

glossaries-extra.sty v1.22: 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}[2017/11/08 v1.22 (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^AT_EX run the entries aren't defined. This isn't as straight-forward as commands like \cite since attributes associated with the entry's category may switch off the indexing or the entry's glossary type might require a particular counter. This kind of information can't be determined until the entry has been defined. So there are two different commands here. One that's used if the entry hasn't been defined, which tries to use sensible defaults, and one which is used when the entry has been defined.

\@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 }

```

ationShortcuts Enable shortcut commands for the abbreviations. Unlike the analogous command provided by glossaries, this uses \newcommand instead of \let as a safety feature.

```

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   \newcommand*{\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   \newcommand*{\newabbr}{\newabbreviation}%
466 }
```

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 short-
cuts=all and shortcuts=none. Multiple use of this option in the same option list will over-
ride 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             \appto{\@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}{\glsxtrwrglossmark}%
600 \or % false
601   \glsxtr@dooption{debug=false}%
602   \renewcommand*\glsxtrwrglossmark{\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     }%
704   }%
705 }

```

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   \c@ifstar@\glsxtr@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     }%
```

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*\s@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.

```

747 \newrobustcmd*{\glsxtrfmt}[3] [] {%
748   \glsdoifexistsordo{#2}%
749   {%
750     \ifglshasfield{\GlsXtrFmtField}{#2}%
751     {%
752       \let\do@gls@link@checkfirsthyper\relax
753       \expandafter\gls@link\expandafter[\GlsXtrFmtDefaultOptions,#1]{#2}%
754       {\csuse{\glscurrentfieldvalue}{#3}}%
755     }%
756     {#3}%
757   }%
758   {#3}%
759 }
```

`\glsxtrentryfmt` No link or indexing.

```

760 \ifdef\texorpdfstring
761 {
762   \newcommand*{\glsxtrentryfmt}[2]{%
763     \texorpdfstring{\glsxtrentryfmt{#1}{#2}}{#2}%
764   }
765 }
766 {
767   \newcommand*{\glsxtrentryfmt}{\glsxtrentryfmt}
768 }
```

`@glsxtrentryfmt`

```

769 \newrobustcmd*{\glsxtrentryfmt}[2]{%
770   \glsdoifexistsordo
771   {%
772     \ifglshasfield{\GlsXtrFmtField}{#1}%
773     {%
```

```

774     \csuse{\glscurrentfieldvalue}{#2}%
775   }%
776   {#2}%
777 }%
778 {#2}%
779 }

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.
780 \newcommand*{\glsxtrfieldlistadd}[3]{%
781   \listcsadd{glo@\glsdetoklabel{#1}@#2}{#3}%
782 }

```

xtrfieldlistgadd Similarly but uses \listcsgadd.

```

783 \newcommand*{\glsxtrfieldlistgadd}[3]{%
784   \listcsgadd{glo@\glsdetoklabel{#1}@#2}{#3}%
785 }

```

xtrfieldlisteadd Similarly but uses \listcseadd.

```

786 \newcommand*{\glsxtrfieldlisteadd}[3]{%
787   \listcseadd{glo@\glsdetoklabel{#1}@#2}{#3}%
788 }

```

xtrfieldlistxadd Similarly but uses \listcsxadd.

```

789 \newcommand*{\glsxtrfieldlistxadd}[3]{%
790   \listcsxadd{glo@\glsdetoklabel{#1}@#2}{#3}%
791 }

```

Now provide commands to iterate over these lists.

fielddolistloop

```

792 \newcommand*{\glsxtrfielddolistloop}[2]{%
793   \dolistcsloop{glo@\glsdetoklabel{#1}@#2}%
794 }

```

fieldforlistloop

```

795 \newcommand*{\glsxtrfieldforlistloop}[3]{%
796   \forlistcsloop{glo@\glsdetoklabel{#1}@#2}{#3}%
797 }

```

List element tests:

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

```

798 \newcommand*{\glsxtrfieldifinlist}[5]{%
799   \ifinlistcs{#3}{glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
800 }

```

`rfieldxifinlist` Expands item.

```
801 \newcommand*{\glsxtrfieldxifinlist}[5]{%
802   \xifinlistcs{#3}{\glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
803 }
```

`\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.

```
804 \newrobustcmd{\glsxtrifhasfield}{%
805   \@ifstar{\s@glsxtrifhasfield}{\@glsxtrifhasfield}%
806 }
```

`\sxtrifhasfield` Unstarred version adds grouping.

```
807 \newcommand{\@glsxtrifhasfield}[4]{%
808   {\s@glsxtrifhasfield{#1}{#2}{#3}{#4}}%
809 }
```

`\sxtrifhasfield` Starred version omits grouping.

```
810 \newcommand{\@glsxtrifhasfield}[4]{%
811   \letcs{\glscurrentfieldvalue}{\glo@\glstoklabel{#2}@#1}%
812   \ifundefined\glscurrentfieldvalue
813     {#4}%
814   {%
815     \ifdefempty\glscurrentfieldvalue{#4}{#3}%
816   }%
817 }
```

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

```
818 \newcommand*{\glsxtrusefield}[2]{%
819   \gls@entry@field{#1}{#2}%
820 }
```

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

```
821 \newcommand*{\Glsxtrusefield}[2]{%
822   \gls@entry@field{#1}{#2}%
823 }
```

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

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

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

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

`etfieldifexists`

```
826 \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.

```
827 \newrobustcmd*\{\GlsXtrSetField\}[3]{%
828   \glsxtrsetfieldifexists{#1}{#2}%
829   {\csdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
830 }
```

\GlsXtrLetField Uses \cslet instead. Third argument should be a macro.

```
831 \newrobustcmd*\{\GlstrLetField\}[3]{%
832   \glsxtrsetfieldifexists{#1}{#2}%
833   {\cslet{glo@\glsdetoklabel{#1}@#2}{#3}}%
834 }
```

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

```
835 \newrobustcmd*\{\csGlsXtrLetField\}[3]{%
836   \glsxtrsetfieldifexists{#1}{#2}%
837   {\csletcs{glo@\glsdetoklabel{#1}@#2}{#3}}%
838 }
```

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.

```
839 \newrobustcmd*\{\GlsXtrLetFieldToField\}[4]{%
840   \glsxtrsetfieldifexists{#1}{#2}%
841   {\csletcs{glo@\glsdetoklabel{#1}@#2}{glo@\glsdetoklabel{#3}@#4}}%
842 }
```

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

```
843 \newrobustcmd*\{\gGlsXtrSetField\}[3]{%
844   \glsxtrsetfieldifexists{#1}{#2}%
845   {\csgdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
846 }
```

xGlsXtrSetField

```
847 \newrobustcmd*\{\xGlsXtrSetField\}[3]{%
848   \glsxtrsetfieldifexists{#1}{#2}%
849   {\protected@csxdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
850 }
```

eGlsXtrSetField

```
851 \newrobustcmd*\{\eGlsXtrSetField\}[3]{%
852   \glsxtrsetfieldifexists{#1}{#2}%
853   {\protected@csedef{glo@\glsdetoklabel{#1}@#2}{#3}}%
854 }
```

XtrIfFieldEqStr

```
855 \newrobustcmd*\{\GlsXtrIfFieldEqStr\}[5]{%
```

```

856 \glsxtrifhasfield{#1}{#2}%
857 {%
858   \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}%
859 }%
860 {#5}%
861 }

\glsxtrpageref Like \glsrefentry but references the page number instead (if entry counting is on).
862 \ifglsentrycounter
863   \newcommand*{\glsxtrpageref}[1]{\pageref{glsentry-\glsdetoklabel{#1}}}
864 \else
865   \ifglssubentrycounter
866     \newcommand*{\glsxtrpageref}[1]{\pageref{glsentry-\glsdetoklabel{#1}}}
867   \else
868     \newcommand*{\glsxtrpageref}[1]{\gls{#1}}
869   \fi
870 \fi

lossarypreamble
871 \newcommand{\apptoglossarypreamble}[2][\glsdefaulttype]{%
872   \ifcsdef{glolist@#1}%
873   {%
874     \ifcsundef{@glossarypreamble@#1}%
875       {\csdef{@glossarypreamble@#1}{}}
876     {}%
877     \csappto{@glossarypreamble@#1}{#2}%
878   }%
879   {}%
880   \GlossariesExtraWarning{Glossary ‘#1’ is not defined}%
881 }%
882 }

```

```

lossarypreamble
883 \newcommand{\preglossarypreamble}[2][\glsdefaulttype]{%
884   \ifcsdef{glolist@#1}%
885   {%
886     \ifcsundef{@glossarypreamble@#1}%
887       {\csdef{@glossarypreamble@#1}{}}
888     {}%
889     \cspreto{@glossarypreamble@#1}{#2}%
890   }%
891   {}%
892   \GlossariesExtraWarning{Glossary ‘#1’ is not defined}%
893 }%
894 }

```

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

```
895 \renewcommand*{\longnewglossaryentry}{%
896   \@ifstar\@glsxtr@s@longnewglossaryentry\@glsxtr@longnewglossaryentry
897 }
```

ewglossaryentry Starred version.

```
898 \newcommand{\@glsxtr@s@longnewglossaryentry}[3]{%
899   \glsdoifnoexists{#1}%
900   {%
901     \bgroup
902       \let\@org@newglossaryentryprehook\@newglossaryentryprehook
903       \long\def\@newglossaryentryprehook{%
904         \long\def\@glo@desc{#3}%
905         \@org@newglossaryentryprehook
906       }%
907       \renewcommand*{\gls@assign@desc}[1]{%
908         \global\cslet{\glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%
909         \global\cslet{\glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
910       }
911       \gls@defglossaryentry{#1}{#2}%
912     \egroup
913   }%
914 }
```

ewglossaryentry Unstarred version.

```
915 \newcommand{\@glsxtr@longnewglossaryentry}[3]{%
916   \glsdoifnoexists{#1}%
917   {%
918     \bgroup
919       \let\@org@newglossaryentryprehook\@newglossaryentryprehook
920       \long\def\@newglossaryentryprehook{%
921         \long\def\@glo@desc{#3\glsxtrpostlongdescription}%
922         \@org@newglossaryentryprehook
923       }%
924       \renewcommand*{\gls@assign@desc}[1]{%
925         \global\cslet{\glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%
926         \global\cslet{\glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
927       }
928       \gls@defglossaryentry{#1}{#2}%
929     \egroup
930   }%
```

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

```
926   \global\cslet{\glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
927   }
928   \gls@defglossaryentry{#1}{#2}%
929 }
```

```
929     \egroup
930 }
931 }
```

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

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

`ignoredglossary` Redefine to check for star.

```
933 \renewcommand{\newignoredglossary}{%
934   \@ifstar\glsxtr@s@newignoredglossary\glsxtr@org@newignoredglossary
935 }
```

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

```
936 \newcommand*{\glsxtr@org@newignoredglossary}[1]{%
937   \ifcsdef{glolist@\#1}
938   {%
939     \glsxtrundefaction{Glossary type '#1' already exists}{}%
940   }%
941   {%
942     \ifdefempty{@ignored@glossaries}
943     {%
944       \edef{@ignored@glossaries{\#1}}%
945     }%
946     {%
947       \eappto{@ignored@glossaries{,\#1}}%
948     }%
949     \csgdef{glolist@\#1}{,}%
950     \ifcsundef{gls@\#1@entryfmt}%
951     {%
952       \defglsentryfmt[\#1]{\glsentryfmt}%
953     }%
954     {%
955       \ifdefempty{@gls@nohyperlist}
956       {%
957         \renewcommand*{@gls@nohyperlist}{\#1}%
958       }%
959       {%
960         \eappto{@gls@nohyperlist{,\#1}}%
961       }%
962     }%
963 }
```

`ignoredglossary` Starred form.

```
964 \newcommand*{\glsxtr@s@newignoredglossary}[1]{%
965   \ifcsdef{glolist@\#1}
966   {%
```

```

967     \glsxtrundefined{Glossary type '#1' already exists}{}%
968 }%
969 {%
970     \ifdefempty{\ignores@ries}{%
971         \edef{\ignores@ries}{\#1}%
972     }%
973     {\%
974         \eappto{\ignores@ries}{,\#1}%
975     }%
976     \csgdef{\glolist@#1}{,}%
977     \ifcsundef{\gls@#1@entryfmt}{%
978         {\%
979             \def\glsentryfmt[\#1]{\glsentryfmt}%
980         }%
981     }%
982     {\}%
983 }%
984 }

```

\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.

```

985 \glsifusetranslator
986 {%
987     \renewcommand*{\glssettoctitle}[1]{%
988         \ifcsdef{\gls@tr@set@#1@toctitle}{%
989             {\%
990                 \csuse{\gls@tr@set@#1@toctitle}%
991             }%
992             {\%
993                 \ifcsdef{@glotype@#1@title}{%
994                     {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
995                     {\def\glossarytoctitle{\glossarytitle}}%
996                 }%
997             }%
998         }%
999     {%
1000         \renewcommand*{\glssettoctitle}[1]{%
1001             \ifcsdef{@glotype@#1@title}{%
1002                 {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1003                 {\def\glossarytoctitle{\glossarytitle}}%
1004             }%
1005         }

```

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

```

1006 \newcommand{\provideignoredglossary}{%
1007     \@ifstar{\glsxtr@s@provideignoredglossary}{\glsxtr@provideignoredglossary}%
1008 }

```

\ignoredglossary Unstarred version.

```

1009 \newcommand*{\glsxtr@provideignoredglossary}[1]{%
1010   \ifcsdef{glolist@#1}%
1011   {}%
1012   {}%
1013   \ifdefempty{@ignored@glossaries}%
1014   {}%
1015   \edef{@ignored@glossaries{#1}}%
1016   {}%
1017   {}%
1018   \appto{@ignored@glossaries{,#1}}%
1019   {}%
1020   \csgdef{glolist@#1}{,}%
1021   \ifcsundef{gls@#1@entryfmt}%
1022   {}%
1023   \defglsentryfmt[#1]{\glsentryfmt}%
1024   {}%
1025   {}%
1026   \ifdefempty{@gls@nohyperlist}%
1027   {}%
1028   \renewcommand*{@gls@nohyperlist}{#1}%
1029   {}%
1030   {}%
1031   \appto{@gls@nohyperlist{,#1}}%
1032   {}%
1033 }%
1034 }

```

`ignoredglossary` Starred form.

```

1035 \newcommand*{\glsxtr@s@provideignoredglossary}[1]{%
1036   \ifcsdef{glolist@#1}%
1037   {}%
1038   {}%
1039   \ifdefempty{@ignored@glossaries}%
1040   {}%
1041   \edef{@ignored@glossaries{#1}}%
1042   {}%
1043   {}%
1044   \appto{@ignored@glossaries{,#1}}%
1045   {}%
1046   \csgdef{glolist@#1}{,}%
1047   \ifcsundef{gls@#1@entryfmt}%
1048   {}%
1049   \defglsentryfmt[#1]{\glsentryfmt}%
1050   {}%
1051   {}%
1052 }%
1053 }

```

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

is glossary label.

```
1054 \newcommand{\glsxtrcopytoglossary}[2]{%
1055   \glsdoifexists{#1}%
1056   {%
1057     \ifcsdef{glolist@#2}%
1058     {%
1059       \cseapp{glolist@#2}{#1,}%
1060     }%
1061     {%
1062       \glsxtrundefaction{Glossary type '#2' doesn't exist}{}%
1063     }%
1064   }%
1065 }
```

1.3.1 Existence Checks

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

```
1066 \renewcommand{\glsdoifexists}[2]{%
1067   \ifglsentryexists{#1}{#2}%
1068   {%
```

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

```
1069   \edef\glslabel{\glsdetoklabel{#1}}%
1070   \glsxtrundefaction{Glossary entry '\glslabel'%
1071   has not been defined}{You need to define a glossary entry before%
1072   you can reference it.}%
1073 }%
1074 }
```

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

```
1075 \renewcommand{\glsdoifnoexists}[2]{%
1076   \ifglsentryexists{#1}{%
1077     \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'%
1078     has already been defined}{}{#2}%
1079 }
```

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

```
1080 \ifdef{\glsdoifexistsordo}%
1081 {%
1082   \renewcommand{\glsdoifexistsordo}[3]{%
1083     \ifglsentryexists{#1}{#2}%
1084     {%
1085       \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'%
1086       has not been defined}{You need to define a glossary entry%
1087       before you can use it.}%
1088     #3%
1089   }%
```

```

1090  }%
1091 }
1092 {%
1093   \glsxtr@warnonexistsordo\glsdoifexistsordo
1094   \newcommand{\glsdoifexistsordo}[3]{%
1095     \ifglsentryexists{#1}{#2}%
1096     {%
1097       \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'%
1098         has not been defined}{You need to define a glossary entry%
1099         before you can use it.}%
1100       #3%
1101     }%
1102   }%
1103 }

```

`arynoexistsordo` Similarly for `\doifglossarynoexistsordo`.

```

1104 \ifdef\doifglossarynoexistsordo
1105 {%
1106   \renewcommand{\doifglossarynoexistsordo}[3]{%
1107     \ifglossaryexists{#1}%
1108     {%
1109       \glsxtrundefaction{Glossary type '#1' already exists}{}%
1110       #3%
1111     }%
1112     {#2}%
1113   }%
1114 }
1115 {%
1116   \glsxtr@warnonexistsordo\doifglossarynoexistsordo
1117   \newcommand{\doifglossarynoexistsordo}[3]{%
1118     \ifglossaryexists{#1}%
1119     {%
1120       \glsxtrundefaction{Glossary type '#1' already exists}{}%
1121       #3%
1122     }%
1123     {#2}%
1124   }%
1125 }
1126

```

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.

```

1127 \appto{@newglossaryentryposthook}{%
1128   \ifdefvoid{\glo@see}%
1129   {\csxdef{\glo@\glo@label}{\glo@label \glo@see}}%
1130 }

```

```

1131      \csxdef{\glo@\@glo@label}{\glo@see}%
1132      \if@glstr@autoindex
1133          \glstr@autoindexcrossrefs
1134      \fi
1135  }%
1136 }
1137 \appto{\glstr@keymap}{\{see\}\{see\}%

```

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

```

1138 \newcommand*{\glsxtrusesee}[1]{%
1139     \glsdoifexists{\#1}{%
1140     }{%
1141         \letcs{\glo@see}{\glsdetoklabel{\#1}@see}%
1142         \ifdefempty{\glo@see}{%
1143             {}%
1144         }{%
1145             \expandafter\glstr@usesee@glo@see@end@glsstr@usesee
1146         }%
1147     }%
1148 }

```

\glsxtr@usesee

```

1149 \newcommand*{\glsxtr@usesee}[1][\seename]{%
1150     \glsxtr@usesee[\#1]%
1151 }

```

\@glsxtr@usesee

```

1152 \def\glsxtr@usesee[#1]#2\end@glsxtr@usesee{%
1153     \glsxtruseseeformat{\#1}{\#2}%
1154 }

```

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.

```

1155 \newcommand*{\glsxtruseseeformat}[2]{%
1156     \glsseeformat[\#1]{\#2}{}%
1157 }

```

lsseeitemformat glossaries originally defined \glsseeitemformat to use \glsentryname but in v3.0 this was switched to use \glsentrytext due to problems occurring with the name field being sanitized. Since this is no longer a problem, glossaries-extra restores the original definition as it makes more sense to use the name in the cross-reference list. This still uses \glsaccesstext for abbreviations.

```

1158 \renewcommand*{\glsseeitemformat}[1]{%
1159     \ifglshashshort{\glslabel}{\glsaccesstext{\#1}}{\glsaccessname{\#1}}%
1160 }

```

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

```

1161 \newcommand*{\glsxtruseseealso}[1]{%
1162   \glsdoifexists{#1}%
1163   {%
1164     \letcs{\@glo@see}{\glo@\glsdetoklabel{#1}@seealso}%
1165     \ifdefempty{\@glo@see}%
1166     {}%
1167     {}%
1168     \expandafter\glsxtruseseealsoformat\expandafter{\@glo@see}%
1169   }%
1170 }%
1171 }

```

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

```

1172 \newcommand*{\glsxtruseseealsoformat}[1]{%
1173   \glsseeformat[\seealsoname]{#1}{}%
1174 }

```

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

```

1175 \newrobustcmd{\glsxtrseelist}[1]{%
1176   \edef\@glo@tmp{\noexpand\glsseelist{#1}}\@glo@tmp
1177 }

```

`\seealsoname` In case this command hasn't been defined. (Should be provided by language packages.)

```

1178 \providecommand{\seealsoname}{see also}

```

`\glsxtrindexseealso` 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.

```

1179 \ifdef{\xdycrossrefhook}
1180 {

```

Add the cross-reference class definition to the hook.

```

1181 \appto{\xdycrossrefhook}{%
1182   \write\glswrite{(\define-crossref-class \string"seealso\string"
1183   :unverified )}%
1184   \write\glswrite{(\markup-crossref-list
1185   :class \string"seealso\string"^\space\space\space
1186   :open \string"\string\glsxtruseseealsoformat\glsopenbrace\string"
1187   :close \string"\glsclosebrace\string")}%
1188 }

```

Append to class list.

```

1189 \appto{\xdylocationclassorder}{\space\string"seealso\string"}

```

This essentially works like `\do@seeglossary` but uses the `seealso` class.

```

1190 \newrobustcmd*{\glsxtrindexseealso}[2]{%
1191   \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex

```

```

1192     \glsxtr@recordsee{#1}{#2}%
1193     \fi
1194     \glsdoifexists{#1}%
1195     {%
1196         \@@glsxtrwrglossmark
1197         \def\gls@xref{#2}%
1198         \onelevel@sanitize\gls@xref
1199         \gls@checkmkidxchars\gls@xref
1200         \gls@glossary{\csname glo@#1@type\endcsname}{%
1201             (indexentry
1202                 :tkey (\csname glo@#1@index\endcsname)
1203                 :xref (\string"\gls@xref\string")
1204                 :attr \string"seealso\string"
1205             )
1206         }%
1207     }%
1208 }
1209 }
1210 {

```

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

```

1211 \newrobustcmd*\glsxtrindexseealso{\glssee[\sealso]}
1212 }

```

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`.

```

1213 \ifdef\gls@set@xr@key
1214 {

```

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

```

1215 \define@key{glossentry}{alias}{%
1216     \gls@set@xr@key{alias}{\glo@alias}{#1}%
1217 }
1218 \define@key{glossentry}{seealso}{%
1219     \gls@set@xr@key{seealso}{\glo@seealso}{#1}%
1220 }

```

Add to the key mappings.

```

1221 \appto\gls@keymap{, {alias}{alias}, {seealso}{seealso}}

```

Set the default value.

```

1222 \appto\newglossaryentryprehook{\def\glo@alias{} \def\glo@seealso{}}

```

Assign the field values.

```

1223 \appto\newglossaryentryposthook{%
1224     \ifdefvoid\glo@seealso

```

```
1225     {\csxdef{glo@\@glo@label}{\@glo@seealso}{}}
1226     {%
1227         \csxdef{glo@\@glo@label}{\@glo@seealso}{\@glo@seealso}%
1228         \if@glsxtr@autoseealso
1229             \@glsxtr@autoindexcrossrefs
1230         \fi
1231     }%
```

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

```
1232 \ifdefvoid{\glo@alias}{%  
1233 {\csxdef{\glo@\glo@label}{\glo@alias}}%  
1234 {  
1235 \csxdef{\glo@\glo@label}{\glo@alias}}%  
1236 }%  
1237 }
```

Provide user-level commands to access the values.

```
\glsxtralias  
1238 \newcommand*{\glsxtralias}[1]{\@gls@entry@field{#1}{alias}}  
  
seealso labels  
1239 \newcommand*{\glsxtrseealso}[1]{\@gls@entry@field{#1}{seealso}}
```

Add to the \glo@autosee hook.

```
1240 \appto{@glo@autoseehook{%
1241     \ifdefvoid{@glo@alias
1242     {%
1243         \ifdefvoid{@glo@seealso
1244             {}%
1245             {%
1246                 \edef\do@glssee{\noexpand\glsxtrindexseealso
1247                     {@glo@label}{@glo@seealso}}%
1248                 \do@glssee
1249             }%
1250         }%
1251     {%

```

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

```
1252     \ifdefvoid{\@glo@see}{%  
1253     }%  
1254     \edef\@do@glsee{\noexpand\glsee{\@glo@label}{\@glo@alias}}%  
1255     \@do@glsee  
1256     }%  
1257     {}%  
1258     }%  
1259 }%  
1260 }  
1261 {
```

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

```
\glsxtralias
1262  \glsaddstoragekey*{alias}{}{\glsxtralias}
trseealsolabels
1263  \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.

```
1264  \appto{@newglossaryentryposthook}{%
1265    \ifcsvvoid{glo@}{\glo@label}{alias}{%
1266      {%
1267        \ifcsvvoid{glo@}{\glo@label}{seealso}{%
1268          {}{%
1269            {%
1270              \edef{\do@glssee}{\noexpand\glsxtrindexseealso
1271                {\glo@label}{\csuse{glo@}{\glo@label}{seealso}}}}{%
1272                  \do@glssee
1273                }{%
1274                  {}{%
1275                    {}{}}
```

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

```
1276  \ifdefvoid{glo@see}{%
1277    {%
1278      \edef{\do@glssee}{\noexpand\glssee
1279        {\glo@label}{\csuse{glo@}{\glo@label}{alias}}}}{%
1280        \do@glssee
1281      }{%
1282        {}{%
1283          {}{}}{%
1284        }}{%
1285 }
```

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

```
1286 \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.

```
1287 \newcommand*{\glsxtraddallcrossrefs}{%
1288   \forallglossaries{@glo@type}{%
1289     {%
1290       \forglsentries[@glo@type]{\glo@label}{%
1291         {%
1292           \ifglsused{\glo@label}{%
```

```

1293     {\expandafter\glsxtr@addunusedxrefs\expandafter{\@glo@label}}{}%
1294 }%
1295 }%
1296 }

```

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

```

1297 \newcommand*{\glsxtr@addunusedxrefs}[1]{%
1298   \letcs{\glo@see}{\glsdetoklabel{#1}@see}%
1299   \ifdefvoid{\glo@see}%
1300   {}%
1301   {}%
1302   \expandafter\glsxtr@addunused\glo@see\end\glsxtr@addunused%
1303 }%
1304 \letcs{\glo@see}{\glsdetoklabel{#1}@seealso}%
1305 \ifdefvoid{\glo@see}%
1306 {}%
1307 {}%
1308   \expandafter\glsxtr@addunused\glo@see\end\glsxtr@addunused%
1309 }%
1310 }

```

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

```

1311 \newcommand*{\glsxtr@addunused}[1][]{%
1312   \glsxtr@addunused%
1313 }

```

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

```

1314 \def\glsxtr@addunused#1\end\glsxtr@addunused{%
1315   @for\glsxtr@label:=#1\do
1316   {}%
1317   \ifglsused{\glsxtr@label}{}%
1318   {}%
1319   \glsadd[format=glsxtrunusedformat]{\glsxtr@label}%
1320   \glsunset{\glsxtr@label}%
1321   \expandafter\glsxtr@addunusedxrefs\expandafter{\glsxtr@label}%
1322 }%
1323 }%
1324 }

```

`xtrunusedformat`

```
1325 \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.

```
1326 \let\glsxtr@orgmakenoidxglossaries\makenoidxglossaries
```

```

1327 \renewcommand{\makenoidxglossaries}{%
1328   \ifdefequal\@glsxtr@record@setting\@glsxtr@record@setting@off
1329   {%
1330     \glsxtr@orgmakenoidxglossaries
1331     Add marker to \@do@seeglossary
1332     \renewcommand{\@do@seeglossary}[2]{%
1333       \@@glsxtrwrglossmark
1334       \edef\@gls@label{\glsdetoklabel{##1}}%
1335       \protected@write\auxout{}{%
1336         \string\@gls@reference
1337         {\csname glo@\@gls@label \type\endcsname}%
1338         {\@gls@label}}%
1339       \string\glsseeformat##2{}%
1340     }%
1341   }%
1342 }
1343 Check for docdefs=restricted:
1344 \if@glsxtrdocdefrestricted
1345 If restricted document definitions allowed, adjust \@gls@reference so that it doesn't test for
1346 existence.
1347 \renewcommand*{\@gls@reference}[3]{%
1348   \ifcsundef{@glsref@##1}{\csgdef{@glsref@##1}{}{}}%
1349   \ifinlistcs{##2}{@glsref@##1}{}
1350   {}%
1351   {\listcsgadd{@glsref@##1}{##2}}%
1352   \ifcsundef{glo@\glsdetoklabel{##2}@loclist}{%
1353     {\csgdef{glo@\glsdetoklabel{##2}@loclist}{}{}}%
1354   }%
1355   \listcsgadd{glo@\glsdetoklabel{##2}@loclist}{##3}}%
1356 }%
1357 \else
1358   Disable document definitions.
1359   \glsxtrdocdeffalse
1360   \fi
1361   \disable@keys{glossaries-extra.sty}{docdef}%
1362 }%
1363 {%
1364   \PackageError{glossaries-extra}{\string\makenoidxglossaries\space
1365   not permitted\MessageBreak
1366   with record=\@glsxtr@record@setting\space package option}%
1367   {You may only use \string\makenoidxglossaries\ space with the
1368   record=off option}%
1369 }%
1370 }

```

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

```

1367 \renewcommand*{\gls@defdocnewglossaryentry}{%
1368   \ifcase\@glsxtr@docdefval
     docdef=false:
1369   \renewcommand*{\newglossaryentry}[2]{%
1370     \PackageError{glossaries-extra}{Glossary entries must
1371       be \MessageBreak defined in the preamble with \MessageBreak
1372       package option ‘docdef=false’}\MessageBreak(consider using
1373       ‘docdef=restricted’)\{Move your glossary definitions to
1374       the preamble. You can also put them in a \MessageBreak separate file
1375       and load them with \string\loadglsentries.\}%
1376   }%
1377 \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.
1378   \let\gls@checkseeallowed\relax
1379   \let\newglossaryentry\new@glossaryentry
1380 \or
  Restricted mode just needs to allow the see value.
1381   \let\gls@checkseeallowed\relax
1382 \fi
1383 }%

```

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

```

1384 \newcommand*{\GlsXtrEnableOnTheFly}{%
1385   \@ifstar\@sGlsXtrEnableOnTheFly\@GlsXtrEnableOnTheFly
1386 }

```

`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.)

```

1387 \newcommand*{\@sGlsXtrEnableOnTheFly}{%
1388   \renewcommand*{\glsdetoklabel}[1]{%
1389     \expandafter\@glsxtr@ifcsstart\string##1 \@glsxtr@end\@%
1390   }%
1391   \expandafter\detokenize\expandafter{\##1}%
1392 }%
1393 {\detokenize{\##1}}%
1394 }%
1395 \@GlsXtrEnableOnTheFly
1396 }
1397 \def\@glsxtr@ifcsstart#1#2\@glsxtr@end@#3#4{%

```

```

1398 \expandafter\if\glsbackslash#1%
1399   #3%
1400 \else
1401   #4%
1402 \fi
1403 }

sxtrstarflywarn
1404 \newcommand*{\glsxtrstarflywarn}{%
1405   \GlossariesExtraWarning{Experimental starred version of
1406   \string\GlsXtrEnableOnTheFly\space in use (please ensure you have
1407   read the warnings in the glossaries-extra user manual)}%
1408 }

```

rEnableOnTheFly

```
1409 \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
1410 \newcommand*{\glsxtrcat}{general}

\glsxtr
1411 \newcommand*{\glsxtr}[1][]{%
1412   \def\glsxtr@keylist{##1}%
1413   \@glsxtr
1414 }

\@glsxtr
1415 \newcommand*{\@glsxtr}[2][]{%
1416   \ifglsentryexists{##2}%
1417   {%
1418     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1419   }%
1420   {%
1421     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1422       description={\nopostdesc},##1}%
1423   }%
1424   \expandafter\gls\expandafter[\glsxtr@keylist]{##2}%
1425 }

\Glsxtr
1426 \newcommand*{\Glsxtr}[1][]{%
1427   \def\glsxtr@keylist{##1}%
1428   \@Glsxtr
1429 }
```

```

\@Glsxstr
1430 \newcommand*{\@Glsxstr}[2] []{%
1431   \ifglsentryexists{##2}%
1432   {%
1433     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1434   }%
1435   {%
1436     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1437       description={\nopostrdesc},##1}%
1438   }%
1439   \expandafter\Gls\expandafter[\glsxstr@keylist]{##2}%
1440 }
1441
\glsxtrpl
1442 \newcommand*{\glsxtrpl}[1] []{%
1443   \def\glsxtr@keylist{##1}%
1444   \glsxtrpl
1445 }
1446
\@glsxtrpl
1447 \newcommand*{\@glsxtrpl}[2] []{%
1448   \ifglsentryexists{##2}%
1449   {%
1450     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1451   }%
1452   {%
1453     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1454       description={\nopostrdesc},##1}%
1455   }%
1456   \expandafter\glspl\expandafter[\glsxtr@keylist]{##2}%
1457 }
1458
\Glsxtrpl
1459 \newcommand*{\Glsxtrpl}[1] []{%
1460   \def\glsxtr@keylist{##1}%
1461   \glsxtrpl
1462 }
1463
\@Glsxtrpl
1464 \newcommand*{\@Glsxtrpl}[2] []{%
1465   \ifglsentryexists{##2}%
1466   {%
1467     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1468   }%
1469   {%
1470     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1471       description={\nopostrdesc},##1}%
1472   }%
1473   \expandafter\Glspl\expandafter[\glsxtr@keylist]{##2}%

```

```

1470  }

\GlsXtrWarning
1471 \newcommand*{\GlsXtrWarning}[2]{%
1472   \def\@glsxtr@optlist{##1}%
1473   \onelevel@sanitize\@glsxtr@optlist
1474   \GlossariesExtraWarning{The options '\@glsxtr@optlist' have
1475   been ignored for entry '##2' as it has already been defined}%
1476 }

```

Disable commands after the glossary:

```

1477 \renewcommand\@printglossary[2]{%
1478   \def\@glsxtr@printglossopts{##1}%
1479   \@glsxtr@orgprintglossary{##1}{##2}%
1480   \def\@glsxtr{\@glsxtr@disabledflycommand\glsxtr}%
1481   \def\@glsxtrpl{\@glsxtr@disabledflycommand\glsxtrpl}%
1482   \def\@Glsxtr{\@glsxtr@disabledflycommand\Glsxtr}%
1483   \def\@Glsxtrpl{\@glsxtr@disabledflycommand\Glsxtrpl}%
1484 }

```

abledflycommand

```

1485 \newcommand*{\@glsxtr@disabledflycommand}[1]{%
1486   \PackageError{glossaries-extra}%
1487   {\string##1\space can't be used after any of the \MessageBreak
1488    glossaries have been displayed}%
1489   {The on-the-fly commands enabled by
1490    \string\GlsXtrEnableOnTheFly\space may only be used \MessageBreak
1491    before the glossaries. If you want to use any entries \MessageBreak
1492    after any of the glossaries, you must use the standard \MessageBreak
1493    method of first defining the entry and then using the \MessageBreak
1494    entry with commands like \string\gls}%
1495   \@@glsxtr@disabledflycommand
1496 }%
1497 \newcommand*{\@glsxtr@disabledflycommand}[2][]{##2}

```

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

```

1498 \let\GlsXtrEnableOnTheFly\relax
1499 }%
1500 \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.

```
1501 \newcommand*{\@glsxtr@current@style}{\@glossary@default@style}
```

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

```

etglossarystyle
1502 \renewcommand*{\setglossarystyle}[1]{%
1503   \ifcsundef{@glsstyle@#1}{%
1504     {%
1505       \PackageError{glossaries-extra}{Glossary style '#1' undefined}{}%
1506     }%
1507   }%
1508   \csname @glsstyle@#1\endcsname
Only set the current style if it exists.
1509   \protected@edef\glsxtr@current@style{#1}%
1510 }%
1511 \ifx\glossary@default@style\relax
1512   \protected@edef\glossary@default@style{#1}%
1513 \fi
1514 }

```

In case we have an old version of glossaries:

```

1515 \ifdef\glossary@default@style
1516 {}
1517 {%
1518   \let\glossary@default@style\relax
1519 }

```

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

```

1520 \ifdef\glslistdottedwidth
1521 {%
1522   \ifdim\glslistdottedwidth=.5\hsize
1523     \setlength{\glslistdottedwidth}{-\dimexpr\maxdimen-1sp\relax}
1524   \AtBeginDocument{%
1525     \ifdim\glslistdottedwidth=-\dimexpr\maxdimen-1sp\relax
1526       \setlength{\glslistdottedwidth}{.5\columnwidth}%
1527     \fi
1528   }%
1529   \fi
1530 }
1531 {}%

```

Similarly for `\glsdescwidth`:

```

\glsdescwidth
1532 \ifdef\glsdescwidth
1533 {%
1534   \ifdim\glsdescwidth=.6\hsize
1535     \setlength{\glsdescwidth}{-\dimexpr\maxdimen-1sp\relax}
1536   \AtBeginDocument{%
1537     \ifdim\glsdescwidth=-\dimexpr\maxdimen-1sp\relax
1538       \setlength{\glsdescwidth}{.6\columnwidth}%
1539     \fi
1540   }
1541 }
1542 {}%

```

```

1539      \fi
1540    }%
1541  \fi
1542 }
1543 {}%

```

and for \glspagelistwidth:

```

lspagelistwidth
1544 \ifdef\glspagelistwidth
1545 {}%
1546   \ifdim\glspagelistwidth=.1\hsize
1547     \setlength{\glspagelistwidth}{-\dimexpr\maxdimen-1sp\relax}
1548   \AtBeginDocument{%
1549     \ifdim\glspagelistwidth=-\dimexpr\maxdimen-1sp\relax
1550       \setlength{\glspagelistwidth}{.1\columnwidth}%
1551     \fi
1552   }%
1553 \fi
1554 }
1555 {}%

```

aryentrynumbers Has the nonumberlist option been used?

```

1556 \def\org@glossaryentrynumbers#1{#1\gls@save@numberlist{#1}}%
1557 \ifx\org@glossaryentrynumbers\glossaryentrynumbers
1558   \glsnonumberlistfalse
1559   \renewcommand*\glossaryentrynumbers[1]{%
1560     \ifglsentryexists{\glscurrententrylabel}%
1561     {%
1562       \@glsxtrpreloctag
1563       \GlsXtrFormatLocationList{#1}%
1564       \@glsxtrpostloctag
1565       \gls@save@numberlist{#1}%
1566     }{%
1567   }%
1568 \else
1569   \glsnonumberlisttrue
1570   \renewcommand*\glossaryentrynumbers[1]{%
1571     \ifglsentryexists{\glscurrententrylabel}%
1572     {%
1573       \gls@save@numberlist{#1}%
1574     }{%
1575   }%
1576 \fi

```

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

```

1577 \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

```

1578 \newcommand*{\GlsXtrEnablePreLocationTag}[2]{%
1579   \let\@glsxtrpreloctag\@glsxtrpreloctag
1580   \let\@glsxtrpostloctag\@glsxtrpostloctag
1581   \renewcommand*{\@glsxtr@pagetag}{#1}%
1582   \renewcommand*{\@glsxtr@pagestag}{#2}%
1583   \renewcommand*{\@glsxtr@savepreloctag}[2]{%
1584     \csgdef{@glsxtr@preloctag##1}{##2}%
1585   }%
1586   \renewcommand*{\@glsxtr@doloctag}{%
1587     \ifcsundef{@glsxtr@preloctag@\glscurrententrylabel}%
1588     {%
1589       \GlossariesWarning{Missing pre-location tag for '\glscurrententrylabel'.%
1590       Rerun required}%
1591     }%
1592     {%
1593       \csuse{@glsxtr@preloctag@\glscurrententrylabel}%
1594     }%
1595   }%
1596 }
1597 \@onlypreamble\GlsXtrEnablePreLocationTag

```

glsxtrpreloctag

```

1598 \newcommand*{\@glsxtrpreloctag}{%
1599   \let\@glsxtr@org@delimN\delimN
1600   \let\@glsxtr@org@delimR\delimR
1601   \let\@glsxtr@org@glsignore\glsignore
      \gdef is required as the delimiters may occur inside a scope.
1602   \gdef\@glsxtr@thisloctag{\@glsxtr@pagetag}%
1603   \renewcommand*{\delimN}{%
1604     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
1605     \@glsxtr@org@delimN}%
1606   \renewcommand*{\delimR}{%
1607     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
1608     \@glsxtr@org@delimR}%
1609   \renewcommand*{\glsignore}[1]{%
1610     \gdef\@glsxtr@thisloctag{\relax}%
1611     \@glsxtr@org@glsignore{##1}}%
1612   \glsxtr@doloctag
1613 }

```

glsxtrpreloctag

```
1614 \newcommand*{\glsxtrpreloctag}{}%
```

```

@glsxtr@pagetag
1615 \newcommand*{\@glsxtr@pagetag}{}%

glsxtr@pagestag
1616 \newcommand*{\@glsxtr@pagestag}{}%

lsxtrpostloctag
1617 \newcommand*{\@@glsxtrpostloctag}{}%
1618   \let\delimN\@glsxtr@org@delimN
1619   \let\delimR\@glsxtr@org@delimR
1620   \let\glsignore\@glsxtr@org@glsignore
1621   \protected@write\@auxout{}%
1622   {\string\@glsxtr@savepreloctag{\glscurrententrylabel}\{\@glsxtr@thisloctag\}}%
1623 }

lsxtrpostloctag
1624 \newcommand*{\@glsxtrpostloctag}{}%

lsxtr@preloctag
1625 \newcommand*{\@glsxtr@savepreloctag}[2]{}%
1626 \protected@write\@auxout{}{}%
1627 \string\providetoggle\@glsxtr@savepreloctag[2]{}}

glsxtr@doloctag
1628 \newcommand*{\@glsxtr@doloctag}{}%

ss@nonumberlist  Modify the nonumberlist key to use \GlsXtrFormatLocationList (and also save the number
list):
1629 \renewcommand*{\KV@printgloss@nonumberlist}[1]{%
1630   \XKV@plfalse
1631   \XKV@sttrue
1632   \XKV@checkchoice[\XKV@resa]{#1}{true,false}%
1633   {%
1634     \csname glsnonumberlist\XKV@resa\endcsname
1635     \ifglsnonumberlist
1636       \def\glossaryentrynumbers##1{\gls@save@numberlist{##1}}%
1637     \else
1638       \def\glossaryentrynumbers##1{%
1639         \glsxtrpreloctag
1640         \GlsXtrFormatLocationList{##1}%
1641         \glsxtrpostloctag
1642         \gls@save@numberlist{##1}}%
1643     \fi
1644   }%
1645 }

```

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.

```

1646 \renewcommand*{\glsentryfmt}{%
1647   \ifglshasshort{\glslabel}{\glssetabbrvfmt{\glscategory{\glslabel}}}{}
1648   \glsifregular{\glslabel}%
1649   {\glsxtrregularfont{\glsgenentryfmt}}%
1650   {%
1651     \ifglshasshort{\glslabel}%
1652     {\glsxtrgenabbrvfmt}%
1653     {\glsxtrregularfont{\glsgenentryfmt}}%
1654   }%
1655 }
```

sxtrregularfont Font used for regular entries.

```
1656 \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.

```
1657 \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).

```

1658   \@glsxtr@record{#2}{#3}{glslink}%
1659   \glsdoifexists{#3}%
1660 }
```

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).

```

1661   \let\glsxtrorg@ifKV@glslink@hyper\ifKV@glslink@hyper
1662   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
1663   \def\glscustomtext{#4}%
1664   \@glsxtr@field@linkdefs
1665   #1%
1666   \@gls@link[#2]{#3}{#4}%
1667   \let\ifKV@glslink@hyper\glsxtrorg@ifKV@glslink@hyper
1668 }
```

```
1669 \glspostlinkhook  
1670 }
```

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.

```
1671 \let\@glsxtr@org@gls@\@gls@  
1672 \def\@gls@#1#2{  
1673   \@glsxtr@record{#1}{#2}{glslink}%">  
1674   \@glsxtr@org@gls@{#1}{#2}%"  
1675 }%
```

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

```
1676 \let\@glsxtr@org@glsp1@\@glsp1@  
1677 \def\@glsp1@#1#2{  
1678   \@glsxtr@record{#1}{#2}{glslink}%">  
1679   \@glsxtr@org@glsp1@{#1}{#2}%"  
1680 }%
```

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

```
1681 \let\@glsxtr@org@Gls@\@Gls@  
1682 \def\@Gls@#1#2{  
1683   \@glsxtr@record{#1}{#2}{glslink}%">  
1684   \@glsxtr@org@Gls@{#1}{#2}%"  
1685 }%
```

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

```
1686 \let\@glsxtr@org@Glsp1@\@Glsp1@  
1687 \def\@Glsp1@#1#2{  
1688   \@glsxtr@record{#1}{#2}{glslink}%">  
1689   \@glsxtr@org@Glsp1@{#1}{#2}%"  
1690 }%
```

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

```
1691 \let\@glsxtr@org@GLS@\@GLS@  
1692 \def\@GLS@#1#2{  
1693   \@glsxtr@record{#1}{#2}{glslink}%">  
1694   \@glsxtr@org@GLS@{#1}{#2}%"  
1695 }%
```

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

```
1696 \let\@glsxtr@org@GLSp1@\@GLSp1@  
1697 \def\@GLSp1@#1#2{  
1698   \@glsxtr@record{#1}{#2}{glslink}%">  
1699   \@glsxtr@org@GLSp1@{#1}{#2}%"  
1700 }%
```

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

```
1701 \renewcommand*\@glsdisp}[3] [] {%
1702   \@glsxtr@record{#1}{#2}{glslink}%
1703   \glsdoifexists{#2}{%
1704     \let\do@gls@link@checkfirsthyper\gls@link@checkfirsthyper
1705     \let\glsifplural\secondoftwo
1706     \let\glscapscase\firstofthree
1707     \def\glscustomtext{#3}%
1708     \def\glsinsert{}%
1709     \def\glo@text{\csname gls@\glstype @entryfmt\endcsname}%
1710     \gls@link[#1]{#2}{\glo@text}%
1711     \ifKV@glslink@local
1712       \glslocalunset{#2}%
1713     \else
1714       \glsunset{#2}%
1715     \fi
1716   }%
1717   \glspostlinkhook
1718 }
```

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

```
1719 \renewcommand*\@gls@link}[3] [] {%
1720   \@glsxtr@record{#1}{#2}{glslink}%
1721   \glsdoifexists{#2}{%
1722     {%
1723       \let\do@gls@link@checkfirsthyper\relax
1724       \gls@link[#1]{#2}{#3}%
1725     }%
1726     {%
1727       \glstextformat{#3}%
1728     }%
1729   \glspostlinkhook
1730 }
```

sxtrinitwrgloss Set the default if the wrgloss is omitted.

```
1731 \newcommand*\glsxtrinitwrgloss}{%
1732   \glsifattribute{\glslabel}{wrgloss}{after}%
1733   {%
1734     \glsxtrinitwrglossbeforefalse
1735   }%
1736   {%
1737     \glsxtrinitwrglossbeforetrue
1738   }%
1739 }
```

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

```
1740 \newif\ifglsxtrinitwrglossbefore
1741 \glsxtrinitwrglossbeforetrue
```

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

```
1742 \define@choicekey{glslink}{wrgloss}[\val\nr]{before,after}%
1743 {%
1744   \ifcase\nr\relax
1745     \glsxtrinitwrglossbeforetrue
1746   \or
1747     \glsxtrinitwrglossbeforefalse
1748   \fi
1749 }

1750 \define@key{glslink}{thevalue}{\def\@glsxtr@thevalue{\#1}{}}

1751 \define@key{glslink}{theHvalue}{\def\@glsxtr@theHvalue{\#1}{}}
```

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

```
1752 \define@boolkey{glslink}[\glsxtr@]{hyperoutside}[true]{}
1753 \glsxtr@hyperoutsidetrue
```

nithyperoutside Set the default if the hyperoutside is omitted.

```
1754 \newcommand*\glsxtrinithyperoutside{%
1755   \glsifattribute{\glslabel}{hyperoutside}{false}%
1756   {%
1757     \glsxtr@hyperoutsidefalse
1758   }%
1759   {%
1760     \glsxtr@hyperoutsidetrue
1761   }%
1762 }
```

\@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.

```
1763 \def\@gls@link[#1]#2#3{%
1764   \leavevmode
1765   \edef\glslabel{\glsdetoklabel{\#2}}%
1766   \def\@gls@link@opts{\#1}%
1767   \let\@gls@link@label\glslabel
1768   \let\@glsnumberformat\glsxtr@defaultnumberformat
1769   \edef\@gls@counter{\csname glo@\glslabel\endcsname\@counter\endcsname}%
1770   \edef\glstype{\csname glo@\glslabel\endcsname\@type\endcsname}%
1771   \let\org@ifKV@glslink@hyper\ifKV@glslink@hyper
```

Initialise thevalue and theHvalue (v1.19).

```
1772 \def\@glsxtr@thevalue{()}%
1773 \def\@glsxtr@theHvalue{\@glsxtr@thevalue}{}
```

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

```
1774 \glsxtrinitwrgloss
```

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

```
1775 \glsxtrinithyperoutside
```

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

```
1776 \@gls@setdefault@glslink@opts  
1777 \do@glsdisablehyperinlist  
1778 \do@gls@link@checkfirsthyper  
1779 \setkeys{glslink}{#1}%  
1780 \glslinkpostsetkeys
```

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

```
1781 \ifdefempty{\glsxtr@thevalue}{%  
1782 {  
1783   \@gls@saveentrycounter  
1784 }%  
1785 {  
1786   \let\the\glsentrycounter\glsxtr@thevalue  
1787   \def\theH\glsentrycounter{\glsxtr@theHvalue}{%  
1788 }%  
1789 \@gls@setsort{\glslabel}{%
```

Check textformat attribute (new to v1.21).

```
1790 \glshasattribute{\glslabel}{textformat}{%  
1791 {  
1792   \edef\glsxtr@attrval{\glsgetattribute{\glslabel}{textformat}}%  
1793   \ifcsdef{\glsxtr@attrval}{%  
1794     {  
1795       \let\cs{\glsxtr@textformat}{\glsxtr@attrval}{%  
1796     }%  
1797     {  
1798       \GlossariesExtraWarning{Unknown control sequence name  
1799         '\glsxtr@attrval' supplied in textformat attribute  
1800         for entry '\glslabel'. Reverting to default \string\glstextformat}{%  
1801       \let\glsxtr@textformat\glstextformat  
1802     }%  
1803   }%  
1804   {  
1805     \let\glsxtr@textformat\glstextformat  
1806   }%
```

Do write if it should occur before the link text:

```
1807 \ifglsxtrinitwrglossbefore  
1808   \do@wrglossary{#2}{%  
1809 \fi
```

Do the link text:

```
1810 \ifKV@glslink@hyper  
1811   \ifglsxtr@hyperoutside  
1812     \glslink{\glolinkprefix\glslabel}{\glsxtr@textformat{#3}}{  
1813   \else  
1814     \glsxtr@textformat{\glslink{\glolinkprefix\glslabel}{#3}}{
```

```

1815     \fi
1816 \else
1817     \ifglsxtr@hyperoutside
1818         \glsdonohyperlink{\glolinkprefix\glslabel}{\glsxtr@textformat{#3}}%
1819     \else
1820         \glsxtr@textformat{\glsdonohyperlink{\glolinkprefix\glslabel}{#3}}%
1821     \fi
1822 \fi

```

Do write if it should occur after the link text:

```

1823 \ifglsxtrinitwrglossbefore
1824 \else
1825     \do@wrglossary{#2}%
1826 \fi

```

As the original definition:

```

1827 \let\ifKV@glslink@hyper\org@ifKV@glslink@hyper
1828 }

```

```
1829 \define@key{glossadd}{thevalue}{\def\glsxtr@thevalue{#1}}
```

```
1830 \define@key{glossadd}{theHvalue}{\def\glsxtr@theHvalue{#1}}
```

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

```

1831 \renewrobustcmd*\glsadd[2][]{%
1832     \glsxtrifinmark
1833     {}%
1834     {}%
1835     \gls@adjustmode
1836     \glsxtr@record{#1}{#2}{glossadd}%
1837     \glsdoifexists{#2}%
1838     {}%
1839     \let\glsnumberformat\glsxtr@defaultnumberformat
1840     \edef\gls@counter{\csname glo@\glsdetoklabel{#2}@counter\endcsname}%
1841     \def\glsxtr@thevalue{}%
1842     \def\glsxtr@theHvalue{\glsxtr@thevalue}%
1843     \setkeys{glossadd}{#1}%
1844     \ifdefempty{\glsxtr@thevalue}%
1845     {}%
1846     \gls@saveentrycounter
1847     {}%
1848     {}%
1849     \let\the\glsentrycounter\glsxtr@thevalue
1850     \def\theH\glsentrycounter{\glsxtr@theHvalue}%
1851     {}%
1852     \do@wrglossary{#2}%
1853     {}%
1854 }%
1855 }

```

```

@field@linkdefs Default settings for \@gls@field@link
1856 \newcommand*{\@glsxtr@field@linkdefs}{%
1857   \let\glsxtrifwasfirstuse\@secondoftwo
1858   \let\glsifplural\@secondoftwo
1859   \let\glscapscase\@firstofthree
1860   \let\glsinsert\@empty
1861 }

```

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

assignfieldfont

```

1862 \newcommand*{\glsxtrassignfieldfont}[1]{%
1863   \ifglsentryexists{#1}%
1864   {%
1865     \ifglshasshort{#1}%
1866     {%
1867       \glssetabbrvfmt{\glscategory{#1}}%
1868       \glsifregular{#1}%
1869       {\let\@gls@field@font\glsxtrregularfont}%
1870       {\let\@gls@field@font\@firstofone}%
1871     }%
1872     {%
1873       \glsifnotregular{#1}%
1874       {\let\@gls@field@font\@firstofone}%
1875       {\let\@gls@field@font\glsxtrregularfont}%
1876     }%
1877   }%
1878   {%
1879     \let\@gls@field@font@gobble
1880   }%
1881 }

```

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

```

1882 \def\@glstext@#1#2[#3]{%
1883   \glsxtrassignfieldfont{#2}%
1884   \@gls@field@link{#1}{#2}{\@gls@field@font{\glsaccesstext{#2}#3}}%
1885 }

```

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

```

1886 \def\@GLStext@#1#2[#3]{%
1887   \glsxtrassignfieldfont{#2}%
1888   \@gls@field@link[\let\glscapscase\@thirdofthree]{#1}{#2}%
1889   {\@gls@field@font{\GLSaccesstext{#2}\mfirstrucMakeUppercase{#3}}}%
1890 }

```

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

```

1891 \def\@Glstext@#1#2[#3]{%
1892   \glsxtrassignfieldfont{#2}%

```

```
1893  \@gls@field@link[\let\glscapscase\@secondofthree]{#1}{#2}%
1894    {\@gls@field@font{\Glsaccesstext{#2}{#3}}}{%
1895 }
```

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

```
1896 \newcommand*\glsxtrchecknohyperfirst}[1]{%
1897   \glsifattribute{#1}{nohyperfirst}{true}{\KV@glslink@hyperfalse}{}}{%
1898 }
```

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

```
1899 \def\@glsfirst@#1#2[#3]{%
1900   \glsxtrassignfieldfont{#2}}{}
```

Ensure that \glsfirst honours the nohyperfirst attribute.

```
1901  \@gls@field@link
1902  [\let\glsxtrifwasfirstuse\@firstoftwo
1903  \glsxtrchecknohyperfirst{#2}%
1904  ]{#1}{#2}%
1905  {\@gls@field@font{\glsaccessfirst{#2}{#3}}}{%
1906 }
```

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

```
1907 \def\@Glsfirst@#1#2[#3]{%
1908   \glsxtrassignfieldfont{#2}}{}
```

Ensure that \Glsfirst honours the nohyperfirst attribute.

```
1909  \@gls@field@link
1910  [\let\glsxtrifwasfirstuse\@firstoftwo
1911  \let\glscapscase\@secondofthree
1912  \glsxtrchecknohyperfirst{#2}%
1913  ]%
1914  {#1}{#2}{\@gls@field@font{\Glsaccessfirst{#2}{#3}}}{%
1915 }
```

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

```
1916 \def\@GLSfirst@#1#2[#3]{%
1917   \glsxtrassignfieldfont{#2}}{}
```

Ensure that \GLSfirst honours the nohyperfirst attribute.

```
1918  \@gls@field@link
1919  [\let\glsxtrifwasfirstuse\@firstoftwo
1920  \let\glscapscase\@thirdofthree
1921  \glsxtrchecknohyperfirst{#2}%
1922  ]%
1923  {#1}{#2}{\@gls@field@font{\GLSaccessfirst{#2}{\mfirstuclMakeUppercase{#3}}}}{%
1924 }
```

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

```
1925 \def\@glsplural@#1#2[#3]{%
1926   \glsxtrassignfieldfont{#2}%
1927   \gls@field@link[\let\glsifplural\@firstoftwo]{#1}{#2}%
1928   {\gls@field@font{\glsaccessplural{#2}#3}}%
1929 }
```

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

```
1930 \def\@Glsplural@#1#2[#3]{%
1931   \glsxtrassignfieldfont{#2}%
1932   \gls@field@link
1933   [\let\glsifplural\@firstoftwo
1934   \let\glscapscase\@secondofthree
1935   ]%
1936   {#1}{#2}{\gls@field@font{\Glsaccessplural{#2}#3}}%
1937 }
```

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

```
1938 \def\@GLSplural@#1#2[#3]{%
1939   \glsxtrassignfieldfont{#2}%
1940   \gls@field@link
1941   [\let\glsifplural\@firstoftwo
1942   \let\glscapscase\@thirdofthree
1943   ]%
1944   {#1}{#2}{\gls@field@font{\GLSaccessplural{#2}\mfirstucMakeUppercase{#3}}}%
1945 }
```

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

```
1946 \def\@glsfirstplural@#1#2[#3]{%
1947   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
1948   \gls@field@link
1949   [\let\glsxtrifwasfirstuse\@firstoftwo
1950   \let\glsifplural\@firstoftwo
1951   \glsxtrchecknohyperfirst{#2}%
1952   ]%
1953   {#1}{#2}{\gls@field@font{\glsaccessfirstplural{#2}#3}}%
1954 }
```

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

```
1955 \def\@Glsfirstplural@#1#2[#3]{%
1956   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
1957   \gls@field@link
1958   [\let\glsxtrifwasfirstuse\@firstoftwo
1959   \let\glsifplural\@firstoftwo
1960   \let\glscapscase\@secondofthree
```

```
1961     \glsxtrchecknohyperfirst{#2}%
1962   ]%
1963   {#1}{#2}{\gls@field@font{\Glsaccessfirstplural{#2}#3}}%
1964 }
```

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

```
1965 \def\GLSfirstplural@#1#2[#3]{%
1966   \glsxtrassignfieldfont{#2}%


```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
1967   \gls@field@link
1968   [\let\glsxtrifwasfirstuse\@firstoftwo
1969     \let\glsifplural\@firstoftwo
1970     \let\glscapscase\@thirdofthree
1971     \glsxtrchecknohyperfirst{#2}%
1972   ]%
1973   {#1}{#2}%
1974   {\gls@field@font{\Glsaccessfirstplural{#2}\mfirstucMakeUppercase{#3}}}%
1975 }
```

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

```
1976 \def\glsname@#1#2[#3]{%
1977   \glsxtrassignfieldfont{#2}%
1978   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccessname{#2}#3}}%
1979 }
```

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

```
1980 \def\Glsname@#1#2[#3]{%
1981   \glsxtrassignfieldfont{#2}%
1982   \gls@field@link
1983   [\let\glscapscase\@secondoftwo]{#1}{#2}%
1984   {\gls@field@font{\Glsaccessname{#2}#3}}%
1985 }
```

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

```
1986 \def\GLSname@#1#2[#3]{%
1987   \glsxtrassignfieldfont{#2}%
1988   \gls@field@link[\let\glscapscase\@thirdoftwo]%
1989   {#1}{#2}%
1990   {\gls@field@font{\Glsaccessname{#2}\mfirstucMakeUppercase{#3}}}%
1991 }
```

\@glsdesc@

```
1992 \def\glsdesc@#1#2[#3]{%
1993   \glsxtrassignfieldfont{#2}%
1994   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccessdesc{#2}#3}}%
1995 }
```

```

\@Glsdesc@ First letter uppercase version.
1996 \def\@Glsdesc@#1#2[#3]{%
1997   \glsxtrassignfieldfont{#2}%
1998   \gls@field@link
1999   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2000   {\gls@field@font{\Glsaccessdesc{#2}{#3}}}{%
2001 }

\@GLSdesc@ All uppercase version.
2002 \def\@GLSdesc@#1#2[#3]{%
2003   \glsxtrassignfieldfont{#2}%
2004   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2005   {#1}{#2}{\gls@field@font{\GLSaccessdesc{#2}\mfirstucMakeUppercase{#3}}}{%
2006 }

@glsdescplural@ No case-changing version.
2007 \def\@glsdescplural@#1#2[#3]{%
2008   \glsxtrassignfieldfont{#2}%
2009   \gls@field@link
2010   [\let\glscapscase\@secondoftwo
2011     \let\glsifplural\@firstoftwo
2012   ]{#1}{#2}{\gls@field@font{\glsaccessdescplural{#2}{#3}}}{%
2013 }

@Glsdescplural@ First letter uppercase version.
2014 \def\@Glsdescplural@#1#2[#3]{%
2015   \glsxtrassignfieldfont{#2}%
2016   \gls@field@link
2017   [\let\glscapscase\@secondoftwo
2018     \let\glsifplural\@firstoftwo
2019   ]{#1}{#2}{\gls@field@font{\Glsaccessdescplural{#2}{#3}}}{%
2020 }

@GLSdescplural@ All uppercase version.
2021 \def\@GLSdesc@#1#2[#3]{%
2022   \glsxtrassignfieldfont{#2}%
2023   \gls@field@link
2024   [\let\glscapscase\@thirdoftwo
2025     \let\glsifplural\@firstoftwo
2026   ]{%
2027     {#1}{#2}%
2028     {\gls@field@font{\GLSaccessdescplural{#2}\mfirstucMakeUppercase{#3}}}{%
2029 }

\@glssymbol@
2030 \def\@glssymbol@#1#2[#3]{%
2031   \glsxtrassignfieldfont{#2}%
2032   \gls@field@link{#1}{#2}{\gls@font{\glsaccesssymbol{#2}{#3}}}{%
2033 }

```

\@Glssymbol@ First letter uppercase version.

```
2034 \def\@Glssymbol@#1#2[#3]{%
2035   \glsxtrassignfieldfont{#2}%
2036   \gls@field@link
2037   [\let\glscapscase\@secondoftwo]%
2038   {#1}{#2}{\gls@field@font{\Glsaccesssymbol{#2}{#3}}}{%
2039 }
```

\@GLSsymbol@ All uppercase version.

```
2040 \def\@GLSsymbol@#1#2[#3]{%
2041   \glsxtrassignfieldfont{#2}%
2042   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2043   {#1}{#2}{\gls@field@font{\GLSaccesssymbol{#2}\mfirstucMakeUppercase{#3}}}{%
2044 }
```

lssymbolplural@ No case-changing version.

```
2045 \def\@glssymbolplural@#1#2[#3]{%
2046   \glsxtrassignfieldfont{#2}%
2047   \gls@field@link
2048   [\let\glscapscase\@secondoftwo
2049     \let\glsifplural\@firstoftwo
2050   ]{#1}{#2}{\gls@field@font{\glsaccesssymbolplural{#2}{#3}}}{%
2051 }
```

lssymbolplural@ First letter uppercase version.

```
2052 \def\@Glssymbolplural@#1#2[#3]{%
2053   \glsxtrassignfieldfont{#2}%
2054   \gls@field@link
2055   [\let\glscapscase\@secondoftwo
2056     \let\glsifplural\@firstoftwo
2057   ]{#1}{#2}{\gls@field@font{\Glsaccesssymbolplural{#2}{#3}}}{%
2058 }
```

LSsymbolplural@ All uppercase version.

```
2059 \def\@GLSsymbol@#1#2[#3]{%
2060   \glsxtrassignfieldfont{#2}%
2061   \gls@field@link
2062   [\let\glscapscase\@thirdoftwo
2063     \let\glsifplural\@firstoftwo
2064   ]%
2065   {#1}{#2}{%
2066     \gls@field@font{\GLSaccesssymbolplural{#2}\mfirstucMakeUppercase{#3}}}{%
2067 }
```

\@Glsuseri@ First letter uppercase version.

```
2068 \def\@Glsuseri@#1#2[#3]{%
2069   \glsxtrassignfieldfont{#2}%
2070   \gls@field@link
```

```

2071  [\let\glscapscase\@secondoftwo]{#1}{#2}%
2072  {\@gls@field@font{\Glsentryuseri{#2}#3}}%
2073 }

\@GLSuseri@ All uppercase version.
2074 \def\@GLSuseri@#1#2[#3]{%
2075   \glsxtrassignfieldfont{#2}%
2076   \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2077     {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseri{#2}#3}}}%
2078 }

\@Glsuserii@ First letter uppercase version.
2079 \def\@Glsuserii@#1#2[#3]{%
2080   \glsxtrassignfieldfont{#2}%
2081   \@gls@field@link
2082   [\let\glscapscase\@secondoftwo]%
2083   {#1}{#2}{\@gls@field@font{\Glsentryuserii{#2}#3}}}%
2084 }

\@GLSuserii@ All uppercase version.
2085 \def\@GLSuserii@#1#2[#3]{%
2086   \glsxtrassignfieldfont{#2}%
2087   \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2088     {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuserii{#2}#3}}}%
2089 }

\@Glsuseriii@ First letter uppercase version.
2090 \def\@Glsuseriii@#1#2[#3]{%
2091   \glsxtrassignfieldfont{#2}%
2092   \@gls@field@link
2093   [\let\glscapscase\@secondoftwo]%
2094   {#1}{#2}{\@gls@field@font{\Glsentryuseriii{#2}#3}}}%
2095 }

\@GLSuseriii@ All uppercase version.
2096 \def\@GLSuseriii@#1#2[#3]{%
2097   \glsxtrassignfieldfont{#2}%
2098   \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2099     {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseriii{#2}#3}}}%
2100 }

\@Glsuseriv@ First letter uppercase version.
2101 \def\@Glsuseriv@#1#2[#3]{%
2102   \glsxtrassignfieldfont{#2}%
2103   \@gls@field@link
2104   [\let\glscapscase\@secondoftwo]%
2105   {#1}{#2}{\@gls@field@font{\Glsentryuseriv{#2}#3}}}%
2106 }

```

```

\@GLSuseriv@ All uppercase version.
2107 \def\@GLSuseriv@#1#2[#3]{%
2108   \glsxtrassignfieldfont{#2}%
2109   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2110   {#1}{#2}%
2111   {\gls@field@font{\mfirstucMakeUppercase{\glsentryuseriv{#2}{#3}}}}%
2112 }

\@Glsuserv@ First letter uppercase version.
2113 \def\@Glsuserv@#1#2[#3]{%
2114   \glsxtrassignfieldfont{#2}%
2115   \gls@field@link
2116   [\let\glscapscase\@secondoftwo]%
2117   {#1}{#2}{\gls@field@font{\Glsentryuserv{#2}{#3}}}%
2118 }

\@GLSuserv@ All uppercase version.
2119 \def\@GLSuserv@#1#2[#3]{%
2120   \glsxtrassignfieldfont{#2}%
2121   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2122   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuserv{#2}{#3}}}}%
2123 }

\@Glsuservi@ First letter uppercase version.
2124 \def\@Glsuservi@#1#2[#3]{%
2125   \glsxtrassignfieldfont{#2}%
2126   \gls@field@link
2127   [\let\glscapscase\@secondoftwo]%
2128   {#1}{#2}{\gls@field@font{\Glsentryuservi{#2}{#3}}}%
2129 }

\@GLSuservi@ All uppercase version.
2130 \def\@GLSuservi@#1#2[#3]{%
2131   \glsxtrassignfieldfont{#2}%
2132   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2133   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuservi{#2}{#3}}}}%
2134 }

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

\@acrshort No case change.
2135 \def\@acrshort#1#2[#3]{%
2136   \glsdoifexists{#2}%
2137   {%
2138     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2139     \let\glsxtrifwasfirstuse\@secondoftwo
2140     \let\glsifplural\@secondoftwo

```

```

2141     \let\glscapscase\@firstofthree
2142     \let\glsinsert\@empty
2143     \def\glscustomtext{%
2144         \acronymfont{\glsaccessshort{#2}}#3%
2145     }%
2146     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2147 }%
2148 \glspostlinkhook
2149 }

```

\@Acrshort First letter uppercase.

```

2150 \def\@Acrshort#1#2[#3]{%
2151     \glsdoifexists{#2}%
2152     {%
2153         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2154         \let\glsxtrifwasfirstuse\@secondoftwo
2155         \let\glsifplural\@secondoftwo
2156         \let\glscapscase\@secondofthree
2157         \let\glsinsert\@empty
2158         \def\glscustomtext{%
2159             \acronymfont{\Glsaccessshort{#2}}#3%
2160         }%
2161         \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2162     }%
2163     \glspostlinkhook
2164 }

```

\@ACRshort All uppercase.

```

2165 \def\@ACRshort#1#2[#3]{%
2166     \glsdoifexists{#2}%
2167     {%
2168         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2169         \let\glsxtrifwasfirstuse\@secondoftwo
2170         \let\glsifplural\@secondoftwo
2171         \let\glscapscase\@thirdofthree
2172         \let\glsinsert\@empty
2173         \def\glscustomtext{%
2174             \mfirstucMakeUppercase{\acronymfont{\glsaccessshort{#2}}#3}%
2175         }%
2176         \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2177     }%
2178     \glspostlinkhook
2179 }

```

\@acrshortpl No case change.

```

2180 \def\@acrshortpl#1#2[#3]{%
2181     \glsdoifexists{#2}%
2182     {%
2183         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper

```

```

2184   \let\glsxtrifwasfirstuse\@secondoftwo
2185   \let\glsifplural\@firstoftwo
2186   \let\glscapscase\@firstofthree
2187   \let\glsinsert\@empty
2188   \def\glscustomtext{%
2189     \acronymfont{\glsaccessshortpl{#2}}#3%
2190   }%
2191   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2192 }%
2193 \glspostlinkhook
2194 }

```

\@Acrshortpl First letter uppercase.

```

2195 \def\@Acrshortpl#1#2[#3]{%
2196   \glsdoifexists{#2}%
2197 {%
2198   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2199   \let\glsxtrifwasfirstuse\@secondoftwo
2200   \let\glsifplural\@firstoftwo
2201   \let\glscapscase\@secondofthree
2202   \let\glsinsert\@empty
2203   \def\glscustomtext{%
2204     \acronymfont{\Glsaccessshortpl{#2}}#3%
2205   }%
2206   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2207 }%
2208 \glspostlinkhook
2209 }

```

\@ACRshortpl All uppercase.

```

2210 \def\@ACRshortpl#1#2[#3]{%
2211   \glsdoifexists{#2}%
2212 {%
2213   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2214   \let\glsxtrifwasfirstuse\@secondoftwo
2215   \let\glsifplural\@firstoftwo
2216   \let\glscapscase\@thirdofthree
2217   \let\glsinsert\@empty
2218   \def\glscustomtext{%
2219     \mfirstrucMakeUppercase{\acronymfont{\glsaccessshortpl{#2}}#3}%
2220   }%
2221   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2222 }%
2223 \glspostlinkhook
2224 }

```

\@acrlong No case change.

```

2225 \def\@acrlong#1#2[#3]{%
2226   \glsdoifexists{#2}%

```

```

2227 {%
2228   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2229   \let\glsxtrifwasfirstuse\@secondoftwo
2230   \let\glsifplural\@secondoftwo
2231   \let\glscapscase\@firstofthree
2232   \let\glsinsert\@empty
2233   \def\glscustomtext{%
2234     \acronymfont{\glsaccesslong{#2}}#3%
2235   }%
2236   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2237 }%
2238 \glspostlinkhook
2239 }

```

\@Acrlong First letter uppercase.

```

2240 \def\@Acrlong#1#2[#3]{%
2241   \glsdoifexists{#2}{%
2242     {%
2243       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2244       \let\glsxtrifwasfirstuse\@secondoftwo
2245       \let\glsifplural\@secondoftwo
2246       \let\glscapscase\@secondofthree
2247       \let\glsinsert\@empty
2248       \def\glscustomtext{%
2249         \acronymfont{\Glsaccesslong{#2}}#3%
2250       }%
2251       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2252     }%
2253   \glspostlinkhook
2254 }

```

\@ACRlong All uppercase.

```

2255 \def\@ACRlong#1#2[#3]{%
2256   \glsdoifexists{#2}{%
2257     {%
2258       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2259       \let\glsxtrifwasfirstuse\@secondoftwo
2260       \let\glsifplural\@secondoftwo
2261       \let\glscapscase\@thirdofthree
2262       \let\glsinsert\@empty
2263       \def\glscustomtext{%
2264         \mfirstrucMakeUppercase{\acronymfont{\glsaccesslong{#2}}#3}%
2265       }%
2266       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2267     }%
2268   \glspostlinkhook
2269 }

```

\@acrlongpl No case change.

```

2270 \def\@acrlongpl#1#2[#3]{%
2271   \glsdoifexists{#2}{%
2272     {%
2273       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2274       \let\glsxtrifwasfirstuse\@secondoftwo
2275       \let\glsifplural\@firstoftwo
2276       \let\glscapscase\@firstofthree
2277       \let\glsinsert\@empty
2278     \def\glscustomtext{%
2279       \acronymfont{\glsaccesslongpl{#2}}#3%
2280     }%
2281     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2282   }%
2283   \glspostlinkhook
2284 }

```

\@Acrlongpl First letter uppercase.

```

2285 \def\@Acrlongpl#1#2[#3]{%
2286   \glsdoifexists{#2}{%
2287     {%
2288       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2289       \let\glsxtrifwasfirstuse\@secondoftwo
2290       \let\glsifplural\@firstoftwo
2291       \let\glscapscase\@secondofthree
2292       \let\glsinsert\@empty
2293     \def\glscustomtext{%
2294       \acronymfont{\Glsaccesslongpl{#2}}#3%
2295     }%
2296     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2297   }%
2298   \glspostlinkhook
2299 }

```

\@ACRlongpl All uppercase.

```

2300 \def\@ACRlongpl#1#2[#3]{%
2301   \glsdoifexists{#2}{%
2302     {%
2303       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2304       \let\glsxtrifwasfirstuse\@secondoftwo
2305       \let\glsifplural\@firstoftwo
2306       \let\glscapscase\@thirdofthree
2307       \let\glsinsert\@empty
2308     \def\glscustomtext{%
2309       \mfirstrucMakeUppercase{\acronymfont{\glsaccesslongpl{#2}}#3}%
2310     }%
2311     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2312   }%
2313   \glspostlinkhook
2314 }

```

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

```
\@glsaddkey
2315 \renewcommand*{\@glsaddkey}[7]{%
2316   \key@ifundefined{glossentry}{\#1}{%
2317   {%
2318     \define@key{glossentry}{\#1}{\csdef{@glo@\#1}{##1}}{%
2319       \appto{\gls@keymap}{, \#1}{\#1}}{%
2320       \appto{\@newglossaryentryprehook}{\csdef{@glo@\#1}{\#2}}{%
2321       \appto{\@newglossaryentryposthook}{%
2322         \letcs{\@glo@tmp}{\glo@\#1}}{%
2323         \gls@assign@field{\#2}{\glo@label}{\#1}{\@glo@tmp}}{%
2324       }{%
2325       \newcommand*{\#3}[1]{\gls@entry@field{\##1}{\#1}}{%
2326       \newcommand*{\#4}[1]{\Gls@entry@field{\##1}{\#1}}{%
```

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

```
2327 \ifcsdef{@gls@user@\#1@}{%
2328 {%
2329   \PackageError{glossaries}{%
2330     {Can't define '\string#5' as helper command
2331     '\expandafter\string\csname @gls@user@\#1@\endcsname' already
2332     exists}}{%
2333   }{%
2334 }{%
2335 {%
2336   \expandafter\newcommand\expandafter*\expandafter
2337     {\csname @gls@user@\#1\endcsname}[2] []{%
2338       \new@ifnextchar[%
2339         {\csuse{@gls@user@\#1@}{##1}{##2}}{%
2340           {\csuse{@gls@user@\#1@}{##1}{##2}[]}}{%
2341           \csdef{@gls@user@\#1@}{##1}{##2}{%
2342             \gls@field@link{##1}{##2}{\gls@user@\#1@}{##2}{##3}}{%
2343           }{%
2344           \newrobustcmd*{\#5}{%
2345             \expandafter\gls@hyp@opt\csname @gls@user@\#1\endcsname}}{%
2346           }{%
```

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

```
2347 \ifcsdef{@Gls@user@\#1@}{%
2348 {%
2349   \PackageError{glossaries}{%
2350     {Can't define '\string#6' as helper command
2351     '\expandafter\string\csname @Gls@user@\#1@\endcsname' already
2352     exists}}{%
2353   }{%
2354 }{%
2355 {%
2356   \expandafter\newcommand\expandafter*\expandafter
```

```

2357     {\csname @Gls@user@#1\endcsname}[2] []{%
2358         \new@ifnextchar[%
2359             {\csuse{@Gls@user@#1@}{##1}{##2}}%
2360             {\csuse{@Gls@user@#1@}{##1}{##2}[]}}%
2361     \csdef{@Gls@user@#1@}##1##2##3}{%
2362         \@gls@field@link[\let\glscapscase\@secondofthree]%
2363             {##1}{##2}{##4{##2}##3}}%
2364     }%
2365     \newrobustcmd*{##6}{%
2366         \expandafter\gls@hyp@opt\csname @Gls@user@#1\endcsname}%
2367     }%

```

Finally the all caps version (modified):

```

2368     \ifcsdef{@GLS@user@#1@}{%
2369         {}%
2370             \PackageError{glossaries}{%
2371                 {Can't define '\string#7' 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\@thirdofthree]%
2384             {##1}{##2}{\mfirstucMakeUppercase{##3{##2}##3}}}}%
2385     }%
2386     \newrobustcmd*{##7}{%
2387         \expandafter\gls@hyp@opt\csname @GLS@user@#1\endcsname}%
2388     }%
2389 }%
2390 {}%
2391     \PackageError{glossaries-extra}{Key '#1' already exists}{}%
2392 }%
2393 }

```

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

```
2394 \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.

```
2395 \let\glsxtr@org@checkfirsthyper\gls@link@checkfirsthyper
2396 \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.

```
2397 \ifglsused{\glslabel}%
2398 {\let\glsxtrifwasfirstuse@\secondoftwo}
2399 {\let\glsxtrifwasfirstuse@\firstoftwo}%

    Store the category label for convenience.

2400 \edef\glscategorylabel{\glscategory{\glslabel}}%
2401 \ifglsused{\glslabel}%
2402 {%
2403     \glsifcategoryattribute{\glscategorylabel}{nohypernext}{true}%
2404     {\KV@glslink@hyperfalse}{}%
2405 }%
2406 {%
2407     \glsifcategoryattribute{\glscategorylabel}{nohyperfirst}{true}%
2408     {\KV@glslink@hyperfalse}{}%
2409 }%
2410 \glslinkcheckfirsthyperhook
2411 }
```

`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.

```
2412 \ifdef\do@glsdisablehyperinlist
2413 {%
2414     \let@\glsxtr@do@glsdisablehyperinlist\do@glsdisablehyperinlist
2415     \renewcommand*\do@glsdisablehyperinlist{%
2416         \glsxtr@do@glsdisablehyperinlist
2417         \glsifattribute{\glslabel}{nohyper}{true}{\KV@glslink@hyperfalse}{}%
2418     }%
2419 }
2420 {}
```

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

```
2421 \define@boolkey{glslink}{noindex}[true]{}
2422 \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`

```
2423 \ifdef\@gls@setdefault@glslink@opts
2424 {
2425     \renewcommand*\@gls@setdefault@glslink@opts{%
2426         \KV@glslink@noindexfalse
2427         \@glsxtrsetaliasnoindex
2428     }%
2429 }
2430 {
```

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

```
2431 \newcommand*{\@gls@setdefault@glslink@opts}{%
2432   \KV@glslink@noindexfalse
2433   \glsxtrsetaliasnoindex
2434 }
2435 \preto\do@glsdisablehyperinlist{\@gls@setdefault@glslink@opts}
2436 }
```

`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.)

```
2437 \providecommand*{\glsxtrsetaliasnoindex}{%
2438   \KV@glslink@noindextrue
2439 }
```

`setaliasnoindex`

```
2440 \newcommand*{\@glsxtrsetaliasnoindex}{%
2441   \glsxtrifhasfield{alias}{\glslabel}%
2442   {%
2443     \let\glsxtrindexaliased\glsxtrindexaliased
2444     \glsxtrsetaliasnoindex
2445     \let\glsxtrindexaliased\@no@glsxtrindexaliased
2446   }%
2447 {}%
2448 }
```

`xtrindexaliased`

```
2449 \newcommand{\@glsxtrindexaliased}{%
2450   \ifKV@glslink@noindex
2451   \else
2452     \begingroup
2453     \let\@glsnumberformat\glsxtr@defaultnumberformat
2454     \edef\@gls@counter{\csname glo@\glsdetoklabel{\glslabel}@counter\endcsname}%
2455     \glsxtr@saveentrycounter
2456     \@@do@wrglossary{\glsxtralias{\glslabel}}%
2457     \endgroup
2458   \fi
2459 }
```

`xtrindexaliased`

```
2460 \newcommand{\@no@glsxtrindexaliased}{%
2461   \PackageError{glossaries-extra}{\string\glsxtrindexaliased\space
2462   not permitted outside definition of \string\glsxtrsetaliasnoindex}%
2463 {}%
2464 }
```

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

```
2465 \let\glsxtrindexaliased\@no@glsxtrindexaliased
```

```

tDefaultGlsOpts Set the default options for \glslink etc.
2466 \newcommand*{\GlsXtrSetDefaultGlsOpts}[1]{%
2467   \renewcommand*{\@gls@setdefault@glslink@opts}{%
2468     \setkeys{glslink}{#1}%
2469     \glsxtrsetaliasnoindex
2470   }%
2471 }

lsxtrifindexing Provide user level command to access it in \glswriteentry.
2472 \newcommand*{\glsxtrifindexing}[2]{%
2473   \ifKV@glslink@noindex #2\else #1\fi
2474 }

\glswriteentry Redefine to test for indexonlyfirst category attribute.
2475 \renewcommand*{\glswriteentry}[2]{%
2476   \glsxtrifindexing
2477   {%
2478     \ifglsindexonlyfirst
2479       \ifglsused{#1}
2480         {\glsxtrdoautoindexname{#1}{dualindex}}%
2481         {#2}%
2482     \else
2483       \glsifattribute{#1}{indexonlyfirst}{true}%
2484       {\ifglsused{#1}
2485         {\glsxtrdoautoindexname{#1}{dualindex}}%
2486         {#2}}%
2487       {#2}%
2488     \fi
2489   }%
2490   {}%
2491 }

@do@@wrglossary Hook into glossary indexing command so that it can also use \index at the same time if
 required and add user hook.
2492 \appto{@do@@wrglossary}{\glsxtr@do@@wrindex
2493   \glsxtrdownrglossaryhook{\gls@label}%
2494 }

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

Similarly for the “noidx” version:

s@noidxglossary
2495 \appto{\gls@noidxglossary}{\glsxtr@do@@wrindex
2496   \glsxtrdownrglossaryhook{\gls@label}%
2497 }

xtr@do@@wrindex
2498 \newcommand*{\glsxtr@do@@wrindex}{%

```

```

2499 \glsxtrdoautoindexname{@gls@label}{dualindex}%
2500 }

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.)
2501 \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.
2502 \newcommand*\gls@alt@hyp@opt[1]{%
2503 \let\glslinkvar\firstofthree
2504 \let@gls@hyp@opt@cs#1\relax
2505 \@ifstar{\s@gls@hyp@opt}{%
2506 {\@ifnextchar+{%
2507 {\@firstoftwo{\p@gls@hyp@opt}}%
2508 {%
2509 \expandafter\@ifnextchar\gls@alt@hyp@opt@char
2510 {\@firstoftwo{\@alt@gls@hyp@opt}}%
2511 {#1}}%
2512 }%
2513 }%
2514 }

alt@gls@hyp@opt User version
2515 \newcommand*\@alt@gls@hyp@opt[1] []{%
2516 \let\glslinkvar\firstofthree
2517 \expandafter\gls@hyp@opt@cs\expandafter[\@gls@alt@hyp@opt@keys,#1]}

lt@hyp@opt@char Contains the character used as the command modifier.
2518 \newcommand*\gls@alt@hyp@opt@char{}

lt@hyp@opt@keys Contains the option list used as the command modifier.
2519 \newcommand*\gls@alt@hyp@opt@keys{}

rSetAltModifier
2520 \newcommand*\GlsXtrSetAltModifier[2]{%
2521 \let\gls@hyp@opt\gls@alt@hyp@opt
2522 \def\gls@alt@hyp@opt@char{#1}%
2523 \def\gls@alt@hyp@opt@keys{#2}%
2524 }

org@dohyperlink
2525 \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.

```
2526 \ifdef\glsnavhyperlink
2527 {
2528   \renewcommand*{\glsnavhyperlink}[3][\@glo@type]{%
2529     \edef\gls@grplabel{\#2}\protected@edef\@gls@grptitle{\#3}%
Scope:
2530   {%
2531     \let\glsdohyperlink\glsxtr@org@dohyperlink
2532     \glslink{\glsnavhyperlinkname{\#1}{\#2}}{\#3}%
2533   }%
2534 }%
2535 }
2536 {}
```

\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.

```
2537 \renewcommand*{\glsdohyperlink}[2]{%
2538   \glshasattribute{\glslabel}{targeturl}%
2539   {%
2540     \glshasattribute{\glslabel}{targetname}%
2541   {%
2542     \glshasattribute{\glslabel}{targetcategory}%
2543   {%
2544     \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
2545       {\glsgetattribute{\glslabel}{targetcategory}}%
2546       {\glsgetattribute{\glslabel}{targetname}}%
2547       {{\glsxtrprotectlinks\#2}}%
2548     }%
2549   {%
2550     \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
2551       {}%
2552       {\glsgetattribute{\glslabel}{targetname}}%
2553       {{\glsxtrprotectlinks\#2}}%
2554     }%
2555   {%
2556     \href{\glsgetattribute{\glslabel}{targeturl}}{%
2557       {{\glsxtrprotectlinks\#2}}%
2558     }%
2559   }%
2560 }%
2561 {%
```

Check for alias.

```

2562 \glsfieldfetch{\glslabel}{alias}{\gloaliaslabel}%
2563 \ifdefvoid\gloaliaslabel
2564 {%
2565   \glsxtrhyperlink{\#1}{\glsxtrprotectlinks{\#2}}%
2566 }%
2567 {%

```

Redirect link to the alias target.

```

2568   \glsxtrhyperlink
2569     {\glolinkprefix\glsdetoklabel{\gloaliaslabel}}%
2570     {\glsxtrprotectlinks{\#2}}%
2571   }%
2572 }%
2573 }

```

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

```

2574 \ifdef{@glsshowtarget}
2575 {
2576   \newcommand{\glsxtrhyperlink}[2]{%
2577     @_glsshowtarget{\#1}%
2578     \hyperlink{\#1}{\#2}%
2579   }%
2580 }
2581 {
2582   \newcommand{\glsxtrhyperlink}[2]{\hyperlink{\#1}{\#2}}%
2583 }

```

`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.

```

2584 \renewrobustcmd*{\glshyperlink}[2][\glsentrytext{@glo@label}]{%
2585   \glsdoifexists{\#2}%
2586   {%
2587     \def{@glo@label}{\#2}%
2588     {\edef\glslabel{\#2}%
2589      \glslink{\glolinkprefix\glslabel}{\#1}}%
2590   }%
2591 }

```

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

```

2592 \renewcommand{\glsdisablehyper}{%
2593   \KV@glslink@hyperfalse
2594   \def{@glslink}{\glsdonohyperlink}%
2595   \let{@glstarget}{\secondoftwo}
2596 }

```

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

```
2597 \renewcommand{\glsenablehyper}{%
2598   \KV@glslink@hypertrue
2599   \def\@glslink{\glsdohyperlink}%
2600   \def\@glstarget{\glsdohypertarget}%
2601 }
```

\lsdonohyperlink 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.

```
2602 \def\glsdonohyperlink#1#2{{\glsxtrprotectlinks #2}}
```

\@glslink Reset \@glslink with patched versions:

```
2603 \ifcsundef{hyperlink}{%
2604   {%
2605     \def\@glslink{\glsdonohyperlink}%
2606   }%
2607   {%
2608     \def\@glslink{\glsdohyperlink}%
2609   }}
```

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

```
2610 \newcommand*{\glsxtrprotectlinks}{%
2611   \KV@glslink@hyperfalse
2612   \KV@glslink@noindextrue
2613   \let@\gls@{\glsxtr@p@text@}
2614   \let@\Gls@{\Glsxtr@p@text@}
2615   \let@\GLS@{\GLSxtr@p@text@}
2616   \let@\glspl@{\glsxtr@p@plural@}
2617   \let@\Glspl@{\Glsxtr@p@plural@}
2618   \let@\GLSpl@{\GLSxtr@p@plural@}
2619   \let@\glsxtrshort@{\glsxtr@p@short@}
2620   \let@\Glsxtrshort@{\Glsxtr@p@short@}
2621   \let@\GLSxtrshort@{\GLSxtr@p@short@}
2622   \let@\glsxtrlong@{\glsxtr@p@long@}
2623   \let@\Glsxtrlong@{\Glsxtr@p@long@}
2624   \let@\GLSxtrlong@{\GLSxtr@p@long@}
2625   \let@\glsxtrshortpl@{\glsxtr@p@shortpl@}
2626   \let@\Glsxtrshortpl@{\Glsxtr@p@shortpl@}
2627   \let@\GLSxtrshortpl@{\GLSxtr@p@shortpl@}
2628   \let@\glsxtrlongpl@{\glsxtr@p@longpl@}
2629   \let@\Glsxtrlongpl@{\Glsxtr@p@longpl@}
2630   \let@\GLSxtrlongpl@{\GLSxtr@p@longpl@}
2631   \let@\acrshort@{\glsxtr@p@acrshort@}
2632   \let@\Acrshort@{\Glsxtr@p@acrshort@}
2633   \let@\ACRshort@{\GLSxtr@p@acrshort@}
```

```

2634 \let\@acrshortpl\@glsxtr@p@acrshortpl@
2635 \let\@Acrshortpl\@Glsxtr@p@acrshortpl@
2636 \let\@ACRshortpl\@GLSxtr@p@acrshortpl@
2637 \let\@acrlong\@glsxtr@p@acrlong@
2638 \let\@Acrlong\@Glsxtr@p@acrlong@
2639 \let\@ACRLong\@GLSxtr@p@acrlong@
2640 \let\@acrlongpl\@glsxtr@p@acrlongpl@
2641 \let\@Acrlongpl\@Glsxtr@p@acrlongpl@
2642 \let\@ACRLongpl\@GLSxtr@p@acrlongpl@
2643 }

```

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

```

@glsxtr@p@text@
2644 \def\@glsxtr@p@text@#1#2[#3]{{\@glstext@{#1}{#2}[#3]}}
@Glsxtr@p@text@
2645 \def\@Glsxtr@p@text@#1#2[#3]{{\@Glstext@{#1}{#2}[#3]}}
@GLSxtr@p@text@
2646 \def\@GLSxtr@p@text@#1#2[#3]{{\@GLStext@{#1}{#2}[#3]}}
lsxtr@p@plural@
2647 \def\@glsxtr@p@plural@#1#2[#3]{{\@glsplural@{#1}{#2}[#3]}}
lsxtr@p@plural@
2648 \def\@Glsxtr@p@plural@#1#2[#3]{{\@Glsplural@{#1}{#2}[#3]}}
LSxtr@p@plural@
2649 \def\@GLSxtr@p@plural@#1#2[#3]{{\@GLSplural@{#1}{#2}[#3]}}
glsxtr@p@short@
2650 \def\@glsxtr@p@short@#1#2[#3]{%
2651 {%
2652 \glssetabbrvfmt{\glscategory{#2}}%
2653 \glsabbrvfont{\glsentryshort{#2}}#3%
2654 }%
2655 }
Glsxtr@p@short@
2656 \def\@Glsxtr@p@short@#1#2[#3]{%
2657 {%
2658 \glssetabbrvfmt{\glscategory{#2}}%
2659 \glsabbrvfont{\Glsentryshort{#2}}#3%
2660 }%
2661 }

```

```

GLSxtr@p@short@%
2662 \def\@GLSxtr@p@short@#1#2[#3]{%
2663   {%
2664     \glssetabrvfmt{\glscategory{#2}}%
2665     \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshort{#2}}#3}%
2666   }%
2667 }

sxtr@p@shortpl@%
2668 \def\@glsxtr@p@shortpl@#1#2[#3]{%
2669   {%
2670     \glssetabrvfmt{\glscategory{#2}}%
2671     \glsabbrvfont{\glsentryshortpl{#2}}#3%
2672   }%
2673 }

sxtr@p@shortpl@%
2674 \def\@Glsxtr@p@shortpl@#1#2[#3]{%
2675   {%
2676     \glssetabrvfmt{\glscategory{#2}}%
2677     \glsabbrvfont{\Glsentryshortpl{#2}}#3%
2678   }%
2679 }

Sxtr@p@shortpl@%
2680 \def\@GLSxtr@p@shortpl@#1#2[#3]{%
2681   {%
2682     \glssetabrvfmt{\glscategory{#2}}%
2683     \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshortpl{#2}}#3}%
2684   }%
2685 }

@glsxtr@p@long@%
2686 \def\@glsxtr@p@long@#1#2[#3]{{{\glsentrylong{#2}}#3} }

@Glsxtr@p@long@%
2687 \def\@Glsxtr@p@long@#1#2[#3]{{{\Glsentrylong{#2}}#3} }

@GLSxtr@p@long@%
2688 \def\@GLSxtr@p@long@#1#2[#3]{%
2689   {\mfirstucMakeUppercase{\glslongfont{\glsentrylong{#2}}#3}}}

lsxtr@p@longpl@%
2690 \def\@glsxtr@p@longpl@#1#2[#3]{{{\glsentrylongpl{#2}}#3} }

lsxtr@p@longpl@%
2691 \def\@Glsxtr@p@longpl@#1#2[#3]{{{\glslongfont{\Glsentrylongpl{#2}}#3}}}

```

```

LSxtr@p@longpl@
2692 \def\@GLSxtr@p@longpl@#1#2[#3]{%
2693   {\mfirstucMakeUppercase{\glslongfont{\glsentrylongpl{#2}}#3}}}

xtr@p@acrshort@
2694 \def\@glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\glsentryshort{#2}}#3}>

xtr@p@acrshort@
2695 \def\@Glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\Glsentryshort{#2}}#3}>

xtr@p@acrshort@
2696 \def\@GLSxtr@p@acrshort@#1#2[#3]{%
2697   {\mfirstucMakeUppercase{\acronymfont{\glsentryshort{#2}}#3}}}

r@p@acrshortpl@
2698 \def\@glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\glsentryshortpl{#2}}#3}>

r@p@acrshortpl@
2699 \def\@Glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\Glsentryshortpl{#2}}#3}>

sxtr@p@acrlong@
2702 \def\@glsxtr@p@acrlong@#1#2[#3]{{\glsentrylong{#2}}#3}>

sxtr@p@acrlong@
2703 \def\@Glsxtr@p@acrlong@#1#2[#3]{{\Glsentrylong{#2}}#3}>

Sxtr@p@acrlong@
2704 \def\@GLSxtr@p@acrlong@#1#2[#3]{%
2705   {\mfirstucMakeUppercase{\glsentrylong{#2}}#3}}}

tr@p@acrlongpl@
2706 \def\@glsxtr@p@acrlongpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}>

tr@p@acrlongpl@
2707 \def\@Glsxtr@p@acrlongpl@#1#2[#3]{{\Glsentrylongpl{#2}}#3}>

tr@p@acrlongpl@
2708 \def\@GLSxtr@p@acrlongpl@#1#2[#3]{%
2709   {\mfirstucMakeUppercase{\glsentrylongpl{#2}}#3}}}

```

Commands to minimise conflict.

```

\@glsxtrp@opt
2710 \newcommand*{\@glsxtrp@opt}{hyper=false,noindex}

```

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

```
2711 \newcommand*{\glsxtrsetpopts}[1]{%
2712   \renewcommand*{\@glsxtrp@opt}{#1}%
2713 }
```

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

```
2714 \newcommand*{\glossxtrsetpopts}{%
2715   \glsxtrsetpopts{noindex}%
2716 }
```

```
\@@glsxtrp
```

```
2717 \newrobustcmd*{\@@glsxtrp}[2]{%
  Add scope.
2718  {%
2719    \let\glspostlinkhook\relax
2720    \csname#1\expandafter\endcsname\expandafter[\@glsxtrp@opt]{#2}[]%
2721  }%
2722 }
```

```
\@glsxtrp
```

```
2723 \newrobustcmd*{\@glsxtrp}[2]{%
2724   \ifcsdef{gls#1}%
2725   {%
2726     \@@glsxtrp{gls#1}{#2}%
2727   }%
2728   {%
2729     \ifcsdef{glsxtr#1}%
2730     {%
2731       \@@glsxtrp{glsxtr#1}{#2}%
2732     }%
2733     {%
2734       \PackageError{glossaries-extra}{‘#1’ not recognised by
2735         \string\glsxtrp}{}%
2736     }%
2737   }%
2738 }
```

```
\@Glsxtrp
```

```
2739 \newrobustcmd*{\@Glsxtrp}[2]{%
2740   \ifcsdef{Gls#1}%
2741   {%
2742     \@@glsxtrp{Gls#1}{#2}%
2743   }%
2744   {%
2745     \ifcsdef{Glsxtr#1}%
2746     {%
2747       \@@glsxtrp{Glsxtr#1}{#2}%
2748     }%
```

```

2749     {%
2750         \PackageError{glossaries-extra}{‘#1’ not recognised by
2751             \string\Glsxtrp\{}}%
2752     }%
2753 }%
2754 }

\@GLSxtrp
2755 \newrobustcmd*\@GLSxtrp}[2]{%
2756     \ifcsdef{GLS#1}{%
2757         {%
2758             \@@glsxtrp{GLS#1}{#2}}%
2759         }%
2760     {%
2761         \ifcsdef{GLSxtr#1}{%
2762             {%
2763                 \@@glsxtrp{GLSxtr#1}{#2}}%
2764             }%
2765             {%
2766                 \PackageError{glossaries-extra}{‘#1’ not recognised by
2767                     \string\GLSxtrp\{}}%
2768             }%
2769         }%
2770     }
2771 }

\glsxtr@entry@p
2771 \newrobustcmd*\glsxtr@headentry@p}[2]{%
2772     \glsifattribute{#1}{headuc}{true}{%
2773         {%
2774             \mfirstucMakeUppercase{\gls@entry@field{#1}{#2}}%
2775         }%
2776     {%
2777         \gls@entry@field{#1}{#2}}%
2778     }%
2779 }

\glsxtrp Not robust as it needs to expand somewhat.
2780 \ifdef\texorpdfstring
2781 {
2782     \newcommand*\glsxtrp}[2]{%
2783         \protect\NoCaseChange
2784         {%
2785             \protect\texorpdfstring
2786             {%
2787                 \protect\glsxtrifinmark
2788                 {%
2789                     \ifcsdef{glsxtrhead#1}{%
2790                         {%
2791                             \protect\csuse{glsxtrhead#1}{#2}}%

```

```

2792      }%
2793      {%
2794          \glsxstr@headentry@p{#2}{#1}%
2795      }%
2796      }%
2797      {%
2798          \glsxtrp{#1}{#2}%
2799      }%
2800      }%
2801      {%
2802          \protect\gls@entry@field{#2}{#1}%
2803      }%
2804      }%
2805  }%
2806 }
2807 {
2808 \newcommand{\glsxtrp}[2]{%
2809     \protect\NoCaseChange
2810     {%
2811         \protect\glsxtrifinmark
2812         {%
2813             \ifcsdef{glsxtrhead#1}%
2814             {%
2815                 \protect\csuse{glsxtrhead#1}%
2816             }%
2817             {%
2818                 \glsxstr@headentry@p{#2}{#1}%
2819             }%
2820         }%
2821         {%
2822             \glsxtrp{#1}{#2}%
2823         }%
2824     }%
2825 }
2826 }

```

Provide short synonyms for the most common option.

```
\glsp
```

```
2827 \newcommand*{\glsp}{\glsxtrp{short}}
```

```
\glspt
```

```
2828 \newcommand*{\glspt}{\glsxtrp{text}}
```

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

```
2829 \ifdef\texorpdfstring
2830 {
2831     \newcommand{\Glsxtrp}[2]{%
```

```

2832 \protect\NoCaseChange
2833 {%
2834   \protect\texorpdfstring
2835   {%
2836     \protect\glsxtrifinmark
2837     {%
2838       \ifcsdef{Glsxtrhead#1}%
2839       {%
2840         {\protect\csuse{Glsxtrhead#1}{#2}}%
2841       }%
2842       {%
2843         \protect{@Gls@entry@field{#2}{#1}}%
2844       }%
2845     }%
2846     {%
2847       \Glsxtrp{#1}{#2}%
2848     }%
2849   }%
2850   {%
2851     \protect{@gls@entry@field{#2}{#1}}%
2852   }%
2853 }
2854 }
2855 }
2856 {
2857 \newcommand{\Glsxtrp}[2]{%
2858   \protect\NoCaseChange
2859   {%
2860     \protect\glsxtrifinmark
2861     {%
2862       \ifcsdef{Glsxtrhead#1}%
2863       {%
2864         {\protect\csuse{Glsxtrhead#1}}%
2865       }%
2866       {%
2867         \protect{@Gls@entry@field{#2}{#1}}%
2868       }%
2869     }%
2870     {%
2871       \Glsxtrp{#1}{#2}%
2872     }%
2873   }%
2874 }
2875 }

```

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

```

2876 \ifdef\texorpdfstring
2877 {
2878   \newcommand{\GLSxtrp}[2]{%

```

```

2879 \protect\NoCaseChange
2880 {%
2881   \protect\texorpdfstring
2882   {%
2883     \protect\glsxtrifinmark
2884     {%
2885       \ifcsdef{GLSxtr#1}%
2886       {%
2887         {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
2888       }%
2889     {%
2890       \protect\mfirstucMakeUppercase
2891       {%
2892         \protect\@gls@entry@field{#2}{#1}%
2893       }%
2894     }%
2895   }%
2896   {%
2897     \@GLSxtrp{#1}{#2}%
2898   }%
2899 }%
2900 {%
2901   \protect\@gls@entry@field{#2}{#1}%
2902 }%
2903 }%
2904 }%
2905 }
2906 {
2907 \newcommand{\GLSxtrp}[2]{%
2908   \protect\NoCaseChange
2909   {%
2910     \protect\glsxtrifinmark
2911     {%
2912       \ifcsdef{GLSxtr#1}%
2913       {%
2914         {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
2915       }%
2916     {%
2917       \protect\mfirstucMakeUppercase
2918       {%
2919         \protect\@gls@entry@field{#2}{#1}%
2920       }%
2921     }%
2922   }%
2923   {%
2924     \@GLSxtrp{#1}{#2}%
2925   }%
2926 }%
2927 }

```

```
2928 }
```

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.
```

```
2929 \renewcommand*{\@glsunset}[1]{%
2930   \@@glsunset{#1}%
2931   \glsxtrpostunset{#1}%
2932 }%
```

```
glsxtrpostunset
```

```
2933 \newcommand*{\glsxtrpostunset}[1]{}
```

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

```
2934 \renewcommand*{\@glslocalunset}[1]{%
2935   \@@glslocalunset{#1}%
2936   \glsxtrpostlocalunset{#1}%
2937 }%
```

```
rpostlocalunset
```

```
2938 \newcommand*{\glsxtrpostlocalunset}[1]{}
```

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

```
2939 \renewcommand*{\@glsreset}[1]{%
2940   \@@glsreset{#1}%
2941   \glsxtrpostreset{#1}%
2942 }%
```

```
glsxtrpostreset
```

```
2943 \newcommand*{\glsxtrpostreset}[1]{}
```

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

```
2944 \renewcommand*{\@glslocalreset}[1]{%
2945   \@@glslocalreset{#1}%
2946   \glsxtrpostlocalreset{#1}%
2947 }%
```

```
rpostlocalreset
```

```
2948 \newcommand*{\glsxtrpostlocalreset}[1]{}
```

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

```
2949 \newcommand*{\GlsXtrEnableEntryCounting}[2]{%
```

Enable entry counting:

```
2950 \glsenableentrycount
```

Redefine \gls etc:

```
2951 \renewcommand*\gls{\c@gls}%
2952 \renewcommand*\Gls{\c@Gls}%
2953 \renewcommand*\glsp{*\c@glsp}%
2954 \renewcommand*\Glsp{*\c@Glsp}%
2955 \renewcommand*\GLS{\c@GLS}%
2956 \renewcommand*\GLSp{\c@GLSp}
```

Set the entrycount attribute:

```
2957 \glsxtr@setentrycountunsetattr{#1}{#2}%
```

In case this command is used again:

```
2958 \let\GlsXtrEnableEntryCounting\glsxtr@setentrycountunsetattr
2959 \renewcommand*\GlsXtrEnableEntryUnitCounting[3]{%
2960   \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryUnitCounting\space
2961   can't be used with \string\GlsXtrEnableEntryCounting}%
2962   {Use one or other but not both commands}}%
2963 }
```

ycountunsetattr

```
2964 \newcommand*\glsxtr@setentrycountunsetattr[2]{%
2965   \@for\glsxtr@cat:=#1\do
2966   {%
2967     \ifdefempty{\glsxtr@cat}{}%
2968     {%
2969       \glssetcategoryattribute{\glsxtr@cat}{entrycount}{#2}%
2970     }%
2971   }%
2972 }
```

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

nableentrycount

```
2973 \renewcommand*\glsenableentrycount{}%
```

Enable new fields:

```
2974 \appto\newglossaryentry@defcounters{\@newglossaryentry@defcounters}%
```

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

```
2975 \renewcommand*\gls@defdocnewglossaryentry{}%
2976 \renewcommand*\newglossaryentry[2]{%
2977   \PackageError{glossaries}{\string\newglossaryentry\space
2978   may only be used in the preamble when entry counting has
2979   been activated}{If you use \string\glsenableentrycount\space
2980   you must place all entry definitions in the preamble not in
2981   the document environment}}%
2982 }%
2983 }%
```

New commands to access new fields:

```
2984 \newcommand*{\glsentrycurrcount}[1]{%
2985   \ifcsundef{glo@\glsdetoklabel{##1}@currcount}{%
2986     {0}{\gls@entry@field{##1}{currcount}}{%
2987   }%
2988 \newcommand*{\glsentryprevcount}[1]{%
2989   \ifcsundef{glo@\glsdetoklabel{##1}@prevcount}{%
2990     {0}{\gls@entry@field{##1}{prevcount}}{%
2991   }%
```

Adjust post unset and reset:

```
2992 \let\glsxtr@entrycount@org@unset\glsxtrpostunset
2993 \renewcommand*{\glsxtrpostunset}[1]{%
2994   \glsxtr@entrycount@org@unset{##1}%
2995   \gls@increment@currcount{##1}%
2996 }%
2997 \let\glsxtr@entrycount@org@localunset\glsxtrpostlocalunset
2998 \renewcommand*{\glsxtrpostlocalunset}[1]{%
2999   \glsxtr@entrycount@org@localunset{##1}%
3000   \gls@local@increment@currcount{##1}%
3001 }%
3002 \let\glsxtr@entrycount@org@reset\glsxtrpostreset
3003 \renewcommand*{\glsxtrpostreset}[1]{%
3004   \glsxtr@entrycount@org@reset{##1}%
3005   \csgdef{glo@\glsdetoklabel{##1}@currcount}{0}%
3006 }%
3007 \let\glsxtr@entrycount@org@localreset\glsxtrpostlocalreset
3008 \renewcommand*{\glsxtrpostlocalreset}[1]{%
3009   \glsxtr@entrycount@org@localreset{##1}%
3010   \csdef{glo@\glsdetoklabel{##1}@currcount}{0}%
3011 }%
```

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

```
3012 \let\ccls@\ccls@%
3013 \let\cclspl@\cclspl@%
3014 \let\cGls@\cGls@%
3015 \let\cGlspl@\cGlspl@%
3016 \let\cGLS@\cGLS@%
3017 \let\cGLSpl@\cGLSpl@%
```

The rest is as the original definition.

```
3018 \AtEndDocument{\gls@write@entrycounts}%
3019 \renewcommand*{\gls@entry@count}[2]{%
3020   \csgdef{glo@\glsdetoklabel{##1}@prevcount}{##2}%
3021 }%
3022 \let\glsenableentrycount\relax
3023 \renewcommand*{\glsenableentryunitcount}{%
3024   \PackageError{glossaries-extra}{\string\glsenableentryunitcount\space}
```

```

3025      can't be used with \string\glsenableentrycount}%
3026      {Use one or other but not both commands}%
3027  }%
3028 }

```

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.

```

3029 \renewcommand*{\gls@write@entrycounts}{%
3030   \immediate\write\auxout
3031   {\string\providecommand*{\string\gls@entry@count}[2]{}}%
3032   \count@=0\relax
3033   \forallglsentries{\glsentry}{%
3034     \glshasattribute{\glsentry}{entrycount}%
3035   }%
3036   \ifglsused{\glsentry}%
3037   {}%
3038   \immediate\write\auxout
3039   {\string\gls@entry@count{\glsentry}\{\glsentrycurrcount{\glsentry}}}%
3040 }%
3041 {}%
3042 \advance\count@ by \one
3043 }%
3044 {}%
3045 }%
3046 \ifnum\count@=0
3047   \GlossariesExtraWarningNoLine{Entry counting has been enabled
3048   \MessageBreak with \string\glsenableentrycount\space but the
3049   \MessageBreak attribute 'entrycount' hasn't
3050   \MessageBreak been assigned to any of the defined
3051   \MessageBreak entries}%
3052 \fi
3053 }

```

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

```

3054 \newcommand*{\glsxtrifcounttrigger}[3]{%
3055   \glshasattribute{\#1}{entrycount}%
3056   {}%
3057   \ifnum\glsentryprevcount{\#1}>\glsgetattribute{\#1}{entrycount}\relax
3058     #3%
3059   \else
3060     #2%
3061   \fi
3062 }%
3063 {\#3}%
3064 }

```

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

\@@cgl{...}

```
3065 \def\@@cgl[#1#2[#3]{%
3066   \glsxtrifcounttrigger{#2}%
3067   {%
3068     \cglformat{#2}{#3}%
3069     \glsunset{#2}%
3070   }%
3071   {%
3072     \gls@{#1}{#2}[#3]%
3073   }%
3074 }%
```

\@@cglsp{...}

```
3075 \def\@@cglsp[#1#2[#3]{%
3076   \glsxtrifcounttrigger{#2}%
3077   {%
3078     \cglspformat{#2}{#3}%
3079     \glsunset{#2}%
3080   }%
3081   {%
3082     \glspl@{#1}{#2}[#3]%
3083   }%
3084 }%
```

\@@cGls{...}

```
3085 \def\@@cGls[#1#2[#3]{%
3086   \glsxtrifcounttrigger{#2}%
3087   {%
3088     \cGlsformat{#2}{#3}%
3089     \glsunset{#2}%
3090   }%
3091   {%
3092     \Gls@{#1}{#2}[#3]%
3093   }%
3094 }%
```

\@@cGlspl{...}

```
3095 \def\@@cGlspl[#1#2[#3]{%
3096   \glsxtrifcounttrigger{#2}%
3097   {%
3098     \cGlsplformat{#2}{#3}%
3099     \glsunset{#2}%
3100   }%
3101   {%
3102     \Glspl@{#1}{#2}[#3]%
3103   }%
3104 }%
```

```

\@@cGLS@
3105 \def\@@cGLS@#1#2[#3]{%
3106   \glsxtrifcounttrigger{#2}%
3107   {%
3108     \cGLSformat{#2}{#3}%
3109     \glsunset{#2}%
3110   }%
3111   {%
3112     \cGLS@{#1}{#2}[#3]%
3113   }%
3114 }%


\@@cGLSpl@
3115 \def\@@cGLSpl@#1#2[#3]{%
3116   \glsxtrifcounttrigger{#2}%
3117   {%
3118     \cGLSplformat{#2}{#3}%
3119     \glsunset{#2}%
3120   }%
3121   {%
3122     \cGLSpl@{#1}{#2}[#3]%
3123   }%
3124 }%


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

\@cgl s@
3125 \def\@cgl s@#1#2[#3]{\@gl s@{#1}{#2}[#3]}

\@cGl s@
3126 \def\@cGl s@#1#2[#3]{\@Gl s@{#1}{#2}[#3]}

\@cgl spl@
3127 \def\@cgl spl@#1#2[#3]{\@gl spl@{#1}{#2}[#3]}

\@cGl spl@
3128 \def\@cGl spl@#1#2[#3]{\@Gl spl@{#1}{#2}[#3]}

Add all upper case versions not provided by glossaries.

\cGLS
3129 \newrobustcmd*\cGLS{\@gl s@hyp@opt\@cGLS}

\@cGLS Defined the un-starred form. Need to determine if there is a final optional argument
3130 \newcommand*\@cGLS[2][]{%
3131   \new@ifnextchar[\{\@cGLS@{#1}{#2}\}{\@cGLS@{#1}{#2}[]}]%
3132 }

```

```

\@cGLS@

3133 \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.
3134 \newcommand*{\cGLSformat}[2]{%
3135   \expandafter\mfirstuc\expandafter{\cGLSformat{#1}{#2}}%
3136 }

\cGLSp1
3137 \newrobustcmd*{\cGLSp1}{\gls@hyp@opt\cGLSp1}

\@cGLSp1 Defined the un-starred form. Need to determine if there is a final optional argument
3138 \newcommand*{\@cGLSp1}[2][]{%
3139   \new@ifnextchar[{\@cGLSp1@{#1}{#2}}{\@cGLSp1@{#1}{#2}[]}}%
3140 }

\@cGLSp1@
3141 \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.
3142 \newcommand*{\cGLSp1format}[2]{%
3143   \expandafter\mfirstuc\expandafter{\cGLSp1format{#1}{#2}}%
3144 }

Modify the trigger formats to check for the regular attribute.

\cglformat
3145 \renewcommand*{\cglformat}[2]{%
3146   \glsifregular{#1}%
3147   {\glsentryfirst{#1}}%
3148   {\ifglshaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
3149 }

\cGlsformat
3150 \renewcommand*{\cGlsformat}[2]{%
3151   \glsifregular{#1}%
3152   {\Glsentryfirst{#1}}%
3153   {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
3154 }

\cglsp1format
3155 \renewcommand*{\cglsp1format}[2]{%
3156   \glsifregular{#1}%
3157   {\glsentryfirstplural{#1}}%
3158   {\ifglshaslong{#1}{\glsentrylongpl{#1}}{\glsentryfirstplural{#1}}}#2%
3159 }

```

```

\cGlsplformat
3160 \renewcommand*\cGlsplformat}[2]{%
3161   \glsifregular{#1}%
3162   {\Glsentryfirstplural{#1}}%
3163   {\ifglshaslong{#1}{\Glsentrylongpl{#1}}{\Glsentryfirstplural{#1}}}#2%
3164 }

```

New code similar to above for unit counting.

```

defunitcounters
3165 \newcommand*\@newglossaryentry@defunitcounters}{%
3166   \edef@\glo@countunit{\csuse{@glsxtr@categoryattr@@\glo@category @unitcount}}%
3167   \ifdefvoid@\glo@countunit
3168   {}%
3169   {}%
3170   \@glsxtr@ifunitcounter{\glo@countunit}%
3171   {}%
3172   {\expandafter\glsxtr@addunitcounter\expandafter{\glo@countunit}}%
3173 }%
3174 }


```

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

```

3175 \newcommand*\@glsxtr@unitcountlist}{}


```

```

@addunitcounter
3176 \newcommand*\@glsxtr@addunitcounter}[1]{%
3177   \listadd{\@glsxtr@unitcountlist}{#1}%
3178   \ifcsundef{glsxtr@theunit@#1}
3179   {}%
3180   \ifcsdef{theH#1}%
3181   {\csdef{glsxtr@theunit@#1}{\csuse{theH#1}}}%
3182   {\csdef{glsxtr@theunit@#1}{\csuse{the#1}}}%
3183 }%
3184 {}%
3185 }


```

```

r@ifunitcounter
3186 \newcommand*\@glsxtr@ifunitcounter}[3]{%
3187   \xifinlist{#1}{\@glsxtr@unitcountlist}{#2}{#3}}%
3188 }


```

```

urrentunitcount
3189 \newcommand*\@glsxtr@currentunitcount[1]{%
3190   glo@\glsdetoklabel{#1}@currunit@\glsgetattribute{#1}{unitcount}.%
3191   \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3192 }


```

```

eviousunitcount
3193 \newcommand*{\glsxtr@previousunitcount}[1]{%
3194   glo@\glsdetoklabel{#1}@prevunit@\glsgetattribute{#1}{unitcount}.%
3195   \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3196 }

t@currunitcount
3197 \newcommand*{\@gls@increment@currunitcount}[1]{%
3198   \glshasattribute{#1}{unitcount}%
3199   {%
3200     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{#1}}%
3201     \ifcsundef{\@glsxtr@csname}%
3202     {%
3203       \csgdef{\@glsxtr@csname}{1}%
3204       \listcsxadd
3205         {glo@\glsdetoklabel{#1}@unitlist}%
3206         {\glsgetattribute{#1}{unitcount}.%
3207           \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%}
3208     }%
3209   }%
3210   {%
3211     \csxdef{\@glsxtr@csname}%
3212       {\number\numexpr\csname\@glsxtr@csname\endcsname+1}%
3213   }%
3214 }%
3215 {}%
3216 }

t@currunitcount
3217 \newcommand*{\@gls@local@increment@currunitcount}[1]{%
3218   \glshasattribute{#1}{unitcount}%
3219   {%
3220     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{#1}}%
3221     \ifcsundef{\@glsxtr@csname}%
3222     {%
3223       \csdef{\@glsxtr@csname}{1}%
3224       \listcseadd
3225         {glo@\glsdetoklabel{#1}@unitlist}%
3226         {\glsgetattribute{#1}{unitcount}.%
3227           \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%}
3228     }%
3229   }%
3230   {%
3231     \csedef{\@glsxtr@csname}%
3232       {\number\numexpr\csname\@glsxtr@csname\endcsname+1}%
3233   }%
3234 }%
3235 {}%
3236 }

```

```

r@currunitcount
3237 \newcommand*{\@glsxtr@currunitcount}[2]{%
3238   \ifcsundef
3239   {glo@\glsdetoklabel{#1}@currunit@#2}%
3240   {0}%
3241   {\csuse{glo@\glsdetoklabel{#1}@currunit@#2}}%
3242 }%

r@prevunitcount
3243 \newcommand*{\@glsxtr@prevunitcount}[2]{%
3244   \ifcsundef
3245   {glo@\glsdetoklabel{#1}@prevunit@#2}%
3246   {0}%
3247   {\csuse{glo@\glsdetoklabel{#1}@prevunit@#2}}%
3248 }%

eentryunitcount
3249 \newcommand*{\glsenableentryunitcount}{%
  Enable new fields:
  3250   \appto\@newglossaryentry@defcounters{\@newglossaryentry@defunitcounters}%
  Just in case the user has switched on the docdef option.
  3251   \renewcommand*{\gls@defdocnewglossaryentry}{%
  3252     \renewcommand*\newglossaryentry[2]{%
  3253       \PackageError{glossaries}{\string\newglossaryentry\space
  3254         may only be used in the preamble when entry counting has
  3255         been activated}{If you use \string\glsenableentryunitcount\space
  3256         you must place all entry definitions in the preamble not in
  3257         the document environment}%
  3258     }%
  3259   }%
  New commands to access new fields:
  3260   \newcommand*{\glsentrycurrcount}[1]{%
  3261     \@glsxtr@currunitcount{##1}{\glsgetattribute{##1}{unitcount}.}%
  3262     \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
  3263   }%
  3264   \newcommand*{\glsentryprevcount}[1]{%
  3265     \@glsxtr@prevunitcount{##1}{\glsgetattribute{##1}{unitcount}.}%
  3266     \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
  3267   }%
  Access total count:
  3268   \newcommand*{\glsentryprevtotalcount}[1]{%
  3269     \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
  3270     {0}%
  3271     {%
  3272       \number\csuse{glo@\glsdetoklabel{##1}@prevunittotal}%
  3273     }%
  3274   }%

```

Access max value:

```
3275 \newcommand*{\glsentryprevmaxcount}[1]{%
3276   \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
3277   {0}%
3278   {%
3279     \number\csuse{glo@\glsdetoklabel{##1}@prevunitmax}%
3280   }%
3281 }%
```

Adjust post unset and reset:

```
3282 \let\@glsxtr@entryunitcount@org@unset\glsxtrpostunset
3283 \renewcommand*{\glsxtrpostunset}[1]{%
3284   \@glsxtr@entryunitcount@org@unset{##1}%
3285   \@gls@increment@currunitcount{##1}%
3286 }%
3287 \let\@glsxtr@entryunitcount@org@localunset\glsxtrpostlocalunset
3288 \renewcommand*{\glsxtrpostlocalunset}[1]{%
3289   \@glsxtr@entryunitcount@org@localunset{##1}%
3290   \@gls@local@increment@currunitcount{##1}%
3291 }%
3292 \let\@glsxtr@entryunitcount@org@reset\glsxtrpostreset
3293 \renewcommand*{\glsxtrpostreset}[1]{%
3294   \glshasattribute{##1}{unitcount}%
3295   {%
3296     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
3297     \ifcsundef{\@glsxtr@csname}%
3298     {}%
3299     {\csgdef{\@glsxtr@csname}{0}}%
3300   }%
3301   {}%
3302 }%
3303 \let\@glsxtr@entryunitcount@org@localreset\glsxtrpostlocalreset
3304 \renewcommand*{\glsxtrpostlocalreset}[1]{%
3305   \@glsxtr@entryunitcount@org@localreset{##1}%
3306   \@gls@increment@currunitcount{##1}%
3307   {%
3308     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
3309     \ifcsundef{\@glsxtr@csname}%
3310     {}%
3311     {\csgdef{\@glsxtr@csname}{0}}%
3312   }%
3313   {}%
3314 }%
```

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

```
3315 \let\@cgls@\@@cgls@
3316 \let\@cglspl@\@@cglspl@
3317 \let\@cGls@\@@cGls@
```

```

3318 \let\@cGlsp1@\@@cGlsp1@
3319 \let\@cGLS@\@@cGLS@
3320 \let\@cGLSp1@\@@cGLSp1@

    Write information to the aux file.

3321 \AtEndDocument{\gls@write@entryunitcounts}%
3322 \renewcommand*{\gls@entry@unitcount}[3]{%
3323   \csgdef{glo@\glsdetoklabel{##1}@prevunit@##3}{##2}%
3324   \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
3325     {\csgdef{glo@\glsdetoklabel{##1}@prevunittotal}{##2}}%
3326   {%
3327     \csxdef{glo@\glsdetoklabel{##1}@prevunittotal}{%
3328       \number\numexpr\csuse{glo@\glsdetoklabel{##1}@prevunittotal}+##2}%
3329   }%
3330   \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
3331     {\csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}}%
3332   {%
3333     \ifnum\csuse{glo@\glsdetoklabel{##1}@prevunitmax}<##2
3334       \csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}%
3335     \fi
3336   }%
3337 }%
3338 \let\glsenableentryunitcount\relax
3339 \renewcommand*{\glsenableentrycount}{%
3340   \PackageError{glossaries-extra}{\string\glsenableentrycount\space
3341     can't be used with \string\glsenableentryunitcount}%
3342   {Use one or other but not both commands}%
3343 }%
3344 }
3345 \onlypreamble\glsenableentryunitcount

```

entry@unitcount

```
3346 \newcommand*{\gls@entry@unitcount}[3]{}
```

ryunitcounts@do

```

3347 \newcommand*{\gls@write@entryunitcounts@do}[1]{%
3348   \immediate\write\auxout
3349   {\string\gls@entry@unitcount
3350     {\@glsentry}\%
3351     {\@glsxtr@currunitcount{\@glsentry}{#1}}%
3352   }%
3353   {#1}}%
3354 }
```

entryunitcounts

```

3355 \newcommand*{\gls@write@entryunitcounts}{%
3356   \immediate\write\auxout
3357   {\string\providecommand*{\string\gls@entry@unitcount}[3]{}{}}%
3358   \count@=0\relax

```

```

3359 \forallglsentries{@glsentry}{%
3360   \glshasattribute{@glsentry}{unitcount}{%
3361     {%
3362       \ifglsused{@glsentry}{%
3363         {%
3364           \forlistcsloop{%
3365             {\@gls@write@entryunitcounts@do}{%
3366               \glo@\glsdetoklabel{@glsentry}{unitlist}{%
3367             }{%
3368             {}{%
3369               \advance\count@ by \one
3370             }{%
3371             {}{%
3372             }{%
3373             \ifnum\count@=0
3374               \GlossariesExtraWarning{Entry counting has been enabled
3375                 \MessageBreak with \string\glsenableentryunitcount\space but the
3376                 \MessageBreak attribute ‘unitcount’ hasn’t
3377                 \MessageBreak been assigned to any of the defined
3378                 \MessageBreak entries}{%
3379             \fi
3380           }

```

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.

```
3381 \newcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
```

Enable entry counting:

```
3382 \glsenableentryunitcount
```

Redefine \gls etc:

```

3383 \renewcommand*{\gls}{\cgls}{%
3384 \renewcommand*{\Gls}{\cGls}{%
3385 \renewcommand*{\glspl}{\cglspl}{%
3386 \renewcommand*{\Glspl}{\cGlspl}{%
3387 \renewcommand*{\GLS}{\cGLS}{%
3388 \renewcommand*{\GLSpl}{\cGLSpl}{%

```

Set the entrycount attribute:

```
3389 \@glsxtr@setentryunitcountunsetattr{#1}{#2}{#3}{}
```

In case this command is used again:

```

3390 \let\GlsXtrEnableEntryUnitCounting\glsxtr@setentryunitcountunsetattr
3391 \renewcommand*{\GlsXtrEnableEntryCounting}[2]{%
3392   \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryCounting\space
3393     can’t be used with \string\GlsXtrEnableEntryUnitCounting}{%
3394     {Use one or other but not both commands}}{%
3395   }

```

tcountunsetattr

```

3396 \newcommand*{\@glsxtr@setentryunitcountunsetattr}[3]{%
3397   \c@for\@glsxtr@cat:=#1\do
3398   {%
3399     \ifdefempty{\@glsxtr@cat}{}
3400     {%
3401       \glssetcategoryattribute{\@glsxtr@cat}{entrycount}{#2}%
3402       \glssetcategoryattribute{\@glsxtr@cat}{unitcount}{#3}%
3403     }%
3404   }%
3405 }

```

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`

```

3406 \renewcommand*{\SetGenericNewAcronym}{%
3407   \let\@Gls@entryname\@Gls@acrentryname
3408   \renewcommand{\newacronym}[4][]{%
3409     \ifdefempty{\@glsacronymlists}{%
3410     {%
3411       \def\@glo@type{\acronymtype}%
3412       \setkeys{glossentry}{##1}%
3413       \DeclareAcronymList{\@glo@type}%
3414     }%
3415     {}%
3416     \glskeylisttok{##1}%
3417     \glslabeltok{##2}%
3418     \glsshorttok{##3}%
3419     \glslongtok{##4}%
3420     \newacronymhook
3421     \protected@edef\@do@newglossaryentry{%
3422       \noexpand\newglossaryentry{\the\glslabeltok}%
3423     {%
3424       type=\acronymtype,%
3425       name={\expandonce{\acronymentry{##2}}},%
3426       sort={\acronymsort{\the\glsshorttok}{\the\glslongtok}},%
3427       text={\the\glsshorttok},%
3428       short={\the\glsshorttok},%
3429       shortplural={\the\glsshorttok\noexpand\acrpluralsuffix},%
3430       long={\the\glslongtok},%
3431       longplural={\the\glslongtok\noexpand\acrpluralsuffix},%
3432       category=acronym,

```

```

3433     \GenericAcronymFields,%
3434     \the\glskeylisttok
3435   }%
3436   }%
3437   \cdo@newglossaryentry
3438 }%
3439 \renewcommand*{\acrfullfmt}[3]{%
3440   \glslink[##1]{##2}{\genacrfullformat{##2}{##3}}}%
3441 \renewcommand*{\Acrfullfmt}[3]{%
3442   \glslink[##1]{##2}{\Genacrfullformat{##2}{##3}}}%
3443 \renewcommand*{\ACRfullfmt}[3]{%
3444   \glslink[##1]{##2}{%
3445     \mfirstucMakeUppercase{\genacrfullformat{##2}{##3}}}}%
3446 \renewcommand*{\acrfullplfmt}[3]{%
3447   \glslink[##1]{##2}{\genplacrfullformat{##2}{##3}}}}%
3448 \renewcommand*{\Acrfullplfmt}[3]{%
3449   \glslink[##1]{##2}{\Genplacrfullformat{##2}{##3}}}}%
3450 \renewcommand*{\ACRfullplfmt}[3]{%
3451   \glslink[##1]{##2}{%
3452     \mfirstucMakeUppercase{\genplacrfullformat{##2}{##3}}}}}}%
3453 \renewcommand*{\glsentryfull}[1]{\genacrfullformat{##1}{}}}}%
3454 \renewcommand*{\Glsentryfull}[1]{\Genacrfullformat{##1}{}}}}%
3455 \renewcommand*{\glsentryfullpl}[1]{\genplacrfullformat{##1}{}}}}%
3456 \renewcommand*{\Glsentryfullpl}[1]{\Genplacrfullformat{##1}{}}}}%
3457 }%

```

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:

```

3458 \let\@glsxtr@org@setacronymstyle\setacronymstyle
3459 \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`.

```

3460 \newcommand*{\MakeAcronymsAbbreviations}{%
3461   \renewcommand*{\newacronym}[4][]{%
3462     \glsxtr@newabbreviation{type=\acronymtype,category=acronym,##1}{##2}{##3}{##4}}%
3463   }%
3464   \renewcommand*{\firstacronymfont}[1]{\glsfirstabbrvfont{##1}}}}%
3465   \renewcommand*{\acronymfont}[1]{\glsabbrvfont{##1}}}}%
3466   \renewcommand*{\setacronymstyle}[1]{%
3467     \PackageError{glossaries-extra}{\string\setacronymstyle{##1}%
3468       unavailable.%
3469       Use \string\setabbreviationstyle\space instead.%
3470       The original acronym interface can be restored with%
3471       \string\RestoreAcronyms}{}}}}%
3472   }%
3473   \renewcommand*{\newacronymstyle}[1]{%

```

```

3474     \GlossariesExtraWarning{New acronym style ‘##1’ won’t be
3475     available unless you restore the original acronym interface with
3476     \string\RestoreAcronyms}%
3477     \@glsxtr@org@newacronymstyle{##1}%
3478   }%
3479 }

```

Switch acronyms to abbreviations:

```
3480 \MakeAcronymsAbbreviations
```

`RestoreAcronyms` Restore acronyms to glossaries interface.

```

3481 \newcommand*{\RestoreAcronyms}{%
3482   \SetGenericNewAcronym
3483   \renewcommand{\firstacronymfont}[1]{\acronymfont{##1}}%
3484   \renewcommand{\acronymfont}[1]{##1}%
3485   \let\setacronymstyle\@glsxtr@org@setacronymstyle
3486   \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.

```

3487 \renewcommand*{\gls@link@checkfirsthyper}{%
3488   \ifglsused{\glslabel}%
3489   { \let\glsxtrifwasfirstuse\@secondoftwo}
3490   { \let\glsxtrifwasfirstuse\@firstoftwo}%
3491   \glsxtr@org@checkfirsthyper
3492 }
3493 \glssetcategoryattribute{acronym}{regular}{false}%
3494 \setacronymstyle{long-short}%
3495 }

```

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

```

3496 \renewcommand*{\glsacspace}[1]{%
3497   \settowidth{\dimen@}{(\firstacronymfont{\glsentryshort{#1}})}%
3498   \ifdim\dimen@<\glsacspacemax\else\space\fi
3499 }

```

`\glsacspacemax` Value used in the above.

```
3500 \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

```
3501 \newcommand*{\@glsxtr@reg@glosslist}{}%
```

Save the original definition of \makeglossaries:

```
3502 \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
```

```
3503 \renewcommand*\makeglossaries[1] []{%
3504   \ifx\@glsxtr@record@setting\@glsxtr@record@setting@only
3505     \PackageError{glossaries-extra}{\string\makeglossaries\space
3506       not permitted\MessageBreak with record=only package option}%
3507     {You may only use \string\makeglossaries\space with
3508       record=off or record=alsoindex options}%
3509   \else
3510     \ifblank{#1}%
3511       {\@glsxtr@org@makeglossaries}%
3512     {%
3513       \ifx\@glsxtr@record@setting\@glsxtr@record@setting@alsoindex
3514         \PackageError{glossaries-extra}{\string\makeglossaries[#1]\space
3515           not permitted\MessageBreak with record=alsoindex package option}%
3516         {You may only use the hybrid \string\makeglossaries[...]\space with
3517           record=off option}%
3518       \else
3519         \edef\@glsxtr@reg@glosslist{#1}%
3520         \ifundef{\glswrite}{\newwrite\glswrite}{}%
3521         \protected@write\@auxout{}{\string\providecommand
3522           \string@\glsorder[1]{}}
3523         \protected@write\@auxout{}{\string\providecommand
3524           \string@\istfilename[1]{}}
3525         \protected@write\@auxout{}{\string\@istfilename{\istfilename}}%
3526         \protected@write\@auxout{}{\string\glsorder{\glsorder}}
3527         \protected@write\@auxout{}{\string\glsxtr@makeglossaries{#1}}
3528         \write\@auxout{\string\providecommand\string@\gls@reference[3]{}}
3529     }%
```

Iterate through each supplied glossary type and activate it.

```
3529   \@for\@glo@type:=#1\do{%
3530     \ifdefempty{\@glo@type}{}{\@makeglossary{\@glo@type}}%
3531   }%
```

New glossaries must be created before \makeglossaries:

```
3532   \renewcommand*\newglossary[4] []{%
3533     \PackageError{glossaries}{New glossaries
3534       must be created before \string\makeglossaries}{You need
3535       to move \string\makeglossaries\space after all your
3536       \string\newglossary\space commands}}%
```

Any subsequence instances of this command should have no effect

```
3537   \let\@makeglossary\relax
3538   \let\makeglossary\relax
```

```

3539      \renewcommand{\makeglossaries}[1] [] {}%
Disable all commands that have no effect after \makeglossaries
3540      \@disable@onlypremakeg
Allow see key:
3541      \let\gls@checkseeallowed\relax
Adjust \do@seeglossary. This needs to check for the entries existence.
3542      \renewcommand*{\do@seeglossary}[2] {%
3543          \glsdoifexists{##1}%
3544          {%
3545              \edef@gls@label{\glsdetoklabel{##1}}%
3546              \edef@gls@type{\csname glo@\gls@label @type\endcsname}%
3547              \expandafter\DTLifinlist\expandafter{\gls@type}{\glsxtr@reg@glosslist}%
3548              {\glsxtr@org@doseeglossary{##1}{##2}}%
3549              {%
3550                  \@@glsxtrwrglossmark
3551                  \protected@write\auxout{}{%
3552                      \string@gls@reference
3553                      {\gls@type}{\gls@label}{\string\glsseeformat##2{}}%
3554                  }%
3555              }%
3556          }%
3557      }%

```

Adjust \do@wrglossary

```

3558      \let\glsxtr@do@wrglossary\do@wrglossary
3559      \def\do@wrglossary{%
3560          \edef@gls@type{\csname glo@\gls@label @type\endcsname}%
3561          \expandafter\DTLifinlist\expandafter{\gls@type}{\glsxtr@reg@glosslist}%
3562          {\glsxtr@do@wrglossary}%
3563          {\gls@noidxglossary}%
3564      }%

```

Suppress warning about no \makeglossaries

```

3565      \let\warn@nomakeglossaries\relax
3566      \def\warn@noprintglossary{%
3567          \GlossariesWarningNoLine{No \string\printglossary\space
3568          or \string\printglossaries\space
3569          found.^^J(Remove \string\makeglossaries\space if you don't want
3570          any glossaries.)^^JThis document will not have a glossary}%
3571      }%

```

Only warn for glossaries not listed.

```

3572      \renewcommand{\gls@noref@warn}[1] {%
3573          \edef@gls@type{##1}%
3574          \expandafter\DTLifinlist\expandafter{\gls@type}{\glsxtr@reg@glosslist}%
3575          {%
3576              \GlossariesExtraWarning{Can't use
3577                  \string\printnoidxglossary[type={\gls@type}]
3578                  when '\gls@type' is listed in the optional argument of

```

```

3579         \string\makeglossaries}%
3580     }%
3581     {%
3582         \GlossariesWarning{Empty glossary for
3583         \string\printnoidxglossary[type={##1}] .}
3584         Rerun may be required (or you may have forgotten to use
3585         commands like \string\gls)}%
3586     }%
3587 }

```

Adjust display number list to check for type:

```

3588     \renewcommand*\{\glsdisplaynumberlist}[1]{%
3589         \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3590         {\@glsxtr@idx@displaynumberlist{##1}}%
3591         {\@glsxtr@noidx@displaynumberlist{##1}}%
3592     }%

```

Adjust entry list:

```

3593     \renewcommand*\{\glsentrynumberlist}[1]{%
3594         \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3595         {\@glsxtr@idx@entrynumberlist{##1}}%
3596         {\@glsxtr@noidx@entrynumberlist{##1}}%
3597     }%

```

Adjust number list loop

```

3598     \renewcommand*\{\glsnumberlistloop}[2]{%
3599         \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3600         {%
3601             \PackageError{glossaries-extra}{\string\glsnumberlistloop\space
3602             not available for glossary '##1'}{}%
3603         }%
3604         {\@glsxtr@noidx@numberlistloop{##1}{##2}}%
3605     }%

```

Only sanitize sort for normal indexing glossaries.

```

3606     \renewcommand*\{\glsprestandardsort}[3]{%
3607         \expandafter\DTLifinlist\expandafter{##2}{\@glsxtr@reg@glosslist}%
3608         {%
3609             \glsdosanitizesort
3610         }%
3611         {%
3612             \ifglssanitizesort
3613                 \gls@noidx@sanitizesort
3614             \else
3615                 \gls@noidx@nosanitizesort
3616             \fi
3617         }%
3618     }%

```

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

```

3619 \renewcommand*\new@glossaryentry[2]{%
3620     \PackageError{glossaries-extra}{Glossary entries must be defined
3621         in the preamble\MessageBreak when you use the optional argument
3622         of \string\makeglossaries}{Either move your definitions to the
3623         preamble or don't use the optional argument of
3624         \string\makeglossaries}%
3625 }%

```

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).

```

3626     \let\@glo@assign@sortkey\@glsxtr@mixed@assign@sortkey
3627     \renewcommand*{\@printgloss@setsort}{%

```

Need to extract just the type value.

```

3628     \expandafter\@glsxtr@gettype\expandafter,\@glsxtr@printglossopts,%
3629         type=\glsdefaulttype,\@end@glsxtr@gettype
3630     \def\@glo@sorttype{\@glo@default@sorttype}%
3631 }%

```

Check automake setting:

```

3632 \ifglsautomake
3633     \renewcommand*{\@gls@doautomake}{%
3634         \@for\@gls@type:=\@glsxtr@reg@glosslist\do{%
3635             \ifdefempty{\@gls@type}{}{\@gls@automake{\@gls@type}}%
3636         }%
3637     }%
3638 \fi

```

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

```

3639 \ifdef\@glo@check@sortallowed{\@glo@check@sortallowed\makeglossaries}{}%
3640     \fi
3641 }%
3642 \fi
3643 }

```

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.)

```

3644 \newcommand{\@glsxtr@orgprintglossary}[2]{%
3645     \def\@glo@type{\glsdefaulttype}%

```

Add check here.

```

3646 \def\glossarytitle{%
3647     \ifcsdef{@glotype}{\@glo@type @title}{%
3648         {\@csuse{@glotype}{\@glo@type @title}}{%
3649             {\glossaryname}}{%
3650             \def\glossarytoctitle{\glossarytitle}%

```

```

3651 \let\org@glossarytitle\glossarytitle
3652 \def\@glossarystyle{%
3653   \ifx\@glossary@default@style\relax
3654     \GlossariesWarning{No default glossary style provided \MessageBreak
3655       for the glossary '\@glo@type'. \MessageBreak
3656       Using deprecated fallback. \MessageBreak
3657       To fix this set the style with \MessageBreak
3658       \string\setglossarystyle\space or use the \MessageBreak
3659       style key=value option}%
3660   \fi
3661 }%
3662 \def\gls@dotocitle{\glssettoctitle{\@glo@type}}%
3663 \let\@org@glossaryentrynumbers\glossaryentrynumbers
3664 \bgroup
3665   \@printgloss@setsort
3666   \setkeys{printgloss}{#1}%
3667   \ifx\glossarytitle\org@glossarytitle
3668   \else
3669     \cslet{@glotype@\@glo@type @title}{\glossarytitle}%
3670   \fi
3671   \let\currentglossary\@glo@type
3672   \let\org@glossaryentrynumbers\glossaryentrynumbers
3673   \let\glsnonextpages\@glsnonextpages
3674   \let\glsnextpages\@glsnextpages

3675   \glsxtractivenopost
3676   \gls@dotocitle
3677   \@glossarystyle
3678   \let\gls@org@glossaryentryfield\glossentry
3679   \let\gls@org@glossarysubentryfield\subglossentry
3680   \renewcommand{\glossentry}[1]{%
3681     \xdef\glscurrententrylabel{\glsdetoklabel{##1}}%
3682     \gls@org@glossaryentryfield{##1}%
3683   }%
3684   \renewcommand{\subglossentry}[2]{%
3685     \xdef\glscurrententrylabel{\glsdetoklabel{##2}}%
3686     \gls@org@glossarysubentryfield{##1}{##2}%
3687   }%
3688   \@gls@preglossaryhook
3689   #2%
3690 \egroup
3691 \global\let\glossaryentrynumbers\@org@glossaryentrynumbers
3692 \global\let\warn@noprintglossary\relax
3693 }

```

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

```

3694 \newcommand*{\glsxtractivenopost}{%
3695   \let\nopostdesc\@nopostdesc
3696   \let\glsxtrnropostpunc\@glsxtr@nopostpunc
3697 }

```

```

lsxtrnopostrpunc
3698 \newrobustcmd*{\glsxtrnopostrpunc}{}}

sxtr@nopostrpunc Provide a command that works like \nopostrdesc but only switches off the punctuation without suppressing the post-description hook.
3699 \newcommand{\@glsxtr@nopostrpunc}{%
3700   \let\@@glsxtr@org@postdescription\glspostdescription
3701   \ifglsnopostrdot
3702     \renewcommand{\glspostdescription}{%
3703       \glsnopostrdottrue
3704       \let\glspostdescription\@@glsxtr@org@postdescription
3705       \glsxtrpostdescription}%
3706   \else
3707     \renewcommand{\glspostdescription}{%
3708       \let\glspostdescription\@@glsxtr@org@postdescription
3709       \glsxtrpostdescription}%
3710   \fi
3711   \glsnopostrdotfalse
3712 }

\@printglossary Redefine.
3713 \renewcommand{\@printglossary}[2]{%
3714   \def\@glsxtr@printglossopts{\#1}%
3715   \glsxtr@orgprintglossary{\#1}{\#2}%
3716 }

Add a key that switches off the entry targets:
3717 \define@choicekey{printgloss}{target}[\val\nr]{true,false}[true]{%
3718   \ifcase\nr
3719     \let\glstarget\glsdohypertarget
3720   \else
3721     \let\glstarget\@secondoftwo
3722   \fi
3723 }

hypernameprefix
3724 \newcommand{\@glsxtrhypernameprefix}{}}

New to v1.20:
3725 \define@key{printgloss}{targetnameprefix}{%
3726   \renewcommand{\@glsxtrhypernameprefix}{\#1}%
3727 }

lsdohypertarget Redefine to insert \@glsxtrhypernameprefix before the target name.
3728 \let\glsxtr@org@glsdohypertarget\glsdohypertarget
3729 \renewcommand{\glsdohypertarget}[2]{%
3730   \glsxtr@org@glsdohypertarget{\@glsxtrhypernameprefix\#1}\#2}%
3731 }

```

```

@makeglossaries For the benefit of makeglossaries
3732 \newcommand*\glsxtr@makeglossaries[1]{}

@glsxtr@gettype Get just the type.
3733 \def\glsxtr@gettype#1,type=#2,#3@end\glsxtr@gettype{%
3734   \def\glo@type{#2}%
3735 }

@assign@sortkey Assign the sort key.
3736 \newcommand\glsxtr@mixed@assign@sortkey[1]{%
3737   \edef\glo@type{\glo@type}%
3738   \expandafter\DTLifinlist\expandafter{\glo@type}{\glsxtr@reg@glosslist}%
3739   {%
3740     \glo@no@assign@sortkey{#1}%
3741   }%
3742   {%
3743     \glo@assign@sortkey{#1}%
3744   }%
3745 }%

Display number list for the regular version:

splaynumberlist
3746 \let\glsxtr@idx@displaynumberlist\glsdisplaynumberlist

Display number list for the “noidx” version:

splaynumberlist
3747 \newcommand*\glsxtr@noidx@displaynumberlist[1]{%
3748   \letcs{\gls@loclist}{\glsdetoklabel{#1}@loclist}%
3749   \ifdef{\gls@loclist}%
3750   {%
3751     \def\gls@noidxloclist@sep{%
3752       \def\gls@noidxloclist@sep{%
3753         \def\gls@noidxloclist@sep{%
3754           \glsnumlistsep
3755         }%
3756         \def\gls@noidxloclist@finalsep{\glsnumlistlastsep}%
3757       }%
3758     }%
3759     \def\gls@noidxloclist@finalsep{}%
3760     \def\gls@noidxloclist@prev{}%
3761     \forlistloop{\glsnoidxdisplaylocisthandler}{\gls@loclist}%
3762     \gls@noidxloclist@finalsep
3763     \gls@noidxloclist@prev
3764   }%
3765   {%
3766     \glsxtrundeftag
3767     \glsdoifexists{#1}%

```

```

3768     {%
3769         \GlossariesWarning{Missing location list for '#1'. Either
3770             a rerun is required or you haven't referenced the entry.}%
3771     }%
3772 }%
3773 }%
3774

```

And for the number list loop:

@numberlistloop

```

3775 \newcommand*{\@glsxtr@noidx@numberlistloop}[3]{%
3776     \let\cs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@loclist}%
3777     \let\org{\glsnoidxdisplayloc\glsnoidxdisplayloc
3778     \let\gls@org@glsseeformat\glsseeformat
3779     \let\glsnoidxdisplayloc\relax
3780     \let\glsseeformat\relax
3781     \ifdef{\gls@loclist}
3782     {%
3783         \forlistloop{\glsnoidxnumberlistloophandler}{\@gls@loclist}%
3784     }%
3785     {%
3786         \glsxtrundeftag
3787         \glsdoifexists{#1}%
3788     }%
3789         \GlossariesWarning{Missing location list for '##1'. Either
3790             a rerun is required or you haven't referenced the entry.}%
3791     }%
3792 }%
3793 \let\glsnoidxdisplayloc\gls@org@glsnoidxdisplayloc
3794 \let\glsseeformat\gls@org@glsseeformat
3795 }%

```

Same for entry number list.

entrynumberlist

```

3796 \newcommand*{\@glsxtr@noidx@entrynumberlist}[1]{%
3797     \let\cs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@loclist}%
3798     \ifdef{\gls@loclist}
3799     {%
3800         \glsnoidxloclist{\@gls@loclist}%
3801     }%
3802     {%
3803         \glsxtrundeftag
3804         \glsdoifexists{#1}%
3805     }%
3806         \GlossariesWarning{Missing location list for '#1'. Either
3807             a rerun is required or you haven't referenced the entry.}%
3808     }%

```

```
3809  }%
3810 }%
```

entrynumberlist

```
3811 \newcommand*{\@glsxtr@idx@entrynumberlist}[1]{\glsentrynumberlist{#1}}
```

x@getgroup title Patch.

```
3812 \renewcommand*{\@gls@noidx@getgroup title}[2]{%
3813   \protected@edef{\glsxtr@titlelabel}{#1}%
3814   \ifdefvoid{\glsxtr@titlelabel}%
3815   {}%
3816   {}%
3817   \protected@edef{\glsxtr@titlelabel}{\csuse{\glsxtr@group title@#1}}%
3818 }%
3819 \ifdefvoid{\glsxtr@titlelabel}%
3820 {}%
3821   \DTLifint{#1}%
3822   {}%
3823   \ifnum#1<256\relax
3824     \edef#2{\char#1\relax}%
3825   \else
3826     \edef#2{#1}%
3827   \fi
3828 }%
3829 {}%
3830   \ifcsgundef{#1group name}%
3831   {\def#2{#1}%
3832   {\letcs{#2}{#1group name}}%
3833 }%
3834 }%
3835 {}%
3836   \let#2\glsxtr@titlelabel
3837 }%
3838 }
```

g@getgroup title Save original definition of \@gls@getgroup title

```
3839 \let\glsxtr@org@getgroup title\gls@getgroup title
```

tr@getgroup 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.

```
3840 \newrobustcmd{\glsxtr@getgroup title}[2]{%
3841   \protected@edef{\glsxtr@titlelabel}{\glsxtr@group title@#1}%
3842   \onelevel@sanitize\glsxtr@titlelabel
3843   \ifcsgdef{\glsxtr@titlelabel}%
3844   {\letcs{#2}{\glsxtr@titlelabel}}%
3845   {\glsxtr@org@getgroup title{#1}{#2}}%
3846 }
3847 \let\@gls@getgroup title\glsxtr@getgroup title
```

```

trsetgrouptitle Sets the title for the given group label.
3848 \newcommand{\glsxtrsetgrouptitle}[2]{%
3849   \protected@edef{\glsxtr@titlelabel}{\glsxtr@grouptitle@#1}%
3850   \onelevel@sanitize{\glsxtr@titlelabel}%
3851   \csxdef{\glsxtr@titlelabel}{#2}%
3852 }

\glsnavigation Redefine to use new user-level command.
3853 \renewcommand*{\glsnavigation}{%
3854   \def{\gls@between}{}%
3855   \ifcsundef{\gls@hypergrouplist@\glo@type}%
3856   {}%
3857   \def{\gls@list}{}%
3858   {}%
3859   {}%
3860   \expandafter\let\expandafter{\gls@list}%
3861   \csname \gls@hypergrouplist@\glo@type\endcsname%
3862 }%
3863 \for{\gls@tmp:=\gls@list}{\do{%
3864   \gls@between
3865   \glsxtrgetgrouptitle{\gls@tmp}{\gls@grptitle}%
3866   \glsnavhyperlink{\gls@tmp}{\gls@grptitle}%
3867   \let{\gls@between}{\glshypernavsep}%
3868 }}%
3869 }

@noidx@glossary
3870 \renewcommand*{\printnoidxglossary}{%
3871   \ifcsdef{\glsref@\glo@type}%
3872   {}%
3873   \ifcsdef{\glo@sortmacro@\glo@sorttype}%
3874   {}%
3875   \csuse{\glo@sortmacro@\glo@sorttype}{\glo@type}%
3876   {}%
3877   {}%
3878   \PackageError{glossaries}{Unknown sort handler '\glo@sorttype'}{}%
3879 }%
3880 \glossarysection[\glossarytoctitle]{\glossarytitle}%
3881 \glossarypreamble

Moved this command definition outside of environment in case of scoping issues (e.g. in
tabular-like styles).
3882 \def{\gls@currentlettergroup}{}%
3883 \begin{theglossary}%
3884 \glossaryheader
3885 \glsresetentrylist
3886 \forlistcsloop{\gls@noidx@do}{\glsref@\glo@type}%
3887 \end{theglossary}%
3888 \glossarypostamble

```

```
3889 }%
3890 {%
```

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

```
3891 \glsxtrifemptyglossary{\@glo@type}%
3892 {}%
3893 {\glossarysection[\glossarytoctitle]{\glossarytitle}}%
3894 \@gls@noref@warn{\@glo@type}%
3895 }%
3896 }
```

`noidxdisplayloc` Patch to check for range formations.

```
3897 \renewcommand*{\glsnoidxdisplayloc}[4]{%
3898   \setentrycounter[#1]{#2}%
3899   \glsxtr@display@loc#3\empty\end@glsxtr@display@loc{#4}%
3900 }
```

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

```
3901 \def\glsxtr@display@loc#1#2\end@glsxtr@display@loc#3{%
3902   \ifx#1(\relax
3903     \glsxtrdisplaystartloc{#2}{#3}%
3904   \else
3905     \ifx#1)\relax
3906       \glsxtrdisplayendloc{#2}{#3}%
3907     \else
3908       \glsxtrdisplaysingleloc{#1#2}{#3}%
3909     \fi
3910   \fi
3911 }
```

`isplaysingleloc` Single location.

```
3912 \newcommand*{\glsxtrdisplaysingleloc}[2]{%
3913   \csuse{#1}{#2}%
3914 }
```

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 `\glsxtrlocrengfmt`.

`displaystartloc` Start of a location range.

```
3915 \newcommand*{\glsxtrdisplaystartloc}[2]{%
3916   \edef\glsxtrlocrengfmt{#1}%
3917   \ifx\glsxtrlocrengfmt\empty
3918     \def\glsxtrlocrengfmt{\glsnumberformat}%
3919   \fi
3920   \expandafter\glsxtrdisplaysingleloc
3921     \expandafter{\glsxtrlocrengfmt}{#2}%
3922 }
```

`trdisplayendloc` End of a location range.

```
3923 \newcommand*{\glsxtrdisplayendloc}[2]{%
3924   \edef\@glsxtr@tmp{\#1}%
3925   \ifdefempty{\@glsxtr@tmp}{\def\@glsxtr@tmp{glsnumberformat}}{}%
3926   \ifx\glsxtrlocrengfmt\@glsxtr@tmp
3927   \else
3928     \GlossariesExtraWarning{Mismatched end location range
3929       (start=\glsxtrlocrengfmt, end=\@glsxtr@tmp)}%
3930   \fi
3931   \expandafter\glsxtrdisplayendlohook\expandafter{\@glsxtr@tmp}{\#2}%
3932   \expandafter\glsxtrdisplaysingleloc
3933   \expandafter{\glsxtrlocrengfmt}{\#2}%
3934   \def\glsxtrlocrengfmt{}%
3935 }
```

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

```
3936 \newcommand*{\glsxtrdisplayendlohook}[2]{}%
```

`sxtrlocrengfmt` Current range format. Empty if not in a range.

```
3937 \newcommand*{\glsxtrlocrengfmt}{}%
```

`ls@removespaces` Redefine to allow adjustments to location hyperlink.

```
3938 \def\@gls@removespaces#1 #2\@nil{%
3939   \toks@=\expandafter{\the\toks@#1}%
3940   \ifx\#2\%
3941     \edef\x{\the\toks@}%
3942     \ifx\x\empty
3943     \else
3944       \glsxtrlocationhyperlink{\glsentrycounter}{\glo@counterprefix}{\the\toks@}%
3945     \fi
3946   \else
3947     \gls@ReturnAfterFi{%
3948       \gls@removespaces#2\@nil
3949     }%
3950   \fi
3951 }
```

`cationhyperlink`

```
3952 \newcommand*{\glsxtrlocationhyperlink}[3]{%
3953   \ifdefvoid\glsxtrspplocationurl
3954   {%
3955     \glsxtrhyperlink{\#1\#2\#3}{\#3}%
3956   }%
3957   {%
3958     \hyperref{\glsxtrspplocationurl}{}{\#1\#2\#3}{\#3}%
3959   }%
3960 }
```

```

supphypernumber
3961 \newcommand{\glsxtrsupsupphypernumber}[1]{%
3962   {%
3963     \glshasattribute{\glscurrententrylabel}{externalallocation}%
3964     {%
3965       \def\glsxtrsupplocationurl{%
3966         \glsgetattribute{\glscurrententrylabel}{externalallocation}}%
3967     }%
3968     {%
3969       \def\glsxtrsupplocationurl{}%
3970     }%
3971     \glshypernumber{#1}%
3972   }%
3973 }

```

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

```

@print@glossary
3974 \renewcommand{\@print@glossary}{%
3975   \makeatletter
3976   \cinput{\jobname.\csname\glototype@\glo@type\in\endcsname}%
3977   \IfFileExists{\jobname.\csname\glototype@\glo@type\in\endcsname}{}{%
3978     {\glsxtrNoGlossaryWarning{\glo@type}}%
3980     \ifglsxindy
3981       \ifcsundef{\xdy@\glo@type\language}{%
3982         {%
3983           \edef\@do@auxoutstuff{%
3984             \noexpand\AtEndDocument{%
3985               \noexpand\immediate\noexpand\write\auxout{%
3986                 \string\providetcommand\string\@xdylanguage[2]{}{}}%
3987               \noexpand\immediate\noexpand\write\auxout{%
3988                 \string\@xdylanguage{\glo@type}\{\xdy@main@language\}}%
3989             }%
3990           }%
3991         }%
3992       {%
3993         \edef\@do@auxoutstuff{%
3994           \noexpand\AtEndDocument{%
3995             \noexpand\immediate\noexpand\write\auxout{%
3996               \string\providetcommand\string\@xdylanguage[2]{}{}}%
3997             \noexpand\immediate\noexpand\write\auxout{%
3998               \string\@xdylanguage{\glo@type}\{\csname\xdy@\glo@type\language\endcsname\}}%
3999             }%
4000           }%
4001         }%
4002       }%
4003     \@do@auxoutstuff

```

```

4004 \edef\@do@auxoutstuff{%
4005   \noexpand\AtEndDocument{%
4006     \noexpand\immediate\noexpand\write\@auxout{%
4007       \string\providetcommand\string@gls@codepage[2]{}{}}%
4008     \noexpand\immediate\noexpand\write\@auxout{%
4009       \string@gls@codepage{\@glo@type}{\gls@codepage}}{}}%
4010   }%
4011 }%
4012 \do@auxoutstuff
4013 \fi
4014 \renewcommand*\@warn@nomakeglossaries{%
4015   \GlossariesWarningNoLine{\string\makeglossaries\space
4016   hasn't been used,^^Jthe glossaries will not be updated}{}}%
4017 }%
4018 }

```

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

`\GlsWarningHead` Header message.

```

4019 \newcommand{\GlsXtrNoGlsWarningHead}[2]{%
4020   This document is incomplete. The external file associated with
4021   the glossary '#1' (which should be called \texttt{\#2})
4022   hasn't been created.%}
4023 }

```

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

```

4024 \newcommand{\GlsXtrNoGlsWarningEmptyStart}{%
4025   This has probably happened because there are no entries defined
4026   in this glossary.%}
4027 }

```

`\GlsWarningEmptyMain` The default “main” glossary is empty.

```

4028 \newcommand{\GlsXtrNoGlsWarningEmptyMain}{%
4029   If you don't want this glossary,
4030   add \texttt{\{nomain\}} to your package option list when you load
4031   \texttt{\{glossaries-extra.sty\}}. For example: %}
4032 }

```

`\GlsWarningEmptyNotMain` A glossary that isn't the default “main” glossary is empty.

```

4033 \newcommand{\GlsXtrNoGlsWarningEmptyNotMain}[1]{%
4034   Did you forget to use \texttt{\{type=\#1\}} when you defined your
4035   entries? If you tried to load entries into this glossary with
4036   \texttt{\{loadglsentries\}} did you remember to use
4037   \texttt{\{[#1]\}} as the optional argument? If you did, check that
4038   the definitions in the file you loaded all had the type set
4039   to \texttt{\{glsdefaulttype\}}.%}
4040 }

```

`\GlsWarningCheckFile` Advisory message to check the file contents.

```
4041 \newcommand{\GlsXtrNoGlsWarningCheckFile}[1]{%
4042   Check the contents of the file \texttt{\#1}. If
4043   it's empty, that means you haven't indexed any of your entries in this
4044   glossary (using commands like \texttt{\string\gls} or
4045   \texttt{\string\glsadd}) so this list can't be generated.
4046   If the file isn't empty, the document build process hasn't been
4047   completed.%
```

```
4048 }
```

WarningAutoMake Message when automake option has been used.

```
4049 \newcommand{\GlsXtrNoGlsWarningAutoMake}[1]{%
4050   You may need to rerun \LaTeX. If you already have, it may be that
4051   \TeX's shell escape doesn't allow you to run
4052   \texttt{\ifglsxindy xindy\else makeindex\fi}. Check the
4053   transcript file \texttt{\jobname.log}. If the shell escape is
4054   disabled, try one of the following:
4055
4056   \begin{itemize}
4057     \item Run the external (Lua) application:
4058
4059       \texttt{\makeglossaries-lite.lua \string"\jobname\string"}
4060
4061     \item Run the external (Perl) application:
4062
4063       \texttt{\makeglossaries \string"\jobname\string"}
4064   \end{itemize}
4065
4066   Then rerun \LaTeX\ on this document.
4067   \GlossariesExtraWarning{Rerun required to build the
4068   glossary '#1' or check \TeX's shell escape allows
4069   you to run \texttt{\ifglsxindy xindy\else makeindex\fi}}%
```

```
4070 }
```

WarningMisMatch Mismatching \makenoidxglossaries.

```
4071 \newcommand{\GlsXtrNoGlsWarningMisMatch}{%
4072   You need to either replace \texttt{\string\makenoidxglossaries}
4073   with \texttt{\string\makeglossaries} or replace
4074   \texttt{\string\printglossary} (or \texttt{\string\printglossaries}) with
4075   \texttt{\string\printnoidxglossary}
4076   (or \texttt{\string\printnoidxglossaries}) and then rebuild
4077   this document.%
```

```
4078 }
```

arningBuildInfo Build advice.

```
4079 \newcommand{\GlsXtrNoGlsWarningBuildInfo}{%
4080   Try one of the following:
4081   \begin{itemize}
4082     \item Add \texttt{automake} to your package option list when you load
```

```

4083     \texttt{\glsopenbrace glossaries-extra\glsclosebrace}. For example:
4084
4085     \texttt{\string\usepackage[automake]\%}
4086         \glsopenbrace glossaries-extra\glsclosebrace}
4087
4088     \item Run the external (Lua) application:
4089
4090     \texttt{\texttt{makeglossaries-lite.lua \string"\jobname\string"}}
4091
4092     \item Run the external (Perl) application:
4093
4094     \texttt{\texttt{makeglossaries \string"\jobname\string"}}
4095 \end{itemize}
4096
4097 Then rerun \LaTeX\ on this document.%
4098 }

```

oGlsWarningTail Final paragraph.

```

4099 \newcommand{\GlsXtrNoGlsWarningTail}{%
4100 This message will be removed once the problem has been fixed.%
4101 }

```

GlsWarningNoOut No out file created. Build advice.

```

4102 \newcommand{\GlsXtrNoGlsWarningNoOut}[1]{%
4103 The file \texttt{\#1} doesn't exist. This most likely means you haven't used
4104 \texttt{\string\makeglossaries} or you have used
4105 \texttt{\string\nofiles}. If this is just a draft version of the
4106 document, you can suppress this message using the
4107 \texttt{\nomissingglostext} package option.%
4108 }

```

glossarywarning

```

4109 \newcommand*{\@glsxtr@defaultnoglossarywarning}[1]{%
4110 \glossarysection[\glossarytoctitle]{\glossarytitle}
4111 \GlsXtrNoGlsWarningHead{\#1}{\jobname.\csname @glotype@\glo@type @in\endcsname}
4112 \par
4113 \glsxtrifemptyglossary{\#1}%
4114 {%
4115 \GlsXtrNoGlsWarningEmptyStart\space
4116 \ifthenelse{\equal{\#1}{main}}{\GlsXtrNoGlsWarningEmptyMain\par
4117 \medskip
4118 \noindent\texttt{\string\usepackage[nomain\ifglsacronym ,acronym\fi]\%}
4119         \glsopenbrace glossaries-extra\glsclosebrace}
4120 \medskip
4121 }%
4122 {\GlsXtrNoGlsWarningEmptyNotMain{\#1}}%
4123 }%
4124 {%
4125 \IfFileExists{\jobname.\csname @glotype@\glo@type @out\endcsname}

```

```

4126  {%
4127    \GlsXtrNoGlsWarningCheckFile
4128      {\jobname.\csname @glo@type @out\endcsname}
4129
4130  \ifglsautomake
4131
4132  \GlsXtrNoGlsWarningAutoMake{#1}
4133
4134  \else
4135
4136  \ifthenelse{\equal{#1}{main}}{%
4137  {%
4138    \GlsXtrNoGlsWarningEmptyMain\par
4139    \medskip
4140    \noindent\textrtt{\string\usepackage[nomain]{%
4141      glossaries-extra\glsclosebrace}}
4142    \medskip
4143  }%
4144  {}%
4145
4146  \ifdefequal{\makeglossaries}{no@makeglossaries}{%
4147  {%
4148    \GlsXtrNoGlsWarningMisMatch
4149  }%
4150  {}%
4151    \GlsXtrNoGlsWarningBuildInfo
4152  }%
4153  \fi
4154 }%
4155 {%
4156   \GlsXtrNoGlsWarningNoOut
4157     {\jobname.\csname @glo@type @out\endcsname}%
4158   }%
4159 }%
4160 \par
4161 \GlsXtrNoGlsWarningTail
4162 }

```

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.

```
4163 \newcommand*{\glsxtrresourcefile}[2][]{%
```

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

```

4164 \disable@keys{glossaries-extra.sty}{record}%
4165 \glsxtr@writefields
4166 \protected@write\@auxout{\glsxtrresourceinit}{\string\glsxtr@resource{#1}{#2}}%
4167 \let\@glsxtr@org@see@noindex\@gls@see@noindex
4168 \let\@gls@see@noindex\relax

```

```

4169 \IfFileExists{#2.glstex}%
4170 {%
    Can't scope \@input so save and restore the category code of @ to allow for internal commands in the location list.
4171 \edef\@bibgls@restoreat{\noexpand\catcode\noexpand`\noexpand\@=\number\catcode`\@}%
4172 \makeatletter
4173 \@input{#2.glstex}%
4174 \@bibgls@restoreat
4175 }%
4176 {%
4177 \GlossariesExtraWarning{No file '#2.glstex'}%
4178 }%
4179 \let\@gls@see@noindex\@glsxtr@org@see@noindex
4180 }
4181 \onlypreamble\glsxtrresourcefile

trresourcecount
4182 \newcount\glsxtrresourcecount

trLoadResources Short cut that uses \glsxtrresourcefile with \jobname as the mandatory argument.
4183 \newcommand*\GlsXtrLoadResources}[1][]{%
4184 \ifnum\glsxtrresourcecount=0\relax
4185   \glsxtrresourcefile[#1]{\jobname}%
4186 \else
4187   \glsxtrresourcefile[#1]{\jobname-\the\glsxtrresourcecount}%
4188 \fi
4189 \advance\glsxtrresourcecount by 1\relax
4190 }

glsxtr@resource
4191 \newcommand*\glsxtr@resource}[2] {}

\glsxtr@fields
4192 \newcommand*\glsxtr@fields}[1] {}

xtr@texencoding
4193 \newcommand*\glsxtr@texencoding}[1] {}

\glsxtr@langtag
4194 \newcommand*\glsxtr@langtag}[1] {}

@pluralsuffixes
4195 \newcommand*\glsxtr@pluralsuffixes}[4] {}

tr@shortcutsval
4196 \newcommand*\glsxtr@shortcutsval}[1] {}

```

```

sxtr@linkprefix
4197 \newcommand*{\glsxtr@linkprefix}[1]{}

xtr@writefields This information only needs to be written once, so disable it after it's been used.
4198 \newcommand*{\glsxtr@writefields}{%
4199   \protected@write\@auxout{}{%
4200     {\string\providecommand*{\string\glsxtr@fields}[1]{}}
4201   \protected@write\@auxout{}{%
4202     {\string\providecommand*{\string\glsxtr@resource}[2]{}}
4203   \protected@write\@auxout{}{%
4204     {\string\providecommand*{\string\glsxtr@pluralsuffixes}[4]{}}
4205   \protected@write\@auxout{}{%
4206     {\string\providecommand*{\string\glsxtr@shortcutsval}[1]{}}
4207   \protected@write\@auxout{}{%
4208     {\string\providecommand*{\string\glsxtr@linkprefix}[1]{}}
4209   \protected@write\@auxout{}{\string\glsxtr@fields{\@gls@keymap}}}
4210 \protected@write\@auxout{}{%
4211   {\string\providecommand*{\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.
4212 \ifdef\CurrentTrackedLanguageTag
4213 {%
4214   \protected@write\@auxout{}{%
4215     \string\glsxtr@langtag{\CurrentTrackedLanguageTag}}
4216 }%
4217 {%
4218 \protected@write\@auxout{}{\string\glsxtr@pluralsuffixes
4219   {\glspluralsuffix}{\abbrvpluralsuffix}{\acrpluralsuffix}}
4220   {\glsxtrabbrvpluralsuffix}}%
4221 \ifdef\inputencodingname
4222 {%
4223   \protected@write\@auxout{}{\string\glsxtr@texencoding{\inputencodingname}}
4224 }%
4225 {%

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.)
4226   \@ifpackageloaded{fontspec}{%
4227     {\protected@write\@auxout{}{\string\glsxtr@texencoding{utf8}}}}
4228   {}}
4229 }%
4230 \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.
4231 \AtBeginDocument

```

```
4232   {\protected@write\@auxout{}{\string\glsxtr@linkprefix{\glolinkprefix}}}}%  
4233 \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.

```
4234 \ifglsautomake  
4235   \IfFileExists{\jobname.aux}{%  
4236     {\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.

```
4237   \ifx\@gls@doautomake\@gls@doautomake@err  
4238     \let\@gls@doautomake\relax  
4239   \fi  
4240 \fi  
4241 }
```

do@automake@err

```
4242 \newcommand*{\@gls@doautomake@err}{%  
4243   \PackageError{glossaries}{You must use  
4244     \string\makeglossaries\space with automake=true}  
4245   {  
4246     Either remove the automake=true setting or  
4247     add \string\makeglossaries\space to your document preamble.%  
4248   }%  
4249 }
```

Allow locations specific to a particular counter to be recorded.

\glsxtr@record

```
4250 \newcommand*{\glsxtr@record}[5]{}
```

r@counterrecord Aux file command.

```
4251 \newcommand*{\glsxtr@counterrecord}[3]{%  
4252   \glsxtrfieldlistgadd{\#1}{record.\#2}{\#3}}%  
4253 }
```

unterrecordhook Hook used by \@glsxtr@dorecord.

```
4254 \newcommand*{\@glsxtr@counterrecordhook}{}%
```

trRecordCounter Activate recording for a particular counter (identified in the argument).

```
4255 \newcommand*{\GlsXtrRecordCounter}[1]{%  
4256   \@@glsxtr@recordcounter{\#1}}%  
4257 }  
4258 \onlypreamble\GlsXtrRecordCounter
```

docounterrecord

```
4259 \newcommand*{\@glsxtr@docounterrecord}[1]{%
```

```

4260 \protected@write\@auxout{}{\string\glsxtr@counterrecord
4261   {\@gls@label}\#1{\csuse{the#1}}}}
4262 }

```

`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.

```

4263 \newcommand*{\glsxtrglossentry}[1]{%
4264   \glsxtrtitleorpdforheading
4265   {\@glsxtrglossentry\#1}%
4266   {\glsentryname\#1}%
4267   {\glsxtrheadname\#1}%
4268 }

```

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

```

4269 \newrobustcmd*{\@glsxtrglossentry}[1]{%
4270   \glsxtrtitleorpdforheading
4271   {%
4272     \glsdoifexists\#1{%
4273       {%
4274         \begingroup
4275           \edef\glscurrententrylabel{\glsdetoklabel\#1}%
4276           \edef\currentglossary{\glsentrytype\{\glscurrententrylabel\}}%
4277           \ifglshasparent\#1{%
4278             {\glssubentryitem\#1}%
4279             {\glsentryitem\#1}%
4280             \glstarget\#1{\glossentryname\#1}%
4281           \endgroup
4282         }%
4283       }%
4284       {\glsentryname\#1}%
4285       {\glsxtrheadname\#1}%
4286     }%

```

`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.

```

4287 \newcommand*{\glsxtrglossentryother}[3]{%
4288   \ifstrempty\#1{%
4289     {%
4290       \ifcsdef{glsxtrhead\#3}{%
4291         {%
4292           \glsxtrtitleorpdforheading

```

```

4293      {\@glsxtrglossentryother{#2}{#3}{#1}}%
4294      {\@gls@entry@field{#2}{#3}}%
4295      {\csuse{glsxtrhead#3}{#2}}%
4296  }%
4297  {%
4298      \glsxtrtitleorpdforheading
4299      {\@glsxtrglossentryother{#2}{#3}{#1}}%
4300      {\@gls@entry@field{#2}{#3}}%
4301      {\@gls@entry@field{\NoCaseChange{#2}}{#3}}%
4302  }%
4303  }%
4304  {%
4305      \glsxtrtitleorpdforheading
4306      {\@glsxtrglossentryother{#2}{#3}{#1}}%
4307      {\@gls@entry@field{#2}{#3}}%
4308      {#1}}%
4309  }%
4310 }

```

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

```

4311 \newrobustcmd*{\@glsxtrglossentryother}[3]{%
4312     \glsxtrtitleorpdforheading
4313     {%
4314         \glsdoifexists{#1}%
4315     {%
4316         \begingroup
4317             \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
4318             \edef\currentglossary{\glsentrytype{\glscurrententrylabel}}%
4319             \ifglshasparent{#1}%
4320                 {\glssubentryitem{#1}}%
4321                 {\glsentryitem{#1}}%
4322                 \glstarget{#1}{\glossentrynameother{#1}{#2}}%
4323         \endgroup
4324     }%
4325 }%
4326 {\@gls@entry@field{#1}{#2}}%
4327 {#3}%
4328 }

```

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

```

4329 \newcommand*{\printunsrtglossary}{%
4330     \@ifstar\s@printunsrtglossary\@printunsrtglossary
4331 }

```

`ntunsrtglossary` Unstarred version.

```

4332 \newcommand*{\@printunsrtglossary}[1][]{%
4333     \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%
4334 }

```

ntunsrtglossary Starred version.

```

4335 \newcommand*{\s@printunsrtglossary}[2] [] {%
4336   \begingroup
4337   #2%
4338   \@printglossary{type=\glsdefaulttype,#1}{\@print@unsrt@glossary}%
4339   \endgroup
4340 }

```

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

```

4341 \newcommand*{\printunsrtglossaries}{%
4342   \forallglossaries{\@glo@type}{\printunsrtglossary[type=\@glo@type]}%
4343 }

```

@unsrt@glossary

```

4344 \newcommand*{\@print@unsrt@glossary}{%
4345   \glossarysection[\glossarytoctitle]{\glossarytitle}%
4346   \glossarypreamble
      check for empty list
4347   \glsxtrifemptyglossary{\@glo@type}%
4348   {%
4349     \GlossariesExtraWarning{No entries defined in glossary '\@glo@type'}%
4350   }%
4351   {%
4352     \key@ifundefined{glossentry}{group}%
4353     {\let\@gls@getgroupname\@gls@noidx@getgroupname}%
4354     {\let\@gls@getgroupname\@glsxtr@unsrt@getgroupname}%
4355     \def\@gls@currentlettergroup{}%

```

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

```

4356   \def\@glsxtr@doglossary{%
4357     \begin{theglossary}%
4358       \glossaryheader
4359       \glsresetentrylist
4360     }%
4361     \expandafter\@for\expandafter\glscurrententrylabel\expandafter
4362       :\expandafter=\csname glolist@\@glo@type\endcsname\do{%
4363         \ifdef\glscurrententrylabel{%
4364           {}%
4365         }%

```

Provide a hook (for example to measure width).

```

4366   \let\glsxtr@process@firstofone
4367   \let\printunsrtglossaryskipentry
4368     \glsxtr@printunsrtglossaryskipentry
4369     \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%

```

Don't check group for child entries.

```
4370      \glsxstr@process
4371      {%
4372          \ifglshasparent{\glscurrententrylabel}{}%
4373          {%
4374              \glsxstr@checkgroup\glscurrententrylabel
4375              \expandafter\appto\expandafter\@glsxstr@doglossary\expandafter
4376              {\@glsxstr@groupheading}%
4377          }%
4378          \eappto\@glsxstr@doglossary{%
4379              \noexpand\@printunsrt@glossary@handler{\glscurrententrylabel}}%
4380          }%
4381      }%
4382  }%
4383  \appto\@glsxstr@doglossary{\end{theglossary}}%
4384  \printunsrtglossarypredoglossary
4385  \@glsxstr@doglossary
4386  }%
4387  \glossarypostamble
4388 }
```

ntryprocesshook

```
4389 \newcommand*{\printunsrtglossaryentryprocesshook}[1]{}
```

ntryprocesshook

```
4390 \newcommand*{\printunsrtglossaryskipentry}{%
4391   \PackageError{glossaries-extra}{\string\printunsrtglossaryskipentry\space
4392 can only be used within \string\printunsrtglossaryentryprocesshook}{}%
4393 }
```

ntryprocesshook

```
4394 \newcommand*{\@glsxstr@printunsrtglossaryskipentry}{%
4395   \let\glsxstr@process\@gobble
4396 }
```

rypredoglossary

```
4397 \newcommand*{\printunsrtglossarypredoglossary}{}
```

lossary@handler

```
4398 \newcommand{\@printunsrt@glossary@handler}[1]{%
4399   \xdef\glscurrententrylabel{\#1}%
4400   \printunsrtglossaryhandler\glscurrententrylabel
4401 }
```

glossaryhandler

```
4402 \newcommand{\printunsrtglossaryhandler}[1]{%
4403   \glsxtrunsrtdo{\#1}%
4404 }
```

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.

```
4405 \newrobustcmd*{\glsxtriflabelinlist}[4]{%
4406   \protected@edef\glsxtridoiflabelinlist{\noexpand\gls@ifinlist{#1}{#2}}%
4407   \glsxtridoiflabelinlist{#3}{#4}%
4408 }
```

srtglossaryunit

```
4409 \newcommand{\print@op@unsrtglossaryunit}[2][]{%
4410   \s@printunsrtglossary[type=\glsdefaulttype,#1]{%
4411     \printunsrtglossaryunitsetup[#2]%
4412   }%
4413 }
```

glossaryunitsetup

```
4414 \newcommand*{\printunsrtglossaryunitsetup}[1]{%
4415   \renewcommand{\printunsrtglossaryhandler}[1]{%
4416     \glsxtrfieldxifinlist{##1}{record.#1}{\csuse{the#1}}%
4417     {\glsxtrunsrtdo{##1}}%
4418   }%
4419 }
```

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

```
4420 \ifcsundef{theH#1}%
4421 {%
4422   \renewcommand*{\glsxtrhypernameprefix}{record.#1.\csuse{the#1}. \gobble}%
4423 }%
4424 {%
4425   \renewcommand*{\glsxtrhypernameprefix}{record.#1.\csuse{theH#1}. \gobble}%
4426 }%
4427 \renewcommand*{\glossarysection}[2][]{%
4428   \appto\glossarypostamble{\glspar\medskip\glspar}%
4429 }
```

srtglossaryunit

```
4430 \newcommand{\print@noop@unsrtglossaryunit}[2][]{%
4431   \PackageError{glossaries-extra}{\string\printunsrtglossaryunit\space
4432     requires the record=only or record=alsoindex package option}{%
4433 }}
```

t@getgroup title

```
4434 \newrobustcmd*{\glsxtr@unsrt@getgroup title}[2]{%
4435   \protected@edef\glsxtr@titlelabel{\glsxtr@group title@#1}%
4436   \onelevel@sanitize\glsxtr@titlelabel
4437   \ifcsdef{\glsxtr@titlelabel}%
4438     {\letcs{#2}{\glsxtr@titlelabel}}%
```

```
4439 {\def#2{#1}}%
4440 }
```

\glsxtrunsrtdo Provide a user-level call to \glsxtr@noidx@do to make it easier to define a new handler.
4441 \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).

```
4442 \newcommand*{\glsxtrgroupfield}[group]
```

The tabular-like glossary styles cause quite a problem with the iterative approach. In particular for the group skip. To compensate for this, the groups are now determined while \glsxtr@doglossary is being constructed rather than in the handler.

sxtr@checkgroup The argument is the entry's label. (This block of code was formerly in \glsxtr@noidx@do.) Now that this is no longer within a tabular environment, the global definitions aren't needed. The result is now stored in \glsxtr@grouphereading, which will be empty if no heading is required.

```
4443 \newcommand*{\glsxtr@checkgroup}[1]{%
4444   \def\glsxtr@grouphereading{}%
4445   \key@ifundefined{glossentry}{group}%
4446   {%
4447     \letcs{\gls@sort}{\glsdetoklabel{#1}@sort}%
4448     \expandafter\glo@grabfirst\gls@sort{}{}\@nil
4449   }%
4450   {%
4451     \protected@edef\glo@thislettergrp{%
4452       \csuse{\glo@glsdetoklabel{#1}@glsxtrgroupfield}%
4453     }%
4454     \ifdefequal{\glo@thislettergrp}{\gls@currentlettergroup}%
4455     {}%
4456     {%
4457       \ifdefempty{\gls@currentlettergroup}%
4458         {\def\glsxtr@grouphereading{\gls@groupskip}%
4459           \appto{\glsxtr@grouphereading}{%
4460             \noexpand\gls@groupheading{\expandonce\glo@thislettergrp}%
4461           }%
4462         }%
4463       \let\gls@currentlettergroup\glo@thislettergrp
4464     }%
4465 }
```

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.

```
4465 \newcommand{\glsxtr@noidx@do}[1]{%
4466   \ifglsentryexists{#1}%
4467   {%
```

```

4468 \global\letcs{\@gls@loclist}{glo@\glsdetoklabel{#1}@loclist}%
4469 \global\letcs{\@gls@location}{glo@\glsdetoklabel{#1}@location}%
4470 \ifglshasparent{#1}%
4471 {%
4472   \gls@level=\csuse{glo@\glsdetoklabel{#1}@level}\relax
4473   \ifdefvoid{\@gls@location}%
4474   {%
4475     \ifdefvoid{\@gls@loclist}%
4476     {%
4477       \subglossentry{\gls@level}{#1}{}%
4478     }%
4479     {%
4480       \subglossentry{\gls@level}{#1}%
4481       {%
4482         \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}%
4483       }%
4484     }%
4485   }%
4486   {%
4487     \subglossentry{\gls@level}{#1}{\glossaryentrynumbers{\@gls@location}}%
4488   }%
4489 }%
4490 {%
4491   \ifdefvoid{\@gls@location}%
4492   {%
4493     \ifdefvoid{\@gls@loclist}%
4494     {%
4495       \glossentry{#1}{}%
4496     }%
4497     {%
4498       \glossentry{#1}%
4499     }%
4500     \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}%
4501   }%
4502 }%
4503 {%
4504   \glossentry{#1}%
4505   {%
4506     \glossaryentrynumbers{\@gls@location}}%
4507   }%
4508 }%
4509 }%
4510 }%
4511 }%
4512 {}%
4513 }

```

1.3.8 Support for bib2gls

Some useful commands for bib2gls users.

```
\glshex  
4514 \newcommand*{\glshex}{\string\u}
```

xtrresourceinit Code used during the protected write operation.

```
4515 \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  
4516 \newcount\@glsxtrnewgls@inner
```

(The default options supplied in *<options>* below could possibly be used to form the inner control sequence name to help make it unique, but it might feasibly contain the value where the value might contain commands.)

```
\@glsxtrnewgls \glsxtrnewgls[<options>]{<prefix>}{<cs>}{<inner cs name>}  
  
4517 \newcommand*{\@glsxtrnewgls}[4]{%  
4518   \ifdef{\#3}{%  
4519     {  
4520       \PackageError{glossaries-extra}{Command \string#3\space already  
4521 defined}{}%  
4522     }%  
4523     {  
4524       \ifcsdef{\#4like\#2}{%  
4525         {  
4526           \advance\@glsxtrnewgls@inner by \cne  
4527           \def\@glsxtrnewgls@innercsname{\#4like\number\@glsxtrnewgls@inner \#2}{%  
4528         }%  
4529         {\def\@glsxtrnewgls@innercsname{\#4like\#2}}%  
4530         \expandafter\newrobustcmd\expandafter*\expandafter  
4531         #3\expandafter{\expandafter\@gls@hyp@opt\csname\@glsxtrnewgls@innercsname\endcsname}%  
4532         \ifstrempty{\#1}{%  
4533           {  
4534             \expandafter\newcommand\expandafter*\csname\@glsxtrnewgls@innercsname\endcsname[2] [] {  
4535               \new@ifnextchar[%  
4536                 {\csname \#4@\endcsname{\##1}{\#2##2}}%  
4537                 {\csname \#4@\endcsname{\##1}{\#2##2}[]}%  
4538               }%  
4539             }%  
4540           }%  
4541         }%  
4542       }%  
4543     }%  
4544   }%  
4545 }
```

```

4540     {%
4541         \expandafter\newcommand\expandafter*\csname\@glsxtrnewgls@innercsname\endcsname[2] [] {%
4542             \new@ifnextchar[%
4543                 {\csname @#4@\endcsname{#1},##1}{#2##2}}%
4544                 {\csname @#4@\endcsname{#1},##1}{#2##2}[] }%
4545         }%
4546     }%
4547 }%
4548 }

```

\glsxtrnewgls \glsxtrnewgls[*options*]{*prefix*}{{*cs*}}

The first argument prepends to the options and the second argument is the prefix.

```

4549 \newrobustcmd*{\glsxtrnewgls}[3] [] {%
4550     \@glsxtrnewgls{#1}{#2}{#3}{gls}%
4551 }

```

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.

```

4552 \newrobustcmd*{\glsxtrnewglslike}[6] [] {%
4553     \@glsxtrnewgls{#1}{#2}{#3}{gls}%
4554     \@glsxtrnewgls{#1}{#2}{#4}{glspl}%
4555     \@glsxtrnewgls{#1}{#2}{#5}{Gls}%
4556     \@glsxtrnewgls{#1}{#2}{#6}{Glspl}%
4557 }

```

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.

```

4558 \newrobustcmd*{\glsxtrnewGLSlike}[4] [] {%
4559     \@glsxtrnewgls{#1}{#2}{#3}{GLS}%
4560     \@glsxtrnewgls{#1}{#2}{#4}{GLSpl}%
4561 }

```

\glsxtrnewrgls As \glsxtrnewgls but for \rgls.

```

4562 \newrobustcmd*{\glsxtrnewrgls}[3] [] {%
4563     \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
4564 }

```

sxtrnewrglslike As \glsxtrnewglslike but for \rgls etc.

```

4565 \newrobustcmd*{\glsxtrnewrglslike}[6] [] {%
4566     \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
4567     \@glsxtrnewgls{#1}{#2}{#4}{rglspl}%
4568     \@glsxtrnewgls{#1}{#2}{#5}{rGls}%
4569     \@glsxtrnewgls{#1}{#2}{#6}{rGlspl}%
4570 }

```

sxtrnewrGLSlike As \glsxtrnewrGLSlike but for \rGLS etc.

```
4571 \newrobustcmd*\{\glsxtrnewrGLSlike\}[4] [] {%
4572   \@glsxtrnewglsls{#1}{#2}{#3}{rGLS}%
4573   \@glsxtrnewglsls{#1}{#2}{#4}{rGLSpl}%
4574 }
```

Provide easy access to record count fields.

totalRecordCount Access total record count. This is designed to be expandable. The argument is the label.

```
4575 \newcommand*\{\GlsXtrTotalRecordCount\}[1] {%
4576   \ifcsdef{glo@\glsdetoklabel{#1}@recordcount}%
4577     {\cscname glo@\glsdetoklabel{#1}@recordcount\endcscname}%
4578   {0}%
4579 }
```

sXtrRecordCount Access record count for a particular counter. The first argument is the label. The second argument is the counter name.

```
4580 \newcommand*\{\GlsXtrRecordCount\}[2] {%
4581   \ifcsdef{glo@\glsdetoklabel{#1}@recordcount.#2}%
4582     {\cscname glo@\glsdetoklabel{#1}@recordcount.#2\endcscname}%
4583   {0}%
4584 }
```

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.

```
4585 \newcommand*\{\GlsXtrLocationRecordCount\}[3] {%
4586   \ifcsdef{glo@\glsdetoklabel{#1}@recordcount.#2.\glsxtrdetoklocation{#3}}%
4587     {\cscname glo@\glsdetoklabel{#1}@recordcount.#2.\glsxtrdetoklocation{#3}\endcscname}%
4588   {0}%
4589 }
```

trdetoklocation

```
4590 \newcommand*\{\glsxtrdetoklocation\}[1]{#1}
```

ablerecordcount

```
4591 \newcommand*\{\glsxtrenablerecordcount\}{%
4592   \renewcommand*\{\gls\}{\rgls}%
4593   \renewcommand*\{\Gls\}{\rGls}%
4594   \renewcommand*\{\glspl\}{\rglsp}%
4595   \renewcommand*\{\Glspl\}{\rGlspl}%
4596   \renewcommand*\{\GLS\}{\rGLS}%
4597   \renewcommand*\{\GLSpl\}{\rGLSp}%
4598 }
```

ordtriggervalue The value used by the record trigger test. The argument is the entry's label.

```
4599 \newcommand*\{\glsxtrrecordtriggervalue\}[1] {%
```

```

4600 \GlsXtrTotalRecordCount{#1}%
4601 }

dCountAttribute
4602 \newcommand*{\GlsXtrSetRecordCountAttribute}[2]{%
4603 \@for\@glsxtr@cat:=#1\do
4604 {%
4605 \ifdefempty{\@glsxtr@cat}{}
4606 {%
4607 \glssetcategoryattribute{\@glsxtr@cat}{recordcount}{#2}%
4608 }%
4609 }%
4610 }

```

rifrecordtrigger \glsxtrifrecordtrigger{\label}{\trigger format}{\normal}

```

4611 \newcommand*{\glsxtrifrecordtrigger}[3]{%
4612 \glshasattribute{#1}{recordcount}%
4613 {%
4614 \ifnum\glsxtrrecordtriggervalue{#1}>\glsgetattribute{#1}{recordcount}\relax
4615 #3%
4616 \else
4617 #2%
4618 \fi
4619 }%
4620 {#3}%
4621 }

```

trigger@record Still need a record to ensure that bib2gls selects the entry.

```

4622 \newcommand*{@glsxtr@rglstrigger@record}[3]{%
4623 \edef\glslabel{\glsdetoklabel{#2}}%
4624 \let\@gls@link@label\glslabel
4625 \def@glsxtr@thevalue{}%
4626 \def@glsxtr@theHvalue{\glsxtr@thevalue}%
4627 \def@glsnumberformat{glstriggerrecordformat}%
4628 \edef@gls@counter{\csname glo@\glslabel @counter\endcsname}%
4629 \edef\glstype{\csname glo@\glslabel @type\endcsname}%
4630 \def@glsxtr@thevalue{}%
4631 \def@glsxtr@theHvalue{\glsxtr@thevalue}%
4632 \glsxtrinitwrgloss
4633 \setkeys{glslink}{#1}%
4634 \glslinkpostsetkeys
4635 \ifdefempty{@glsxtr@thevalue}{%
4636 {%
4637 \gls@saveentrycounter
4638 }%

```

```

4639  {%
4640    \let\theHglsentrycounter\@glsxtr@thevalue
4641    \def\theHglsentrycounter{\@glsxtr@theHvalue}%
4642  }%
4643  \ifglsxtrinitwrglossbefore
4644    \@do@wrglossary{#2}%
4645  \fi
4646  #3%
4647  \ifglsxtrinitwrglossbefore
4648  \else
4649    \@do@wrglossary{#2}%
4650  \fi
4651  \ifKV@glslink@local
4652    \glslocalunset{#2}%
4653  \else
4654    \glsunset{#2}%
4655  \fi
4656 }

```

`gerrecordformat` Typically won't be used as it should be recognised as a special type of ignored location by `bib2gls`.

```
4657 \newcommand*{\glstriggerrecordformat}[1]{}
```

`\rgls`

```
4658 \newrobustcmd*{\rgls}{\gls@hyp@opt\rgls}
```

`\@rgls`

```
4659 \newcommand*{\@rgls}[2][]{%
4660   \new@ifnextchar[\{@rgls@{\#1}{\#2}\}{\@rgls@{\#1}{\#2}[]}}%
4661 }
```

`\@rgls@`

```
4662 \def\@rgls@{\#1\#2[#3]}{%
4663   \glsxtrifrecordtrigger{\#2}%
4664   {%
4665     \glsxtr@rglstrigger@record{\#1}{\#2}{\rglsformat{\#2}{\#3}}%
4666   }%
4667   {%
4668     \gls@{\#1}{\#2}[\#3]%
4669   }%
4670 }
```

`\rglsp`

```
4671 \newrobustcmd*{\rglsp}{\gls@hyp@opt\rglsp}
```

`\@rglsp`

```
4672 \newcommand*{\@rglsp}[2][]{%
4673   \new@ifnextchar[\{@rglsp@{\#1}{\#2}\}{\@rglsp@{\#1}{\#2}[]}}%
4674 }
```

```

\@rglspl@

4675 \def\@rglspl#1#2[#3]{%
4676   \glsxtrifrecordtrigger{#2}%
4677   {%
4678     \glsxtr@rglstrigger@record{#1}{#2}{\rglsplformat{#2}{#3}}%
4679   }%
4680   {%
4681     \glspl@{#1}{#2}{#3}%
4682   }%
4683 }%


\rGls
4684 \newrobustcmd*\rGls{\gls@hyp@opt\rGls}

\@rGls
4685 \newcommand*\@rGls[2][]{%
4686   \new@ifnextchar[\@rGls@{#1}{#2}]{\@rGls@{#1}{#2}[]}{%
4687 }

\@rGls@
4688 \def\@rGls#1#2[#3]{%
4689   \glsxtrifrecordtrigger{#2}%
4690   {%
4691     \glsxtr@rglstrigger@record{#1}{#2}{\rGlsformat{#2}{#3}}%
4692   }%
4693   {%
4694     \Gls@{#1}{#2}{#3}%
4695   }%
4696 }%


\rGlspl
4697 \newrobustcmd*\rGlspl{\gls@hyp@opt\rGlspl}

\@rGlspl
4698 \newcommand*\@rGlspl[2][]{%
4699   \new@ifnextchar[\@rGlspl@{#1}{#2}]{\@rGlspl@{#1}{#2}[]}{%
4700 }

\@rGlspl@
4701 \def\@rGlspl#1#2[#3]{%
4702   \glsxtrifrecordtrigger{#2}%
4703   {%
4704     \glsxtr@rglstrigger@record{#1}{#2}{\rGlsplformat{#2}{#3}}%
4705   }%
4706   {%
4707     \Glspl@{#1}{#2}{#3}%
4708   }%
4709 }%

```

```

\rGLS
4710 \newrobustcmd*\rGLS{@gls@hyp@opt\rGLS}

\@rGLS
4711 \newcommand*\@rGLS[2] []{%
4712   \new@ifnextchar[\@rGLS@{\#1}{\#2}]{\@rGLS@{\#1}{\#2}[]}{%
4713 }

\@rGLS@
4714 \def\@rGLS@#1#2[#3]{%
4715   \glsxtrifrecordtrigger{#2}%
4716   {%
4717     \glsxtr@rglstrigger@record{#1}{#2}{\rGLSformat{#2}{#3}}%
4718   }%
4719   {%
4720     \@GLS@{\#1}{\#2}[#3]%
4721   }%
4722 }%

\rGLSpl
4723 \newrobustcmd*\rGLSpl{@gls@hyp@opt\rGLSpl}

\@rGLSpl
4724 \newcommand*\@rGLSpl[2] []{%
4725   \new@ifnextchar[\@rGLSpl@{\#1}{\#2}]{\@rGLSpl@{\#1}{\#2}[]}{%
4726 }

\@rGLSpl@
4727 \def\@rGLSpl@#1#2[#3]{%
4728   \glsxtrifrecordtrigger{#2}%
4729   {%
4730     \glsxtr@rglstrigger@record{#1}{#2}{\rGLSplformat{#2}{#3}}%
4731   }%
4732   {%
4733     \@GLSpl@{\#1}{\#2}[#3]%
4734   }%
4735 }%

\rglsformat
4736 \newcommand*\rglsformat[2]{%
4737   \glsifregular{#1}%
4738   {\glsentryfirst{#1}}%
4739   {\ifglsphaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
4740 }

\rglsplformat
4741 \newcommand*\rglsplformat[2]{%
4742   \glsifregular{#1}

```

```

4743  {\glsentryfirstplural{#1}}%
4744  {\ifglshaslong{#1}{\glsentrylongplural{#1}}{\glsentryfirstplural{#1}}}#2%
4745 }

\rGlsformat
4746 \newcommand*{\rGlsformat}[2]{%
4747   \glsifregular{#1}%
4748   {\Glsentryfirst{#1}}%
4749   {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
4750 }

\rGlsplformat
4751 \newcommand*{\rGlsplformat}[2]{%
4752   \glsifregular{#1}%
4753   {\Glsentryfirstplural{#1}}%
4754   {\ifglshaslong{#1}{\Glsentrylongplural{#1}}{\Glsentryfirstplural{#1}}}#2%
4755 }

\rGLSformat
4756 \newcommand*{\rGLSformat}[2]{%
4757   \expandafter\mfirstrucMakeUppercase\expandafter{\rglsformat{#1}{#2}}%
4758 }

\rGLSplformat
4759 \newcommand*{\rGLSplformat}[2]{%
4760   \expandafter\mfirstrucMakeUppercase\expandafter{\rglsplformat{#1}{#2}}%
4761 }

```

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.

```

4762 \@ifpackageloaded{glossaries-accsupp}%
4763 {

```

Define (or redefine) commands to use the accessibility information.

`\glsaccessname` Display the name value (no link and no check for existence).

```

4764  \newcommand*{\glsaccessname}[1]{%
4765    \glsnameaccessdisplay
4766    {%
4767      \glsentryname{#1}%
4768    }%
4769    {#1}%
4770  }

```

\Glsaccessname Display the name value (no link and no check for existence) with the first letter converted to upper case.

```
4771 \newcommand*{\Glsaccessname}[1]{%
4772   \glsnameaccessdisplay
4773   {%
4774     \Glsentryname{#1}%
4775   }%
4776   {#1}%
4777 }
```

\GLSaccessname Display the name value (no link and no check for existence) converted to upper case.

```
4778 \newcommand*{\GLSaccessname}[1]{%
4779   \glsnameaccessdisplay
4780   {%
4781     \mfirstucMakeUppercase{\glsentryname{#1}}%
4782   }%
4783   {#1}%
4784 }
```

\glsaccesstext Display the text value (no link and no check for existence).

```
4785 \newcommand*{\glsaccesstext}[1]{%
4786   \glstextaccessdisplay
4787   {%
4788     \glsentrytext{#1}%
4789   }%
4790   {#1}%
4791 }
```

\Glsaccesstext Display the text value (no link and no check for existence) with the first letter converted to upper case.

```
4792 \newcommand*{\Glsaccesstext}[1]{%
4793   \glstextaccessdisplay
4794   {%
4795     \Glsentrytext{#1}%
4796   }%
4797   {#1}%
4798 }
```

\GLSaccesstext Display the text value (no link and no check for existence) converted to upper case.

```
4799 \newcommand*{\GLSaccesstext}[1]{%
4800   \glstextaccessdisplay
4801   {%
4802     \mfirstucMakeUppercase{\glsentrytext{#1}}%
4803   }%
4804   {#1}%
4805 }
```

\glsaccessplural Display the plural value (no link and no check for existence).

```
4806 \newcommand*{\glsaccessplural}[1]{%
4807   \glspluralaccessdisplay
4808   {%
4809     \glsentryplural{#1}%
4810   }%
4811   {#1}%
4812 }
```

`Glsaccessplural` Display the plural value (no link and no check for existence) with the first letter converted to upper case.

```
4813 \newcommand*{\Glsaccessplural}[1]{%
4814   \glspluralaccessdisplay
4815   {%
4816     \Glsentryplural{#1}%
4817   }%
4818   {#1}%
4819 }
```

`GLSaccessplural` Display the plural value (no link and no check for existence) converted to upper case.

```
4820 \newcommand*{\GLSaccessplural}[1]{%
4821   \glspluralaccessdisplay
4822   {%
4823     \mfirstucMakeUppercase{\glsentryplural{#1}}%
4824   }%
4825   {#1}%
4826 }
```

`\glsaccessfirst` Display the first value (no link and no check for existence).

```
4827 \newcommand*{\glsaccessfirst}[1]{%
4828   \glsfirstaccessdisplay
4829   {%
4830     \glsentryfirst{#1}%
4831   }%
4832   {#1}%
4833 }
```

`\Glsaccessfirst` Display the first value (no link and no check for existence) with the first letter converted to upper case.

```
4834 \newcommand*{\Glsaccessfirst}[1]{%
4835   \glsfirstaccessdisplay
4836   {%
4837     \Glsentryfirst{#1}%
4838   }%
4839   {#1}%
4840 }
```

`\GLSaccessfirst` Display the first value (no link and no check for existence) converted to upper case.

```
4841 \newcommand*{\GLSaccessfirst}[1]{%
```

```
4842     \glsfirstaccessdisplay
4843     {%
4844         \mfirstucMakeUppercase{\glsentryfirst{\#1}}%
4845     }%
4846     {\#1}%
4847 }
```

cessfirstplural Display the firstplural value (no link and no check for existence).

```
4848 \newcommand*{\glsaccessfirstplural}[1]{%
4849     \glsfirstpluralaccessdisplay
4850     {%
4851         \glsentryfirstplural{\#1}%
4852     }%
4853     {\#1}%
4854 }
```

cessfirstplural Display the firstplural value (no link and no check for existence) with the first letter converted to upper case.

```
4855 \newcommand*{\Glsaccessfirstplural}[1]{%
4856     \glsfirstpluralaccessdisplay
4857     {%
4858         \Glsentryfirstplural{\#1}%
4859     }%
4860     {\#1}%
4861 }
```

cessfirstplural Display the firstplural value (no link and no check for existence) converted to upper case.

```
4862 \newcommand*{\GLSaccessfirstplural}[1]{%
4863     \glsfirstpluralaccessdisplay
4864     {%
4865         \mfirstucMakeUppercase{\glsentryfirstplural{\#1}}%
4866     }%
4867     {\#1}%
4868 }
```

glsaccesssymbol Display the symbol value (no link and no check for existence).

```
4869 \newcommand*{\glsaccesssymbol}[1]{%
4870     \glssymbolaccessdisplay
4871     {%
4872         \glsentrysymbol{\#1}%
4873     }%
4874     {\#1}%
4875 }
```

Glsaccesssymbol Display the symbol value (no link and no check for existence) with the first letter converted to upper case.

```
4876 \newcommand*{\Glsaccesssymbol}[1]{%
4877     \glssymbolaccessdisplay
```

```

4878     {%
4879         \Glsentrysymbol{#1}%
4880     }%
4881     {#1}%
4882 }

```

`GLSaccessssymbol` Display the symbol value (no link and no check for existence) converted to upper case.

```

4883 \newcommand*{\GLSaccessssymbol}[1]{%
4884     \glssymbolaccessdisplay
4885     {%
4886         \mfirstucMakeUppercase{\glsentrysymbol{#1}}%
4887     }%
4888     {#1}%
4889 }

```

`esssymbolplural` Display the symbolplural value (no link and no check for existence).

```

4890 \newcommand*{\glsaccessssymbolplural}[1]{%
4891     \glssymbolpluralaccessdisplay
4892     {%
4893         \glsentrysymbolplural{#1}%
4894     }%
4895     {#1}%
4896 }

```

`esssymbolplural` Display the symbolplural value (no link and no check for existence) with the first letter converted to upper case.

```

4897 \newcommand*{\Glsaccessssymbolplural}[1]{%
4898     \glssymbolpluralaccessdisplay
4899     {%
4900         \Glsentrysymbolplural{#1}%
4901     }%
4902     {#1}%
4903 }

```

`esssymbolplural` Display the symbolplural value (no link and no check for existence) converted to upper case.

```

4904 \newcommand*{\GLSaccessssymbolplural}[1]{%
4905     \glssymbolpluralaccessdisplay
4906     {%
4907         \mfirstucMakeUppercase{\glsentrysymbolplural{#1}}%
4908     }%
4909     {#1}%
4910 }

```

`\glsaccessdesc` Display the desc value (no link and no check for existence).

```

4911 \newcommand*{\glsaccessdesc}[1]{%
4912     \glsdescriptionaccessdisplay
4913     {%
4914         \glsentrydesc{#1}%

```

```
4915    }%
4916    {#1}%
4917 }
```

\Glsaccessdesc Display the desc value (no link and no check for existence) with the first letter converted to upper case.

```
4918 \newcommand*{\Glsaccessdesc}[1]{%
4919     \glsdescriptionaccessdisplay
4920     {%
4921         \Glsentrydesc{#1}%
4922     }%
4923     {#1}%
4924 }
```

\GLSaccessdesc Display the desc value (no link and no check for existence) converted to upper case.

```
4925 \newcommand*{\GLSaccessdesc}[1]{%
4926     \glsdescriptionaccessdisplay
4927     {%
4928         \mfirstucMakeUppercase{\glsentrydesc{#1}}%
4929     }%
4930     {#1}%
4931 }
```

ccessdescplural Display the descplural value (no link and no check for existence).

```
4932 \newcommand*{\glsaccessdescplural}[1]{%
4933     \glsdescriptionpluralaccessdisplay
4934     {%
4935         \glsentrydescplural{#1}%
4936     }%
4937     {#1}%
4938 }
```

ccessdescplural Display the descplural value (no link and no check for existence) with the first letter converted to upper case.

```
4939 \newcommand*{\Glsaccessdescplural}[1]{%
4940     \glsdescriptionpluralaccessdisplay
4941     {%
4942         \Glsentrydescplural{#1}%
4943     }%
4944     {#1}%
4945 }
```

ccessdescplural Display the descplural value (no link and no check for existence) converted to upper case.

```
4946 \newcommand*{\GLSaccessdescplural}[1]{%
4947     \glsdescriptionpluralaccessdisplay
4948     {%
4949         \mfirstucMakeUppercase{\glsentrydescplural{#1}}%
4950     }%
```

```
4951     {#1}%
4952 }
```

\glsaccessshort Display the short form (no link and no check for existence).

```
4953 \newcommand*{\glsaccessshort}[1]{%
4954     \glsshortaccessdisplay
4955     {%
4956         \glsentryshort{#1}%
4957     }%
4958     {#1}%
4959 }
```

\Glsaccessshort Display the short form with first letter converted to uppercase (no link and no check for existence).

```
4960 \newcommand*{\Glsaccessshort}[1]{%
4961     \glsshortaccessdisplay
4962     {%
4963         \Glsentryshort{#1}%
4964     }%
4965     {#1}%
4966 }
```

\GLSaccessshort Display the short value (no link and no check for existence) converted to upper case.

```
4967 \newcommand*{\GLSaccessshort}[1]{%
4968     \glsshortaccessdisplay
4969     {%
4970         \mfirstucMakeUppercase{\glsentryshort{#1}}%
4971     }%
4972     {#1}%
4973 }
```

\saccessshortpl Display the short plural form (no link and no check for existence).

```
4974 \newcommand*{\glsaccessshortpl}[1]{%
4975     \glsshortpluralaccessdisplay
4976     {%
4977         \glsentryshortpl{#1}%
4978     }%
4979     {#1}%
4980 }
```

\saccessshortpl Display the short plural form with first letter converted to uppercase (no link and no check for existence).

```
4981 \newcommand*{\Glsaccessshortpl}[1]{%
4982     \glsshortpluralaccessdisplay
4983     {%
4984         \Glsentryshortpl{#1}%
4985     }%
4986     {#1}%
4987 }
```

```

LSaccessshortpl Display the shortplural value (no link and no check for existence) converted to upper case.
4988 \newcommand*{\GLSaccessshortpl}[1]{%
4989   \glsshortpluralaccessdisplay
4990   {%
4991     \mfirstucMakeUppercase{\glsentryshortpl{#1}}%
4992   }%
4993   {#1}%
4994 }

\glsaccesslong Display the long form (no link and no check for existence).
4995 \newcommand*{\glsaccesslong}[1]{%
4996   \glslongaccessdisplay{\glsentrylong{#1}}{#1}%
4997 }

\Glsaccesslong Display the long form (no link and no check for existence).
4998
4999 \newcommand*{\Glsaccesslong}[1]{%
5000   \glslongaccessdisplay{\Glsentrylong{#1}}{#1}%
5001 }

\GLSaccesslong Display the long value (no link and no check for existence) converted to upper case.
5002 \newcommand*{\GLSaccesslong}[1]{%
5003   \glslongaccessdisplay
5004   {%
5005     \mfirstucMakeUppercase{\glsentrylong{#1}}%
5006   }%
5007   {#1}%
5008 }

\glsaccesslongpl Display the long plural form (no link and no check for existence).
5009 \newcommand*{\glsaccesslongpl}[1]{%
5010   \glslongpluralaccessdisplay{\glsentrylongpl{#1}}{#1}%
5011 }

\Glsaccesslongpl Display the long plural form (no link and no check for existence).
5012
5013 \newcommand*{\Glsaccesslongpl}[1]{%
5014   \glslongpluralaccessdisplay{\Glsentrylongpl{#1}}{#1}%
5015 }

\GLSaccesslongpl Display the longplural value (no link and no check for existence) converted to upper case.
5016 \newcommand*{\GLSaccesslongpl}[1]{%
5017   \glslongpluralaccessdisplay
5018   {%
5019     \mfirstucMakeUppercase{\glsentrylongpl{#1}}%
5020   }%
5021   {#1}%
5022 }

```

```

    End of if part

5023 }
5024 {
    No accessibility support. Just define these commands to do \glsentry{xxx}

\glsaccessname Display the name value (no link and no check for existence).
5025   \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.
5026   \newcommand*{\Glsaccessname}[1]{\Glsentryname{#1}}


\GLSaccessname Display the name value (no link and no check for existence). converted to upper case.
5027   \newcommand*{\GLSaccessname}[1]{%
5028     \protect\mfirstucMakeUppercase{\glsentryname{#1}}%


\glsaccesstext Display the text value (no link and no check for existence).
5029   \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.
5030   \newcommand*{\Glsaccesstext}[1]{\Glsentrytext{#1}}


\GLSaccesstext Display the text value (no link and no check for existence). converted to upper case.
5031   \newcommand*{\GLSaccesstext}[1]{%
5032     \protect\mfirstucMakeUppercase{\glsentrytext{#1}}%


glsaccessplural Display the plural value (no link and no check for existence).
5033   \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.
5034   \newcommand*{\Glsaccessplural}[1]{\Glsentryplural{#1}}


\GLSaccessplural Display the plural value (no link and no check for existence). converted to upper case.
5035   \newcommand*{\GLSaccessplural}[1]{%
5036     \protect\mfirstucMakeUppercase{\glsentryplural{#1}}%


\glsaccessfirst Display the first value (no link and no check for existence).
5037   \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.
5038   \newcommand*{\Glsaccessfirst}[1]{\Glsentryfirst{#1}}

```

\GLSaccessfirst Display the first value (no link and no check for existence). converted to upper case.

```
5039 \newcommand*{\GLSaccessfirst}[1]{%
  5040   \protect\mfirstucMakeUppercase{\glsentryfirst{\#1}}}
```

\cessfirstplural Display the firstplural value (no link and no check for existence).

```
5041 \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.

```
5042 \newcommand*{\Glsaccessfirstplural}[1]{\Glsentryfirstplural{\#1}}
```

\cessfirstplural Display the firstplural value (no link and no check for existence). converted to upper case.

```
5043 \newcommand*{\GLSaccessfirstplural}[1]{%
  5044   \protect\mfirstucMakeUppercase{\glsentryfirstplural{\#1}}}
```

\glsaccesssymbol Display the symbol value (no link and no check for existence).

```
5045 \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.

```
5046 \newcommand*{\Glsaccesssymbol}[1]{\Glsentrysymbol{\#1}}
```

\GLSaccesssymbol Display the symbol value (no link and no check for existence). converted to upper case.

```
5047 \newcommand*{\GLSaccesssymbol}[1]{%
  5048   \protect\mfirstucMakeUppercase{\glsentrysymbol{\#1}}}
```

\esssymbolplural Display the symbolplural value (no link and no check for existence).

```
5049 \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.

```
5050 \newcommand*{\Glsaccesssymbolplural}[1]{\Glsentrysymbolplural{\#1}}
```

\esssymbolplural Display the symbolplural value (no link and no check for existence). converted to upper case.

```
5051 \newcommand*{\GLSaccesssymbolplural}[1]{%
  5052   \protect\mfirstucMakeUppercase{\glsentrysymbolplural{\#1}}}
```

\glsaccessdesc Display the desc value (no link and no check for existence).

```
5053 \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.

```
5054 \newcommand*{\Glsaccessdesc}[1]{\Glsentrydesc{\#1}}
```

\GLSaccessdesc Display the desc value (no link and no check for existence). converted to upper case.

```
5055 \newcommand*{\GLSaccessdesc}[1]{%
5056   \protect\mfirstucMakeUppercase{\glsentrydesc{\#1}}}
```

\accessdescplural Display the descplural value (no link and no check for existence).

```
5057 \newcommand*{\glsaccessdescplural}[1]{\glsentrydescplural{\#1}}
```

\accessdescplural Display the descplural value (no link and no check for existence) with the first letter converted to upper case.

```
5058 \newcommand*{\Glsaccessdescplural}[1]{\Glsentrydescplural{\#1}}
```

\accessdescplural Display the descplural value (no link and no check for existence). converted to upper case.

```
5059 \newcommand*{\GLSaccessdescplural}[1]{%
5060   \protect\mfirstucMakeUppercase{\glsentrydescplural{\#1}}}
```

\glsaccessshort Display the short form (no link and no check for existence).

```
5061 \newcommand*{\glsaccessshort}[1]{\glsentryshort{\#1}}
```

\Glsaccessshort Display the short form with first letter converted to uppercase (no link and no check for existence).

```
5062 \newcommand*{\Glsaccessshort}[1]{\Glsentryshort{\#1}}
```

\GLSaccessshort Display the short value (no link and no check for existence). converted to upper case.

```
5063 \newcommand*{\GLSaccessshort}[1]{%
5064   \protect\mfirstucMakeUppercase{\glsentryshort{\#1}}}
```

\lsaccessshortpl Display the short plural form (no link and no check for existence).

```
5065 \newcommand*{\glsaccessshortpl}[1]{\glsentryshortpl{\#1}}
```

\lsaccessshortpl Display the short plural form with first letter converted to uppercase (no link and no check for existence).

```
5066 \newcommand*{\Glsaccessshortpl}[1]{\Glsentryshortpl{\#1}}
```

\Laccessshortpl Display the shortplural value (no link and no check for existence). converted to upper case.

```
5067 \newcommand*{\Laccessshortpl}[1]{%
5068   \protect\mfirstucMakeUppercase{\glsentryshortpl{\#1}}}
```

\glsaccesslong Display the long form (no link and no check for existence).

```
5069 \newcommand*{\glsaccesslong}[1]{\glsentrylong{\#1}}
```

\Glsaccesslong Display the long form (no link and no check for existence).

```
5070 \newcommand*{\Glsaccesslong}[1]{\Glsentrylong{\#1}}
```

\GLSaccesslong Display the long value (no link and no check for existence). converted to upper case.

```
5071 \newcommand*{\GLSaccesslong}[1]{%
5072   \protect\mfirstucMakeUppercase{\glsentrylong{\#1}}}
```

```
glsaccesslongpl Display the long plural form (no link and no check for existence).  
5073 \newcommand*{\glsaccesslongpl}[1]{\glsentrylongpl{\#1}}
```

```
Glsaccesslongpl Display the long plural form (no link and no check for existence).  
5074 \newcommand*{\Glsaccesslongpl}[1]{\Glsentrylongpl{\#1}}
```

```
GLSaccesslongpl Display the longplural value (no link and no check for existence). converted to upper case.  
5075 \newcommand*{\GLSaccesslongpl}[1]{%  
5076 \protect\mfirstucMakeUppercase{\glsentrylongpl{\#1}}}
```

End of else part
5077 }

1.5 Categories

```
\glscategory Add a new storage key that can be used to indicate a category. The default category is general.  
5078 \glsaddstoragekey{category}{general}{\glscategory}
```

```
\glsifcategory Convenient shortcut to determine if an entry has the given category.  
5079 \newcommand{\glsifcategory}[4]{%  
5080 \ifglsfieldeq{\#1}{category}{\#2}{\#3}{\#4}}%  
5081 }
```

Categories can have attributes.

```
categoryattribute \glssetcategoryattribute{\category}{\attribute-label}{\value}
```

Set (or override if already set) an attribute for the given category.

```
5082 \newcommand*{\glssetcategoryattribute}[3]{%  
5083 \csdef{@glsxtr@categoryattr@@#1@#2}{\#3}}%  
5084 }
```

```
categoryattribute \glsgetcategoryattribute{\category}{\attribute-label}
```

Get the value of the given attribute for the given category. Does nothing if the attribute isn't defined.

```
5085 \newcommand*{\glsgetcategoryattribute}[2]{%  
5086 \csuse{@glsxtr@categoryattr@@#1@#2}}%  
5087 }
```

```
\categoryattribute {\glshascategoryattribute{\category}{\attribute-label}}{\true}{\false}
```

Tests if the category has the given attribute set.

```
5088 \newcommand*\glshascategoryattribute[4]{%
5089   \ifcvoid{\glsxtr@categoryattr@@\#1\#2}{\#4}{\#3}%
5090 }
```

```
\glssetattribute{\entry_label}{\attribute-label}{\value}
```

Short cut where the category label is obtained from the entry information.

```
5091 \newcommand*\glssetattribute[3]{%
5092   \glssetcategoryattribute{\glscategory{\#1}}{\#2}{\#3}%
5093 }
```

```
\glsgetattribute{\entry_label}{\attribute-label}
```

Short cut where the category label is obtained from the entry information.

```
5094 \newcommand*\glsgetattribute[2]{%
5095   \glsgetcategoryattribute{\glscategory{\#1}}{\#2}%
5096 }
```

```
\glshasattribute{\entry_label}{\attribute-label}{\true}{\false}
```

Short cut to test if the given attribute has been set where the category label is obtained from the entry information.

```
5097 \newcommand*\glshasattribute[4]{%
5098   \ifglsentryexists{\#1}%
5099     {\glshascategoryattribute{\glscategory{\#1}}{\#2}{\#3}{\#4}}%
5100   {\#4}%
5101 }
```

```
\glsifcategoryattribute{\category}{\attribute-label}{\value}{\true part}{\false part}
```

True if category has the attribute with the given value.

```
5102 \newcommand{\glsifcategoryattribute}[5]{%
```

```

5103 \ifcsundef{@glsxtr@categoryattr@@#1@#2}%
5104 {#5}%
5105 {\ifcsstring{@glsxtr@categoryattr@@#1@#2}{#3}{#4}{#5}}%
5106 }

```

```
\glsifattribute{\glsifattribute{<entry label>}{<attribute-label>}{<value>}{<true part>}{<false part>}}
```

Short cut to determine if the given entry has a category with the given attribute set.

```

5107 \newcommand{\glsifattribute}[5]{%
5108   \ifglsentryexists{#1}%
5109     {\glsifcategoryattribute{\glscategory{#1}}{#2}{#3}{#4}{#5}}%
5110   {#5}%
5111 }

```

Set attributes for the default general category:

```
5112 \glssetcategoryattribute{general}{regular}{true}
```

Acronyms are regular by default, since they're typically just treated like normal words.

```
5113 \glssetcategoryattribute{acronym}{regular}{true}
```

`regularcategory` Convenient shortcut to create add the regular attribute.

```

5114 \newcommand*\glssetregularcategory[1]{%
5115   \glssetcategoryattribute{#1}{regular}{true}%
5116 }

```

```
\glsifregularcategory{<category>}{<true part>}{<false part>}
```

Short cut to determine if a category has the regular attribute explicitly set to true.

```

5117 \newcommand{\glsifregularcategory}[3]{%
5118   \glsifcategoryattribute{#1}{regular}{true}{#2}{#3}}%
5119 }

```

```
\glsifnotregularcategory{<category>}{<true part>}{<false part>}
```

Short cut to determine if a category has the regular attribute explicitly set to false.

```

5120 \newcommand{\glsifnotregularcategory}[3]{%
5121   \glsifcategoryattribute{#1}{regular}{false}{#2}{#3}}%
5122 }

```

```
\glsifregular \glsifregular{\entrylabel}{\truepart}{\falsepart}
```

Short cut to determine if an entry has a regular attribute set to true.

```
5123 \newcommand{\glsifregular}[3]{%
5124   \glsifregularcategory{\glscategory{#1}}{#2}{#3}%
5125 }
```

```
\glsifnotregular \glsifnotregular{\entrylabel}{\truepart}{\falsepart}
```

Short cut to determine if an entry has a regular attribute set to false.

```
5126 \newcommand{\glsifnotregular}[3]{%
5127   \glsifnotregularcategory{\glscategory{#1}}{#2}{#3}%
5128 }
```

```
\glsforeachincategory \glsforeachincategory[<glossary labels>]{<category-label>}{<glossary-cs>}{<label-cs>}{<body>}
```

Iterates through all entries in all the glossaries (or just those listed in *<glossary labels>*) and does *<body>* if the category matches *<category-label>*. The control sequences *<glossary-cs>* and *<label-cs>* may be used in *<body>* to access the glossary label and entry label for the current iteration.

```
5129 \newcommand{\glsforeachincategory}[5][\@glo@types]{%
5130   \forallglossaries[#1]{#3}%
5131   {%
5132     \forglsentries[#3]{#4}%
5133     {%
5134       \glsifcategory{#4}{#2}{#5}{}%
5135     }%
5136   }%
5137 }
```

```
\glsforeachwithattribute \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.

```

5138 \newcommand{\glsforeachwithattribute}[6] [\\@glo@types]{%
5139   \forallglossaries[#1]{#4}%
5140   {%
5141     \forglsentries[#4]{#5}%
5142     {%
5143       \glsifattribute{#5}{#2}{#3}{#6}{}}%
5144     }%
5145   }%
5146 }

```

If `\newterm` has been defined, redefine it so that it automatically sets the category label to `index` and add `\glsxtrpostdescription`.

```

5147 \ifdef{\newterm}
5148 {%

```

`\newterm`

```

5149 \renewcommand*{\newterm}[2] []{%
5150   \newglossaryentry[#2]{%
5151     type={index},category=index,name={#2},%
5152     description={\glsxtrpostdescription\nopostdesc},#1}%
5153 }

```

Indexed terms are regular by default.

```

5154 \glssetcategoryattribute{index}{regular}{true}

```

`\trpostdescindex`

```

5155 \newcommand*{\glsxtrpostdescindex}{}%
5156 }%
5157 {}

```

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`.

```

5158 \ifdef{\printsymbols}
5159 {%

```

`\glsxtrnewsymbol` Unlike `\newterm`, this has a separate argument for the label (since the symbol will likely contain commands).

```

5160 \newcommand*{\glsxtrnewsymbol}[3] []{%
5161   \newglossaryentry[#2]{name={#3},sort={#2},type=symbols,category=symbol, #1}%
5162 }

```

Symbols are regular by default.

```

5163 \glssetcategoryattribute{symbol}{regular}{true}

```

`\rpostdescsymbol`

```

5164 \newcommand*{\glsxtrpostdescsymbol}{}%

```

```
5165 }
5166 {}
```

Similar for the numbers option.

```
5167 \ifdef\printnumbers
5168 {%
```

`glsxtrnewnumber`

```
5169 \ifdef\printnumbers
5170   \newcommand*{\glsxtrnewnumber}[3] []{%
5171     \newglossaryentry{\#2}{name=\#3,sort=\#2,type=numbers,category=number,\#1}%
5172 }
```

Numbers are regular by default.

```
5173 \glssetcategoryattribute{number}{regular}{true}
```

`rpostdescnumber`

```
5174 \newcommand*{\glsxtrpostdescnumber}{}%
5175 }
5176 {}
```

`sxtrsetcategory` Set the category for all listed labels. The first argument is the list of entry labels and the second argument is the category label.

```
5177 \newcommand*{\glsxtrsetcategory}[2]{%
5178   \@for\@glsxtr@label:=#1\do
5179   {%
5180     \glsfieldxdef{\@glsxtr@label}{category}{#2}%
5181   }%
5182 }
```

`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.

```
5183 \newcommand*{\glsxtrsetcategoryforall}[2]{%
5184   \forallglossaries[#1]{\@glsxtr@type}{%
5185     \forglsentries[\@glsxtr@type]{\@glsxtr@label}{%
5186       {%
5187         \glsfieldxdef{\@glsxtr@label}{category}{#2}%
5188       }%
5189     }%
5190 }
```

`trfieldtitlecase` `\glsxtrfieldtitlecase{\langle label \rangle}{\langle field \rangle}`

Apply title casing to the contents of the given field.

```
5191 \newcommand*{\glsxtrfieldtitlecase}[2]{%
```

```

5192 \expandafter\glsxtrfieldtitlecasecs\expandafter
5193   {\csname glo@\glsdetoklabel{\#1}@#2\endcsname}%
5194 }

```

`\glsxtrfieldtitlecasecs` The command used by `\glsxtrfieldtitlecase`. May be redefined to use a different command, for example, `\xcapitalisefmtwords`.

```
5195 \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.

```

5196 \@ifpackageloaded{glossaries-accsupp}%
5197 {%
5198   \renewcommand*{\glossentrydesc}[1]{%
5199     \glsdoifexistsorwarn{\#1}%
5200     {%
5201       \glssetabrvfmt{\glscategory{\#1}}%

```

As from version 1.04, allow the `glossdescfont` attribute to determine the font applied.

```

5202   \glshasattribute{\#1}{glossdescfont}%
5203   {%
5204     \edef\@glsxtr@attrval{\glsgetattribute{\#1}{glossdescfont}}%
5205     \ifcsdef{\@glsxtr@attrval}%
5206     {%
5207       \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}%
5208     }%
5209     {%
5210       \GlossariesExtraWarning{Unknown control sequence name
5211         '\@glsxtr@attrval' supplied in glossdescfont attribute
5212         for entry '#1'. Ignoring}%
5213       \let\@glsxtr@glossdescfont\@firstofone
5214     }%
5215   }%
5216   {\let\@glsxtr@glossdescfont\@firstofone}%
5217   \glsifattribute{\#1}{glossdesc}{firstuc}%
5218   {%
5219     \glsxtr@glossdescfont{\Glsaccessdesc{\#1}}%
5220   }%
5221   {%
5222     \glsifattribute{\#1}{glossdesc}{title}%
5223     {%
5224       \glsxtr@do@titlecaps@warn
5225       \glsdescriptionaccessdisplay
5226       {%
5227         \glsxtr@glossdescfont{\glsxtrfieldtitlecase{\#1}{desc}}%
5228       }%
5229     }%

```

```

5230      }%
5231      {%
5232          \glsxtr@glossdescfont{\glsaccessdesc{#1}}%
5233      }%
5234      }%
5235      }%
5236  }
5237 }
5238 {
5239 \renewcommand*\glossentrydesc[1]{%
5240     \glsdoifexistsorwarn{#1}%
5241     {%
5242         \glssetabbrvfmt{\glscategory{#1}}%
5243         \glshasattribute{#1}{glossdescfont}%
5244     }%
5245         \edef\glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%
5246         \ifcsdef{\glsxtr@attrval}%
5247             {%
5248                 \letcs{\glsxtr@glossdescfont}{\glsxtr@attrval}%
5249             }%
5250             {%
5251                 \GlossariesExtraWarning{Unknown control sequence name
5252                     '\glsxtr@attrval' supplied in glossdescfont attribute
5253                     for entry '#1'. Ignoring}%
5254                 \let\glsxtr@glossdescfont\firstofone
5255             }%
5256         }%
5257         {\let\glsxtr@glossdescfont\firstofone}%
5258         \glsifattribute{#1}{glossdesc}{firstuc}%
5259     }%
5260         \glsxtr@glossdescfont{\Glsentrydesc{#1}}%
5261     }%
5262     {%
5263         \glsifattribute{#1}{glossdesc}{title}%
5264         {%
5265             \glsxtr@do@titlecaps@warn
5266             \glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
5267         }%
5268         {%
5269             \glsxtr@glossdescfont{\glsentrydesc{#1}}%
5270         }%
5271     }%
5272 }%
5273 }
5274 }

```

\glossentryname If the glossname attribute is “firstuc” convert first letter to upper case. If the attribute is “title” use title case.

```
5275 \ifpackageloaded{glossaries-accsupp}
```

```

5276 {
5277   \renewcommand*\glossentryname}[1]{%
5278     \glsdoifexistsorwarn{#1}%
5279     {%
5280       \glssetabbrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the `glossnamefont` attribute to determine the font applied.

```

5281   \glshasattribute{#1}{glossnamefont}%
5282   {%
5283     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5284     \ifcsdef{\@glsxtr@attrval}%
5285     {%
5286       \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5287     }%
5288     {%
5289       \GlossariesExtraWarning{Unknown control sequence name
5290         '\@glsxtr@attrval' supplied in glossnamefont attribute
5291         for entry '#1'. Reverting to default \string\glsnamefont}%
5292       \let\@glsxtr@glossnamefont\glsnamefont
5293     }%
5294   }%
5295   {\let\@glsxtr@glossnamefont\glsnamefont}%
5296   \glsifattribute{#1}{glossname}{firststuc}%
5297   {%
5298     \glsnameaccessdisplay
5299   {%
5300     \glsxtr@glossnamefont{\Glsentryname{#1}}%
5301   }%
5302   {#1}%
5303   {%
5304     \glsifattribute{#1}{glossname}{title}%
5305   {%
5306     \glsxtr@do@titlecaps@warn
5307     \glsnameaccessdisplay
5308   {%
5309     \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
5310   }%
5311   {#1}%
5312   {%
5313     \glsnameaccessdisplay
5314   {%
5315     \glsifattribute{#1}{glossname}{uc}%
5316   {%
5317     \glsnameaccessdisplay
5318   }%

```

Hide the label from the upper-casing command.

```

5319   \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5320   \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
5321 }%

```

```

5322      {#1}%
5323    }%
5324    {%
5325      \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5326      \glsnameaccessdisplay
5327    {%
5328      \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
5329    }%
5330    {#1}%
5331  }%
5332 }%
5333 }%

```

Do post-name hook:

```

5334   \glsxtrpostnamehook{#1}%
5335 }%
5336 }
5337 }
5338 {
5339 \renewcommand*\glossentryname[1]{%
5340   \glsdoifexistsorwarn{#1}%
5341 {%
5342   \glssetabbrvfmt{\glscategory{#1}}%
5343   \glshasattribute{#1}{glossnamefont}%
5344 {%
5345   \edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5346   \ifcsdef\glsxtr@attrval{%
5347 {%
5348   \letcs{\glsxtr@glossnamefont}{\glsxtr@attrval}%
5349 }%
5350 {%
5351   \GlossariesExtraWarning{Unknown control sequence name
5352     '\glsxtr@attrval' supplied in glossnamefont attribute
5353     for entry '#1'. Reverting to default \string\glsnamefont}%
5354   \let\glsxtr@glossnamefont\glsnamefont
5355 }%
5356 }%
5357 {\let\glsxtr@glossnamefont\glsnamefont}%
5358 \glsifattribute{#1}{glossname}{firstuc}%
5359 {%
5360   \glsxtr@glossnamefont{\Glsentryname{#1}}%
5361 }%
5362 {%
5363   \glsifattribute{#1}{glossname}{title}%
5364 {%
5365   \glsxtr@do@titlecaps@warn
5366   \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
5367 }%
5368 {%
5369   \glsifattribute{#1}{glossname}{uc}%

```

```
5370      {%
```

Hide the label from the upper-casing command.

```
5371          \letcs{\glo@name}{\glsdetoklabel{#1}@name}%
5372          \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
5373      }%
5374  {%
```

This little trick is used by glossaries to allow the user to redefine `\glossnamefont` to use `\makefirstuc`. Support it even though they can now use the `firstuc` attribute.

```
5375          \letcs{\glo@name}{\glsdetoklabel{#1}@name}%
5376          \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
5377      }%
5378  }%
5379 }%
```

Do post-name hook.

```
5380      \glsxtrpostnamehook{#1}%
5381  }%
5382 }
5383 }
```

`\Glossentryname` Redefine to set the abbreviation format and accessibility support.

```
5384 \@ifpackageloaded{glossaries-accsupp}%
5385 {
5386     \renewcommand*\Glossentryname[1]{%
5387         \glsdoifexistsorwarn{#1}%
5388     }%
5389     \glssetabbrvfmt{\glscategory{#1}}%
```

As from version 1.04, allow the `glossnamefont` attribute to determine the font applied.

```
5390     \glshasattribute{#1}{glossnamefont}%
5391  }%
5392     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5393     \ifcsdef{\@glsxtr@attrval}%
5394     }%
5395     \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5396  }%
5397  }%
5398     \GlossariesExtraWarning{Unknown control sequence name
5399     '@\glsxtr@attrval' supplied in glossnamefont attribute
5400     for entry '#1'. Reverting to default \string\glossnamefont}%
5401     \let\@glsxtr@glossnamefont\glossnamefont
5402  }%
5403 }%
5404 {\let\@glsxtr@glossnamefont\glossnamefont}%
5405 \glossnameaccessdisplay
5406 }%
5407 \glsxtr@glossnamefont{\Glossentryname{#1}}%
5408 }%
5409 {#1}%
```

Do post-name hook:

```
5410      \glsxtrpostnamehook{#1}%
5411  }%
5412 }
5413 }
5414 {
5415 \renewcommand*\Glossentryname[1]{%
5416   \@glsdoifexistsorwarn{#1}%
5417   {%
5418     \glssetabbrvfmt{\glscategory{#1}}%
5419     \glshasattribute{#1}{glossnamefont}%
5420   }%
5421   \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5422   \ifcsdef{\@glsxtr@attrval}%
5423   {%
5424     \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5425   }%
5426   {%
5427     \GlossariesExtraWarning{Unknown control sequence name
5428       '\@glsxtr@attrval' supplied in glossnamefont attribute
5429       for entry '#1'. Reverting to default \string\glsnamefont}%
5430     \let\@glsxtr@glossnamefont\glsnamefont
5431   }%
5432 }%
5433 { \let\@glsxtr@glossnamefont\glsnamefont}%
5434 \glsxtr@glossnamefont{\Glossentryname{#1}}%
```

Do post-name hook:

```
5435 \glsxtrpostnamehook{#1}%
5436 }%
5437 }
5438 }
```

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.

```
5439 \newcommand*\glsxtrpostnamehook[1]{%
5440   \let\glsnumberformat\@glsxtr@defaultnumberformat
5441   \glsxtrdoautoindexname{#1}{indexname}}
```

Allow categories to hook in here.

```
5442 \csuse{glsxtrpostname\glscategory{#1}}%
5443 }
```

etaccessdisplay

```
5444 \ifpackageloaded{glossaries-accsupp}%
5445 {
```

```

5446 \newcommand*{\glsxtr@setaccessdisplay}[1]{%
5447   \ifcsdef{gls#1accessdisplay}{%
5448     {\letcs{\glsxtr@accessdisplay}{\gls#1accessdisplay}}%
5449   }%
5450   \edef\@gls@thisval{\#1}%
5451   \@for\@gls@map:=\@gls@keymap\do{%
5452     \edef\@this@key{\expandafter\@secondoftwo\@gls@map}%
5453     \ifdefequal{\@this@key}{\@gls@thisval}{%
5454       \%
5455       \edef\@gls@thisval{\expandafter\@firstoftwo\@gls@map}%
5456       \@endfortrue
5457     }%
5458   }%
5459 }%
5460 \ifcsdef{gls@\gls@thisval accessdisplay}{%
5461   {\letcs{\glsxtr@accessdisplay}{gls@\gls@thisval accessdisplay}}%
5462   {\let\@glsxtr@accessdisplay\@firstoftwo}%
5463 }%
5464 }%
5465 }%
5466 }%
5467 \newcommand*{\glsxtr@setaccessdisplay}[1]{%
5468   \let\@glsxtr@accessdisplay\@firstoftwo
5469 }

```

`sentrynameother` Provide a command that works like `\glossentryname` but accesses a different field (which must be supplied using its internal field label).

```

5470 \newrobustcmd*{\glossentrynameother}[2]{%
5471   \glsdoifexistsorwarn{\#1}%
5472   }%

```

Accessibility support:

```
5473 \glsxtr@setaccessdisplay{\#2}%
```

Set the abbreviation format:

```

5474 \glssetabrvfmt{\glscategory{\#1}}%
5475 \glshasattribute{\#1}{glossnamefont}%
5476 \%
5477 \edef\@glsxtr@attrval{\glsgetattribute{\#1}{glossnamefont}}%
5478 \ifcsdef{\@glsxtr@attrval}{%
5479   \%
5480   \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5481 }%
5482 \%
5483 \GlossariesExtraWarning{Unknown control sequence name
5484   '\@glsxtr@attrval' supplied in glossnamefont attribute}

```

```

5485     for entry '#1'. Reverting to default \string\glsnamefont}%
5486     \let\@glsxtr@glossnamefont\glsnamefont
5487   }%
5488 }%
5489 {\let\@glsxtr@glossnamefont\glsnamefont}%
5490 \glsifattribute{#1}{glossname}{firstuc}%
5491 {%
5492   \@glsxtr@accessdisplay
5493   {\@glsxtr@glossnamefont{\@Gls@entry@field{#1}{#2}}}%
5494   {#1}%
5495 }%
5496 {%
5497   \glsifattribute{#1}{glossname}{title}%
5498   {%
5499     \@glsxtr@do@titlecaps@warn
5500     \@glsxtr@accessdisplay
5501     {\@glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{#2}}}%
5502     {#1}%
5503   }%
5504   {%
5505     \glsifattribute{#1}{glossname}{uc}%
5506     {%
5507       \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
5508       \@glsxtr@accessdisplay
5509       {\@glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}}%
5510       {#1}%
5511     }%
5512     {%
5513       \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
5514       \@glsxtr@accessdisplay
5515       {\expandafter\@glsxtr@glossnamefont\expandafter{\glo@name}}%
5516       {#1}%
5517     }%
5518   }%
5519 }%

```

Do post-name hook.

```

5520   \glsxtrpostnamehook{#1}%
5521 }%
5522 }

```

`format@override` Determines if the `format` key should override the `indexing` attribute value.

```

5523 \newif\if@glsxtr@format@override
5524 \if@glsxtr@format@overridefalse

```

If overriding is enabled, the `\glshypernumber` command will have to be redefined in the index to use `\hyperpage` instead.

`xFormatOverride`

```

5525 \@ifpackageloaded{hyperref}

```

```

5526 {
  If hyperref's hyperindex option is on, then hyperref will automatically add \hyperpage, so
  don't add it.

5527 \ifHy@hyperindex
5528   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
5529     \@glsxtr@format@overridetru
5530     \appto\theindex{\let\glshypernumber\@firstofone}%
5531   }
5532 \else
5533   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
5534     \@glsxtr@format@overridetru
5535     \appto\theindex{\let\glshypernumber\hyperpage}%
5536   }
5537 \fi
5538 }
5539 {
5540   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
5541     \@glsxtr@format@overridetru
5542   }
5543 }
5544 \only\GlsXtrEnableIndexFormatOverride

doautoindexname
5545 \newcommand*{\glsxtrdoautoindexname}[2]{%
5546   \glshasattribute{#1}{#2}%
5547   {%
      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.

5548   \@glsxtr@autoindex@setname{#1}%
      If the attribute value is simply "true" don't add an encap, otherwise use the value as the encap.

5549   \protected@edef@\glsxtr@attrval{\glsgetattribute{#1}{#2}}%
5550   \if@glsxtr@format@override
      5551     \ifx@\glsnumberformat@\glsxtr@defaultnumberformat
      5552       \else
      5553         \let@\glsxtr@attrval@\glsnumberformat
      5554       \fi
      5555     \fi
      5556     \ifdefstring{\@glsxtr@attrval}{true}%
      5557     {}%
      5558     {\eappto@\glo@name{\@glsxtr@autoindex@encap@\glsxtr@attrval}}%
      5559     \expandafter\glsxtrautoindex\expandafter{\@glo@name}%
      5560   }%
      5561   {}%
    5562 }

glsxtrautoindex
5563 \newcommand*{\glsxtrautoindex}{\index}

```

```

toindex@setname Assign \@glo@name for use with indexname attribute.
5564 \newcommand*{\@glsxtr@autoindex@setname}[1]{%
5565   \protected@edef{\glo@name{\glsxtrautoindexentry{#1}}}{%
5566     \glsxtrautoindexassingsort{\glo@sort}{#1}}%
5567   \gls@checkmkidxchars{\glo@sort}%
5568   \glsxtr@autoindex@doextra@esc{\glo@sort}%
5569   \epreto{\glo@name{\glo@sort\glsxtr@autoindex@at}}{%
5570 }

rautoindexentry Command used for the actual part when auto-indexing.
5571 \newcommand*{\glsxtrautoindexentry}[1]{\string\glsentryname{#1}}


trautoindexsort Used to assign the sort value when auto-indexing.
5572 \newcommand*{\glsxtrautoindexassingsort}[2]{%
5573   \glsletentryfield{#1}{#2}{sort}}%
5574 }

dex@doextra@esc
5575 \newcommand*{\glsxtr@autoindex@doextra@esc}[1]{%
  Escape the escape character unless it has already been escaped.
5576   \ifx\glsxtr@autoindex@esc\gls@quotechar
5577   \else
5578     \def\gls@checkedmkidx{}%
5579     \edef\@glsxtr@checkspch{%
5580       \noexpand\glsxtr@autoindex@escquote\expandonce{#1}%
5581       \noexpand\empty\glsxtr@autoindex@esc\noexpand\@nil
5582       \glsxtr@autoindex@esc\noexpand\empty\noexpand\glsxtr@endescspch}%
5583     \glsxtr@checkspch
5584     \let#1\gls@checkedmkidx\relax
5585   \fi
  Escape actual character unless it has already been escaped.
5586   \ifx\glsxtr@autoindex@at\gls@actualchar
5587   \else
5588     \def\gls@checkedmkidx{}%
5589     \edef\@glsxtr@checkspch{%
5590       \noexpand\glsxtr@autoindex@escat\expandonce{#1}%
5591       \noexpand\empty\glsxtr@autoindex@at\noexpand\@nil
5592       \glsxtr@autoindex@at\noexpand\empty\noexpand\glsxtr@endescspch}%
5593     \glsxtr@checkspch
5594     \let#1\gls@checkedmkidx\relax
5595   \fi
  Escape level character unless it has already been escaped.
5596   \ifx\glsxtr@autoindex@level\gls@levelchar
5597   \else
5598     \def\gls@checkedmkidx{}%
5599     \edef\@glsxtr@checkspch{%
5600       \noexpand\glsxtr@autoindex@esclevel\expandonce{#1}%

```

```

5601      \noexpand\@empty\@glsxtr@autoindex@level\noexpand\@nnil
5602      \@glsxtr@autoindex@level\noexpand\@empty\noexpand\@glsxtr@endescspch}%
5603      \@@glsxtr@checkspch
5604      \let#1\@gls@checkedmidx\relax
5605  \fi

```

Escape encapsulation character unless it has already been escaped.

```

5606  \ifx\@glsxtr@autoindex@encap\@gls@encapchar
5607  \else
5608      \def\@gls@checkedmidx{}%
5609      \edef\@glsxtr@checkspch{%
5610          \noexpand\@glsxtr@autoindex@escencap\expandonce{#1}%
5611          \noexpand\@empty\@glsxtr@autoindex@encap\noexpand\@nnil
5612          \@glsxtr@autoindex@encap\noexpand\@empty\noexpand\@glsxtr@endescspch}%
5613      \@@glsxtr@checkspch
5614      \let#1\@gls@checkedmidx\relax
5615  \fi
5616 }

```

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`.

```
5617 \newcommand*\{@glsxtr@autoindex@at}{}%
```

`trSetActualChar` Set the actual character.

```

5618 \newcommand*\GlsXtrSetActualChar[1]{%
5619     \gdef\@glsxtr@autoindex@at{#1}%
5620     \def\@glsxtr@autoindex@escat##1#1##2#1##3\@glsxtr@endescspch{%
5621         \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escat}{##1}{##2}{##3}%
5622     }%
5623 }
5624 \@onlypreamble\GlsXtrSetActualChar
5625 \makeatother
5626 \GlsXtrSetActualChar{@}
5627 \makeatletter

```

`autoindex@encap` Encapsulation character for use with `\index`.

```
5628 \newcommand*\{@glsxtr@autoindex@encap}{}%
```

`XtrSetEncapChar` Set the encapsulation character.

```

5629 \newcommand*\GlsXtrSetEncapChar[1]{%
5630     \gdef\@glsxtr@autoindex@encap{#1}%
5631     \def\@glsxtr@autoindex@escencap##1#1##2#1##3\@glsxtr@endescspch{%
5632         \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escencap}{##1}{##2}{##3}%
5633     }%
5634 }
5635 \GlsXtrSetEncapChar{|}
5636 \@onlypreamble\GlsXtrSetEncapChar

```

```

autoindex@level Level character for use with \index.
5637 \newcommand*{\@glsxtr@autoindex@level}{}}

XtrSetLevelChar Set the encap character.
5638 \newcommand*{\GlsXtrSetLevelChar}[1]{%
5639   \gdef\@glsxtr@autoindex@level{\#1}%
5640   \def\@glsxtr@autoindex@esclevel##1##2##3\@glsxtr@endescspch{%
5641     \@@glsxtr@autoindex@escspch{\#1}{\@glsxtr@autoindex@esclevel}{##1}{##2}{##3}%
5642   }%
5643 }
5644 \GlsXtrSetLevelChar{!}
5645 \onlypreamble\GlsXtrSetLevelChar

r@autoindex@esc Escape character for use with \index.
5646 \newcommand*{\@glsxtr@autoindex@esc}{"}

lsXtrSetEscChar Set the escape character.
5647 \newcommand*{\GlsXtrSetEscChar}[1]{%
5648   \gdef\@glsxtr@autoindex@esc{\#1}%
5649   \def\@glsxtr@autoindex@escquote##1##2##3\@glsxtr@endescspch{%
5650     \@@glsxtr@autoindex@escspch{\#1}{\@glsxtr@autoindex@escquote}{##1}{##2}{##3}%
5651   }%
5652 }
5653 \GlsXtrSetEscChar{`}
5654 \onlypreamble\GlsXtrSetEscChar

      Set if defined. (For example, if doc package has been loaded.) Actual character \actualchar:
5655 \ifdef\actualchar
5656   {\expandafter\GlsXtrSetActualChar\expandafter{\actualchar}}
5657 {}

      Quote character \quotechar:
5658 \ifdef\quotechar
5659   {\expandafter\GlsXtrSetEscChar\expandafter{\quotechar}}
5660 {}

      Level character \levelchar:
5661 \ifdef\levelchar
5662   {\expandafter\GlsXtrSetLevelChar\expandafter{\levelchar}}
5663 {}

      Encap character \encapchar:
5664 \ifdef\encapchar
5665   {\expandafter\GlsXtrSetEncapChar\expandafter{\encapchar}}
5666 {}

leto@endescspch
5667 \def\@glsxtr@gobbleto@endescspch#1\@glsxtr@endescspch{}}

```

```
toindex@esc@spch \@@glsxtr@autoindex@escspch{\char}{\cs}{\pre}{\mid}{\post}
```

```
5668 \newcommand*\@@glsxtr@autoindex@escspch}[5]{%
5669   \gls@tmpb=\expandafter{\gls@checkedmidx}%
5670   \toks@={#3}%
5671   \ifx\@nnil#3\relax
5672     \def\@@glsxtr@checkspch{\glsxtr@gobbleto@endescspch#5@glsxtr@endescspch}%
5673   \else
5674     \ifx\@nnil#4\relax
5675       \edef\gls@checkedmidx{\the\gls@tmpb\the\toks@}%
5676       \def\@@glsxtr@checkspch{\glsxtr@gobbleto@endescspch
5677         #4#5@glsxtr@endescspch}%
5678     \else
5679       \edef\gls@checkedmidx{\the\gls@tmpb\the\toks@%
5680         \glsxtr@autoindex@esc#1}%
5681       \def\@@glsxtr@checkspch{\#2#5#1\@nnil#1@glsxtr@endescspch}%
5682     \fi
5683   \fi
5684 \@@glsxtr@checkspch
5685 }
```

\Glossentrydesc Redefine to set the abbreviation format and accessibility support.

```
5686 \renewcommand*\Glossentrydesc}[1]{%
5687   \glsdoifexistsorwarn{#1}%
5688   {%
5689     \glssetabbrvfmt{\glscategory{#1}}%
5690     \Glsaccessdesc{#1}%
5691   }%
5692 }
```

\lossentrysymbol Redefine to set the abbreviation format and accessibility support.

```
5693 \renewcommand*\glossentrysymbol}[1]{%
5694   \glsdoifexistsorwarn{#1}%
5695   {%
5696     \glssetabbrvfmt{\glscategory{#1}}%
5697     \glsaccesssymbol{#1}%
5698   }%
5699 }
```

\lossentrysymbol Redefine to set the abbreviation format and accessibility support.

```
5700 \renewcommand*\Glossentrysymbol}[1]{%
5701   \glsdoifexistsorwarn{#1}%
5702   {%
5703     \glssetabbrvfmt{\glscategory{#1}}%
5704     \Glsaccesssymbol{#1}%
5705   }%
5706 }
```

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.

```
5707 \newcommand*{\GlsXtrEnableInitialTagging}{%
5708   \@ifstar\s@glsxtr@enabletagging\@glsxtr@enabletagging
5709 }
5710 \@onlypreamble\GlsXtrEnableInitialTagging
```

r@enabletagging Starred version undefines command.

```
5711 \newcommand*{\s@glsxtr@enabletagging}[2]{%
5712   \undef#2%
5713   \@glsxtr@enabletagging{#1}{#2}%
5714 }
```

r@enabletagging Internal command.

```
5715 \newcommand*{\@glsxtr@enabletagging}[2]{%
  Set attributes for categories given in the first argument.
5716   \@for\@glsxtr@cat:=#1\do
5717   {%
5718     \ifdefempty\@glsxtr@cat
5719     {}%
5720     {\glssetcategoryattribute{\@glsxtr@cat}{tagging}{true}}%
5721   }%
5722   \newrobustcmd*#2[1]{##1}%
5723   \def\@glsxtr@taggingcs{#2}%
5724   \renewcommand*\@glsxtr@activate@initialtagging{%
5725     \let#2\@glsxtr@tag
5726   }%
5727   \ifundef\@gls@preglossaryhook
5728   {\GlossariesExtraWarning{Initial tagging requires at least
5729     glossaries.sty v4.19 to work correctly}}%
5730   {}%
5731 }
```

Are we using an old version of mfirstuc that has a bug in \capitalisewords? If so, patch it so we don't have a problem with a combination of tagging and title case.

fu@checkword@do If this command hasn't been defined, then we have pre v2.02 of mfirstuc

```
5732 \ifundef\mfu@checkword@do
5733 {
5734   \newcommand*{\mfu@checkword@do}[1]{%
5735     \ifdefstring{\mfu@checkword@arg}{#1}%
5736     {}%
5737     \let\@mfu@domakefirstuc\@firstofone
5738     \listbreak
5739   }%
```

```

5740     {}%
5741 }

\mfp@checkword \capitalisewords was introduced in mfirstuc v1.06. If \mfp@checkword hasn't been de-
      fined mfirstuc is too old to support the title case attribute.
5742 \ifundef\mfp@checkword
5743 {
5744   \newcommand{\glsxtr@do@titlecaps@warn}{%
5745     \GlossariesExtraWarning{mfirstuc.sty too old. Title Caps
5746       support not available}%
5747 
5748   \let\glsxtr@do@titlecaps@warn\relax
5749 }
5750 {
5751   \renewcommand*\mfp@checkword[1]{%
5752     \def\mfp@checkword@arg{#1}%
5753     \let\mfp@domakefirstuc\makefirstuc
5754     \forlistloop\mfp@checkword@do\mfp@nocaplist
5755   }
5756 }
5757 }
5758 {}% no patch required

@titlecaps@warn Do warning if title case not supported.
5759 \newcommand*{\glsxtr@do@titlecaps@warn}{}}

@initialtagging Used in \printglossary but at least v4.19 of glossaries required.
5760 \newcommand*{\glsxtr@activate@initialtagging}{}}

\glsxtr@tag Definition of tagging command when used in glossary.
5761 \newrobustcmd*{\glsxtr@tag}[1]{%
5762   \glsifattribute{\glscurrententrylabel}{tagging}{true}%
5763   {\glsxtrtagfont{#1}}{#1}%
5764 }

\glsxtrtagfont Used in the glossary.
5765 \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.
5766 \ifdef{\gls@preglossaryhook}
5767 {
5768   \renewcommand*{\gls@preglossaryhook}{%
5769     \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.

```
5770 \ifundef\@glsxtr@org@postdescription
5771 {%
5772   \let\@glsxtr@org@postdescription\glspostdescription
5773   \renewcommand*\glspostdescription{%
5774     \ifglsentryexists{\glscurrententrylabel}{%
5775       {%
5776         \glsxtrpostdescription
5777         \@glsxtr@org@postdescription
5778       }%
5779     }%
5780   }%
5781 }%
5782 {}%
```

Enable the options used by `\@glsxtrp`:

```
5783 \glossxtrsetopts
5784 }%
5785 }
5786 {}
```

`postdescription` This command will only be used if `\@gls@preglossaryhook` is available *and* the glossary style uses `\glspostdescription` without modifying it. (`\nopostdesc` will suppress this.) The `glossaries-extra-stylemods` package will add the post description hook to all the predefined styles that don't include it.

```
5787 \newcommand*\glsxtrpostdescription{%
5788   \csuse{glsxtrpostdesc\glscategory}{\glscurrententrylabel}}%
5789 }
```

`postdescgeneral`

```
5790 \newcommand*\glsxtrpostdescgeneral{}{}
```

`xtrpostdescterm`

```
5791 \newcommand*\glsxtrpostdescterm{}{}
```

`postdescacronym`

```
5792 \newcommand*\glsxtrpostdescacronym{}{}
```

`escabbreviation`

```
5793 \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.

```
5794 \renewcommand*\glspostlinkhook{%
5795   \ifglsentryexists{\glslabel}{\glsxtrpostlinkhook}{}}%
5796 }
```

xtrpostlinkhook The entry label should already be stored in \glslabel by \@gls@link.

```

5797 \newcommand*{\glsxtrpostlinkhook}{%
5798   \glsxtrdiscardperiod{\glslabel}%
5799   {\glsxtrpostlinkendsentence}%
5800   {\glsxtrpostlink}%
5801 }
```

\glsxtrpostlink

```

5802 \newcommand*{\glsxtrpostlink}{%
5803   \csuse{glsxtrpostlink\glscategory{\glslabel}}%
5804 }
```

linkendsentence Done by \glsxtrpostlinkhook if a full stop is discarded.

```

5805 \newcommand*{\glsxtrpostlinkendsentence}{%
5806   \ifcsdef{glsxtrpostlink\glscategory{\glslabel}}{%
5807     {%
5808       \csuse{glsxtrpostlink\glscategory{\glslabel}}%
```

Put the full stop back.

```

5809   .\spacefactor\sfcodes`\. \relax
5810 }%
5811 {%
```

Assume the full stop was discarded because the entry ends with a period, so adjust the space-factor.

```

5812   \spacefactor\sfcodes`\. \relax
5813 }%
5814 }
```

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.

```

5815 \newcommand*{\glsxtrpostlinkAddDescOnFirstUse}{%
5816   \glsxtrifwasfirstuse{\space(\glsaccessdesc{\glslabel})}{}%
5817 }
```

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.

```

5818 \newcommand*{\glsxtrpostlinkAddSymbolOnFirstUse}{%
5819   \glsxtrifwasfirstuse
5820   {%
5821     \ifglshassymbol{\glslabel}{\space(\glsaccesssymbol{\glslabel})}{}%
5822   }%
5823 {}}%
5824 }
```

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).

```

5825 \newcommand*{\glsxtrdiscardperiod}[3]{%
5826   \glsxtrifwasfirstuse
5827   {%
5828     \glsifattribute{#1}{retainfirstuseperiod}{true}%
5829     {#3}%
5830   {%
5831     \glsifattribute{#1}{discardperiod}{true}%
5832     {%
5833       \glsifplural
5834       {%
5835         \glsifattribute{#1}{pluraldiscardperiod}{true}%
5836         {\glsxtrifperiod{#2}{#3}}%
5837         {#3}%
5838       }%
5839     {%
5840       \glsxtrifperiod{#2}{#3}%
5841     }%
5842   }%
5843   {#3}%
5844 }%
5845 }%
5846 {%
5847   \glsifattribute{#1}{discardperiod}{true}%
5848   {%
5849     \glsifplural
5850     {%
5851       \glsifattribute{#1}{pluraldiscardperiod}{true}%
5852       {\glsxtrifperiod{#2}{#3}}%
5853       {#3}%
5854     }%
5855   {%
5856     \glsxtrifperiod{#2}{#3}%
5857   }%
5858 }%
5859 {#3}%
5860 }%
5861 }

```

`\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`

```
5862 \newcommand*{\glsxtrifperiod}[1]{\new@ifnextchar.{\@firstoftwo{#1}}}
```

Sometimes it's useful to test if there's a punctuation character following the glossary entry.

`glsxtr@punclist` List of characters identified as punctuation marks. (Be careful of babel shorthands!) This doesn't allow for punctuation marks made up from multiple characters (such as ' ').

```
5863 \newcommand*{\glsxtr@punclist}{.,;?!}
```

`punctuationmark` Add character to punctuation list.

```
5864 \newcommand*{\glsxtraddpunctuationmark}[1]{\appto{\glsxtr@punclist}{#1}}
```

```
unctuationmarks  Reset the punctuation list.  
5865 \newcommand*{\glsxtrsetpunctuationmarks}[1]{\def\glsxtr@punctlist{#1}}
```

```
\glsxtrifpunc \glsxtrifnextpunc{\i true part}{\i false part}
```

Test if this is followed by a punctuation mark. (Adapted from `\new@ifnextchar`.)

```
5866 \newcommand*{\glsxtrifnextpunc}[2]{%  
5867   \def\reserved@a{#1} %  
5868   \def\reserved@b{#2} %  
5869   \futurelet\glspunc@token\glsxtr@ifnextpunc  
5870 }
```

```
sxtr@ifnextpunc  
5871 \newcommand*{\glsxtr@ifnextpunc}{%  
5872   \glsxtr@ifpunctoken{\glspunc@token}{\let\reserved@b\reserved@a}{}%  
5873   \reserved@b  
5874 }
```

xtr@ifpunctoken Test if the token given in the first argument is in the punctuation list.

```
5875 \newcommand*{\glsxtr@ifpunctoken}[1]{%  
5876   \expandafter\glsxtr@ifpunctoken\expandafter#1\glsxtr@punctlist\@nnil  
5877 }
```

```
xtr@ifpunctoken  
5878 \def\@glsxtr@ifpunctoken#1#2{%
```

5879 \let\reserved@d=#2%
5880 \ifx\reserved@d\@nnil
5881 \let\glsxtr@next\glsxtr@notfoundinlist
5882 \else
5883 \ifx#1\reserved@d
5884 \let\glsxtr@next\glsxtr@foundinlist
5885 \else
5886 \let\glsxtr@next\glsxtr@ifpunctoken
5887 \fi
5888 \fi
5889 \glsxtr@next#1%
5890 }

```
xtr@foundinlist  
5891 \def\@glsxtr@foundinlist#1\@nnil{\@firstoftwo}
```

```
@notfoundinlist  
5892 \def\@glsxtr@notfoundinlist#1{\@secondoftwo}
```

```
glsxtrdopostpunc \glsxtrdopostpunc{<code>}
```

If this is followed be a punctuation character, do `<code>` after the character otherwise do `<code>` before whatever comes next.

```
5893 \newcommand{\glsxtrdopostpunc}[1]{%
5894   \glsxtrifnextpunc{@glsxtr@swaptwo{#1}}{#1}%
5895 }
```

```
@glsxtr@swaptwo
```

```
5896 \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.

```
5897 \define@key{glsxtrabbrv}{category}{%
5898   \edef\glscategorylabel{#1}%
5899   \ifcsdef{@glsabbrv@current@#1}%
5900   {}%
```

Warning should already have been issued.

```
5901 \let{@glsxtr@orgwarndep\GlsXtrWarnDeprecatedAbbrStyle}%
5902 \let{\GlsXtrWarnDeprecatedAbbrStyle}@gobbletwo%
5903 \glsxtr@applyabbrvstyle{\csname@glsabbrv@current@#1\endcsname}%
5904 \let{\GlsXtrWarnDeprecatedAbbrStyle}@glsxtr@orgwarndep%
5905 }%
5906 {}%
5907 }
```

Save the short plural form. This may be needed before the entry is defined.

```
5908 \define@key{glsxtrabbrv}{shortplural}{%
5909   \def@gls@shortpl{#1}%
5910 }
```

Similarly for the long plural form.

```
5911 \define@key{glsxtrabbrv}{longplural}{%
5912   \def@gls@longpl{#1}%
5913 }
```

Token registers for the short plural and long plural, provided for use in the abbreviation style definitions.

```
\glsshortpltok
```

```
5914 \newtoks\glsshortpltok
```

```

\glslongpltok
 5915 \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.
 5916 \newcommand*{\@glsxtr@insertdots}[2]{%
 5917   \def#1{}%
 5918   \@glsxtr@insert@dots#1#2\@nnil
 5919 }

xtr@insert@dots
 5920 \newcommand*{\@glsxtr@insert@dots}[2]{%
 5921   \ifx\@nnil#2\relax
 5922     \let\@glsxtr@insert@dots@next\gobble
 5923   \else
 5924     \ifx\relax#2\relax
 5925       \else
 5926         \appto#1{#2.}%
 5927       \fi
 5928     \let\@glsxtr@insert@dots@next\@glsxtr@insert@dots
 5929   \fi
 5930   \@glsxtr@insert@dots@next#1%
 5931 }

Similarly provide a way of replacing spaces with \glsxtrwordsep, which first needs to be defined:

```

```

\glsxtrwordsep
 5932 \newcommand*{\glsxtrwordsep}{\space}

Each word is marked with

\glsxtrword
 5933 \newcommand*{\glsxtrword}[1]{#1}

tr@markwordseps
 5934 \newcommand*{\@glsxtr@markwordseps}[2]{%
 5935   \def#1{}%
 5936   \@glsxtr@mark@wordseps#1#2 \@nnil
 5937 }

r@mark@wordseps
 5938 \def\@glsxtr@mark@wordseps#1#2 #3{%
 5939   \ifdefempty{#1}{%
```

```

5940 {\def#1{\protect\glsxtrword{#2}}}%  

5941 {\appto#1{\protect\glsxtrwordsep\protect\glsxtrword{#2}}}%  

5942 \ifx\@nnil#3\relax  

5943 \let\@glsxtr@mark@wordseps@next\relax  

5944 \else  

5945 \def\@glsxtr@mark@wordseps@next{  

5946   \@glsxtr@mark@wordseps#1#3}%  

5947 \fi  

5948 \glsxtr@mark@wordseps@next  

5949 }

```

`newabbreviation` Define a new generic abbreviation.

```

5950 \newcommand*{\newabbreviation}[4] [] {  

5951   \glsxtr@newabbreviation{#1}{#2}{#3}{#4}}%  

5952 }

```

`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.)

```

5953 \newcommand*{\glsxtr@newabbreviation}[4] {  

5954   \glskeylisttok{#1}%  

5955   \glslabeltok{#2}%  

5956   \glsshorttok{#3}%  

5957   \glslongtok{#4}%

```

Save the original short and long values (before attribute settings modify them).

```

5958 \def\glsxtrorgshort{#3}%  

5959 \def\glsxtrorglong{#4}%

```

Get the category.

```

5960 \def\glscategorylabel{abbreviation}%  

5961 \glsxtr@applyabbrvstyle{\glsabbrv@current@abbreviation}%

```

Ignore the shortplural and longplural keys.

```

5962 \setkeys*{\glsxtrabbrv}{shortplural,longplural}{#1}%

```

Set the default long plural

```

5963 \def\gls@longpl{#4\glspluralsuffix}%  

5964 \let\gls@default@longpl\gls@longpl

```

Has the markwords attribute been set?

```

5965 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}-%  

5966 {  

5967   \glsxtr@markwordseps\gls@long{#4}%  

5968   \expandafter\def\expandafter\gls@longpl\expandafter  

5969     {\gls@long\glspluralsuffix}%  

5970   \let\gls@default@longpl\gls@longpl

```

Update `\glslongtok`.

```

5971 \expandafter\glslongtok\expandafter{\gls@long}-%  

5972 {}%  

5973 {}%

```

Has the markshortwords attribute been set? (Not compatible with insertdots.)

```
5974 \glsifcategoryattribute{\glscategorylabel}{markshortwords}{true}%
5975 {%
5976   \@glsxtr@markwordseps\@gls@short{#3}%
5977 }%
5978 {%
```

Has the insertdots attribute been set?

```
5979 \glsifcategoryattribute{\glscategorylabel}{insertdots}{true}%
5980 {%
5981   \@glsxtr@insertdots\@gls@short{#3}%
5982     \expandafter\glsshorttok\expandafter{\@gls@short\spacefactor1000 \relax}%
5983 }%
5984 {\def\@gls@short{#3}}%
5985 }%
```

Has the aposplural attribute been set? (Not compatible with noshortplural.)

```
5986 \glsifcategoryattribute{\glscategorylabel}{aposplural}{true}%
5987 {%
5988   \expandafter\def\expandafter\@gls@shortpl\expandafter{\@gls@short
5989     \abrvpluralsuffix}%
5990 }%
5991 {%
```

Has the noshortplural attribute been set?

```
5992 \glsifcategoryattribute{\glscategorylabel}{noshortplural}{true}%
5993 {%
5994   \let\@gls@shortpl\@gls@short
5995 }%
5996 {%
5997   \expandafter\def\expandafter\@gls@shortpl\expandafter{\@gls@short
5998     \abrvpluralsuffix}%
5999 }%
6000 }%
```

Update \glsshorttok:

```
6001 \expandafter\glsshorttok\expandafter{\@gls@short}%
```

Hook for further customisation if required:

```
6002 \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).

```
6003 \setkeys*{\glsxtrabrv}[category]{#1}%
```

Has the plural been explicitly set?

```
6004 \ifx\@gls@default@longpl\@gls@longpl
6005 \else
```

Has the markwords attribute been set?

```
6006 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
6007 {%
```

```

6008      \expandafter\@glsxtr@markwordseps\expandafter\@gls@longpl\expandafter
6009      {\@gls@longpl}%
6010  }%
6011  {}%
6012 \fi

Set the plural token registers so the values can be accessed by the abbreviation styles.

6013 \expandafter\glsshortpltok\expandafter{\@gls@shortpl}%
6014 \expandafter\glslongpltok\expandafter{\@gls@longpl}%

Do any extra setup provided by hook:

6015 \newabbreviationhook

Define this entry:

6016 \protected@edef\@do@newglossaryentry{%
6017   \noexpand\newglossaryentry{\the\glslabeltok}%
6018   {%
6019     type=\glsxtrabbrvtype,%
6020     category=abbreviation,%
6021     short={\the\glsshorttok},%
6022     shortplural={\the\glsshortpltok},%
6023     long={\the\glslongtok},%
6024     longplural={\the\glslongpltok},%
6025     name={\the\glsshorttok},%
6026     \CustomAbbreviationFields,%
6027     \the\glskeylisttok
6028   }%
6029 }%
6030 \@do@newglossaryentry
6031 \GlsXtrPostNewAbbreviation
6032 }

```

`evpresetkeyhook` Hook for extra stuff in `\newabbreviation`

```
6033 \newcommand*{\glsxtrnewabbrevresetkeyhook}[3]{}
```

`NewAbbreviation` Hook used by abbreviation styles.

```
6034 \newcommand*{\GlsXtrPostNewAbbreviation}{}  
6035 \newcommand*{\newabbreviationhook}{}  
6036 \newcommand*{\CustomAbbreviationFields}{}  
6037 \newcommand*{\glsxtrparen}[1]{(#1)}  
6038 \newcommand*{\glsxtrfullformat}[2]{%
```

`\glsxtrparen` For the parenthetical styles.

`glsxtrfullformat` Full format without case change.

```

6039 \glsfirstlongfont{\glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
6040 \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
6041 }

lsxtrfullformat Full format with case change.
6042 \newcommand*{\Glsxtrfullformat}[2]{%
6043   \glsfirstlongfont{\Glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
6044   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
6045 }

xtrfullplformat Plural full format without case change.
6046 \newcommand*{\glsxtrfullplformat}[2]{%
6047   \glsfirstlongfont{\glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
6048   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}%
6049 }

xtrfullplformat Plural full format with case change.
6050 \newcommand*{\Glsxtrfullplformat}[2]{%
6051   \glsfirstlongfont{\Glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
6052   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}%
6053 }

\glsxtrfullsep Separator used by full format is a space by default. The argument is the entry's label.
6054 \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.
6055 \newcommand*{\glsxtrinelinefullformat}{\glsxtrfullformat}

nlinefullformat Full format with case change.
6056 \newcommand*{\Glsxtrinelinefullformat}{\Glsxtrfullformat}

xtrfullplformat Plural full format without case change.
6057 \newcommand*{\glsxtrinelinefullplformat}{\glsxtrfullplformat}

inefullplformat Plural full format with case change.
6058 \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
6059 \renewcommand*{\glsentryfull}[1]{\glsxtrinelinefullformat{#1}{}}
```

\Glsentryfull

```
6060 \renewcommand*{\Glsentryfull}[1]{\Glsxtrinelinefullformat{#1}{}}
```

```

\glsentryfullpl
 6061 \renewcommand*{\glsentryfullpl}[1]{\glsxtrinlinefullplformat{#1}{}}
```

\Glsentryfullpl

```
 6062 \renewcommand*{\Glsentryfullpl}[1]{\Glsxtrinlinefullplformat{#1}{}}
```

sfirstabbrvfont Font changing command used for the abbreviation on first use or in the full format.

```
 6063 \newcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{#1}}
```

bbrvdefaultfont Font changing command used for the abbreviation on first use or in the full format.

```
 6064 \newcommand*{\glsfirstabbrvdefaultfont}[1]{\glsabbrvfont{#1}}
```

\glsabbrvfont Font changing command used for the abbreviation on subsequent use.

```
 6065 \newcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{#1}}
```

bbrvdefaultfont

```
 6066 \newcommand*{\glsabbrvdefaultfont}[1]{#1}
```

\glslongfont Font changing command used for the long form in commands like \glsxtrlong.

```
 6067 \newcommand*{\glslongfont}[1]{\glslongdefaultfont{#1}}
```

longdefaultfont Default font changing command used for the long form in commands like \glsxtrlong.

```
 6068 \newcommand*{\glslongdefaultfont}[1]{#1}
```

lsfirstlongfont Font changing command used for the long form on first use or in the full format.

```
 6069 \newcommand*{\glsfirstlongfont}[1]{\glslongfont{#1}}
```

longdefaultfont

```
 6070 \newcommand*{\glsfirstlongdefaultfont}[1]{\glslongdefaultfont{#1}}
```

brvpluralsuffix Default plural suffix. Allow an alternative default suffix for abbreviations.

```
 6071 \newcommand*{\glsxtrabbrvpluralsuffix}{\glspluralsuffix}
```

brvpluralsuffix Default plural suffix.

```
 6072 \newcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}
```

\glsxtrfull Full form (no case-change).

```
 6073 \newrobustcmd*{\glsxtrfull}{\@gls@hyp@opt\ns@glsxtrfull}
 6074 \newcommand*\ns@glsxtrfull[2][]{%
 6075   \new@ifnextchar[\{\@glsxtr@full{#1}{#2}\}%
 6076     {\@glsxtr@full{#1}{#2}[]}\%
 6077 }
```

\@glsxstr@full Low-level macro:

```
6078 \def\@glsxstr@full#1#2[#3]{%
6079   \glsdoifexists{#2}%
6080   {%
6081     \glssetabrvfmt{\glscategory{#2}}%
6082     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6083     \let\glsifplural\@secondoftwo
6084     \let\glscapscase\@firstofthree
6085     \let\glsinsert\@empty
6086     \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.

```
6087   \glsxtrsetupfulldefs
6088   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6089 }%
6090 \glspostlinkhook
6091 }
```

trsetupfulldefs

```
6092 \newcommand*\glsxtrsetupfulldefs{%
6093   \let\glsxtrifwasfirstuse\@firstoftwo
6094 }
```

\Glsxtrfull Full form (first letter uppercase).

```
6095 \newrobustcmd*\Glsxtrfull{\gls@hyp@opt\ns@Glsxtrfull}
6096 \newcommand*\ns@Glsxtrfull[2][]{%
6097   \new@ifnextchar[\{\glsxtr@full{#1}{#2}}%
6098     {\glsxtr@full{#1}{#2}}[]}%
```

```
6099 }
```

\@Glsxstr@full Low-level macro:

```
6100 \def\@Glsxstr@full#1#2[#3]{%
6101   \glsdoifexists{#2}%
6102   {%
6103     \glssetabrvfmt{\glscategory{#2}}%
6104     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6105     \let\glsifplural\@secondoftwo
6106     \let\glscapscase\@secondofthree
6107     \let\glsinsert\@empty
6108     \def\glscustomtext{\Glsxtrinlinefullformat{#2}{#3}}%
6109     \glsxtrsetupfulldefs
6110     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6111   }%
6112 \glspostlinkhook
6113 }
```

\GLSxtrfull Full form (all uppercase).

```
6114 \newrobustcmd*{\GLSxtrfull}{\gls@hyp@opt\ns@GLSxtrfull}
6115 \newcommand*\ns@GLSxtrfull[2][]{%
6116   \new@ifnextchar[{\gls@full{\#1}{\#2}}{%
6117     {\gls@full{\#1}{\#2}}[] }%
6118 }
```

\@GLSxtr@full Low-level macro:

```
6119 \def\@GLSxtr@full#1#2[#3]{%
6120   \glsdoifexists{\#2}{%
6121     {%
6122       \glssetabrvfmt{\glscategory{\#2}}{%
6123         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6124         \let\glsifplural\@secondoftwo
6125         \let\glscapscase\@thirdofthree
6126         \let\glsinsert\@empty
6127         \def\glscustomtext{\mfirstucMakeUppercase{\glsxtrinlinefullformat{\#2}{\#3}}}{%
6128           \glsxtrsetupfulldefs
6129           \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}{%
6130             }%
6131           \glspostlinkhook
6132 }
```

\glsxtrfullpl Plural full form (no case-change).

```
6133 \newrobustcmd*{\glsxtrfullpl}{\gls@hyp@opt\ns@glsxtrfullpl}
6134 \newcommand*\ns@glsxtrfullpl[2][]{%
6135   \new@ifnextchar[{\glsxtrfullpl{\#1}{\#2}}{%
6136     {\glsxtrfullpl{\#1}{\#2}}[] }%
6137 }
```

\@glsxtr@fullpl Low-level macro:

```
6138 \def\@glsxtr@fullpl#1#2[#3]{%
6139   \glsdoifexists{\#2}{%
6140     {%
6141       \glssetabrvfmt{\glscategory{\#2}}{%
6142         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6143         \let\glsifplural\@firstoftwo
6144         \let\glscapscase\@firstofthree
6145         \let\glsinsert\@empty
6146         \def\glscustomtext{\glsxtrinlinefullplformat{\#2}{\#3}}{%
6147           \glsxtrsetupfulldefs
6148           \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}{%
6149             }%
6150           \glspostlinkhook
6151 }
```

\Glsxtrfullpl Plural full form (first letter uppercase).

```
6152 \newrobustcmd*{\Glsxtrfullpl}{\gls@hyp@opt\ns@Glsxtrfullpl}
6153 \newcommand*\ns@Glsxtrfullpl[2][]{%
```

```

6154 \new@ifnextchar[{\@Glsxtr@fullpl{#1}{#2}}%
6155           {\@Glsxtr@fullpl{#1}{#2}[] }%
6156 }

\@Glsxtr@fullpl Low-level macro:
6157 \def\@Glsxtr@fullpl#1#2[#3]{%
6158   \glsdoifexists{#2}%
6159   {%
6160     \glssetabrvfmt{\glscategory{#2}}%
6161     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6162     \let\glsifplural\@firstoftwo
6163     \let\glscapscase\@secondofthree
6164     \let\glsinsert\@empty
6165     \def\glscustomtext{\Glsxtrinlinefullplformat{#2}{#3}}%
6166     \glsxtrsetupfulldefs
6167     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6168   }%
6169   \glspostlinkhook
6170 }

```

\GLSxtrfullpl Plural full form (all upper case).

```

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     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6180     \let\glsifplural\@firstoftwo
6181     \let\glscapscase\@thirdofthree
6182     \let\glsinsert\@empty
6183     \def\glscustomtext{%
6184       \mfirstucMakeUppercase{\glsxtrinlinefullplformat{#2}{#3}}%
6185     \glsxtrsetupfulldefs
6186     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6187   }%
6188   \glspostlinkhook
6189 }

```

The short and long forms work in a similar way to acronyms.

\glsxtrshort

```
6190 \newrobustcmd*\glsxtrshort{\gls@hyp@opt\ns@glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

6191 \newcommand*{\ns@glsxtrshort}[2] []{%
6192   \new@ifnextchar[{\@glsxtrshort[#1]{#2}}{\@glsxtrshort[#1]{#2}}[] }%
6193 }

```

Read in the final optional argument:

```

6194 \def\@glsxtrshort#1#2[#3]{%
6195   \glsdoifexists{#2}%
6196   {%

```

Need to make sure \glsabrvfont is set correctly.

```

6197   \glssetabrvfmt{\glscategory{#2}}%
6198   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6199   \let\glsxtrifwasfirstuse\@secondoftwo
6200   \let\glsifplural\@secondoftwo
6201   \let\glscapscase\@firstofthree
6202   \let\glsinsert\@empty
6203   \def\glscustomtext{%
6204     \glsabrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
6205     \ifglsxtrinsertinside\else#3\fi
6206   }%
6207   \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6208 }%
6209 \glspostlinkhook
6210 }%

```

\Glsxtrshort

```

6211 \newrobustcmd*{\Glsxtrshort}{\@gls@hyp@opt\ns@Glsxtrshort}

```

Define the un-starred form. Need to determine if there is a final optional argument

```

6212 \newcommand*{\ns@Glsxtrshort}[2] []{%
6213   \new@ifnextchar[{\@Glsxtrshort[#1]{#2}}{\@Glsxtrshort[#1]{#2}}[] }%
6214 }

```

Read in the final optional argument:

```

6215 \def\@Glsxtrshort#1#2[#3]{%
6216   \glsdoifexists{#2}%
6217   {%
6218     \glssetabrvfmt{\glscategory{#2}}%
6219     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6220     \let\glsxtrifwasfirstuse\@secondoftwo
6221     \let\glsifplural\@secondoftwo
6222     \let\glscapscase\@secondofthree
6223     \let\glsinsert\@empty
6224     \def\glscustomtext{%
6225       \glsabrvfont{\Glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
6226       \ifglsxtrinsertinside\else#3\fi
6227     }%
6228     \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6229   }%
6230   \glspostlinkhook
6231 }%

```

```

\GLSxtrshort
6232 \newrobustcmd*\{\GLSxtrshort\}{\gls@hyp@opt\ns@GLSxtrshort}

Define the un-starred form. Need to determine if there is a final optional argument
6233 \newcommand*\{\ns@GLSxtrshort\}[2] []{%
6234   \new@ifnextchar[\{\@GLSxtrshort{\#1}{\#2}\}{\@GLSxtrshort{\#1}{\#2}}[]]{%
6235 }

Read in the final optional argument:
6236 \def\@GLSxtrshort#1#2[#3]{%
6237   \glsdoifexists{\#2}{%
6238     {%
6239       \glssetabrvfmt{\glscategory{\#2}}{%
6240         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6241         \let\glsxtrifwasfirstuse\secondoftwo
6242         \let\glsifplural\secondoftwo
6243         \let\glscapscase\thirdofthree
6244         \let\glsinsert\empty
6245         \def\glscustomtext{%
6246           \mfirstrucMakeUppercase
6247           {\glsabrvfont{\glsaccessshort{\#2}}\ifglsxtrinsertinside#3\fi}{%
6248             \ifglsxtrinsertinside\else#3\fi
6249           }%
6250         }%
6251         \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
6252       }%
6253       \glspostlinkhook
6254     }%
}

```

```

\glsxtrlong
6255 \newrobustcmd*\{\glsxtrlong\}{\gls@hyp@opt\ns@glsxtrlong}

Define the un-starred form. Need to determine if there is a final optional argument
6256 \newcommand*\{\ns@glsxtrlong\}[2] []{%
6257   \new@ifnextchar[\{\glsxtrlong{\#1}{\#2}\}{\glsxtrlong{\#1}{\#2}}[]]{%
6258 }

Read in the final optional argument:
6259 \def\@glsxtrlong#1#2[#3]{%
6260   \glsdoifexists{\#2}{%
6261     {%
6262       \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6263       \let\glsxtrifwasfirstuse\secondoftwo
6264       \let\glsifplural\secondoftwo
6265       \let\glscapscase\firstofthree
6266       \let\glsinsert\empty
6267       \def\glscustomtext{%
6268         \glslongfont{\glsaccesslong{\#2}}\ifglsxtrinsertinside#3\fi}{%
6269           \ifglsxtrinsertinside\else#3\fi
6270         }%
6271         \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
}

```

```

6272  }%
6273  \glspostlinkhook
6274 }

\Glsxtrlong
6275 \newrobustcmd*{\Glsxtrlong}{\gls@hyp@opt\ns@Glsxtrlong}

Define the un-starred form. Need to determine if there is a final optional argument
6276 \newcommand*{\ns@Glsxtrlong}[2] []{%
6277  \new@ifnextchar[{\glsxtrlong[#1]{#2}}{\glsxtrlong[#1]{#2}}[] }%
6278 }

Read in the final optional argument:
6279 \def\glsxtrlong#1#2[#3]{%
6280  \glsdoifexists{#2}%
6281  {%
6282   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6283   \let\glsxtrifwasfirstuse@secondoftwo
6284   \let\glsifplural@secondoftwo
6285   \let\glscapscase@secondofthree
6286   \let\glsinsert@\empty
6287   \def\glscustomtext{%
6288     \glslongfont{\glsaccesslong[#2]\ifglsxtrinsertinside#3\fi}%
6289     \ifglsxtrinsertinside\else#3\fi
6290   }%
6291   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6292 }%
6293 \glspostlinkhook
6294 }

```

```

\GLSxtrlong
6295 \newrobustcmd*{\GLSxtrlong}{\gls@hyp@opt\ns@GLSxtrlong}

Define the un-starred form. Need to determine if there is a final optional argument
6296 \newcommand*{\ns@GLSxtrlong}[2] []{%
6297  \new@ifnextchar[{\glsxtrlong[#1]{#2}}{\glsxtrlong[#1]{#2}}[] }%
6298 }

Read in the final optional argument:
6299 \def\glsxtrlong#1#2[#3]{%
6300  \glsdoifexists{#2}%
6301  {%
6302   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6303   \let\glsxtrifwasfirstuse@secondoftwo
6304   \let\glsifplural@secondoftwo
6305   \let\glscapscase@thirdofthree
6306   \let\glsinsert@\empty
6307   \def\glscustomtext{%
6308     \mfirstucMakeUppercase
6309     \glslongfont{\glsaccesslong[#2]\ifglsxtrinsertinside#3\fi}%
6310     \ifglsxtrinsertinside\else#3\fi

```

```

6311      }%
6312      }%
6313      \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6314      }%
6315      \glspostlinkhook
6316 }

```

Plural short forms:

\glsxtrshortpl

```

6317 \newrobustcmd*\glsxtrshortpl{\gls@hyp@opt\ns@glsxtrshortpl}
    Define the un-starred form. Need to determine if there is a final optional argument
6318 \newcommand*\ns@glsxtrshortpl[2][]{%
6319   \new@ifnextchar[\glsxtrshortpl[#1]{#2}{\glsxtrshortpl[#1]{#2}[]}}%
6320 }

```

Read in the final optional argument:

```

6321 \def\glsxtrshortpl#1#2[#3]{%
6322   \glsdoifexists{#2}{%
6323     {%
6324       \glssetabrvfmt{\glscategory{#2}}{%
6325         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6326         \let\glsxtrifwasfirstuse\secondoftwo
6327         \let\glsifplural\firstoftwo
6328         \let\glscapscase\firstofthree
6329         \let\glsinsert\empty
6330         \def\glscustomtext{%
6331           \glsabbrvfont{\glsaccessshortpl[#2]\ifglsxtrinsertinside#3\fi}{%
6332             \ifglsxtrinsertinside\else#3\fi
6333           }%
6334           \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6335         }%
6336         \glspostlinkhook
6337       }%

```

\Glsxtrshortpl

```

6338 \newrobustcmd*\Glsxtrshortpl{\gls@hyp@opt\ns@Glsxtrshortpl}
    Define the un-starred form. Need to determine if there is a final optional argument
6339 \newcommand*\ns@Glsxtrshortpl[2][]{%
6340   \new@ifnextchar[\Glsxtrshortpl[#1]{#2}{\Glsxtrshortpl[#1]{#2}[]}}%
6341 }

```

Read in the final optional argument:

```

6342 \def\Glsxtrshortpl#1#2[#3]{%
6343   \glsdoifexists{#2}{%
6344     {%
6345       \glssetabrvfmt{\glscategory{#2}}{%
6346         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6347         \let\glsxtrifwasfirstuse\secondoftwo

```

```

6348   \let\glsifplural\@firstoftwo
6349   \let\glscapscase\@secondofthree
6350   \let\glsinsert\@empty
6351   \def\glscustomtext{%
6352     \glsabbrvfont{\Glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
6353     \ifglsxtrinsertinside\else#3\fi
6354   }%
6355   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6356 }%
6357 \glspostlinkhook
6358 }

```

\GLSxtrshortpl

```
6359 \newrobustcmd*\GLSxtrshortpl{\gls@hyp@opt\ns@GLSxtrshortpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

6360 \newcommand*\ns@GLSxtrshortpl[2][]{%
6361   \new@ifnextchar[\{@GLSxtrshortpl{#1}{#2}\}{\@GLSxtrshortpl{#1}{#2}[]}}%
6362 }

```

Read in the final optional argument:

```

6363 \def\@GLSxtrshortpl#1#2[#3]{%
6364   \glsdoifexists{#2}%
6365   {%
6366     \glssetabbrvfmt{\glscategory{#2}}%
6367     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6368     \let\glsxtrifwasfirstuse\@secondoftwo
6369     \let\glsifplural\@firstoftwo
6370     \let\glscapscase\@thirdofthree
6371     \let\glsinsert\@empty
6372     \def\glscustomtext{%
6373       \mfirstucMakeUppercase
6374       \glsabbrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
6375       \ifglsxtrinsertinside\else#3\fi
6376     }%
6377   }%
6378   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6379 }%
6380 \glspostlinkhook
6381 }

```

Plural long forms:

\glsxtrlongpl

```
6382 \newrobustcmd*\glsxtrlongpl{\gls@hyp@opt\ns@glsxtrlongpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

6383 \newcommand*\ns@glsxtrlongpl[2][]{%
6384   \new@ifnextchar[\{@glsxtrlongpl{#1}{#2}\}{\@glsxtrlongpl{#1}{#2}[]}}%
6385 }

```

Read in the final optional argument:

```
6386 \def\@glsxtrlongpl#1#2[#3]{%
6387   \glsdoifexists{#2}%
6388 {%
6389   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6390   \let\glsxtrifwasfirstuse\@secondoftwo
6391   \let\glsifplural\@firstoftwo
6392   \let\glscapscase\@firstofthree
6393   \let\glsinsert\@empty
6394   \def\glscustomtext{%
6395     \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
6396     \ifglsxtrinsertinside\else#3\fi
6397   }%
6398   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6399 }%
6400 \glspostlinkhook
6401 }
```

\Glsxtrlongpl

```
6402 \newrobustcmd*\Glsxtrlongpl{\gls@hyp@opt\ns@Glsxtrlongpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
6403 \newcommand*\ns@Glsxtrlongpl[2][]{%
6404   \new@ifnextchar[\{@Glsxtrlongpl{#1}{#2}\}{\@Glsxtrlongpl{#1}{#2}[]}%
6405 }
```

Read in the final optional argument:

```
6406 \def\@Glsxtrlongpl#1#2[#3]{%
6407   \glsdoifexists{#2}%
6408 {%
6409   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6410   \let\glsxtrifwasfirstuse\@secondoftwo
6411   \let\glsifplural\@firstoftwo
6412   \let\glscapscase\@secondofthree
6413   \let\glsinsert\@empty
6414   \def\glscustomtext{%
6415     \glslongfont{\Glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
6416     \ifglsxtrinsertinside\else#3\fi
6417   }%
6418   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6419 }%
6420 \glspostlinkhook
6421 }
```

\GLSxtrlongpl

```
6422 \newrobustcmd*\GLSxtrlongpl{\gls@hyp@opt\ns@GLSxtrlongpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
6423 \newcommand*\ns@GLSxtrlongpl[2][]{%
6424   \new@ifnextchar[\{@GLSxtrlongpl{#1}{#2}\}{\@GLSxtrlongpl{#1}{#2}[]}%
6425 }
```

Read in the final optional argument:

```
6426 \def\@GLSxtrlongpl#1#2[#3]{%
6427   \glsdoifexists{#2}%
6428 {%
6429   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6430   \let\glsxtrifwasfirstuse\@secondoftwo
6431   \let\glsifplural\@firstoftwo
6432   \let\glscapscase\@thirdofthree
6433   \let\glsinsert\@empty
6434   \def\glscustomtext{%
6435     \mfirstucMakeUppercase
6436     {\glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
6437       \ifglsxtrinsertinside\else#3\fi
6438     }%
6439   }%
6440   \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6441 }%
6442 \glspostlinkhook
6443 }
```

\glssetabbrvfmt Set the current format for the given category (or the abbreviation category if unset).

```
6444 \newcommand*{\glssetabbrvfmt}[1]{%
6445   \ifcsdef{@glsabbrv@current@#1}%
6446   {\glsxtr@applyabbrvfmt{\csname @glsabbrv@current@#1\endcsname}}%
6447   {\glsxtr@applyabbrvfmt{\@glsabbrv@current@abbreviation}}%
6448 }
```

\glsuseabbrvfont Provide a way to use the abbreviation font for a given category for arbitrary text.

```
6449 \newrobustcmd*{\glsuseabbrvfont}[2]{{\glssetabbrvfmt{#2}\glsabbrvfont{#1}}}
```

\glsuselongfont Provide a way to use the long font for a given category for arbitrary text.

```
6450 \newrobustcmd*{\glsuselongfont}[2]{{\glssetabbrvfmt{#2}\glslongfont{#1}}}
```

\sxtrgenabbrvfmt Similar to \glsgenacfmt, but for abbreviations.

```
6451 \newcommand*{\glsxtrgenabbrvfmt}{}%
6452   \ifdefempty\glscustomtext
6453 {%
6454   \ifglsused\glslabel
6455   {}%
```

Subsequent use:

```
6456   \glsifplural
6457   {}%
```

Subsequent plural form:

```
6458   \glscapscase
6459   {}%
```

Subsequent plural form, don't adjust case:

```
6460      \glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
6461      }%
6462      {%
```

Subsequent plural form, make first letter upper case:

```
6463      \Glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
6464      }%
6465      {%
```

Subsequent plural form, all caps:

```
6466      \mfirstucMakeUppercase
6467      {\glsxtrsubsequentplfmt{\glslabel}{\glsinsert}}%
6468      }%
6469      }%
6470      {%
```

Subsequent singular form

```
6471      \glscapscase
6472      {%
```

Subsequent singular form, don't adjust case:

```
6473      \glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
6474      }%
6475      {%
```

Subsequent singular form, make first letter upper case:

```
6476      \Glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
6477      }%
6478      {%
```

Subsequent singular form, all caps:

```
6479      \mfirstucMakeUppercase
6480      {\glsxtrsubsequentfmt{\glslabel}{\glsinsert}}%
6481      }%
6482      }%
6483      }%
6484      {%
```

First use:

```
6485      \glsifplural
6486      {%
```

First use plural form:

```
6487      \glscapscase
6488      {%
```

First use plural form, don't adjust case:

```
6489      \glsxtrfullplformat{\glslabel}{\glsinsert}%
6490      }%
6491      {%
```

First use plural form, make first letter upper case:

```
6492      \Glsxtrfullplformat{\glslabel}{\glsinsert}%
6493      }%
6494      {%
```

First use plural form, all caps:

```
6495      \mfirstucMakeUppercase
6496      {\glsxtrfullplformat{\glslabel}{\glsinsert}}%
6497      }%
6498      }%
6499      {%
```

First use singular form

```
6500      \glscapscase
6501      {%
```

First use singular form, don't adjust case:

```
6502      \glsxtrfullformat{\glslabel}{\glsinsert}%
6503      }%
6504      {%
```

First use singular form, make first letter upper case:

```
6505      \Glsxtrfullformat{\glslabel}{\glsinsert}%
6506      }%
6507      {%
```

First use singular form, all caps:

```
6508      \mfirstucMakeUppercase
6509      {\glsxtrfullformat{\glslabel}{\glsinsert}}%
6510      }%
6511      }%
6512      }%
6513      }%
6514      {%
```

User supplied text.

```
6515      \glscustomtext
6516      }%
6517 }
```

trsubsequentfmt Subsequent use format (singular no case change).

```
6518 \newcommand*{\glsxtrsubsequentfmt}[2]{%
6519   \glsabbrvfont{\glsaccessshort{\#1}\ifglsxtrinsertinside #2\fi}%
6520   \ifglsxtrinsertinside \else#2\fi
6521 }
6522 \let\glsxtrdefaultsubsequentfmt\glsxtrsubsequentfmt
```

subsequentplfmt Subsequent use format (plural no case change).

```
6523 \newcommand*{\glsxtrsubsequentplfmt}[2]{%
6524   \glsabbrvfont{\glsaccessshortpl{\#1}\ifglsxtrinsertinside #2\fi}%
6525   \ifglsxtrinsertinside \else#2\fi
```

```
6526 }
6527 \let\glsxtrdefaultsubsequentplfmt\glsxtrsubsequentplfmt
```

trsubsequentfmt Subsequent use format (singular, first letter uppercase).

```
6528 \newcommand*{\Glsxtrsubsequentfmt}[2]{%
6529   \glsabbrvfont{\Glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
6530   \ifglsxtrinsertinside \else#2\fi
6531 }
6532 \let\Glsxtrdefaultsubsequentfmt\Glsxtrsubsequentfmt
```

subsequentplfmt Subsequent use format (plural, first letter uppercase).

```
6533 \newcommand*{\Glsxtrsubsequentplfmt}[2]{%
6534   \glsabbrvfont{\Glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
6535   \ifglsxtrinsertinside \else#2\fi
6536 }
6537 \let\Glsxtrdefaultsubsequentplfmt\Glsxtrsubsequentplfmt
```

1.6.1 Abbreviation Styles Setup

breviaitonstyle

```
6538 \newcommand*{\setabbreviationstyle}[2][abbreviation]{%
6539   \ifcsundef{@glsabbrv@dispstyle@setup@#2}%
6540   {%
6541     \PackageError{glossaries-extra}{Undefined abbreviation style ‘#2’}{}%
6542   }%
6543   {%
```

Have abbreviations already been defined for this category?

```
6544   \ifcsstring{@glsabbrv@current@#1}{#2}%
6545   {%
```

Style already set.

```
6546   }%
6547   {%
6548     \def\@glsxtr@dostylewarn{}%
6549     \glsforeachincategory{#1}{\@gls@type}{\@gls@label}%
6550     {%
6551       \def\@glsxtr@dostylewarn{\GlossariesWarning{Abbreviation
6552         style has been switched \MessageBreak
6553         for category ‘#1’, \MessageBreak
6554         but there have already been entries \MessageBreak
6555         defined for this category. Unwanted \MessageBreak
6556         side-effects may result}}%
6557       \@endfortrue
6558     }%
6559     \@glsxtr@dostylewarn
```

Set up the style for the given category.

```
6560   \csdef{@glsabbrv@current@#1}{#2}%
6561   \glsxtr@applyabbrvstyle{#2}%
```

```
6562      }%
6563  }%
6564 }
```

applyabbrvstyle Apply the abbreviation style without existence check.

```
6565 \newcommand*{\glsxtr@applyabbrvstyle}[1]{%
6566   \csuse{@glsabrv@dispstyle@setup@#1}%
6567   \csuse{@glsabrv@dispstyle@fmts@#1}%
6568 }
```

r@applyabbrvfmt Only apply the style formats.

```
6569 \newcommand*{\glsxtr@applyabbrvfmt}[1]{%
6570   \csuse{@glsabrv@dispstyle@fmts@#1}%
6571 }
```

breviaitonstyle 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.

```
6572 \newcommand*{\newabbreviationstyle}[3]{%
6573   \ifcsdef{@glsabrv@dispstyle@setup@#1}%
6574     {}%
6575     \PackageError{glossaries-extra}{Abbreviation style '#1' already%
6576     defined}{}%
6577   }%
6578   {}%
6579   \csdef{@glsabrv@dispstyle@setup@#1}{%
```

Initialise hook to do nothing. The style may change this.

```
6580   \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
6581   #2}%
6582   \csdef{@glsabrv@dispstyle@fmts@#1}{%
```

Assume in-line form is the same as first use. The style may change this.

```
6583   \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}%
6584   \renewcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}%
6585   \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}%
6586   \renewcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}%
```

Reset \glsxtrsubsequentfmt etc in case a style changes this.

```
6587   \let\glsxtrsubsequentfmt\glsxtrdefaultsubsequentfmt
6588   \let\glsxtrsubsequentplfmt\glsxtrdefaultsubsequentplfmt
6589   \let\Glsxtrsubsequentfmt\Glsxtrdefaultsubsequentfmt
6590   \let\Glsxtrsubsequentplfmt\Glsxtrdefaultsubsequentplfmt
6591   #3}%
6592 }%
6593 }
```

breviaitonstyle

```
6594 \newcommand*{\renewabbreviationstyle}[3]{%
6595   \ifcsundef{@glsabrv@dispstyle@setup@#1}
```

```

6596  {%
6597    \PackageError{glossaries-extra}{Abbreviation style '#1' not defined}{}%
6598  }%
6599  {%
6600    \csdef{@glsabrv@dispstyle@setup@#1}{%
        Initialise hook to do nothing. The style may change this.
6601      \renewcommand*\{\GlsXtrPostNewAbbreviation\}{}%
6602      #2}%
6603    \csdef{@glsabrv@dispstyle@fmts@#1}{%
        Assume in-line form is the same as first use. The style may change this.
6604      \renewcommand*\{\glsxtrinlinefullformat\}{\glsxtrfullformat\}%
6605      \renewcommand*\{\Glsxtrinlinefullformat\}{\Glsxtrfullformat\}%
6606      \renewcommand*\{\glsxtrinlinefullplformat\}{\glsxtrfullplformat\}%
6607      \renewcommand*\{\Glsxtrinlinefullplformat\}{\Glsxtrfullplformat\}%
6608      #3}%
6609  }%
6610 }

```

breviaitonstyle Define a synonym for an abbreviation style. The first argument is the new name. The second argument is the original style's name.

```

6611 \newcommand*\{\letabbreviationstyle\}[2]{%
6612   \csletcs{@glsabrv@dispstyle@setup@#1}{@glsabrv@dispstyle@setup@#2}%
6613   \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
6614 }

```

ecated@abbrstyle \glsxtr@deprecated@abbrstyle{\<old-name>}{\<new-name>}

Define a synonym for a deprecated abbreviation style.

```

6615 \newcommand*\{\@glsxtr@deprecated@abbrstyle\}[2]{%
6616   \csdef{@glsabrv@dispstyle@setup@#1}{%
6617     \GlsXtrWarnDeprecatedAbbrStyle{#1}{#2}%
6618     \csuse{@glsabrv@dispstyle@setup@#2}%
6619   }%
6620   \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
6621 }

```

ecatedAbbrStyle Generate warning for deprecated style use.

```

6622 \newcommand*\{\GlsXtrWarnDeprecatedAbbrStyle\}[2]{%
6623   \GlossariesExtraWarning{Deprecated abbreviation style name '#1',
6624   use '#2' instead}%
6625 }

```

eAbbrStyleSetup

```

6626 \newcommand*\{\GlsXtrUseAbbrStyleSetup\}[1]{%
6627   \ifcsundef{@glsabrv@dispstyle@setup@#1}%

```

```

6628 {%
6629   \PackageError{glossaries-extra}%
6630   {Unknown abbreviation style definitions '#1'}{}%
6631 }%
6632 {%
6633   \csname @glsabbrv@dispstyle@setup@\#1\endcsname
6634 }%
6635 }

seAbbrStyleFmts
6636 \newcommand*{\GlsXtrUseAbbrStyleFmts}[1]{%
6637   \ifcsundef{@glsabbrv@dispstyle@fmts@\#1}%
6638   {%
6639     \PackageError{glossaries-extra}%
6640     {Unknown abbreviation style formats '#1'}{}%
6641   }%
6642   {%
6643     \csname @glsabbrv@dispstyle@fmts@\#1\endcsname
6644   }%
6645 }

```

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.

```

6646 \newif\ifglsxtrinsertinside
6647 \glsxtrinsertinsidefalse

```

long-short

```

6648 \newabbreviationstyle{long-short}{%
6649 {%
6650   \renewcommand*{\CustomAbbreviationFields}{%
6651     name={\protect\glsabbrvfont{\the\glsshorttok}},%
6652     sort={\the\glsshorttok},%
6653     first={\protect\glsfirstlongfont{\the\glslongtok}}%
6654     \protect\glsxtrfullsep{\the\glslabeltok}%
6655     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
6656     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}}%
6657     \protect\glsxtrfullsep{\the\glslabeltok}%
6658     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%

```

```
6659     plural={\protect\glsabbrvfont{\the\glsshortpltok}},%
6660     description={\the\glslongtok}}%
```

Unset the regular attribute if it has been set.

```
6661 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
6662   \glshasattribute{\the\glslabeltok}{regular}%
6663   {%
6664     \glssetattribute{\the\glslabeltok}{regular}{false}%
6665   }%
6666   {}%
6667 }%
6668 }%
6669 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
6670 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
6671 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
6672 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
6673 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
6674 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
6675 \renewcommand*{\glsxtrfullformat}[2]{%
6676   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
6677   \ifglsxtrinsertinside\else##2\fi
6678   \glsxtrfullsep{##1}%
6679   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
6680 }%
6681 \renewcommand*{\glsxtrfullplformat}[2]{%
6682   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
6683   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6684   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
6685 }%
6686 \renewcommand*{\Glsxtrfullformat}[2]{%
6687   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
6688   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6689   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
6690 }%
6691 \renewcommand*{\Glsxtrfullplformat}[2]{%
6692   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
6693   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6694   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
6695 }%
6696 }
```

Set this as the default style for general abbreviations:

```
6697 \setabbreviationstyle{long-short}
```

ngshortdescsort

```
6698 \newcommand*{\glsxtrlongshortdescsort}{%
```

```
6699 \expandonce\glsxtrorglong\space (\expandonce\glsxtrorgshort)%
6700 }
```

ngshortdescname

```
6701 \newcommand*\glsxtrlongshortdescname{%
6702   \protect\glslongfont{\the\glslongtok}%
6703   \glsxtrparen{\protect\glsabbrvfont{\the\glsshorttok}}%
6704 }
```

long-short-desc User supplies description. The long form is included in the name.

```
6705 \newabbreviationstyle{long-short-desc}%
6706 {%
6707   \renewcommand*\CustomAbbreviationFields{%
6708     name={\glsxtrlongshortdescname},%
6709     sort={\glsxtrlongshortdescsort},%
6710     first={\protect\glsfirstlongfont{\the\glslongtok}%
6711       \protect\glsxtrfullsep{\the\glslabeltok}%
6712       \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
6713     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}%
6714       \protect\glsxtrfullsep{\the\glslabeltok}%
6715       \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%

```

The text key should only have the short form.

```
6716   text={\protect\glsabbrvfont{\the\glsshorttok}},%
6717   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
6718 }
```

Unset the regular attribute if it has been set.

```
6719 \renewcommand*\GlsXtrPostNewAbbreviation{%
6720   \glshasattribute{\the\glslabeltok}{regular}%
6721   {%
6722     \glssetattribute{\the\glslabeltok}{regular}{false}%
6723   }%
6724   {}%
6725 }%
6726 }%
6727 {%
6728 \GlsXtrUseAbbrStyleFmts{long-short}%
6729 }
```

short-long Short form followed by long form in parenthesis on first use.

```
6730 \newabbreviationstyle{short-long}%
6731 {%
6732   \renewcommand*\CustomAbbreviationFields{%
6733     name={\protect\glsabbrvfont{\the\glsshorttok}},%
6734     sort={\the\glsshorttok},%
6735     description={\the\glslongtok},%
6736     first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
6737       \protect\glsxtrfullsep{\the\glslabeltok}}%
```

```

6738     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
6739     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
6740       \protect\glsxtrfullsep{\the\glslabeltok}%
6741       \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
6742     plural={\protect\glsabbrvfont{\the\glsshortpltok}}}

```

Unset the regular attribute if it has been set.

```

6743 \renewcommand*\GlsXtrPostNewAbbreviation}{%
6744   \glshasattribute{\the\glslabeltok}{regular}%
6745   {%
6746     \glssetattribute{\the\glslabeltok}{regular}{false}%
6747   }%
6748   {}%
6749 }%
6750 }%
6751 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

6752 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
6753 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
6754 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
6755 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
6756 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

6757 \renewcommand*\glsxtrfullformat[2]{%
6758   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6759   \ifglsxtrinsertinside\else##2\fi
6760   \glsxtrfullsep{##1}%
6761   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}}%
6762 }%
6763 \renewcommand*\glsxtrfullplformat[2]{%
6764   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6765   \ifglsxtrinsertinside\else##2\fi
6766   \glsxtrfullsep{##1}%
6767   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}}%
6768 }%
6769 \renewcommand*\GlsXtrfullformat[2]{%
6770   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6771   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6772   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}}%
6773 }%
6774 \renewcommand*\GlsXtrfullplformat[2]{%
6775   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6776   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6777   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}}%
6778 }%
6779 }

```

```
ortlongdescsort
6780 \newcommand*{\glsxtrshortlongdescsort}{\the\glsshorttok}
```

```
ortlongdescname
6781 \newcommand*{\glsxtrshortlongdescname}{%
6782   \protect\glsabbrvfont{\the\glsshorttok}%
6783   \glsxtrparen{\protect\glslongfont{\the\glslongtok}}%
6784 }
```

short-long-desc User supplies description. The long form is included in the name.

```
6785 \newabbreviationstyle{short-long-desc}%
6786 {%
6787   \renewcommand*{\CustomAbbreviationFields}{%
6788     name={\glsxtrshortlongdescname},
6789     sort={\glsxtrshortlongdescsort},
6790     first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
6791       \protect\glsxtrfullsep{\the\glslabeltok}%
6792       \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
6793     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
6794       \protect\glsxtrfullsep{\the\glslabeltok}%
6795       \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
6796     text={\protect\glsabbrvfont{\the\glsshorttok}},%
6797     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
6798   }%
```

Unset the regular attribute if it has been set.

```
6799 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
6800   \glshasattribute{\the\glslabeltok}{regular}%
6801   {%
6802     \glssetattribute{\the\glslabeltok}{regular}{false}%
6803   }%
6804   {}%
6805 }%
6806 }%
6807 {%
6808   \GlsXtrUseAbbrStyleFmts{short-long}%
6809 }
```

ongfootnotefont Only used by the “footnote” styles.

```
6810 \newcommand*{\glsfirstlongfootnotefont}[1]{\glslongfootnotefont{#1}}%
```

ongfootnotefont Only used by the “footnote” styles.

```
6811 \newcommand*{\glslongfootnotefont}[1]{\glslongdefaultfont{#1}}%
```

```
\glsxtrabbrvfootnote{\langle label \rangle}{\langle long \rangle}
```

Command used by footnote abbreviation styles. The default definition ignores the first argument. The second argument *<long>* includes the font changing command and may be the singular or plural form, depending on the command that was used (for example, \gls or \glspl).

```
6812 \newcommand*{\glsxtrabbrvfootnote}[2]{\footnote{#2}}
```

footnote Short form followed by long form in footnote on first use.

```
6813 \newabbreviationstyle{footnote}{%
6814 {%
6815   \renewcommand*{\CustomAbbreviationFields}{%
6816     name={\protect\glsabbrvfont{\the\glsshorttok}},%
6817     sort={\the\glsshorttok},%
6818     description={\the\glslongtok},%
6819     first={\protect\glsfirstabbrvfont{\the\glsshorttok}}%
6820     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
6821     {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
6822     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}}%
6823     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
6824     {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
6825     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.

```
6826 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
6827   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
6828   \glshasattribute{\the\glslabeltok}{regular}%
6829   {%
6830     \glssetattribute{\the\glslabeltok}{regular}{false}%
6831   }%
6832   {}%
6833 }%
6834 }%
6835 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
6836 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
6837 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
6838 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
6839 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
6840 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```
6841 \renewcommand*{\glsxtrfullformat}[2]{%
6842   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6843   \ifglsxtrinsertinside\else##2\fi
6844   \protect\glsxtrabbrvfootnote{##1}%
6845   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}}%
6846 }%
```

```

6847 \renewcommand*{\glsxtrfullplformat}[2]{%
6848   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6849   \ifglsxtrinsertinside\else##2\fi
6850   \protect\glsxtrabrvfootnote{##1}%
6851   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6852 }%
6853 \renewcommand*{\Glsxtrfullformat}[2]{%
6854   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6855   \ifglsxtrinsertinside\else##2\fi
6856   \protect\glsxtrabrvfootnote{##1}%
6857   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6858 }%
6859 \renewcommand*{\Glsxtrfullplformat}[2]{%
6860   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6861   \ifglsxtrinsertinside\else##2\fi
6862   \protect\glsxtrabrvfootnote{##1}%
6863   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6864 }%

```

The first use full form and the inline full form use the short (long) style.

```

6865 \renewcommand*{\glsxtrinlinefullformat}[2]{%
6866   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6867   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6868   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6869 }%
6870 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
6871   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6872   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6873   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6874 }%
6875 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
6876   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6877   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6878   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6879 }%
6880 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
6881   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6882   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6883   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6884 }%
6885 }

```

short-footnote

```
6886 \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.

```
6887 \newabbreviationstyle{postfootnote}{}
```

```

6888 {%
6889   \renewcommand*{\CustomAbbreviationFields}{%
6890     name={\protect\glsabbrvfont{\the\glsshorttok}},%
6891     sort={\the\glsshorttok},%
6892     description={\the\glslongtok},%
6893     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
6894     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
6895     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.

```

6896 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
6897   \csdef{glsxtrpostlink\glscategorylabel}{%
6898     \glsxtrifwasfirstuse
6899   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

6900   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
6901   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
6902   }%
6903   {}%
6904   }%
6905   \glshasattribute{\the\glslabeltok}{regular}%
6906   {}%
6907   \glssetattribute{\the\glslabeltok}{regular}{false}%
6908   }%
6909   {}%
6910 }%

```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```

6911 \renewcommand*{\glsxtrsetupfulldefs}{%
6912   \let\glsxtrifwasfirstuse\@secondoftwo
6913 }%
6914 }%
6915 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

6916 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
6917 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{\##1}}%
6918 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{\##1}}%
6919 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{\##1}}%
6920 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{\##1}}%

```

The full format displays the short form. The long form is deferred.

```

6921 \renewcommand*{\glsxtrfullformat}[2]{%
6922   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
6923   \ifglsxtrinsertinside\else##2\fi
6924 }%

```

```

6925 \renewcommand*{\glsxtrfullplformat}[2]{%
6926   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6927   \ifglsxtrinsertinside\else##2\fi
6928 }%
6929 \renewcommand*{\Glsxtrfullformat}[2]{%
6930   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6931   \ifglsxtrinsertinside\else##2\fi
6932 }%
6933 \renewcommand*{\Glsxtrfullplformat}[2]{%
6934   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6935   \ifglsxtrinsertinside\else##2\fi
6936 }%

```

The first use full form and the inline full form use the short (long) style.

```

6937 \renewcommand*{\glsxtrinlinefullformat}[2]{%
6938   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6939   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6940   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6941 }%
6942 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
6943   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6944   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6945   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6946 }%
6947 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
6948   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6949   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6950   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6951 }%
6952 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
6953   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6954   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6955   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6956 }%
6957 }

```

rt-postfootnote

```
6958 \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.

```

6959 \newabbreviationstyle{short}%
6960 {%
6961   \renewcommand*{\CustomAbbreviationFields}{%
6962     name={\protect\glsabbrvfont{\the\glsshorttok}},%
6963     sort={\the\glsshorttok},%
6964     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%

```

```

6965     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},  

6966     text={\protect\glsabbrvfont{\the\glsshorttok}},  

6967     plural={\protect\glsabbrvfont{\the\glsshortpltok}},  

6968     description={\the\glslongtok}}%  

6969 \renewcommand*\GlsXtrPostNewAbbreviation}{%  

6970   \glssetattribute{\the\glslabeltok}{regular}{true}}%  

6971 }%  

6972 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

6973 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%  

6974 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%  

6975 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%  

6976 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%  

6977 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

6978 \renewcommand*\glsxtrinlinefullformat}[2]{%  

6979   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%  

6980   \ifglsxtrinsertinside##2\fi}%  

6981   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

6982   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%  

6983 }%  

6984 \renewcommand*\glsxtrinlinefullplformat}[2]{%  

6985   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%  

6986   \ifglsxtrinsertinside##2\fi}%  

6987   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

6988   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%  

6989 }%  

6990 \renewcommand*\Glsxtrinlinefullformat}[2]{%  

6991   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%  

6992   \ifglsxtrinsertinside##2\fi}%  

6993   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

6994   \glsxtrparen{\glsfirstlongfont{\Glsaccesslong{##1}}}%  

6995 }%  

6996 \renewcommand*\Glsxtrinlinefullplformat}[2]{%  

6997   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%  

6998   \ifglsxtrinsertinside##2\fi}%  

6999   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

7000   \glsxtrparen{\glsfirstlongfont{\Glsaccesslongpl{##1}}}%  

7001 }%

```

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.

```

7002 \renewcommand*\glsxtrfullformat}[2]{%  

7003   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

7004   \ifglsxtrinsertinside\else##2\fi  

7005 }%  

7006 \renewcommand*\glsxtrfullplformat}[2]{%  

7007   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

7008   \ifglsxtrinsertinside\else##2\fi

```

```

7009 }%
7010 \renewcommand*{\Glsxtrfullformat}[2]{%
7011   \glsfirstabbrvfont{\glsaccessshort##1}\ifglsxtrinsertinside##2\fi}%
7012   \ifglsxtrinsertinside\else##2\fi
7013 }%
7014 \renewcommand*{\Glsxtrfullplformat}[2]{%
7015   \glsfirstabbrvfont{\glsaccessshortpl##1}\ifglsxtrinsertinside##2\fi}%
7016   \ifglsxtrinsertinside\else##2\fi
7017 }%
7018 }

```

Set this as the default style for acronyms:

```
7019 \setabbreviationstyle[acronym]{short}
```

`short-nolong`

```
7020 \letabbreviationstyle{short-nolong}{short}
```

`rt-nolong-noreg` Like `short-nolong` but doesn't set the `regular` attribute.

```

7021 \newabbreviationstyle{short-nolong-noreg}{%
7022 {%
7023   \GlsXtrUseAbbrStyleSetup{short-nolong}}%

```

Unset the `regular` attribute if it has been set.

```

7024 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7025   \glshasattribute{\the\glslabeltok}{regular}}%
7026 {%
7027   \glssetattribute{\the\glslabeltok}{regular}{false}}%
7028 {%
7029 {}}%
7030 }%
7031 }%
7032 {%
7033 \GlsXtrUseAbbrStyleFmts{short-nolong}}%
7034 }

```

`trshortdescname`

```

7035 \newcommand*{\glsxtrshortdescname}{%
7036   \protect\glsabbrvfont{\the\glsshorttok}}%
7037 }

```

`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.

```

7038 \newabbreviationstyle{short-desc}{%
7039 {%
7040   \renewcommand*{\CustomAbbreviationFields}{%
7041     name={\glsxtrshortdescname},%
7042     sort={\the\glsshorttok},%
7043     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
7044     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%

```

```

7045   text={\protect\glsabbrvfont{\the\glsshorttok}},  

7046   plural={\protect\glsabbrvfont{\the\glsshortpltok}},  

7047   description={\the\glslongtok}}%  

7048 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  

7049   \glssetattribute{\the\glslabeltok}{regular}{true}}%  

7050 }%  

7051 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

7052 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%  

7053 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%  

7054 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%  

7055 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%  

7056 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

7057 \renewcommand*{\glsxtrinlinefullformat}[2]{%  

7058   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%  

7059   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

7060   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%  

7061 }%  

7062 \renewcommand*{\glsxtrinlinefullplformat}[2]{%  

7063   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%  

7064   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

7065   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%  

7066 }%  

7067 \renewcommand*{\Glsxtrinlinefullformat}[2]{%  

7068   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%  

7069   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

7070   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%  

7071 }%  

7072 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%  

7073   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%  

7074   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

7075   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%  

7076 }%

```

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.

```

7077 \renewcommand*{\glsxtrfullformat}[2]{%  

7078   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%  

7079   \ifglsxtrinsertinside\else##2\fi  

7080 }%  

7081 \renewcommand*{\glsxtrfullplformat}[2]{%  

7082   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%  

7083   \ifglsxtrinsertinside\else##2\fi  

7084 }%  

7085 \renewcommand*{\Glsxtrfullformat}[2]{%  

7086   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%  

7087   \ifglsxtrinsertinside\else##2\fi  

7088 }%

```

```

7089 \renewcommand*{\Glsxtrfullplformat}[2]{%
7090   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7091   \ifglsxtrinsertinside\else##2\fi
7092 }%
7093 }

```

short-nolong-desc

```
7094 \letabbreviationstyle{short-nolong-desc}{short-desc}
```

long-desc-noreg Like **short-nolong-desc** but doesn't set the regular attribute.

```

7095 \newabbreviationstyle{short-nolong-desc-noreg}%
7096 {%
7097   \GlsXtrUseAbbrStyleSetup{short-nolong-desc}%

```

Unset the regular attribute if it has been set.

```

7098 \renewcommand*{\GlsXtrPostNewAbbreviation}%
7099   \glshasattribute{\the\glslabeltok}{regular}%
7100   {%
7101     \glssetattribute{\the\glslabeltok}{regular}{false}%
7102   }%
7103   {}%
7104 }%
7105 }%
7106 {%
7107   \GlsXtrUseAbbrStyleFmts{short-nolong-desc}%
7108 }

```

nolong-short Similar to **short-nolong** but the full form shows the long form followed by the short form in parentheses.

```

7109 \newabbreviationstyle{nolong-short}%
7110 {%
7111   \GlsXtrUseAbbrStyleSetup{short-nolong}%
7112 }%
7113 {%
7114   \GlsXtrUseAbbrStyleFmts{short-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

7115 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7116   \protect\glsfirstlongfont{\glsaccesslong{##1}%
7117   \ifglsxtrinsertinside##2\fi}%
7118   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7119   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
7120 }%
7121 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7122   \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
7123   \ifglsxtrinsertinside##2\fi}%
7124   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7125   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
7126 }%
7127 \renewcommand*{\Glsxtrinlinefullformat}[2]{%

```

```

7128     \protect\glsfirstlongfont{\glsaccesslong{##1}%
7129         \ifglsxtrinsertinside##2\fi}%
7130     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7131     \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshort{##1}}}%
7132 }%
7133 \renewcommand*\Glsxtrinlinefullplformat[2]{%
7134     \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
7135         \ifglsxtrinsertinside##2\fi}%
7136         \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7137         \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshortpl{##1}}}%
7138 }%
7139 }

```

`nong-short-noreg` Like `nolong-short` but doesn't set the regular attribute.

```

7140 \newabbreviationstyle{nong-short-noreg}{%
7141 {%
7142     \GlsXtrUseAbbrStyleSetup{nong-short}%

```

Unset the regular attribute if it has been set.

```

7143 \renewcommand*\GlsXtrPostNewAbbreviation{%
7144     \glshasattribute{\the\glslabeltok}{regular}%
7145     {%
7146         \glssetattribute{\the\glslabeltok}{regular}{false}%
7147     }%
7148     {}%
7149 }%
7150 }%
7151 {%
7152     \GlsXtrUseAbbrStyleFmts{nong-short}%
7153 }

```

`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.

```

7154 \newabbreviationstyle{long-desc}{%
7155 {%
7156     \renewcommand*\CustomAbbreviationFields{%
7157         name={\protect\protect\glslongfont{\the\glslongtok}},%
7158         sort={\the\glslongtok},%
7159         first={\protect\glsfirstlongfont{\the\glslongtok}},%
7160         firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},%
7161         text={\glslongfont{\the\glslongtok}},%
7162         plural={\glslongfont{\the\glslongpltok}}}%
7163 }%
7164     \renewcommand*\GlsXtrPostNewAbbreviation{%
7165         \glssetattribute{\the\glslabeltok}{regular}{true}}%
7166 }%
7167 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

7168 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7169 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7170 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
7171 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7172 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

7173 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
7174   \glslongfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7175   \ifglsxtrinsertinside \else##2\fi
7176 }%
7177 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
7178   \glslongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7179   \ifglsxtrinsertinside \else##2\fi
7180 }%
7181 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
7182   \glslongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7183   \ifglsxtrinsertinside \else##2\fi
7184 }%
7185 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
7186   \glslongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7187   \ifglsxtrinsertinside \else##2\fi
7188 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

7189 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7190   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7191   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7192   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
7193 }%
7194 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7195   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7196   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7197   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
7198 }%
7199 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7200   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7201   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7202   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
7203 }%
7204 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7205   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7206   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7207   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
7208 }%

```

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.

```

7209 \renewcommand*{\glsxtrfullformat}[2]{%
7210   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7211   \ifglsxtrinsertinside\else##2\fi

```

```

7212 }%
7213 \renewcommand*{\glsxtrfullplformat}[2]{%
7214   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7215   \ifglsxtrinsertinside\else##2\fi
7216 }%
7217 \renewcommand*{\Glsxtrfullformat}[2]{%
7218   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7219   \ifglsxtrinsertinside\else##2\fi
7220 }%
7221 \renewcommand*{\Glsxtrfullplformat}[2]{%
7222   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7223   \ifglsxtrinsertinside\else##2\fi
7224 }%
7225 }

```

`ng-noshort-desc` Provide a synonym that matches similar styles.

```
7226 \letabbreviationstyle{long-noshort-desc}{long-desc}
```

`hort-desc-noreg` Like `long-noshort-desc` but doesn't set the `regular` attribute.

```

7227 \newabbreviationstyle{long-noshort-desc-noreg}%
7228 {%
7229   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%

```

Unset the `regular` attribute if it has been set.

```

7230 \renewcommand*{\GlsXtrPostNewAbbreviation}%
7231   \glshasattribute{\the\glslabeltok}{regular}%
7232 {%
7233   \glssetattribute{\the\glslabeltok}{regular}{false}%
7234 }%
7235 {()}%
7236 }%
7237 }%
7238 {%
7239 \GlsXtrUseAbbrStyleFmts{long-noshort-desc}%
7240 }

```

`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.

```

7241 \newabbreviationstyle{long}%
7242 {%
7243 \renewcommand*{\CustomAbbreviationFields}%
7244   name={\protect\glsabbrvfont{\the\glsshorttok}},%
7245   sort={\the\glsshorttok},%
7246   first={\protect\glsfirstlongfont{\the\glslongtok}},%
7247   firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},%
7248   text={\glslongfont{\the\glslongtok}},%
7249   plural={\glslongfont{\the\glslongpltok}},%
7250   description={\the\glslongtok}%

```

```

7251  }%
7252  \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7253    \glssetattribute{\the\glslabeltok}{regular}{true}}%
7254 }%
7255 {%
7256  \GlsXtrUseAbbrStyleFmts{long-desc}%
7257 }

```

`long-noshort` Provide a synonym that matches similar styles.

```
7258 \letabbreviationstyle{long-noshort}{long}
```

`g-noshort-noreg` Like `long-noshort` but doesn't set the `regular` attribute.

```

7259 \newabbreviationstyle{long-noshort-noreg}{%
7260 {%
7261   \GlsXtrUseAbbrStyleSetup{long-noshort}}%

```

Unset the `regular` attribute if it has been set.

```

7262 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7263   \glshasattribute{\the\glslabeltok}{regular}}%
7264 {%
7265   \glssetattribute{\the\glslabeltok}{regular}{false}}%
7266 }%
7267 {()}%
7268 }%
7269 }%
7270 {%
7271 \GlsXtrUseAbbrStyleFmts{long-noshort}}%
7272 }

```

1.6.3 Predefined Styles (Small Capitals)

These styles use `\textsc` for the short form.

`\glsxtrscfont` Maintained for backward-compatibility.

```
7273 \newcommand*{\glsxtrscfont}[1]{\textsc{#1}}
```

`\glsabbrvscfont` Added for consistent naming.

```
7274 \newcommand*{\glsabbrvscfont}{\glsxtrscfont}
```

`sxtrfirstscfont` Maintained for backward-compatibility.

```
7275 \newcommand*{\sxtrfirstscfont}[1]{\glsabbrvscfont{#1}}
```

`irstabbrvscfont` Added for consistent naming.

```
7276 \newcommand*{\glsfirstabbrvscfont}{\sxtrfirstscfont}
```

and for the default short form suffix:

`\glsxtrscsuffix`

```
7277 \newcommand*{\glsxtrscsuffix}{\glstextup{\glsxtrabbrvpluralsuffix}}
```

```
long-short-sc
```

```
7278 \newabbreviationstyle{long-short-sc}{%
7279 {%
7280   \renewcommand*{\CustomAbbreviationFields}{%
7281     name={\protect\glsabbrvscfont{\the\glsshorttok}},%
7282     sort={\the\glsshorttok},%
7283     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
7284     \protect\glsxtrfullsep{\the\glslabeltok}%
7285     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
7286     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
7287     \protect\glsxtrfullsep{\the\glslabeltok}%
7288     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
7289     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%
7290     description={\the\glslongtok}}%
7291 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7292   \glshasattribute{\the\glslabeltok}{regular}}%
7293   {%
7294     \glssetattribute{\the\glslabeltok}{regular}{false}}%
7295   }%
7296   {}%
7297 }%
7298 }%
7299 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
7300 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrcsuffix}%
7301 \renewcommand*{\glsabbrvfont[1]}{\glsabbrvscfont{##1}}%
7302 \renewcommand*{\glsfirstabbrvfont[1]}{\glsfirstabbrvscfont{##1}}%
```

Use the default long fonts.

```
7303 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7304 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
7305 \renewcommand*{\glsxtrfullformat}[2]{%
7306   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7307   \ifglsxtrinsertinside\else##2\fi
7308   \glsxtrfullsep{##1}%
7309   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7310 }%
7311 \renewcommand*{\glsxtrfullplformat}[2]{%
7312   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7313   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7314   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7315 }%
7316 \renewcommand*{\Glsxtrfullformat}[2]{%
7317   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7318   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7319   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7320 }%
```

```

7321 \renewcommand*\Glsxtrfullplformat}[2]{%
7322   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7323   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7324   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7325 }%
7326 }

```

g-short-sc-desc

```

7327 \newabbreviationstyle{long-short-sc-desc}{%
7328 {%
7329   \renewcommand*\CustomAbbreviationFields}{%
7330     name={\glsxtrlongshortdescname},%
7331     sort={\glsxtrlongshortdescsort},%
7332     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
7333       \protect\glsxtrfullsep{\the\glslabeltok}%
7334       \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
7335     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
7336       \protect\glsxtrfullsep{\the\glslabeltok}%
7337       \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
7338     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
7339     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}}%
7340 }%

```

Unset the regular attribute if it has been set.

```

7341 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7342   \glshasattribute{\the\glslabeltok}{regular}%
7343   {%
7344     \glssetattribute{\the\glslabeltok}{regular}{false}%
7345   }%
7346   {}%
7347 }%
7348 }%
7349 {%

```

As long-short-sc style:

```

7350 \GlsXtrUseAbbrStyleFmts{long-short-sc}%
7351 }

```

Now the short (long) version

```

7352 \newabbreviationstyle{short-sc-long}{%
7353 {%
7354   \renewcommand*\CustomAbbreviationFields}{%
7355     name={\protect\glsabbrvscfont{\the\glsshorttok}},%
7356     sort={\the\glsshorttok},%
7357     description={\the\glslongtok},%
7358     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
7359       \protect\glsxtrfullsep{\the\glslabeltok}%
7360       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
7361     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
7362       \protect\glsxtrfullsep{\the\glslabeltok}}%

```

```

7363     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
7364     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}}%

```

Unset the regular attribute if it has been set.

```

7365   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7366     \glshasattribute{\the\glslabeltok}{regular}}%
7367     {%
7368       \glssetattribute{\the\glslabeltok}{regular}{false}}%
7369     }%
7370     {}%
7371   }%
7372 }%
7373 {}%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7374   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7375   \renewcommand*{\glsabbrvfont[1]}{\glsabbrvscfont{##1}}%
7376   \renewcommand*{\glsfirstabbrvfont[1]}{\glsfirstabbrvscfont{##1}}%
7377   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7378   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

7379   \renewcommand*{\glsxtrfullformat}[2]{%
7380     \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7381     \ifglsxtrinsertinside\else##2\fi
7382     \glsxtrfullsep{##1}%
7383     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%
7384   }%
7385   \renewcommand*{\glsxtrfullplformat}[2]{%
7386     \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7387     \ifglsxtrinsertinside\else##2\fi
7388     \glsxtrfullsep{##1}%
7389     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%
7390   }%
7391   \renewcommand*{\Glsxtrfullformat}[2]{%
7392     \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7393     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7394     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%
7395   }%
7396   \renewcommand*{\Glsxtrfullplformat}[2]{%
7397     \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7398     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7399     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%
7400   }%
7401 }%

```

As before but user provides description

```

7402 \newabbreviationstyle{short-sc-long-desc}{%
7403 {}%
7404   \renewcommand*{\CustomAbbreviationFields}{%

```

```

7405   name={\glsxtrshortlongdescname},
7406   sort={\glsxtrshortlongdescsort},
7407   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
7408     \protect\glsxtrfullsep{\the\glslabeltok}%
7409     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
7410   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
7411     \protect\glsxtrfullsep{\the\glslabeltok}%
7412     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
7413   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
7414   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
7415 }%

```

Unset the regular attribute if it has been set.

```

7416 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7417   \glshasattribute{\the\glslabeltok}{regular}%
7418   {%
7419     \glssetattribute{\the\glslabeltok}{regular}{false}%
7420   }%
7421   {}%
7422 }%
7423 }%
7424 }%

```

As short-sc-long style:

```

7425 \GlsXtrUseAbbrStyleFmts{short-sc-long}%
7426 }

```

short-sc

```

7427 \newabbreviationstyle{short-sc}%
7428 {%
7429   \renewcommand*{\CustomAbbreviationFields}{%
7430     name={\protect\glsabbrvscfont{\the\glsshorttok}},%
7431     sort={\the\glsshorttok},%
7432     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
7433     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
7434     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
7435     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%
7436     description={\the\glslongtok}}%
7437   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7438     \glssetattribute{\the\glslabeltok}{regular}{true}}%
7439 }%
7440 }%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7441 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7442 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\#1}}%
7443 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\#1}}%
7444 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\#1}}%
7445 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{\#1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

7446 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7447   \protect\glsfirstabbrvscfont{\glsaccessshort{##1}}%
7448   \ifglsxtrinsertinside##2\fi}%
7449 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7450 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7451 }%
7452 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7453   \protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}%
7454   \ifglsxtrinsertinside##2\fi}%
7455 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7456 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
7457 }%
7458 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7459   \protect\glsfirstabbrvscfont{\Glsaccessshort{##1}}%
7460   \ifglsxtrinsertinside##2\fi}%
7461 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7462 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7463 }%
7464 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7465   \protect\glsfirstabbrvscfont{\Glsaccessshortpl{##1}}%
7466   \ifglsxtrinsertinside##2\fi}%
7467 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7468 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
7469 }%

```

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.

```

7470 \renewcommand*{\glsxtrfullformat}[2]{%
7471   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7472   \ifglsxtrinsertinside\else##2\fi
7473 }%
7474 \renewcommand*{\glsxtrfullplformat}[2]{%
7475   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7476   \ifglsxtrinsertinside\else##2\fi
7477 }%
7478 \renewcommand*{\Glsxtrfullformat}[2]{%
7479   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7480   \ifglsxtrinsertinside\else##2\fi
7481 }%
7482 \renewcommand*{\Glsxtrfullplformat}[2]{%
7483   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7484   \ifglsxtrinsertinside\else##2\fi
7485 }%
7486 }

```

`short-sc-nolong`

```
7487 \letabbreviationstyle{short-sc-nolong}{short-sc}
```

`short-sc-desc`

```

7488 \newabbreviationstyle{short-sc-desc}%
7489 {%
7490   \renewcommand*{\CustomAbbreviationFields}{%
7491     name={\glsxtrshortdescname},
7492     sort={\the\glsshorttok},
7493     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
7494     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
7495     text={\protect\glsabbrvscfont{\the\glsshorttok}},
7496     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},
7497     description={\the\glslongtok}}%
7498 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7499   \glssetattribute{\the\glslabeltok}{regular}{true}}%
7500 }%
7501 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7502 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7503 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7504 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
7505 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7506 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

7507 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7508   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7509   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
7510   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7511 }%
7512 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7513   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7514   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
7515   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7516 }%
7517 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7518   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7519   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
7520   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7521 }%
7522 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7523   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7524   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
7525   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7526 }%

```

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.

```

7527 \renewcommand*{\glsxtrfullformat}[2]{%
7528   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7529   \ifglsxtrinsertinside\else##2\fi
7530 }%
7531 \renewcommand*{\glsxtrfullplformat}[2]{%

```

```

7532   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7533   \ifglsxtrinsertinside\else##2\fi
7534 }%
7535 \renewcommand*\{\Glsxtrfullformat}[2]{%
7536   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7537   \ifglsxtrinsertinside\else##2\fi
7538 }%
7539 \renewcommand*\{\Glsxtrfullplformat}[2]{%
7540   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7541   \ifglsxtrinsertinside\else##2\fi
7542 }%
7543 }

```

-sc-nolong-desc

```
7544 \letabbreviationstyle{short-sc-nolong-desc}{short-sc-desc}
```

nolong-short-sc

```

7545 \newabbreviationstyle{nolong-short-sc}%
7546 {%
7547   \GlsXtrUseAbbrStyleSetup{short-sc-nolong}%
7548 }%
7549 {%
7550   \GlsXtrUseAbbrStyleFmts{short-sc-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

7551 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
7552   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
7553   \ifglsxtrinsertinside##2\fi}%
7554   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7555   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7556 }%
7557 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
7558   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
7559   \ifglsxtrinsertinside##2\fi}%
7560   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7561   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7562 }%
7563 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
7564   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
7565   \ifglsxtrinsertinside##2\fi}%
7566   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7567   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7568 }%
7569 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
7570   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
7571   \ifglsxtrinsertinside##2\fi}%
7572   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7573   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7574 }%
7575 }

```

`long-noshort-sc` The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsxtrshort`.

```
7576 \newabbreviationstyle{long-noshort-sc}%
7577 {%
7578   \renewcommand*{\CustomAbbreviationFields}{%
7579     name={\protect\glsabbrvscfont{\the\glsshorttok}},%
7580     sort={\the\glsshorttok},%
7581     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},%
7582     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},%
7583     text={\protect\glslongdefaultfont{\the\glslongtok}},%
7584     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
7585     description={\the\glslongtok}%
7586   }%
7587   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7588     \glssetattribute{\the\glslabeltok}{regular}{true}%
7589   }%
7590 }%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
7591 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7592 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7593 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
7594 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7595 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
7596 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
7597   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7598   \ifglsxtrinsertinside \else##2\fi
7599 }%
7600 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
7601   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7602   \ifglsxtrinsertinside \else##2\fi
7603 }%
7604 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
7605   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7606   \ifglsxtrinsertinside \else##2\fi
7607 }%
7608 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
7609   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7610   \ifglsxtrinsertinside \else##2\fi
7611 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
7612 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7613   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7614   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7615   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7616 }%
7617 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
```

```

7618   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7619     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7620     \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7621   }%
7622   \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
7623     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7624       \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7625       \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7626   }%
7627   \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
7628     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7629       \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7630       \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7631   }%

```

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.

```

7632   \renewcommand*\{\glsxtrfullformat}[2]{%
7633     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7634       \ifglsxtrinsertinside\else##2\fi
7635   }%
7636   \renewcommand*\{\glsxtrfullplformat}[2]{%
7637     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7638       \ifglsxtrinsertinside\else##2\fi
7639   }%
7640   \renewcommand*\{\Glsxtrfullformat}[2]{%
7641     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7642       \ifglsxtrinsertinside\else##2\fi
7643   }%
7644   \renewcommand*\{\Glsxtrfullplformat}[2]{%
7645     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7646       \ifglsxtrinsertinside\else##2\fi
7647   }%
7648 }

```

long-sc Backward compatibility:

```
7649 @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`.

```

7650 \newabbreviationstyle{long-noshort-sc-desc}%
7651 {%
7652   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
7653 }%
7654 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7655 \renewcommand*\{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7656 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7657 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%

```

```

7658 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7659 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

The format for subsequent use (not used when the regular attribute is set).

7660 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
7661   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7662   \ifglsxtrinsertinside \else##2\fi
7663 }%
7664 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
7665   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7666   \ifglsxtrinsertinside \else##2\fi
7667 }%
7668 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
7669   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7670   \ifglsxtrinsertinside \else##2\fi
7671 }%
7672 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
7673   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7674   \ifglsxtrinsertinside \else##2\fi
7675 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

7676 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7677   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7678   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7679   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7680 }%
7681 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7682   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7683   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7684   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7685 }%
7686 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7687   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7688   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7689   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7690 }%
7691 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7692   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7693   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7694   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7695 }%

```

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.

```

7696 \renewcommand*{\glsxtrfullformat}[2]{%
7697   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7698   \ifglsxtrinsertinside\else##2\fi
7699 }%
7700 \renewcommand*{\glsxtrfullplformat}[2]{%
7701   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

7702     \ifglsxtrinsertinside\else##2\fi
7703   }%
7704   \renewcommand*{\Glsxtrfullformat}[2]{%
7705     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7706     \ifglsxtrinsertinside\else##2\fi
7707   }%
7708   \renewcommand*{\Glsxtrfullplformat}[2]{%
7709     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7710     \ifglsxtrinsertinside\else##2\fi
7711   }%
7712 }

```

long-desc-sc Backward compatibility:

```
7713 @glsxtr@deprecated@abbrstyle{long-desc-sc}{long-noshort-sc-desc}
```

short-sc-footnote

```

7714 \newabbreviationstyle{short-sc-footnote}%
7715 {%
7716   \renewcommand*{\CustomAbbreviationFields}{%
7717     name={\protect\glsabbrvscfont{\the\glsshorttok}},%
7718     sort={\the\glsshorttok},%
7719     description={\the\glslongtok},%
7720     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
7721       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7722         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
7723     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
7724       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7725         {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
7726     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.

```

7727   \renewcommand*{\GlsXtrPostNewAbbreviation}%
7728     \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
7729     \glshasattribute{\the\glslabeltok}{regular}%
7730   {%
7731     \glssetattribute{\the\glslabeltok}{regular}{false}%
7732   }%
7733   {}%
7734 }%
7735 }%
7736 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7737   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7738   \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7739   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
7740   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
7741   \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```
7742 \renewcommand*{\glsxtrfullformat}[2]{%
7743   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7744   \ifglsxtrinsertinside\else##2\fi
7745   \protect\glsxtrabrvfootnote{##1}%
7746   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7747 }%
7748 \renewcommand*{\glsxtrfullplformat}[2]{%
7749   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7750   \ifglsxtrinsertinside\else##2\fi
7751   \protect\glsxtrabrvfootnote{##1}%
7752   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7753 }%
7754 \renewcommand*{\Glsxtrfullformat}[2]{%
7755   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7756   \ifglsxtrinsertinside\else##2\fi
7757   \protect\glsxtrabrvfootnote{##1}%
7758   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7759 }%
7760 \renewcommand*{\Glsxtrfullplformat}[2]{%
7761   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7762   \ifglsxtrinsertinside\else##2\fi
7763   \protect\glsxtrabrvfootnote{##1}%
7764   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7765 }%
```

The first use full form and the inline full form use the short (long) style.

```
7766 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7767   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7768   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7769   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7770 }%
7771 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7772   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7773   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7774   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7775 }%
7776 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7777   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7778   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7779   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7780 }%
7781 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7782   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7783   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7784   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7785 }%
7786 }
```

`footnote-sc Backward compatibility:`

```
7787 \@glsxtr@deprecated@abbrstyle{footnote-sc}{short-sc-footnote}
```

`sc-postfootnote`

```
7788 \newabbreviationstyle{short-sc-postfootnote}%
7789 {%
7790   \renewcommand*{\CustomAbbreviationFields}{%
7791     name={\protect\glsabbrvscfont{\the\glsshorttok}},%
7792     sort={\the\glsshorttok},%
7793     description={\the\glslongtok},%
7794     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
7795     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
7796     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.

```
7797 \renewcommand*{\GlsXtrPostNewAbbreviation}%
7798   \csdef{glsxtrpostlink\glscategorylabel}{%
7799     \glsxtrifwasfirstuse
7800   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
7801   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
7802     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
7803   }%
7804   {}%
7805 }%
7806 \glshasattribute{\glslabeltok}{regular}%
7807 {}%
7808   \glssetattribute{\glslabeltok}{regular}{false}%
7809 }%
7810   {}%
7811 }%
```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```
7812 \renewcommand*{\glsxtrsetupfulldefs}%
7813   \let\glsxtrifwasfirstuse\@secondoftwo
7814 }%
7815 }%
7816 {}
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
7817 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7818 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\##1}}%
7819 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\##1}}%
7820 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{\##1}}%
7821 \renewcommand*\glslongfont[1]{\glslongfootnotefont{\##1}}%
```

The full format displays the short form. The long form is deferred.

```
7822 \renewcommand*{\glsxtrfullformat}[2]{%
7823   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7824   \ifglsxtrinsertinside\else##2\fi
7825 }%
7826 \renewcommand*{\glsxtrfullplformat}[2]{%
7827   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7828   \ifglsxtrinsertinside\else##2\fi
7829 }%
7830 \renewcommand*{\Glsxtrfullformat}[2]{%
7831   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7832   \ifglsxtrinsertinside\else##2\fi
7833 }%
7834 \renewcommand*{\Glsxtrfullplformat}[2]{%
7835   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7836   \ifglsxtrinsertinside\else##2\fi
7837 }%
```

The first use full form and the inline full form use the short (long) style.

```
7838 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7839   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7840   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7841   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7842 }%
7843 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7844   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7845   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7846   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7847 }%
7848 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7849   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7850   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7851   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7852 }%
7853 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7854   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7855   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7856   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7857 }%
7858 }
```

postfootnote-sc Backward compatibility:

```
7859 @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.
7860 \newcommand*\glsxtrsmfont[1]{\textsmaller{#1}}


\glsabbrvsmfont Added for consistent naming.
7861 \newcommand*\glsabbrvsmfont{\glsxtrsmfont}

sxtrfirstsmfont Maintained for backward compatibility.
7862 \newcommand*\sxtrfirstsmfont[1]{\glsabbrvsmfont{#1}}


irstabbrvsmfont Added for consistent naming.
7863 \newcommand*\irstabbrvsmfont{\sxtrfirstsmfont}

and for the default short form suffix:

\glsxtrsmsuffix
7864 \newcommand*\glsxtrsmsuffix{\glsxtrabbrvpluralsuffix}

long-short-sm
7865 \newabbreviationstyle{long-short-sm}{%
7866 {%
7867   \renewcommand*\CustomAbbreviationFields{%
7868     name={\protect\glsabbrvsmfont{\the\glsshorttok}},%
7869     sort={\the\glsshorttok},%
7870     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%%
7871     \protect\glsxtrfullsep{\the\glslabeltok}%%
7872     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
7873     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%%
7874     \protect\glsxtrfullsep{\the\glslabeltok}%%
7875     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
7876     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},%
7877     description={\the\glslongtok}}%
7878   \renewcommand*\GlsXtrPostNewAbbreviation{%
7879     \glshasattribute{\the\glslabeltok}{regular}}%
7880   {%
7881     \glssetattribute{\the\glslabeltok}{regular}{false}}%
7882   }%
7883   {}%
7884 }%
7885 }%
7886 {%
7887   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
7888   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
7889   \renewcommand*\abbrvpluralsuffix{\protect\glsxtrsmsuffix}%

  Use the default long fonts.
7890   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7891   \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```
7892 \renewcommand*{\glsxtrfullformat}[2]{%
7893   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7894   \ifglsxtrinsertinside\else##2\fi
7895   \glsxtrfullsep{##1}%
7896   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
7897 }%
7898 \renewcommand*{\glsxtrfullplformat}[2]{%
7899   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7900   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7901   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
7902 }%
7903 \renewcommand*{\Glsxtrfullformat}[2]{%
7904   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7905   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7906   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
7907 }%
7908 \renewcommand*{\Glsxtrfullplformat}[2]{%
7909   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7910   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7911   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
7912 }%
7913 }
```

g-short-sm-desc

```
7914 \newabbreviationstyle{long-short-sm-desc}%
7915 {%
7916   \renewcommand*{\CustomAbbreviationFields}{%
7917     name={\glsxtrlongshortdescname},
7918     sort={\glsxtrlongshortdescsort},%
7919     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
7920       \protect\glsxtrfullsep{\the\glslabeltok}%
7921       \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
7922     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
7923       \protect\glsxtrfullsep{\the\glslabeltok}%
7924       \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
7925     text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
7926     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}}%
7927 }%
```

Unset the regular attribute if it has been set.

```
7928 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7929   \glshasattribute{\the\glslabeltok}{regular}%
7930   {%
7931     \glssetattribute{\the\glslabeltok}{regular}{false}%
7932   }%
7933   {}%
7934 }%
7935 }%
7936 {%
```

As long-short-sm style:

```
7937 \GlsXtrUseAbbrStyleFmts{long-short-sm}%
7938 }
```

short-sm-long Now the short (long) version

```
7939 \newabbreviationstyle{short-sm-long}%
7940 {%
7941 \renewcommand*\CustomAbbreviationFields{%
7942   name={\protect\glsabbrvsmfont{\the\glsshorttok}},%
7943   sort={\the\glsshorttok},%
7944   description={\the\glslongtok},%
7945   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}}%
7946   \protect\glsxtrfullsep{\the\glslabeltok}%
7947   \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}},%
7948   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}%
7949   \protect\glsxtrfullsep{\the\glslabeltok}%
7950   \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}},%
7951   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
7952 \renewcommand*\GlsXtrPostNewAbbreviation{%
7953   \glshasattribute{\the\glslabeltok}{regular}%
7954   {%
7955     \glssetattribute{\the\glslabeltok}{regular}{false}%
7956   }%
7957   {}%
7958 }%
7959 }%
7960 {%
7961 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
7962 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
7963 \renewcommand*\abbrvpluralsuffix{\protect\glsxtrmsuffix}%
7964 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7965 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
7966 \renewcommand*\glsxtrfullformat}[2]{%
7967   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7968   \ifglsxtrinsertinside\else##2\fi
7969   \glsxtrfullsep{##1}%
7970   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7971 }%
7972 \renewcommand*\glsxtrfullplformat}[2]{%
7973   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7974   \ifglsxtrinsertinside\else##2\fi
7975   \glsxtrfullsep{##1}%
7976   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
7977 }%
7978 \renewcommand*\Glsxtrfullformat}[2]{%
7979   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%

```

```

7980 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7981 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7982 }%
7983 \renewcommand*\Glsxtrfullplformat[2]{%
7984   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7985   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7986   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
7987 }%
7988 }

```

`rt-sm-long-desc` As before but user provides description

```

7989 \newabbreviationstyle{short-sm-long-desc}{%
7990 {%
7991   \renewcommand*\CustomAbbreviationFields{%
7992     name={\glsxtrshortlongdescname},%
7993     sort={\glsxtrshortlongdescsort},%
7994     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}}%
7995     \protect\glsxtrfullsep{\the\glslabeltok}%
7996     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
7997     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}%
7998     \protect\glsxtrfullsep{\the\glslabeltok}%
7999     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8000     text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8001     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}%
8002 }%

```

Unset the regular attribute if it has been set.

```

8003 \renewcommand*\GlsXtrPostNewAbbreviation{%
8004   \glshasattribute{\the\glslabeltok}{regular}}%
8005 {%
8006   \glssetattribute{\the\glslabeltok}{regular}{false}}%
8007 }%
8008 {}%
8009 }%
8010 }%
8011 }%

```

As short-sm-long style:

```

8012 \GlsXtrUseAbbrStyleFmts{short-sm-long}%
8013 }

```

`short-sm`

```

8014 \newabbreviationstyle{short-sm}{%
8015 {%
8016   \renewcommand*\CustomAbbreviationFields{%
8017     name={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8018     sort={\the\glsshorttok},%
8019     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
8020     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
8021     text={\protect\glsabbrvsmfont{\the\glsshorttok}},%

```

```

8022     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},  

8023     description={\the\glslongtok}}%  

8024 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  

8025   \glssetattribute{\the\glslabeltok}{regular}{true}}%  

8026 }%  

8027 {  

8028   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%  

8029   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%  

8030   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsnsuffix}}%  

8031   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%  

8032   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

8033 \renewcommand*{\glsxtrinlinefullformat}[2]{%  

8034   \protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}%  

8035   \ifglsxtrinsertinside##2\fi}%  

8036   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

8037   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%  

8038 }%  

8039 \renewcommand*{\glsxtrinlinefullplformat}[2]{%  

8040   \protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}%  

8041   \ifglsxtrinsertinside##2\fi}%  

8042   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

8043   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%  

8044 }%  

8045 \renewcommand*{\Glsxtrinlinefullformat}[2]{%  

8046   \protect\glsfirstabbrvsmfont{\Glsaccessshort{##1}}%  

8047   \ifglsxtrinsertinside##2\fi}%  

8048   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

8049   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%  

8050 }%  

8051 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%  

8052   \protect\glsfirstabbrvsmfont{\Glsaccessshortpl{##1}}%  

8053   \ifglsxtrinsertinside##2\fi}%  

8054   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

8055   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%  

8056 }%

```

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.

```

8057 \renewcommand*{\glsxtrfullformat}[2]{%  

8058   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

8059   \ifglsxtrinsertinside\else##2\fi  

8060 }%  

8061 \renewcommand*{\glsxtrfullplformat}[2]{%  

8062   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

8063   \ifglsxtrinsertinside\else##2\fi  

8064 }%  

8065 \renewcommand*{\Glsxtrfullformat}[2]{%

```

```

8066   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8067   \ifglsxtrinsertinside\else##2\fi
8068 }%
8069 \renewcommand*{\Glsxtrfullplformat}[2]{%
8070   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8071   \ifglsxtrinsertinside\else##2\fi
8072 }%
8073 }

```

short-sm-nolong

```
8074 \letabbreviationstyle{short-sm-nolong}{short-sm}
```

short-sm-desc

```

8075 \newabbreviationstyle{short-sm-desc}{%
8076 }%
8077 \renewcommand*{\CustomAbbreviationFields}{%
8078   name={\glsxtrshortdescname},
8079   sort={\the\glsshorttok},
8080   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
8081   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
8082   text={\protect\glsabbrvsmfont{\the\glsshorttok}},
8083   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
8084   description={\the\glslongtok}}%
8085 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8086   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8087 }%
8088 }%
8089 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8090 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8091 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmsuffix}%
8092 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8093 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

8094 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8095   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8096   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8097   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8098 }%
8099 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8100   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8101   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8102   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8103 }%
8104 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8105   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8106   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8107   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8108 }%
8109 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%

```

```

8110   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8111   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8112   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8113 }%

```

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.

```

8114 \renewcommand*{\glsxtrfullformat}[2]{%
8115   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8116   \ifglsxtrinsertinside\else##2\fi
8117 }%
8118 \renewcommand*{\glsxtrfullplformat}[2]{%
8119   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8120   \ifglsxtrinsertinside\else##2\fi
8121 }%
8122 \renewcommand*{\Glsxtrfullformat}[2]{%
8123   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8124   \ifglsxtrinsertinside\else##2\fi
8125 }%
8126 \renewcommand*{\Glsxtrfullplformat}[2]{%
8127   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8128   \ifglsxtrinsertinside\else##2\fi
8129 }%
8130 }

```

-sm-nolong-desc

```
8131 \letabbreviationstyle{short-sm-nolong-desc}{short-sm-desc}
```

nolong-short-sm

```

8132 \newabbreviationstyle{nolong-short-sm}%
8133 {%
8134   \GlsXtrUseAbbrStyleSetup{short-sm-nolong}%
8135 }%
8136 {%
8137   \GlsXtrUseAbbrStyleFmts{short-sm-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

8138 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8139   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}}%
8140   \ifglsxtrinsertinside##2\fi}%
8141   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8142   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8143 }%
8144 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8145   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}%
8146   \ifglsxtrinsertinside##2\fi}%
8147   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8148   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8149 }%
8150 \renewcommand*{\Glsxtrinlinefullformat}[2]{%

```

```

8151   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
8152     \ifglsxtrinsertinside##2\fi}%
8153   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8154   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8155 }%
8156 \renewcommand*\Glsxtrinlinefullplformat[2]{%
8157   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
8158     \ifglsxtrinsertinside##2\fi}%
8159   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8160   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8161 }%
8162 }

```

`long-noshort-sm` The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

8163 \newabbreviationstyle{long-noshort-sm}{%
8164 }%
8165 \renewcommand*\CustomAbbreviationFields{%
8166   name={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8167   sort={\the\glsshorttok},%
8168   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},%
8169   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},%
8170   text={\protect\glslongdefaultfont{\the\glslongtok}},%
8171   plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
8172   description={\the\glslongtok}%
8173 }%
8174 \renewcommand*\GlsXtrPostNewAbbreviation{%
8175   \glssetattribute{\the\glslabeltok}{regular}{true}%
8176 }%
8177 }%
8178 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}%
8179 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}%
8180 \renewcommand*\abbrvpluralsuffix{\protect\glsxtrsuffix}%
8181 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}%
8182 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8183 \renewcommand*\glsxtrsubsequentfmt[2]{%
8184   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8185   \ifglsxtrinsertinside \else##2\fi
8186 }%
8187 \renewcommand*\glsxtrsubsequentplfmt[2]{%
8188   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8189   \ifglsxtrinsertinside \else##2\fi
8190 }%
8191 \renewcommand*\Glsxtrsubsequentfmt[2]{%
8192   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8193   \ifglsxtrinsertinside \else##2\fi
8194 }%
8195 \renewcommand*\Glsxtrsubsequentplfmt[2]{%

```

```

8196   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8197   \ifglsxtrinsertinside \else##2\fi
8198 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8199 \renewcommand*{\glsxtrinlinelinefullformat}[2]{%
8200   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8201   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8202   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
8203 }%
8204 \renewcommand*{\glsxtrinlinelinefullplformat}[2]{%
8205   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8206   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8207   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8208 }%
8209 \renewcommand*{\Glsxtrinlinelinefullformat}[2]{%
8210   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8211   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8212   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
8213 }%
8214 \renewcommand*{\Glsxtrinlinelinefullplformat}[2]{%
8215   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8216   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8217   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8218 }%

```

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.

```

8219 \renewcommand*{\glsxtrfullformat}[2]{%
8220   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8221   \ifglsxtrinsertinside\else##2\fi
8222 }%
8223 \renewcommand*{\glsxtrfullplformat}[2]{%
8224   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8225   \ifglsxtrinsertinside\else##2\fi
8226 }%
8227 \renewcommand*{\Glsxtrfullformat}[2]{%
8228   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8229   \ifglsxtrinsertinside\else##2\fi
8230 }%
8231 \renewcommand*{\Glsxtrfullplformat}[2]{%
8232   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8233   \ifglsxtrinsertinside\else##2\fi
8234 }%
8235 }

```

`long-sm` Backward compatibility:

```
8236 @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`.

```
8237 \newabbreviationstyle{long-noshort-sm-desc}%
8238 {%
8239   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
8240 }%
8241 {%
8242   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8243   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8244   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmsuffix}%
8245   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8246   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
8247 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8248   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8249   \ifglsxtrinsertinside \else##2\fi
8250 }%
8251 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8252   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8253   \ifglsxtrinsertinside \else##2\fi
8254 }%
8255 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8256   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8257   \ifglsxtrinsertinside \else##2\fi
8258 }%
8259 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8260   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8261   \ifglsxtrinsertinside \else##2\fi
8262 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
8263 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8264   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8265   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8266   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8267 }%
8268 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8269   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8270   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8271   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8272 }%
8273 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8274   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8275   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8276   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8277 }%
8278 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8279   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8280   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8281 }
```

```

8281     \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8282 }%

```

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.

```

8283 \renewcommand*{\glsxtrfullformat}[2]{%
8284   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8285   \ifglsxtrinsertinside\else##2\fi
8286 }%
8287 \renewcommand*{\glsxtrfullplformat}[2]{%
8288   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8289   \ifglsxtrinsertinside\else##2\fi
8290 }%
8291 \renewcommand*{\Glsxtrfullformat}[2]{%
8292   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8293   \ifglsxtrinsertinside\else##2\fi
8294 }%
8295 \renewcommand*{\Glsxtrfullplformat}[2]{%
8296   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8297   \ifglsxtrinsertinside\else##2\fi
8298 }%
8299 }

```

`long-desc-sm` Backward compatibility:

```
8300 @glsxtr@deprecated@abbrstyle{long-desc-sm}{long-noshort-sm-desc}
```

`short-sm-footnote`

```

8301 \newabbreviationstyle{short-sm-footnote}{%
8302 }%
8303 \renewcommand*{\CustomAbbreviationFields}{%
8304   name={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8305   sort={\the\glsshorttok},%
8306   description={\the\glslongtok},%
8307   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}}%
8308   \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8309   {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8310   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}%
8311   \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8312   {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
8313   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.

```

8314 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8315   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8316   \glshasattribute{\the\glslabeltok}{regular}%
8317 }%
8318   \glssetattribute{\the\glslabeltok}{regular}{false}%
8319 }%
8320 }%

```

```

8321  }%
8322 }%
8323 {%
8324 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8325 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8326 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmsuffix}%
8327 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8328 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

8329 \renewcommand*{\glsxtrfullformat}[2]{%
8330   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8331   \ifglsxtrinsertinside\else##2\fi
8332   \protect\glsxtrabrvfootnote{##1}%
8333   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8334 }%
8335 \renewcommand*{\glsxtrfullplformat}[2]{%
8336   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8337   \ifglsxtrinsertinside\else##2\fi
8338   \protect\glsxtrabrvfootnote{##1}%
8339   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8340 }%
8341 \renewcommand*{\Glsxtrfullformat}[2]{%
8342   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8343   \ifglsxtrinsertinside\else##2\fi
8344   \protect\glsxtrabrvfootnote{##1}%
8345   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8346 }%
8347 \renewcommand*{\Glsxtrfullplformat}[2]{%
8348   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8349   \ifglsxtrinsertinside\else##2\fi
8350   \protect\glsxtrabrvfootnote{##1}%
8351   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8352 }%

```

The first use full form and the inline full form use the short (long) style.

```

8353 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8354   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8355   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8356   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8357 }%
8358 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8359   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8360   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8361   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8362 }%
8363 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8364   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8365   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8366   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%

```

```

8367 }%
8368 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8369   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8370   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8371   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}}%
8372 }%
8373 }

```

footnote-sm Backward compatibility:

```
8374 \@glsxtr@deprecated@abbrstyle{footnote-sm}{short-sm-footnote}
```

sm-postfootnote

```

8375 \newabbreviationstyle{short-sm-postfootnote}{%
8376 {%
8377   \renewcommand*{\CustomAbbreviationFields}{%
8378     name={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8379     sort={\the\glsshorttok},%
8380     description={\the\glslongtok},%
8381     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
8382     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
8383     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.

```

8384 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8385   \csdef{glsxtrpostlink\glscategorylabel}{%
8386     \glsxtrifwasfirstuse
8387   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

8388   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8389   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}%
8390 }%
8391 {}%
8392 }%
8393 \glshasattribute{\the\glslabeltok}{regular}%
8394 {}%
8395 \glssetattribute{\the\glslabeltok}{regular}{false}%
8396 }%
8397 {}%
8398 }%

```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```

8399 \renewcommand*{\glsxtrsetupfulldefs}{%
8400   \let\glsxtrifwasfirstuse\@secondoftwo
8401 }%
8402 }%
8403 {}%

```

```

8404 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8405 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8406 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsnsuffix}%
8407 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8408 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

8409 \renewcommand*{\glsxtrfullformat}[2]{%
8410   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8411   \ifglsxtrinsertinside\else##2\fi
8412 }%
8413 \renewcommand*{\glsxtrfullplformat}[2]{%
8414   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8415   \ifglsxtrinsertinside\else##2\fi
8416 }%
8417 \renewcommand*{\Glsxtrfullformat}[2]{%
8418   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8419   \ifglsxtrinsertinside\else##2\fi
8420 }%
8421 \renewcommand*{\Glsxtrfullplformat}[2]{%
8422   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8423   \ifglsxtrinsertinside\else##2\fi
8424 }%

```

The first use full form and the inline full form use the short (long) style.

```

8425 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8426   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8427   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8428   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8429 }%
8430 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8431   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8432   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8433   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8434 }%
8435 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8436   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8437   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8438   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8439 }%
8440 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8441   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8442   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8443   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8444 }%
8445 }

```

postfootnote-sm Backward compatibility:

```
8446 @glsxtr@deprecated@abbrstyle{postfootnote-sm}{short-sm-postfootnote}
```

1.6.5 Predefined Styles (Emphasized)

These styles use \emph for the short form.

```
\glsabbrvemfont
8447 \newcommand*{\glsabbrvemfont}[1]{\emph{#1}}%
\nrstabbrvemfont
8448 \newcommand*{\glsfirstabbrvemfont}[1]{\glsabbrvemfont{#1}}%
```

The default short form suffix:

```
\glsxtremsuffix
8449 \newcommand*{\glsxtremsuffix}{\glsxtrabbrvpluralsuffix}
```

`firstlongemfont` Only used by the “long-em” styles.

```
8450 \newcommand*{\glsfirstlongemfont}[1]{\glslongemfont{#1}}%
```

`glslongemfont` Only used by the “long-em” styles.

```
8451 \newcommand*{\glslongemfont}[1]{\emph{#1}}%
```

`long-short-em` The long form is just set in the default long font.

```
8452 \newabbreviationstyle{long-short-em}{%
8453 {%
8454   \renewcommand*{\CustomAbbreviationFields}{%
8455     name={\protect\glsabbrvemfont{\the\glsshorttok}},%
8456     sort={\the\glsshorttok},%
8457     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%,%
8458     \protect\glsxtrfullsep{\the\glslabeltok}%
8459     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
8460     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%,%
8461     \protect\glsxtrfullsep{\the\glslabeltok}%
8462     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
8463     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%,%
8464     description={\the\glslongtok}}%
8465   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8466     \glshasattribute{\the\glslabeltok}{regular}%
8467     {%
8468       \glssetattribute{\the\glslabeltok}{regular}{false}%
8469     }%
8470     {}%
8471   }%
8472 }%
8473 {%
8474   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
8475   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
8476   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
```

Use the default long fonts.

```
8477 \renewcommand*\{\glsfirstlongfont\}[1]{\glsfirstlongdefaultfont{##1}}%
8478 \renewcommand*\{\glslongfont\}[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
8479 \renewcommand*\{\glsxtrfullformat\}[2]{%
8480   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8481   \ifglsxtrinsertinside\else##2\fi
8482   \glsxtrfullsep{##1}%
8483   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8484 }%
8485 \renewcommand*\{\glsxtrfullplformat\}[2]{%
8486   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8487   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8488   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8489 }%
8490 \renewcommand*\{\Glsxtrfullformat\}[2]{%
8491   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8492   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8493   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8494 }%
8495 \renewcommand*\{\Glsxtrfullplformat\}[2]{%
8496   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8497   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8498   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8499 }%
8500 }
```

g-short-em-desc

```
8501 \newabbreviationstyle{long-short-em-desc}{%
8502 }%
8503 \renewcommand*\{\CustomAbbreviationFields\}{%
8504   name={\glsxtrlongshortdescname},%
8505   sort={\glsxtrlongshortdescsort},%
8506   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
8507     \protect\glsxtrfullsep{\the\glslabeltok}%
8508     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
8509   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
8510     \protect\glsxtrfullsep{\the\glslabeltok}%
8511     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
8512   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8513   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
8514 }%
```

Unset the regular attribute if it has been set.

```
8515 \renewcommand*\{\GlsXtrPostNewAbbreviation\}{%
8516   \glshasattribute{\the\glslabeltok}{regular}%
8517 }%
8518   \glssetattribute{\the\glslabeltok}{regular}{false}%
8519 }%
```

```
8520     {}%
8521   }%
8522 }%
8523 {%
```

As long-short-em style:

```
8524 \GlsXtrUseAbbrStyleFmts{long-short-em}%
8525 }
```

long-em-short-em

```
8526 \newabbreviationstyle{long-em-short-em}%
8527 {%
```

\glslongemfont is used in the description since \glsdesc doesn't set the style.

```
8528 \renewcommand*{\CustomAbbreviationFields}{%
8529   name={\protect\glsabbrvemfont{\the\glsshorttok}},%
8530   sort={\the\glsshorttok},%
8531   first={\protect\glsfirstlongemfont{\the\glslongtok}}%
8532   \protect\glsxtrfullsep{\the\glslabeltok}%
8533   \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
8534   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}}%
8535   \protect\glsxtrfullsep{\the\glslabeltok}%
8536   \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
8537   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
8538   description={\protect\glslongemfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
8539 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8540   \glshasattribute{\the\glslabeltok}{regular}%
8541   {%
8542     \glssetattribute{\the\glslabeltok}{regular}{false}%
8543   }%
8544   {}%
8545 }%
8546 }%
8547 {%
8548 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8549 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{\##1}}%
8550 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{\##1}}%
8551 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{\##1}}%
8552 \renewcommand*{\glslongfont}[1]{\glslongemfont{\##1}}%
```

The first use full form and the inline full form are the same for this style.

```
8553 \renewcommand*{\glsxtrfullformat}[2]{%
8554   \glsfirstlongemfont{\glsaccesslong{\##1}\ifglsxtrinsertinside##2\fi}%
8555   \ifglsxtrinsertinside\else##2\fi
8556   \glsxtrfullsep{\##1}%
8557   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{\##1}}}}%
8558 }%
8559 \renewcommand*{\glsxtrfullplformat}[2]{%
```

```

8560 \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8561 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8562 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8563 }%
8564 \renewcommand*\Glsxtrfullformat[2]{%
8565 \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8566 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8567 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8568 }%
8569 \renewcommand*\Glsxtrfullplformat[2]{%
8570 \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8571 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8572 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8573 }%
8574 }

```

m-short-em-desc

```

8575 \newabbreviationstyle{long-em-short-em-desc}{%
8576 }%
8577 \renewcommand*\CustomAbbreviationFields{%
8578   name={\glsxtrlongshortdescname},%
8579   sort={\glsxtrlongshortdescsort},%
8580   first={\protect\glsfirstlongemfont{\the\glslongtok}}%
8581   \protect\glsxtrfullsep{\the\glslabeltok}%
8582   \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
8583   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}}%
8584   \protect\glsxtrfullsep{\the\glslabeltok}%
8585   \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
8586   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8587   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
8588 }%

```

Unset the regular attribute if it has been set.

```

8589 \renewcommand*\GlsXtrPostNewAbbreviation{%
8590   \glshasattribute{\the\glslabeltok}{regular}%
8591   {}%
8592   \glssetattribute{\the\glslabeltok}{regular}{false}%
8593   {}%
8594   {}%
8595 }%
8596 }%
8597 {}%
8598 \GlsXtrUseAbbrStyleFmts{long-em-short-em}%
8599 }

```

short-em-long Now the short (long) version

```

8600 \newabbreviationstyle{short-em-long}{%
8601 }%
8602 \renewcommand*\CustomAbbreviationFields{%
8603   name={\protect\glsabbrvemfont{\the\glsshorttok}},%

```

```

8604     sort={\the\glsshorttok},
8605     description={\the\glslongtok},%
8606     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
8607       \protect\glsxtrfullsep{\the\glslabeltok}%
8608       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8609     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
8610       \protect\glsxtrfullsep{\the\glslabeltok}%
8611       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8612     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}

```

Unset the regular attribute if it has been set.

```

8613 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8614   \glshasattribute{\the\glslabeltok}{regular}%
8615   {%
8616     \glssetattribute{\the\glslabeltok}{regular}{false}%
8617   }%
8618   {}%
8619 }%
8620 }%
8621 {%

```

Mostly as short-long style:

```

8622 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8623 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
8624 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
8625 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8626 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8627 \renewcommand*\glsxtrfullformat}[2]{%
8628   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8629   \ifglsxtrinsertinside\else##2\fi
8630   \glsxtrfullsep{##1}%
8631   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%
8632 }%
8633 \renewcommand*\glsxtrfullplformat}[2]{%
8634   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8635   \ifglsxtrinsertinside\else##2\fi
8636   \glsxtrfullsep{##1}%
8637   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%
8638 }%
8639 \renewcommand*\Glsxtrfullformat}[2]{%
8640   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8641   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8642   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%
8643 }%
8644 \renewcommand*\Glsxtrfullplformat}[2]{%
8645   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8646   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8647   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%
8648 }%

```

```
8649 }
```

rt-em-long-desc As before but user provides description

```
8650 \newabbreviationstyle{short-em-long-desc}%
8651 {%
8652   \renewcommand*{\CustomAbbreviationFields}{%
8653     name={\glsxtrshortlongdescname},
8654     sort={\glsxtrshortlongdescsort},
8655     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
8656       \protect\glsxtrfullsep{\the\glslabeltok}%
8657       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8658     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
8659       \protect\glsxtrfullsep{\the\glslabeltok}%
8660       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8661     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8662     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
8663   }%
```

Unset the regular attribute if it has been set.

```
8664 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8665   \glshasattribute{\the\glslabeltok}{regular}%
8666   {%
8667     \glssetattribute{\the\glslabeltok}{regular}{false}%
8668   }%
8669   {}%
8670 }%
8671 }%
8672 {%
8673 \GlsXtrUseAbbrStyleFmts{short-em-long}%
8674 }
```

hort-em-long-em

```
8675 \newabbreviationstyle{short-em-long-em}%
8676 {%
```

\glslongemfont is used in the description since \glsdesc doesn't set the style.

```
8677 \renewcommand*{\CustomAbbreviationFields}{%
8678   name={\protect\glsabbrvemfont{\the\glsshorttok}},%
8679   sort={\the\glsshorttok},
8680   description={\protect\glslongemfont{\the\glslongtok}},%
8681   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
8682     \protect\glsxtrfullsep{\the\glslabeltok}%
8683     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
8684   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
8685     \protect\glsxtrfullsep{\the\glslabeltok}%
8686     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
8687   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```

8688 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8689   \glshasattribute{\the\glslabeltok}{regular}{%
8690     {%
8691       \glssetattribute{\the\glslabeltok}{regular}{false}{%
8692     }%
8693   }%
8694 }%
8695 }%
8696 {%
8697 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtremsuffix}{%
8698 \renewcommand*\glsabbrvfont}[1]{\glsabbrvemfont{##1}}{%
8699 \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}{%
8700 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}{%
8701 \renewcommand*\glslongfont}[1]{\glslongemfont{##1}}{%

```

The first use full form and the inline full form are the same for this style.

```

8702 \renewcommand*\glsxtrfullformat}[2]{%
8703   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}{%
8704     \ifglsxtrinsertinside\else##2\fi
8705     \glsxtrfullsep{##1}{%
8706       \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}{%
8707     }%
8708   \renewcommand*\glsxtrfullplformat}[2]{%
8709     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}{%
8710       \ifglsxtrinsertinside\else##2\fi
8711       \glsxtrfullsep{##1}{%
8712         \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}{%
8713     }%
8714   \renewcommand*\Glsxtrfullformat}[2]{%
8715     \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}{%
8716       \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{%
8717         \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}{%
8718     }%
8719   \renewcommand*\Glsxtrfullplformat}[2]{%
8720     \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}{%
8721       \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{%
8722         \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}{%
8723     }%
8724 }

```

em-long-em-desc

```

8725 \newabbreviationstyle{short-em-long-em-desc}{%
8726 }%
8727 \renewcommand*\CustomAbbreviationFields}{%
8728   name={\glsxtrshortlongdescname},%
8729   sort={\glsxtrshortlongdescsort},%
8730   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}{%
8731     \protect\glsxtrfullsep{\the\glslabeltok}{%
8732       \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}},%
8733       firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}{%

```

```

8734     \protect\glsxtrfullsep{\the\glslabeltok}%
8735     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
8736     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8737     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
8738 }%

```

Unset the regular attribute if it has been set.

```

8739 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8740   \glshasattribute{\the\glslabeltok}{regular}}%
8741 {%
8742   \glssetattribute{\the\glslabeltok}{regular}{false}}%
8743 }%
8744 {%
8745 }%
8746 }%
8747 {%
8748 \GlsXtrUseAbbrStyleFmts{short-em-long-em}%
8749 }%

```

short-em

```

8750 \newabbreviationstyle{short-em}{%
8751 {%
8752 \renewcommand*\CustomAbbreviationFields}{%
8753   name={\protect\glsabbrvemfont{\the\glsshorttok}},%
8754   sort={\the\glsshorttok},%
8755   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
8756   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
8757   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8758   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
8759   description={\the\glslongtok}}%
8760 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8761   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8762 }%
8763 {%
8764 \renewcommand*\abrvpluralsuffix}{\protect\glsxtremsuffix}%
8765 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
8766 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{\##1}}%
8767 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\##1}}%
8768 \renewcommand*\glslongfont[1]{\glslongdefaultfont{\##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

8769 \renewcommand*\glsxtrinlinefullformat}[2]{%
8770   \protect\glsfirstabbrvemfont{\glsaccessshort{\##1}}%
8771   \ifglsxtrinsertinside{\fi}%
8772   \ifglsxtrinsertinside{\else{\glsxtrfullsep{\##1}}}%%
8773   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}}%
8774 }%
8775 \renewcommand*\glsxtrinlinefullplformat}[2]{%
8776   \protect\glsfirstabbrvemfont{\glsaccessshortpl{\##1}}%
8777   \ifglsxtrinsertinside{\fi}%

```

```

8778 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8779 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8780 }%
8781 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8782   \protect\glsfirstabbrvemfont{\Glsaccessshort{##1}%
8783     \ifglsxtrinsertinside##2\fi}%
8784   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8785   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8786 }%
8787 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8788   \protect\glsfirstabbrvemfont{\Glsaccessshortpl{##1}%
8789     \ifglsxtrinsertinside##2\fi}%
8790   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8791   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8792 }%

```

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.

```

8793 \renewcommand*{\glsxtrfullformat}[2]{%
8794   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8795   \ifglsxtrinsertinside\else##2\fi
8796 }%
8797 \renewcommand*{\glsxtrfullplformat}[2]{%
8798   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8799   \ifglsxtrinsertinside\else##2\fi
8800 }%
8801 \renewcommand*{\Glsxtrfullformat}[2]{%
8802   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8803   \ifglsxtrinsertinside\else##2\fi
8804 }%
8805 \renewcommand*{\Glsxtrfullplformat}[2]{%
8806   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8807   \ifglsxtrinsertinside\else##2\fi
8808 }%
8809 }

```

short-em-nolong

```
8810 \letabbreviationstyle{short-em-nolong}{short-em}
```

short-em-desc

```

8811 \newabbreviationstyle{short-em-desc}%
8812 {%
8813   \renewcommand*{\CustomAbbreviationFields}{%
8814     name={\glsxtrshortdescname},
8815     sort={\the\glsshorttok},
8816     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
8817     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
8818     text={\protect\glsabbrvemfont{\the\glsshorttok}},
```

```

8819     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},  

8820     description={\the\glslongtok}}%  

8821 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  

8822   \glssetattribute{\glslabeltok}{regular}{true}}%  

8823 }%  

8824 {  

8825   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%  

8826   \renewcommand*{\glsabbrvfont[1]}{\glsabbrvemfont{##1}}%  

8827   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%  

8828   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%  

8829   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

8830 \renewcommand*{\glsxtrinlinefullformat}[2]{%  

8831   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

8832   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

8833   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%  

8834 }%  

8835 \renewcommand*{\glsxtrinlinefullplformat}[2]{%  

8836   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

8837   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

8838   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%  

8839 }%  

8840 \renewcommand*{\Glsxtrinlinefullformat}[2]{%  

8841   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

8842   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

8843   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%  

8844 }%  

8845 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%  

8846   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

8847   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

8848   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%  

8849 }%

```

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.

```

8850 \renewcommand*{\glsxtrfullformat}[2]{%  

8851   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

8852   \ifglsxtrinsertinside\else##2\fi  

8853 }%  

8854 \renewcommand*{\glsxtrfullplformat}[2]{%  

8855   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

8856   \ifglsxtrinsertinside\else##2\fi  

8857 }%  

8858 \renewcommand*{\Glsxtrfullformat}[2]{%  

8859   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

8860   \ifglsxtrinsertinside\else##2\fi  

8861 }%  

8862 \renewcommand*{\Glsxtrfullplformat}[2]{%  

8863   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%

```

```

8864      \ifglsxtrinsertinside\else##2\fi
8865  }%
8866 }

-em-nolong-desc
8867 \letabbreviationstyle{short-em-nolong-desc}{short-em-desc}

```

nolong-short-em

```

8868 \newabbreviationstyle{nolong-short-em}%
8869 {%
8870  \GlsXtrUseAbbrStyleSetup{short-em-nolong}%
8871 }%
8872 {%
8873  \GlsXtrUseAbbrStyleFmts{short-em-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

8874 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
8875  \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
8876    \ifglsxtrinsertinside##2\fi}%
8877  \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8878  \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8879 }%
8880 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
8881  \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
8882  \ifglsxtrinsertinside##2\fi}%
8883  \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8884  \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8885 }%
8886 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
8887  \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
8888  \ifglsxtrinsertinside##2\fi}%
8889  \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8890  \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8891 }%
8892 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
8893  \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
8894  \ifglsxtrinsertinside##2\fi}%
8895  \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8896  \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8897 }%
8898 }

```

long-noshort-em The short form is explicitly invoked through commands like `\glsshort`.

```

8899 \newabbreviationstyle{long-noshort-em}%
8900 {%
8901  \renewcommand*\{\CustomAbbreviationFields}{%
8902    name={\protect\glsabbrvemfont{\the\glsshorttok}},%
8903    sort={\the\glsshorttok},%
8904    first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},%

```

```

8905   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},  

8906   text={\protect\glslongdefaultfont{\the\glslongtok}},  

8907   plural={\protect\glslongdefaultfont{\the\glslongpltok}},%  

8908   description={\the\glslongtok}%
8909 }%
8910 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8911   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8912 }%
8913 {%
8914 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8915 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
8916 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
8917 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8918 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8919 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8920   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8921   \ifglsxtrinsertinside \else##2\fi
8922 }%
8923 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8924   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8925   \ifglsxtrinsertinside \else##2\fi
8926 }%
8927 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8928   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8929   \ifglsxtrinsertinside \else##2\fi
8930 }%
8931 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8932   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8933   \ifglsxtrinsertinside \else##2\fi
8934 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8935 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8936   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8937   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8938   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8939 }%
8940 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8941   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8942   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8943   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8944 }%
8945 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8946   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8947   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8948   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8949 }%
8950 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%

```

```

8951   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8952     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8953   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8954 }%

```

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.

```

8955 \renewcommand*\glsxtrfullformat[2]{%
8956   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8957   \ifglsxtrinsertinside\else##2\fi
8958 }%
8959 \renewcommand*\glsxtrfullplformat[2]{%
8960   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8961   \ifglsxtrinsertinside\else##2\fi
8962 }%
8963 \renewcommand*\Glsxtrfullformat[2]{%
8964   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8965   \ifglsxtrinsertinside\else##2\fi
8966 }%
8967 \renewcommand*\Glsxtrfullplformat[2]{%
8968   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8969   \ifglsxtrinsertinside\else##2\fi
8970 }%
8971 }

```

`long-em` Backward compatibility:

```
8972 @glsxtr@deprecated@abbrstyle{long-em}{long-noshort-em}
```

`g-em-noshort-em` The short form is explicitly invoked through commands like `\glsshort`.

```

8973 \newabbreviationstyle{long-em-noshort-em}%
8974 {%
8975   \renewcommand*\CustomAbbreviationFields{%
8976     name={\protect\glsabbrvemfont{\the\glsshorttok}},%
8977     sort={\the\glsshorttok},%
8978     first={\protect\glsfirstlongemfont{\the\glslongtok}},%
8979     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},%
8980     text={\protect\glslongemfont{\the\glslongtok}},%
8981     plural={\protect\glslongemfont{\the\glslongpltok}},%
8982     description={\protect\glslongemfont{\the\glslongtok}}%
8983 }%
8984 \renewcommand*\GlsXtrPostNewAbbreviation{%
8985   \glssetattribute{\the\glslabeltok}{regular}{true}%
8986 }%
8987 {%
8988   \renewcommand*\abbrvpluralsuffix{\protect\glsxtremsuffix}%
8989   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
8990   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
8991   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongemfont{##1}}%
8992   \renewcommand*\glslongfont[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```
8993 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8994   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8995   \ifglsxtrinsertinside \else##2\fi
8996 }%
8997 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8998   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8999   \ifglsxtrinsertinside \else##2\fi
9000 }%
9001 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9002   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9003   \ifglsxtrinsertinside \else##2\fi
9004 }%
9005 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9006   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9007   \ifglsxtrinsertinside \else##2\fi
9008 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9009 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9010   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9011   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9012   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9013 }%
9014 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9015   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9016   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9017   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9018 }%
9019 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9020   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9021   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9022   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9023 }%
9024 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9025   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9026   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9027   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9028 }%
```

The first use full form only displays the long form, but it typically won't be used as the regular attribute is set by this style.

```
9029 \renewcommand*{\glsxtrfullformat}[2]{%
9030   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9031   \ifglsxtrinsertinside\else##2\fi
9032 }%
9033 \renewcommand*{\glsxtrfullplformat}[2]{%
9034   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9035   \ifglsxtrinsertinside\else##2\fi
9036 }%
```

```

9037 \renewcommand*{\Glsxtrfullformat}[2]{%
9038   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9039   \ifglsxtrinsertinside\else##2\fi
9040 }%
9041 \renewcommand*{\Glsxtrfullplformat}[2]{%
9042   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9043   \ifglsxtrinsertinside\else##2\fi
9044 }%
9045 }

```

`noshort-em-noreg` Like `long-em-noshort-em` but doesn't set the `regular` attribute.

```

9046 \newabbreviationstyle{long-em-noshort-em-noreg}{%
9047 {%
9048   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em}{%

```

Unset the `regular` attribute if it has been set.

```

9049 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9050   \glshasattribute{\the\glslabeltok}{regular}{%
9051   }%
9052     \glssetattribute{\the\glslabeltok}{regular}{false}{%
9053   }%
9054   {}{%
9055 }{%
9056 }{%
9057 {%
9058   \GlsXtrUseAbbrStyleFmts{long-em-noshort-em}{%
9059 }

```

`noshort-em-desc` The emphasized font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

9060 \newabbreviationstyle{long-noshort-em-desc}{%
9061 {%
9062   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}{%
9063 }{%
9064 {%
9065 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}{%
9066 \renewcommand*{\glsabbrvfont[1]}{\glsabbrvemfont{##1}}{%
9067 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}{%
9068 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}{%
9069 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}{%

```

The format for subsequent use (not used when the `regular` attribute is set).

```

9070 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9071   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}{%
9072   \ifglsxtrinsertinside \else##2\fi
9073 }{%
9074 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9075   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}{%
9076   \ifglsxtrinsertinside \else##2\fi
9077 }{%

```

```

9078 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
9079   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9080   \ifglsxtrinsertinside \else##2\fi
9081 }%
9082 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
9083   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9084   \ifglsxtrinsertinside \else##2\fi
9085 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9086 \renewcommand*\glsxtrinlinefullformat}[2]{%
9087   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9088   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9089   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9090 }%
9091 \renewcommand*\glsxtrinlinefullplformat}[2]{%
9092   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9093   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9094   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9095 }%
9096 \renewcommand*\Glsxtrinlinefullformat}[2]{%
9097   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9098   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9099   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9100 }%
9101 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
9102   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9103   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9104   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9105 }%

```

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.

```

9106 \renewcommand*\glsxtrfullformat}[2]{%
9107   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9108   \ifglsxtrinsertinside\else##2\fi
9109 }%
9110 \renewcommand*\glsxtrfullplformat}[2]{%
9111   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9112   \ifglsxtrinsertinside\else##2\fi
9113 }%
9114 \renewcommand*\Glsxtrfullformat}[2]{%
9115   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9116   \ifglsxtrinsertinside\else##2\fi
9117 }%
9118 \renewcommand*\Glsxtrfullplformat}[2]{%
9119   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9120   \ifglsxtrinsertinside\else##2\fi
9121 }%
9122 }

```

long-desc-em Backward compatibility:

```
9123 \@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.

```
9124 \newabbreviationstyle{long-em-noshort-em-desc}%
9125 {%
9126   \renewcommand*{\CustomAbbreviationFields}{%
9127     name={\protect\protect\glslongemfont{\the\glslongtok}},%
9128     sort={\the\glslongtok},%
9129     first={\protect\glsfirstlongemfont{\the\glslongtok}},%
9130     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},%
9131     text={\glslongemfont{\the\glslongtok}},%
9132     plural={\glslongemfont{\the\glslongpltok}}%
9133   }%
9134   \renewcommand*{\GlsXtrPostNewAbbreviation}%
9135     \glssetattribute{\the\glslabeltok}{regular}{true}%
9136 }%
9137 {%
9138   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9139   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\#1}}%
9140   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{\#1}}%
9141   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{\#1}}%
9142   \renewcommand*{\glslongfont}[1]{\glslongemfont{\#1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
9143 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9144   \glslongemfont{\glsaccesslong{\#1}\ifglsxtrinsertinside {\#2}\fi}%
9145   \ifglsxtrinsertinside \else{\#2}\fi
9146 }%
9147 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9148   \glslongemfont{\glsaccesslongpl{\#1}\ifglsxtrinsertinside {\#2}\fi}%
9149   \ifglsxtrinsertinside \else{\#2}\fi
9150 }%
9151 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9152   \glslongemfont{\Glsaccesslong{\#1}\ifglsxtrinsertinside {\#2}\fi}%
9153   \ifglsxtrinsertinside \else{\#2}\fi
9154 }%
9155 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9156   \glslongemfont{\Glsaccesslongpl{\#1}\ifglsxtrinsertinside {\#2}\fi}%
9157   \ifglsxtrinsertinside \else{\#2}\fi
9158 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9159 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9160   \glsfirstlongemfont{\glsaccesslong{\#1}\ifglsxtrinsertinside{\#2}\fi}%
9161   \ifglsxtrinsertinside\else{\#2}\fi\glsxtrfullsep{\#1}%
9162   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{\#1}}}}%
9163 }%
9164 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
```

```

9165   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9166   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9167   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9168 }%
9169 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9170   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9171   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9172   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9173 }%
9174 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9175   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9176   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9177   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9178 }%

```

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.

```

9179 \renewcommand*{\glsxtrfullformat}[2]{%
9180   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9181   \ifglsxtrinsertinside\else##2\fi
9182 }%
9183 \renewcommand*{\glsxtrfullplformat}[2]{%
9184   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9185   \ifglsxtrinsertinside\else##2\fi
9186 }%
9187 \renewcommand*{\Glsxtrfullformat}[2]{%
9188   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9189   \ifglsxtrinsertinside\else##2\fi
9190 }%
9191 \renewcommand*{\Glsxtrfullplformat}[2]{%
9192   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9193   \ifglsxtrinsertinside\else##2\fi
9194 }%
9195 }

```

t-em-desc-noreg Like long-em-noshort-em-desc but doesn't set the regular attribute.

```

9196 \newabbreviationstyle{long-em-noshort-em-desc-noreg}{%
9197 {%
9198   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em-desc}%

```

Unset the regular attribute if it has been set.

```

9199 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9200   \glshasattribute{\the\glslabeltok}{regular}%
9201   {%
9202     \glssetattribute{\the\glslabeltok}{regular}{false}%
9203   }%
9204   {}%
9205 }%
9206 }%
9207 {%

```

```

9208 \GlsXtrUseAbbrStyleFmts{long-em-noshort-em-desc}%
9209 }

short-em-footnote

9210 \newabbreviationstyle{short-em-footnote}{%
9211 {%
9212   \renewcommand*{\CustomAbbreviationFields}{%
9213     name={\protect\glsabbrvemfont{\the\glsshorttok}},%
9214     sort={\the\glsshorttok},%
9215     description={\the\glslongtok},%
9216     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%
9217       \protect\glsxtrabrvfootnote{\the\glslabeltok}%
9218         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9219     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}%
9220       \protect\glsxtrabrvfootnote{\the\glslabeltok}%
9221         {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9222     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.

```

9223 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9224   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9225   \glshasattribute{\the\glslabeltok}{regular}%
9226   {%
9227     \glssetattribute{\the\glslabeltok}{regular}{false}%
9228   }%
9229   {}%
9230 }%
9231 }%
9232 {%
9233   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9234   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
9235   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{\##1}}%
9236   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{\##1}}%
9237   \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{\##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

9238 \renewcommand*{\glsxtrfullformat}[2]{%
9239   \glsfirstabbrvemfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
9240   \ifglsxtrinsertinside\else##2\fi
9241   \protect\glsxtrabrvfootnote{\##1}%
9242     {\glsfirstlongfootnotefont{\glsaccesslong{\##1}}}%
9243 }%
9244 \renewcommand*{\glsxtrfullplformat}[2]{%
9245   \glsfirstabbrvemfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside##2\fi}%
9246   \ifglsxtrinsertinside\else##2\fi
9247   \protect\glsxtrabrvfootnote{\##1}%
9248     {\glsfirstlongfootnotefont{\glsaccesslongpl{\##1}}}%
9249 }%
9250 \renewcommand*{\Glsxtrfullformat}[2]{%

```

```

9251   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9252   \ifglsxtrinsertinside\else##2\fi
9253   \protect\glsxtrabbrvfootnote{##1}%
9254   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9255 }%
9256 \renewcommand*{\Glsxtrfullplformat}[2]{%
9257   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9258   \ifglsxtrinsertinside\else##2\fi
9259   \protect\glsxtrabbrvfootnote{##1}%
9260   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9261 }%

```

The first use full form and the inline full form use the short (long) style.

```

9262 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9263   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9264   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9265   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9266 }%
9267 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9268   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9269   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9270   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9271 }%
9272 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9273   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9274   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9275   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9276 }%
9277 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9278   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9279   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9280   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9281 }%
9282 }

```

footnote-em Backward compatibility:

```
9283 \glsxtr@deprecated@abbrstyle{footnote-em}{short-em-footnote}
```

em-postfootnote

```

9284 \newabbreviationstyle{short-em-postfootnote}%
9285 {%
9286   \renewcommand*{\CustomAbbreviationFields}{%
9287     name={\protect\glsabbrvemfont{\the\glsshorttok}},%
9288     sort={\the\glsshorttok},%
9289     description={\the\glslongtok},%
9290     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
9291     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
9292     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.

```
9293 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9294   \csdef{glsxtrpostlink\glscategorylabel}{%
9295     \glsxtrifwasfirstuse
9296   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
9297   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9298   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
9299 }%
9300 {}%
9301 }%
9302 \glshasattribute{\the\glslabeltok}{regular}%
9303 {}%
9304   \glssetattribute{\the\glslabeltok}{regular}{false}%
9305 }%
9306 {}%
9307 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
9308 \renewcommand*{\glsxtrsetupfulldefs}{%
9309   \let\glsxtrifwasfirstuse\@secondoftwo
9310 }%
9311 }%
9312 {}%
9313 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9314 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
9315 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9316 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
9317 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form. The long form is deferred.

```
9318 \renewcommand*{\glsxtrfullformat}[2]{%
9319   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9320   \ifglsxtrinsertinside\else##2\fi
9321 }%
9322 \renewcommand*{\glsxtrfullplformat}[2]{%
9323   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9324   \ifglsxtrinsertinside\else##2\fi
9325 }%
9326 \renewcommand*{\GlsXtrfullformat}[2]{%
9327   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9328   \ifglsxtrinsertinside\else##2\fi
9329 }%
9330 \renewcommand*{\Glsxtrfullplformat}[2]{%
9331   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9332   \ifglsxtrinsertinside\else##2\fi
```

```

9333 }%
The first use full form and the inline full form use the short (long) style.
9334 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9335   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9336   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9337   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}}%
9338 }%
9339 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9340   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9341   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9342   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}}%
9343 }%
9344 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9345   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9346   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9347   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}}%
9348 }%
9349 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9350   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9351   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9352   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}}%
9353 }%
9354 }

```

`postfootnote-em` Backward compatibility:

```
9355 @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.

```
9356 \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.

```

9357 \ifdef\glscurrentfieldvalue
9358 {
9359   \newcommand*{\glsxtruserparen}[2]{%
9360     \glsxtrfullsep{##2}%
9361     \glsxtrparen
9362     {##1\ifglshasfield{\glsxtruserfield}{##2}{, \glscurrentfieldvalue}{}{}}%
9363   }
9364 }
9365 {
9366   \newcommand*{\glsxtruserparen}[2]{%

```

```

9367     \glsxtrfullsep{#2}%
9368     \glsxtrparen
9369     {#1\ifglshasfield{\glsxtruserfield}{#2}{, \glo@thisvalue}{}}
9370 }
9371 }
```

Font used for short form:

```
lsabbrvuserfont
9372 \newcommand*{\glsabbrvuserfont}[1]{\glsabbrvdefaultfont{#1}}
```

Font used for short form on first use:

```
stabrvuserfont
9373 \newcommand*{\glsfirststabrvuserfont}[1]{\glsabbrvuserfont{#1}}
```

Font used for long form:

```
glslonguserfont
9374 \newcommand*{\glslonguserfont}[1]{\glslongdefaultfont{#1}}
```

Font used for long form on first use:

```
rstlonguserfont
9375 \newcommand*{\glsfirstlonguserfont}[1]{\glslonguserfont{#1}}
```

The default short form suffix:

```
lsxtrusersuffix
9376 \newcommand*{\glsxtrusersuffix}{\glsxtrabbrvpluralsuffix}
```

```
long-short-user
9377 \newabbreviationstyle{long-short-user}%
9378 {%
9379   \renewcommand*{\CustomAbbreviationFields}{%
9380     name={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9381     sort={\the\glsshorttok},%
9382     first={\protect\glsfirstlonguserfont{\the\glslongtok}}%
9383     \protect\glsxtruserparen{\protect\glsfirststabrvuserfont{\the\glsshorttok}}%{\the\glslabeltok},%
9384     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}}%
9385     \protect\glsxtruserparen
9386     {\protect\glsfirststabrvuserfont{\the\glsshortpltok}}{\the\glslabeltok},%
9387     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
9388     description={\protect\glslonguserfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
9390 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9391   \glshasattribute{\the\glslabeltok}{regular}}%
9392 {%
```

```

9393     \glssetattribute{\the\glslabeltok}{regular}{false}%
9394   }%
9395   {}%
9396 }%
9397 }%
9398 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

9399 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9400 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
9401 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
9402 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
9403 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

9404 \renewcommand*{\glsxtrfullformat}[2]{%
9405   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9406   \ifglsxtrinsertinside\else##2\fi
9407   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9408 }%
9409 \renewcommand*{\glsxtrfullplformat}[2]{%
9410   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9411   \ifglsxtrinsertinside\else##2\fi
9412   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9413 }%
9414 \renewcommand*{\Glsxtrfullformat}[2]{%
9415   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9416   \ifglsxtrinsertinside\else##2\fi
9417   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9418 }%
9419 \renewcommand*{\Glsxtrfullplformat}[2]{%
9420   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9421   \ifglsxtrinsertinside\else##2\fi
9422   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9423 }%
9424 }

```

-postshort-user Like long-short-user but defers the parenthetical matter to after the link.

```

9425 \newabbreviationstyle{long-postshort-user}%
9426 {%
9427 \renewcommand*{\CustomAbbreviationFields}{%
9428   name={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9429   sort={\the\glsshorttok},%
9430   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9431   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9432   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
9433   description={\protect\glslonguserfont{\the\glslongtok}}}%
9434 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9435   \csdef{glsxtrpostlink\glscategorylabel}{%

```

```

9436     \glsxtrifwasfirstuse
9437     {%
9438         \glsxtruserparen
9439             {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}{%
9440                 {\glslabel}%
9441             }%
9442             {}%
9443         }%
9444         \glshasattribute{\the\glslabeltok}{regular}%
9445         {%
9446             \glssetattribute{\the\glslabeltok}{regular}{false}%
9447         }%
9448         {}%
9449     }%
9450 }%
9451 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

9452 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9453 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
9454 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
9455 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
9456 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

9457 \renewcommand*{\glsxtrfullformat}[2]{%
9458     \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9459     \ifglsxtrinsertinside\else##2\fi
9460 }%
9461 \renewcommand*{\glsxtrfullplformat}[2]{%
9462     \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9463     \ifglsxtrinsertinside\else##2\fi
9464 }%
9465 \renewcommand*{\Glsxtrfullformat}[2]{%
9466     \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9467     \ifglsxtrinsertinside\else##2\fi
9468 }%
9469 \renewcommand*{\Glsxtrfullplformat}[2]{%
9470     \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9471     \ifglsxtrinsertinside\else##2\fi
9472 }%

```

In-line format:

```

9473 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9474     \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9475     \ifglsxtrinsertinside\else##2\fi
9476     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9477 }%
9478 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9479     \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

9480   \ifglsxtrinsertinside\else##2\fi
9481     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9482   }%
9483   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9484     \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9485     \ifglsxtrinsertinside\else##2\fi
9486     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9487   }%
9488   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9489     \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9490     \ifglsxtrinsertinside\else##2\fi
9491     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9492   }%
9493 }

```

`short-user-desc` Like `long-postshort-user` but the user supplies the description.

```

9494 \newabbreviationstyle{long-postshort-user-desc}%
9495 {%
9496   \renewcommand*{\CustomAbbreviationFields}{%
9497     name={\protect\glslonguserfont{\the\glslongtok}}%
9498       \protect\glsxtruserparen
9499         {\protect\glsabbrvuserfont{\the\glsshorttok}}{\the\glslabeltok}},%
9500     sort={\the\glslongtok},
9501     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9502     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9503     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9504     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
9505   }%
9506   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9507     \csdef{glsxtrpostlink\glscategorylabel}{%
9508       \glsxtrifwasfirstuse
9509       {%
9510         \glsxtruserparen
9511           {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}}%
9512           {\glslabel}%
9513       }%
9514       {}%
9515     }%
9516     \glshasattribute{\the\glslabeltok}{regular}%
9517     {%
9518       \glssetattribute{\the\glslabeltok}{regular}{false}%
9519     }%
9520     {}%
9521   }%
9522 }%
9523 {%
9524   \GlsXtrUseAbbrStyleFmts{long-postshort-user}%
9525 }

```

t-postlong-user Like short-long-user but defers the parenthetical matter to after the link.

```
9526 \newabbreviationstyle{short-postlong-user}{%
9527 {%
9528   \renewcommand*{\CustomAbbreviationFields}{%
9529     name={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9530     sort={\the\glsshorttok},%
9531     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9532     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9533     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
9534     description={\protect\glslonguserfont{\the\glslongtok}}}}%
9535 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9536   \csdef{glsxtrpostlink\glscategorylabel}{%
9537     \glsxtrifwasfirstuse
9538     {%
9539       \glsxtruserparen
9540         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}}%
9541         {\glslabel}}%
9542     }%
9543     {}%
9544   }%
9545   \glshasattribute{\the\glslabeltok}{regular}%
9546   {%
9547     \glssetattribute{\the\glslabeltok}{regular}{false}%
9548   }%
9549   {}%
9550 }%
9551 }%
9552 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
9553 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9554 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
9555 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
9556 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
9557 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%
```

First use full form:

```
9558 \renewcommand*{\glsxtrfullformat}[2]{%
9559   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9560   \ifglsxtrinsertinside\else##2\fi
9561 }%
9562 \renewcommand*{\glsxtrfullplformat}[2]{%
9563   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9564   \ifglsxtrinsertinside\else##2\fi
9565 }%
9566 \renewcommand*{\Glsxtrfullformat}[2]{%
9567   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9568   \ifglsxtrinsertinside\else##2\fi
9569 }%
```

```

9570 \renewcommand*{\Glsxtrfullplformat}[2]{%
9571   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9572   \ifglsxtrinsertinside\else##2\fi
9573 }%

```

In-line format:

```

9574 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9575   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9576   \ifglsxtrinsertinside\else##2\fi
9577   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
9578 }%
9579 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9580   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9581   \ifglsxtrinsertinside\else##2\fi
9582   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
9583 }%
9584 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9585   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9586   \ifglsxtrinsertinside\else##2\fi
9587   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
9588 }%
9589 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9590   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9591   \ifglsxtrinsertinside\else##2\fi
9592   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
9593 }%
9594 }

```

`tlong-user-desc` Like `short-postlong-user` but leaves the user to specify the description.

```

9595 \newabbreviationstyle{short-postlong-user-desc}{%
9596 }%
9597 \renewcommand*{\CustomAbbreviationFields}{%
9598   name={\protect\glsabbrvuserfont{\the\glsshorttok}%
9599     \protect\glsxtruserparen
9600       {\protect\glslonguserfont{\the\glslongpltok}}%
9601       {\the\glslabeltok}},%
9602   sort={\the\glsshorttok},%
9603   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9604   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9605   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9606   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
9607 }%
9608 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9609   \csdef{glsxtrpostlink\glscategorylabel}{%
9610     \glsxtrifwasfirstuse
9611     {%
9612       \glsxtruserparen
9613         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}}%
9614       {\glslabel}}%

```

```

9615      }%
9616      {}%
9617  }%
9618  \glshasattribute{\the\glslabeltok}{regular}%
9619  {}%
9620  \glssetattribute{\the\glslabeltok}{regular}{false}%
9621  }%
9622  {}%
9623 }%
9624 }%
9625 {}%
9626 \GlsXtrUseAbbrStyleFmts{short-postlong-user}%
9627 }

```

short-user-desc

```

9628 \newabbreviationstyle{long-short-user-desc}%
9629 {}%
9630 \renewcommand*{\CustomAbbreviationFields}{%
9631   name={\glsxtrlongshortdescname},%
9632   sort={\glsxtrlongshortdescsort},%
9633   first={\protect\glsfirstlonguserfont{\the\glslongtok}%
9634     \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
9635     {\the\glslabeltok}},%
9636   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}%
9637     \protect\glsxtruserparen%
9638     {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%
9639   text={\protect\glsabbrvfont{\the\glsshorttok}},%
9640   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
9641 }%

```

Unset the regular attribute if it has been set.

```

9642 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9643   \glshasattribute{\the\glslabeltok}{regular}%
9644   {}%
9645   \glssetattribute{\the\glslabeltok}{regular}{false}%
9646   }%
9647   {}%
9648 }%
9649 }%
9650 {}%
9651 \GlsXtrUseAbbrStyleFmts{long-short-user}%
9652 }

```

short-long-user

```

9653 \newabbreviationstyle{short-long-user}%
9654 {}%
\glslonguserfont is used in the description since \glsdesc doesn't set the style.
9655 \renewcommand*{\CustomAbbreviationFields}{%

```

```

9656   name={\protect\glsabbrvuserfont{\the\glshorttok}},  

9657   sort={\the\glshorttok},  

9658   description={\protect\glslonguserfont{\the\glshorttok}},%  

9659   first={\protect\glsfirstabbrvuserfont{\the\glshorttok}}%  

9660     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glshorttok}}%  

9661       {\the\glslabeltok}},%  

9662   firstplural={\protect\glsfirstabbrvuserfont{\the\glshortpltok}}%  

9663     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glshortpltok}}%  

9664       {\the\glslabeltok}},%  

9665   plural={\protect\glsabbrvuserfont{\the\glshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

9666 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  

9667   \glshasattribute{\the\glslabeltok}{regular}}%  

9668   {}%  

9669   \glssetattribute{\the\glslabeltok}{regular}{false}}%  

9670 }%  

9671 {}%  

9672 }%  

9673 }%  

9674 {}%

```

In case the user wants to mix and match font styles, these are redefined here.

```

9675 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%  

9676 \renewcommand*{\glsabbrvfont[1]}{\glsabbrvuserfont{##1}}%  

9677 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%  

9678 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%  

9679 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

9680 \renewcommand*{\glsxtrfullformat}[2]{%  

9681   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

9682   \ifglsxtrinsertinside\else##2\fi  

9683   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}}%  

9684 }%  

9685 \renewcommand*{\glsxtrfullplformat}[2]{%  

9686   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

9687   \ifglsxtrinsertinside\else##2\fi  

9688   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}}%  

9689 }%  

9690 \renewcommand*{\GlsXtrfullformat}[2]{%  

9691   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

9692   \ifglsxtrinsertinside\else##2\fi  

9693   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}}%  

9694 }%  

9695 \renewcommand*{\GlsXtrfullplformat}[2]{%  

9696   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

9697   \ifglsxtrinsertinside\else##2\fi  

9698   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}}%  

9699 }%

```

```

9700 }

-long-user-desc
9701 \newabbreviationstyle{short-long-user-desc}%
9702 {%
9703   \renewcommand*{\CustomAbbreviationFields}{%
9704     name={\glsxtrshortlongdescname},
9705     sort={\glsxtrshortlongdescsort},%
9706     first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
9707       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
9708       {\the\glslabeltok}},%
9709     firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
9710       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
9711       {\the\glslabeltok}},%
9712     text={\protect\glsabbrvfont{\the\glsshorttok}},%
9713     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
9714 }%

```

Unset the regular attribute if it has been set.

```

9715 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9716   \glshasattribute{\the\glslabeltok}{regular}%
9717   {%
9718     \glssetattribute{\the\glslabeltok}{regular}{false}%
9719   }%
9720   {}%
9721 }%
9722 }%
9723 {%
9724 \GlsXtrUseAbbrStyleFmts{short-long-user}%
9725 }

```

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.

```

9726 \newrobustcmd*{\glsxtrifhyphenstart}[3]{%
9727   \ifx\glsinsert\relax
9728     \expandafter\@glsxtrifhyphenstart\#1\relax\relax
9729     \@end\@glsxtrifhyphenstart{\#2}{\#3}%
9730   \else
9731     \@glsxtrifhyphenstart\#1\relax\relax\@end\@glsxtrifhyphenstart{\#2}{\#3}%
9732   \fi
9733 }

```

```

trifhyphenstart
9734 \def\@glsxtrifhyphenstart#1#2\@end@glsxtrifhyphenstart#3#4{%
9735   \ifx-#1\relax#3\else #4\fi
9736 }

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.

```

9737 \newcommand*\glsxtrlonghyphenshort[4]{%
  Grouping is needed to localise the redefinitions.
9738  {%
  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.
9739  \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
9740  \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#4}\fi}%
9741  \ifglsxtrinsertinside\else{#4}\fi
9742  \glsxtrfullsep{#1}%
9743  \glsxtrparen{\glsfirstabbrvhyphenfont{#3\ifglsxtrinsertinside{#4}\fi}%
9744  \ifglsxtrinsertinside\else{#4}\fi}%
9745 }%
9746 }

```

```

abbrvhypenfont
9747 \newcommand*\glsabbrvhypenfont{\glsabbrvdefaultfont}%

```

```

abbrvhypenfont
9748 \newcommand*\glsfirstabbrvhypenfont{\glsabbrvhypenfont}%

```

```

slonghypenfont
9749 \newcommand*\glslonghypenfont{\glslongdefaultfont}%

```

```

tlonghypenfont
9750 \newcommand*\glsfirstlonghypenfont{\glslonghypenfont}%

```

The default short form suffix:

```

xtrhyphensuffix
9751 \newcommand*\glsxtrhyphensuffix{\glsxtrabbrvpluralsuffix}%

```

```

en-short-hyphen Designed for use with the markwords attribute.
9752 \newabbreviationstyle{long-hyphen-short-hyphen}%
9753 {%

```

```

9754 \renewcommand*{\CustomAbbreviationFields}{%
9755   name={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
9756   sort={\the\glsshorttok},%
9757   first={\protect\glsfirstlonghypenfont{\the\glslongtok}}%
9758   \protect\glsxtrfullsep{\the\glslabeltok}%
9759   \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
9760   firstplural={\protect\glsfirstlonghypenfont{\the\glslongpltok}}%
9761   \protect\glsxtrfullsep{\the\glslabeltok}%
9762   \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}}},%
9763   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
9764   description={\protect\glslonghypenfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```

9765 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9766   \glshasattribute{\the\glslabeltok}{regular}%
9767   {%
9768     \glssetattribute{\the\glslabeltok}{regular}{false}%
9769   }%
9770   {}%
9771 }%
9772 }%
9773 {%
9774 \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
9775 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
9776 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
9777 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
9778 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

9779 \renewcommand*{\glsxtrfullformat}[2]{%
9780   \glsxtrlonghypenshort{##1}{\glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
9781 }%
9782 \renewcommand*{\glsxtrfullplformat}[2]{%
9783   \glsxtrlonghypenshort{##1}{\glsaccesslongpl{##1}}%
9784   {\glsaccessshortpl{##1}}{##2}%
9785 }%
9786 \renewcommand*{\Glsxtrfullformat}[2]{%
9787   \glsxtrlonghypenshort{##1}{\Glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
9788 }%
9789 \renewcommand*{\Glsxtrfullplformat}[2]{%
9790   \glsxtrlonghypenshort{##1}{\Glsaccesslongpl{##1}}%
9791   {\glsaccessshortpl{##1}}{##2}%
9792 }%
9793 }

```

`ort-hyphen-desc` Like `long-hyphen-short-hyphen` but the description must be supplied by the user.

```

9794 \newabbreviationstyle{long-hyphen-short-hyphen-desc}%
9795 {%
9796 \renewcommand*{\CustomAbbreviationFields}{%
9797   name={\glsxtrlongshortdescname},%

```

```

9798     sort={\glsxtrlongshortdescsort},
9799     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}%
9800       \protect\glsxtrfullsep{\the\glslabeltok}%
9801       \glsxtrparen{\protect\glsfirstabbrvhyphenfont{\the\glsshorttok}}},%
9802     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}%
9803       \protect\glsxtrfullsep{\the\glslabeltok}%
9804       \glsxtrparen{\protect\glsfirstabbrvhyphenfont{\the\glsshortpltok}}},%
9805     text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
9806     plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}}%
9807 }%

```

Unset the regular attribute if it has been set.

```

9808   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9809     \glshasattribute{\the\glslabeltok}{regular}%
9810     {}%
9811     \glssetattribute{\the\glslabeltok}{regular}{false}%
9812     {}%
9813     {}%
9814   }%
9815 }%
9816 {%
9817   \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%
9818 }

```

onghyphennoshort \glsxtrlonghyphennoshort{\label}{\long}{\insert}

```
9819 \newcommand*{\glsxtrlonghyphennoshort}[3]{%
```

Grouping is needed to localise the redefinitions.

```
9820 {}%
```

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.

```

9821   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
9822   \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#3}\fi}%
9823   \ifglsxtrinsertinside\else{#3}\fi
9824 }%
9825 }

```

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.

```

9826 \newabbreviationstyle{long-hyphen-noshort-desc-noreg}{%
9827 {}%
9828   \renewcommand*{\CustomAbbreviationFields}{%

```

```

9829     name={\protect\protect\glslonghyphenfont{\the\glslongtok}},  

9830     sort={\expandonce\glsxtrorglong},  

9831     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%  

9832     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%  

9833     plural={\protect\glslonghyphenfont{\the\glslongpltok}}}%  

9834 }%

```

Unset the regular attribute if it has been set.

```

9835 \renewcommand*\GlsXtrPostNewAbbreviation}{%  

9836   \glshasattribute{\the\glslabeltok}{regular}}%  

9837 {  

9838   \glssetattribute{\the\glslabeltok}{regular}{false}}%  

9839 }%  

9840 {}%  

9841 }%  

9842 }%  

9843 {}%  

9844 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}}%

```

In case the user wants to mix and match font styles, these are redefined here.

```

9845 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}}%  

9846 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{\##1}}%  

9847 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{\##1}}%  

9848 \renewcommand*\glsfirstlongfont[1]{\glsfirstlonghyphenfont{\##1}}%  

9849 \renewcommand*\glslongfont[1]{\glslonghyphenfont{\##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9850 \renewcommand*\glsxtrsubsequentfmt}[2]{%  

9851   \glsxtrlonghyphennoshort{\##1}{\glsaccesslong{\##1}}{\##2}}%  

9852 }%  

9853 \renewcommand*\glsxtrsubsequentplfmt}[2]{%  

9854   \glsxtrlonghyphennoshort{\##1}{\glsaccesslongpl{\##1}}{\##2}}%  

9855 }%  

9856 \renewcommand*\Glsxtrsubsequentfmt}[2]{%  

9857   \glsxtrlonghyphennoshort{\##1}{\Glsaccesslong{\##1}}{\##2}}%  

9858 }%  

9859 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%  

9860   \glsxtrlonghyphennoshort{\##1}{\Glsaccesslongpl{\##1}}{\##2}}%  

9861 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9862 \renewcommand*\glsxtrinlinefullformat}[2]{%  

9863   \glsxtrlonghyphennoshort{\##1}{\glsaccesslong{\##1}}{\##2}}%  

9864   \glsxtrfullsep{\##1}}%  

9865   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{\##1}}}}%  

9866 }%  

9867 \renewcommand*\glsxtrinlinefullplformat}[2]{%  

9868   \glsxtrlonghyphennoshort{\##1}{\glsaccesslongpl{\##1}}{\##2}}%  

9869   \glsxtrfullsep{\##1}}%  

9870   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{\##1}}}}%  

9871 }%

```

```

9872 \renewcommand*\Glsxtrinlinefullformat}[2]{%
9873   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
9874   \glsxtrfullsep{##1}%
9875   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
9876 }%
9877 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
9878   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
9879   \glsxtrfullsep{##1}%
9880   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
9881 }%

```

The first use full form only displays the long form.

```

9882 \renewcommand*\glsxtrfullformat}[2]{%
9883   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
9884 }%
9885 \renewcommand*\glsxtrfullplformat}[2]{%
9886   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
9887 }%
9888 \renewcommand*\Glsxtrfullformat}[2]{%
9889   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
9890 }%
9891 \renewcommand*\Glsxtrfullplformat}[2]{%
9892   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
9893 }%
9894 }

```

n-noshort-noreg It doesn't really make a great deal of sense to have a long-only style that doesn't have a description (unless no glossary is required), but the best course of action here is to use the short form as the name and the long form as the description.

```

9895 \newabbreviationstyle{long-hyphen-noshort-noreg}%
9896 {%
9897 \renewcommand*\CustomAbbreviationFields}{%
9898   name={\protect\glsabbrvfont{\the\glsshorttok}},%
9899   sort={\the\glsshorttok},%
9900   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
9901   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
9902   text={\protect\glslonghyphenfont{\the\glslongtok}},%
9903   plural={\protect\glslonghyphenfont{\the\glslongpltok}},%
9904   description={\the\glslongtok}%
9905 }%

```

Unset the regular attribute if it has been set.

```

9906 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9907   \glshasattribute{\the\glslabeltok}{regular}%
9908 {%
9909   \glssetattribute{\the\glslabeltok}{regular}{false}%
9910 }%
9911 {}%
9912 }%
9913 }%

```

```

9914 {%
9915   \GlsXtrUseAbbrStyleFmts{long-desc}%
9916 }

```

`\glsxtrlonghyphen{<long>}{<label>}{<insert>}`

Used by long-hyphen-postshort-hyphen. The *<insert>* is checked to determine if it starts with a hyphen but isn't used here as it's moved to the post-link hook.

```
9917 \newcommand*\glsxtrlonghyphen}[3]{%
```

Grouping is needed to localise the redefinitions.

```

9918 {%
9919   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
9920   \glsfirstlonghyphenfont{#1}%
9921 }%
9922 }

```

`\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.

```

9923 \newcommand*\glsxtrposthyphenshort}[2]{%
9924 {%
9925   \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
9926   \ifglsxtrinsertinside{\glsfirstlonghyphenfont{#2}}\else{#2}\fi
9927   \glsxtrfullsep{#1}%
9928   \glsxtrparens
9929   {\glsfirstabbrvhyphenfont{\glsentryshort{#1}\ifglsxtrinsertinside{#2}\fi}%
9930     \ifglsxtrinsertinside\else{#2}\fi
9931   }%
9932 }%
9933 }

```

`\glsxtrposthyphensubsequent{<label>}{<insert>}`

Format in the post-link hook for subsequent use. The label is ignored by default.

```

9934 \newcommand*\glsxtrposthyphensubsequent}[2]{%
9935   \glsabbrvfont{\ifglsxtrinsertinside {#2}\fi}%
9936   \ifglsxtrinsertinside \else{#2}\fi
9937 }

```

`ostshort-hyphen` Like long-hyphen-short-hyphen but shifts the insert and parenthetical material to the post-link hook.

```
9938 \newabbreviationstyle{long-hyphen-postshort-hyphen}%
9939 {%
9940   \renewcommand*{\CustomAbbreviationFields}{%
9941     name={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
9942     sort={\the\glsshorttok},%
9943     first={\protect\glsfirstlonghypenfont{\the\glslongtok}},%
9944     firstplural={\protect\glsfirstlonghypenfont{\the\glslongpltok}},%
9945     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
9946     description={\protect\glslonghypenfont{\the\glslongtok}}}%
9947   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9948     \csdef{glsxtrpostlink\glscategorylabel}{%
9949       \glsxtrifwasfirstuse
9950       {%
9951         \glsxtrposthyphenshort{\glslabel}{\glsinsert}
9952       }%
9953     }%
```

Put the insertion into the post-link:

```
9954   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
9955   }%
9956 }%
9957 \glshasattribute{\the\glslabeltok}{regular}%
9958 {%
9959   \glssetattribute{\the\glslabeltok}{regular}{false}%
9960 }%
9961 {}%
9962 }%
9963 }%
9964 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
9965 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
9966 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
9967 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
9968 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
9969 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%
```

Subsequent use needs to omit the insertion:

```
9970 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9971   \glsabbrvfont{\glsaccessshort{##1}}%
9972 }%
9973 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9974   \glsabbrvfont{\glsaccessshortpl{##1}}%
9975 }%
9976 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9977   \glsabbrvfont{\Glsaccessshort{##1}}%
9978 }%
9979 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
```

```

9980     \glsabbrvfont{\Glsaccessshortpl{##1}}%
9981 }

```

First use full form:

```

9982 \renewcommand*{\glsxtrfullformat}[2]{%
9983   \glsxtrlonghyphen{\glsaccesslong{##1}{##1}{##2}}%
9984 }%
9985 \renewcommand*{\glsxtrfullplformat}[2]{%
9986   \glsxtrlonghyphen{\glsaccesslongpl{##1}{##1}{##2}}%
9987 }%
9988 \renewcommand*{\Glsxtrfullformat}[2]{%
9989   \glsxtrlonghyphen{\Glsaccesslong{##1}{##1}{##2}}%
9990 }%
9991 \renewcommand*{\Glsxtrfullplformat}[2]{%
9992   \glsxtrlonghyphen{\Glsaccesslongpl{##1}{##1}{##2}}%
9993 }%

```

In-line format.

```

9994 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9995   \glsfirstlonghyphenfont{\glsaccesslong{##1}}%
9996   \ifglsxtrinsertinside{##2}\fi}%
9997 \ifglsxtrinsertinside \else{##2}\fi
9998 }%
9999 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10000   \glsfirstlonghyphenfont{\glsaccesslongpl{##1}}%
10001   \ifglsxtrinsertinside{##2}\fi}%
10002 \ifglsxtrinsertinside \else{##2}\fi
10003 }%
10004 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10005   \glsfirstlonghyphenfont{\Glsaccesslong{##1}}%
10006   \ifglsxtrinsertinside{##2}\fi}%
10007 \ifglsxtrinsertinside \else{##2}\fi
10008 }%
10009 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10010   \glsfirstlonghyphenfont{\Glsaccesslongpl{##1}}%
10011   \ifglsxtrinsertinside{##2}\fi}%
10012 \ifglsxtrinsertinside \else{##2}\fi
10013 }%
10014 }

```

`ort-hyphen-desc` Like `long-hyphen-postshort-hyphen` but the description must be supplied by the user.

```

10015 \newabbreviationstyle{long-hyphen-postshort-hyphen-desc}{%
10016 }%
10017 \renewcommand*{\CustomAbbreviationFields}{%
10018   name={\glsxtrlongshortdescname},%
10019   sort={\glsxtrlongshortdescsort},%
10020   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10021   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10022   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10023   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}}

```

```

10024 }%
10025 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10026   \csdef{glsxtrpostlink}{\glscategorylabel}{%
10027     \glsxtrifwasfirstuse
10028   }%
10029   \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
10030 }%
10031 }%

```

Put the insertion into the post-link:

```

10032   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10033 }%
10034 }%
10035 \glshasattribute{\the\glslabeltok}{regular}%
10036 {%
10037   \glssetattribute{\the\glslabeltok}{regular}{false}%
10038 }%
10039 {}%
10040 }%
10041 }%
10042 {%
10043 \GlsXtrUseAbbrStyleFmts{long-hyphen-postshort-hyphen}%
10044 }

```

rshorthypenlong \glsxtrshorthypenlong{\label}{\short}{\long}{\insert}

The *long* and *short* arguments may be the plural form. The *long* argument may also be the first letter uppercase form.

```
10045 \newcommand*\glsxtrshorthypenlong[4]{%
```

Grouping is needed to localise the redefinitions.

```
10046 }%
```

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.)

```

10047 \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
10048 \glsfirstabbrvhyphenfont{#2\ifglsxtrinsertinside{#4}\fi}%
10049 \ifglsxtrinsertinside\else{#4}\fi
10050 \glsxtrfullsep{#1}%
10051 \glsxtrparen{\glsfirstlonghyphenfont{#3\ifglsxtrinsertinside{#4}\fi}%
10052 \ifglsxtrinsertinside\else{#4}\fi}%
10053 }%
10054 }

```

hen-long-hyphen Designed for use with the markwords attribute.

```
10055 \newabbreviationstyle{short-hyphen-long-hyphen}{%
```

```

10056 {%
10057   \renewcommand*{\CustomAbbreviationFields}{%
10058     name={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10059     sort={\the\glsshorttok},%
10060     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}%
10061     \protect\glsxtrfullsep{\the\glslabeltok}%
10062     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}},%
10063     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}}%
10064     \protect\glsxtrfullsep{\the\glslabeltok}%
10065     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}},%
10066     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10067     description={\protect\glslonghypenfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```

10068   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10069     \glshasattribute{\the\glslabeltok}{regular}}%
10070     {%
10071       \glssetattribute{\the\glslabeltok}{regular}{false}}%
10072     }%
10073     {}%
10074   }%
10075 }%
10076 {%
10077   \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
10078   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10079   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10080   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10081   \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10082   \renewcommand*{\glsxtrfullformat}[2]{%
10083     \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\glsaccesslong{##1}}{##2}}%
10084   }%
10085   \renewcommand*{\glsxtrfullplformat}[2]{%
10086     \glsxtrshorthypenlong{##1}%
10087     {\glsaccessshortpl{##1}}{\glsaccesslongpl{##1}}{##2}}%
10088   }%
10089   \renewcommand*{\GlsXtrfullformat}[2]{%
10090     \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\Glsaccesslong{##1}}{##2}}%
10091   }%
10092   \renewcommand*{\GlsXtrfullplformat}[2]{%
10093     \glsxtrshorthypenlong{##1}%
10094     {\glsaccessshortpl{##1}}{\Glsaccesslongpl{##1}}{##2}}%
10095   }%
10096 }

```

`ong-hyphen-desc` Like `short-hyphen-long-hyphen` but the description must be supplied by the user.

```

10097 \newabbreviationstyle{short-hyphen-long-hyphen-desc}%
10098 {%
10099   \renewcommand*{\CustomAbbreviationFields}{%

```

```

10100   name={\glsxtrshortlongdescname},
10101   sort={\glsxtrshortlongdescsort},
10102   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
10103     \protect\glsxtrfullsep{\the\glslabeltok}%
10104     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
10105   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
10106     \protect\glsxtrfullsep{\the\glslabeltok}%
10107     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
10108   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10109   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10110 }%

```

Unset the regular attribute if it has been set.

```

10111 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10112   \glshasattribute{\the\glslabeltok}{regular}%
10113   {%
10114     \glssetattribute{\the\glslabeltok}{regular}{false}%
10115   }%
10116   {}%
10117 }%
10118 }%
10119 {%
10120 \GlsXtrUseAbbrStyleFmts{short-hyphen-long-hyphen}%
10121 }%

```

`\glsxtrshorthypen{<short>}{{<label>}}{<insert>}`

Used by short-hyphen-postlong-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.

```
10122 \newcommand*{\glsxtrshorthypen}[3]{%
```

Grouping is needed to localise the redefinitions.

```

10123 {%
10124   \glsxtrifhypenstart{#3}{\def\glsxtrwordsep{-}}{}%
10125   \glsfirstabbrvhypenfont{#1}%
10126 }%
10127 }%

```

`\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.

```

10128 \newcommand*{\glsxtrposthypenlong}[2]{%
10129 {%

```

```

10130 \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
10131 \ifglsxtrinsertinside{\glsfirstabbrvhypenfont{#2}}\else{#2}\fi
10132 \glsxtrfullsep{#1}%
10133 \glsxtrparen
10134 {\glsfirstlonghypenfont{\glsentrylong{#1}\ifglsxtrinsertinside{#2}\fi}%
10135 \ifglsxtrinsertinside\else{#2}\fi
10136 }%
10137 }%
10138 }

```

postlong-hyphen Like short-hyphen-long-hyphen but shifts the insert and parenthetical material to the post-link hook.

```

10139 \newabbreviationstyle{short-hyphen-postlong-hyphen}%
10140 {%
10141 \renewcommand*{\CustomAbbreviationFields}{%
10142   name={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10143   sort={\the\glsshorttok},%
10144   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
10145   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
10146   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10147   description={\protect\glslonghypenfont{\the\glslongtok}}}%
10148 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10149   \csdef{glsxtrpostlink\glscategorylabel}{%
10150     \glsxtrifwasfirstuse
10151   }%
10152     \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
10153   }%
10154 }

```

Put the insertion into the post-link:

```

10155   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10156 }%
10157 }%
10158 \glshasattribute{\the\glslabeltok}{regular}%
10159 {%
10160   \glssetattribute{\the\glslabeltok}{regular}{false}%
10161 }%
10162 {}%
10163 }%
10164 }%
10165 %

```

In case the user wants to mix and match font styles, these are redefined here.

```

10166 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
10167 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10168 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10169 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10170 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

Subsequent use needs to omit the insertion:

```

10171 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10172   \glsabbrvfont{\glsaccessshort{##1}}%
10173 }%
10174 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
10175   \glsabbrvfont{\glsaccessshortpl{##1}}%
10176 }%
10177 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10178   \glsabbrvfont{\Glsaccessshort{##1}}%
10179 }%
10180 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10181   \glsabbrvfont{\Glsaccessshortpl{##1}}%
10182 }%

```

First use full form:

```

10183 \renewcommand*{\glsxtrfullformat}[2]{%
10184   \glsxtrshorthyphen{\glsaccessshort{##1}}{##1}{##2}%
10185 }%
10186 \renewcommand*{\glsxtrfullplformat}[2]{%
10187   \glsxtrshorthyphen{\glsaccessshortpl{##1}}{##1}{##2}%
10188 }%
10189 \renewcommand*{\Glsxtrfullformat}[2]{%
10190   \glsxtrshorthyphen{\Glsaccessshort{##1}}{##1}{##2}%
10191 }%
10192 \renewcommand*{\Glsxtrfullplformat}[2]{%
10193   \glsxtrshorthyphen{\Glsaccessshortpl{##1}}{##1}{##2}%
10194 }%

```

In-line format. Commands like `\glsxtrfull` set `\glsinsert` to empty. The entire link-text (provided by the following commands) is stored in `\glscustomtext`.

```

10195 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10196   \glsfirstabbrvhypenfont{\glsaccessshort{##1}}%
10197   \ifglsxtrinsertinside{##2}\fi}%
10198 \ifglsxtrinsertinside \else{##2}\fi
10199 }%
10200 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10201   \glsfirstabbrvhypenfont{\glsaccessshortpl{##1}}%
10202   \ifglsxtrinsertinside{##2}\fi}%
10203 \ifglsxtrinsertinside \else{##2}\fi
10204 }%
10205 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10206   \glsfirstabbrvhypenfont{\Glsaccessshort{##1}}%
10207   \ifglsxtrinsertinside{##2}\fi}%
10208 \ifglsxtrinsertinside \else{##2}\fi
10209 }%
10210 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10211   \glsfirstabbrvhypenfont{\Glsaccessshortpl{##1}}%
10212   \ifglsxtrinsertinside{##2}\fi}%
10213 \ifglsxtrinsertinside \else{##2}\fi
10214 }%
10215 }

```

ong-hyphen-desc Like short-hyphen-postlong-hyphen but the description must be supplied by the user.

```
10216 \newabbreviationstyle{short-hyphen-postlong-hyphen-desc}{%
10217 {%
10218   \renewcommand*{\CustomAbbreviationFields}{%
10219     name={\glsxtrshortlongdescname},%
10220     sort={\glsxtrshortlongdescsort},%
10221     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
10222     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
10223     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10224     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10225 }%
10226 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10227   \csdef{glsxtrpostlink}{\glscategorylabel}{%
10228     \glsxtrifwasfirstuse
10229   }%
10230   \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
10231 }%
10232 }%
```

Put the insertion into the post-link:

```
10233   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10234 }%
10235 }%
10236 \glshasattribute{\the\glslabeltok}{regular}%
10237 {%
10238   \glssetattribute{\the\glslabeltok}{regular}{false}%
10239 }%
10240 {}%
10241 }%
10242 }%
10243 {%
10244 \GlsXtrUseAbbrStyleFmts{short-hyphen-postlong-hyphen}%
10245 }
```

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

```
10246 \newcommand*{\glsabbrvonlyfont}{\glsabbrvdefaultfont}%

```

stabbrvonlyfont

```
10247 \newcommand*{\glsfirstabbrvonlyfont}{\glsabbrvonlyfont}%

```

glslongonlyfont

```
10248 \newcommand*{\glslongonlyfont}{\glslongdefaultfont}%

```

rstlongonlyfont

```
10249 \newcommand*{\glsfirstlongonlyfont}{\glslongonlyfont}%

```

The default short form suffix:

```
lsxtronlysuffix  
10250 \newcommand*\glsxtronlysuffix{\glsxtrabbrvpluralsuffix}
```

only-short-only

```
10251 \newabbreviationstyle{long-only-short-only}{%  
10252 {  
10253   \renewcommand*\CustomAbbreviationFields{  
10254     name={\protect\glsabbrvonlyfont{\the\glsshorttok}},  
10255     sort={\the\glsshorttok},  
10256     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%  
10257     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%  
10258     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}},%  
10259     description={\protect\glslongonlyfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
10260 \renewcommand*\GlsXtrPostNewAbbreviation{  
10261   \glshasattribute{\the\glslabeltok}{regular}{%  
10262     {  
10263       \glssetattribute{\the\glslabeltok}{regular}{false}{%  
10264     }%  
10265   {}%  
10266 }%  
10267 }%  
10268 {  
10269   \renewcommand*\abrvpluralsuffix{\protect\glsxtronlysuffix}{%  
10270   \renewcommand*\glsabbrvfont[1]{\glsabbrvonlyfont{##1}}%  
10271   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvonlyfont{##1}}%  
10272   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongonlyfont{##1}}%  
10273   \renewcommand*\glslongfont[1]{\glslongonlyfont{##1}}%
```

The first use full form doesn't show the short form.

```
10274 \renewcommand*\glsxtrfullformat[2]{%  
10275   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}{%  
10276   \ifglsxtrinsertinside\else##2\fi  
10277 }%  
10278 \renewcommand*\glsxtrfullplformat[2]{%  
10279   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}{%  
10280   \ifglsxtrinsertinside\else##2\fi  
10281 }%  
10282 \renewcommand*\GlsXtrfullformat[2]{%  
10283   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}{%  
10284   \ifglsxtrinsertinside\else##2\fi  
10285 }%  
10286 \renewcommand*\GlsXtrfullplformat[2]{%  
10287   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}{%  
10288   \ifglsxtrinsertinside\else##2\fi  
10289 }%
```

The inline full form does show the short form.

```
10290 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10291   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10292   \ifglsxtrinsertinside\else##2\fi
10293   \glsxtrfullsep{##1}%
10294   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshort{##1}}}}%
10295 }%
10296 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10297   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10298   \ifglsxtrinsertinside\else##2\fi
10299   \glsxtrfullsep{##1}%
10300   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}}%
10301 }%
10302 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10303   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10304   \ifglsxtrinsertinside\else##2\fi
10305   \glsxtrfullsep{##1}%
10306   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}}%
10307 }%
10308 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10309   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10310   \ifglsxtrinsertinside\else##2\fi
10311   \glsxtrfullsep{##1}%
10312   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\Glsaccessshortpl{##1}}}}%
10313 }%
10314 }
```

xtronlydescsort

```
10315 \newcommand*{\glsxtronlydescsort}{\the\glslongtok}
```

xtronlydescname

```
10316 \newcommand*{\glsxtronlydescname}{%
10317   \protect\glslongfont{\the\glslongtok}}%
10318 }
```

short-only-desc

```
10319 \newabbreviationstyle{long-only-short-only-desc}{%
10320 }%
10321 \renewcommand*{\CustomAbbreviationFields}{%
10322   name={\glsxtronlydescname},%
10323   sort={\glsxtronlydescsort},%
10324   first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
10325   firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
10326   text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
10327   plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}}%
10328 }%
```

Unset the regular attribute if it has been set.

```
10329 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
```

```

10330 \glshasattribute{\the\glslabeltok}{regular}%
10331 {%
10332   \glssetattribute{\the\glslabeltok}{regular}{false}%
10333 }%
10334 {}%
10335 }%
10336 }%
10337 {%
10338 \GlsXtrUseAbbrStyleFmts{long-only-short-only}%
10339 }

```

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 hyperref's `\texorpdfstring` which can simply use the expandable command in the PDF string case. The `\TeX` string case can now use `\glsxtrshort` with the `noindex` key set, which prevents the unwanted additions to the location list, and the `hyper` key set to false, which prevents the problem of nested links. This just leaves one thing left that needs to be dealt with, and that's what to do if the heading style uses `\MakeUppercase`.

Note that glossaries automatically loads `textcase`, so the label can be protected from case change with `textcase`'s `\NoCaseChange`. This means that we don't have a problem provided the page style uses `\MakeTextUppercase`, but the default heading page style uses `\MakeUppercase`.

To get around this, save the original definition of `\markboth` and `\markright` and adjust it so that `\MakeUppercase` is temporarily redefined to `\MakeTextUppercase`. Some packages or classes redefine these commands, so we can't just assume they still have the original kernel definition.

`\markright` Save original definition:

```
10340 \let\@glsxtr@org@markright\markright
```

Redefine (grouping not added in case it interferes with the original code):

```

10341 \renewcommand*{\markright}[1]{%
10342   \glsxtrmarkhook
10343   \@glsxtr@org@markright{\@glsxtrinmark#1\@glsxtrnotinmark}%
10344   \glsxtrrestoremarkhook
10345 }
```

`\markboth` Save original definition:

```
10346 \let\@glsxtr@org@markboth\markboth
```

Redefine (grouping not added in case it interferes with the original code):

```
10347 \renewcommand*\{\markboth}{2}{%
10348   \glsxtrmarkhook
10349   \glsxtr@org@markboth
10350   {\glsxtrinmark#1\glsxtrnotinmark}%
10351   {\glsxtrinmark#2\glsxtrnotinmark}%
10352   \glsxtrrestoremarkhook
10353 }
```

Also do this for \starttoc

\starttoc Save original definition:

```
10354 \let\@glsxtr@org@@starttoc\starttoc
```

Redefine:

```
10355 \renewcommand*\{\starttoc}{1}{%
10356   \glsxtrmarkhook
10357   \glsxtrinmark
10358   \glsxtr@org@@starttoc{#1}%
10359   \glsxtrnotinmark
10360   \glsxtrrestoremarkhook
10361 }
```

If this causes a problem provide a simple way of switching back to the original definitions:

sxtrRevertMarks

```
10362 \newcommand*\{\glsxtrRevertMarks}{%
10363   \let\markright\glsxtr@org@markright
10364   \let\markboth\glsxtr@org@markboth
10365   \let\@starttoc\glsxtr@org@@starttoc
10366 }
```

\glsxtrifinmark

```
10367 \newcommand*\{\glsxtrifinmark}{2}{#2}
```

\glsxtrinmark

```
10368 \newrobustcmd*\{\glsxtrinmark}{%
10369   \let\glsxtrifinmark\@firstoftwo
10370 }
```

\glsxtrnotinmark

```
10371 \newrobustcmd*\{\glsxtrnotinmark}{%
10372   \let\glsxtrifinmark\@secondoftwo
10373 }
```

eorpdfforheading

```
10374 \ifdef\texorpdfstring
10375 {
```

```

10376 \newcommand*{\glsxtrtitleorpdforheading}[3]{\texorpdfstring{#1}{#2}}
10377 }
10378 {
10379 \newcommand*{\glsxtrtitleorpdforheading}[3]{#1}
10380 }

```

\glsxtrmarkhook Hook used in new definition of \markboth and \markright to make some changes to apply to the marks:

```
10381 \newcommand*{\glsxtrmarkhook}{%
```

Save current definitions:

```

10382 \let@\glsxtr@org@MakeUppercase\MakeUppercase
10383 \let@\glsxtr@org@glsxtrtitleorpdforheading\glsxtrtitleorpdforheading
10384 \let@\glsxtr@org@glsxrtitleshort\glsxrtitleshort
10385 \let@\glsxtr@org@glsxrtitleshortpl\glsxrtitleshortpl
10386 \let@\glsxtr@org@Glsxtrtitleshort\Glsxtrtitleshort
10387 \let@\glsxtr@org@Glsxrtitleshortpl\Glsxrtitleshortpl
10388 \let@\glsxtr@org@glsxrtitlename\glsxrtitlename
10389 \let@\glsxtr@org@Glsxrtitlename\Glsxrtitlename
10390 \let@\glsxtr@org@glsxrtitletext\glsxrtitletext
10391 \let@\glsxtr@org@Glsxrtitletext\Glsxrtitletext
10392 \let@\glsxtr@org@glsxrttitleplural\glsxrttitleplural
10393 \let@\glsxtr@org@Glsxrttitleplural\Glsxrttitleplural
10394 \let@\glsxtr@org@glsxrttitlefirst\glsxrttitlefirst
10395 \let@\glsxtr@org@Glsxrttitlefirst\Glsxrttitlefirst
10396 \let@\glsxtr@org@glsxrttitlefirstplural\glsxrttitlefirstplural
10397 \let@\glsxtr@org@Glsxrttitlefirstplural\Glsxrttitlefirstplural
10398 \let@\glsxtr@org@glsxrttitlelong\glsxrttitlelong
10399 \let@\glsxtr@org@glsxrttitlelongpl\glsxrttitlelongpl
10400 \let@\glsxtr@org@Glsxrttitlelong\Glsxrttitlelong
10401 \let@\glsxtr@org@Glsxrttitlelongpl\Glsxrttitlelongpl
10402 \let@\glsxtr@org@glsxrttitlefull\glsxrttitlefull
10403 \let@\glsxtr@org@glsxrttitlefullpl\glsxrttitlefullpl
10404 \let@\glsxtr@org@Glsxrttitlefull\Glsxrttitlefull
10405 \let@\glsxtr@org@Glsxrttitlefullpl\Glsxrttitlefullpl

```

New definitions

```

10406 \let\glsxtrifinmark@\firstoftwo
10407 \let\MakeUppercase\MakeTextUppercase
10408 \let\glsxtrtitleorpdforheading@\thirdofthree
10409 \let\glsxrtitleshort\glsxtrheadshort
10410 \let\glsxrtitleshortpl\glsxtrheadshortpl
10411 \let\Glsxrtitleshort\Glsxtrheadshort
10412 \let\Glsxrtitleshortpl\Glsxtrheadshortpl
10413 \let\glsxrtitlename\glsxtrheadname
10414 \let\Glsxrtitlename\Glsxtrheadname
10415 \let\glsxrtitletext\glsxtrheadtext
10416 \let\Glsxrtitletext\Glsxtrheadtext
10417 \let\glsxrttitleplural\glsxtrheadplural
10418 \let\Glsxrttitleplural\Glsxtrheadplural

```

```

10419 \let\glsxtrtitlefirst\glsxtrheadfirst
10420 \let\Glsxtrtitlefirst\Glsxtrheadfirst
10421 \let\glsxtrtitlefirstplural\glsxtrheadfirstplural
10422 \let\Glsxtrtitlefirstplural\Glsxtrheadfirstplural
10423 \let\glsxtrtitlelong\glsxtrheadlong
10424 \let\glsxtrtitlelongpl\glsxtrheadlongpl
10425 \let\Glsxtrtitlelong\Glsxtrheadlong
10426 \let\Glsxtrtitlelongpl\Glsxtrheadlongpl
10427 \let\glsxtrtitlefull\glsxtrheadfull
10428 \let\glsxtrtitlefullpl\glsxtrheadfullpl
10429 \let\Glsxtrtitlefull\Glsxtrheadfull
10430 \let\Glsxtrtitlefullpl\Glsxtrheadfullpl
10431 }

```

`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.)

```

10432 \newcommand*{\glsxtrrestoremarkhook}{%
10433   \let\glsxtrifinmark\@secondoftwo
10434   \let\MakeUppercase\@glsxtr@org@MakeUppercase
10435   \let\glsxtrtitleorpdforheading\@glsxtr@org@glsxtrtitleorpdforheading
10436   \let\glsxtrtitleshort\@glsxtr@org@glsxtrtitleshort
10437   \let\glsxtrtitleshortpl\@glsxtr@org@glsxtrtitleshortpl
10438   \let\Glsxtrtitleshort\@glsxtr@org@Glsxtrtitleshort
10439   \let\Glsxtrtitleshortpl\@glsxtr@org@Glsxtrtitleshortpl
10440   \let\glsxtrtitlename\@glsxtr@org@glsxtrtitlename
10441   \let\Glsxtrtitlename\@glsxtr@org@Glsxtrtitlename
10442   \let\glsxtrtitletext\@glsxtr@org@glsxtrtitletext
10443   \let\Glsxtrtitletext\@glsxtr@org@Glsxtrtitletext
10444   \let\glsxtrtitleplural\@glsxtr@org@glsxtrtitleplural
10445   \let\Glsxtrtitleplural\@glsxtr@org@Glsxtrtitleplural
10446   \let\glsxtrtitlefirst\@glsxtr@org@glsxtrtitlefirst
10447   \let\Glsxtrtitlefirst\@glsxtr@org@Glsxtrtitlefirst
10448   \let\glsxtrtitlefirstplural\@glsxtr@org@glsxtrtitlefirstplural
10449   \let\Glsxtrtitlefirstplural\@glsxtr@org@Glsxtrtitlefirstplural
10450   \let\glsxtrtitlelong\@glsxtr@org@glsxtrtitlelong
10451   \let\glsxtrtitlelongpl\@glsxtr@org@glsxtrtitlelongpl
10452   \let\Glsxtrtitlelong\@glsxtr@org@Glsxtrtitlelong
10453   \let\Glsxtrtitlelongpl\@glsxtr@org@Glsxtrtitlelongpl
10454   \let\glsxtrtitlefull\@glsxtr@org@glsxtrtitlefull
10455   \let\glsxtrtitlefullpl\@glsxtr@org@glsxtrtitlefullpl
10456   \let\Glsxtrtitlefull\@glsxtr@org@Glsxtrtitlefull
10457   \let\Glsxtrtitlefullpl\@glsxtr@org@Glsxtrtitlefullpl
10458 }

```

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.

```
10459 \newcommand*{\glsxtrheadshort}[1]{%
10460   \protect\NoCaseChange
10461   {%
10462     \glsifattribute{#1}{headuc}{true}%
10463     {%
10464       \GLSxtrshort [noindex,hyper=false]{#1}[]%
10465     }%
10466     {%
10467       \glsxtrshort [noindex,hyper=false]{#1}[]%
10468     }%
10469   }%
10470 }
```

`lsxrttitleshort` Command to display short form of abbreviation in section title and table of contents.

```
10471 \newrobustcmd*{\glsxrttitleshort}[1]{%
10472   \glsxtrshort [noindex,hyper=false]{#1}[]%
10473 }
```

`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.

```
10474 \newcommand*{\glsxtrheadshortpl}[1]{%
10475   \protect\NoCaseChange
10476   {%
10477     \glsifattribute{#1}{headuc}{true}%
10478     {%
10479       \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
10480     }%
10481     {%
10482       \glsxtrshortpl [noindex,hyper=false]{#1}[]%
10483     }%
10484   }%
10485 }
```

`xrttitleshortpl` Command to display plural short form of abbreviation in section title and table of contents.

```
10486 \newrobustcmd*{\glsxrttitleshortpl}[1]{%
10487   \glsxtrshortpl [noindex,hyper=false]{#1}[]%
10488 }
```

`Glsxtrheadshort` Command used to display short form in the page header with the first letter converted to upper case.

```
10489 \newcommand*{\Glsxtrheadshort}[1]{%
10490   \protect\NoCaseChange
10491   {%
10492     \glsifattribute{#1}{headuc}{true}%
10493     {%
10494       \GLSxtrshort [noindex,hyper=false]{#1}[]%
```

```
10495 }%
10496 {%
10497 \Glsxtrshort [noindex,hyper=false]{#1}[]%
10498 }%
10499 }%
10500 }
```

`lsxtrtitleshort` Command to display short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10501 \newrobustcmd*\{\Glsxtrtitleshort\}[1]{%
10502 \Glsxtrshort [noindex,hyper=false]{#1}[]%
10503 }
```

`sxtrheadshortpl` Command used to display plural short form in the page header with the first letter converted to upper case.

```
10504 \newcommand*\{\Glsxtrheadshortpl\}[1]{%
10505 \protect\NoCaseChange
10506 {%
10507 \glsifattribute{#1}{headuc}{true}%
10508 {%
10509 \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
10510 }%
10511 {%
10512 \Glsxtrshortpl [noindex,hyper=false]{#1}[]%
10513 }%
10514 }%
10515 }
```

`xtrtitleshortpl` Command to display plural short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10516 \newrobustcmd*\{\Glsxtrtitleshortpl\}[1]{%
10517 \Glsxtrshortpl [noindex,hyper=false]{#1}[]%
10518 }
```

`\glsxtrheadname` As above but for the name value.

```
10519 \newcommand*\{\glsxtrheadname\}[1]{%
10520 \protect\NoCaseChange
10521 {%
10522 \glsifattribute{#1}{headuc}{true}%
10523 {%
10524 \GLSname [noindex,hyper=false]{#1}[]%
10525 }%
10526 {%
10527 \glsname [noindex,hyper=false]{#1}[]%
10528 }%
10529 }%
10530 }
```

`\glsxtrtitlename` Command to display name value in section title and table of contents.

```
10531 \newrobustcmd*\{\glsxtrtitlename\}[1]{%
10532   \glsname[noindex,hyper=false]{#1}[]%
10533 }
```

`\Glsxtrheadname` First letter converted to upper case

```
10534 \newcommand*\{\Glsxtrheadname\}[1]{%
10535   \protect\NoCaseChange
10536   {%
10537     \glsifattribute{#1}{headuc}{true}%
10538     {%
10539       \GLSname[noindex,hyper=false]{#1}[]%
10540     }%
10541     {%
10542       \Glsname[noindex,hyper=false]{#1}[]%
10543     }%
10544   }%
10545 }
```

`\Glsxtrtitlename` Command to display name value in section title and table of contents with the first letter changed to upper case.

```
10546 \%changes{1.21}{2017-11-03}{new}
10547 \newrobustcmd*\{\Glsxtrtitlename\}[1]{%
10548   \Glsname[noindex,hyper=false]{#1}[]%
10549 }
```

`\glsxtrheadtext` As above but for the text value.

```
10550 \newcommand*\{\glsxtrheadtext\}[1]{%
10551   \protect\NoCaseChange
10552   {%
10553     \glsifattribute{#1}{headuc}{true}%
10554     {%
10555       \GLStext[noindex,hyper=false]{#1}[]%
10556     }%
10557     {%
10558       \glstext[noindex,hyper=false]{#1}[]%
10559     }%
10560   }%
10561 }
```

`\glsxtrtitletext` Command to display text value in section title and table of contents.

```
10562 \newrobustcmd*\{\glsxtrtitletext\}[1]{%
10563   \glstext[noindex,hyper=false]{#1}[]%
10564 }
```

`\Glsxtrheadtext` First letter converted to upper case

```
10565 \newcommand*\{\Glsxtrheadtext\}[1]{%
10566   \protect\NoCaseChange
```

```

10567 {%
10568   \glsifattribute{#1}{headuc}{true}%
10569   {%
10570     \GLStext [noindex,hyper=false]{#1}[]%
10571   }%
10572   {%
10573     \Glstext [noindex,hyper=false]{#1}[]%
10574   }%
10575 }%
10576 }

```

`Glsxtrtitletext` Command to display text value in section title and table of contents with the first letter changed to upper case.

```

10577 \newrobustcmd*\{\Glsxtrtitletext\}[1]{%
10578   \Glstext [noindex,hyper=false]{#1}[]%
10579 }

```

`lsxtrheadplural` As above but for the plural value.

```

10580 \newcommand*\{\glsxtrheadplural\}[1]{%
10581   \protect\NoCaseChange
10582   {%
10583     \glsifattribute{#1}{headuc}{true}%
10584     {%
10585       \GLSplural [noindex,hyper=false]{#1}[]%
10586     }%
10587     {%
10588       \glsplural [noindex,hyper=false]{#1}[]%
10589     }%
10590   }%
10591 }

```

`sxtrtitleplural` Command to display plural value in section title and table of contents.

```

10592 \newrobustcmd*\{\glsxtrtitleplural\}[1]{%
10593   \glsplural [noindex,hyper=false]{#1}[]%
10594 }

```

`lsxtrheadplural` Convert first letter to upper case.

```

10595 \newcommand*\{\Glsxtrheadplural\}[1]{%
10596   \protect\NoCaseChange
10597   {%
10598     \glsifattribute{#1}{headuc}{true}%
10599     {%
10600       \GLSplural [noindex,hyper=false]{#1}[]%
10601     }%
10602     {%
10603       \Glsplural [noindex,hyper=false]{#1}[]%
10604     }%
10605   }%
10606 }

```

`sxtrtitleplural` Command to display plural value in section title and table of contents with the first letter changed to upper case.

```
10607 \newrobustcmd*\{\Glsxtrtitleplural\}[1]{%
10608   \Glsplural[noindex,hyper=false]{#1}[]%
10609 }
```

`glsxtrheadfirst` As above but for the first value.

```
10610 \newcommand*\{\glsxtrheadfirst\}[1]{%
10611   \protect\NoCaseChange
10612   {%
10613     \glsifattribute{#1}{headuc}{true}%
10614     {%
10615       \GLSfirst[noindex,hyper=false]{#1}[]%
10616     }%
10617     {%
10618       \glsfirst[noindex,hyper=false]{#1}[]%
10619     }%
10620   }%
10621 }
```

`lsxtrtitlefirst` Command to display first value in section title and table of contents.

```
10622 \newrobustcmd*\{\glsxtrtitlefirst\}[1]{%
10623   \glsfirst[noindex,hyper=false]{#1}[]%
10624 }
```

`Glsxtrheadfirst` First letter converted to upper case

```
10625 \newcommand*\{\Glsxtrheadfirst\}[1]{%
10626   \protect\NoCaseChange
10627   {%
10628     \glsifattribute{#1}{headuc}{true}%
10629     {%
10630       \GLSfirst[noindex,hyper=false]{#1}[]%
10631     }%
10632     {%
10633       \Glsfirst[noindex,hyper=false]{#1}[]%
10634     }%
10635   }%
10636 }
```

`lsxtrtitlefirst` Command to display first value in section title and table of contents with the first letter changed to upper case.

```
10637 \newrobustcmd*\{\Glsxtrtitlefirst\}[1]{%
10638   \Glsfirst[noindex,hyper=false]{#1}[]%
10639 }
```

`headfirstplural` As above but for the firstplural value.

```
10640 \newcommand*\{\glsxtrheadfirstplural\}[1]{%
10641   \protect\NoCaseChange
```

```

10642 {%
10643   \glsifattribute{#1}{headuc}{true}%
10644   {%
10645     \GLSfirstplural[noindex,hyper=false]{#1}[]%
10646   }%
10647   {%
10648     \glsfirstplural[noindex,hyper=false]{#1}[]%
10649   }%
10650 }%
10651 }

```

`titlefirstplural` Command to display `firstplural` value in section title and table of contents.

```

10652 \newrobustcmd*\Glsxtrtitlefirstplural}[1]{%
10653   \glsfirstplural[noindex,hyper=false]{#1}[]%
10654 }

```

`headfirstplural` First letter converted to upper case

```

10655 \newcommand*\Glsxtrheadfirstplural}[1]{%
10656   \protect\NoCaseChange
10657   {%
10658     \glsifattribute{#1}{headuc}{true}%
10659   }%
10660     \GLSfirstplural[noindex,hyper=false]{#1}[]%
10661   }%
10662   {%
10663     \glsfirstplural[noindex,hyper=false]{#1}[]%
10664   }%
10665 }%
10666 }

```

`titlefirstplural` Command to display `first` value in section title and table of contents with the first letter changed to upper case.

```

10667 \newrobustcmd*\Glsxtrtitlefirstplural}[1]{%
10668   \glsfirstplural[noindex,hyper=false]{#1}[]%
10669 }

```

`\glsxtrheadlong` Command used to display long form in the page header.

```

10670 \newcommand*\glsxtrheadlong}[1]{%
10671   \protect\NoCaseChange
10672   {%
10673     \glsifattribute{#1}{headuc}{true}%
10674   }%
10675     \GLSxtrlong[noindex,hyper=false]{#1}[]%
10676   }%
10677   {%
10678     \glsxtrlong[noindex,hyper=false]{#1}[]%
10679   }%
10680 }%
10681 }

```

`glsxtrtitlelong` Command to display long form of abbreviation in section title and table of contents.

```
10682 \newrobustcmd*\{glsxtrtitlelong\}[1]{%
10683   \glsxtrlong[noindex,hyper=false]{#1}[]%
10684 }
```

`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.

```
10685 \newcommand*\{glsxtrheadlongpl\}[1]{%
10686   \protect\NoCaseChange
10687   {%
10688     \glsifattribute{#1}{headuc}{true}%
10689     {%
10690       \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
10691     }%
10692     {%
10693       \glsxtrlongpl[noindex,hyper=false]{#1}[]%
10694     }%
10695   }%
10696 }
```

`sxttitlelongpl` Command to display plural long form of abbreviation in section title and table of contents.

```
10697 \newrobustcmd*\{glsxtrtitlelongpl\}[1]{%
10698   \glsxtrlongpl[noindex,hyper=false]{#1}[]%
10699 }
```

`\Glsxtrheadlong` Command used to display long form in the page header with the first letter converted to upper case.

```
10700 \newcommand*\{\Glsxtrheadlong\}[1]{%
10701   \protect\NoCaseChange
10702   {%
10703     \glsifattribute{#1}{headuc}{true}%
10704     {%
10705       \GLSxtrlong[noindex,hyper=false]{#1}[]%
10706     }%
10707     {%
10708       \Glsxtrlong[noindex,hyper=false]{#1}[]%
10709     }%
10710   }%
10711 }
```

`Glsxtrtitlelong` Command to display long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10712 \newrobustcmd*\{\Glsxtrtitlelong\}[1]{%
10713   \Glsxtrlong[noindex,hyper=false]{#1}[]%
10714 }
```

`\sxtrheadlongpl` Command used to display plural long form in the page header with the first letter converted to upper case.

```
10715 \newcommand*{\Glsxtrheadlongpl}[1]{%
10716   \protect\NoCaseChange
10717   {%
10718     \glsifattribute{#1}{headuc}{true}%
10719     {%
10720       \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
10721     }%
10722     {%
10723       \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
10724     }%
10725   }%
10726 }
```

`\sxtrtitlelongpl` Command to display plural long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10727 \newrobustcmd*{\Glsxtrtitlelongpl}[1]{%
10728   \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
10729 }
```

`\glsxtrheadfull` Command used to display full form in the page header.

```
10730 \newcommand*{\glsxtrheadfull}[1]{%
10731   \protect\NoCaseChange
10732   {%
10733     \glsifattribute{#1}{headuc}{true}%
10734     {%
10735       \GLSxtrfull[noindex,hyper=false]{#1}[]%
10736     }%
10737     {%
10738       \glsxtrfull[noindex,hyper=false]{#1}[]%
10739     }%
10740   }%
10741 }
```

`\glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents.

```
10742 \newrobustcmd*{\glsxtrtitlefull}[1]{%
10743   \glsxtrfull[noindex,hyper=false]{#1}[]%
10744 }
```

`\sxtrheadfullpl` 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.

```
10745 \newcommand*{\glsxtrheadfullpl}[1]{%
10746   \protect\NoCaseChange
10747   {%
10748     \glsifattribute{#1}{headuc}{true}%
10749     {%
```

```

10750     \GLSxtrfullpl [noindex,hyper=false]{#1}[]%
10751   }%
10752 {%
10753   \glsxtrfullpl [noindex,hyper=false]{#1}[]%
10754 }%
10755 }%
10756 }

```

`sxttitlefullpl` Command to display plural full form of abbreviation in section title and table of contents.

```

10757 \newrobustcmd*\{\glsxtrtitlefullpl\}[1]{%
10758   \glsxtrfullpl [noindex,hyper=false]{#1}[]%
10759 }

```

`\Glsxtrheadfull` Command used to display full form in the page header with the first letter converted to upper case.

```

10760 \newcommand*\{\Glsxtrheadfull\}[1]{%
10761   \protect\NoCaseChange
10762 {%
10763   \glsifattribute{#1}{headuc}{true}%
10764   {%
10765     \GLSxtrfull [noindex,hyper=false]{#1}[]%
10766   }%
10767   {%
10768     \Glsxtrfull [noindex,hyper=false]{#1}[]%
10769   }%
10770 }%
10771 }

```

`Glsxrttitlefull` Command to display full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

10772 \newrobustcmd*\{\Glsxrttitlefull\}[1]{%
10773   \Glsxtrfull [noindex,hyper=false]{#1}[]%
10774 }

```

`\sxtrheadfullpl` Command used to display plural full form in the page header with the first letter converted to upper case.

```

10775 \newcommand*\{\Glsxtrheadfullpl\}[1]{%
10776   \protect\NoCaseChange
10777 {%
10778   \glsifattribute{#1}{headuc}{true}%
10779   {%
10780     \GLSxtrfullpl [noindex,hyper=false]{#1}[]%
10781   }%
10782   {%
10783     \Glsxtrfullpl [noindex,hyper=false]{#1}[]%
10784   }%
10785 }%
10786 }

```

`\glsxtrtitlefullpl` Command to display plural full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10787 \newrobustcmd*{\Glsxtrtitlefullpl}[1]{%
10788   \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
10789 }
```

`\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.

```
10790 \ifdef\textorpdfstring
10791 {
10792   \newcommand*{\glsfmtshort}[1]{%
10793     \textorpdfstring
10794       {\glsxtrtitleshort{#1}}%
10795       {\glsentryshort{#1}}%
10796   }
10797 }
10798 {
10799   \newcommand*{\glsfmtshort}[1]{%
10800     \glsxtrtitleshort{#1}%
10801 }
```

Similarly for the plural version.

```
\glsfmtshortpl
10802 \ifdef\textorpdfstring
10803 {
10804   \newcommand*{\glsfmtshortpl}[1]{%
10805     \textorpdfstring
10806       {\glsxtrtitleshortpl{#1}}%
10807       {\glsentryshortpl{#1}}%
10808   }
10809 }
10810 {
10811   \newcommand*{\glsfmtshortpl}[1]{%
10812     \glsxtrtitleshortpl{#1}%
10813 }
```

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).

```
10814 \ifdef\textorpdfstring
10815 {
10816   \newcommand*{\Glsfmtshort}[1]{%
10817     \textorpdfstring
10818       {\Glsxtrtitleshort{#1}}%
10819       {\glsentryshort{#1}}%
10820   }
10821 }
```

```
10822 {
10823   \newcommand*{\Glsfmtshort}[1]{%
10824     \Glsxtrtitleshort{#1}}
10825 }
```

\Glsfmtshortpl Plural form (first letter uppercase).

```
10826 \ifdef\textorpdfstring
10827 {
10828   \newcommand*{\Glsfmtshortpl}[1]{%
10829     \textorpdfstring
10830     {\Glsxtrtitleshortpl{#1}}%
10831     {\glsentryshortpl{#1}}%
10832 }
10833 }
10834 {
10835   \newcommand*{\Glsfmtshortpl}[1]{%
10836     \Glsxtrtitleshortpl{#1}}
10837 }
```

\glsfmtname As above but for the name value.

```
10838 \ifdef\textorpdfstring
10839 {
10840   \newcommand*{\glsfmtname}[1]{%
10841     \textorpdfstring
10842     {\Glsxtrtitlename{#1}}%
10843     {\glsentryname{#1}}%
10844 }
10845 }
10846 {
10847   \newcommand*{\glsfmtname}[1]{%
10848     \Glsxtrtitlename{#1}}
10849 }
```

\Glsfmtname First letter converted to upper case.

```
10850 \ifdef\textorpdfstring
10851 {
10852   \newcommand*{\Glsfmtname}[1]{%
10853     \textorpdfstring
10854     {\Glsxtrtitlename{#1}}%
10855     {\glsentryname{#1}}%
10856 }
10857 }
10858 {
10859   \newcommand*{\Glsfmtname}[1]{%
10860     \Glsxtrtitlename{#1}}
10861 }
```

\glsfmttext As above but for the text value.

```
10862 \ifdef\textorpdfstring
```

```

10863 {
10864   \newcommand*{\glsfmttext}[1]{%
10865     \texorpdfstring
10866     {\glsxtrtitletext{\#1}}%
10867     {\glsentrytext{\#1}}%
10868   }
10869 }
10870 {
10871   \newcommand*{\glsfmttext}[1]{%
10872     \glsxtrtitletext{\#1}}
10873 }

```

\Glsfmttext First letter converted to upper case.

```

10874 \ifdef\texorpdfstring
10875 {
10876   \newcommand*{\Glsfmttext}[1]{%
10877     \texorpdfstring
10878     {\Glsxtrtitletext{\#1}}%
10879     {\glsentrytext{\#1}}%
10880   }
10881 }
10882 {
10883   \newcommand*{\Glsfmttext}[1]{%
10884     \Glsxtrtitletext{\#1}}
10885 }

```

\glsfmtplural As above but for the plural value.

```

10886 \ifdef\texorpdfstring
10887 {
10888   \newcommand*{\glsfmtplural}[1]{%
10889     \texorpdfstring
10890     {\glsxtrtitleplural{\#1}}%
10891     {\glsentryplural{\#1}}%
10892   }
10893 }
10894 {
10895   \newcommand*{\glsfmtplural}[1]{%
10896     \glsxtrtitleplural{\#1}}
10897 }

```

\Glsfmtplural First letter converted to upper case.

```

10898 \ifdef\texorpdfstring
10899 {
10900   \newcommand*{\Glsfmtplural}[1]{%
10901     \texorpdfstring
10902     {\Glsxtrtitleplural{\#1}}%
10903     {\glsentryplural{\#1}}%
10904   }
10905 }

```

```
10906 {
10907   \newcommand*{\Glsfmtplural}[1]{%
10908     \Glsxtrtitleplural{#1}}
10909 }
```

\glsfmtfirst As above but for the first value.

```
10910 \ifdef\textorpdfstring
10911 {
10912   \newcommand*{\glsfmtfirst}[1]{%
10913     \textorpdfstring
10914     {\glsxtrtitlefirst{#1}}%
10915     {\glsentryfirst{#1}}%
10916   }
10917 }
10918 {
10919   \newcommand*{\glsfmtfirst}[1]{%
10920     \glsxtrtitlefirst{#1}}
10921 }
```

\Glsfmtfirst First letter converted to upper case.

```
10922 \ifdef\textorpdfstring
10923 {
10924   \newcommand*{\Glsfmtfirst}[1]{%
10925     \textorpdfstring
10926     {\Glsxtrtitlefirst{#1}}%
10927     {\glsentryfirst{#1}}%
10928   }
10929 }
10930 {
10931   \newcommand*{\Glsfmtfirst}[1]{%
10932     \Glsxtrtitlefirst{#1}}
10933 }
```

\glsfmtfirstpl As above but for the firstplural value.

```
10934 \ifdef\textorpdfstring
10935 {
10936   \newcommand*{\glsfmtfirstpl}[1]{%
10937     \textorpdfstring
10938     {\glsxtrtitlefirstplural{#1}}%
10939     {\glsentryfirstplural{#1}}%
10940   }
10941 }
10942 {
10943   \newcommand*{\glsfmtfirstpl}[1]{%
10944     \glsxtrtitlefirstplural{#1}}
10945 }
```

\Glsfmtfirstpl First letter converted to upper case.

```
10946 \ifdef\textorpdfstring
```

```

10947 {
10948   \newcommand*{\Glsfmtfirstpl}[1]{%
10949     \texorpdfstring
10950       {\Glsxrttitlefirstplural{#1}}%
10951       {\glsentryfirstplural{#1}}%
10952   }
10953 }
10954 {
10955   \newcommand*{\Glsfmtfirstpl}[1]{%
10956     \Glsxrttitlefirstplural{#1}}
10957 }

```

\glsfmtlong As above but for the long value.

```

10958 \ifdef\texorpdfstring
10959 {
10960   \newcommand*{\glsfmtlong}[1]{%
10961     \texorpdfstring
10962       {\Glsxrttitlelong{#1}}%
10963       {\glsentrylong{#1}}%
10964   }
10965 }
10966 {
10967   \newcommand*{\glsfmtlong}[1]{%
10968     \Glsxrttitlelong{#1}}
10969 }

```

\Glsfmtlong First letter converted to upper case.

```

10970 \ifdef\texorpdfstring
10971 {
10972   \newcommand*{\Glsfmtlong}[1]{%
10973     \texorpdfstring
10974       {\Glsxrttitlelong{#1}}%
10975       {\glsentrylong{#1}}%
10976   }
10977 }
10978 {
10979   \newcommand*{\Glsfmtlong}[1]{%
10980     \Glsxrttitlelong{#1}}
10981 }

```

\glsfmtlongpl As above but for the longplural value.

```

10982 \ifdef\texorpdfstring
10983 {
10984   \newcommand*{\glsfmtlongpl}[1]{%
10985     \texorpdfstring
10986       {\Glsxrttitlelongpl{#1}}%
10987       {\glsentrylongpl{#1}}%
10988   }
10989 }

```

```
10990 {  
10991   \newcommand*{\glsfmtlongpl}[1]{%  
10992     \glsxtrtitlelongpl{#1}}  
10993 }
```

\Glsfmtlongpl First letter converted to upper case.

```
10994 \ifdef\textorpdfstring  
10995 {  
10996   \newcommand*{\Glsfmtlongpl}[1]{%  
10997     \textorpdfstring  
10998       {\Glsxtrtitlelongpl{#1}}%  
10999       {\glsentrylongpl{#1}}%  
11000   }  
11001 }  
11002 {  
11003   \newcommand*{\Glsfmtlongpl}[1]{%  
11004     \Glsxtrtitlelongpl{#1}}  
11005 }
```

\glsfmtfull In-line full format.

```
11006 \ifdef\textorpdfstring  
11007 {  
11008   \newcommand*{\glsfmtfull}[1]{%  
11009     \textorpdfstring  
11010       {\glsxtrtitlefull{#1}}%  
11011       {\glsxtrinlinetitlefullformat{#1}{}}%  
11012   }  
11013 }  
11014 {  
11015   \newcommand*{\glsfmtfull}[1]{%  
11016     \glsxtrtitlefull{#1}}  
11017 }
```

\Glsfmtfull First letter converted to upper case.

```
11018 \ifdef\textorpdfstring  
11019 {  
11020   \newcommand*{\Glsfmtfull}[1]{%  
11021     \textorpdfstring  
11022       {\Glsxtrtitlefull{#1}}%  
11023       {\Glsxtrinlinetitlefullformat{#1}{}}%  
11024   }  
11025 }  
11026 {  
11027   \newcommand*{\Glsfmtfull}[1]{%  
11028     \Glsxtrtitlefull{#1}}  
11029 }
```

\glsfmtfullpl In-line full plural format.

```
11030 \ifdef\textorpdfstring
```

```

11031 {
11032   \newcommand*{\glsfmtfullpl}[1]{%
11033     \texorpdfstring
11034       {\glsxtrtitlefullpl{#1}}%
11035       {\glsxtrinlinefullplformat{#1}{}}
11036   }
11037 }
11038 {
11039   \newcommand*{\glsfmtfullpl}[1]{%
11040     \glsxtrtitlefullpl{#1}
11041 }

```

\Glsfmtfullpl First letter converted to upper case.

```

11042 \ifdef\texorpdfstring
11043 {
11044   \newcommand*{\Glsfmtfullpl}[1]{%
11045     \texorpdfstring
11046       {\Glsxtrtitlefullpl{#1}}%
11047       {\Glsxtrinlinefullplformat{#1}{}}
11048   }
11049 }
11050 {
11051   \newcommand*{\Glsfmtfullpl}[1]{%
11052     \Glsxtrtitlefullpl{#1}
11053 }

```

1.8 Multi-Lingual Support

Add the facility to load language modules, if they are installed, but none are provided with this package.

sariesExtraLang

```

11054 \newcommand*{\RequireGlossariesExtraLang}[1]{%
11055   \@ifundefined{ver@glossariesxtr-#1.ldf}{\input{glossariesxtr-#1.ldf}}{}%
11056 }

```

sariesExtraLang

```

11057 \newcommand*{\ProvidesGlossariesExtraLang}[1]{%
11058   \ProvidesFile{glossariesxtr-#1.ldf}%
11059 }

```

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.)

```

11060 \@ifpackageloaded{tracklang}
11061 {%
11062   \AnyTrackedLanguages

```

```
11063  {%
11064      \ForEachTrackedDialect{\this@dialect}{%
11065          \IfTrackedLanguageFileExists{\this@dialect}{%
11066              {glossariesxtr-}\% prefix
11067              {.ldf}\%
11068              {%
11069                  \RequireGlossariesExtraLang{\CurrentTrackedTag}\%
11070              }%
11071              {%
11072                  }%
11073              }%
11074          }%
11075          {}%
11076      }%
11077 {}}
```

Load `glossaries-extra-stylemods` if required.

```
11078 \@glsxtr@redefstyles
```

and set the style:

```
11079 \@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:

```
11080 \NeedsTeXFormat{LaTeX2e}
11081 \ProvidesPackage{glossaries-extra-stylemods}[2017/11/08 v1.22 (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
11082 \newcommand*\{@glsxtr@loadstyles}{}%
```

all Provide all known styles.

```
11083 \DeclareOption{all}{%
11084   \appto\@glsxtr@loadstyles{%
11085     \RequirePackage{glossary-inline}%
11086     \RequirePackage{glossary-list}%
11087     \RequirePackage{glossary-tree}%
11088     \RequirePackage{glossary-mcols}%
11089     \RequirePackage{glossary-long}%
11090     \RequirePackage{glossary-longragged}%
11091     \RequirePackage{glossary-longbooktabs}%
11092     \RequirePackage{glossary-super}%
11093     \RequirePackage{glossary-superragged}%
11094     \RequirePackage{glossary-bookindex}%
11095   }%
11096 }

11097 \DeclareOption*{%
11098   \IfFileExists{glossary-\CurrentOption.sty}%
11099     {\appto\@glsxtr@loadstyles{%
11100       \noexpand\RequirePackage{glossary-\CurrentOption}}%
11101     }%
11102     {%
11103       \PackageError{glossaries-extra-styles}%
11104     }%
11105   }%
```

```

11104     {Unknown option '\CurrentOption'}{}%
11105   }%
11106 }

```

Process the package options:

```
11107 \ProcessOptions
```

Load the required packages:

```
11108 \@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`.

```
11109 \providecommand*{\glsxtrprelocation}{\space}
```

In case we have an old version of glossaries:

`ewglossarystyle`

```

11110 \providecommand{\renewglossarystyle}[2]{%
11111   \ifcsundef{@glsstyle@#1}{%
11112     {%
11113       \PackageError{glossaries-extra}{Glossary style '#1' isn't already defined}{}%
11114     }%
11115     {%
11116       \csdef{@glsstyle@#1}{#2}%
11117     }%
11118 }

```

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.

```

11119 \ifdef{\@glsstyle@listdotted}{%
11120 {%
11121   \renewglossarystyle{listdotted}{%
11122     \setglossarystyle{list}{%
11123       \renewcommand*{\glossentry}[2]{%
11124         \item[]\makebox[\glslistdottedwidth][l]{%
11125           \glsentryitem{##1}%
11126           \glstarget{##1}{\glossentryname{##1}}%
11127           \unskip\leaders\hbox to 2.9mm{\hss.}\hfill\strut}%
11128           \glossentrydesc{##1}\glspostdescription}%
11129       \renewcommand*{\subglossentry}[3]{%
11130         \item[]\makebox[\glslistdottedwidth][l]{%
11131           \glssubentryitem{##2}%
11132           \glstarget{##2}{\glossentryname{##2}}%
11133           \unskip\leaders\hbox to 2.9mm{\hss.}\hfill\strut}%
11134           \glossentrydesc{##2}\glspostdescription}%
11135 }

```

```
11136 }  
11137 {%
```

Assume the style isn't required if it hasn't already been defined.

```
11138 }
```

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.

```
11139 \ifdef{@glsstyle@list}  
11140 {%
```

listprelocation Space before number list for top-level entries.

```
11141 \newcommand{\glslistprelocation}{\glsxtrprelocation}
```

childprelocation Space before number list for child entries.

```
11142 \newcommand{\glslistchildprelocation}{\glslistprelocation}
```

childpostlocation Full stop after number list.

```
11143 \newcommand{\glslistchildpostlocation}{.}
```

Redefine list to use these commands.

```
11144 \renewglossarystyle{list}{%  
11145   \renewenvironment{theglossary}{%  
11146     {\begin{description}}{\end{description}}%  
11147     \renewcommand*\glossaryheader{}%  
11148     \renewcommand*\glsgroupheading[1]{}%  
11149     \renewcommand*\glossentry[2]{%  
11150       \item[\glsentryitem{##1}-%  
11151         \glstarget{##1}{\glossentryname{##1}}]  
11152         \glossentrydesc{##1}\glspostdescription\glslistprelocation ##2}%  
11153     \renewcommand*\subglossentry[3]{%  
11154       \glssubentryitem{##2}-%  
11155       \glstarget{##2}{\strut}\space  
11156       \glossentrydesc{##2}\glspostdescription  
11157       \glslistchildprelocation ##3\glslistchildpostlocation}%  
11158     \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\indexspace\fi}%  
11159   }  
11160 }  
11161 {}
```

Similarly for altlist. Since it requires list, the new commands should have been defined above.

```
11162 \ifdef{@glsstyle@altlist}  
11163 {%
```

```
11164   \renewglossarystyle{altlist}{%  
11165     \setglossarystyle{list}{%  
11166       \renewcommand*\glossentry[2]{%  
11167         \item[\glsentryitem{##1}-%
```

```

11168      \glstarget{##1}{\glossentryname{##1}}]%
11169      \mbox{} \par \nobreak \afterheading
11170      \glossentrydesc{##1} \glspostdescription \glslistprelocation ##2}%
11171      \renewcommand{\subglossentry}[3]{%
11172          \par
11173          \glssubentryitem{##2}%
11174          \glstarget{##2}{\strut} \glossentrydesc{##2} \glspostdescription
11175          \glslistchildprelocation ##3}%
11176      }
11177  }
11178 {}
```

Redefine `listgroup` so that it discourages a break after group headings.

```

11179 \ifdef{\glsstyle@listgroup}
11180 {%
11181     \renewglossarystyle{listgroup}{%
11182         \setglossarystyle{list}%
11183         \renewcommand*{\glsgroupheading}[1]{%
11184             \item[\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}]%
11185             \mbox{} \par \nobreak \afterheading
11186         }%
11187     }
11188 }
11189 {}
```

Similarly for `listhypergroup`.

```

11190 \ifdef{\glsstyle@listhypergroup}
11191 {%
11192     \renewglossarystyle{listhypergroup}{%
11193         \setglossarystyle{list}%
11194         \renewcommand*{\glossaryheader}{%
11195             \glslistnavigationitem{\glsnavigation}}%
11196         \renewcommand*{\glsgroupheading}[1]{%
11197             \item[\glslistgroupheaderfmt
11198                 {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}]%
11199             \mbox{} \par \nobreak \afterheading
11200         }%
11201     }
11202 }
11203 {}
```

Similarly for `altlistgroup`.

```

11204 \ifdef{\glsstyle@altlistgroup}
11205 {%
11206     \renewglossarystyle{altlistgroup}{%
11207         \setglossarystyle{altlist}%
11208         \renewcommand*{\glsgroupheading}[1]{%
11209             \item[\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}]%
11210             \mbox{} \par \nobreak \afterheading
11211         }%
11212     }
```

```

11213 }
11214 {}

Similarly for altlisthypergroup.

11215 \ifdef{\@glsstyle@altlisthypergroup}
11216 {%
11217   \renewglossarystyle{altlisthypergroup}{%
11218     \setglossarystyle{altlist}{%
11219       \renewcommand*{\glossaryheader}{%
11220         \glslistnavigationitem{\glsnavigation}}%
11221       \renewcommand*{\glsgroupheading}[1]{%
11222         \item[\glslistgroupheaderfmt
11223           {\glsnavhypertarget{\#\#1}{\glsgetgrouptitle{\#\#1}}}]%
11224         \mbox{}\par\nobreak\@afterheading
11225       }%
11226     }%
11227   }%
11228 }

```

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`.

```

11229 \ifcsdef{@glsstyle@long}
11230 {%
11231   \renewglossarystyle{long}{%
11232     \renewenvironment{theglossary}%
11233       {\begin{longtable}{lp{\glsdescwidth}}}%
11234       {\end{longtable}}%
11235     \renewcommand*{\glossaryheader}{}%
11236     \renewcommand*{\glsgroupheading}[1]{}%
11237     \renewcommand{\glossentry}[2]{%
11238       \glsentryitem{\#\#1}\glstarget{\#\#1}{\glossentryname{\#\#1}} &
11239       \glossentrydesc{\#\#1}\glspostdescription
11240       \glsxtrprelocation ##2\tabularnewline
11241     }%
11242     \renewcommand{\subglossentry}[3]{%
11243       &
11244       \glssubentryitem{\#\#2}%
11245       \glstarget{\#\#2}{\strut}\glossentrydesc{\#\#2}\glspostdescription
11246       \glsxtrprelocation ##3\tabularnewline
11247     }%
11248     \ifglsnogroupskip
11249       \renewcommand*{\glsgroupskip}{}%
11250     \else
11251       \renewcommand*{\glsgroupskip}{\&\tabularnewline}%
11252     \fi
11253   }

```

```
11254 }  
11255 {}
```

Three column style:

```
11256 \ifcsdef{@glsstyle@long3col}{%  
11257   \renewglossarystyle{long3col}{%  
11258     \renewenvironment{theglossary}{%  
11259       {\begin{longtable}{lp{\glsdescwidth}p{\glspagelistwidth}}}}%  
11260       {\end{longtable}}%  
11261     \renewcommand*\glossaryheader{}%  
11262     \renewcommand*\glsgroupheading[1]{}%  
11263     \renewcommand{\glossentry}[2]{%  
11264       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &  
11265       \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline  
11266     }%  
11267     \renewcommand{\subglossentry}[3]{%  
11268       &  
11269       \glosssubentryitem{##2}{%  
11270         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &  
11271         ##3\tabularnewline  
11272     }%  
11273 }
```

Conditional needs to be outside of \glsgroupskip otherwise it can cause “Incomplete \iftrue” errors.

```
11274   \ifglsnogroupskip  
11275     \renewcommand*\glsgroupskip{}%  
11276   \else  
11277     \renewcommand*\glsgroupskip{\& \tabularnewline}%  
11278   \fi  
11279 }  
11280 }  
11281 {}
```

Four column style:

```
11282 \ifcsdef{@glsstyle@long4col}{%  
11283   \renewglossarystyle{long4col}{%  
11284     \renewenvironment{theglossary}{%  
11285       {\begin{longtable}{llll}}%  
11286       {\end{longtable}}%  
11287     \renewcommand*\glossaryheader{}%  
11288     \renewcommand*\glsgroupheading[1]{}%  
11289     \renewcommand{\glossentry}[2]{%  
11290       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &  
11291       \glossentrydesc{##1}\glspostdescription &  
11292       \glossentrysymbol{##1} &  
11293       ##2\tabularnewline  
11294     }%  
11295     \renewcommand{\subglossentry}[3]{%  
11296       &
```

```

11298     \glssubentryitem{##2}%
11299     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
11300     \glossentrysymbol{##2} & ##3\tabularnewline
11301   }%
11302   \ifglsnogroupskip
11303     \renewcommand*\glsgroupskip{}%
11304   \else
11305     \renewcommand*\glsgroupskip{\& \&\tabularnewline}%
11306   \fi
11307 }
11308 }
11309 {}
```

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.

```

11310 \ifcsdef@glsstyle@longragged}
11311 {%
11312   \renewglossarystyle{longragged}{%
11313     \renewenvironment{theglossary}{%
11314       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}}%
11315       {\end{longtable}}%
11316     \renewcommand*\glossaryheader{}%
11317     \renewcommand*\glsgroupheading[1]{}%
11318     \renewcommand{\glossentry}[2]{%
11319       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11320       \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
11321       \tabularnewline
11322     }%
11323     \renewcommand{\subglossentry}[3]{%
11324       &
11325       \glssubentryitem{##2}%
11326       \glstarget{##2}{\strut}\glossentrydesc{##2}%
11327       \glspostdescription\glsxtrprelocation ##3%
11328       \tabularnewline
11329     }%
11330   \ifglsnogroupskip
11331     \renewcommand*\glsgroupskip{}%
11332   \else
11333     \renewcommand*\glsgroupskip{\& \tabularnewline}%
11334   \fi
11335 }
11336 }
```

```
11337 {}
```

Three and four column styles don't use \glsxtrprelocation since the number list is in its own column.

```
11338 \ifcsdef{@glsstyle@longragged3col}
11339 {%
11340   \renewglossarystyle{longragged3col}{%
11341     \renewenvironment{theglossary}{%
11342       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}{%
11343         >{\raggedright}p{\glspagelistwidth}}}}{%
11344       {\end{longtable}}}}{%
11345     \renewcommand*\glossaryheader{}{%
11346       \renewcommand*\glsgroupheading}[1]{}}{%
11347       \renewcommand*\glossentry}[2]{%
11348         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11349           \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
11350     }{%
11351       \renewcommand*\subglossentry}[3]{%
11352         &
11353           \glssubentryitem{##2}{%
11354             \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
11355               ##3\tabularnewline
11356     }{%
11357       \ifglsnogroupskip
11358         \renewcommand*\glsgroupskip{}{%
11359       \else
11360         \renewcommand*\glsgroupskip}{\& \&\tabularnewline}{%
11361       \fi
11362     }
11363   }
11364 }
```

Four column style:

```
11365 \ifcsdef{@glsstyle@altlongragged4col}
11366 {%
11367   \renewglossarystyle{altlongragged4col}{%
11368     \renewenvironment{theglossary}{%
11369       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}}{%
11370         >{\raggedright}p{\glspagelistwidth}}}}{%
11371       {\end{longtable}}}}{%
11372     \renewcommand*\glossaryheader{}{%
11373       \renewcommand*\glsgroupheading}[1]{}}{%
11374       \renewcommand*\glossentry}[2]{%
11375         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11376           \glossentrydesc{##1}\glspostdescription & \glossentrysymbol{##1} &
11377             ##2\tabularnewline
11378     }{%
11379       \renewcommand*\subglossentry}[3]{%
11380         &
```

```

11381     \glssubentryitem{##2}%
11382     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
11383     \glossentrysymbol{##2} & ##3\tabularnewline
11384   }%
11385   \ifglsnogroupskip
11386     \renewcommand*\glsgroupskip{}%
11387   \else
11388     \renewcommand*\glsgroupskip{\& \&\tabularnewline}%
11389   \fi
11390 }
11391 }
11392 {}
```

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`.

```

11393 \ifcsdef{@glsstyle@super}%
11394 {%
11395   \renewglossarystyle{super}{%
11396     \renewenvironment{theglossary}{%
11397       {\tablehead{}\tabletail{}}%
11398       \begin{supertabular}{lp{\glsdescwidth}}{}}%
11399       \end{supertabular}}%
11400   \renewcommand*\glossaryheader{}%
11401   \renewcommand*\glsgroupheading[1]{}%
11402   \renewcommand{\glossentry}[2]{%
11403     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11404     \glossentrydesc{##1}\glspostdescription
11405     \glsxtrprelocation ##2\tabularnewline
11406   }%
11407   \renewcommand{\subglossentry}[3]{%
11408     &
11409     \glssubentryitem{##2}%
11410     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
11411     \glsxtrprelocation ##3\tabularnewline
11412   }%
11413   \ifglsnogroupskip
11414     \renewcommand*\glsgroupskip{}%
11415   \else
11416     \renewcommand*\glsgroupskip{\& \tabularnewline}%
11417   \fi
11418 }
11419 }
11420 {}
```

Three column style:

```
11421 \ifcsdef{@glsstyle@super3col}
```

```

11422 {%
11423   \renewglossarystyle{super3col}{%
11424     \renewenvironment{theglossary}{%
11425       {\tablehead{}\tabletail{}%
11426         \begin{supertabular}{lp{\glscolumnwidth}p{\glspagelistwidth}}}}{%
11427       \end{supertabular}}{%
11428         \renewcommand*\glossaryheader{}{%
11429           \renewcommand*\glsgroupheading}[1]{}}{%
11430           \renewcommand{\glossentry}[2]{%
11431             \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11432               \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
11433             }{%
11434               \renewcommand{\subglossentry}[3]{%
11435                 &
11436                   \glssubentryitem{##2}{%
11437                     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
11438                       ##3\tabularnewline
11439                     }{%
11440           \ifglsnogroupskip
11441             \renewcommand*\glsgroupskip{}{%
11442           \else
11443             \renewcommand*\glsgroupskip}{ & \tabularnewline}{%
11444           \fi
11445         }{%
11446       }
11447   }{%

```

Four column styles:

```

11448 \ifcsdef{@glsstyle@super4col}
11449 {%
11450   \renewglossarystyle{super4col}{%
11451     \renewenvironment{theglossary}{%
11452       {\tablehead{}\tabletail{}%
11453         \begin{supertabular}{llll}{%
11454           \end{supertabular}}{%
11455             \renewcommand*\glossaryheader{}{%
11456               \renewcommand*\glsgroupheading}[1]{}}{%
11457                 \renewcommand{\glossentry}[2]{%
11458                   \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11459                     \glossentrydesc{##1}\glspostdescription &
11460                       \glossentrysymbol{##1} & ##2\tabularnewline
11461                     }{%
11462                       \renewcommand{\subglossentry}[3]{%
11463                         &
11464                           \glssubentryitem{##2}{%
11465                             \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
11466                               \glossentrysymbol{##2} & ##3\tabularnewline
11467                             }{%

```

```

11468     \ifglsnogroupskip
11469         \renewcommand*{\glsgroupskip}{}%
11470     \else
11471         \renewcommand*{\glsgroupskip}{\& & \tabularnewline}%
11472     \fi
11473 }
11474 }
11475 {}

```

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`.

```

11476 \ifcsdef{@glsstyle@superragged}%
11477 {%
11478     \renewglossarystyle{superragged}{%
11479         \renewenvironment{theglossary}{%
11480             {\tablehead{}\tabletail{}}%
11481             \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}}{}}%
11482             \end{supertabular}%
11483             \renewcommand*{\glossaryheader}{}%
11484             \renewcommand*{\glsgroupheading}[1]{}%
11485             \renewcommand{\glossentry}[2]{%
11486                 \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11487                 \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
11488                 \tabularnewline
11489             }%
11490             \renewcommand{\subglossentry}[3]{%
11491                 &
11492                 \glssubentryitem{##2}%
11493                 \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
11494                 \glsxtrprelocation ##3%
11495                 \tabularnewline
11496             }%
11497             \ifglsnogroupskip
11498                 \renewcommand*{\glsgroupskip}{}%
11499             \else
11500                 \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
11501             \fi
11502 }
11503 }
11504 {}

```

Three column style:

```

11505 \ifcsdef{@glsstyle@superragged3col}%
11506 {%
11507     \renewglossarystyle{superragged3col}{%

```

```

11508 \renewenvironment{theglossary}%
11509   {\tablehead{}\tabletail{}%
11510     \begin{supertabular}{l>{\raggedright\p{\glscdescwidth}}%
11511       >{\raggedright\p{\glspagelistwidth}}}%
11512     \end{supertabular}%
11513   \renewcommand*\glossaryheader{}%
11514   \renewcommand*\glsgrouphheading}[1]{}%
11515   \renewcommand{\glossentry}[2]{%
11516     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11517     \glossentrydesc{##1}\glspostdescription &
11518     ##2\tabularnewline
11519   }%
11520   \renewcommand{\subglossentry}[3]{%
11521     &
11522     \glssubentryitem{##2}%
11523     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
11524     ##3\tabularnewline
11525   }%
11526   \ifglsnogroupskip
11527     \renewcommand*\glsgroupskip{}%
11528   \else
11529     \renewcommand*\glsgroupskip}{ & \tabularnewline}%
11530   \fi
11531 }
11532 }
11533 {}
```

Four columns:

```

11534 \ifcsdef{@glsstyle@altsuperragged4col}%
11535 {}%
11536   \renewglossarystyle{altsuperragged4col}{%
11537     \renewenvironment{theglossary}%
11538       {\tablehead{}\tabletail{}%
11539         \begin{supertabular}{l>{\raggedright\p{\glscdescwidth}l}%
11540           >{\raggedright\p{\glspagelistwidth}}}%
11541         \end{supertabular}%
11542       \renewcommand*\glossaryheader{}%
11543       \renewcommand{\glossentry}[2]{%
11544         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
11545         \glossentrydesc{##1}\glspostdescription &
11546         \glossentrysymbol{##1} & ##2\tabularnewline
11547       }%
11548       \renewcommand{\subglossentry}[3]{%
11549         &
11550         \glssubentryitem{##2}%
11551         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
11552         \glossentrysymbol{##2} & ##3\tabularnewline
11553   }%
```

```

11554     \ifglsnogroupskip
11555         \renewcommand*\{\glsgroupskip\}{\}
11556     \else
11557         \renewcommand*\{\glsgroupskip\}{\& \& \tabularnewline\}
11558     \fi
11559 }
11560 }
11561 {}

```

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`.

```

11562 \ifdef{@glsstyle@inline}
11563 {%
11564     \renewcommand*\{\glspostinline\}{.\spacefactor\sffcode`\.}
        Just use \glsxtrpostdescription instead of \glspostdescription.
11565     \renewcommand*\{\glsinlinedescformat\}[3]{%
11566         \space#1\glsxtrpostdescription}
11567     \renewcommand*\{\glsinlinesubdescformat\}[3]{%
11568         #1\glsxtrpostdescription}

```

The default settings don't show the location lists, so there's no adjustment for `\glsxtrprelocation`.

```

11569 }
11570 {}

```

2.8 Tree Styles

The index style is redefined so that the space before the number list isn't hard coded.

```

11571 \ifdef{@glsstyle@index}
11572 {%

```

`treeprelocation` The space before the number list for top-level entries. This is shared by the other tree styles.

```

11573     \newcommand*\{\glstreeprelocation\}{\glsxtrprelocation}

```

`childprelocation` The space before the number list for child entries. This is shared by the other tree styles.

```

11574     \newcommand*\{\glstreechildprelocation\}{\glstreeprelocation}

```

```

11575     \renewglossarystyle{index}{%
11576         \renewenvironment{theglossary}{%
11577             {\setlength{\parindent}{0pt}}%
11578             \setlength{\parskip}{0pt plus 0.3pt}}%
11579         \let\item\glstreeitem
11580         \let\subitem\glstreesubitem

```

```

11581     \let\subsubitem\glstreesubsubitem
11582     }%
11583 {\par}%
11584 \renewcommand*\glossaryheader{}%
11585 \renewcommand*\glsgroupheading}[1]{%
11586 \renewcommand*\glossentry}[2]{%
11587     \item\glstreeentryitem{##1}%
11588     \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
11589     \ifglshassymbol{##1}{\space(\glossentrysymbol{##1})}{}%
11590     \glstreepredesc \glossentrydesc{##1}\glspostdescription
11591     \glstreeprelocation ##2%
11592 }%
11593 \renewcommand{\subglossentry}[3]{%
11594     \ifcase##1\relax
11595         \item
11596     \or
11597         \subitem
11598         \glssubentryitem{##2}%
11599     \else
11600         \subsubitem
11601     \fi
11602     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
11603     \ifglshassymbol{##2}{\space(\glossentrysymbol{##2})}{}%
11604     \glstreechildpredesc\glossentrydesc{##2}\glspostdescription
11605     \glstreechildprelocation ##3%
11606 }%
11607 \renewcommand*\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
11608 }
11609 }
11610 {}
```

The `indexgroup` style is redefined to discourage a page break after the heading.

```

11611 \ifdef{@glsstyle@indexgroup}
11612 {%
11613     \renewglossarystyle{indexgroup}{%
11614         \setglossarystyle{index}%
11615         \renewcommand*\glsgroupheading}[1]{%
11616             \item\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
11617             \nopagebreak\indexspace
11618             \nobreak\@afterheading
11619         }%
11620     }
11621 }
11622 {}
```

Similarly for `indexhypergroup`.

```

11623 \ifdef{@glsstyle@indexhypergroup}
11624 {%
11625     \renewglossarystyle{indexhypergroup}{%
11626         \setglossarystyle{index}%
```

```

11627 \renewcommand*\glossaryheader}{%
11628   \item\glstreenavigationfmt{\glsnavigation}%
11629     \nobreak\@afterheading\indexspace}%
11630 \renewcommand*\glsgroupheading}[1]{%
11631   \item\glstreegroupheaderfmt
11632   {\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
11633   \nopagebreak\indexspace
11634   \nobreak\@afterheading}%
11635 }%
11636 }
11637 {}
```

Adjust tree style to remove hard coded space before number list.

```

11638 \ifdef{@glsstyle@tree}
11639 {%
11640   \renewglossarystyle{tree}{%
11641     \renewenvironment{theglossary}%
11642       {\setlength{\parindent}{0pt}%
11643         \setlength{\parskip}{0pt plus 0.3pt}}%
11644       {}%
11645     \renewcommand*\glossaryheader}{%
11646     \renewcommand*\glsgroupheading}[1]{%
11647     \renewcommand{\glossentry}[2]{%
11648       \hangindent0pt\relax
11649       \parindent0pt\relax
11650       \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
11651       \ifglshassymbol{##1}{\space(\glossentrysymbol{##1})}{}%
11652       \glstreepredesc\glossentrydesc{##1}\glspostdescription
11653       \glstreeprelocation##2\par
11654     }%
11655     \renewcommand{\subglossentry}[3]{%
11656       \hangindent##1\glstreeindent\relax
11657       \parindent##1\glstreeindent\relax
11658       \ifnum##1=1\relax
11659         \glssubentryitem{##2}%
11660       \fi
11661       \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
11662       \ifglshassymbol{##2}{\space(\glossentrysymbol{##2})}{}%
11663       \glstreechildpredesc\glossentrydesc{##2}\glspostdescription
11664       \glstreechildprelocation##3\par
11665     }%
11666     \renewcommand*\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
11667   }%
11668 }
11669 {}
```

The treegroup style is redefined to discourage a page break after the heading.

```

11670 \ifdef{@glsstyle@treegroup}
11671 {%
11672   \renewglossarystyle{treegroup}{%
```

```

11673   \setglossarystyle{tree}%
11674   \renewcommand{\glsgroupheding}[1]{\par
11675     \noindent\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}\par
11676     \nopagebreak\indexspace\nobreak\@afterheading}%
11677 }
11678 }
11679 {}

```

Similarly for treehypergroup

```

11680 \ifdef{\@glsstyle@treehypergroup}
11681 {%
11682   \renewglossarystyle{treehypergroup}{%
11683     \setglossarystyle{tree}%
11684     \renewcommand*\glossaryheader{%
11685       \par\noindent\glstreenavigationfmt{\glsnavigation}\par
11686       \nobreak\@afterheading\indexspace}%
11687     \renewcommand*\glsgroupheding[1]{%
11688       \par\noindent
11689       \glstreegroupheaderfmt
11690       {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}\par
11691       \nopagebreak\indexspace\nobreak\@afterheading}%
11692 }
11693 }
11694 {}

```

Adjust treenoname style to remove hard coded space before number list.

```

11695 \ifdef{\@glsstyle@treenoname}
11696 {%
11697   \renewglossarystyle{treenoname}{%
11698     \renewenvironment{theglossary}%
11699       {\setlength{\parindent}{0pt}%
11700        \setlength{\parskip}{0pt plus 0.3pt}}%
11701       {}%
11702     \renewcommand*\glossaryheader{}%
11703     \renewcommand*\glsgroupheding[1]{}%
11704     \renewcommand{\glossentry}[2]{%
11705       \hangindent0pt\relax
11706       \parindent0pt\relax
11707       \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
11708       \ifglshassymbol{##1}{\space(\glossentrysymbol{##1})}{}%
11709       \glstreepredesc\glossentrydesc{##1}\glspostdescription
11710       \glstreeprelocation##2\par
11711     }%
11712     \renewcommand{\subglossentry}[3]{%
11713       \hangindent##1\glstreeindent\relax
11714       \parindent##1\glstreeindent\relax
11715       \ifnum##1=1\relax
11716         \glssubentryitem{##2}%
11717       \fi
11718       \glstarget{##2}{\strut}%

```

```

11719      \glossentrydesc{##2}\glspostdescription\glstreechildprelocation##3\par
11720  }%
11721  \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
11722 }
11723 }
11724 {}
```

The treenonamegroup style is redefined to discourage a page break after the heading.

```

11725 \ifdef{@glsstyle@treenonamegroup}%
11726 {%
11727  \renewglossarystyle{treenonamegroup}{%
11728    \setglossarystyle{treenoname}%
11729    \renewcommand{\glsgroupheading}[1]{\par
11730      \noindent\glstreegroupheaderfmt
11731      {\glsgetgroupname{##1}}%
11732      \nopagebreak\indexspace\nobreak\@afterheading
11733    }%
11734 }
11735 }
11736 {}
```

Similarly for treenamehypergroup

```

11737 \ifdef{@glsstyle@treenamehypergroup}%
11738 {%
11739  \renewglossarystyle{treenamehypergroup}{%
11740    \setglossarystyle{treenoname}%
11741    \renewcommand*{\glossaryheader}{%
11742      \par\noindent\glstreenavigationfmt{\glsnavigation}\par
11743      \nobreak\@afterheading\indexspace}%
11744    \renewcommand*{\glsgroupheading}[1]{%
11745      \par\noindent
11746      \glstreegroupheaderfmt
11747      {\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
11748      \nopagebreak\indexspace\nobreak\@afterheading}%
11749 }
11750 }
11751 {}
```

The alttree style is redefined to make it easier to made minor adjustments.

```

11752 \ifdef{@glsstyle@alttree}%
11753 {%
```

Only redefine this style if it's already been defined.

<code>\glsxtralttreeSymbolDescLocation{<label>}{<location list>}</code>

Layout the symbol, description and location for top-level entries.

```

11754 \newcommand{\glsxtralttreeSymbolDescLocation}[2]{%
```

```

11755   {%
11756     \let\par\glsxtrAltTreePar
11757     \ifglshassymbol{#1}{(\glossentrysymbol{#1})\space}{}%
11758     \glossentrydesc{#1}\glspostdescription\glstreeprelocation #2\par
11759   }%
11760 }

```

`trAltTreeIndent` Paragraph indent for subsequent paragraphs in multi-paragraph descriptions.

```
11761 \newlength\glsxtrAltTreeIndent
```

`lsxtrAltTreePar` Multi-paragraph descriptions need to keep the hanging indent.

```

11762 \newcommand{\glsxtrAltTreePar}{%
11763   \@@par
11764   \glsxtrAltTreeSetHangIndent
11765   \setlength{\parindent}{\dimexpr\hangindent+\glsxtrAltTreeIndent}%
11766 }

```

`mbolDescLocation` `\glsxtralttreeSubSymbolDescLocation{<level>}{<label>}{<location list>}`

Layout the symbol, description and location for sub-entries. Defaults to the same as the top-level.

```

11767 \newcommand{\glsxtralttreeSubSymbolDescLocation}[3]{%
11768   \glsxtralttreeSymbolDescLocation{#2}{#3}%
11769 }

```

`trtreeindent` 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.

```
11770 \newlength\glsxtrtreeindent
```

`sxtalttreeInit` User-level initialisation for the alttree style.

```

11771 \newcommand*{\glsxtralttreeInit}{%
11772   \settowidth{\glsxtrtreeindent}{\glstreenamefmt{\glsgetwidestname\space}}%
11773   \glsxtrAltTreeIndent=\parindent
11774 }

```

`\gglsetwidest` The original `\glssetwidest` only uses `\def`. This uses `\gdef`.

```

11775 \newcommand*{\gglsetwidest}[2][0]{%
11776   \csgdef{@glswidestname\romannumeral#1}{#2}%
11777 }

```

`\eglsetwidest` The original `\glssetwidest` only uses `\def`. This uses `\protected@csedef`.

```

11778 \newcommand*{\eglsetwidest}[2][0]{%
11779   \protected@csedef{@glswidestname\romannumeral#1}{#2}%
11780 }

```

```

\xglssetwidest Like the above but uses \protected@csxdef.
11781 \newcommand*{\xglssetwidest}[2][0]{%
11782     \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
11783 }

\lsgetwidestname Provide a user-level macro to obtain the widest top-level name.
11784 \newcommand*{\lsgetwidestname}{\@glswidestname}

\etwidestsubname Provide a user-level macro to obtain the widest sub-entry name.
11785 \newcommand*{\lsgetwidestsubname}[1]{%
11786     \ifcsundef{@glswidestname\romannumeral#1}%
11787     {\@glswidestname}%
11788     {\csuse{@glswidestname\romannumeral#1}}%
11789 }

\estTopLevelName CamelCase is easier for long command names. Provide a CamelCase synonym of \glsfindwidesttoplevelname
11790 \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 com-
mand should go at the start of the glossary. Alternatively, place at the end of the document
and save for the next run.
11791 \newrobustcmd*{\glsFindWidestUsedTopLevelName}[1][\@glo@types]{%
11792     \dimen@=0pt\relax
11793     \gls@tmp@len=0pt\relax
11794     \forall@glossaries[#1]{\@gls@type}%
11795     {%
11796         \for@glsentries[\@gls@type]{\@glo@label}%
11797         {%
11798             \ifglsused{\@glo@label}%
11799             {%
11800                 \ifglshasparent{\@glo@label}%
11801                 {}%
11802                 {%
11803                     \settowidth{\dimen@}%
11804                     {\glstreenamefmt{\glsentryname{\@glo@label}}}%
11805                     \ifdim\dimen@>\gls@tmp@len
11806                         \gls@tmp@len=\dimen@
11807                         \eglssetwidest{\glsentryname{\@glo@label}}%
11808                         \fi
11809                     }%
11810                 }%
11811                 {}%
11812             }%
11813         }%
11814     }

```

`destUsedAnyName` Like the above but doesn't check the parent key. Useful if all levels should have the same width for the name.

```
11815 \newrobustcmd*{\glsFindWidestUsedAnyName}[1][\@glo@types]{%
11816   \dimen@=0pt\relax
11817   \gls@tmp@len=0pt\relax
11818   \forallglossaries[#1]{\gls@type}{%
11819     {%
11820       \forglse{[\gls@type]}{\glo@label}{%
11821         {%
11822           \ifglsused{\glo@label}{%
11823             {%
11824               \settowidth{\dimen@}{%
11825                 \glsentryname{\glo@label}}}{%
11826               \ifdim\dimen@>\gls@tmp@len
11827                 \gls@tmp@len=\dimen@
11828                 \glssetwidest{\glsentryname{\glo@label}}{%
11829                   \fi
11830                 }{%
11831               }{%
11832             }{%
11833           }{%
11834         }{%
11835       }{%
11836     }{%
11837   }{%
11838 }
```

`ndWidestAnyName` Like the above but doesn't check if the entry has been used.

```
11835 \newrobustcmd*{\glsFindWidestAnyName}[1][\@glo@types]{%
11836   \dimen@=0pt\relax
11837   \gls@tmp@len=0pt\relax
11838   \forallglossaries[#1]{\gls@type}{%
11839     {%
11840       \forglse{[\gls@type]}{\glo@label}{%
11841         {%
11842           \settowidth{\dimen@}{%
11843             \glsentryname{\glo@label}}}{%
11844             \ifdim\dimen@>\gls@tmp@len
11845               \gls@tmp@len=\dimen@
11846               \glssetwidest{\glsentryname{\glo@label}}{%
11847                 \fi
11848               }{%
11849             }{%
11850           }{%
11851         }{%
11852       }{%
11853     }{%
11854   }{%
11855 }
```

`estUsedLevelTwo` This is like `\glsFindWidestUsedTopLevelName` but also sets the first two sub-levels as well. Any entry that has a great-grandparent is ignored.

```
11851 \newrobustcmd*{\glsFindWidestUsedLevelTwo}[1][\@glo@types]{%
11852   \dimen@=0pt\relax
11853   \dimen@i=0pt\relax
11854   \dimen@ii=0pt\relax
11855   \forallglossaries[#1]{\gls@type}{%
11856     {%
```

```

11857 \forglsentries[\@gls@type]{\@glo@label}%
11858 {%
11859   \ifglsused{\@glo@label}%
11860   {%
11861     \ifglshasparent{\@glo@label}%
11862     {%
11863       \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@label}}@parent}%
11864       \ifglshasparent{\@glo@parent}%
11865       {%
11866         \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@parent}}@parent}%
11867         \ifglshasparent{\@glo@parent}%
11868         {}%
11869         {%
11870           \settowidth{\gls@tmp[1]}%
11871             {\glstreenamefmt{\glsentryname{\@glo@label}}}%
11872             \ifdim\gls@tmp[1]>\dimen@ii
11873               \dimen@ii=\gls@tmp[1]
11874               \eglssetwidest[2]{\glsentryname{\@glo@label}}%
11875             \fi
11876           }%
11877         }%
11878         {%
11879           \settowidth{\gls@tmp[1]}%
11880             {\glstreenamefmt{\glsentryname{\@glo@label}}}%
11881             \ifdim\gls@tmp[1]>\dimen@i
11882               \dimen@i=\gls@tmp[1]
11883               \eglssetwidest[1]{\glsentryname{\@glo@label}}%
11884             \fi
11885           }%
11886         }%
11887         {%
11888           \settowidth{\gls@tmp[1]}%
11889             {\glstreenamefmt{\glsentryname{\@glo@label}}}%
11890             \ifdim\gls@tmp[1]>\dimen@o
11891               \dimen@o=\gls@tmp[1]
11892               \eglssetwidest{\glsentryname{\@glo@label}}%
11893             \fi
11894           }%
11895         }%
11896         {}%
11897       }%
11898     }%
11899   }

```

dWidestLevelTwo This is like \glsFindWidestUsedLevelTwo but doesn't check if the entry has been used.

```

11900 \newrobustcmd*\glsFindWidestLevelTwo[1][\@glo@types]{%
11901   \dimen@=0pt\relax
11902   \dimen@i=0pt\relax
11903   \dimen@ii=0pt\relax

```

```

11904 \forallglossaries[#1]{\@gls@type}%
11905 {%
11906   \forglsentries[\@gls@type]{\@glo@label}%
11907   {%
11908     \ifglshasparent{\@glo@label}%
11909     {%
11910       \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@label}}@parent}%
11911       \ifglshasparent{\@glo@parent}%
11912       {%
11913         \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@parent}}@parent}%
11914         \ifglshasparent{\@glo@parent}%
11915         {}%
11916         {%
11917           \settowidth{\gls@tmp[1]}%
11918             {\glstreenamefmt{\glsentryname{\@glo@label}}}%
11919           \ifdim\gls@tmp[1]>\dimen@ii
11920             \dimen@ii=\gls@tmp[1]
11921             \eglssetwidest[2]{\glsentryname{\@glo@label}}%
11922           \fi
11923         }%
11924       }%
11925     {%
11926       \settowidth{\gls@tmp[1]}%
11927         {\glstreenamefmt{\glsentryname{\@glo@label}}}%
11928       \ifdim\gls@tmp[1]>\dimen@i
11929         \dimen@i=\gls@tmp[1]
11930         \eglssetwidest[1]{\glsentryname{\@glo@label}}%
11931       \fi
11932     }%
11933   }%
11934   {%
11935     \settowidth{\gls@tmp[1]}%
11936       {\glstreenamefmt{\glsentryname{\@glo@label}}}%
11937     \ifdim\gls@tmp[1]>\dimen@o
11938       \dimen@o=\gls@tmp[1]
11939       \eglssetwidest{\glsentryname{\@glo@label}}%
11940     \fi
11941   }%
11942 }%
11943 }%
11944 }

```

`\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.

```

11945 \newrobustcmd*\glsFindWidestUsedAnyNameSymbol}[2][\@glo@types]{%
11946   \dimen@=0pt\relax
11947   \gls@tmp[1]=0pt\relax
11948   #2=0pt\relax
11949   \forallglossaries[#1]{\@gls@type}%

```

```

11950  {%
11951      \forglsentries[\@gls@type]{\@glo@label}%
11952      {%
11953          \ifglsused{\@glo@label}%
11954          {%
11955              \settowidth{\dimen@}%
11956              {\glstreenamefmt{\glsentryname{\@glo@label}}}%
11957              \ifdim\dimen@>\gls@tmp{%
11958                  \gls@tmp=\dimen@%
11959                  \glssetwidest{\glsentryname{\@glo@label}}%
11960              \fi%
11961              \settowidth{\dimen@}%
11962              {\glsentrysymbol{\@glo@label}}%
11963              \ifdim\dimen@>#2\relax%
11964                  #2=\dimen@%
11965              \fi%
11966          }%
11967          {}%
11968      }%
11969  }%
11970 }

```

`\stAnyNameSymbol` Like the above but doesn't check if the entry has been used.

```

11971  \newrobustcmd*\glsFindWidestAnyNameSymbol}[2][\@glo@types]{%
11972      \dimen@=0pt\relax%
11973      \gls@tmp=0pt\relax%
11974      #2=0pt\relax%
11975      \forallglossaries[#1]{\@gls@type}%
11976      {%
11977          \forglsentries[\@gls@type]{\@glo@label}%
11978          {%
11979              \settowidth{\dimen@}%
11980              {\glstreenamefmt{\glsentryname{\@glo@label}}}%
11981              \ifdim\dimen@>\gls@tmp{%
11982                  \gls@tmp=\dimen@%
11983                  \glssetwidest{\glsentryname{\@glo@label}}%
11984              \fi%
11985              \settowidth{\dimen@}%
11986              {\glsentrysymbol{\@glo@label}}%
11987              \ifdim\dimen@>#2\relax%
11988                  #2=\dimen@%
11989              \fi%
11990          }%
11991      }%
11992 }

```

`\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.

```
11993 \newrobustcmd*{\glsFindWidestUsedAnyNameSymbolLocation}[3][\@glo@types]{%
11994   \dimen@=0pt\relax
11995   \gls@tmp@len=0pt\relax
11996   #2=0pt\relax
11997   #3=0pt\relax
11998   \forallglossaries[#1]{\@gls@type}{%
11999   {%
12000     \forglsentries[\@gls@type]{\@glo@label}{%
12001     {%
12002       \ifglsused{\@glo@label}{%
12003       {%
12004         \settowidth{\dimen@}{%
12005           {\glsentryname{\glo@label}}}}%
12006         \ifdim\dimen@>\gls@tmp@len
12007           \gls@tmp@len=\dimen@
12008           \glssetwidest{\glsentryname{\glo@label}}{%
12009             \fi
12010             \settowidth{\dimen@}{%
12011               {\glsentrysymbol{\glo@label}}}}%
12012             \ifdim\dimen@>#2\relax
12013               #2=\dimen@
12014             \fi
12015             \settowidth{\dimen@}{%
12016               {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}}%
12017             \ifdim\dimen@>#3\relax
12018               #3=\dimen@
12019             \fi
12020           }%
12021           {}%
12022         }%
12023       }%
12024     }%
```

`eSymbolLocation` Like the `\glsFindWidestUsedAnyNameSymbol` but doesn't check if the entry has been used.

```
12025 \newrobustcmd*{\glsFindWidestAnyNameSymbolLocation}[3][\@glo@types]{%
12026   \dimen@=0pt\relax
12027   \gls@tmp@len=0pt\relax
12028   #2=0pt\relax
12029   #3=0pt\relax
12030   \forallglossaries[#1]{\@gls@type}{%
12031   {%
12032     \forglsentries[\@gls@type]{\@glo@label}{%
12033     {%
12034       \settowidth{\dimen@}{%
12035         {\glsentryname{\glo@label}}}}%
12036       \ifdim\dimen@>\gls@tmp@len
12037         \gls@tmp@len=\dimen@
12038         \glssetwidest{\glsentryname{\glo@label}}{%
```

```

12039      \fi
12040      \settowidth{\dimen@}%
12041          {\glsentrysymbol{@glo@label}}%
12042      \ifdim\dimen@>\#2\relax
12043          #2=\dimen@
12044      \fi
12045      \settowidth{\dimen@}%
12046          {\GlsXtrFormatLocationList{\glsentrynumberlist{@glo@label}}}%
12047      \ifdim\dimen@>\#3\relax
12048          #3=\dimen@
12049      \fi
12050  }%
12051 }%
12052 }

```

`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.

```

12053 \newrobustcmd*{\glsFindWidestUsedAnyNameLocation}[2][{@glo@types}]{%
12054     \dimen@=0pt\relax
12055     \gls@tmp@len=0pt\relax
12056     #2=0pt\relax
12057     \forallglossaries[#1]{\gls@type}%
12058     {%
12059         \forallglsentries[@gls@type]{@glo@label}%
12060         {%
12061             \ifglsused{@glo@label}%
12062             {%
12063                 \settowidth{\dimen@}%
12064                     {\glstreenamefmt{\glsentryname{@glo@label}}}%
12065                 \ifdim\dimen@>\gls@tmp@len
12066                     \gls@tmp@len=\dimen@
12067                     \glssetwidest{\glsentryname{@glo@label}}%
12068                 \fi
12069                 \settowidth{\dimen@}%
12070                     {\GlsXtrFormatLocationList{\glsentrynumberlist{@glo@label}}}%
12071                 \ifdim\dimen@>\#2\relax
12072                     #2=\dimen@
12073                 \fi
12074             }%
12075             {}%
12076         }%
12077     }%
12078 }

```

`AnyNameLocation` Like the `\glsFindWidestAnyNameLocation` but doesn't check the `first use` flag.

```

12079 \newrobustcmd*{\glsFindWidestAnyNameLocation}[2][{@glo@types}]{%
12080     \dimen@=0pt\relax
12081     \gls@tmp@len=0pt\relax

```

```

12082     #2=0pt\relax
12083     \forallglossaries[#1]{\@gls@type}%
12084     {%
12085         \forglentries[\@gls@type]{\@glo@label}%
12086         {%
12087             \settowidth{\dimen@}%
12088             {\glstreenamefmt{\glsentryname{\@glo@label}}}%
12089             \ifdim\dimen@>\gls@tmpplen
12090                 \gls@tmpplen=\dimen@
12091                 \eglssetwidest{\glsentryname{\@glo@label}}%
12092             \fi
12093             \settowidth{\dimen@}%
12094             {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}%
12095             \ifdim\dimen@>#2\relax
12096                 #2=\dimen@
12097             \fi
12098         }%
12099     }%
12100 }

```

`\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`.

```

12101 \newcommand*{\glsxtrComputeTreeIndent}[1]{%
12102     \glstreeindent=\glsxtrtreeindent\relax
12103 }

```

`\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.

```

12104 \newcommand*{\glsxtrComputeTreeSubIndent}[3]{%
12105     \ifcsundef{\glswidestname\romannumeral#1}%
12106     {%
12107         \settowidth{#3}{\glstreenamefmt{\@glswidestname\space}}%
12108     }%
12109     {%
12110         \settowidth{#3}{\glstreenamefmt{%
12111             \csname @glswidestname\romannumeral#1\endcsname\space}}%
12112     }%
12113 }

```

`\setHangIndent` Set `\hangindent` for top-level entries:

```

12114 \newcommand*{\glsxtrAltTreeSetHangIndent}{\hangindent\glstreeindent}

```

```

etSubHangIndent Set \hangindent for sub-entries:
12115 \newcommand*{\glsxtrAltTreeSetSubHangIndent}[1]{\hangindent\glstreeindent}

Redefine alttree:
12116 \renewglossarystyle{alttree}{%
12117   \renewenvironment{theglossary}{%
12118     {%
12119       \glsxtralttreeInit
12120       \def\@gls@prevlevel{-1}%
12121       \mbox{}\par}%
12122     {\par}%
12123     \renewcommand*{\glossaryheader}{()}%
12124     \renewcommand*{\glsgroupheading}[1]{()}%
12125     \renewcommand{\glossentry}[2]{%
12126       \ifnum\@gls@prevlevel=0\relax
12127       \else
12128         \glsxtrComputeTreeIndent{##1}%
12129       \fi
12130       \parindent\glstreeindent
12131       \glsxtrAltTreeSetHangIndent
12132       \makebox[0pt][r]%
12133     {%
12134       \glstreenamebox{\glstreeindent}%
12135     {%
12136       \glsentryitem{##1}%
12137       \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
12138     }%
12139   }%
12140   \glsxtralttreeSymbolDescLocation{##1}{##2}%
12141   \def\@gls@prevlevel{0}%
12142 }
12143 \renewcommand{\subglossentry}[3]{%
12144   \ifnum##1=1\relax
12145     \glssubentryitem{##2}%
12146   \fi
12147   \ifnum\@gls@prevlevel=##1\relax
12148   \else
12149     \glsxtrComputeTreeSubIndent{##1}{##2}{\gls@tmp{len}}%
12150     \ifnum\@gls@prevlevel<##1\relax
12151       \setlength\glstreeindent{\gls@tmp{len}}
12152       \addtolength\glstreeindent\parindent
12153       \parindent\glstreeindent
12154     \else
12155       \ifnum\@gls@prevlevel=0\relax
12156         \glsxtrComputeTreeIndent{##2}%
12157       \else
12158         \glsxtrComputeTreeSubIndent{\@gls@prevlevel}{##2}{\glstreeindent}%
12159       \fi
12160       \addtolength\parindent{-\glstreeindent}%

```

```

12161      \setlength\glstreeindent\parindent
12162      \fi
12163      \fi
12164      \glsxtrAltTreeSetSubHangIndent{##1}%
12165      \makebox[0pt][r]{\glstreenamebox{\gls@tmplen}{%
12166          \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}}}%
12167      \glsxtralttreeSubSymbolDescLocation{##1}{##2}{##3}%
12168      \def\@gls@prevlevel{##1}%
12169  }%
12170  \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
12171 }
12172 }%
12173 {%
12174 }

```

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.

```

12175 \ifdef{\@glsstyle@alttreegroup}
12176 {%
12177     \renewglossarystyle{alttreegroup}{%
12178         \setglossarystyle{alttree}%
12179         \renewcommand{\glsgroupheading}[1]{\par
12180             \def\@gls@prevlevel{-1}%
12181             \hangindent0pt\relax
12182             \parindent0pt\relax
12183             \glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
12184             \nopagebreak\indexspace\nopagebreak
12185     }%
12186 }
12187 }%
12188 {%
12189 }

```

Similarly for `alttreehypergroup`.

```

12190 \ifdef{\@glsstyle@alttreehypergroup}
12191 {%
12192     \renewglossarystyle{alttreehypergroup}{%
12193         \setglossarystyle{alttree}%
12194         \renewcommand*{\glossaryheader}{%
12195             \par
12196             \def\@gls@prevlevel{-1}%
12197             \hangindent0pt\relax
12198             \parindent0pt\relax
12199             \glstreenavigationfmt{\glsnavigation}\par\indexspace
12200     }%
12201     \renewcommand*{\glsgroupheading}[1]{%
12202         \par
12203         \def\@gls@prevlevel{-1}%
12204         \hangindent0pt\relax
12205         \parindent0pt\relax

```

```

12206     \glstreegroupheaderfmt
12207         {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}\par
12208         \nopagebreak\indexspace\nopagebreak
12209     }%
12210 }
12211 }%
12212 {%
12213 }

```

2.9 Multicolumn Styles

Adjust `mcolindexgroup` to discourage page breaks after the group headings.

```

12214 \ifdef{@glsstyle@mcolindexgroup}
12215 {%
12216     \renewglossarystyle{mcolindexgroup}{%
12217         \setglossarystyle{mcolindex}{%
12218             \renewcommand*{\glsgroupheading}[1]{%
12219                 \item\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
12220                 \nopagebreak\indexspace\nobreak\@afterheading
12221             }%
12222         }%
12223 }%
12224 {%
12225 }

```

Similarly for `mcolindexhypergroup`.

```

12226 \ifdef{@glsstyle@mcolindexhypergroup}
12227 {%
12228     \renewglossarystyle{mcolindexhypergroup}{%
12229         \setglossarystyle{mcolindex}{%
12230             \renewcommand*{\glossaryheader}{%
12231                 \item\glstreenavigationfmt{\glsnavigation}%
12232                 \indexspace
12233             }%
12234             \renewcommand*{\glsgroupheading}[1]{%
12235                 \item\glstreegroupheaderfmt
12236                     {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}\%
12237                     \nopagebreak\indexspace\nobreak\@afterheading
12238             }%
12239         }%
12240 }%
12241 {%
12242 }

```

Similarly for `mcolindexspannav`.

```

12243 \ifdef{@glsstyle@mcolindexspannav}
12244 {%
12245     \renewglossarystyle{mcolindexspannav}{%
12246         \setglossarystyle{index}{%

```

```

12247 \renewenvironment{theglossary}%
12248 {%
12249   \begin{multicols}{\glsmcols}[\noindent\glstreenavigationfmt{\glsnavigation}]%
12250   \setlength{\parindent}{0pt}%
12251   \setlength{\parskip}{0pt plus 0.3pt}%
12252   \let\item\glstreeitem}%
12253 {\end{multicols}}%
12254 \renewcommand*\glsgroupheading[1]{%
12255   \item\glstreegroupheaderfmt
12256   {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
12257   \nopagebreak\indexspace\nobreak\@afterheading
12258 }%
12259 }
12260 }%
12261 {%
12262 }

```

Similarly for mcoltreegroup.

```

12263 \ifdef{@glsstyle@mcoltreegroup}%
12264 {%
12265   \renewglossarystyle{mcoltreegroup}{%
12266     \setglossarystyle{mcoltree}%
12267     \renewcommand{\glsgroupheading}[1]{\par
12268       \noindent\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}}%
12269       \nopagebreak\indexspace\nobreak\@afterheading
12270   }%
12271 }
12272 }%
12273 {%
12274 }

```

Similarly for mcoltreehypergroup.

```

12275 \ifdef{@glsstyle@mcoltreehypergroup}%
12276 {%
12277   \renewglossarystyle{mcoltreehypergroup}{%
12278     \setglossarystyle{mcoltree}%
12279     \renewcommand*\glossaryheader{%
12280       \par\noindent\glstreenavigationfmt{\glsnavigation}\par\indexspace
12281     }%
12282     \renewcommand*\glsgroupheading[1]{%
12283       \par\noindent
12284       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
12285       \nopagebreak\indexspace\nobreak\@afterheading
12286     }%
12287   }
12288 }%
12289 {%
12290 }

```

Similarly for mcoltreespannav.

```

12291 \ifdef{@glsstyle@mcoltreespannav}%

```

```

12292 {%
12293   \renewglossarystyle{mcoltreeespannav}{%
12294     \setglossarystyle{tree}%
12295     \renewenvironment{theglossary}%
12296     {%
12297       \begin{multicols}{\glsmcols}%
12298         [\noindent\glstreenavigationfmt{\glsnavigation}]%
12299         \setlength{\parindent}{0pt}%
12300         \setlength{\parskip}{0pt plus 0.3pt}%
12301     }%
12302   {\end{multicols}}%
12303   \renewcommand*{\glsgroupheading}[1]{%
12304     \par\noindent
12305     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
12306     \nopagebreak\indexspace\nobreak\@afterheading
12307   }%
12308 }
12309 }%
12310 {%
12311 }

```

Similarly for mcoltreeonamegroup.

```

12312 \ifdef{@glsstyle@mcoltreeonamegroup}%
12313 {%
12314   \renewglossarystyle{mcoltreeonamegroup}{%
12315     \setglossarystyle{mcoltreeoname}%
12316     \renewcommand{\glsgroupheading}[1]{\par
12317       \noindent\glstreegroupheaderfmt{\glsgetgroupname{##1}}}%
12318       \nopagebreak\indexspace\nobreak\@afterheading
12319   }%
12320 }
12321 }%
12322 {%
12323 }

```

Similarly for mcoltreeonamehypergroup.

```

12324 \ifdef{@glsstyle@mcoltreeonamehypergroup}%
12325 {%
12326   \renewglossarystyle{mcoltreeonamehypergroup}{%
12327     \setglossarystyle{mcoltreeoname}%
12328     \renewcommand*{\glossaryheader}{%
12329       \par\noindent\glstreenavigationfmt{\glsnavigation}\par\indexspace}%
12330     \renewcommand*{\glsgroupheading}[1]{%
12331       \par\noindent
12332       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
12333       \nopagebreak\indexspace\nobreak\@afterheading
12334   }%
12335 }%
12336 {%
12337 }

```

Similarly for `mcolreenonamespannav`.

```
12338 \ifdef{@glsstyle@mcolreenonamespannav}
12339 {%
12340   \renewglossarystyle{mcolreenonamespannav}{%
12341     \setglossarystyle{treenoname}%
12342     \renewenvironment{theglossary}%
12343     {%
12344       \begin{multicols}{\glsmcols}%
12345         [\noindent\glstreenavigationfmt{\glsnavigation}]%
12346         \setlength{\parindent}{0pt}%
12347         \setlength{\parskip}{0pt plus 0.3pt}%
12348     }%
12349   {\end{multicols}}%
12350   \renewcommand*\glsgroupheading[1]{%
12351     \par\noindent
12352     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
12353     \nopagebreak\indexspace\nobreak\@afterheading}%
12354 }
12355 }%
12356 {%
12357 }
```

`mcolaltree` needs adjusting so that it uses `\glsxtralttreeInit`. This doesn't use `\mbox{}``\par` which would unbalance the top of the columns.

```
12358 \ifdef{@glsstyle@mcolaltree}
12359 {%
12360   \renewglossarystyle{mcolaltree}{%
12361     \setglossarystyle{alttree}%
12362     \renewenvironment{theglossary}%
12363     {%
12364       \glsxtralttreeInit
12365       \def@gls@prevlevel{-1}%
12366       \begin{multicols}{\glsmcols}%
12367     }%
12368   {\par\end{multicols}}%
12369 }
12370 }%
12371 {%
12372 }
```

Redefine `mcolaltreegroup` to discourage page breaks after the group headings.

```
12373 \ifdef{@glsstyle@mcolaltreegroup}
12374 {%
12375   \renewglossarystyle{mcolaltreegroup}{%
12376     \setglossarystyle{mcolaltree}%
12377     \renewcommand*\glsgroupheading[1]{\par
12378       \def@gls@prevlevel{-1}%
12379       \hangindent0pt\relax
12380       \parindent0pt\relax
12381       \glstreegroupheaderfmt{\glsgetgroupname{##1}}}%
12382 }
```

```

12382      \nopagebreak\indexspace\nopagebreak
12383  }%
12384 }
12385 }%
12386 {%
12387 }

```

Similarly for mcolaltreehypergroup.

```

12388 \ifdef{\@glsstyle@mcolaltreehypergroup}
12389 {%
12390   \renewglossarystyle{mcolaltreehypergroup}{%
12391     \setglossarystyle{mcolaltree}{%
12392       \renewcommand*\glossaryheader{%
12393         \par
12394         \def\@gls@prevlevel{-1}%
12395         \hangindent0pt\relax
12396         \parindent0pt\relax
12397         \glstreenavigationfmt{\glsnavigation}%
12398         \par\indexspace
12399       }%
12400       \renewcommand*\glsgroupheading[1]{%
12401         \par
12402         \def\@gls@prevlevel{-1}%
12403         \hangindent0pt\relax
12404         \parindent0pt\relax
12405         \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroup{##1}}}%
12406         \nopagebreak\indexspace\nopagebreak
12407       }%
12408     }%
12409   }%
12410 {%
12411 }

```

Similarly for mcolaltreespannav.

```

12412 \ifdef{\@glsstyle@mcolaltreespannav}
12413 {%
12414   \renewglossarystyle{mcolaltreespannav}{%
12415     \setglossarystyle{alttree}{%
12416       \renewenvironment{theglossary}{%
12417         {%
12418           \glsxtralttreeInit
12419           \def\@gls@prevlevel{-1}%
12420           \begin{multicols}{\glsmcols}%
12421             [\noindent\glstreenavigationfmt{\glsnavigation}]%
12422         }%
12423         {\par\end{multicols}}%
12424         \renewcommand*\glsgroupheading[1]{%
12425           \par
12426           \def\@gls@prevlevel{-1}%
12427           \hangindent0pt\relax

```

```
12428     \parindent0pt\relax
12429     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroup{##1}}}{%
12430     \nopagebreak\indexspace\nopagebreak
12431 }%
12432 }
12433 }%
12434 {%
12435 }
```

Reset the default style

```
12436 \ifx\@glossary@default@style\relax
12437 \else
12438   \setglossarystyle{@glsxtr@current@style}
12439 \fi
```

3 bookindex style (glossary-bookindex.sty)

3.1 Package Initialisation and Options

```
12440 \NeedsTeXFormat{LaTeX2e}
12441 \ProvidesPackage{glossary-bookindex}[2017/11/08 v1.22 (NLCT)]

    Load required packages.
12442 \RequirePackage{multicol}
12443 \RequirePackage{glossary-tree}

trbookindexcols  Number of columns.
12444 \newcommand{\glsxtrbookindexcols}{2}

trbookindexname  Format used for top-level entries. (Argument is the label.)
12445 \newcommand*{\glsxtrbookindexname}[1]{\glossentryname{#1}}


ookindexsubname  Format used for sub entries.
12446 \newcommand*{\glsxtrbookindexsubname}[1]{\glsxtrbookindexname{#1}}


sxtrprelocation  Provide in case glossaries-stylemods isn't loaded.
12447 \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.
12448 \newcommand*{\glsxtrbookindexprelocation}[1]{%
12449   \glsxtrifhasfield{location}{#1}%
12450   {,\glsxtrprelocation}%
12451   {\glsxtrprelocation}%
12452 }
```

xsubprelocation Separator used before location list for sub-entries.

```
12453 \newcommand*{\glsxtrbookindexsubprelocation}[1]{%
12454   \glsxtrbookindexprelocation{#1}%
12455 }
```

xparentchildsep Separator used between top-level parent and child entry.

```
12456 \newcommand{\glsxtrbookindexparentchildsep}{\nopagebreak}
```

rentsubchildsep Separator used between sub-level parent and child entry.

```
12457 \newcommand{\glsxtrbookindexparentsubchildsep}{\glsxtrbookindexparentchildsep}
```

ookindexbetween Between two top-level entries identified by the labels in the arguments.
12458 \newcommand{\glsxtrbookindexbetween}[2]{}

indexsubbetween Between two level 1 entries identified by the labels in the arguments.
12459 \newcommand{\glsxtrbookindexsubbetween}[2]{}

exsubsubbetween Between two level 2 entries identified by the labels in the arguments.
12460 \newcommand{\glsxtrbookindexsubsubbetween}[2]{}

indexatendgroup At the end of a letter group. The argument is the index of the last top-level entry.
12461 \newcommand{\glsxtrbookindexatendgroup}[1]{}

exsubatendgroup At the end of a letter group. The argument is the index of the last level 1 entry.
12462 \newcommand{\glsxtrbookindexsubatendgroup}[1]{}

ubsubatendgroup At the end of a letter group. The argument is the index of the last level 2 entry.
12463 \newcommand{\glsxtrbookindexsubsubatendgroup}[1]{}

kindexgroupskip Group separator.
12464 \newcommand{\glsxtrbookindexgroupskip}{\ifglsnogroupskip\else\indexspace\fi}
Format group title.

dexformatheader Group separator.
12465 \newcommand*\glsxtrbookindexformatheader[1]{%
12466 \par{\centering\glstreegroupheaderfmt{#1}\par}%
12467 }

okindexbookmark Book mark group heading if supported.
12468 \ifdef\pdfbookmark
12469 {%
12470 \newcommand*\glsxtrbookindexbookmark[2]{%
12471 \ifdefstring{\@glossarysec}{chapter}%
12472 {\pdfbookmark[1]{#1}{#2}}%
12473 {\pdfbookmark[2]{#1}{#2}}%
12474 }%
12475 }%
12476 {%
12477 \newcommand*\glsxtrbookindexbookmark[2]{}
12478 }

kindexcolspread
12479 \newcommand*\glsxtrbookindexcolspread(){}

Define the style.
12480 \newglossarystyle{bookindex}{%
12481 \setglossarystyle{index}%
12482 \renewenvironment{theglossary}%

```

12483 {%
12484   \ifdefempty\glsxtrbookindexcols{%
12485     {\begin{multicols}{\glsxtrbookindexcols}}{%
12486       {\begin{multicols}{\glsxtrbookindexcols}[\glsxtrbookindexcols{spread}]}{%
12487         \setlength{\parindent}{0pt}{%
12488           \setlength{\parskip}{0pt plus 0.3pt}{%
12489             \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep{%
12490               \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep{%
12491                 \let\@glsxtr@bookindex@between@gobble{%
12492                   \let\@glsxtr@bookindex@subbetween@gobble{%
12493                     \let\@glsxtr@bookindex@subsubbetween@gobble{%
12494                       \let\@glsxtr@bookindex@atendgroup\relax{%
12495                         \let\@glsxtr@bookindex@subatendgroup\relax{%
12496                           \let\@glsxtr@bookindex@subsubatendgroup\relax{%
12497                             \let\@glsxtr@bookindexgroupskip\relax{%
12498                           }{%
12499                         }{%

```

Do end group hooks.

```

12500   \let\@glsxtr@bookindex@subsubatendgroup{%
12501     \let\@glsxtr@bookindex@subatendgroup{%
12502       \let\@glsxtr@bookindex@atendgroup{%

```

End multicols environment.

```

12503   \end{multicols}{%
12504 }{%

```

Use ragged right as columns are likely to be narrow and indexes tend not to be fully justified.

```

12505   \renewcommand*\glossaryheader{\raggedright}{%

```

Top level entry format.

```

12506   \renewcommand*\glossentry[2]{%

```

Do separator.

```

12507   \let\@glsxtr@bookindex@between{##1}{%

```

Update separators.

```

12508   \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep{%
12509     \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep{%
12510       \let\@glsxtr@bookindex@subbetween@gobble{%
12511         \let\@glsxtr@bookindex@subsubbetween@gobble{%
12512           \edef\@glsxtr@bookindex@between{%
12513             \noexpand\glsxtrbookindexbetween{##1}{%
12514           }{%
12515             \edef\@glsxtr@bookindex@atendgroup{%
12516               \noexpand\glsxtrbookindexatendgroup{##1}{%
12517             }{%
12518               \let\@glsxtr@bookindex@subatendgroup\relax{%
12519                 \let\@glsxtr@bookindex@subsubatendgroup\relax{%

```

Format entry.

```

12520   \glstreeitem{%

```

```

12521      \glsentryitem{##1}%
12522      \glstarget{##1}{\glsxtrbookindexname{##1}}%
12523      \glsxtrbookindexprelocation{##1}##2%
12524  }%
12525  \renewcommand{\subglossentry}[3]{%
12526    \ifcase##1\relax

```

Level 0 (shouldn't happen as that's formatted with \glossentry).

```

12527      \glstreeitem
12528      \or

```

Level 1.

```

12529      \glsxtr@bookindex@sep
12530      \glsxtr@bookindex@subbetween{##2}%
12531      \let\glsxtr@bookindex@sep\relax

```

Update separators.

```

12532      \let\glsxtr@bookindex@subsubbetween\gobble
12533      \let\glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
12534      \edef\glsxtr@bookindex@subbetween{%
12535        \noexpand\glsxtrbookindexsubbetween{##2}%
12536  }%
12537      \edef\glsxtr@bookindex@atsubendgroup{%
12538        \noexpand\glsxtrbookindexatsubendgroup{##1}%
12539  }%

```

Start sub-item.

```

12540      \glstreesubitem
12541      \glssubentryitem{##2}%
12542      \else

```

All other levels.

```

12543      \glsxtr@bookindex@subsep
12544      \glsxtr@bookindex@subsubbetween{##2}%

```

Update separators.

```

12545      \let\glsxtr@bookindex@subsep\relax
12546      \edef\glsxtr@bookindex@subsubbetween{%
12547        \noexpand\glsxtrbookindexsubsubbetween{##2}%
12548  }%
12549      \edef\glsxtr@bookindex@atsubsubendgroup{%
12550        \noexpand\glsxtrbookindexatsubsubendgroup{##1}%
12551  }%

```

Start sub-sub-item.

```

12552      \glstreesubsubitem
12553      \fi

```

Format entry.

```

12554      \glstarget{##2}{\glsxtrbookindexsubname{##2}}%
12555      \glsxtrbookindexsubprelocation{##2}##3%
12556  }%

```

The group skip is moved to the group heading to avoid interfering with the end letter group hooks.

```
12557 \renewcommand*{\glsgroupskip}{}%
```

Group heading format.

```
12558 \renewcommand*{\glsgroupheading}[1]{%
```

Do end group hooks.

```
12559 \@glsxtr@bookindex@subsubatendgroup
```

```
12560 \@glsxtr@bookindex@subatendgroup
```

```
12561 \@glsxtr@bookindex@atendgroup
```

```
12562 \@glsxtr@bookindexgroupskip
```

Update separators.

```
12563 \let\@glsxtr@bookindexgroupskip\glsxtrbookindexgroupskip
```

```
12564 \let\@glsxtr@bookindex@between@gobble
```

```
12565 \let\@glsxtr@bookindex@atendgroup\relax
```

```
12566 \let\@glsxtr@bookindex@subatendgroup\relax
```

```
12567 \let\@glsxtr@bookindex@subsubatendgroup\relax
```

Fetch the group title from the label supplied in #1.

```
12568 \glsxtrgetgroup{##1}{\thisgrptitle}%
```

Do the PDF bookmark if supported.

```
12569 \glsxtrbookindexbookmark{\thisgrptitle}{index.##1}%
```

Format the group title.

```
12570 \glsxtrbookindexformatheader{\thisgrptitle}%
```

```
12571 \nopagebreak\indexspace\nopagebreak\@afterheading
```

```
12572 }%
```

```
12573 }
```

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.

```
12574 \newcommand{\glsxtrbookindexthepage}{%
```

```
12575 \ifdef{\currentglossary}{\currentglossary.\arabic{page}}{\arabic{page}}%
```

```
12576 }
```

`\bookindexmarkentry` Writes entry information to the .aux file. The argument is the entry label.

```
12577 \newcommand*{\glsxtrbookindexmarkentry}[1]{%
```

```
12578 \protected@write\@auxout
```

```
12579 {\let\glsxtrbookindexthepage\relax}%
```

```
12580 {\string\glsxtr@setbookindexmark{\glsxtrbookindexthepage}{#1}}%
```

```
12581 }
```

```

setbookindexmark
12582 \newcommand*{\glsxtr@setbookindexmark}[2]{%
12583   \ifcsundef{\glsxtr@idxfirstmark@#1}{%
12584     {\csgdef{\glsxtr@idxfirstmark@#1}{\#2}}{%
12585   }{%
12586     {\csgdef{\glsxtr@idxlastmark@#1}{\#2}}{%
12587   }
}

dexfirstmarkfmt
12588 \newcommand*{\glsxtrbookindexfirstmarkfmt}[1]{%
12589   \glsentryname{\#1}}{%
12590 }

kindexfirstmark
12591 \newcommand*{\glsxtrbookindexfirstmark}{%
12592   \letcs{\glsxtr@label}{\glsxtr@idxfirstmark@\glsxtrbookindexthe\page}{%
12593   \ifdef{\glsxtr@label}{%
12594     {\glsxtrbookindexfirstmarkfmt{\glsxtr@label}}{%
12595   }{%
12596 }

ndexlastmarkfmt
12597 \newcommand*{\glsxtrbookindexlastmarkfmt}[1]{%
12598   \glsentryname{\#1}}{%
12599 }

okindexlastmark
12600 \newcommand*{\glsxtrbookindexlastmark}{%
12601   \letcs{\glsxtr@label}{\glsxtr@idxlastmark@\glsxtrbookindexthe\page}{%
12602   \ifdef{\glsxtr@label}{%
12603     {\glsxtrbookindexlastmarkfmt{\glsxtr@label}}{%
12604   }{%
12605 }
}

```

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 301
\glsfmtshort: new 301
\Glsfmtshortpl: new 302
\glsfmtshortpl: new 301
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0.3 (2015-12-02)

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\@ACRshort: added redefinition 67
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