%
12250      \def\@gls@prevlevel{##1}%
12251  }%
12252  \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
12253 }%
12254 }%
12255 {%
12256 }

```

Redefine `alttreegroup` so that it discourages a break after group headings. Can't use `\@afterheading` here as it messes with the first item of the group.

```

12257 \ifdef{@glsstyle@alttreegroup}%
12258 {%
12259     \renewglossarystyle{alttreegroup}{%
12260         \setglossarystyle{alttree}{%
12261             \renewcommand{\glsgroupheading}[1]{\par
12262                 \def\@gls@prevlevel{-1}%
12263                 \hangindent0pt\relax
12264                 \parindent0pt\relax
12265                 \glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
12266                 \nopagebreak\indexspace\nopagebreak
12267             }%
12268         }%
12269     }%
12270 {%
12271 }

```

Similarly for `alttreehypergroup`.

```

12272 \ifdef{@glsstyle@alttreehypergroup}%
12273 {%
12274     \renewglossarystyle{alttreehypergroup}{%
12275         \setglossarystyle{alttree}{%
12276             \renewcommand*{\glossaryheader}{%
12277                 \par
12278                 \def\@gls@prevlevel{-1}%
12279                 \hangindent0pt\relax
12280                 \parindent0pt\relax
12281                 \glstreenavigationfmt{\glsnavigation}\par\indexspace
12282             }%
12283             \renewcommand*{\glsgroupheading}[1]{%
12284                 \par
12285                 \def\@gls@prevlevel{-1}%
12286                 \hangindent0pt\relax
12287                 \parindent0pt\relax

```

```

12288     \glstreegroupheaderfmt
12289     {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}\par
12290     \nopagebreak\indexspace\nopagebreak
12291     }%
12292   }
12293 }%
12294 {%
12295 }

```

## 2.9 Multicolumn Styles

Adjust `mcolindexgroup` to discourage page breaks after the group headings.

```

12296 \ifdef{@glsstyle@mcolindexgroup}
12297 {%
12298   \renewglossarystyle{mcolindexgroup}{%
12299     \setglossarystyle{mcolindex}{%
12300       \renewcommand*{\glsgroupheading}[1]{%
12301         \item\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
12302         \nopagebreak\indexspace\nobreak\@afterheading
12303       }%
12304     }%
12305   }%
12306 {%
12307 }

```

Similarly for `mcolindexhypergroup`.

```

12308 \ifdef{@glsstyle@mcolindexhypergroup}
12309 {%
12310   \renewglossarystyle{mcolindexhypergroup}{%
12311     \setglossarystyle{mcolindex}{%
12312       \renewcommand*{\glossaryheader}{%
12313         \item\glstreenavigationfmt{\glsnavigation}%
12314         \indexspace
12315       }%
12316       \renewcommand*{\glsgroupheading}[1]{%
12317         \item\glstreegroupheaderfmt
12318         {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}\%
12319         \nopagebreak\indexspace\nobreak\@afterheading
12320       }%
12321     }%
12322   }%
12323 {%
12324 }

```

Similarly for `mcolindexspannav`.

```

12325 \ifdef{@glsstyle@mcolindexspannav}
12326 {%
12327   \renewglossarystyle{mcolindexspannav}{%
12328     \setglossarystyle{index}{%

```

```

12329 \renewenvironment{theglossary}%
12330 {%
12331   \begin{multicols}{\glsmcols}[\noindent\glstreenavigationfmt{\glsnavigation}]%
12332   \setlength{\parindent}{0pt}%
12333   \setlength{\parskip}{0pt plus 0.3pt}%
12334   \let\item\glstreeitem}%
12335 {\end{multicols}}%
12336 \renewcommand*\glsgroupheading[1]{%
12337   \item\glstreegroupheaderfmt
12338   {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
12339   \nopagebreak\indexspace\nobreak\@afterheading
12340 }%
12341 }%
12342 }%
12343 {%
12344 }

```

Similarly for mcoltreegroup.

```

12345 \ifdef{@glsstyle@mcoltreegroup}%
12346 {%
12347   \renewglossarystyle{mcoltreegroup}{%
12348     \setglossarystyle{mcoltree}%
12349     \renewcommand{\glsgroupheading}[1]{\par
12350       \noindent\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}}%
12351       \nopagebreak\indexspace\nobreak\@afterheading
12352     }%
12353   }%
12354 }%
12355 {%
12356 }

```

Similarly for mcoltreehypergroup.

```

12357 \ifdef{@glsstyle@mcoltreehypergroup}%
12358 {%
12359   \renewglossarystyle{mcoltreehypergroup}{%
12360     \setglossarystyle{mcoltree}%
12361     \renewcommand*\glossaryheader{%
12362       \par\noindent\glstreenavigationfmt{\glsnavigation}\par\indexspace
12363     }%
12364     \renewcommand*\glsgroupheading[1]{%
12365       \par\noindent
12366       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
12367       \nopagebreak\indexspace\nobreak\@afterheading
12368     }%
12369   }%
12370 }%
12371 {%
12372 }

```

Similarly for mcoltreespannav.

```

12373 \ifdef{@glsstyle@mcoltreespannav}%

```

```

12374 {%
12375   \renewglossarystyle{mcoltreeespannav}{%
12376     \setglossarystyle{tree}%
12377     \renewenvironment{theglossary}%
12378     {%
12379       \begin{multicols}{\glsmcols}%
12380         [\noindent\glstreenavigationfmt{\glsnavigation}]%
12381         \setlength{\parindent}{0pt}%
12382         \setlength{\parskip}{0pt plus 0.3pt}%
12383     }%
12384   {\end{multicols}}%
12385   \renewcommand*{\glsgroupheading}[1]{%
12386     \par\noindent
12387     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
12388     \nopagebreak\indexspace\nobreak\@afterheading
12389   }%
12390 }
12391 }%
12392 {%
12393 }

```

Similarly for mcoltreeonamegroup.

```

12394 \ifdef{@glsstyle@mcoltreeonamegroup}%
12395 {%
12396   \renewglossarystyle{mcoltreeonamegroup}{%
12397     \setglossarystyle{mcoltreeoname}%
12398     \renewcommand{\glsgroupheading}[1]{\par
12399       \noindent\glstreegroupheaderfmt{\glsgetgroupname{##1}}}%
12400     \nopagebreak\indexspace\nobreak\@afterheading
12401   }%
12402 }
12403 }%
12404 {%
12405 }

```

Similarly for mcoltreeonamehypergroup.

```

12406 \ifdef{@glsstyle@mcoltreeonamehypergroup}%
12407 {%
12408   \renewglossarystyle{mcoltreeonamehypergroup}{%
12409     \setglossarystyle{mcoltreeoname}%
12410     \renewcommand*{\glossaryheader}{%
12411       \par\noindent\glstreenavigationfmt{\glsnavigation}\par\indexspace}%
12412     \renewcommand*{\glsgroupheading}[1]{%
12413       \par\noindent
12414       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
12415       \nopagebreak\indexspace\nobreak\@afterheading
12416     }%
12417 }%
12418 {%
12419 }

```

Similarly for mcoltreeonenamespannav.

```
12420 \ifdef{@glsstyle@mcoltreeonenamespannav}
12421 {%
12422   \renewglossarystyle{mcoltreeonenamespannav}{%
12423     \setglossarystyle{treenoname}%
12424     \renewenvironment{theglossary}%
12425     {%
12426       \begin{multicols}{\glsmcols}%
12427         [\noindent\glstreenavigationfmt{\glsnavigation}]%
12428         \setlength{\parindent}{0pt}%
12429         \setlength{\parskip}{0pt plus 0.3pt}%
12430     }%
12431   {\end{multicols}}%
12432   \renewcommand*\glsgroupheading[1]{%
12433     \par\noindent
12434     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
12435     \nopagebreak\indexspace\nobreak\@afterheading}%
12436 }
12437 }%
12438 {%
12439 }
```

mcolaltree needs adjusting so that it uses \glsxtralttreeInit This doesn't use \mbox{} \par which would unbalance the top of the columns.

```
12440 \ifdef{@glsstyle@mcolaltree}
12441 {%
12442   \renewglossarystyle{mcolaltree}{%
12443     \setglossarystyle{alttree}%
12444     \renewenvironment{theglossary}%
12445     {%
12446       \glsxtralttreeInit
12447       \def@gls@prevlevel{-1}%
12448       \begin{multicols}{\glsmcols}%
12449     }%
12450   {\par\end{multicols}}%
12451 }
12452 }%
12453 {%
12454 }
```

Redefine mcolalttreegroup to discourage page breaks after the group headings.

```
12455 \ifdef{@glsstyle@mcolalttreegroup}
12456 {%
12457   \renewglossarystyle{mcolalttreegroup}{%
12458     \setglossarystyle{mcolalttree}%
12459     \renewcommand{\glsgroupheading}[1]{\par
12460       \def@gls@prevlevel{-1}%
12461       \hangindent0pt\relax
12462       \parindent0pt\relax
12463       \glstreegroupheaderfmt{\glsgetgroupname{##1}}}%
12464 }
```

```

12464      \nopagebreak\indexspace\nopagebreak
12465  }%
12466 }
12467 }%
12468 {%
12469 }

```

Similarly for mcolaltreehypergroup.

```

12470 \ifdef{\@glsstyle@mcolaltreehypergroup}
12471 {%
12472   \renewglossarystyle{mcolaltreehypergroup}{%
12473     \setglossarystyle{mcolaltree}{%
12474       \renewcommand*{\glossaryheader}{%
12475         \par
12476         \def\@gls@prevlevel{-1}%
12477         \hangindent0pt\relax
12478         \parindent0pt\relax
12479         \glstreenavigationfmt{\glsnavigation}%
12480         \par\indexspace
12481     }%
12482     \renewcommand*{\glsgroupheading}[1]{%
12483       \par
12484       \def\@gls@prevlevel{-1}%
12485       \hangindent0pt\relax
12486       \parindent0pt\relax
12487       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroup{##1}}}%
12488       \nopagebreak\indexspace\nopagebreak
12489     }%
12490   }%
12491 }%
12492 {%
12493 }

```

Similarly for mcolaltreespannav.

```

12494 \ifdef{\@glsstyle@mcolaltreespannav}
12495 {%
12496   \renewglossarystyle{mcolaltreespannav}{%
12497     \setglossarystyle{alttree}{%
12498       \renewenvironment{theglossary}{%
12499         {%
12500           \glsxtralttreeInit
12501           \def\@gls@prevlevel{-1}%
12502           \begin{multicols}{\glsmcols}%
12503             [\noindent\glstreenavigationfmt{\glsnavigation}]%
12504         }%
12505         {\par\end{multicols}}%
12506         \renewcommand*{\glsgroupheading}[1]{%
12507           \par
12508           \def\@gls@prevlevel{-1}%
12509           \hangindent0pt\relax

```

```
12510     \parindent0pt\relax
12511     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroup{##1}}}{%
12512         \nopagebreak\indexspace\nopagebreak
12513     }%
12514 }
12515 }%
12516 {%
12517 }

    Reset the default style

12518 \ifx\@glossary@default@style\relax
12519 \else
12520     \setglossarystyle{@glsxtr@current@style}
12521 \fi
```

# 3 bookindex style (glossary-bookindex.sty)

## 3.1 Package Initialisation and Options

```
12522 \NeedsTeXFormat{LaTeX2e}
12523 \ProvidesPackage{glossary-bookindex}[2017/11/12 v1.23 (NLCT)]

    Load required packages.
12524 \RequirePackage{multicol}
12525 \RequirePackage{glossary-tree}

trbookindexcols  Number of columns.
12526 \newcommand{\glsxtrbookindexcols}{2}

trbookindexname  Format used for top-level entries. (Argument is the label.)
12527 \newcommand*{\glsxtrbookindexname}[1]{\glossentryname{#1}}


ookindexsubname  Format used for sub entries.
12528 \newcommand*{\glsxtrbookindexsubname}[1]{\glsxtrbookindexname{#1}}


sxtrprelocation  Provide in case glossaries-stylemods isn't loaded.
12529 \providecommand*{\glsxtrprelocation}{\space}

ndexprelocation  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.
12530 \newcommand*{\glsxtrbookindexprelocation}[1]{%
12531   \glsxtrifhasfield{location}{#1}%
12532   {,\glsxtrprelocation}%
12533   {\glsxtrprelocation}%
12534 }
```

xsubprelocation Separator used before location list for sub-entries.

```
12535 \newcommand*{\glsxtrbookindexsubprelocation}[1]{%
12536   \glsxtrbookindexprelocation{#1}%
12537 }
```

xparentchildsep Separator used between top-level parent and child entry.

```
12538 \newcommand{\glsxtrbookindexparentchildsep}{\nopagebreak}
```

rentsubchildsep Separator used between sub-level parent and child entry.

```
12539 \newcommand{\glsxtrbookindexparentsubchildsep}{\glsxtrbookindexparentchildsep}
```

ookindexbetween Between two top-level entries identified by the labels in the arguments.  
 12540 \newcommand{\glsxtrbookindexbetween}[2]{}

indexsubbetween Between two level 1 entries identified by the labels in the arguments.  
 12541 \newcommand{\glsxtrbookindexsubbetween}[2]{}

exsubsubbetween Between two level 2 entries identified by the labels in the arguments.  
 12542 \newcommand{\glsxtrbookindexsubsubbetween}[2]{}

indexatendgroup At the end of a letter group. The argument is the index of the last top-level entry.  
 12543 \newcommand{\glsxtrbookindexatendgroup}[1]{}

exsubatendgroup At the end of a letter group. The argument is the index of the last level 1 entry.  
 12544 \newcommand{\glsxtrbookindexsubatendgroup}[1]{}

ubsubatendgroup At the end of a letter group. The argument is the index of the last level 2 entry.  
 12545 \newcommand{\glsxtrbookindexsubsubatendgroup}[1]{}

kindexgroupskip Group separator.  
 12546 \newcommand{\glsxtrbookindexgroupskip}{\ifglsnogroupskip\else\indexspace\fi}  
 Format group title.

dexformatheader Group separator.  
 12547 \newcommand\*\glsxtrbookindexformatheader[1]{%  
 12548 \par{\centering\glstreegroupheaderfmt{\#1}\par}%
 12549 }

okindexbookmark Book mark group heading if supported.  
 12550 \ifdef\pdfbookmark  
 12551 {%
 12552 \newcommand\*\glsxtrbookindexbookmark[2]{%
 12553 \ifdefstring{\@glossarysec}{chapter}%
 12554 {\pdfbookmark[1]{\#1}{\#2}}%
 12555 {\pdfbookmark[2]{\#1}{\#2}}%
 12556 }
 12557 }
 12558 {%
 12559 \newcommand\*\glsxtrbookindexbookmark[2]{}
 12560 }

kindexcolspread  
 12561 \newcommand\*\glsxtrbookindexcolspread(){}

Define the style.  
 12562 \newglossarystyle{bookindex}{%
 12563 \setglossarystyle{index}%
 12564 \renewenvironment{theglossary}%

```

12565  {%
12566    \ifdefempty\glsxtrbookindexcols{%
12567      {\begin{multicols}{\glsxtrbookindexcols}}{%
12568        {\begin{multicols}{\glsxtrbookindexcols}[\glsxtrbookindexcols{spread}]}{%
12569          \setlength{\parindent}{0pt}{%
12570            \setlength{\parskip}{0pt plus 0.3pt}{%
12571              \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep{%
12572                \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep{%
12573                  \let\@glsxtr@bookindex@between@gobble{%
12574                    \let\@glsxtr@bookindex@subbetween@gobble{%
12575                      \let\@glsxtr@bookindex@subsubbetween@gobble{%
12576                        \let\@glsxtr@bookindex@atendgroup\relax{%
12577                          \let\@glsxtr@bookindex@subatendgroup\relax{%
12578                            \let\@glsxtr@bookindex@subsubatendgroup\relax{%
12579                              \let\@glsxtr@bookindexgroupskip\relax{%
12580                            }{%
12581                          }{%

```

Do end group hooks.

```

12582    \@glsxtr@bookindex@subsubatendgroup{%
12583      \@glsxtr@bookindex@subatendgroup{%
12584        \@glsxtr@bookindex@atendgroup{%

```

End multicols environment.

```

12585    \end{multicols}{%
12586  }{%

```

Use ragged right as columns are likely to be narrow and indexes tend not to be fully justified.

```

12587  \renewcommand*\glossaryheader{\raggedright}{%

```

Top level entry format.

```

12588  \renewcommand*\glossentry[2]{%

```

Do separator.

```

12589    \@glsxtr@bookindex@between{##1}{%

```

Update separators.

```

12590    \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep{%
12591      \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep{%
12592        \let\@glsxtr@bookindex@subbetween@gobble{%
12593          \let\@glsxtr@bookindex@subsubbetween@gobble{%
12594            \edef\@glsxtr@bookindex@between{%
12595              \noexpand\glsxtrbookindexbetween{##1}{%
12596            }{%
12597              \edef\@glsxtr@bookindex@atendgroup{%
12598                \noexpand\glsxtrbookindexatendgroup{##1}{%
12599              }{%
12600                \let\@glsxtr@bookindex@subatendgroup\relax{%
12601                  \let\@glsxtr@bookindex@subsubatendgroup\relax{%

```

Format entry.

```

12602  \glstreeitem{%

```

```

12603      \glsentryitem{##1}%
12604      \glstarget{##1}{\glsxtrbookindexname{##1}}%
12605      \glsxtrbookindexprelocation{##1}##2%
12606  }%
12607  \renewcommand{\subglossentry}[3]{%
12608      \ifcase##1\relax

```

Level 0 (shouldn't happen as that's formatted with \glossentry).

```

12609      \glstreeitem
12610      \or

```

Level 1.

```

12611      \@glsxtr@bookindex@sep
12612      \@glsxtr@bookindex@subbetween{##2}%
12613      \let@\glsxtr@bookindex@sep\relax

```

Update separators.

```

12614      \let@\glsxtr@bookindex@subsubbetween\gobble
12615      \let@\glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
12616      \edef@\glsxtr@bookindex@subbetween{%
12617          \noexpand\glsxtrbookindexsubbetween{##2}%
12618      }%
12619      \edef@\glsxtr@bookindex@atsubendgroup{%
12620          \noexpand\glsxtrbookindexatsubendgroup{##1}%
12621      }%

```

Start sub-item.

```

12622      \glstreesubitem
12623      \glssubentryitem{##2}%
12624      \else

```

All other levels.

```

12625      \@glsxtr@bookindex@subsep
12626      \@glsxtr@bookindex@subsubbetween{##2}%

```

Update separators.

```

12627      \let@\glsxtr@bookindex@subsep\relax
12628      \edef@\glsxtr@bookindex@subsubbetween{%
12629          \noexpand\glsxtrbookindexsubsubbetween{##2}%
12630      }%
12631      \edef@\glsxtr@bookindex@atsubsubendgroup{%
12632          \noexpand\glsxtrbookindexatsubsubendgroup{##1}%
12633      }%

```

Start sub-sub-item.

```

12634      \glstreesubsubitem
12635      \fi

```

Format entry.

```

12636      \glstarget{##2}{\glsxtrbookindexsubname{##2}}%
12637      \glsxtrbookindexsubprelocation{##2}##3%
12638  }%

```

The group skip is moved to the group heading to avoid interfering with the end letter group hooks.

```
12639 \renewcommand*{\glsgroupskip}{}%
```

Group heading format.

```
12640 \renewcommand*{\glsgroupheading}[1]{%
```

Do end group hooks.

```
12641 \@glsxtr@bookindex@subsubatendgroup
```

```
12642 \@glsxtr@bookindex@subatendgroup
```

```
12643 \@glsxtr@bookindex@atendgroup
```

```
12644 \@glsxtr@bookindexgroupskip
```

Update separators.

```
12645 \let\@glsxtr@bookindexgroupskip\glsxtrbookindexgroupskip
```

```
12646 \let\@glsxtr@bookindex@between@gobble
```

```
12647 \let\@glsxtr@bookindex@atendgroup\relax
```

```
12648 \let\@glsxtr@bookindex@subatendgroup\relax
```

```
12649 \let\@glsxtr@bookindex@subsubatendgroup\relax
```

Fetch the group title from the label supplied in #1.

```
12650 \glsxtrgetgroup{##1}{\thisgrptitle}%
```

Do the PDF bookmark if supported.

```
12651 \glsxtrbookindexbookmark{\thisgrptitle}{index.##1}%
```

Format the group title.

```
12652 \glsxtrbookindexformatheader{\thisgrptitle}%
```

```
12653 \nopagebreak\indexspace\nopagebreak\@afterheading
```

```
12654 }%
```

```
12655 }
```

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.

```
12656 \newcommand{\glsxtrbookindexthepage}{}%
```

```
12657 \ifdef{\currentglossary}{\currentglossary.\arabic{page}}{\arabic{page}}%
```

```
12658 }
```

`\indexmarkentry` Writes entry information to the .aux file. The argument is the entry label.

```
12659 \newcommand*{\glsxtrbookindexmarkentry}[1]{%
```

```
12660 \protected@write\@auxout
```

```
12661 {\let\glsxtrbookindexthepage\relax}%
```

```
12662 {\string\glsxtr@setbookindexmark{\glsxtrbookindexthepage}{#1}}%
```

```
12663 }
```

```

setbookindexmark
12664 \newcommand*{\glsxtr@setbookindexmark}[2]{%
12665   \ifcsundef{\glsxtr@idxfirstmark@#1}{%
12666     {\csgdef{\glsxtr@idxfirstmark@#1}{\#2}}{%
12667   }{%
12668     {\csgdef{\glsxtr@idxlastmark@#1}{\#2}}{%
12669   }{%
dexfirstmarkfmt
12670 \newcommand*{\glsxtrbookindexfirstmarkfmt}[1]{%
12671   \glsentryname{\#1}}{%
12672 }{%
kindexfirstmark
12673 \newcommand*{\glsxtrbookindexfirstmark}{%
12674   \letcs{\glsxtr@label}{\glsxtr@idxfirstmark@\glsxtrbookindexthepage}}{%
12675   \ifdef{\glsxtr@label}{%
12676     {\glsxtrbookindexfirstmarkfmt{\glsxtr@label}}}{%
12677   }{%
12678 }{%
ndexlastmarkfmt
12679 \newcommand*{\glsxtrbookindexlastmarkfmt}[1]{%
12680   \glsentryname{\#1}}{%
12681 }{%
okindexlastmark
12682 \newcommand*{\glsxtrbookindexlastmark}{%
12683   \letcs{\glsxtr@label}{\glsxtr@idxlastmark@\glsxtrbookindexthepage}}{%
12684   \ifdef{\glsxtr@label}{%
12685     {\glsxtrbookindexlastmarkfmt{\glsxtr@label}}}{%
12686   }{%
12687 }{%

```

# Glossary

**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 ..... 303  
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0.3 (2015-12-02)

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