

glossaries-extra.sty v1.28: 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}[2018/03/06 v1.28 (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}%
64 [\glsxtr@undefaction@val\glsxtr@undefaction@nr]%
65 {warn,error}%
66 {%
67   \ifcase\glsxtr@undefaction@nr\relax
68     \let\glsxtrundefaction@\glsxtr@warn@undefaction
69     \let\glsxtr@warnnonexistsordo@\glsxtr@warn@onexistsordo
70     \let@\glsxtr@redef@forglsentries@\glsxtr@do@redef@forglsentries
71   \or
72     \let\glsxtrundefaction@\glsxtr@err@undefaction
73     \let\glsxtr@warnnonexistsordo@\gobble
74     \let@\glsxtr@redef@forglsentries\relax
75   \fi
76 }

```

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

\@glsxtr@record Does nothing by default.

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

\sxtr@recordsee Does nothing by default.

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

\ulnnumberformat

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

\ultNumberFormat

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

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

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

```
83 \newcommand*{\@glsxtr@do@record@wrglossary}[1]{%
84   \begingroup
85   \ifKV@glslink@noindex
86   \else
87     \edef\@gls@label{\glsdetoklabel{#1}}%
88     \let\glslabel@gls@label
89     \glswriteentry{#1}%
90   {%
91     \ifdefempty{\@glsxtr@thevalue}{%
92     {%
93       \ifx\@glsxtr@org@theHvalue\@glsxtr@theHvalue
94       \else
95         \let\theHglsentrycounter\@glsxtr@theHvalue
96       \fi
97       \glsxtr@saveentrycounter
98       \let\@@do@@wrglossary\@glsxtr@dorecord
99     }%
100   {%
101     \let\theHglsentrycounter\@glsxtr@thevalue
102     \let\theHglsentrycounter\@glsxtr@theHvalue
103     \let\@@do@@wrglossary\@glsxtr@dorecordnodefer
104   }%
105   \ifx\@glsxtr@record@setting\@glsxtr@record@setting@alsoindex
106     \glsxtr@do@wrglossary{#1}%
107   \else
108     \@@glsxtrwrglossmark
109     \@@do@@wrglossary
110   \fi
111 }%
112 \fi
113 \endgroup
114 }
```

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

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

@@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).

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

```
120 \ifglsentryexists{#2}{}%
121 {%
122   \@@glsxtrwrglossmark
123   \begingroup
```

Save the label in case it's needed.

```
124   \edef\@gls@label{\glsdetoklabel{#2}}%
125   \let\glslabel\@gls@label
126   \let\@glsnumberformat\glsxtr@defaultnumberformat
127   \def\@glsxtr@thevalue{}%
128   \def\@glsxtr@theHvalue{\glsxtr@thevalue}%
129   \let\@glsxtr@org@theHvalue\glsxtr@theHvalue
```

Entry hasn't been defined, so we'll have to assume the page number by default.

```
130 \def\@gls@counter{page}%
```

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

```
131 \gls@setdefault@glslink@opts
132 \setkeys{#3}{#1}%
133 \ifKV@glslink@noindex
134 \else
135   \glswriteentry{#2}%
136 {%
```

Check if thevalue has been set.

```
137 \ifdefempty{\glsxtr@thevalue}%
138 {%
```

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

```
139 \ifx\glsxtr@org@theHvalue\glsxtr@theHvalue
140 \else
141   \let\theHglsentrycounter\glsxtr@theHvalue
142 \fi
```

Save the entry counter.

```
143 \glsxtr@saveentrycounter
```

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

```
144 \let\@@do@wrglossary\glsxtr@dorecord
145 }%
146 {%
```

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.)

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

No need to escape special characters.

```
154      \@@do@@wrglossary
155      \fi
156  }%
157      \fi
158  \endgroup
159 }%
160 }
```

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

```
161 \newcommand*{\glsxtr@dorecord}{%
162   \global\let\glsrecordlocref\theglsentrycounter
163   \let\@glsxtr@orgprefix\@glo@counterprefix
164   \ifx\theglsentrycounter\theHglsentrycounter
165     \def\@glo@counterprefix{}%
166   \else
167     \edef\@do@gls@getcounterprefix{\noexpand\@gls@getcounterprefix
168       {\theglsentrycounter}{\theHglsentrycounter}}%
169   }%
170   \@do@gls@getcounterprefix
171 \fi
172 \protected@write\@auxout{\let\glsrecordlocref\relax}{\string\glsxtr@record
173   {\@gls@label}{\@glo@counterprefix}{\@gls@counter}{\@glsnumberformat}}%
174   {\glsrecordlocref}}%
175 \glsxtr@counterrecordhook
176 \let\@glo@counterprefix\glsxtr@orgprefix
177 }
```

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.

```
178 \newcommand*{\glsxtr@dorecordnodefer}{%
179   \ifx\theglsentrycounter\theHglsentrycounter
180     \protected@write\@auxout{}{\string\glsxtr@record
181       {\@gls@label}{}{\@gls@counter}{\@glsnumberformat}}%
182       {\theglsentrycounter}}%
183   \else
184     \edef\@do@gls@getcounterprefix{\noexpand\@gls@getcounterprefix
185       {\theglsentrycounter}{\theHglsentrycounter}}%
186   }%
187   \@do@gls@getcounterprefix
188   \protected@write\@auxout{}{\string\glsxtr@record
189     {\@gls@label}{\@glo@counterprefix}{\@gls@counter}{\@glsnumberformat}}%
190     {\theglsentrycounter}}%
191 \fi
192 \glsxtr@counterrecordhook
193 }
```

```

r@recordcounter
194 \newcommand*{\@glsxtr@recordcounter}{%
195   \@glsxtr@noop@recordcounter
196 }

p@recordcounter
197 \newcommand*{\@glsxtr@noop@recordcounter}[1]{%
198   \PackageError{glossaries-extra}{\string\GlsXtrRecordCounter\space
199   requires record=only or record=alsoindex package option}{}
200 }

p@recordcounter
201 \newcommand*{\@glsxtr@op@recordcounter}[1]{%
202   \appto{\@glsxtr@counterrecordhook}{\noexpand\@glsxtr@docounterrecord{#1}}%
203 }

lsxtr@recordsee Deal with \glssee in record mode.
204 \newcommand*{\@glsxtr@recordsee}[2]{%
205   \@glsxtrwrglossmark
206   \def\@gls@xref{#2}%
207   \onelevel@sanitize\@gls@xref
208   \protected@write\@auxout{}{\string\glsxtr@recordsee{#1}{\@gls@xref}}%
209 }

srtglossaryunit
210 \newcommand{\printunsrtglossaryunit}{%
211   \print@noop@unsrtglossaryunit
212 }

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

aveentrycounter Only store the entry counter information if the indexing is on.
214 \newcommand*{\glsxtr@indexonly@saveentrycounter}{%
215   \ifKV@glslink@noindex
216   \else
217     \glsxtr@saveentrycounter
218   \fi
219 }

addloclistfield
220 \newcommand*{\glsxtr@addloclistfield}{%
221   \key@ifundefined{glossentry}{loclist}{%
222   }{%
223     \define@key{glossentry}{loclist}{\def\@glo@loclist{##1}}%
224     \appto{\gls@keymap}{\{loclist\}{loclist}}%
225     \appto{\@newglossaryentryprehook}{\def\@glo@loclist{}}%
226     \appto{\@newglossaryentryposthook}{%

```

```

227     \gls@assign@field{}{\@glo@label}{\loclist}{\@glo@loclist}%
228   }%
229   \glssetnoexpandfield{\loclist}%
230 }%
231 {}%

```

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

```

232 \key@ifundefined{glossentry}{location}%
233 {}%
234 \define@key{glossentry}{location}{\def\@glo@location{##1}%
235 \appto\@gls@keymap{, {location}{location}}%
236 \appto\@newglossaryentryprehook{\def\@glo@location{} }%
237 \appto\@newglossaryentryposthook{%
238   \gls@assign@field{}{\@glo@label}{location}{\@glo@location}%
239 }%
240 \glssetnoexpandfield{location}%
241 }%
242 {}%

```

Add a key to store the group heading.

```

243 \key@ifundefined{glossentry}{group}%
244 {}%
245 \define@key{glossentry}{group}{\def\@glo@group{##1}%
246 \appto\@gls@keymap{, {group}{group}}%
247 \appto\@newglossaryentryprehook{\def\@glo@group{} }%
248 \appto\@newglossaryentryposthook{%
249   \gls@assign@field{}{\@glo@label}{group}{\@glo@group}%
250 }%
251 \glssetnoexpandfield{group}%
252 }%
253 {}%
254 }

```

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

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

`tting@alsoindex`

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

`rd@setting@only`

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

`ord@setting@off`

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

Now define the record package option.

```

259 \define@choicekey{glossaries-extra.sty}{record}%
260   [\@glsxtr@record@setting\glsxtr@record@nr]%
261   {off,only,alsoindex}%

```

```

262 [only]%
263 {%
264   \ifcase\glsxtr@record@nr\relax
    Don't record.

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

Only record (don't index).

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

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

289   \def\glsxtrsetaliasnoindex{}%

`@gls@setupsort@none was only introduced to glossaries v4.30, so it may not be available.
If it's defined, use it to remove the unnecessary overhead of escaping and sanitizing the sort
value.

290   \ifdef@\gls@setupsort@none{\gls@setupsort@none}{}%

Load glossaries-extra-bib2gls:

291   \RequirePackage{glossaries-extra-bib2gls}%
292 }%
293 \or

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

294   \def\glsxtr@setup@record{%
295     \renewcommand*{\@do@seeglossary}{\glsxtr@dosee@alsoindex@glossary}%
296     \let\@glsxtr@record\@glsxtr@record
297     \let\@do@wrglossary\glsxtr@do@alsoindex@wrglossary

```

```

298     \let\@gls@saveentrycounter\glsxtr@indexonly@glsxtr@indexonly@saveentrycounter
299     \let\glsxtrundefaction\@glsxtr@warn@undefaction
300     \let\glsxtr@warnonexistsordo\@glsxtr@warn@onexistsordo
301     \glsxtr@addloclistfield
302     \let\@glsxtr@recordcounter\glsxtr@op@recordcounter
303     \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}%
304     \undef\glsxtrsetaliasnoindex
305   }%
306   \fi
307 }

```

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

Need to provide conditional commands that are backward compatible:

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

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

`sxtrodocdeffalse`
 311 `\newcommand*{\@glsxtrdocdeffalse}{\def\@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.

```

312 \define@choicekey{glossaries-extra.sty}{docdef}
313   [\@glsxtr@docdefsetting\@glsxtr@docdefval]%
314   {false,true,restricted}[true]%
315 {%
316   \ifnum\@glsxtr@docdefval=2\relax
317     \renewcommand*{\@glsdoifexistsorwarn}{\glsdoifexists}%
318   \fi
319 }

```

`ocdefrestricted`
 320 `\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).

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

```

indexcrossrefs Automatically index cross references at the end of the document
322 \define@boolkey{glossaries-extra.sty}[@glsxtr]{indexcrossrefs}[true]{%
323   \if@glsxtrindexcrossrefs
324   \else
325     \renewcommand*{\@glsxtr@autoindexcrossrefs}{}%
326   \fi
327 }

      Switch off since this can increase the build time.
328 \glsxtrindexcrossrefsfalse
      But allow see key to switch it on automatically.

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

autoseeindex Provide a boolean option to allow the user to prevent the automatic indexing of the cross-referencing keys see,seealso and alias.
330 \define@boolkey{glossaries-extra.sty}[@glsxtr@]{autoseeindex}[true]{%
331 }
332 \glsxtr@autoseeindextrue

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

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

336 \@glsxtr@declareoption{nowarn}{%
337   \let\GlossariesExtraWarning\@gobble
338   \let\GlossariesExtraWarningNoLine\@gobble
339   \glsxtr@dooption{nowarn}%
340 }

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

postdot Shortcut for nopostdot=false
342 \@glsxtr@declareoption{postdot}{%
343   \glsxtr@dooption{nopostdot=false}%
344   \renewcommand*{\@glsxtr@defpostpunc}{}%
345   \renewcommand*{\glspostdescription}{%
346     \ifglsnopostdot\else.\spacefactor\sfcod\fi\%%
347   }%
348 }

```

```

nopostdot Needs to redefine \@glsxtr@defpostpunc
349 \define@choicekey{glossaries-extra.sty}{nopostdot}{true,false}[true]{%
350   \@glsxtr@dooption{nopostdot=#1}%
351   \renewcommand*\{@glsxtr@defpostpunc}{%
352     \renewcommand*\@glspostdescription}{%
353       \ifglsnopostdot\else.\spacefactor\sfcodespace\fi}%
354   }%
355 }

postpunc Set the post-description punctuation. This also sets the \ifglsnopostdot conditional,
which now indicates if the post-description punctuation has been suppressed.
356 \define@key{glossaries-extra.sty}{postpunc}{%
357   \@glsxtr@dooption{nopostdot=false}%
358   \ifstreq{\#1}{dot}%
359   {%
360     \renewcommand*\{@glsxtr@defpostpunc}{%
361       \renewcommand*\@glspostdescription}{.\spacefactor\sfcodespace\fi}%
362   }%
363 }%
364 {%
365   \ifstreq{\#1}{comma}%
366   {%
367     \renewcommand*\{@glsxtr@defpostpunc}{%
368       \renewcommand*\@glspostdescription}{,\spacefactor\sfcodespace\fi}%
369   }%
370 }%
371 {%
372   \ifstreq{\#1}{none}%
373   {%
374     \@glsxtr@dooption{nopostdot=true}%
375     \renewcommand*\{@glsxtr@defpostpunc}{%
376       \renewcommand*\@glspostdescription}{\spacefactor\sfcodespace\fi}%
377   }%
378 }%
379 {%
380   \renewcommand*\{@glsxtr@defpostpunc}{%
381     \renewcommand*\@glspostdescription}{\#1}%
382   }%
383 }%
384 }%
385 }%
386 }

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

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

```

```

abbreviationsdef
 389 \newcommand*{\@glsxstr@doabbreviationsdef}{%
 390   \@ifpackageloaded{babel}{%
 391     {\@providecommand{\abbreviationsname}{\acronymname}}{%
 392     {\@providecommand{\abbreviationsname}{Abbreviations}}{%
 393       \newglossary[glg-abr]{abbreviations}{gls-abr}{glo-abr}{\abbreviationsname}{%
 394         \renewcommand*{\glsxtrabbrvtype}{abbreviations}}{%
 395         \newcommand*{\printabbreviations}[1][]{%
 396           \printglossary[type=\glsxtrabbrvtype,##1]}{%
 397         }{%
 398         \disable@keys{glossaries-extra.sty}{abbreviations}}{%
 399       If the acronym option hasn't been used, change \acronymtype to \glsxtrabbrvtype.%
 400       \ifglsacronym{%
 401         \else{%
 402           \renewcommand*{\acronymtype}{\glsxtrabbrvtype}{%
 403         }{%
 404       \let\@glsxtr@declareoption{abbreviations}{%
 405         \let\@glsxtr@abbreviationsdef\@glsxtr@doabbreviationsdef{%
 406       }{%
 407     Enable shortcut commands for the abbreviations. Unlike the analogous command provided by glossaries, this uses \newcommand instead of \let as a safety feature (except for \newabbr which is also provided with \GlsXtrDefineAcShortcuts).%
 408     \newcommand*{\GlsXtrDefineAbbreviationShortcuts}{%
 409       \newcommand*{\ab}{\cglsshort}{%
 410       \newcommand*{\abp}{\cglspl}{%
 411       \newcommand*{\as}{\glsxtrshort}{%
 412       \newcommand*{\asp}{\glsxtrshortpl}{%
 413       \newcommand*{\al}{\glsxtrlong}{%
 414       \newcommand*{\alp}{\glsxtrlongpl}{%
 415       \newcommand*{\af}{\glsxtrfull}{%
 416       \newcommand*{\afp}{\glsxtrfullpl}{%
 417       \newcommand*{\Ab}{\cGls}{%
 418       \newcommand*{\Afp}{\cGlspl}{%
 419       \newcommand*{\As}{\Glsxtrshort}{%
 420       \newcommand*{\Asp}{\Glsxtrshortpl}{%
 421       \newcommand*{\Al}{\Glsxtrlong}{%
 422       \newcommand*{\Alp}{\Glsxtrlongpl}{%
 423       \newcommand*{\Af}{\Glsxtrfull}{%
 424       \newcommand*{\Afp}{\Glsxtrfullpl}{%
 425       \newcommand*{\AB}{\cGLS}{%
 426       \newcommand*{\ABP}{\cGLSpl}{%
 427       \newcommand*{\AS}{\GLSxtrshort}{%
 428       \newcommand*{\ASP}{\GLSxtrshortpl}{%
 429     }{%
 430   }{%
 431 }
```

```

429 \newcommand*{\ALP}{\GLSxtrlongpl}%
430 \newcommand*{\AF}{\GLSxtrfull}%
431 \newcommand*{\AFP}{\GLSxtrfullpl}%

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

```

Disable this command after it's been used.

```

433 \let\GlsXtrDefineAbbreviationShortcuts\relax
434 }

```

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

```

435 \newcommand*{\GlsXtrDefineAcShortcuts}%
436 \newcommand*{\ac}{\cgls}%
437 \newcommand*{\acp}{\cglsp}%
438 \newcommand*{\acs}{\glsxtrshort}%
439 \newcommand*{\acsp}{\glsxtrshortpl}%
440 \newcommand*{\acl}{\glsxtrlong}%
441 \newcommand*{\aclp}{\glsxtrlongpl}%
442 \newcommand*{\acf}{\glsxtrfull}%
443 \newcommand*{\acfp}{\glsxtrfullpl}%
444 \newcommand*{\Ac}{\cGls}%
445 \newcommand*{\Acp}{\cGlp}%
446 \newcommand*{\Acs}{\Glsxtrshort}%
447 \newcommand*{\Acsp}{\Glsxtrshortpl}%
448 \newcommand*{\Acl}{\Glsxtrlong}%
449 \newcommand*{\Aclp}{\Glsxtrlongpl}%
450 \newcommand*{\Acf}{\Glsxtrfull}%
451 \newcommand*{\Acfp}{\Glsxtrfullpl}%
452 \newcommand*{\AC}{\cGLS}%
453 \newcommand*{\ACP}{\cGLSp}%
454 \newcommand*{\ACS}{\GLSxtrshort}%
455 \newcommand*{\ACSP}{\GLSxtrshortpl}%
456 \newcommand*{\ACL}{\GLSxtrlong}%
457 \newcommand*{\ACLP}{\GLSxtrlongpl}%
458 \newcommand*{\ACF}{\GLSxtrfull}%
459 \newcommand*{\ACFP}{\GLSxtrfullpl}%

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

```

Disable this command after it's been used.

```

461 \let\GlsXtrDefineAcShortcuts\relax
462 }

```

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

```

463 \newcommand*{\GlsXtrDefineOtherShortcuts}%
464 \newcommand*{\newentry}{\newglossaryentry}%
465 \ifdef\printsymbols
466 {%

```

```

467     \newcommand*{\newsym}{\glsxtrnewsymbol}%
468 }{%
469 \ifdef\printnumbers
470 {%
471     \newcommand*{\newnum}{\glsxtrnewnumber}%
472 }{%
473 \let\GlsXtrDefineOtherShortcuts\relax
474 }

```

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.

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

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

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

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

```

477 \define@choicekey{glossaries-extra.sty}{shortcuts}%
478 [\@glsxtr@shortcutsval\@glsxtr@shortcutsnr]%
479 {acronyms,acro,abbreviations,abbr,other,all,true,ac,none,false}[true]{%
480 \ifcase\@glsxtr@shortcutsnr\relax % acronyms
481     \renewcommand*{\@glsxtr@setupshortcuts}{}%
482         \glsacrshortcutstrue
483         \DefineAcronymSynonyms
484     }%
485 \or % acro
486     \renewcommand*{\@glsxtr@setupshortcuts}{}%
487         \glsacrshortcutstrue
488         \DefineAcronymSynonyms
489     }%
490 \or % abbreviations
491     \renewcommand*{\@glsxtr@setupshortcuts}{}%
492         \GlsXtrDefineAbbreviationShortcuts
493     }%
494 \or % abbr
495     \renewcommand*{\@glsxtr@setupshortcuts}{}%
496         \GlsXtrDefineAbbreviationShortcuts
497     }%
498 \or % other
499     \renewcommand*{\@glsxtr@setupshortcuts}{}%
500         \GlsXtrDefineOtherShortcuts
501     }%

```

```

502 \or % all
503   \renewcommand*{\@glsxtr@setupshortcuts}{%
504     \glsacrshortcutstrue
505     \GlsXtrDefineAcShortcuts
506     \GlsXtrDefineAbbreviationShortcuts
507     \GlsXtrDefineOtherShortcuts
508   }%
509 \or % true
510   \renewcommand*{\@glsxtr@setupshortcuts}{%
511     \glsacrshortcutstrue
512     \GlsXtrDefineAcShortcuts
513     \GlsXtrDefineAbbreviationShortcuts
514     \GlsXtrDefineOtherShortcuts
515   }%
516 \or % ac
517   \renewcommand*{\@glsxtr@setupshortcuts}{%
518     \glsacrshortcutstrue
519     \GlsXtrDefineAcShortcuts
520   }%

```

Leave none and false as last option.

```

521 \else % none, false
522   \renewcommand*{\@glsxtr@setupshortcuts}{}%
523 \fi
524 }

```

lsxtr@doaccsupp

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

accsupp If accsupp, load glossaries-accsupp package.

```
526 \@glsxtr@declareoption{accsupp}{%
527   \renewcommand*{\@glsxtr@doaccsupp}{\RequirePackage{glossaries-accsupp}}}
```

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

```
528 \newcommand{\glsxtrNoGlossaryWarning}[1]{%
529   \@glsxtr@defaultnoglossarywarning{#1}%
530 }
```

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

```
531 \define@choicekey{glossaries-extra.sty}{nomissingglstext}%
532   [\@glsxtr@nomissingglstextval\@glsxtr@nomissingglstextnr]%
533   {true,false}[true]{%
534     \ifcase\@glsxtr@nomissingglstextnr\relax % true
535       \renewcommand{\glsxtrNoGlossaryWarning}[1]{\null}%
536     \else % false

```

```

537     \renewcommand{\glsxtrNoGlossaryWarning}[1]{%
538         \@glsxtr@defaultnoglossarywarning{#1}%
539     }%
540     \fi
541 }

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

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

stylemods
543 \define@key{glossaries-extra.sty}{stylemods}[default]{%
544     \ifstrequal{#1}{default}%
545     {}%
546     \renewcommand*{\@glsxtr@redefstyles}{%
547         \RequirePackage{glossaries-extra-stylemods}}%
548     }%
549     {}%
550     \ifstrequal{#1}{all}%
551     {}%
552     \renewcommand*{\@glsxtr@redefstyles}{%
553         \PassOptionsToPackage{all}{glossaries-extra-stylemods}%
554         \RequirePackage{glossaries-extra-stylemods}}%
555     }%
556     }%
557     {}%
558     \renewcommand*{\@glsxtr@redefstyles}{}%
559     \@for\glsxtr@tmp:=#1\do{%
560         \IfFileExists{glossary-\@glsxtr@tmp.sty}{%
561             {}%
562             \eappto\@glsxtr@redefstyles{%
563                 \noexpand\RequirePackage{glossary-\@glsxtr@tmp}}%
564             }%
565             {}%
566             \PackageError{glossaries-extra}{%
567                 {Glossaries style package ‘glossary-\@glsxtr@tmp.sty’%
568                  doesn’t exist (did you mean to use the ‘style’ key?)}}%
569             {The list of values (#1) in the ‘stylemods’ key should%
570               match the glossary-xxx.sty files provided with%
571               glossaries.sty}}%
572             }%
573             }%
574             \appto\@glsxtr@redefstyles{\RequirePackage{glossaries-extra-stylemods}}%
575     }
576     }%
577 }

glsxtr@do@style
578 \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.

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

Defer actual style change:

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

Set this as the default style:

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

Set this style:

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

```
583 }%
```

```
584 }
```

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

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

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

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

```
587 \AtBeginDocument{\renewcommand*{\@glsxtrwrglossmark}{\@glsxtrwrglossmark}}
```

sxtrwrglossmark Does nothing by default.

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

debug Provide extra debug options.

```
589 \define@choicekey{glossaries-extra.sty}{debug}
```

```
590 [\@glsxtr@debugval\@glsxtr@debugnr]%
```

```
591 {true,false,showtargets,showwrgloss,all}[true]{%
```

```
592 \ifcase\@glsxtr@debugnr\relax % true
```

```
593 \glsxtr@dooption{debug=true}%
```

```
594 \renewcommand*{\@glsxtrwrglossmark}{}%
```

```
595 \or % false
```

```
596 \glsxtr@dooption{debug=false}%
```

```
597 \renewcommand*{\@glsxtrwrglossmark}{}%
```

```
598 \or % showtargets
```

```
599 \glsxtr@dooption{debug=showtargets}%
```

```
600 \or % showwrgloss
```

```
601 \glsxtr@dooption{debug=true}%
```

```
602 \renewcommand*{\@glsxtrwrglossmark}{\glsxtrwrglossmark}%
```

```
603 \or % all
```

```
604 \glsxtr@dooption{debug=showtargets}%
```

```
605 \renewcommand*{\@glsxtrwrglossmark}{\glsxtrwrglossmark}%
```

```
606 \fi
```

```
607 }
```

Pass all other options to `glossaries`.

```
608 \DeclareOptionX*{%
```

```
609 \expandafter\glsxtr@dooption\expandafter{\CurrentOption}}
```

Process options.

610 \ProcessOptionsX

Load glossaries if not already loaded.

611 \RequirePackage{glossaries}

Load the glossaries-accsupp package if required.

612 \@glsxtr@doaccsupp

Redefine \glspostdescription if required.

613 \@glsxtr@defpostpunc

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

614 \def\glsshowtarget#1{%

615 \glsxtrtitleorpdforheading

616 {%

617 \ifmmode

618 \texttt{\small [#1]}%

619 \else

620 \ifinner

621 \texttt{\small [#1]}%

622 \else

623 \marginpar{\texttt{\small [#1]}}%

624 \fi

625 \fi

626 }%

627 {[#1]}%

628 {\texttt{\small [#1]}}%

629 }

g@doseeglossary Save original definition of \do@seeglossary

630 \let\@glsxtr@org@doseeglossary\do@seeglossary

r@doseeglossary

631 \newcommand*{\@glsxtr@doseeglossary}[2]{%

632 \glsdoifexists{#1}{%

633 {%

634 @@glsxtrwrglossmark

635 \glsxtr@org@doseeglossary{#1}{#2}{%

636 }{}}

637 }

oindex@glossary

638 \newcommand*{\@glsxtr@dosee@alsoindex@glossary}[2]{%

639 \glsxtr@recordsee{#1}{#2}{%

640 \glsxtr@doseeglossary{#1}{#2}{%

641 }

@org@gloautosee Save and restore original definition of \@glo@gloautosee. (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.)

```
642 \let\@glsxtr@org@gloautosee\@glo@gloautosee
```

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

```
643 \if@glsxtr@autoseeindex
644 \else
645   \ifdef\@glsxtr@org@gloautosee
646   {}%
647   {\PackageError{glossaries-extra}{`autoseeindex=false' package
648     option requires at least v4.30 of glossaries.sty}%
649     {You need to update the glossaries.sty package}%
650   }
651 \fi
```

\@glo@gloautosee If \@glo@gloautosee has been defined (glossaries v4.30 onwards), redefine it to test the autoseeindex option.

```
652 \ifdef\@glo@gloautosee
653 {}
654   \renewcommand*\@glo@gloautosee{}%
655   \if@glsxtr@autoseeindex\@glsxtr@org@gloautosee\fi}%
656 }%
657 {}
```

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.

```
658 \renewcommand*\gls@checkseeallowed{}%
659 \if@glsxtr@autoseeindex\gls@see@noindex\fi
660 }
```

Define abbreviations glossaries if required.

```
661 \@glsxtr@abbreviationsdef
662 \let\@glsxtr@abbreviationsdef\relax
```

Setup shortcuts if required.

```
663 \@glsxtr@setupshortcuts
```

Redefine \@glsxtr@redef@forglsentries if required.

```
664 \@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:

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

Now define the user command:

```
666 \newcommand*\glossariesextrasetup[1]{%
667   \let\glsxtr@setup@record\relax
668   \let\@glsxtr@setupshortcuts\relax
```

```

669 \let\@glsxtr@redef@forglsentries\relax
670 \setkeys{glossaries-extra.sty}{#1}%
671 \@glsxtr@abbreviationsdef
672 \let\@glsxtr@abbreviationsdef\relax
673 \@glsxtr@setupshortcuts
674 \@glsxtr@setup@record
675 \@glsxtr@redef@forglsentries
676 }

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

@@do@wrglossary The new version adds code that can show a marker for debugging.
678 \newcommand*{\glsxtr@@do@wrglossary}[1]{%
679   \glsxtrwrglossmark
680   \glsxtr@org@@do@wrglossary{#1}%
681 }

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

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

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

684 \newcommand*{\glsxtrdialecthook}{}}

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

Disable preamble-only options and switch on the undefined tag at the start of the document.
686 \AtBeginDocument{%
687   \disable@keys{glossaries-extra.sty}{abbreviations,docdef,record}%
688   \def\@glsxtrundeftag{\glsxtrundeftag}%
689 }

```

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.)

```
690 \newcommand{\glsxtrifemptyglossary}[3]{%
691   \ifcsdef{glolist@\#1}{%
692     {}%
693     \ifcsstring{glolist@\#1}{,}{%
694       {}%
695       \glsxtrunodefaction{Glossary type '#1' doesn't exist}{}%
696       #2%
697     }%
698   }%
699 }
```

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

```
700 \newcommand*\glsxtrifkeydefined}[3]{%
701   \key@ifundefined{glossentry}{\#1}{\#3}{\#2}%
702 }
```

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

```
703 \newcommand*\glsxtrprovidestoragekey}{%
704   \c@ifstar\sglsxtr@provide@storagekey\glsxtr@provide@storagekey
705 }
```

`vide@storagekey` Unstarred version.

```
706 \newcommand*\glsxtr@provide@storagekey}[3]{%
707   \key@ifundefined{glossentry}{\#1}{%
708     {}%
709     \define@key{glossentry}{\#1}{\csdef{@glo@\#1}{##1}}%
710     \appto{@gls@keymap}{\#1\#1}%
711     \appto{@newglossaryentryprehook}{\csdef{@glo@\#1}{\#2}}%
712     \appto{@newglossaryentryposthook}{%
713       \letcs{@glo@tmp}{@glo@\#1}%
714       \gls@assign@field{\#2}{@glo@label}{\#1}{@glo@tmp}}%
715   }%
```

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

```
716   \ifblank{\#3}{%
717     {}%
718     \newcommand*{\glsxtrusefield}[1]{\gls@entry@field{##1}{\#1}}%
719   }%
720 }%
721 }%
722 }%
```

Provide the no-link command if not already defined.

```
723     \ifblank{#3}{%
724     {}%
725     {}%
726     \providecommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
727     }%
728   }%
729 }
```

vide@storagekey Starred version.

```
730 \newcommand*{\s@glsxtr@provide@storagekey}[1]{%
731   \key@ifundefined{glossentry}{#1}{%
732   {}%
733   \expandafter\newcommand\expandafter*\expandafter{%
734     {\csname gls@assign##1@field\endcsname}{#2}{%
735       \gls@expand@field{##1}{#1}{##2}}%
736     }%
737   }%
738   {}%
739   \glsxtr@provide@addstoragekey{#1}}%
740 }
```

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

```
741 \newcommand{\GlsXtrFmtField}{\useri}
```

tDefaultOptions

```
742 \newcommand{\GlsXtrFmtDefaultOptions}{\noindex}
```

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

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

\@glsxtrfmt Unstarred form.

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

\s@glsxtrfmt Starred form.

```
745 \newcommand*{\s@glsxtrfmt}[3]{%
746   \new@ifnextchar[\s@glsxtrfmt{#1}{#2}{#3}]{%
747     \glsxtrfmt{#1}{#2}{#3}}{}}
```

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

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

\@glsxtrfmt Actual inner working.

750 \newcommand*{\@glsxtrfmt}[4]{%

Since there's no post-link hook to worry about, grouping can be added to provide some protection against nesting (but in general nested link text should be avoided).

```
751 \begingroup
752 \def\glslabel[#2]%
753 \glsdoifexistsordo[#2]%
754 {%
755 \ifglshasfield{\GlsXtrFmtField}{#2}%
756 {%
757 \let\do@gls@link@checkfirsthyper\relax
758 \expandafter\gls@link\expandafter[\GlsXtrFmtDefaultOptions,#1]{#2}%
759 {\glsxtrfmtdisplay{\glscurrentfieldvalue}{#3}{#4}}%
760 }%
761 {\glsxtrfmtdisplay{@firstofone}{#3}{#4}}%
762 }%
763 {%
```

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

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

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

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

`\glsxtryentryfmt` No link or indexing.

```
774 \ifdef\texorpdfstring
775 {
776 \newcommand*{\glsxtryentryfmt}[2]{%
777 \texorpdfstring{\glsxtryentryfmt{#1}{#2}}{#2}%
778 }
779 }
780 {
781 \newcommand*{\glsxtryentryfmt}{\glsxtryentryfmt}
782 }
```

`@glsxtryentryfmt`

783 \newrobustcmd*{\glsxtryentryfmt}[2]{%

```

784 \glsdoifexistsodo{#1}%
785 {%
786   \ifglshasfield{\GlsXtrFmtField}{#1}%
787   {%
788     \csuse{\glscurrentfieldvalue}{#2}%
789   }%
790   {#2}%
791 }%
792 {#2}%
793 }

```

`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.

```

794 \newcommand*{\glsxtrfieldlistadd}[3]{%
795   \listcsadd{glo@\glsdetoklabel{#1}@#2}{#3}%
796 }

```

`trfieldlistgadd` Similarly but uses `\listcsgadd`.

```

797 \newcommand*{\glsxtrfieldlistgadd}[3]{%
798   \listcsgadd{glo@\glsdetoklabel{#1}@#2}{#3}%
799 }

```

`trfieldlisteadd` Similarly but uses `\listcseadd`.

```

800 \newcommand*{\glsxtrfieldlisteadd}[3]{%
801   \listcseadd{glo@\glsdetoklabel{#1}@#2}{#3}%
802 }

```

`trfieldlistxadd` Similarly but uses `\listcsxadd`.

```

803 \newcommand*{\glsxtrfieldlistxadd}[3]{%
804   \listcsxadd{glo@\glsdetoklabel{#1}@#2}{#3}%
805 }

```

Now provide commands to iterate over these lists.

`fielddolistloop`

```

806 \newcommand*{\glsxtrfielddolistloop}[2]{%
807   \dolistcsloop{glo@\glsdetoklabel{#1}@#2}%
808 }

```

`ieldforlistloop`

```

809 \newcommand*{\glsxtrfieldforlistloop}[3]{%
810   \forlistcsloop{glo@\glsdetoklabel{#1}@#2}{#3}%
811 }

```

List element tests:

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

```
812 \newcommand*{\glsxtrfieldifinlist}[5]{%
813   \ifinlistcs{#3}{\glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
814 }
```

rfieldxifinlist Expands item.

```
815 \newcommand*{\glsxtrfieldxifinlist}[5]{%
816   \xifinlistcs{#3}{\glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
817 }
```

lsxtrforcsvfield **\glsxtrforcsvfield{<label>}{<field>}{<cs handler>}**

```
818 \newcommand*{\glsxtrforcsvfield}[3]{%
819   @_glsxtrifhasfield{#2}{#1}%
820   {%
821     \let\glsxtrtendfor\@endfortrue
822     \@for\@glsxtr@label:=\glscurrentfieldvalue\do
823       {\expandafter#3\expandafter{\@glsxtr@label}}{}}%
824   {}%
825 }
```

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.

```
826 \newrobustcmd{\glsxtrifhasfield}{%
827   \@ifstar{\s@glsxtrifhasfield}{\@glsxtrifhasfield}%
828 }
```

lsxtrifhasfield Unstarred version adds grouping.

```
829 \newcommand{\@glsxtrifhasfield}[4]{%
830   {\s@glsxtrifhasfield{#1}{#2}{#3}{#4}}%
831 }
```

lsxtrifhasfield Starred version omits grouping.

```
832 \newcommand{\s@glsxtrifhasfield}[4]{%
833   \letcs{\glscurrentfieldvalue}{\glo@\glsdetoklabel{#2}@#1}%
834   \ifundefined{\glscurrentfieldvalue}
835     {#4}%
836   {%
837     \ifdefempty{\glscurrentfieldvalue}{#4}{#3}%
838   }%
839 }
```

```

sXtrIfFieldUndef \GlsXtrIfFieldUndef{<field>}{<label>}{<true>}{<false>}

Just uses \ifcsundef.

840 \newcommand{\GlsXtrIfFieldUndef}[2]{%
841   \ifcsundef{glo@\glsdetoklabel{#2}@#1}{%
842 }

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

843 \newcommand*\glsxtrusefield[2]{%
844   \gls@entry@field{#1}{#2}%
845 }

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

846 \newcommand*\Glsxtrusefield[2]{%
847   \gls@entry@field{#1}{#2}%
848 }

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

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

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

850 \newcommand*\glsxtredefield[2]{\protected\csedef{glo@\glsdetoklabel{#1}@#2}{}

etfieldifexists

851 \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.

852 \newrobustcmd*\GlsXtrSetField[3]{%
853   \glsxtrsetfieldifexists{#1}{#2}{%
854     \csdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
855 }

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

856 \newrobustcmd*\GlsXtrLetField[3]{%
857   \glsxtrsetfieldifexists{#1}{#2}{%
858     \cslet{glo@\glsdetoklabel{#1}@#2}{#3}}%
859 }

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

860 \newrobustcmd*\csGlsXtrLetField[3]{%
861   \glsxtrsetfieldifexists{#1}{#2}{%
862     \csletcs{glo@\glsdetoklabel{#1}@#2}{#3}}%
863 }

```

`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.

```
864 \newrobustcmd*{\GlsXtrLetFieldToField}[4]{%
865   \glsxtrsetfieldifexists{#1}{#2}%
866   {\csletcs{glo@\glsdetoklabel{#1}@#2}{glo@\glsdetoklabel{#3}@#4}}%
867 }
```

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

```
868 \newrobustcmd*{\gGlsXtrSetField}[3]{%
869   \glsxtrsetfieldifexists{#1}{#2}%
870   {\csgdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
871 }
```

`xGlsXtrSetField`

```
872 \newrobustcmd*{\xGlsXtrSetField}[3]{%
873   \glsxtrsetfieldifexists{#1}{#2}%
874   {\protected@csxdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
875 }
```

`eGlsXtrSetField`

```
876 \newrobustcmd*{\eGlsXtrSetField}[3]{%
877   \glsxtrsetfieldifexists{#1}{#2}%
878   {\protected@csedef{glo@\glsdetoklabel{#1}@#2}{#3}}%
879 }
```

`XtrIfFieldEqStr`

```
880 \newrobustcmd*{\GlsXtrIfFieldEqStr}[5]{%
881   \glsxtrifhasfield{#1}{#2}%
882   {%
883     \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}%
884   }%
885   {#5}%
886 }
```

`\glsxtrpageref` Like `\glsrefentry` but references the page number instead (if entry counting is on).

```
887 \ifglsentrycounter
888   \newcommand*{\glsxtrpageref}[1]{\pageref{glsentry-\glsdetoklabel{#1}}}
889 \else
890   \ifglssubentrycounter
891     \newcommand*{\glsxtrpageref}[1]{\pageref{glsentry-\glsdetoklabel{#1}}}
892   \else
893     \newcommand*{\glsxtrpageref}[1]{\gls{#1}}
894   \fi
895 \fi
```

`lossarypreamble`

```
896 \newcommand{\apptoglossarypreamble}[2][\glsdefaulttype]{%
```

```

897 \ifcsdef{glolist@\#1}%
898 {%
899   \ifcsundef{@glossarypreamble@\#1}%
900   { \csdef{@glossarypreamble@\#1}{} }%
901   {}%
902   \csappto{@glossarypreamble@\#1}{\#2}%
903 }%
904 {%
905   \GlossariesExtraWarning{Glossary '#1' is not defined}%
906 }%
907 }

```

lossarypreamble

```

908 \newcommand{\preglossarypreamble}[2][\glsdefaulttype]{%
909   \ifcsdef{glolist@\#1}%
910   {%
911     \ifcsundef{@glossarypreamble@\#1}%
912     { \csdef{@glossarypreamble@\#1}{} }%
913     {}%
914     \cspreto{@glossarypreamble@\#1}{\#2}%
915   }%
916   {%
917     \GlossariesExtraWarning{Glossary '#1' is not defined}%
918   }%
919 }

```

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

```

920 \renewcommand*{\longnewglossaryentry}{%
921   @ifstar \glsxtr@s@longnewglossaryentry \glsxtr@longnewglossaryentry
922 }

```

ewglossaryentry Starred version.

```

923 \newcommand{\glsxtr@s@longnewglossaryentry}[3]{%
924   \glsdoifnoexists{\#1}{%
925   {%
926     \bgroup
927       \let\org@newglossaryentryprehook\newglossaryentryprehook
928       \long\def\@newglossaryentryprehook{%
929         \long\def\@glo@desc{\#3}}%

```

```

930     \org@newglossaryentryprehook
931 }
932 \renewcommand*{\gls@assign@desc}[1]{%
933     \global\cslet{glo@\glsdetoklabel{#1}@desc}{\glo@desc}%
934     \global\cslet{glo@\glsdetoklabel{#1}@descplural}{\glo@descplural}%
935 }
936 \gls@defglossaryentry{#1}{#2}%
937 \egroup
938 }%
939 }

```

`ewglossaryentry` Unstarred version.

```

940 \newcommand{\glsxtr@longnewglossaryentry}[3]{%
941     \glsdoifnoexists{#1}%
942 {%
943     \bgroup
944         \let\org@newglossaryentryprehook\newglossaryentryprehook
945         \long\def\newglossaryentryprehook{%
946             \long\def\glo@desc{\glsxtrpostlongdescription}%
947             \org@newglossaryentryprehook
948         }%
949         \renewcommand*{\gls@assign@desc}[1]{%
950             \global\cslet{glo@\glsdetoklabel{#1}@desc}{\glo@desc}%

```

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

```

951     \global\cslet{glo@\glsdetoklabel{#1}@descplural}{\glo@descplural}%
952 }
953 \gls@defglossaryentry{#1}{#2}%
954 \egroup
955 }%
956 }

```

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

```
957 \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.

```

958 \renewcommand{\newignoredglossary}{%
959     @ifstar\glsxtr@s@newignoredglossary\glsxtr@org@newignoredglossary
960 }

```

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

```

961 \newcommand*{\glsxtr@org@newignoredglossary}[1]{%
962     \ifcsdef{glolist@#1}%
963     {%
964         \glsxtrundefaction{Glossary type '#1' already exists}{}%
965     }%

```

```

966  {%
967    \ifdefempty{\@ignored@glossaries}
968    {%
969      \edef{\@ignored@glossaries}{\#1}%
970    }%
971    {%
972      \appto{\@ignored@glossaries}{,\#1}%
973    }%
974    \csgdef{glolist@\#1}{,}%
975    \ifcsundef{gls@\#1@entryfmt}%
976    {%
977      \def\glsentryfmt[\#1]{\glsentryfmt}%
978    }%
979    {}%
980    \ifdefempty{\gls@nohyperlist}
981    {%
982      \renewcommand*{\gls@nohyperlist}{\#1}%
983    }%
984    {}%
985    \appto{\gls@nohyperlist}{,\#1}%
986    {}%
987  }%
988 }

```

`\ignoredglossary` Starred form.

```

989 \newcommand*{\glsxtr@s@newignoredglossary}[1]{%
990   \ifcsdef{glolist@\#1}
991   {%
992     \glsxtrunodef{Glossary type '#1' already exists}{}%
993   }%
994   {%
995     \ifdefempty{\@ignored@glossaries}
996     {%
997       \edef{\@ignored@glossaries}{\#1}%
998     }%
999     {%
1000       \appto{\@ignored@glossaries}{,\#1}%
1001     }%
1002     \csgdef{glolist@\#1}{,}%
1003     \ifcsundef{gls@\#1@entryfmt}%
1004     {%
1005       \def\glsentryfmt[\#1]{\glsentryfmt}%
1006     }%
1007     {}%
1008   }%
1009 }

```

`\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.

```

1010 \glsifusetranslator
1011 {%
1012   \renewcommand*{\glssettoctitle}[1]{%
1013     \ifcsdef{gls@tr@set@#1@toctitle}{%
1014       {%
1015         \csuse{gls@tr@set@#1@toctitle}{%
1016       }%
1017     }%
1018     \ifcsdef{@glotype@#1@title}{%
1019       {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1020       {\def\glossarytoctitle{\glossarytitle}}%
1021     }%
1022   }%
1023 }
1024 {
1025   \renewcommand*{\glssettoctitle}[1]{%
1026     \ifcsdef{@glotype@#1@title}{%
1027       {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1028       {\def\glossarytoctitle{\glossarytitle}}%
1029     }%
1030 }

```

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

```

1031 \newcommand{\provideignoredglossary}{%
1032   \@ifstar\glsxtr@s\provideignoredglossary\glsxtr@provideignoredglossary
1033 }

```

`ignoredglossary` Unstarred version.

```

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

```

```

1055     {%
1056         \eappto{\gls@nohyperlist}{#1}%
1057     }%
1058 }%
1059 }

```

`ignoredglossary` Starred form.

```

1060 \newcommand*{\glsxtr@s@provideignoredglossary}[1]{%
1061     \ifcsdef{glolist@#1}%
1062     {}%
1063     {%
1064         \ifdefempty{\ignored@glossaries}%
1065         {}%
1066         \edef{\ignored@glossaries}{#1}%
1067     }%
1068     {%
1069         \eappto{\ignored@glossaries}{#1}%
1070     }%
1071     \csgdef{glolist@#1}{,}%
1072     \ifcsundef{gls@#1@entryfmt}%
1073     {}%
1074     \def\glsentryfmt[#1]{\glsentryfmt}%
1075     }%
1076     {}%
1077 }%
1078 }

```

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

```

1079 \newcommand*{\glsxtrrcopytogglossary}[2]{%
1080     \glsdoifexists{#1}%
1081     {}%
1082     \ifcsdef{glolist@#2}%
1083     {}%
1084     \cseappto{glolist@#2}{#1,}%
1085     }%
1086     {}%
1087     \glsxtrundefaction{Glossary type '#2' doesn't exist}{}%
1088 }%
1089 }%
1090 }

```

1.3.1 Existence Checks

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

```

1091 \renewcommand{\glsdoifexists}[2]{%
1092     \if\glsentryexists{#1}{#2}%
1093     {}%

```

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

```
1094 \edef\glslabel{\glsdetoklabel{#1}}%
1095 \glsxtrundefaction{Glossary entry ‘\glslabel’
1096 has not been defined}{You need to define a glossary entry before
1097 you can reference it.}%
1098 }%
1099 }
```

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

```
1100 \renewcommand{\glsdoifnoexists}[2]{%
1101   \ifglsentryexists{#1}{%
1102     \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’
1103       has already been defined}{}{#2}%
1104 }
```

`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.

```
1105 \ifdef\glsdoifexistsordo
1106 {%
1107   \renewcommand{\glsdoifexistsordo}[3]{%
1108     \ifglsentryexists{#1}{#2}{%
1109       {%
1110         \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’
1111           has not been defined}{You need to define a glossary entry
1112           before you can use it.}%
1113         #3%
1114       }%
1115     }%
1116   }%
1117 {%
1118   \glsxtr@warnonexistsordo\glsdoifexistsordo
1119   \newcommand{\glsdoifexistsordo}[3]{%
1120     \ifglsentryexists{#1}{#2}{%
1121       {%
1122         \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’
1123           has not been defined}{You need to define a glossary entry
1124           before you can use it.}%
1125         #3%
1126       }%
1127     }%
1128   }
```

`arynoexistsordo` Similarly for `\doifglossarynoexistsordo`.

```
1129 \ifdef\doifglossarynoexistsordo
1130 {%
1131   \renewcommand{\doifglossarynoexistsordo}[3]{%
1132     \ifglossaryexists{#1}{%
```

```

1133     {%
1134         \glsxtrundefaction{Glossary type '#1' already exists}{()}%
1135         #3%
1136     }%
1137     {#2}%
1138 }%
1139 }%
1140 {%
1141     \glsxtr@warnnonexistsordo\doifglossarynoexistsordo
1142     \newcommand{\doifglossarynoexistsordo}[3]{%
1143         \ifglossaryexists{#1}%
1144         {%
1145             \glsxtrundefaction{Glossary type '#1' already exists}{()}%
1146             #3%
1147         }%
1148         {#2}%
1149     }%
1150 }%
1151

```

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

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

```

1152 \appto\@newglossaryentryposthook{%
1153     \ifdefvoid\@glo@see
1154     {\csxdef{glo@\@glo@label}{\@glo@see}}%
1155     {%
1156         \csxdef{glo@\@glo@label}{\@glo@see}{\@glo@see}%
1157         \if@glsxtr@autoseeindex
1158             \glsxtr@autoindexcrossrefs
1159         \fi
1160     }%
1161 }%
1162 \appto\@gls@keymap{,{see}{see}}

```

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

```

1163 \newcommand*{\glsxtrusesee}[1]{%
1164     \glsdoifexists{#1}%
1165     {%
1166         \letcs{\@glo@see}{glo@\glsdetoklabel{#1}@see}%
1167         \ifdefempty\@glo@see
1168         {}%
1169         {%
1170             \expandafter\glsxtr@usesee\@glo@see\@end@glsxtr@usesee
1171         }%
1172     }%
1173 }

```

```

\glsxtr@usesee
1174 \newcommand*{\glsxtr@usesee}[1] [\seename]{%
1175   \glsxtr@usesee[#1]%
1176 }

@\glsxtr@usesee
1177 \def\@glsxtr@usesee[#1]#2\@end@glsxtr@usesee{%
1178   \glsxtruseseeformat{#1}{#2}%
1179 }

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.
1180 \newcommand*{\glsxtruseseeformat}[2]{%
1181   \glsseeformat[#1]{#2}{}%
1182 }

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.
1183 \renewcommand*{\glsseeitemformat}[1]{%
1184   \ifglslabel{\glslabel}{\glsaccesstext{\glslabel}}{\glsaccessname{\glslabel}}%
1185 }

lxtruseseealso Apply \glsseeformat to the seealso key if not empty. There's no optional tag to worry about here.
1186 \newcommand*{\glsxtruseseealso}[1]{%
1187   \glsdoifexists{\glslabel}{%
1188     {%
1189       \letcs{\glo@see}{\glo@\glsdetoklabel{\glslabel}}{\glo@seealso}%
1190       \ifdefempty{\glo@see}{%
1191         {}%
1192       }{%
1193         \expandafter\glsxtruseseealsoformat\expandafter{\glo@see}%
1194       }%
1195     }%
1196   }%
1197 }

seseealsoformat The format used by \glsxtruseseealso. The argument is the comma-separated list of cross-referenced labels.
1197 \newcommand*{\glsxtruseseealsoformat}[1]{%
1198   \glsseeformat[\glo@see]{%
1199 }

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

```

```

1200 \newrobustcmd{\glsxtrseelist}[1]{%
1201   \edef\@glo@tmp{\noexpand\glsseelist{#1}}\@glo@tmp
1202 }

\seealso In case this command hasn't been defined. (Should be provided by language packages.)
1203 \providecommand{\seealso}{see also}

xtrindexseealso If \xdycrossrefhook is defined, provide a seealso crossref class. Otherwise this just does \glssee with \seealso as the tag. The hook is only defined if both xindy and glossaries v4.30+ are being used.
1204 \ifdef\xdycrossrefhook
1205 {

  Add the cross-reference class definition to the hook.
1206 \appto\xdycrossrefhook{%
1207   \write\glswrite{(\def\crossrefclass \string"seealso\string"
1208   :unverified )}%
1209   \write\glswrite{(\markup-crossref-list
1210   :class \string"seealso\string"^\J\space\space\space
1211   :open \string"\string\glsxtrusealsoformat\glsopenbrace\string"
1212   :close \string"\glsclosebrace\string")}%
1213 }

```

Append to class list.

```

1214 \appto\xdylocationclassorder{\space\string"seealso\string"}

```

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

```

1215 \newrobustcmd*\glsxtrindexseealso[2]{%
1216   \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
1217     \glsxtr@recordsee{#1}{#2}%
1218   \fi
1219   \glsdoifexists{#1}%
1220   {%
1221     \@@glsxtrwrglossmark
1222     \def\gls@xref{#2}%
1223     \onelevel@sanitize@gls@xref
1224     \gls@checkmkidxchars@gls@xref
1225     \gls@glossary{\csname glo@#1@type\endcsname}{%
1226       (indexentry
1227         :tkey (\csname glo@#1@index\endcsname)
1228         :xref (\string"\gls@xref\string")
1229         :attr \string"seealso\string"
1230       )
1231     }%
1232   }%
1233 }
1234 }
1235 {

```

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

```

1236 \newrobustcmd*{\glsxtrindexseealso}{\glssee[\seealso]}
1237 }

```

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

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

```

1238 \ifdef\gls@set@xr@key
1239 {

```

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

```

1240 \define@key{glossentry}{alias}{%
1241   \gls@set@xr@key{alias}{\@glo@alias}{#1}%
1242 }
1243 \define@key{glossentry}{seealso}{%
1244   \gls@set@xr@key{seealso}{\@glo@seealso}{#1}%
1245 }

```

Add to the key mappings.

```
1246 \appto{@gls@keymap}{, {alias}{alias}, {seealso}{seealso}}
```

Set the default value.

```
1247 \appto{@newglossaryentryprehook}{\def\@glo@alias{} \def\@glo@seealso{} }%
```

Assign the field values.

```

1248 \appto{@newglossaryentryposthook}{%
1249   \ifdefvoid\@glo@seealso
1250     {\csxdef{\glo@\glo@label}{\seealso}{}}
1251   {%
1252     \csxdef{\glo@\glo@label}{\seealso}{\@glo@seealso}%
1253     \if@glsxtr@autoseeindex
1254       \glsxtr@autoindexcrossrefs
1255     \fi
1256   }%

```

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

```

1257 \ifdefvoid\@glo@alias
1258   {\csxdef{\glo@\glo@label}{\alias}{}}
1259   {%
1260     \csxdef{\glo@\glo@label}{\alias}{\@glo@alias}%
1261   }%
1262 }

```

Provide user-level commands to access the values.

```
\glsxtralias
```

```
1263 \newcommand*{\glsxtralias}[1]{\gls@entry@field{#1}{alias}}
```

```
trseealsolabels
```

```
1264 \newcommand*{\glsxtrseealsolabels}[1]{\gls@entry@field{#1}{seealso}}
```

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

```
1265 \appto{\glo@autoseehook}{%
1266   \ifdefvoid{\glo@alias}{%
1267     {%
1268       \ifdefvoid{\glo@seealso}{%
1269         {}%
1270       {%
1271         \edef{\do@glssee}{\noexpand\glsxtrindexseealso}%
1272           {\glo@label}{\glo@seealso}}%
1273         \do@glssee
1274       }%
1275     }%
1276   }%
```

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

```
1277 \ifdefvoid{\glo@see}{%
1278   {%
1279     \edef{\do@glssee}{\noexpand\glssee{\glo@label}{\glo@alias}}%
1280     \do@glssee
1281   }%
1282   {}%
1283 }%
1284 }%
1285 }%
1286 {
```

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

```
\glsxtralias
```

```
1287 \glsaddstoragekey*{alias}{}{\glsxtralias}
```

```
trseealsolabels
```

```
1288 \glsaddstoragekey*{seealso}{}{\glsxtrseealsolabels}
```

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

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

```
1289 \appto{\newglossaryentryposthook}{%
1290   \ifcsvoid{\glo@\glo@label}{\alias}{%
1291     {%
1292       \ifcsvoid{\glo@\glo@label}{\seealso}{%
1293         {}%
1294       {%
1295         \edef{\do@glssee}{\noexpand\glsxtrindexseealso}%
1296           {\glo@label}{\csuse{\glo@\glo@label}{\seealso}}}}%
1297         \do@glssee
1298     }%
1299   }%
```

```

1298      }%
1299      }%
1300      {%
1301      \ifdefvoid{@glo@see}%
1302      {%
1303          \edef\@do@glssee{\noexpand\glssee{%
1304              {\@glo@label}\{\csuse{glo@\@glo@label}{\alias}\}}}}%
1305          \@do@glssee
1306      }%
1307      {}%
1308      }%
1309  }%
1310 }%

```

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

```
1311 \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.

```

1312 \newcommand*{\glsxtraddallcrossrefs}{%
1313     \forallglossaries{\@glo@type}%
1314     {%
1315         \forglsentries[\@glo@type]{\@glo@label}%
1316         {%
1317             \ifglsused{\@glo@label}%
1318                 {\expandafter\glsxtr@addunusedxrefs\expandafter{\@glo@label}}{}%
1319         }%
1320     }%
1321 }

```

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

```

1322 \newcommand*{\@glsxtr@addunusedxrefs}[1]{%
1323     \letcs{\@glo@see}{glo@\glsdetoklabel{\#1}@see}%
1324     \ifdefvoid{@glo@see}%
1325     {}%
1326     {%
1327         \expandafter\glsxtr@addunused\@glo@see\end@glsxtr@addunused
1328     }%
1329     \letcs{\@glo@see}{glo@\glsdetoklabel{\#1}@seealso}%
1330     \ifdefvoid{@glo@see}%
1331     {}%
1332     {%
1333         \expandafter\glsxtr@addunused\@glo@see\end@glsxtr@addunused
1334     }%
1335 }

```

```

lsxtr@addunused Adds all the entries if they haven't been used.
1336 \newcommand*{\glsxtr@addunused}[1][]{%
1337   \glsxtr@addunused
1338 }

lsxtr@addunused Adds all the entries if they haven't been used.
1339 \def\@glsxtr@addunused#1\@end@glsxtr@addunused{%
1340   \for@\glsxtr@label:=#1\do
1341   {%
1342     \ifglsused{\glsxtr@label}{}%
1343     {%
1344       \glsadd[format=glsxtrunusedformat]{\glsxtr@label}%
1345       \glsunset{\glsxtr@label}%
1346       \expandafter\glsxtr@addunusedxrefs\expandafter{\glsxtr@label}%
1347     }%
1348   }%
1349 }

xtrunusedformat
1350 \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.
1351 \let\glsxtr@orgmakenoidxglossaries\makenoidxglossaries
1352 \renewcommand{\makenoidxglossaries}{%
1353   \ifdefequal\@glsxtr@record@setting\@glsxtr@record@setting@off
1354   {%
1355     \glsxtr@orgmakenoidxglossaries

      Add marker to \odo@seeglossary
1356   \renewcommand{\odo@seeglossary}[2]{%
1357     \glsxtrwrglossmark
1358     \edef\@gls@label{\glsdetoklabel{\##1}}%
1359     \protected@write\auxout{}{%
1360       \string\@gls@reference
1361       {\csname glo@\@gls@label\type\endcsname}%
1362       {\@gls@label}}%
1363     {%
1364       \string\glsseeformat{\##2}%
1365     }%
1366   }%
1367 }

      Check for docdefs=restricted:
1368   \if@glsxtrdocdefrestricted

```

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

```
1369 \renewcommand*{\@gls@reference}[3]{%
1370   \ifcsundef{glsref##1}{\csgdef{glsref##1}{}{}}{%
1371     \ifinlistcs{##2}{glsref##1}{%
1372       {}%
1373       {\listcsgadd{glsref##1}{##2}}%
1374       \ifcsundef{glo@\glsdetoklabel{##2}@loclist}{%
1375         \csgdef{glo@\glsdetoklabel{##2}@loclist}{}{}}%
1376       {}%
1377       {\listcsgadd{glo@\glsdetoklabel{##2}@loclist}{##3}}%
1378     }%
1379   \else
```

Disable document definitions.

```
1380   \@glsxtrdocdeffalse
1381   \fi
1382   \disable@keys{glossaries-extra.sty}{docdef}%
1383 }%
1384 {%
1385   \PackageError{glossaries-extra}{\string\makenoidxglossaries\space
1386   not permitted\MessageBreak
1387   with record=\@glsxtr@record@setting\space package option}%
1388   {You may only use \string\makenoidxglossaries\ space with the
1389   record=off option}%
1390 }%
1391 }
```

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

```
1392 \renewcommand*{\gls@defdocnewglossaryentry}{%
1393   \ifcase\@glsxtr@docdefval
1394     docdef=false:
1395     \renewcommand*{\newglossaryentry}[2]{%
1396       \PackageError{glossaries-extra}{Glossary entries must
1397       be \MessageBreak defined in the preamble with \MessageBreak
1398       package option 'docdef=false'\MessageBreak(consider using
1399       'docdef=restricted')}{Move your glossary definitions to
1400       the preamble. You can also put them in a \MessageBreak separate file
1401       and load them with \string\loadglsentries.}%
1402     }%
1403   \or
1404     docdef=true Since the see value is now saved in a field, it can be used by entries that have
1405     been defined in the document.
1406     \let\gls@checkseeallowed\relax
1407     \let\newglossaryentry\new@glossaryentry
1408   \or
```

Restricted mode just needs to allow the see value.

```

1406     \let\gls@checkseeallowed\relax
1407     \fi
1408 }%

```

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

```

1409 \newcommand*{\GlsXtrEnableOnTheFly}{%
1410   \@ifstar@sGlsXtrEnableOnTheFly@GlsXtrEnableOnTheFly
1411 }

```

`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.)

```

1412 \newcommand*{\@sGlsXtrEnableOnTheFly}{%
1413   \renewcommand*{\glsdetoklabel}[1]{%
1414     \expandafter@glsxtr@ifcsstart$string##1 \@glsxtr@end@
1415     {%
1416       \expandafter\detokenize\expandafter{##1}%
1417     }%
1418     {\detokenize{##1}}%
1419   }%
1420   \@GlsXtrEnableOnTheFly
1421 }
1422 \def@glsxtr@ifcsstart#1#2@glsxtr@end@#3#4{%
1423   \expandafter\if\glsbackslash#1%
1424     #3%
1425   \else
1426     #4%
1427   \fi
1428 }

```

sxtrstarflywarn

```

1429 \newcommand*{\glsxtrstarflywarn}{%
1430   \GlossariesExtraWarning{Experimental starred version of
1431   \string\GlsXtrEnableOnTheFly\space in use (please ensure you have
1432   read the warnings in the glossaries-extra user manual)}%
1433 }

```

rEnableOnTheFly

```

1434 \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
1435 \newcommand*{\glsxtrcat}{general}

\glsxtr
1436 \newcommand*{\glsxtr}[1][]{%
1437   \def\glsxtr@keylist{##1}%
1438   \glsxtr
1439 }

\glsxtr
1440 \newcommand*{\glsxtr}[2][]{%
1441   \ifglsentryexists{##2}%
1442   {%
1443     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1444   }%
1445   {%
1446     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1447       description={\nopostdesc},##1}%
1448   }%
1449   \expandafter\gls\expandafter[\glsxtr@keylist]{##2}%
1450 }

\Glsxtr
1451 \newcommand*{\Glsxtr}[1][]{%
1452   \def\glsxtr@keylist{##1}%
1453   \glsxtr
1454 }

\glsxtr
1455 \newcommand*{\glsxtr}[2][]{%
1456   \ifglsentryexists{##2}%
1457   {%
1458     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1459   }%
1460   {%
1461     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1462       description={\nopostdesc},##1}%
1463   }%
1464   \expandafter\Gls\expandafter[\glsxtr@keylist]{##2}%
1465 }

\glsxtrpl
1466 \newcommand*{\glsxtrpl}[1][]{%
1467   \def\glsxtr@keylist{##1}%
1468   \glsxtrpl
1469 }

\glsxtrpl

```

```

1470 \newcommand*{\@glsxtrpl}[2][]{%
1471   \ifglsentryexists{##2}%
1472   {%
1473     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1474   }%
1475   {%
1476     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1477       description={\nopostdesc},##1}%
1478   }%
1479   \expandafter\glspl\expandafter[\glsxtr@keylist]{##2}%
1480 }

\Glsxtrpl
1481 \newcommand*{\Glsxtrpl}[1][]{%
1482   \def\glsxtr@keylist{##1}%
1483   \@Glsxtrpl
1484 }

\@Glsxtrpl
1485 \newcommand*{\@Glsxtrpl}[2][]{%
1486   \ifglsentryexists{##2}%
1487   {%
1488     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1489   }%
1490   {%
1491     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1492       description={\nopostdesc},##1}%
1493   }%
1494   \expandafter\Glspl\expandafter[\glsxtr@keylist]{##2}%
1495 }

\GlsXtrWarning
1496 \newcommand*{\GlsXtrWarning}[2]{%
1497   \def\@glsxtr@optlist{##1}%
1498   \onelevel@sanitize\@glsxtr@optlist
1499   \GlossariesExtraWarning{The options '\@glsxtr@optlist' have
1500   been ignored for entry '##2' as it has already been defined}%
1501 }

```

Disable commands after the glossary:

```

1502 \renewcommand{\printglossary}[2]{%
1503   \def\@glsxtr@printglossopts{##1}%
1504   \def\@glsxtr@orgprintglossary{##1}{##2}%
1505   \def\@glsxtr{\@glsxtr@disabledflycommand\glsxtr}%
1506   \def\@glsxtrpl{\@glsxtr@disabledflycommand\glsxtrpl}%
1507   \def\@Glsxtr{\@glsxtr@disabledflycommand\Glsxtr}%
1508   \def\@Glsxtrpl{\@glsxtr@disabledflycommand\Glsxtrpl}%
1509 }

```

```

abledflycommand
1510 \newcommand*{\@glsxstr@disabledflycommand}[1]{%
1511   \PackageError{glossaries-extra}{%
1512     {\string##1\space can't be used after any of the \MessageBreak
1513      glossaries have been displayed}%
1514     {The on-the-fly commands enabled by
1515       \string\GlsXtrEnableOnTheFly\space may only be used \MessageBreak
1516       before the glossaries. If you want to use any entries \MessageBreak
1517       after any of the glossaries, you must use the standard \MessageBreak
1518       method of first defining the entry and then using the \MessageBreak
1519       entry with commands like \string\gls}%
1520     \@@glsxstr@disabledflycommand
1521   }%
1522 \newcommand*{\@glsxstr@disabledflycommand}[2][]{##2}

```

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

```

1523 \let\GlsXtrEnableOnTheFly\relax
1524 }
1525 \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.

```
1526 \newcommand*{\@glsxtr@current@style}{\@glossary@default@style}
```

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

etglossarystyle

```

1527 \renewcommand*{\setglossarystyle}[1]{%
1528   \ifcsundef{@glsstyle##1}%
1529   {%
1530     \PackageError{glossaries-extra}{Glossary style '#1' undefined}{}%
1531   }%
1532   {%
1533     \csname @glsstyle##1\endcsname

```

Only set the current style if it exists.

```

1534   \protected@edef\@glsxtr@current@style{##1}%
1535   }%
1536   \ifx\@glossary@default@style\relax
1537     \protected@edef\@glossary@default@style{##1}%
1538   \fi
1539 }
```

In case we have an old version of glossaries:

```
1540 \ifdef\@glossary@default@style
1541 {}
```

```

1542 {%
1543   \let\@glossary@default@style\relax
1544 }

listdottedwidth If \glslistdottedwidth has been defined and is currently equal to .5\hsize then make
the modification suggested in bug report #92
1545 \ifdef\glslistdottedwidth
1546 {%
1547   \ifdim\glslistdottedwidth=.5\hsize
1548     \setlength{\glslistdottedwidth}{-\dimexpr\maxdimen-1sp\relax}
1549     \AtBeginDocument{%
1550       \ifdim\glslistdottedwidth=-\dimexpr\maxdimen-1sp\relax
1551         \setlength{\glslistdottedwidth}{.5\columnwidth}%
1552       \fi
1553     }%
1554   \fi
1555 }
1556 {}%

```

Similarly for \glsdescwidth:

\glsdescwidth

```

1557 \ifdef\glsdescwidth
1558 {%
1559   \ifdim\glsdescwidth=.6\hsize
1560     \setlength{\glsdescwidth}{-\dimexpr\maxdimen-1sp\relax}
1561     \AtBeginDocument{%
1562       \ifdim\glsdescwidth=-\dimexpr\maxdimen-1sp\relax
1563         \setlength{\glsdescwidth}{.6\columnwidth}%
1564       \fi
1565     }%
1566   \fi
1567 }
1568 {}%

```

and for \glspagelistwidth:

\glspagelistwidth

```

1569 \ifdef\glspagelistwidth
1570 {%
1571   \ifdim\glspagelistwidth=.1\hsize
1572     \setlength{\glspagelistwidth}{-\dimexpr\maxdimen-1sp\relax}
1573     \AtBeginDocument{%
1574       \ifdim\glspagelistwidth=-\dimexpr\maxdimen-1sp\relax
1575         \setlength{\glspagelistwidth}{.1\columnwidth}%
1576       \fi
1577     }%
1578   \fi
1579 }
1580 {}%

```

aryentrynumbers Has the nonumberlist option been used?

```
1581 \def\org@glossaryentrynumbers{\#1{#1\gls@save@numberlist{\#1}}%  
1582 \ifx\org@glossaryentrynumbers\glossaryentrynumbers  
1583   \glsnonumberlistfalse  
1584   \renewcommand*\glossaryentrynumbers[1]{%  
1585     \ifglsentryexists{\glscurrententrylabel}{%  
1586       {}%  
1587       \@glsxtrpreloctag  
1588       \GlsXtrFormatLocationList{\#1}%  
1589       \@glsxtrpostloctag  
1590       \gls@save@numberlist{\#1}%  
1591     }{}%  
1592   }%  
1593 \else  
1594   \glsnonumberlisttrue  
1595   \renewcommand*\glossaryentrynumbers[1]{%  
1596     \ifglsentryexists{\glscurrententrylabel}{%  
1597       {}%  
1598       \gls@save@numberlist{\#1}%  
1599     }{}%  
1600   }%  
1601 \fi
```

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

```
1602 \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

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

```
1618      \csuse{@glsxtr@preloctag@\glscurrententrylabel}%
1619      }%
1620  }%
1621 }
1622 \only\GlsXtrEnablePreLocationTag
```

glsxtrpreloctag

```
1623 \newcommand*{\@@glsxtrpreloctag}{%
1624   \let\@glsxtr@org@delimN\delimN
1625   \let\@glsxtr@org@delimR\delimR
1626   \let\@glsxtr@org@glsignore\glsignore
   \gdef is required as the delimiters may occur inside a scope.
1627   \gdef\@glsxtr@thisloctag{\@glsxtr@pagetag}%
1628   \renewcommand*{\delimN}{%
1629     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
     \@glsxtr@org@delimN}%
1630   \renewcommand*{\delimR}{%
1631     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
     \@glsxtr@org@delimR}%
1632   \renewcommand*{\glsignore}[1]{%
1633     \gdef\@glsxtr@thisloctag{\relax}%
     \@glsxtr@org@glsignore{##1}}%
1634   \glsxtr@doloctag
1635 }
1636 }
1637 }
1638 }
```

glsxtrpreloctag

```
1639 \newcommand*{\@glsxtrpreloctag}{}%
```

@glsxtr@pagetag

```
1640 \newcommand*{\@glsxtr@pagetag}{}%
```

glsxtr@pagestag

```
1641 \newcommand*{\@glsxtr@pagestag}{}%
```

lsxtrpostloctag

```
1642 \newcommand*{\@@glsxtrpostloctag}{%
1643   \let\delimN\@glsxtr@org@delimN
1644   \let\delimR\@glsxtr@org@delimR
1645   \let\glsignore\@glsxtr@org@glsignore
1646   \protected@write\@auxout{%
1647     {\string\@glsxtr@savepreloctag{\glscurrententrylabel}\{\@glsxtr@thisloctag\}}%
1648 }
```

lsxtrpostloctag

```
1649 \newcommand*{\@glsxtrpostloctag}{}%
```

```

lsxtr@preloctag
1650 \newcommand*{\glsxtr@savepreloctag}[2]{}
1651 \protected@write\@auxout{}{%
1652   \string\providecommand\string{\glsxtr@savepreloctag}[2]{}}

glsxtr@doloctag
1653 \newcommand*{\glsxtr@doloctag}{}}

ss@nonumberlist  Modify the nonumberlist key to use \GlsXtrFormatLocationList (and also save the number
list):
1654 \renewcommand*{\KV@printgloss@nonumberlist}[1]{%
1655   \XKV@plfalse
1656   \XKV@sttrue
1657   \XKV@checkchoice[\XKV@resa]{#1}{true,false}%
1658 {%
1659   \csname glsnonumberlist\XKV@resa\endcsname
1660   \ifglsnonumberlist
1661     \def\glossaryentrynumbers##1{\gls@save@numberlist{##1}}%
1662   \else
1663     \def\glossaryentrynumbers##1{%
1664       \glsxtrpreloctag
1665       \GlsXtrFormatLocationList{##1}%
1666       \glsxtrpostloctag
1667       \gls@save@numberlist{##1}}%
1668   \fi
1669 }%
1670 }

```

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.

```

1671 \renewcommand*{\glsentryfmt}{%
1672   \ifglshasshort{\glslabel}{\glssetabbrvfmt{\glscategory{\glslabel}}}{}%
1673   \glsifregular{\glslabel}%
1674   {\glsxtrregularfont{\glsentryfmt}}%
1675 {%
1676   \ifglshasshort{\glslabel}%
1677   {\glsxtrgenabbrvfmt}%
1678   {\glsxtrregularfont{\glsentryfmt}}%
1679 }%
1680 }

```

sxtrregularfont Font used for regular entries.
1681 \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.
1682 \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).
1683 \glsxtr@record{#2}{#3}{glslink}%
1684 \glsdoifexists{#3}%
1685 {%

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).
1686 \let\glsxtrorg@ifKV@glslink@hyper\ifKV@glslink@hyper
1687 \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
1688 \def\glscustomtext{#4}%
1689 \glsxtr@field@linkdefs
1690 #1%
1691 \gls@link[#2]{#3}{#4}%
1692 \let\ifKV@glslink@hyper\glsxtrorg@ifKV@glslink@hyper
1693 }%
1694 \glspostlinkhook
1695 }

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.
1696 \let\glsxtr@org@gls@\gls@
1697 \def\gls@#1#2{%
1698 \glsxtr@record{#1}{#2}{glslink}%
1699 \glsxtr@org@gls@{#1}{#2}%
1700 }%

\@glspl@ Save the original definition and redefine.
1701 \let\glsxtr@org@glspl@\glspl@
1702 \def\glspl@#1#2{%
1703 \glsxtr@record{#1}{#2}{glslink}%
1704 \glsxtr@org@glspl@{#1}{#2}%
1705 }%

\@Gls@ Save the original definition and redefine.

```
1706 \let\@glsxtr@org@Gls@\@Gls@
1707 \def\@Gls@#1#2{%
1708   \glsxtr@record{#1}{#2}{glslink}%
1709   \glsxtr@org@Gls@{#1}{#2}%
1710 }%
```

\@Glspl@ Save the original definition and redefine.

```
1711 \let\@glsxtr@org@Glspl@\@Glspl@
1712 \def\@Glspl@#1#2{%
1713   \glsxtr@record{#1}{#2}{glslink}%
1714   \glsxtr@org@Glspl@{#1}{#2}%
1715 }%
```

\@GLS@ Save the original definition and redefine.

```
1716 \let\@glsxtr@org@GLS@\@GLS@
1717 \def\@GLS@#1#2{%
1718   \glsxtr@record{#1}{#2}{glslink}%
1719   \glsxtr@org@GLS@{#1}{#2}%
1720 }%
```

\@GLSpl@ Save the original definition and redefine.

```
1721 \let\@glsxtr@org@GLSpl@\@GLSpl@
1722 \def\@GLSpl@#1#2{%
1723   \glsxtr@record{#1}{#2}{glslink}%
1724   \glsxtr@org@GLSpl@{#1}{#2}%
1725 }%
```

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

```
1726 \renewcommand*\@glsdisp}[3][]{%
1727   \glsxtr@record{#1}{#2}{glslink}%
1728   \glsdoifexists{#2}{%
1729     \let\do@gls@link@checkfirsthyper\gls@link@checkfirsthyper
1730     \let\glsifplural\@secondoftwo
1731     \let\glscapscase\@firstofthree
1732     \def\glscustomtext{#3}%
1733     \def\glsinsert{}%
1734     \def\@glo@text{\csname gls@\glstype @entryfmt\endcsname}%
1735     \gls@link[#1]{#2}{\@glo@text}%
1736     \ifKV@glslink@local
1737       \glslocalunset{#2}%
1738     \else
1739       \glsunset{#2}%
1740     \fi
1741   }%
1742   \glspostlinkhook
1743 }
```

```

\@gls@alink@ Redefine to include \@glsxtr@record
1744 \renewcommand*\{@gls@alink}[3] []{%
1745   \@glsxtr@record{\#1}{\#2}{\glslink}%
1746   \glsdoifexistsord{o}{\#2}%
1747   {%
1748     \let\do@gls@alink@checkfirsthyper\relax
1749     \@gls@link[\#1]{\#2}{\#3}%
1750   }%
1751   {%
1752     \glstextformat{\#3}%
1753   }%
1754   \glspostlinkhook
1755 }

```

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

```

1756 \newcommand*\{@glsxtrinitwrgloss}{%
1757   \glsifattribute{\glslabel}{wrgloss}{after}%
1758   {%
1759     \glsxtrinitwrglossbeforefalse
1760   }%
1761   {%
1762     \glsxtrinitwrglossbeforetrue
1763   }%
1764 }

```

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

```

1765 \newif\ifglsxtrinitwrglossbefore
1766 \glsxtrinitwrglossbeforetrue

```

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

```

1767 \define@choicekey{glslink}{wrgloss}%
1768 [\@glsxtr@wrglossval\@glsxtr@wrglossnr]%
1769 {before,after}%
1770 {%
1771   \ifcase\@glsxtr@wrglossnr\relax
1772     \glsxtrinitwrglossbeforetrue
1773   \or
1774     \glsxtrinitwrglossbeforefalse
1775   \fi
1776 }

1777 \define@key{glslink}{thevalue}{\def\@glsxtr@thevalue{\#1}{}}

1778 \define@key{glslink}{theHvalue}{\def\@glsxtr@theHvalue{\#1}{}}

```

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

```

1779 \define@boolkey{glslink}[glsxtr@]{hyperoutside}[true]{}
1780 \glsxtr@hyperoutsidetrue

```

`nithyperoutside` Set the default if the hyperoutside is omitted.

```
1781 \newcommand*{\glsxtrnithyperoutside}{%
1782   \glsifattribute{\glslabel}{hyperoutside}{false}%
1783   {%
1784     \glsxtr@hyperoutsidefalse
1785   }%
1786   {%
1787     \glsxtr@hyperoutsidetrue
1788   }%
1789 }
```

`r@inc@linkcount` Does nothing by default.

```
1790 \newcommand*{\glsxtr@inc@linkcount}{}%
```

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

```
1791 \newcommand*{\glslinkpresetkeys}{}%
```

`\@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.

```
1792 \def\@gls@link[#1]#2#3{%
1793   \leavevmode
1794   \edef\glslabel{\glsdetoklabel{#2}}%
1795   \def\@gls@link@opts{#1}%
1796   \let\@gls@link@label\glslabel
1797   \let\@glsnumberformat\glsxtr@defaultnumberformat
1798   \edef\@gls@counter{\csname glo@\glslabel @counter\endcsname}%
1799   \edef\glstype{\csname glo@\glslabel @type\endcsname}%
1800   \let\org@ifKV@glslink@hyper\ifKV@glslink@hyper
```

Initialise thevalue and theHvalue (v1.19).

```
1801 \def\@glsxtr@thevalue{}%
1802 \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
```

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

```
1803 \glsxtrinitwrgloss
```

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

```
1804 \glsxtrnithyperoutside
```

Note that the default link options may override \glsxtrinitwrgloss.

```
1805 \gls@setdefault@glslink@opts
```

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

```
1806 \glsxtr@inc@linkcount
```

As the original definition.

```
1807 \do@glsdisablehyperinlist
1808 \do@gls@link@checkfirsthyper
```

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

```
1809 \glslinkpresetkeys
```

Set options.

```
1810 \setkeys{glslink}{#1}%
```

User hook after options are set:

```
1811 \glslinkpostsetkeys
```

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

```
1812 \ifdefempty{\@glsxtr@thevalue}%
1813 {%
1814   \@gls@saveentrycounter
1815 }%
1816 {%
1817   \let\theglsentrycounter\@glsxtr@thevalue
1818   \def\theHglsentrycounter{\@glsxtr@theHvalue}%
1819 }%
1820 \@gls@setsort{\glslabel}%
```

Check textformat attribute (new to v1.21).

```
1821 \glshasattribute{\glslabel}{textformat}%
1822 {%
1823   \edef\@glsxtr@attrval{\glsgetattribute{\glslabel}{textformat}}%
1824   \ifcsdef{\@glsxtr@attrval}%
1825   {%
1826     \letcs{\@glsxtr@textformat}{\@glsxtr@attrval}%
1827   }%
1828   {%
1829     \GlossariesExtraWarning{Unknown control sequence name
1830       '\@glsxtr@attrval' supplied in textformat attribute
1831       for entry '\glslabel'. Reverting to default \string\glstextformat}%
1832     \let\@glsxtr@textformat\glstextformat
1833   }%
1834 }%
1835 {%
1836   \let\@glsxtr@textformat\glstextformat
1837 }%
```

Do write if it should occur before the link text:

```
1838 \ifglsxtrinitwrglossbefore
1839   \do@wrglossary{#2}%
1840 \fi
```

Do the link text:

```
1841 \ifKV@glslink@hyper
1842   \ifglsxtr@hyperoutside
1843     \glslink{\glolinkprefix\glslabel}{\glsxtr@textformat{#3}}%
1844   \else
1845     \glsxtr@textformat{\glslink{\glolinkprefix\glslabel}{#3}}%
1846   \fi
1847 \else
1848   \ifglsxtr@hyperoutside
1849     \glsdonohyperlink{\glolinkprefix\glslabel}{\glsxtr@textformat{#3}}%
```

```

1850     \else
1851         \@glsxtr@textformat{\glsdonohyperlink{\glolinkprefix\glslabel}{#3}}%
1852     \fi
1853 \fi

```

Do write if it should occur after the link text:

```

1854 \ifglsxtrinitwrglossbefore
1855 \else
1856     \do@wrglossary{#2}%
1857 \fi

```

As the original definition:

```

1858 \let\ifKV@glslink@hyper\org@ifKV@glslink@hyper
1859 }

1860 \define@key{glossadd}{thevalue}{\def\@glsxtr@thevalue{#1}}
1861 \define@key{glossadd}{theHvalue}{\def\@glsxtr@theHvalue{#1}}

```

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

```

1862 \renewrobustcmd*\glsadd}[2][]{%
1863     \@glsxtrifinmark
1864     {}%
1865     {}%
1866     \@gls@adjustmode
1867     \@glsxtr@record{#1}{#2}{glossadd}%
1868     \glsdoifexists{#2}%
1869     {}%
1870     \let\@glsnumberformat\@glsxtr@defaultnumberformat
1871     \edef\@gls@counter{\csname glo@\glsdetoklabel{#2}@counter\endcsname}%
1872     \def\@glsxtr@thevalue{}%
1873     \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
1874     \setkeys{glossadd}{#1}%
1875     \ifdefempty{\@glsxtr@thevalue}%
1876     {}%
1877     \@gls@saveentrycounter
1878     }%
1879     {}%
1880     \let\theglsentrycounter\@glsxtr@thevalue
1881     \def\theHglsentrycounter{\@glsxtr@theHvalue}%
1882     }%

```

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

```

1883     \@gls@setsort{#2}%
1884     \do@wrglossary{#2}%
1885     }%
1886     }%
1887 }

```

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

```

1888 \newcommand*{\@glsxtr@field@linkdefs}{%
1889   \let\glsxtrifwasfirstuse\@secondoftwo
1890   \let\glsifplural\@secondoftwo
1891   \let\glscapscase\@firstofthree
1892   \let\glsinsert\@empty
1893 }

```

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

assignfieldfont

```

1894 \newcommand*{\glsxtrassignfieldfont}[1]{%
1895   \ifglsentryexists{#1}%
1896   {%
1897     \ifglshasshort{#1}%
1898     {%
1899       \glssetabbrvfmt{\glscategory{#1}}%
1900       \glsifregular{#1}%
1901       {\let\@gls@field@font\glsxtrregularfont}%
1902       {\let\@gls@field@font\@firstofone}%
1903     }%
1904     {%
1905       \glsifnotregular{#1}%
1906       {\let\@gls@field@font\@firstofone}%
1907       {\let\@gls@field@font\glsxtrregularfont}%
1908     }%
1909   }%
1910   {%
1911     \let\@gls@field@font@gobble
1912   }%
1913 }

```

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

```

1914 \def\@glstext@#1#2[#3]{%
1915   \glsxtrassignfieldfont{#2}%
1916   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccesstext{#2}#3}}%
1917 }

```

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

```

1918 \def\@GLStext@#1#2[#3]{%
1919   \glsxtrassignfieldfont{#2}%
1920   \gls@field@link[\let\glscapscase\@thirdofthree]{#1}{#2}%
1921   {\gls@field@font{\GLSaccesstext{#2}\mfirstucMakeUppercase{#3}}}%
1922 }

```

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

```

1923 \def\@Glstext@#1#2[#3]{%
1924   \glsxtrassignfieldfont{#2}%
1925   \gls@field@link[\let\glscapscase\@secondofthree]{#1}{#2}%

```

```
1926     {\@gls@field@font{\Glsaccesstext{#2}#3}}%
1927 }
```

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

```
1928 \newcommand*\glsxtrchecknohyperfirst}[1]{%
1929   \glsifattribute{#1}{nohyperfirst}{true}{\KV@glslink@hyperfalse}{}%
1930 }
```

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

```
1931 \def\glsfirst@#1#2[#3]{%
1932   \glsxtrassignfieldfont{#2}%


```

Ensure that \glsfirst honours the nohyperfirst attribute.

```
1933   \@gls@field@link
1934   [\let\glsxtrifwasfirstuse\@firstoftwo
1935     \glsxtrchecknohyperfirst{#2}%
1936   ]{#1}{#2}%
1937   {\@gls@field@font{\glsaccessfirst{#2}#3}}%
1938 }
```

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

```
1939 \def\@Glsfirst@#1#2[#3]{%
1940   \glsxtrassignfieldfont{#2}%


```

Ensure that \Glsfirst honours the nohyperfirst attribute.

```
1941   \@gls@field@link
1942   [\let\glsxtrifwasfirstuse\@firstoftwo
1943     \let\glscapscase\@secondofthree
1944     \glsxtrchecknohyperfirst{#2}%
1945   ]%
1946   {#1}{#2}{\@gls@field@font{\Glsaccessfirst{#2}#3}}%
1947 }
```

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

```
1948 \def\@GLSfirst@#1#2[#3]{%
1949   \glsxtrassignfieldfont{#2}%


```

Ensure that \GLSfirst honours the nohyperfirst attribute.

```
1950   \@gls@field@link
1951   [\let\glsxtrifwasfirstuse\@firstoftwo
1952     \let\glscapscase\@thirdofthree
1953     \glsxtrchecknohyperfirst{#2}%
1954   ]%
1955   {#1}{#2}{\@gls@field@font{\GLSaccessfirst{#2}\mfirstuclMakeUppercase{#3}}}%
```

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

```
1957 \def\@glsplural@#1#2[#3]{%
1958   \glsxtrassignfieldfont{#2}%
1959   \gls@field@link[\let\glsifplural\@firstoftwo]{#1}{#2}%
1960   {\gls@field@font{\glsaccessplural{#2}#3}}%
1961 }
```

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

```
1962 \def\@Glsplural@#1#2[#3]{%
1963   \glsxtrassignfieldfont{#2}%
1964   \gls@field@link
1965   [\let\glsifplural\@firstoftwo
1966   \let\glscapscase\@secondofthree
1967 ]%
1968   {#1}{#2}{\gls@field@font{\Glsaccessplural{#2}#3}}%
1969 }
```

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

```
1970 \def\@GLSplural@#1#2[#3]{%
1971   \glsxtrassignfieldfont{#2}%
1972   \gls@field@link
1973   [\let\glsifplural\@firstoftwo
1974   \let\glscapscase\@thirdofthree
1975 ]%
1976   {#1}{#2}{\gls@field@font{\GLSaccessplural{#2}\mfirstucMakeUppercase{#3}}}%
1977 }
```

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

```
1978 \def\@glsfirstplural@#1#2[#3]{%
1979   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
1980   \gls@field@link
1981   [\let\glsxtrifwasfirstuse\@firstoftwo
1982   \let\glsifplural\@firstoftwo
1983   \glsxtrchecknohyperfirst{#2}%
1984 ]%
1985   {#1}{#2}{\gls@field@font{\glsaccessfirstplural{#2}#3}}%
1986 }
```

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

```
1987 \def\@Glsfirstplural@#1#2[#3]{%
1988   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
1989   \gls@field@link
1990   [\let\glsxtrifwasfirstuse\@firstoftwo
1991   \let\glsifplural\@firstoftwo
1992   \let\glscapscase\@secondofthree
```

```

1993   \glsxtrchecknohyperfirst{#2}%
1994 ]%
1995 {#1}{#2}{\gls@field@font{\Glsaccessfirstplural{#2}#3}}%
1996 }

```

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

```

1997 \def\GLSfirstplural@#1#2[#3]{%
1998   \glsxtrassignfieldfont{#2}%

```

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

```

1999 \gls@field@link
2000 [\let\glsxtrifwasfirstuse\@firstoftwo
2001 \let\glsifplural\@firstoftwo
2002 \let\glscapscase\@thirdoftthree
2003 \glsxtrchecknohyperfirst{#2}%
2004 ]%
2005 {#1}{#2}%
2006 {\gls@field@font{\Glsaccessfirstplural{#2}\mfirstucMakeUppercase{#3}}}%
2007 }

```

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

```

2008 \def\glsname@#1#2[#3]{%
2009   \glsxtrassignfieldfont{#2}%
2010   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccessname{#2}#3}}%
2011 }

```

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

```

2012 \def\Glsname@#1#2[#3]{%
2013   \glsxtrassignfieldfont{#2}%
2014   \gls@field@link
2015   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2016   {\gls@field@font{\Glsaccessname{#2}#3}}%
2017 }

```

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

```

2018 \def\GLSname@#1#2[#3]{%
2019   \glsxtrassignfieldfont{#2}%
2020   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2021   {#1}{#2}%
2022   {\gls@field@font{\Glsaccessname{#2}\mfirstucMakeUppercase{#3}}}%
2023 }

```

`\@glsdesc@`

```

2024 \def\glsdesc@#1#2[#3]{%
2025   \glsxtrassignfieldfont{#2}%
2026   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccessdesc{#2}#3}}%
2027 }

```

```

\@Glsdesc@ First letter uppercase version.
2028 \def\@Glsdesc@#1#2[#3]{%
2029   \glsxtrassignfieldfont{#2}%
2030   \gls@field@link
2031   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2032   {\gls@field@font{\Glsaccessdesc{#2}{#3}}}{%
2033 }

\@GLSdesc@ All uppercase version.
2034 \def\@GLSdesc@#1#2[#3]{%
2035   \glsxtrassignfieldfont{#2}%
2036   \gls@field@link[\let\glscapscase\@thirdoftwo]{%
2037     {#1}{#2}{\gls@field@font{\GLSaccessdesc{#2}\mfirstucMakeUppercase{#3}}}}{%
2038 }

@glsdescplural@ No case-changing version.
2039 \def\@glsdescplural@#1#2[#3]{%
2040   \glsxtrassignfieldfont{#2}%
2041   \gls@field@link
2042   [\let\glscapscase\@secondoftwo
2043   \let\glsifplural\@firstoftwo
2044   ]{#1}{#2}{\gls@field@font{\glsaccessdescplural{#2}{#3}}}{%
2045 }

@Glsdescplural@ First letter uppercase version.
2046 \def\@Glsdescplural@#1#2[#3]{%
2047   \glsxtrassignfieldfont{#2}%
2048   \gls@field@link
2049   [\let\glscapscase\@secondoftwo
2050   \let\glsifplural\@firstoftwo
2051   ]{#1}{#2}{\gls@field@font{\Glsaccessdescplural{#2}{#3}}}{%
2052 }

@GLSdescplural@ All uppercase version.
2053 \def\@GLSdesc@#1#2[#3]{%
2054   \glsxtrassignfieldfont{#2}%
2055   \gls@field@link
2056   [\let\glscapscase\@thirdoftwo
2057   \let\glsifplural\@firstoftwo
2058   ]{%
2059     {#1}{#2}%
2060     {\gls@field@font{\GLSaccessdescplural{#2}\mfirstucMakeUppercase{#3}}}}{%
2061 }

\@glssymbol@
2062 \def\@glssymbol@#1#2[#3]{%
2063   \glsxtrassignfieldfont{#2}%
2064   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccesssymbol{#2}{#3}}}{%
2065 }

```

\@Glssymbol@ First letter uppercase version.

```
2066 \def\@Glssymbol@#1#2[#3]{%
2067   \glsxtrassignfieldfont{#2}%
2068   \gls@field@link
2069   [\let\glscapscase\@secondoftwo]%
2070   {#1}{#2}{\gls@field@font{\Glsaccesssymbol{#2}{#3}}}{%
2071 }
```

\@GLSsymbol@ All uppercase version.

```
2072 \def\@GLSsymbol@#1#2[#3]{%
2073   \glsxtrassignfieldfont{#2}%
2074   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2075   {#1}{#2}{\gls@field@font{\GLSaccesssymbol{#2}\mfirstucMakeUppercase{#3}}}{%
2076 }
```

lssymbolplural@ No case-changing version.

```
2077 \def\@glssymbolplural@#1#2[#3]{%
2078   \glsxtrassignfieldfont{#2}%
2079   \gls@field@link
2080   [\let\glscapscase\@secondoftwo
2081     \let\glsifplural\@firstoftwo
2082   ]{#1}{#2}{\gls@field@font{\glsaccesssymbolplural{#2}{#3}}}{%
2083 }
```

lssymbolplural@ First letter uppercase version.

```
2084 \def\@Glssymbolplural@#1#2[#3]{%
2085   \glsxtrassignfieldfont{#2}%
2086   \gls@field@link
2087   [\let\glscapscase\@secondoftwo
2088     \let\glsifplural\@firstoftwo
2089   ]{#1}{#2}{\gls@field@font{\Glsaccesssymbolplural{#2}{#3}}}{%
2090 }
```

LSsymbolplural@ All uppercase version.

```
2091 \def\@GLSsymbol@#1#2[#3]{%
2092   \glsxtrassignfieldfont{#2}%
2093   \gls@field@link
2094   [\let\glscapscase\@thirdoftwo
2095     \let\glsifplural\@firstoftwo
2096   ]%
2097   {#1}{#2}{%
2098     {\gls@field@font{\GLSaccesssymbolplural{#2}\mfirstucMakeUppercase{#3}}}{%
2099 }}
```

\@Glsuseri@ First letter uppercase version.

```
2100 \def\@Glsuseri@#1#2[#3]{%
2101   \glsxtrassignfieldfont{#2}%
2102   \gls@field@link
```

```

2103  [\let\glscapscase\@secondoftwo]{#1}{#2}%
2104  {\@gls@field@font{\Glsentryuseri{#2}#3}}%
2105 }

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

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

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

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

\@GLSuseriii@ All uppercase version.
2128 \def\@GLSuseriii@#1#2[#3]{%
2129   \glsxtrassignfieldfont{#2}%
2130   \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2131     {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseriii{#2}#3}}}%
2132 }

\@Glsuseriv@ First letter uppercase version.
2133 \def\@Glsuseriv@#1#2[#3]{%
2134   \glsxtrassignfieldfont{#2}%
2135   \@gls@field@link
2136   [\let\glscapscase\@secondoftwo]%
2137     {#1}{#2}{\@gls@field@font{\Glsentryuseriv{#2}#3}}}%
2138 }

```

```

\@GLSuseriv@ All uppercase version.
2139 \def\@GLSuseriv@#1#2[#3]{%
2140   \glsxtrassignfieldfont{#2}%
2141   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2142   {#1}{#2}%
2143   {\gls@field@font{\mfirstucMakeUppercase{\glsentryuseriv{#2}{#3}}}}%
2144 }

\@Glsuserv@ First letter uppercase version.
2145 \def\@Glsuserv@#1#2[#3]{%
2146   \glsxtrassignfieldfont{#2}%
2147   \gls@field@link
2148   [\let\glscapscase\@secondoftwo]%
2149   {#1}{#2}{\gls@field@font{\Glsentryuserv{#2}{#3}}}%
2150 }

\@GLSuserv@ All uppercase version.
2151 \def\@GLSuserv@#1#2[#3]{%
2152   \glsxtrassignfieldfont{#2}%
2153   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2154   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuserv{#2}{#3}}}}%
2155 }

\@Glsuservi@ First letter uppercase version.
2156 \def\@Glsuservi@#1#2[#3]{%
2157   \glsxtrassignfieldfont{#2}%
2158   \gls@field@link
2159   [\let\glscapscase\@secondoftwo]%
2160   {#1}{#2}{\gls@field@font{\Glsentryuservi{#2}{#3}}}%
2161 }

\@GLSuservi@ All uppercase version.
2162 \def\@GLSuservi@#1#2[#3]{%
2163   \glsxtrassignfieldfont{#2}%
2164   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2165   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuservi{#2}{#3}}}}%
2166 }

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

\@acrshort No case change.
2167 \def\@acrshort#1#2[#3]{%
2168   \glsdoifexists{#2}%
2169   {%
2170     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2171     \let\glsxtrifwasfirstuse\@secondoftwo
2172     \let\glsifplural\@secondoftwo

```

```

2173   \let\glscapscase\@firstofthree
2174   \let\glsinsert\@empty
2175   \def\glscustomtext{%
2176     \acronymfont{\glsaccessshort{#2}}#3%
2177   }%
2178   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2179 }%
2180 \glspostlinkhook
2181 }

```

\@Acrshort First letter uppercase.

```

2182 \def\@Acrshort#1#2[#3]{%
2183   \glsdoifexists{#2}%
2184 {%
2185   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2186   \let\glsxtrifwasfirstuse\@secondoftwo
2187   \let\glsifplural\@secondoftwo
2188   \let\glscapscase\@secondofthree
2189   \let\glsinsert\@empty
2190   \def\glscustomtext{%
2191     \acronymfont{\Glsaccessshort{#2}}#3%
2192   }%
2193   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2194 }%
2195 \glspostlinkhook
2196 }

```

\@ACRshort All uppercase.

```

2197 \def\@ACRshort#1#2[#3]{%
2198   \glsdoifexists{#2}%
2199 {%
2200   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2201   \let\glsxtrifwasfirstuse\@secondoftwo
2202   \let\glsifplural\@secondoftwo
2203   \let\glscapscase\@thirdofthree
2204   \let\glsinsert\@empty
2205   \def\glscustomtext{%
2206     \mfirstucMakeUppercase{\acronymfont{\glsaccessshort{#2}}#3}%
2207   }%
2208   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2209 }%
2210 \glspostlinkhook
2211 }

```

\@acrshortpl No case change.

```

2212 \def\@acrshortpl#1#2[#3]{%
2213   \glsdoifexists{#2}%
2214 {%
2215   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper

```

```

2216   \let\glsxtrifwasfirstuse\@secondoftwo
2217   \let\glsifplural\@firstoftwo
2218   \let\glscapscase\@firstofthree
2219   \let\glsinsert\@empty
2220   \def\glscustomtext{%
2221     \acronymfont{\glsaccessshortpl{#2}}#3%
2222   }%
2223   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2224 }%
2225 \glspostlinkhook
2226 }

```

\@Acrshortpl First letter uppercase.

```

2227 \def\@Acrshortpl#1#2[#3]{%
2228   \glsdoifexists{#2}%
2229 {%
2230   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2231   \let\glsxtrifwasfirstuse\@secondoftwo
2232   \let\glsifplural\@firstoftwo
2233   \let\glscapscase\@secondofthree
2234   \let\glsinsert\@empty
2235   \def\glscustomtext{%
2236     \acronymfont{\Glsaccessshortpl{#2}}#3%
2237   }%
2238   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2239 }%
2240 \glspostlinkhook
2241 }

```

\@ACRshortpl All uppercase.

```

2242 \def\@ACRshortpl#1#2[#3]{%
2243   \glsdoifexists{#2}%
2244 {%
2245   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2246   \let\glsxtrifwasfirstuse\@secondoftwo
2247   \let\glsifplural\@firstoftwo
2248   \let\glscapscase\@thirdofthree
2249   \let\glsinsert\@empty
2250   \def\glscustomtext{%
2251     \mfirstrucMakeUppercase{\acronymfont{\glsaccessshortpl{#2}}#3}%
2252   }%
2253   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2254 }%
2255 \glspostlinkhook
2256 }

```

\@acrlong No case change.

```

2257 \def\@acrlong#1#2[#3]{%
2258   \glsdoifexists{#2}%

```

```

2259 {%
2260   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2261   \let\glsxtrifwasfirstuse\@secondoftwo
2262   \let\glsifplural\@secondoftwo
2263   \let\glscapscase\@firstofthree
2264   \let\glsinsert\@empty
2265   \def\glscustomtext{%
2266     \acronymfont{\glsaccesslong{#2}}#3%
2267   }%
2268   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2269 }%
2270 \glspostlinkhook
2271 }

```

\@Acrlong First letter uppercase.

```

2272 \def\@Acrlong#1#2[#3]{%
2273   \glsdoifexists{#2}{%
2274     {%
2275       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2276       \let\glsxtrifwasfirstuse\@secondoftwo
2277       \let\glsifplural\@secondoftwo
2278       \let\glscapscase\@secondofthree
2279       \let\glsinsert\@empty
2280       \def\glscustomtext{%
2281         \acronymfont{\Glsaccesslong{#2}}#3%
2282       }%
2283       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2284     }%
2285   \glspostlinkhook
2286 }

```

\@ACRlong All uppercase.

```

2287 \def\@ACRlong#1#2[#3]{%
2288   \glsdoifexists{#2}{%
2289     {%
2290       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2291       \let\glsxtrifwasfirstuse\@secondoftwo
2292       \let\glsifplural\@secondoftwo
2293       \let\glscapscase\@thirdofthree
2294       \let\glsinsert\@empty
2295       \def\glscustomtext{%
2296         \mfirstrucMakeUppercase{\acronymfont{\glsaccesslong{#2}}#3}%
2297       }%
2298       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2299     }%
2300   \glspostlinkhook
2301 }

```

\@acrlongpl No case change.

```

2302 \def\@acrlongpl#1#2[#3]{%
2303   \glsdoifexists{#2}{%
2304     {%
2305       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2306       \let\glsxtrifwasfirstuse\@secondoftwo
2307       \let\glsifplural\@firstoftwo
2308       \let\glscapscase\@firstofthree
2309       \let\glsinsert\@empty
2310       \def\glscustomtext{%
2311         \acronymfont{\glsaccesslongpl{#2}}#3%
2312       }%
2313       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2314     }%
2315   \glspostlinkhook
2316 }

```

\@Acrlongpl First letter uppercase.

```

2317 \def\@Acrlongpl#1#2[#3]{%
2318   \glsdoifexists{#2}{%
2319     {%
2320       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2321       \let\glsxtrifwasfirstuse\@secondoftwo
2322       \let\glsifplural\@firstoftwo
2323       \let\glscapscase\@secondofthree
2324       \let\glsinsert\@empty
2325       \def\glscustomtext{%
2326         \acronymfont{\Glsaccesslongpl{#2}}#3%
2327       }%
2328       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2329     }%
2330   \glspostlinkhook
2331 }

```

\@ACRlongpl All uppercase.

```

2332 \def\@ACRlongpl#1#2[#3]{%
2333   \glsdoifexists{#2}{%
2334     {%
2335       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2336       \let\glsxtrifwasfirstuse\@secondoftwo
2337       \let\glsifplural\@firstoftwo
2338       \let\glscapscase\@thirdofthree
2339       \let\glsinsert\@empty
2340       \def\glscustomtext{%
2341         \mfirstrucMakeUppercase{\acronymfont{\glsaccesslongpl{#2}}#3}%
2342       }%
2343       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2344     }%
2345   \glspostlinkhook
2346 }

```

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

```
\@glsaddkey
2347 \renewcommand*{\@glsaddkey}[7]{%
2348   \key@ifundefined{glossentry}{\#1}{%
2349     {%
2350       \define@key{glossentry}{\#1}{\csdef{@glo@\#1}{##1}}{%
2351         \appto{\gls@keymap}{, \#1}{\#1}}{%
2352         \appto{\@newglossaryentryprehook}{\csdef{@glo@\#1}{\#2}}{%
2353           \appto{\@newglossaryentryposthook}{%
2354             \letcs{\@glo@tmp}{\glo@\#1}}{%
2355             \gls@assign@field{\#2}{\glo@label}{\#1}{\@glo@tmp}}{%
2356           }{%
2357           \newcommand*{\#3}[1]{\gls@entry@field{\##1}{\#1}}{%
2358             \newcommand*{\#4}[1]{\Gls@entry@field{\##1}{\#1}}{%
```

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

```
2359 \ifcsdef{@gls@user@\#1@}{%
2360   {%
2361     \PackageError{glossaries}{%
2362       {Can't define '\string#5' as helper command}%
2363       {\expandafter\string\csname @gls@user@\#1@\endcsname already}%
2364       {exists}}{%
2365     }{%
2366   }{%
2367   {%
2368     \expandafter\newcommand\expandafter*\expandafter{%
2369       {\csname @gls@user@\#1\endcsname}[2] []}{%
2370         \new@ifnextchar[%
2371           {\csuse{@gls@user@\#1@}{##1}{##2}}{%
2372             {\csuse{@gls@user@\#1@}{##1}{##2}[]}}{%
2373             \csdef{@gls@user@\#1@}{##1}{##2}{%
2374               \gls@field@link{\#1}{\#2}{\#3}{\#2}{\#3}}{%
2375             }{%
2376             \newrobustcmd*{\#5}{%
2377               \expandafter\gls@hyp@opt\csname @gls@user@\#1\endcsname}}{%
2378             }{%
2379 }
```

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

```
2379 \ifcsdef{@Gls@user@\#1@}{%
2380   {%
2381     \PackageError{glossaries}{%
2382       {Can't define '\string#6' as helper command}%
2383       {\expandafter\string\csname @Gls@user@\#1@\endcsname already}%
2384       {exists}}{%
2385     }{%
2386   }{%
2387   {%
2388     \expandafter\newcommand\expandafter*\expandafter{%
```

```

2389      {\csname @Gls@user@#1\endcsname}[2] []{%
2390          \new@ifnextchar[%
2391              {\csuse{@Gls@user@#1@}{##1}{##2}}%
2392              {\csuse{@Gls@user@#1@}{##1}{##2}[]}}%
2393      \csdef{@Gls@user@#1@}##1##2##3}{%
2394          \@gls@field@link[\let\glscapscase\@secondofthree]%
2395          {##1}{##2}{##4{##2}##3}}%
2396      }%
2397      \newrobustcmd*{##6}{%
2398          \expandafter\gls@hyp@opt\csname @Gls@user@#1\endcsname}%
2399      }%

```

Finally the all caps version (modified):

```

2400      \ifcsdef{@GLS@user@#1@}%
2401      {}%
2402          \PackageError{glossaries}%
2403          {Can't define '\string#7' as helper command}
2404          '\expandafter\string\csname @GLS@user@#1@\endcsname' already
2405          exists}%
2406      {}%
2407      }%
2408      {}%
2409      \expandafter\newcommand\expandafter*\expandafter
2410      {\csname @GLS@user@#1\endcsname}[2] []{%
2411          \new@ifnextchar[%
2412              {\csuse{@GLS@user@#1@}{##1}{##2}}%
2413              {\csuse{@GLS@user@#1@}{##1}{##2}[]}}%
2414      \csdef{@GLS@user@#1@}##1##2##3}{%
2415          \@gls@field@link[\let\glscapscase\@thirdofthree]%
2416          {##1}{##2}{\mfirstucMakeUppercase{##3{##2}##3}}}}%
2417      }%
2418      \newrobustcmd*{##7}{%
2419          \expandafter\gls@hyp@opt\csname @GLS@user@#1\endcsname}%
2420      }%
2421      }%
2422      {}%
2423          \PackageError{glossaries-extra}{Key '#1' already exists}{}%
2424      }%
2425  }

```

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

```
2426 \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.

```
2427 \let\glsxtr@org@checkfirsthyper\gls@link@checkfirsthyper
2428 \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.

```
2429 \ifglsused{\glslabel}%
2430   {\let\glsxtrifwasfirstuse@\secondoftwo}
2431   {\let\glsxtrifwasfirstuse@\firstoftwo}%
2432   \edef\glscategorylabel{\glscategory{\glslabel}}%
2433   \ifglsused{\glslabel}%
2434   {%
2435     \glsifcategoryattribute{\glscategorylabel}{nohypernext}{true}%
2436     {\KV@glslink@hyperfalse}{}%
2437   }%
2438   {%
2439     \glsifcategoryattribute{\glscategorylabel}{nohyperfirst}{true}%
2440     {\KV@glslink@hyperfalse}{}%
2441   }%
2442   \glslinkcheckfirsthyperhook
2443 }
```

`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.

```
2444 \ifdef\do@glsdisablehyperinlist
2445 {%
2446   \let@\glsxtr@do@glsdisablehyperinlist\do@glsdisablehyperinlist
2447   \renewcommand*\do@glsdisablehyperinlist{%
2448     \glsxtr@do@glsdisablehyperinlist
2449     \glsifattribute{\glslabel}{nohyper}{true}{\KV@glslink@hyperfalse}{}%
2450   }
2451 }
2452 {}
```

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

```
2453 \define@boolkey{glslink}{noindex}[true]{}
2454 \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`

```
2455 \ifdef\@gls@setdefault@glslink@opts
2456 {
2457   \renewcommand*\@gls@setdefault@glslink@opts{%
2458     \KV@glslink@noindexfalse
2459     \@glsxtrsetaliasnoindex
2460   }
2461 }
2462 {
```

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

```
2463 \newcommand*{\@gls@setdefault@glslink@opts}{%
2464   \KV@glslink@noindexfalse
2465   \glsxtrsetaliasnoindex
2466 }
2467 \preto\do@glsdisablehyperinlist{\@gls@setdefault@glslink@opts}
2468 }
```

`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.)

```
2469 \providecommand*{\glsxtrsetaliasnoindex}{%
2470   \KV@glslink@noindextrue
2471 }
```

`setaliasnoindex`

```
2472 \newcommand*{\@glsxtrsetaliasnoindex}{%
2473   \glsxtrifhasfield{alias}{\glslabel}%
2474   {%
2475     \let\glsxtrindexaliased\glsxtrindexaliased
2476     \glsxtrsetaliasnoindex
2477     \let\glsxtrindexaliased\@no@glsxtrindexaliased
2478   }%
2479 {}%
2480 }
```

`xtrindexaliased`

```
2481 \newcommand{\@glsxtrindexaliased}{%
2482   \ifKV@glslink@noindex
2483   \else
2484     \begingroup
2485     \let\@glsnumberformat\glsxtr@defaultnumberformat
2486     \edef\@gls@counter{\csname glo@\glsdetoklabel{\glslabel}@counter\endcsname}%
2487     \glsxtr@saveentrycounter
2488     \@@do@wrglossary{\glsxtralias{\glslabel}}%
2489     \endgroup
2490   \fi
2491 }
```

`xtrindexaliased`

```
2492 \newcommand{\@no@glsxtrindexaliased}{%
2493   \PackageError{glossaries-extra}{\string\glsxtrindexaliased\space
2494   not permitted outside definition of \string\glsxtrsetaliasnoindex}%
2495 {}%
2496 }
```

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

```
2497 \let\glsxtrindexaliased\@no@glsxtrindexaliased
```

```

tDefaultGlsOpts Set the default options for \glslink etc.
2498 \newcommand*{\GlsXtrSetDefaultGlsOpts}[1]{%
2499   \renewcommand*{\@gls@setdefault@glslink@opts}{%
2500     \setkeys{glslink}{#1}%
2501     \@glsxtrsetaliasnoindex
2502   }%
2503 }

lsxtrifindexing Provide user level command to access it in \glswriteentry.
2504 \newcommand*{\glsxtrifindexing}[2]{%
2505   \ifKV@glslink@noindex #2\else #1\fi
2506 }

\glswriteentry Redefine to test for indexonlyfirst category attribute.
2507 \renewcommand*{\glswriteentry}[2]{%
2508   \glsxtrifindexing
2509   {%
2510     \ifglsindexonlyfirst
2511       \ifglsused{#1}
2512         {\glsxtrdoautoindexname{#1}{dualindex}}%
2513         {#2}%
2514     \else
2515       \glsifattribute{#1}{indexonlyfirst}{true}%
2516       {\ifglsused{#1}
2517         {\glsxtrdoautoindexname{#1}{dualindex}}%
2518         {#2}}%
2519       {#2}%
2520     \fi
2521   }%
2522   {}%
2523 }

@do@@wrglossary Hook into glossary indexing command so that it can also use \index at the same time if
 required and add user hook.
2524 \appto{@do@@wrglossary}{\glsxtr@do@@wrindex
2525   \glsxtrdownrglossaryhook{\@gls@label}%
2526 }

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

Similarly for the “noidx” version:

s@noidxglossary
2527 \appto{gls@noidxglossary}{\glsxtr@do@@wrindex
2528   \glsxtrdownrglossaryhook{\@gls@label}%
2529 }

xtr@do@@wrindex
2530 \newcommand*{\glsxtr@do@@wrindex}{%

```

```
2531 \glsxtrdoautoindexname{@gls@label}{dualindex}%
2532 }
```

`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.)
2533 `\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.

```
2534 \newcommand*{@gls@alt@hyp@opt}[1]{%
2535 \let\glslinkvar\@firstofthree
2536 \let@gls@hyp@opt@cs#1\relax
2537 \@ifstar{\s@gls@hyp@opt}{%
2538 {\@ifnextchar+{%
2539 {\@firstoftwo{\p@gls@hyp@opt}}%
2540 {%
2541 \expandafter\@ifnextchar\@gls@alt@hyp@opt@char
2542 {\@firstoftwo{\@alt@gls@hyp@opt}}%
2543 {#1}}%
2544 }%
2545 }%
2546 }
```

`alt@gls@hyp@opt` User version

```
2547 \newcommand*{@alt@gls@hyp@opt}[1][]{%
2548 \let\glslinkvar\@firstofthree
2549 \expandafter\@gls@hyp@opt@cs\expandafter[\@gls@alt@hyp@opt@keys,#1]}
```

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

```
2550 \newcommand*{@gls@alt@hyp@opt@char}{}{}
```

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

```
2551 \newcommand*{@gls@alt@hyp@opt@keys}{}{}
```

`rSetAltModifier`

```
2552 \newcommand*{GlsXtrSetAltModifier}[2]{%
2553 \let\gls@hyp@opt\@gls@alt@hyp@opt
2554 \def\gls@alt@hyp@opt@char{#1}%
2555 \def\gls@alt@hyp@opt@keys{#2}%
2556 }
```

`org@dohyperlink`

```
2557 \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.

```
2558 \ifdef\glsnavhyperlink
2559 {
2560   \renewcommand*{\glsnavhyperlink}[3][\@glo@type]{%
2561     \edef\gls@grplabel{\#2}\protected@edef\@gls@grptitle{\#3}%
Scope:
2562   {%
2563     \let\glsdohyperlink\glsxtr@org@dohyperlink
2564     \glslink{\glsnavhyperlinkname{\#1}{\#2}}{\#3}%
2565   }%
2566 }%
2567 }
2568 {}
```

\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.

```
2569 \renewcommand*{\glsdohyperlink}[2]{%
2570   \glshasattribute{\glslabel}{targeturl}%
2571   {%
2572     \glshasattribute{\glslabel}{targetname}%
2573   {%
2574     \glshasattribute{\glslabel}{targetcategory}%
2575   {%
2576     \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
2577       {\glsgetattribute{\glslabel}{targetcategory}}%
2578       {\glsgetattribute{\glslabel}{targetname}}%
2579       {{\glsxtrprotectlinks\#2}}%
2580     }%
2581   {%
2582     \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
2583       {}%
2584       {\glsgetattribute{\glslabel}{targetname}}%
2585       {{\glsxtrprotectlinks\#2}}%
2586     }%
2587   }%
2588   {%
2589     \href{\glsgetattribute{\glslabel}{targeturl}}{%
2590       {{\glsxtrprotectlinks\#2}}%
2591     }%
2592   }%
2593 }
```

Check for alias.

```

2594 \glsfieldfetch{\glslabel}{alias}{\gloaliaslabel}%
2595 \ifdefvoid\gloaliaslabel
2596 {%
2597   \glsxtrhyperlink{\#1}{\glsxtrprotectlinks{\#2}}%
2598 }%
2599 {%

```

Redirect link to the alias target.

```

2600   \glsxtrhyperlink
2601     {\glolinkprefix\glsdetoklabel{\gloaliaslabel}}%
2602     {\glsxtrprotectlinks{\#2}}%
2603   }%
2604 }%
2605 }

```

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

```

2606 \ifdef{@glsshowtarget}
2607 {
2608   \newcommand{\glsxtrhyperlink}[2]{%
2609     \@glsshowtarget{\#1}%
2610     \hyperlink{\#1}{\#2}%
2611   }%
2612 }
2613 {
2614   \newcommand{\glsxtrhyperlink}[2]{\hyperlink{\#1}{\#2}}%
2615 }

```

`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.

```

2616 \renewrobustcmd*{\glshyperlink}[2][\glsentrytext{\glo@label}]{%
2617 \glsdoifexists{\#2}%
2618 {%
2619   \def\glo@label{\#2}%
2620   {\edef\glslabel{\#2}%
2621     \glslink{\glolinkprefix\glslabel}{\#1}}%
2622 }%
2623 }

```

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

```

2624 \renewcommand{\glsdisablehyper}{%
2625   \KV@glslink@hyperfalse
2626   \def\glslink{\glsdonohyperlink}%
2627   \let\glsstar@target\secondoftwo
2628 }

```

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

```
2629 \renewcommand{\glsenablehyper}{%
2630   \KV@glslink@hypertrue
2631   \def\@glslink{\glsdohyperlink}%
2632   \def\@glstarget{\glsdohypertarget}%
2633 }
```

\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.

```
2634 \def\glsdonohyperlink#1#2{{\glsxtrprotectlinks #2}}
```

\@glslink Reset \@glslink with patched versions:

```
2635 \ifcsundef{hyperlink}{%
2636   {%
2637     \def\@glslink{\glsdonohyperlink}%
2638   }%
2639   {%
2640     \def\@glslink{\glsdohyperlink}%
2641 }}
```

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

```
2642 \newcommand*{\glsxtrprotectlinks}{%
2643   \KV@glslink@hyperfalse
2644   \KV@glslink@noindextrue
2645   \let\@gls@\@glsxtr@p@text@
2646   \let\@Gls@\@Glsxtr@p@text@
2647   \let\@GLS@\@GLSxtr@p@text@
2648   \let\@glspl@\@glsxtr@p@plural@
2649   \let\@Glspl@\@Glsxtr@p@plural@
2650   \let\@GLSpl@\@GLSxtr@p@plural@
2651   \let\@glsxtrshort@\@glsxtr@p@short@
2652   \let\@Glsxtrshort@\@Glsxtr@p@short@
2653   \let\@GLSxtrshort@\@GLSxtr@p@short@
2654   \let\@glsxtrlong@\@glsxtr@p@long@
2655   \let\@Glsxtrlong@\@Glsxtr@p@long@
2656   \let\@GLSxtrlong@\@GLSxtr@p@long@
2657   \let\@glsxtrshortpl@\@glsxtr@p@shortpl@
2658   \let\@Glsxtrshortpl@\@Glsxtr@p@shortpl@
2659   \let\@GLSxtrshortpl@\@GLSxtr@p@shortpl@
2660   \let\@glsxtrlongpl@\@glsxtr@p@longpl@
2661   \let\@Glsxtrlongpl@\@Glsxtr@p@longpl@
2662   \let\@GLSxtrlongpl@\@GLSxtr@p@longpl@
2663   \let\@acrshort@\glsxtr@p@acrshort@
2664   \let\@Acrshort@\Glsxtr@p@acrshort@
2665   \let\@ACRshort@\GLSxtr@p@acrshort@}
```

```

2666 \let\@acrshortpl\@glsxtr@p@acrshortpl@
2667 \let\@Acrshortpl\@Glsxtr@p@acrshortpl@
2668 \let\@ACRshortpl\@GLSxtr@p@acrshortpl@
2669 \let\@acrlong\@glsxtr@p@acrlong@
2670 \let\@Acrlong\@Glsxtr@p@acrlong@
2671 \let\@ACRLong\@GLSxtr@p@acrlong@
2672 \let\@acrlongpl\@glsxtr@p@acrlongpl@
2673 \let\@Acrlongpl\@Glsxtr@p@acrlongpl@
2674 \let\@ACRLongpl\@GLSxtr@p@acrlongpl@
2675 }

```

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

```

@glsxtr@p@text@
2676 \def\@glsxtr@p@text@#1#2[#3]{{\@glstext@{#1}{#2}[#3]}}
@Glsxtr@p@text@
2677 \def\@Glsxtr@p@text@#1#2[#3]{{\@Glstext@{#1}{#2}[#3]}}
@GLSxtr@p@text@
2678 \def\@GLSxtr@p@text@#1#2[#3]{{\@GLStext@{#1}{#2}[#3]}}
lsxtr@p@plural@
2679 \def\@glsxtr@p@plural@#1#2[#3]{{\@glsplural@{#1}{#2}[#3]}}
lsxtr@p@plural@
2680 \def\@Glsxtr@p@plural@#1#2[#3]{{\@Glsplural@{#1}{#2}[#3]}}
LSxtr@p@plural@
2681 \def\@GLSxtr@p@plural@#1#2[#3]{{\@GLSplural@{#1}{#2}[#3]}}
glsxtr@p@short@
2682 \def\@glsxtr@p@short@#1#2[#3]{%
2683 {%
2684 \glssetabbrvfmt{\glscategory{#2}}%
2685 \glsabbrvfont{\glsentryshort{#2}}#3%
2686 }%
2687 }
Glsxtr@p@short@
2688 \def\@Glsxtr@p@short@#1#2[#3]{%
2689 {%
2690 \glssetabbrvfmt{\glscategory{#2}}%
2691 \glsabbrvfont{\Glsentryshort{#2}}#3%
2692 }%
2693 }

```

```

GLSxtr@p@short@%
2694 \def\@GLSxtr@p@short@#1#2[#3]{%
2695   {%
2696     \glssetabrvfmt{\glscategory{#2}}%
2697     \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshort{#2}}#3}%
2698   }%
2699 }

sxtr@p@shortpl@%
2700 \def\@glsxtr@p@shortpl@#1#2[#3]{%
2701   {%
2702     \glssetabrvfmt{\glscategory{#2}}%
2703     \glsabbrvfont{\glsentryshortpl{#2}}#3}%
2704   }%
2705 }

sxtr@p@shortpl@%
2706 \def\@Glsxtr@p@shortpl@#1#2[#3]{%
2707   {%
2708     \glssetabrvfmt{\glscategory{#2}}%
2709     \glsabbrvfont{\Glsentryshortpl{#2}}#3}%
2710   }%
2711 }

Sxtr@p@shortpl@%
2712 \def\@GLSxtr@p@shortpl@#1#2[#3]{%
2713   {%
2714     \glssetabrvfmt{\glscategory{#2}}%
2715     \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshortpl{#2}}#3}%
2716   }%
2717 }

@glsxtr@p@long@%
2718 \def\@glsxtr@p@long@#1#2[#3]{{{\glsentrylong{#2}}#3} }

@Glsxtr@p@long@%
2719 \def\@Glsxtr@p@long@#1#2[#3]{{{\Glsentrylong{#2}}#3} }

@GLSxtr@p@long@%
2720 \def\@GLSxtr@p@long@#1#2[#3]{%
2721   {\mfirstucMakeUppercase{\glslongfont{\glsentrylong{#2}}#3}}}

lsxtr@p@longpl@%
2722 \def\@glsxtr@p@longpl@#1#2[#3]{{{\glsentrylongpl{#2}}#3} }

lsxtr@p@longpl@%
2723 \def\@Glsxtr@p@longpl@#1#2[#3]{{{\glslongfont{\Glsentrylongpl{#2}}#3}}}

```

```

LSxtr@p@longpl@
2724 \def\@GLSxtr@p@longpl@#1#2[#3]{%
2725   {\mfirstucMakeUppercase{\glslongfont{\glsentrylongpl{#2}}#3}}}

xtr@p@acrshort@
2726 \def\@glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\glsentryshort{#2}}#3}>

xtr@p@acrshort@
2727 \def\@Glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\Glsentryshort{#2}}#3}>

xtr@p@acrshort@
2728 \def\@GLSxtr@p@acrshort@#1#2[#3]{%
2729   {\mfirstucMakeUppercase{\acronymfont{\glsentryshort{#2}}#3}}}

r@p@acrshortpl@
2730 \def\@glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\glsentryshortpl{#2}}#3}>

r@p@acrshortpl@
2731 \def\@Glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\Glsentryshortpl{#2}}#3}>

sxtr@p@acrlong@
2734 \def\@glsxtr@p@acrlong@#1#2[#3]{{\glsentrylong{#2}}#3}>

sxtr@p@acrlong@
2735 \def\@Glsxtr@p@acrlong@#1#2[#3]{{\Glsentrylong{#2}}#3}>

Sxtr@p@acrlong@
2736 \def\@GLSxtr@p@acrlong@#1#2[#3]{%
2737   {\mfirstucMakeUppercase{\glsentrylong{#2}}#3}}}

tr@p@acrlongpl@
2738 \def\@glsxtr@p@acrlongpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}>

tr@p@acrlongpl@
2739 \def\@Glsxtr@p@acrlongpl@#1#2[#3]{{\Glsentrylongpl{#2}}#3}>

tr@p@acrlongpl@
2740 \def\@GLSxtr@p@acrlongpl@#1#2[#3]{%
2741   {\mfirstucMakeUppercase{\glsentrylongpl{#2}}#3}}}

```

Commands to minimise conflict.

```

\@glsxtrp@opt
2742 \newcommand*{\@glsxtrp@opt}{hyper=false,noindex}

```

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

```
2743 \newcommand*{\glsxtrsetpopts}[1]{%
2744   \renewcommand*{\@glsxtrp@opt}{#1}%
2745 }
```

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

```
2746 \newcommand*{\glossxtrsetpopts}{%
2747   \glsxtrsetpopts{noindex}%
2748 }
```

\@@glsxtrp

```
2749 \newrobustcmd*{\@@glsxtrp}[2]{%
  Add scope.
2750  {%
2751    \let\glspostlinkhook\relax
2752    \csname#1\expandafter\endcsname\expandafter[\@glsxtrp@opt]{#2}[]%
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 }
```

\@Glsxtrp

```
2771 \newrobustcmd*{\@Glsxtrp}[2]{%
2772   \ifcsdef{Gls#1}%
2773   {%
2774     \@@glsxtrp{Gls#1}{#2}%
2775   }%
2776   {%
2777     \ifcsdef{Glsxtr#1}%
2778     {%
2779       \@@glsxtrp{Glsxtr#1}{#2}%
2780     }%
```



```

2824      }%
2825      {%
2826          \glsxstr@headentry@p{#2}{#1}%
2827      }%
2828      }%
2829      {%
2830          \glsxtrp{#1}{#2}%
2831      }%
2832      }%
2833      {%
2834          \protect\gls@entry@field{#2}{#1}%
2835      }%
2836      }%
2837  }
2838 }
2839 {
2840 \newcommand{\glsxtrp}[2]{%
2841     \protect\NoCaseChange
2842     {%
2843         \protect\glsxtrifinmark
2844         {%
2845             \ifcsdef{glsxtrhead#1}%
2846             {%
2847                 \protect\csuse{glsxtrhead#1}%
2848             }%
2849             {%
2850                 \glsxstr@headentry@p{#2}{#1}%
2851             }%
2852         }%
2853         {%
2854             \glsxtrp{#1}{#2}%
2855         }%
2856     }%
2857 }
2858 }

```

Provide short synonyms for the most common option.

```
\glsps
2859 \newcommand*{\glsps}{\glsxtrp{short}}
```

```
\glspt
2860 \newcommand*{\glspt}{\glsxtrp{text}}
```

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

```
2861 \ifdef\texorpdfstring
2862 {
2863     \newcommand{\Glsxtrp}[2]{%
```

```

2864 \protect\NoCaseChange
2865 {%
2866   \protect\texorpdfstring
2867   {%
2868     \protect\glsxtrifinmark
2869     {%
2870       \ifcsdef{Glsxtrhead#1}%
2871       {%
2872         {\protect\csuse{Glsxtrhead#1}{#2}}%
2873       }%
2874       {%
2875         \protect{@Gls@entry@field{#2}{#1}}%
2876       }%
2877     }%
2878     {%
2879       \Glsxtrp{#1}{#2}%
2880     }%
2881   }%
2882   {%
2883     \protect@gls@entry@field{#2}{#1}}%
2884   }%
2885 }
2886 }
2887 }
2888 {
2889 \newcommand{\Glsxtrp}[2]{%
2900   \protect\NoCaseChange
2901   {%
2902     \protect\glsxtrifinmark
2903     {%
2904       \ifcsdef{Glsxtrhead#1}%
2905       {%
2906         {\protect\csuse{Glsxtrhead#1}}%
2907       }%
2908     }%
2909     {%
2910       \Glsxtrp{#1}{#2}}%
2911     }%
2912   }%
2913 }
2914 }
2915 }
2916 }
2917 }
2918 }
2919 }
2920 }
2921 }
2922 }
2923 }
2924 }
2925 }
2926 }
2927 }
2928 }
2929 }
2930 }
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2989 }
2990 }
2991 }
2992 }
2993 }
2994 }
2995 }
2996 }
2997 }
2998 }
2999 }
3000 }
3001 }
3002 }
3003 }
3004 }
3005 }
3006 }
3007 }

```

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

```

2908 \ifdef\texorpdfstring
2909 {
2910 \newcommand{\GLSxtrp}[2]{%

```

```

2911 \protect\NoCaseChange
2912 {%
2913   \protect\texorpdfstring
2914   {%
2915     \protect\glsxtrifinmark
2916     {%
2917       \ifcsdef{GLSxtr#1}%
2918       {%
2919         {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
2920       }%
2921     {%
2922       \protect\mfirstucMakeUppercase
2923       {%
2924         \protect@gls@entry@field{#2}{#1}%
2925       }%
2926     }%
2927   }%
2928   {%
2929     \GLSxtrp{#1}{#2}%
2930   }%
2931 }%
2932 {%
2933   \protect@gls@entry@field{#2}{#1}%
2934 }%
2935 }%
2936 }
2937 }
2938 {
2939 \newcommand{\GLSxtrp}[2]{%
2940   \protect\NoCaseChange
2941   {%
2942     \protect\glsxtrifinmark
2943     {%
2944       \ifcsdef{GLSxtr#1}%
2945       {%
2946         {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
2947       }%
2948     {%
2949       \protect\mfirstucMakeUppercase
2950       {%
2951         \protect@gls@entry@field{#2}{#1}%
2952       }%
2953     }%
2954   }%
2955   {%
2956     \GLSxtrp{#1}{#2}%
2957   }%
2958 }%
2959 }

```

```
2960 }
```

1.3.5 Entry Counting

The (use) entry counting mechanism from glossaries is adjusted here to work with category attributes. Provide a convenient command to enable entry counting, set the `entrycount` attribute for given categories and redefine `\gls` etc to use `\cgls` instead. This form of entry counting is provided to adjust the formatting if the number of times an entry has been used (through commands that unset the first use flag) doesn't exceed the specified threshold. For link counting, see Section 1.4.

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

```
\@glsunset Global unset.  
2961 \renewcommand*{\@glsunset}[1]{%  
2962   \@@glsunset{#1}%  
2963   \glsxtrpostunset{#1}%  
2964 }%  
  
glsxtrpostunset  
2965 \newcommand*{\glsxtrpostunset}[1]{}  
  
\@glslocalunset Local unset.  
2966 \renewcommand*{\@glslocalunset}[1]{%  
2967   \@@glslocalunset{#1}%  
2968   \glsxtrpostlocalunset{#1}%  
2969 }%  
  
rpostlocalunset  
2970 \newcommand*{\glsxtrpostlocalunset}[1]{}  
  
\@glsreset Global reset.  
2971 \renewcommand*{\@glsreset}[1]{%  
2972   \@@glsreset{#1}%  
2973   \glsxtrpostreset{#1}%  
2974 }%  
  
glsxtrpostreset  
2975 \newcommand*{\glsxtrpostreset}[1]{}  
  
\@glslocalreset Local reset.  
2976 \renewcommand*{\@glslocalreset}[1]{%  
2977   \@@glslocalreset{#1}%  
2978   \glsxtrpostlocalreset{#1}%  
2979 }%  
  
rpostlocalreset  
2980 \newcommand*{\glsxtrpostlocalreset}[1]{}
```

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

```
2981 \newcommand*{\GlsXtrEnableEntryCounting}[2]{%
```

Enable entry counting:

```
2982   \glsenableentrycount
```

Redefine \gls etc:

```
2983   \renewcommand*{\gls}{\cgls}%
2984   \renewcommand*{\Gls}{\cGls}%
2985   \renewcommand*{\glspl}{\cglspl}%
2986   \renewcommand*{\Glspl}{\cGlspl}%
2987   \renewcommand*{\GLS}{\cGLS}%
2988   \renewcommand*{\GLSpl}{\cGLSpl}%
```

Set the entrycount attribute:

```
2989   \glsxtr@setentrycountunsetattr{#1}{#2}%
```

In case this command is used again:

```
2990   \let\GlsXtrEnableEntryCounting@glsxtr@setentrycountunsetattr
2991   \renewcommand*{\GlsXtrEnableEntryCounting}[3]{%
2992     \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryUnitCounting\space
2993       can't be used with \string\GlsXtrEnableEntryCounting}%
2994     {Use one or other but not both commands}}%
2995 }
```

entrycountunsetattr

```
2996 \newcommand*{\@glsxtr@setentrycountunsetattr}[2]{%
2997   \@for\@glsxtr@cat:=#1\do
2998   {%
2999     \ifdefempty{\@glsxtr@cat}{}{%
3000       \%
3001       \glssetcategoryattribute{\@glsxtr@cat}{entrycount}{#2}%
3002     }%
3003   }%
3004 }
```

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

enableentrycount

```
3005 \renewcommand*{\glsenableentrycount}{%
```

Enable new fields:

```
3006   \appto\@newglossaryentry@defcounters{\@newglossaryentry@defcounters}%
```

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

```
3007   \renewcommand*{\gls@defdocnewglossaryentry}{%
3008     \renewcommand*{\newglossaryentry}[2]{%
3009       \PackageError{glossaries}{\string\newglossaryentry\space
3010         may only be used in the preamble when entry counting has
3011         been activated}{If you use \string\glsenableentrycount\space}}
```

```

3012      you must place all entry definitions in the preamble not in
3013      the document environment}%
3014  }%
3015 }%

```

New commands to access new fields:

```

3016 \newcommand*{\glsentrycurrcount}[1]{%
3017   \ifcsundef{glo@\glsdetoklabel{##1}@currcount}%
3018   {0}{\@gls@entry@field{##1}{currcount}}%
3019 }%
3020 \newcommand*{\glsentryprevcount}[1]{%
3021   \ifcsundef{glo@\glsdetoklabel{##1}@prevcount}%
3022   {0}{\@gls@entry@field{##1}{prevcount}}%
3023 }%

```

Adjust post unset and reset:

```

3024 \let\@glsxtr@entrycount@org@unset\glsxtrpostunset
3025 \renewcommand*{\glsxtrpostunset}[1]{%
3026   \@glsxtr@entrycount@org@unset{##1}%
3027   \@gls@increment@currcount{##1}}%
3028 }%
3029 \let\@glsxtr@entrycount@org@localunset\glsxtrpostlocalunset
3030 \renewcommand*{\glsxtrpostlocalunset}[1]{%
3031   \@glsxtr@entrycount@org@localunset{##1}%
3032   \@gls@local@increment@currcount{##1}}%
3033 }%
3034 \let\@glsxtr@entrycount@org@reset\glsxtrpostreset
3035 \renewcommand*{\glsxtrpostreset}[1]{%
3036   \@glsxtr@entrycount@org@reset{##1}%
3037   \csgdef{glo@\glsdetoklabel{##1}@currcount}{0}}%
3038 }%
3039 \let\@glsxtr@entrycount@org@localreset\glsxtrpostlocalreset
3040 \renewcommand*{\glsxtrpostlocalreset}[1]{%
3041   \@glsxtr@entrycount@org@localreset{##1}%
3042   \csdef{glo@\glsdetoklabel{##1}@currcount}{0}}%
3043 }%

```

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

```

3044 \let\@cgls@\@@cgls@
3045 \let\@cglspl@\@@cglspl@

3046 \let\@cGls@\@@cGls@
3047 \let\@cGlspl@\@@cGlspl@
3048 \let\@cGLS@\@@cGLS@
3049 \let\@cGLSpl@\@@cGLSpl@

```

The rest is as the original definition.

```

3050 \AtEndDocument{\@gls@write@entrycounts}%
3051 \renewcommand*{\@gls@entry@count}[2]{%
3052   \csgdef{glo@\glsdetoklabel{##1}@prevcount}{##2}}%

```

```

3053 }%
3054 \let\glsenableentrycount\relax
3055 \renewcommand*\glsenableentryunitcount}{%
3056   \PackageError{glossaries-extra}{\string\glsenableentryunitcount\space
3057     can't be used with \string\glsenableentrycount}{%
3058     Use one or other but not both commands}%
3059 }%
3060 }

```

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.

```

3061 \renewcommand*\gls@write@entrycounts}{%
3062   \immediate\write\auxout
3063   {\string\providetoggle{\string\gls@entry@count}[2]{}}%
3064   \count@=0\relax
3065   \forallglsentries{\glsentry}{%
3066     \glshasattribute{\glsentry}{entrycount}{%
3067       {%
3068         \ifglsused{\glsentry}{%
3069           {%
3070             \immediate\write\auxout
3071             {\string\gls@entry@count{\glsentry}\glsentrycurrcount{\glsentry}}{}}%
3072           }%
3073           {}%
3074           \advance\count@ by \one
3075         }%
3076       }%
3077     }%
3078   \ifnum\count@=0
3079     \GlossariesExtraWarningNoLine{Entry counting has been enabled
3080       \MessageBreak with \string\glsenableentrycount\space but the
3081       \MessageBreak attribute 'entrycount' hasn't
3082       \MessageBreak been assigned to any of the defined
3083       \MessageBreak entries}%
3084   \fi
3085 }

```

trifcounttrigger `\glsxtrifcounttrigger{<label>}{{<trigger format>}}{<normal>}`

```

3086 \newcommand*\glsxtrifcounttrigger[3]{%
3087   \glshasattribute{#1}{entrycount}{%
3088     {%
3089       \ifnum\glsentryprevcount{#1}>\glsgetattribute{#1}{entrycount}\relax
3090         #3%
3091       \else
3092         #2%

```

```
3093     \fi
3094 }%
3095 {#3}%
3096 }
```

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

\@cgl s@

```
3097 \def\@cgl s@#1#2[#3]{%
3098   \glsxtrifcounttrigger{#2}%
3099   {%
3100     \cgl sformat{#2}{#3}%
3101     \glsunset{#2}%
3102   }%
3103   {%
3104     \gls@{#1}{#2}[#3]%
3105   }%
3106 }%
```

\@cgl spl@

```
3107 \def\@cgl spl@#1#2[#3]{%
3108   \glsxtrifcounttrigger{#2}%
3109   {%
3110     \cgl splformat{#2}{#3}%
3111     \glsunset{#2}%
3112   }%
3113   {%
3114     \glspl@{#1}{#2}[#3]%
3115   }%
3116 }%
```

\@cGls@

```
3117 \def\@cGls@#1#2[#3]{%
3118   \glsxtrifcounttrigger{#2}%
3119   {%
3120     \cGlsformat{#2}{#3}%
3121     \glsunset{#2}%
3122   }%
3123   {%
3124     \Gls@{#1}{#2}[#3]%
3125   }%
3126 }%
```

\@cGlspl@

```
3127 \def\@cGlspl@#1#2[#3]{%
3128   \glsxtrifcounttrigger{#2}%
3129   {%
3130     \cGlsplformat{#2}{#3}%
3131     \glsunset{#2}%
3132 }
```

```

3132 }%
3133 {%
3134 \cGlspl@{\#1}{\#2}{\#3}%
3135 }%
3136 }%


\@@cGLS@

3137 \def\@@cGLS@#1#2[#3]{%
3138   \glsxtrifcounttrigger{#2}%
3139 {%
3140   \cGLSformat{#2}{#3}%
3141   \glsunset{#2}%
3142 }%
3143 {%
3144   \cGLS@{\#1}{\#2}{\#3}%
3145 }%
3146 }%


\@@cGLSpl@

3147 \def\@@cGLSpl@#1#2[#3]{%
3148   \glsxtrifcounttrigger{#2}%
3149 {%
3150   \cGLSplformat{#2}{#3}%
3151   \glsunset{#2}%
3152 }%
3153 {%
3154   \cGLSpl@{\#1}{\#2}{\#3}%
3155 }%
3156 }%

```

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

```

\@ccls@

3157 \def\@ccls@#2[#3]{\@gls@{\#1}{\#2}{\#3} }

\@cGls@

3158 \def\@cGls@#2[#3]{\@Gls@{\#1}{\#2}{\#3} }

\@cglspl@

3159 \def\@cglspl@#2[#3]{\@glspl@{\#1}{\#2}{\#3} }

\@cGlspl@

3160 \def\@cGlspl@#2[#3]{\@Glspl@{\#1}{\#2}{\#3} }


```

Add all upper case versions not provided by glossaries.

```

\cGLS

3161 \newrobustcmd*\cGLS{\@gls@hyp@opt\@cGLS}

```

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

```
3162 \newcommand*\{@cGLS}[2] []{%
3163   \new@ifnextchar[{\@cGLS@{\#1}{\#2}}{\@cGLS@{\#1}{\#2}[] }%
3164 }
```

\@cGLS@

```
3165 \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.

```
3166 \newcommand*\cGLSformat[2]{%
3167   \expandafter\mfirstuc\expandafter{\cGLSformat{\#1}{\#2}}%
3168 }
```

\cGLSp1

```
3169 \newrobustcmd*\cGLSp1{\gls@hyp@opt\cGLSp1}
```

\@cGLSp1 Defined the un-starred form. Need to determine if there is a final optional argument

```
3170 \newcommand*\@cGLSp1[2] []{%
3171   \new@ifnextchar[{\@cGLSp1@{\#1}{\#2}}{\@cGLSp1@{\#1}{\#2}[] }%
3172 }
```

\@cGLSp1@

```
3173 \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.

```
3174 \newcommand*\cGLSp1format[2]{%
3175   \expandafter\mfirstuc\expandafter{\cGLSp1format{\#1}{\#2}}%
3176 }
```

Modify the trigger formats to check for the regular attribute.

\cglformat

```
3177 \renewcommand*\cglformat[2]{%
3178   \glsifregular{\#1}%
3179   {\glsentryfirst{\#1}}%
3180   {\ifglshaslong{\#1}{\glsentrylong{\#1}}{\glsentryfirst{\#1}}}#2%
3181 }
```

\cGlsformat

```
3182 \renewcommand*\cGlsformat[2]{%
3183   \glsifregular{\#1}%
3184   {\Glsentryfirst{\#1}}%
3185   {\ifglshaslong{\#1}{\Glsentrylong{\#1}}{\Glsentryfirst{\#1}}}#2%
3186 }
```

```

\cglsplformat
3187 \renewcommand*{\cglsplformat}[2]{%
3188   \glsifregular{#1}%
3189   {\glsentryfirstplural{#1}}%
3190   {\ifglshaslong{#1}{\glsentrylongpl{#1}}{\glsentryfirstplural{#1}}}#2%
3191 }

\cGlsplformat
3192 \renewcommand*{\cGlsplformat}[2]{%
3193   \glsifregular{#1}%
3194   {\Glsentryfirstplural{#1}}%
3195   {\ifglshaslong{#1}{\Glsentrylongpl{#1}}{\Glsentryfirstplural{#1}}}#2%
3196 }

```

New code similar to above for unit counting.

```

defunitcounters
3197 \newcommand*{\@newglossaryentry@defunitcounters}{%
3198   \edef@glo@countunit{\csuse{@glsxtr@categoryattr@@@glo@category @unitcount}}%
3199   \ifdefvoid@glo@countunit
3200   {}%
3201   {}%
3202   \@glsxtr@ifunitcounter{@glo@countunit}%
3203   {}%
3204   {\expandafter@glsxtr@addunitcounter\expandafter{@glo@countunit}}%
3205 }%
3206 }

r@unitcountlist List to keep track of which counters are being used by the entry unit count facility.
3207 \newcommand*{\@glsxtr@unitcountlist}{}

@addunitcounter
3208 \newcommand*{\@glsxtr@addunitcounter}[1]{%
3209   \listadd{@glsxtr@unitcountlist}{#1}%
3210   \ifcsundef{glsxtr@theunit@#1}
3211   {}%
3212   \ifcsdef{theH#1}%
3213   {\csdef{glsxtr@theunit@#1}{\csuse{theH#1}}%}
3214   {\csdef{glsxtr@theunit@#1}{\csuse{the#1}}%}
3215 }%
3216 {}%
3217 }

r@ifunitcounter
3218 \newcommand*{\@glsxtr@ifunitcounter}[3]{%
3219   \xifinlist{#1}{@glsxtr@unitcountlist}{#2}{#3}%
3220 }

```

```

urrentunitcount
3221 \newcommand*{\glsxtr@currentunitcount}[1]{%
3222   glo@\glsdetoklabel{#1}@currunit@\glsgetattribute{#1}{unitcount}.%
3223   \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3224 }

eviousunitcount
3225 \newcommand*{\glsxtr@previousunitcount}[1]{%
3226   glo@\glsdetoklabel{#1}@prevunit@\glsgetattribute{#1}{unitcount}.%
3227   \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3228 }

t@currunitcount
3229 \newcommand*{\@gls@increment@currunitcount}[1]{%
3230   \glshasattribute{#1}{unitcount}%
3231   {%
3232     \edef\glsxtr@csname{\glsxtr@currentunitcount{#1}}%
3233     \ifcsundef{\glsxtr@csname}%
3234     {%
3235       \csgdef{\glsxtr@csname}{1}%
3236       \listcsxadd
3237         {glo@\glsdetoklabel{#1}@unitlist}%
3238         {\glsgetattribute{#1}{unitcount}.%
3239           \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%}
3240     }%
3241   }%
3242   {%
3243     \csxdef{\glsxtr@csname}%
3244       {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
3245   }%
3246 }%
3247 {}%
3248 }

t@currunitcount
3249 \newcommand*{\@gls@local@increment@currunitcount}[1]{%
3250   \glshasattribute{#1}{unitcount}%
3251   {%
3252     \edef\glsxtr@csname{\glsxtr@currentunitcount{#1}}%
3253     \ifcsundef{\glsxtr@csname}%
3254     {%
3255       \csdef{\glsxtr@csname}{1}%
3256       \listcseadd
3257         {glo@\glsdetoklabel{#1}@unitlist}%
3258         {\glsgetattribute{#1}{unitcount}.%
3259           \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%}
3260     }%
3261   }%
3262   {%

```

```

3263     \csedef{@glsxtr@csname}%
3264     {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
3265   }%
3266 }%
3267 {}%
3268 }

r@currunitcount
3269 \newcommand*{\@glsxtr@currunitcount}[2]{%
3270   \ifcsundef
3271   {glo@\glsdetoklabel{#1}@currunit@#2}%
3272   {0}%
3273   {\csuse{glo@\glsdetoklabel{#1}@currunit@#2}}%
3274 }%

r@prevunitcount
3275 \newcommand*{\@glsxtr@prevunitcount}[2]{%
3276   \ifcsundef
3277   {glo@\glsdetoklabel{#1}@prevunit@#2}%
3278   {0}%
3279   {\csuse{glo@\glsdetoklabel{#1}@prevunit@#2}}%
3280 }%

entryunitcount
3281 \newcommand*{\glsenableentryunitcount}{%
  Enable new fields:
3282   \appto{@newglossaryentry@defcounters}{@newglossaryentry@defunitcounters}%
  Just in case the user has switched on the docdef option.
3283   \renewcommand*{\gls@defdocnewglossaryentry}{%
3284     \renewcommand*{\newglossaryentry}[2]{%
3285       \PackageError{glossaries}{\string\newglossaryentry\space
3286         may only be used in the preamble when entry counting has
3287         been activated}{If you use \string\glsenableentryunitcount\space
3288         you must place all entry definitions in the preamble not in
3289         the document environment}%
3290     }%
3291   }%
  New commands to access new fields:
3292   \newcommand*{\glsentrycurrcount}[1]{%
3293     \@glsxtr@currunitcount{##1}{\glsgetattribute{##1}{unitcount}.%
3294     \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
3295   }%
3296   \newcommand*{\glsentryprevcount}[1]{%
3297     \@glsxtr@prevunitcount{##1}{\glsgetattribute{##1}{unitcount}.%
3298     \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
3299   }%

```

Access total count:

```
3300 \newcommand*{\glsentryprevtotalcount}[1]{%
3301   \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
3302   {0}%
3303   {%
3304     \number\csuse{glo@\glsdetoklabel{##1}@prevunittotal}%
3305   }%
3306 }%
```

Access max value:

```
3307 \newcommand*{\glsentryprevmaxcount}[1]{%
3308   \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
3309   {0}%
3310   {%
3311     \number\csuse{glo@\glsdetoklabel{##1}@prevunitmax}%
3312   }%
3313 }%
```

Adjust post unset and reset:

```
3314 \let\@glsxtr@entryunitcount@org@unset\glsxtrpostunset
3315 \renewcommand*{\glsxtrpostunset}[1]{%
3316   \glsxtr@entryunitcount@org@unset{##1}%
3317   \gls@increment@currunitcount{##1}%
3318 }%
3319 \let\@glsxtr@entryunitcount@org@localunset\glsxtrpostlocalunset
3320 \renewcommand*{\glsxtrpostlocalunset}[1]{%
3321   \glsxtr@entryunitcount@org@localunset{##1}%
3322   \gls@local@increment@currunitcount{##1}%
3323 }%
3324 \let\@glsxtr@entryunitcount@org@reset\glsxtrpostreset
3325 \renewcommand*{\glsxtrpostreset}[1]{%
3326   \glshasattribute{##1}{unitcount}%
3327   {%
3328     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
3329     \ifcsundef{\@glsxtr@csname}%
3330     {}%
3331     {\csgdef{\@glsxtr@csname}{0}}%
3332   }%
3333   {}%
3334 }%
3335 \let\@glsxtr@entryunitcount@org@localreset\glsxtrpostlocalreset
3336 \renewcommand*{\glsxtrpostlocalreset}[1]{%
3337   \glsxtr@entryunitcount@org@localreset{##1}%
3338   \glshasattribute{##1}{unitcount}%
3339   {%
3340     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
3341     \ifcsundef{\@glsxtr@csname}%
3342     {}%
3343     {\csgdef{\@glsxtr@csname}{0}}%
3344   }%
```

```
3345      {}%
3346  }%
```

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

```
3347  \let\@cglsc@{\@cglsc@%
3348  \let\@cglsplc@{\@cglspcl@%
3349  \let\@cGls@{\@cGls@%
3350  \let\@cGlsplc@{\@cGlspl@%
3351  \let\@cGLS@{\@cGLS@%
3352  \let\@cGLSpcl@{\@cGLSpl@%
```

Write information to the aux file.

```
3353  \AtEndDocument{\@gls@write@entryunitcounts}%
3354  \renewcommand*{\@gls@entry@unitcount}[3]{%
3355    \csgdef{glo@\glsdetoklabel{##1}@prevunit@##3}{##2}%
3356    \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
3357    {\csgdef{glo@\glsdetoklabel{##1}@prevunittotal}{##2}}%
3358    {%
3359      \csxdef{glo@\glsdetoklabel{##1}@prevunittotal}{%
3360        \number\numexpr\csuse{glo@\glsdetoklabel{##1}@prevunittotal}+##2}%
3361    }%
3362    \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
3363    {\csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}}%
3364    {%
3365      \ifnum\csuse{glo@\glsdetoklabel{##1}@prevunitmax}<##2
3366        \csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}%
3367      \fi
3368    }%
3369  }%
3370  \let\glsenableentryunitcount\relax
3371  \renewcommand*{\glsenableentrycount}{%
3372    \PackageError{glossaries-extra}{\string\glsenableentrycount\space
3373      can't be used with \string\glsenableentryunitcount}%
3374    {Use one or other but not both commands}%
3375  }%
3376 }
3377 \onlypreamble\glsenableentryunitcount
```

entry@unitcount

```
3378 \newcommand*{\@gls@entry@unitcount}[3]{}%
```

ryunitcounts@do

```
3379 \newcommand*{\@gls@write@entryunitcounts@do}[1]{%
3380   \immediate\write\auxout
3381   {\string\@gls@entry@unitcount
3382     {\@glsentry}%
3383     {\@glsxtr@currunitcount{\@glsentry}{#1}}%
3384   }%
```

```

3385      {#1} }%
3386 }

entryunitcounts
3387 \newcommand*{\@gls@write@entryunitcounts}{%
3388   \immediate\write\auxout
3389   {\string\providecommand*{\string\@gls@entry@unitcount}[3]{}}
3390   \count@=0\relax
3391   \forallglsentries{\@glsentry}{%
3392     \glshasattribute{\@glsentry}{unitcount}%
3393     {%
3394       \ifglsused{\@glsentry}%
3395       {%
3396         \forlistcsloop
3397           {\@gls@write@entryunitcounts@do}%
3398           {\glo@\glsdetoklabel{\@glsentry}@unitlist}%
3399         }%
3400       {}%
3401       \advance\count@ by \one
3402     }%
3403   }%
3404 }%
3405 \ifnum\count@=0
3406   \GlossariesExtraWarning{Entry counting has been enabled
3407   \MessageBreak with \string\glsenableentryunitcount\space but the
3408   \MessageBreak attribute ‘unitcount’ hasn’t
3409   \MessageBreak been assigned to any of the defined
3410   \MessageBreak entries}%
3411 \fi
3412 }

```

`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.

```
3413 \newcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
```

Enable entry counting:

```
3414 \glsenableentryunitcount
```

Redefine `\gls` etc:

```

3415 \renewcommand*{\gls}{\cgls}%
3416 \renewcommand*{\Gls}{\cGls}%
3417 \renewcommand*{\glspol}{\cglspl}%
3418 \renewcommand*{\Glspol}{\cGlspol}%
3419 \renewcommand*{\GLS}{\cGLS}%
3420 \renewcommand*{\GLSpol}{\cGLSpol}%

```

Set the `entrycount` attribute:

```
3421 \glsxtr@setentryunitcountunsetattr{#1}{#2}{#3}%
```

In case this command is used again:

```

3422 \let\GlsXtrEnableEntryUnitCounting\@glsxtr@setentryunitcountunsetattr
3423 \renewcommand*\GlsXtrEnableEntryCounting}[2]{%
3424   \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryCounting\space
3425     can't be used with \string\GlsXtrEnableEntryUnitCounting}%
3426   {Use one or other but not both commands}}%
3427 }

tcountunsetattr
3428 \newcommand*\@glsxtr@setentryunitcountunsetattr}[3]{%
3429   \@for\@glsxtr@cat:=#1\do
3430   {%
3431     \ifdefempty{\@glsxtr@cat}{}%
3432     {%
3433       \glssetcategoryattribute{\@glsxtr@cat}{entrycount}{#2}%
3434       \glssetcategoryattribute{\@glsxtr@cat}{unitcount}{#3}%
3435     }%
3436   }%
3437 }

```

1.3.6 Acronym Modifications

It's more consistent to use the abbreviation code for acronyms, but make some adjustments to allow for continued use of the glossaries package's custom acronym format. (For example, user may already have defined some acronym styles with `\newacronymstyle` which they would like to continue to use.) The original glossaries acronym code can be restored with `\RestoreAcronyms`, but adjust `\SetGenericNewAcronym` so that `\newacronym` adds the category.

genericNewAcronym

```

3438 \renewcommand*\SetGenericNewAcronym}{%
3439   \let\@Gls@entryname\@Gls@acrentryname
3440   \renewcommand{\newacronym}[4][]{%
3441     \ifdefempty{\glsacronymlists}%
3442     {%
3443       \def\@glo@type{\acronymtype}%
3444       \setkeys{glossentry}{##1}%
3445       \DeclareAcronymList{\@glo@type}%
3446     }%
3447     {}%
3448     \glskeylisttok{##1}%
3449     \glslabeltok{##2}%
3450     \glsshorttok{##3}%
3451     \glslongtok{##4}%
3452     \newacronymhook
3453     \protected@edef\@do@newglossaryentry{%
3454       \noexpand\newglossaryentry{\the\glslabeltok}%
3455     }%
3456     type=\acronymtype,%

```

```

3457     name={\expandonce{\acronymentry{##2}}},%
3458     sort={\acronymsort{\the\glsshorttok}{\the\glslongtok}},%
3459     text={\the\glsshorttok},%
3460     short={\the\glsshorttok},%
3461     shortplural={\the\glsshorttok\noexpand\acrpluralsuffix},%
3462     long={\the\glslongtok},%
3463     longplural={\the\glslongtok\noexpand\acrpluralsuffix},%
3464     category=acronym,
3465     \GenericAcronymFields,%
3466     \the\glskeylisttok
3467   }%
3468 }%
3469   \cdo@newglossaryentry
3470 }%
3471 \renewcommand*{\acrfullfmt}[3]{%
3472   \glslink[##1]{##2}{\genacrfullformat{##2}{##3}}}%
3473 \renewcommand*{\Acrfullfmt}[3]{%
3474   \glslink[##1]{##2}{\Genacrfullformat{##2}{##3}}}%
3475 \renewcommand*{\ACRfullfmt}[3]{%
3476   \glslink[##1]{##2}{%
3477     \mfirstucMakeUppercase{\genacrfullformat{##2}{##3}}}}%
3478 \renewcommand*{\acrfullplfmt}[3]{%
3479   \glslink[##1]{##2}{\genplacrfullformat{##2}{##3}}}%
3480 \renewcommand*{\Acrfullplfmt}[3]{%
3481   \glslink[##1]{##2}{\Genplacrfullformat{##2}{##3}}}%
3482 \renewcommand*{\ACRfullplfmt}[3]{%
3483   \glslink[##1]{##2}{%
3484     \mfirstucMakeUppercase{\genplacrfullformat{##2}{##3}}}}%
3485 \renewcommand*{\glsentryfull}[1]{\genacrfullformat{##1}{}}%
3486 \renewcommand*{\Glsentryfull}[1]{\Genacrfullformat{##1}{}}%
3487 \renewcommand*{\glsentryfullpl}[1]{\genplacrfullformat{##1}{}}%
3488 \renewcommand*{\Glsentryfullpl}[1]{\Genplacrfullformat{##1}{}}%
3489 }

```

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:

```

3490 \let\@glsxtr@org@setacronymstyle\setacronymstyle
3491 \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`.

```

3492 \newcommand*{\MakeAcronymsAbbreviations}{%
3493   \renewcommand*{\newacronym}[4][]{%
3494     \glsxtr@newabbreviation{type=\acronymtype,category=acronym,##1}{##2}{##3}{##4}}%
3495   }%
3496 \renewcommand*{\firstacronymfont}[1]{\glsfirstabbrvfont{##1}}%
3497 \renewcommand*{\acronymfont}[1]{\glsabbrvfont{##1}}%

```

```

3498 \renewcommand*\setacronymstyle[1]{%
3499   \PackageError{glossaries-extra}{\string\setacronymstyle{\#1}%
3500   unavailable.%
3501   Use \string\setabbreviationstyle\space instead.%
3502   The original acronym interface can be restored with%
3503   \string\RestoreAcronyms{}%
3504 }%
3505 \renewcommand*\newacronymstyle[1]{%
3506   \GlossariesExtraWarning{New acronym style '\#1' won't be%
3507   available unless you restore the original acronym interface with%
3508   \string\RestoreAcronyms}%
3509   \@glsxtr@org@newacronymstyle{\#1}%
3510 }%
3511 }

```

Switch acronyms to abbreviations:

```
3512 \MakeAcronymsAbbreviations
```

`RestoreAcronyms` Restore acronyms to glossaries interface.

```

3513 \newcommand*\RestoreAcronyms{%
3514   \SetGenericNewAcronym
3515   \renewcommand{\firstacronymfont}[1]{\acronymfont{\#1}}%
3516   \renewcommand{\acronymfont}[1]{\#1}%
3517   \let\setacronymstyle\@glsxtr@org@setacronymstyle
3518   \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.

```

3519 \renewcommand*\@gls@link@checkfirsthyper{%
3520   \ifglsused{\glslabel}%
3521   {\let\glsxtrifwasfirstuse\@secondoftwo}%
3522   {\let\glsxtrifwasfirstuse\@firstoftwo}%
3523   \glsxtr@org@checkfirsthyper
3524 }%
3525 \glssetcategoryattribute{acronym}{regular}{false}%
3526 \setacronymstyle{long-short}%
3527 }

```

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

```

3528 \renewcommand*\glsacspace[1]{%
3529   \settowidth{\dimen@}{(\firstacronymfont{\glsentryshort{\#1}})}%
3530   \ifdim\dimen@<\glsacspacemax\else\space\fi
3531 }

```

`\glsacspacemax` Value used in the above.

```
3532 \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
3533 \newcommand*{\@glsxtr@reg@glosslist}{}}

Save the original definition of \makeglossaries:
```

```
3534 \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
3535 \renewcommand*{\makeglossaries}[1] []{%
3536   \ifx\@glsxtr@record@setting\@glsxtr@record@setting@only
3537     \PackageError{glossaries-extra}{\string\makeglossaries\space
3538       not permitted\MessageBreak with record=only package option}%
3539     {You may only use \string\makeglossaries\space with
3540       record=off or record=alsoindex options}%
3541   \else
3542     \ifblank{#1}%
3543       {\@glsxtr@org@makeglossaries}%
3544     {%
3545       \ifx\@glsxtr@record@setting\@glsxtr@record@setting@alsoindex
3546         \PackageError{glossaries-extra}{\string\makeglossaries[#1]\space
3547           not permitted\MessageBreak with record=alsoindex package option}%
3548         {You may only use the hybrid \string\makeglossaries[...]\space with
3549           record=off option}%
3550       \else
3551         \edef\@glsxtr@reg@glosslist{#1}%
3552         \ifundef{\glswrite}{\newwrite\glswrite}{}%
3553         \protected@write\@auxout{}{\string\providecommand
3554           \string\@glsorder[1]}%
3555         \protected@write\@auxout{}{\string\providecommand
3556           \string\@istfilename[1]}%
3557         \protected@write\@auxout{}{\string\@istfilename{\istfilename}}%
3558         \protected@write\@auxout{}{\string\@glsorder{\glsorder}}%
3559         \protected@write\@auxout{}{\string\glsxtr@makeglossaries{#1}}%
3560         \write\@auxout{\string\providecommand\string\@gls@reference[3]}%
3561     }%
```

Iterate through each supplied glossary type and activate it.

```
3561   \@for\@glo@type:=#1\do{%
3562     \ifdefempty{\@glo@type}{}{\@makeglossary{\@glo@type}}%
3563   }%
```

New glossaries must be created before \makeglossaries:

```
3564     \renewcommand*\newglossary[4] []{%
3565         \PackageError{glossaries}{New glossaries
3566             must be created before \string\makeglossaries}{You need
3567             to move \string\makeglossaries\space after all your
3568             \string\newglossary\space commands}}%
```

Any subsequent instances of this command should have no effect

```
3569     \let\@makeglossary\relax
3570     \let\makeglossary\relax
3571     \renewcommand\makeglossaries[1] [] {}%
```

Disable all commands that have no effect after \makeglossaries

```
3572     \odisable@onlypremakeg
```

Allow see key:

```
3573     \let\gls@checkseeallowed\relax
```

Adjust \do@seeglossary. This needs to check for the entries existence.

```
3574     \renewcommand*{\do@seeglossary}[2]{%
3575         \glsdoifexists{##1}%
3576         {%
3577             \edef@gls@label{\glsdetoklabel{##1}}%
3578             \edef@gls@type{\csname glo@\gls@label @type\endcsname}%
3579             \expandafter\DTLifinlist\expandafter{\gls@type}{\glsxtr@reg@glosslist}%
3580             {\glsxtr@org@doseeglossary{##1}{##2}}%
3581             {%
3582                 \glsxtrwrglossmark
3583                 \protected@write\auxout{}{%
3584                     \string@gls@reference
3585                     {\gls@type}{\gls@label}{\string\glsseeformat##2{}}%
3586                 }%
3587             }%
3588         }%
3589     }%
```

Adjust \do@wrglossary

```
3590     \let\glsxtr@do@wrglossary\do@wrglossary
3591     \def\do@wrglossary{%
3592         \edef@gls@type{\csname glo@\gls@label @type\endcsname}%
3593         \expandafter\DTLifinlist\expandafter{\gls@type}{\glsxtr@reg@glosslist}%
3594         {\glsxtr@do@wrglossary}%
3595         {\gls@noidxglossary}%
3596     }%
```

Suppress warning about no \makeglossaries

```
3597     \let\warn@nomakeglossaries\relax
3598     \def\warn@noprintglossary{%
3599         \GlossariesWarningNoLine{No \string\printglossary\space
3600             or \string\printglossaries\space
3601             found.^^J(Remove \string\makeglossaries\space if you don't want
3602             any glossaries.)^^JThis document will not have a glossary}%
3603     }
```

```

3603      }%
Only warn for glossaries not listed.
3604      \renewcommand{\@gls@noref@warn}[1]{%
3605          \edef\@gls@type{##1}%
3606          \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
3607          {%
3608              \GlossariesExtraWarning{Can't use
3609                  \string\printnoidxglossary[type={\@gls@type}]
3610                  when '\@gls@type' is listed in the optional argument of
3611                  \string\makeglossaries}%
3612          }%
3613          {%
3614              \GlossariesWarning{Empty glossary for
3615                  \string\printnoidxglossary[type={##1}].
3616                  Rerun may be required (or you may have forgotten to use
3617                  commands like \string\gls)}%
3618          }%
3619      }%

```

Adjust display number list to check for type:

```

3620      \renewcommand*\glsdisplaynumberlist[1]{%
3621          \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3622          {\@glsxtr@idx@displaynumberlist{##1}}%
3623          {\@glsxtr@noidx@displaynumberlist{##1}}%
3624      }%

```

Adjust entry list:

```

3625      \renewcommand*\glsentrynumberlist[1]{%
3626          \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3627          {\@glsxtr@idx@entrynumberlist{##1}}%
3628          {\@glsxtr@noidx@entrynumberlist{##1}}%
3629      }%

```

Adjust number list loop

```

3630      \renewcommand*\glsnumberlistloop[2]{%
3631          \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3632          {%
3633              \PackageError{glossaries-extra}{\string\glsnumberlistloop\space
3634                  not available for glossary '##1'}{}%
3635          }%
3636          {\@glsxtr@noidx@numberlistloop{##1}{##2}}%
3637      }%

```

Only sanitize sort for normal indexing glossaries.

```

3638      \renewcommand*\glsprestandardsort[3]{%
3639          \expandafter\DTLifinlist\expandafter{##2}{\@glsxtr@reg@glosslist}%
3640          {%
3641              \glsdosanitizesort
3642          }%
3643      }%

```

```

3644     \ifglsanizizesort
3645         \@gls@noidx@sanizizesort
3646     \else
3647         \@gls@noidx@nosanizizesort
3648     \fi
3649 }
3650 }

```

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

```

3651 \renewcommand*\new@glossaryentry[2]{%
3652     \PackageError{glossaries-extra}{Glossary entries must be defined
3653         in the preamble\MessageBreak when you use the optional argument
3654         of \string\makeglossaries}{Either move your definitions to the
3655         preamble or don't use the optional argument of
3656         \string\makeglossaries}%
3657 }

```

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).

```

3658 \let\@glo@assign@sortkey\glsxtr@mixed@assign@sortkey
3659 \renewcommand*{\@printgloss@setsort}{%

```

Need to extract just the type value.

```

3660     \expandafter\glsxtr@gettype\expandafter,\@glsxtr@printglossopts,%
3661         type=\glsdefaulttype,\@end@glsxtr@gettype
3662     \def\@glo@sorttype{\@glo@default@sorttype}%
3663 }

```

Check automake setting:

```

3664 \ifglsautomake
3665     \renewcommand*{\@gls@doautomake}{%
3666         \@for\@gls@type:=\glsxtr@reg@glosslist\do{%
3667             \ifdefempty{\@gls@type}{}{\@gls@automake{\@gls@type}}%
3668         }%
3669     }%
3670 \fi

```

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

```

3671     \ifdef{\@glo@check@sortallowed}{\@glo@check@sortallowed\makeglossaries}{}%
3672     \fi
3673 }
3674 \fi
3675 }

```

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

\provideignoreglossary 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.)

```
3676 \newcommand{\@glsxstr@orgprintglossary}[2]{%
3677   \def\@glo@type{\glsdefaulttype}%

```

Add check here.

```
3678   \def\glossarytitle{%
3679     \ifcsdef{@glotype@\@glo@type}{%
3680       {\@csuse{@glotype@\@glo@type}{\title}}{%
3681         {\glossaryname}}{%
3682       \def\glossarytoctitle{\glossarytitle}{%
3683         \let\org@glossarytitle\glossarytitle{%
3684           \def\@glossarystyle{%
3685             \ifx\@glossary@default@style\relax{%
3686               \GlossariesWarning{No default glossary style provided}\MessageBreak
3687               for the glossary '\@glo@type'.\MessageBreak
3688               Using deprecated fallback.\MessageBreak
3689               To fix this set the style with \MessageBreak
3690               \string\setglossarystyle\space or use the \MessageBreak
3691               style key=value option}{%
3692             \fi}{%
3693           }{%
3694             \def\gls@dotocitle{\glssettoctitle{\@glo@type}}{%
3695               \let\@org@glossaryentrynumbers\glossaryentrynumbers{%
3696                 \bgroup{%
3697                   \@printgloss@setsort{%
3698                     \setkeys{printgloss}{#1}}{%
3699                     \ifx\glossarytitle\org@glossarytitle{%
3700                       \else{%
3701                         \cslet{@glotype@\@glo@type}{\title}{\glossarytitle}{%
3702                           \fi}{%
3703                           \let\currentglossary\@glo@type{%
3704                             \let\org@glossaryentrynumbers\glossaryentrynumbers{%
3705                               \let\glsnonextpages\glsnonextpages{%
3706                                 \let\glsnextpages\glsnextpages{%
3707                                   \glsxtractivenopost{%
3708                                     \gls@dotocitle{%
3709                                       \@glossarystyle{%
3710                                         \let\gls@org@glossaryentryfield\glossentry{%
3711                                           \let\gls@org@glossarysubentryfield\subglossentry{%
3712                                             \renewcommand{\glossentry}[1]{%
3713                                               \xdef\glscurrententrylabel{\glsdetoklabel{##1}}{%
3714                                                 \gls@org@glossaryentryfield{##1}}{%
3715                                               }{%
3716                                             \renewcommand{\subglossentry}[2]{%
3717                                               \xdef\glscurrententrylabel{\glsdetoklabel{##2}}{%
3718                                                 \gls@org@glossarysubentryfield{##1}{##2}}{%
3719                                               }{%
3720                                             \gls@preglossaryhook{%

```

```

3721      #2%
3722  \egroup
3723  \global\let\glossaryentrynumbers\@org@glossaryentrynumbers
3724  \global\let\warn@noprintglossary\relax
3725 }

ractivatenopost Change \nopostrdesc and \glsxtrnopostrpunc to behave as they do in the glossary.
3726 \newcommand*{\glsxtrnopostrpunc}{%
3727   \let\nopostrdesc\nopostrdesc
3728   \let\glsxtrnopostrpunc\glsxtr@nopostrpunc
3729 }

lsxtrnopostrpunc
3730 \newrobustcmd*{\glsxtrnopostrpunc}{}}

sxtr@nopostrpunc Provide a command that works like \nopostrdesc but only switches off the punctuation without suppressing the post-description hook.
3731 \newcommand{\@glsxtr@nopostrpunc}{%
3732   \let\@glsxtr@org@postdescription\glspostdescription
3733   \ifglsnopostrdot
3734     \renewcommand{\glspostdescription}{%
3735       \glsnopostrdottrue
3736       \let\glspostdescription\@glsxtr@org@postdescription
3737       \let\glsxtrrestorerepostpunc\glsxtr@restore@postpunc
3738       \glsxtrpostdescription
3739       \glsxtr@nopostrpunc@postdesc}%
3740   \else
3741     \renewcommand{\glspostdescription}{%
3742       \let\glspostdescription\@glsxtr@org@postdescription
3743       \let\glsxtrrestorerepostpunc\glsxtr@restore@postpunc
3744       \glsxtrpostdescription
3745       \glsxtr@nopostrpunc@postdesc}%
3746   \fi
3747   \glsnopostrdotfalse
3748 }

stpunc@postdesc
3749 \newcommand*{\@glsxtr@nopostrpunc@postdesc}{}}

estore@postpunc
3750 \newcommand{\@glsxtr@restore@postpunc}{%
3751   \def\@glsxtr@nopostrpunc@postdesc{%
3752     \glsxtr@org@postdescription
3753     \let\@glsxtr@nopostrpunc@postdesc\empty
3754     \let\glsxtrrestorerepostpunc\empty
3755   }%
3756 }

```

`restorepostpunc` Does nothing outside of glossary.
3757 `\newcommand*{\glsxtrrestorepostpunc}{}%`

`\@printglossary` Redefine.
3758 `\renewcommand{\@printglossary}[2]{%`
3759 `\def\@glsxtr@printglossopts{\#1}%`
3760 `\@glsxtr@orgprintglossary{\#1}{\#2}%`
3761 }

Add a key that switches off the entry targets:

```
3762 \define@choicekey{printgloss}{target}{%
3763 [\@glsxtr@printglossval\@glsxtr@printglossnr]%
3764 {true},false}{true}%
3765 {%
3766 \ifcase\@glsxtr@printglossnr
3767 \let\@glstarget\glsdohypertarget
3768 \else
3769 \let\@glstarget\@secondoftwo
3770 \fi
3771 }
```

`hypernameprefix`
3772 `\newcommand{\@glsxtrhypernameprefix}{}%`

New to v1.20:

```
3773 \define@key{printgloss}{targetnameprefix}{%
3774 \renewcommand{\@glsxtrhypernameprefix}{\#1}%
3775 }
```

`glsdohypertarget` Redefine to insert `\@glsxtrhypernameprefix` before the target name.

```
3776 \let\@glsxtr@org@glsdohypertarget\glsdohypertarget
3777 \renewcommand{\glsdohypertarget}[2]{%
3778 \@glsxtr@org@glsdohypertarget{\@glsxtrhypernameprefix\#1}{\#2}%
3779 }
```

`@makeglossaries` For the benefit of `makeglossaries`
3780 `\newcommand*{\glsxtr@makeglossaries}[1]{}%`

`@glsxtr@gettype` Get just the type.
3781 `\def\@glsxtr@gettype#1,type=#2,#3\@end@glsxtr@gettype{%`
3782 `\def\@glo@type{\#2}%
3783 }`

`@assign@sortkey` Assign the sort key.
3784 `\newcommand{\@glsxtr@mixed@assign@sortkey}[1]{%`
3785 `\edef\@glo@type{\@glo@type}%
3786 \expandafter\DTLifinlist\expandafter{\@glo@type}{\@glsxtr@reg@glosslist}%
3787 {%`

```

3788     \glo@no@assign@sortkey{#1}%
3789   }%
3790   {%
3791     \glo@assign@sortkey{#1}%
3792   }%
3793 }%

```

Display number list for the regular version:

```
splaynumberlist
3794 \let\glsxtr@idx@displaynumberlist\glsdisplaynumberlist
```

Display number list for the “noidx” version:

```
splaynumberlist
3795 \newcommand*{\glsxtr@noidx@displaynumberlist}[1]{%
3796   \letcs{\gls@loclist}{\glo@\glsdetoklabel{#1}@loclist}%
3797   \ifdef{\gls@loclist}%
3798   {%
3799     \def{\gls@noidxloclist@sep}{%
3800       \def{\gls@noidxloclist@sep}{%
3801         \def{\gls@noidxloclist@sep}{%
3802           \glsnumlistsep
3803         }%
3804         \def{\gls@noidxloclist@finalsep}{\glsnumlistlastsep}%
3805       }%
3806     }%
3807     \def{\gls@noidxloclist@finalsep}{%
3808       \def{\gls@noidxloclist@prev}{%
3809         \forlistloop{\glsnoidxdisplayloclisthandler}{\gls@loclist}%
3810         \gls@noidxloclist@finalsep
3811         \gls@noidxloclist@prev
3812       }%
3813     }%
3814     \glsxtrundeftag
3815     \glsdoifexists{#1}%
3816   }%
3817   \GlossariesWarning{Missing location list for ‘#1’. Either
3818     a rerun is required or you haven’t referenced the entry.}%
3819 }%
3820 }%
3821 }%
3822 }
```

And for the number list loop:

```
@numberlistloop
3823 \newcommand*{\glsxtr@noidx@numberlistloop}[3]{%
3824   \letcs{\gls@loclist}{\glo@\glsdetoklabel{#1}@loclist}%
3825   \let{\gls@org@glsnoidxdisplayloc}{\glsnoidxdisplayloc}
```

```

3826 \let\@gls@org@glsseefORMAT\glsseefORMAT
3827 \let\glsnoidxdisplayloc#2\relax
3828 \let\glsseefORMAT#3\relax
3829 \ifdef\@gls@loclist
3830 {%
3831   \forlistloop{\glsnoidxnumberlistloopHandler}{\@gls@loclist}%
3832 }%
3833 {%

3834   \glsxtrundeFTAG
3835   \glsdoifexists{#1}%
3836 {%
3837   \GlossariesWarning{Missing location list for ‘##1’. Either
3838     a rerun is required or you haven’t referenced the entry.}%
3839 }%
3840 }%
3841 \let\glsnoidxdisplayloc\@gls@org@glsnoidxdisplayloc
3842 \let\glsseefORMAT\@gls@org@glsseefORMAT
3843 }%

```

Same for entry number list.

entrynumberlist

```

3844 \newcommand*{\@glsxtr@noidx@entrynumberlist}[1]{%
3845   \let\cs{\@gls@loclist}\glo@\glsdetoklabel{#1}@loclist}%
3846 \ifdef\@gls@loclist
3847 {%
3848   \glsnoidxloclist{\@gls@loclist}%
3849 }%
3850 {%

3851   \glsxtrundeFTAG
3852   \glsdoifexists{#1}%
3853 {%
3854   \GlossariesWarning{Missing location list for ‘#1’. Either
3855     a rerun is required or you haven’t referenced the entry.}%
3856 }%
3857 }%
3858 }%

```

entrynumberlist

```
3859 \newcommand*{\@glsxtr@idx@entrynumberlist}[1]{\glsentrynumberlist{#1}}
```

x@getgroupTitle Patch.

```

3860 \renewcommand*{\@gls@noidx@getgroupTitle}[2]{%
3861   \protected@edef\@glsxtr@titleLabel{#1}%
3862 \ifdefvoid\@glsxtr@titleLabel
3863 {}%
3864 {%
3865   \protected@edef\@glsxtr@titleLabel{\csuse{\glsxtr@groupTitle@#1}}%

```

```

3866 }%
3867 \ifdefvoid{\glsxtr@titlelabel}%
3868 {%
3869   \DTLifint{#1}%
3870   {%
3871     \ifnum#1<256\relax
3872       \edef#2{\char#1\relax}%
3873     \else
3874       \edef#2{#1}%
3875     \fi
3876   }%
3877   {%
3878     \ifcsundef{#1groupname}%
3879       {\def#2{#1}}%
3880       {\letcs#2{#1groupname}}%
3881     }%
3882   }%
3883   {%
3884     \let#2\glsxtr@titlelabel
3885   }%
3886 }

g@getgroup title Save original definition of \@gls@getgroup title
3887 \let\glsxtr@org@gotgroup title\@gls@getgroup title

trgetgroup title Provide a user-level command to fetch the group title. The first argument is the group label.
The second argument is a control sequence in which to store the title.
3888 \newrobustcmd{\glsxtrgetgroup title}[2]{%
3889   \protected@edef\glsxtr@titlelabel{\glsxtr@group title@#1}%
3890   \onelevel@sanitize\glsxtr@titlelabel
3891   \ifcsdef{\glsxtr@titlelabel}%
3892     {\letcs{#2}{\glsxtr@titlelabel}}%
3893     {\glsxtr@org@gotgroup title{#1}{#2}}%
3894   }%
3895 \let\@gls@getgroup title\glsxtrgetgroup title

trsetgroup title Sets the title for the given group label.
3896 \newcommand{\glsxtrsetgroup title}[2]{%
3897   \protected@edef\glsxtr@titlelabel{\glsxtr@group title@#1}%
3898   \onelevel@sanitize\glsxtr@titlelabel
3899   \protected@csxdef{\glsxtr@titlelabel}{#2}%
3900 }

alsetgroup title As above put only locally defines the title.
3901 \newcommand{\glsxtrlocalsetgroup title}[2]{%
3902   \protected@edef\glsxtr@titlelabel{\glsxtr@group title@#1}%
3903   \onelevel@sanitize\glsxtr@titlelabel
3904   \protected@csedef{\glsxtr@titlelabel}{#2}%
3905 }

```

```
\glsnavigation Redefine to use new user-level command.
```

```
3906 \renewcommand*{\glsnavigation}{%
3907   \def\@gls@between{}%
3908   \ifcsundef{@gls@hypergroupelist@\@glo@type}%
3909   {}%
3910   \def\@gls@list{}%
3911 }%
3912 {}%
3913   \expandafter\let\expandafter\@gls@list
3914     \csname @gls@hypergroupelist@\@glo@type\endcsname
3915 }%
3916 \cfor\@gls@tmp:=\@gls@list\do{%
3917   \@gls@between
3918   \glsxtrgetgroup title{\@gls@tmp}{\@gls@grptitle}%
3919   \glsnavhyperlink{\@gls@tmp}{\@gls@grptitle}%
3920   \let\@gls@between\glshypernavsep
3921 }%
3922 }
```

```
@noidx@glossary
```

```
3923 \renewcommand*{\@print@noidx@glossary}{%
3924   \ifcsdef{@glsref@\@glo@type}%
3925   {}%
3926   \ifcsdef{@glo@sortmacro@\@glo@sorttype}%
3927   {}%
3928   \csuse{@glo@sortmacro@\@glo@sorttype}{\@glo@type}%
3929 }%
3930 {}%
3931   \PackageError{glossaries}{Unknown sort handler '\@glo@sorttype'}{}%
3932 }%
3933 \glossarysection[\glossarytoctitle]{\glossarytitle}%
3934 \glossarypreamble
```

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

```
3935 \def\@gls@currentlettergroup{}%
3936 \begin{theglossary}%
3937 \glossaryheader
3938 \glsresetentrylist
3939 \forlistcsloop{\@gls@noidx@do}{@glsref@\@glo@type}%
3940 \end{theglossary}%
3941 \glossarypostamble
3942 }%
3943 {}%
```

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

```
3944 \glsxtrifemptyglossary{\@glo@type}%
3945 {}%
3946 {\glossarysection[\glossarytoctitle]{\glossarytitle}}%
```

```

3947     \gls@noref@warn{\glo@type}%
3948 }%
3949 }

noidxdisplayloc Patch to check for range formations.
3950 \renewcommand*{\glsnoidxdisplayloc}[4]{%
3951   \setentrycounter[#1]{#2}%
3952   \glsxtr@display@loc#3\empty\end@glsxtr@display@loc{#4}%
3953 }

```

```

xtr@display@loc Patch to check for range formations.
3954 \def\glsxtr@display@loc#1#2\end@glsxtr@display@loc#3{%
3955   \ifx#1(\relax
3956     \glsxtrdisplaystartloc{#2}{#3}%
3957   \else
3958     \ifx#1)\relax
3959       \glsxtrdisplayendloc{#2}{#3}%
3960     \else
3961       \glsxtrdisplaysingleloc{#1#2}{#3}%
3962     \fi
3963   \fi
3964 }

```

```

isplaysingleloc Single location.
3965 \newcommand*{\glsxtrdisplaysingleloc}[2]{%
3966   \csuse{#1}{#2}%
3967 }

```

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.
3968 \newcommand*{\glsxtrdisplaystartloc}[2]{%
3969   \edef\glsxtrlocrengfmt{#1}%
3970   \ifx\glsxtrlocrengfmt\empty
3971     \def\glsxtrlocrengfmt{\glsnumberformat}%
3972   \fi
3973   \expandafter\glsxtrdisplaysingleloc
3974   \expandafter{\glsxtrlocrengfmt}{#2}%
3975 }

```

```

trdisplayendloc End of a location range.
3976 \newcommand*{\glsxtrdisplayendloc}[2]{%
3977   \edef\@glsxtr@tmp{#1}%
3978   \ifdefempty{\@glsxtr@tmp}{\def\@glsxtr@tmp{\glsnumberformat}}{}%
3979   \ifx\glsxtrlocrengfmt\@glsxtr@tmp
3980   \else
3981     \GlossariesExtraWarning{Mismatched end location range
3982     (start=\glsxtrlocrengfmt, end=\@glsxtr@tmp)}%
3983   \fi
3984 }

```

```

3983 \fi
3984 \expandafter\glsxtrdisplayendlochook\expandafter{\@glsxtr@tmp}{#2}%
3985 \expandafter\glsxtrdisplaysingleloc
3986 \expandafter{\glsxtrlocrengefmt}{#2}%
3987 \def\glsxtrlocrengefmt{}%
3988 }

splayendlochook Allow the user to hook into the end of range command.
3989 \newcommand*\glsxtrdisplayendlochook}[2]{}

sxtrlocrengefmt Current range format. Empty if not in a range.
3990 \newcommand*\glsxtrlocrengefmt{}{}

ls@removespaces Redefine to allow adjustments to location hyperlink.
3991 \def\@gls@removespaces#1 #2@nil{%
3992 \toks@=\expandafter{\the\toks@#1}%
3993 \ifx\\#2\\%
3994 \edef\x{\the\toks@}%
3995 \ifx\x\empty
3996 \else
3997 \glsxtrlocationhyperlink{\glsentrycounter}{\glo@counterprefix}{\the\toks@}%
3998 \fi
3999 \else
4000 \gls@ReturnAfterFi{%
4001 \gls@removespaces#2@nil
4002 }%
4003 \fi
4004 }

cationhyperlink
4005 \newcommand*\glsxtrlocationhyperlink}[3]{%
4006 \ifdefvoid\glsxtrspplocationurl
4007 {%
4008 \glsxtrhyperlink{#1#2#3}{#3}%
4009 }%
4010 {%
4011 \hyperref{\glsxtrspplocationurl}{#1#2#3}{#3}%
4012 }%
4013 }

suphypernumber
4014 \newcommand*\glsxtrspphypernumber}[1]{%
4015 {%
4016 \glshasattribute{\glscurrententrylabel}{externalallocation}%
4017 {%
4018 \def\glsxtrspplocationurl{%
4019 \glsgetattribute{\glscurrententrylabel}{externalallocation}}%
4020 }%
4021 }%

```

```

4022     \def\glsxtrsapplocationurl{}%
4023   }%
4024   \glshypernumber{#1}%
4025 }%
4026 }

```

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

@print@glossary

```

4027 \renewcommand{\@print@glossary}{%
4028   \makeatletter
4029   \@input{\jobname.\csname @glotype@\glo@type @in\endcsname}%
4030   \IfFileExists{\jobname.\csname @glotype@\glo@type @in\endcsname}%
4031   {}%
4032   {\glsxtrNoGlossaryWarning{\glo@type}}%
4033   \ifglsxindy
4034     \ifcsundef{\xdy@\glo@type \language}%
4035   {}%
4036     \edef\@do@auxoutstuff{%
4037       \noexpand\AtEndDocument{%
4038         \noexpand\immediate\noexpand\write\@auxout{%
4039           \string\providecommand\string\@xdylanguage[2]{}%}
4040         \noexpand\immediate\noexpand\write\@auxout{%
4041           \string\@xdylanguage{\glo@type}\{\xdy@main\language}}%
4042       }%
4043     }%
4044   }%
4045 {}%
4046   \edef\@do@auxoutstuff{%
4047     \noexpand\AtEndDocument{%
4048       \noexpand\immediate\noexpand\write\@auxout{%
4049         \string\providecommand\string\@xdylanguage[2]{}%}
4050       \noexpand\immediate\noexpand\write\@auxout{%
4051         \string\@xdylanguage{\glo@type}\{\csname @xdy@\glo@type
4052           \language\endcsname}}%
4053     }%
4054   }%
4055 }%
4056 \@do@auxoutstuff
4057 \edef\@do@auxoutstuff{%
4058   \noexpand\AtEndDocument{%
4059     \noexpand\immediate\noexpand\write\@auxout{%
4060       \string\providecommand\string\@gls@codepage[2]{}%}
4061     \noexpand\immediate\noexpand\write\@auxout{%
4062       \string\@gls@codepage{\glo@type}\{\gls@codepage}}%
4063   }%
4064 }%
4065 \@do@auxoutstuff
4066 \fi

```

```
4067 \renewcommand*{\@warn@nomakeglossaries}{%
4068   \GlossariesWarningNoLine{\string\makeglossaries\space
4069     hasn't been used,^^Jthe glossaries will not be updated}%
4070 }%
4071 }
```

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

oGlsWarningHead Header message.

```
4072 \newcommand{\GlsXtrNoGlsWarningHead}[2]{%
4073   This document is incomplete. The external file associated with
4074   the glossary '#1' (which should be called \texttt{\#2})
4075   hasn't been created.%%
4076 }
```

rningEmptyStart No entries have been added to the glossary.

```
4077 \newcommand{\GlsXtrNoGlsWarningEmptyStart}{%
4078   This has probably happened because there are no entries defined
4079   in this glossary.%%
4080 }
```

arningEmptyMain The default “main” glossary is empty.

```
4081 \newcommand{\GlsXtrNoGlsWarningEmptyMain}{%
4082   If you don't want this glossary,
4083   add \texttt{nomain} to your package option list when you load
4084   \texttt{glossaries-extra.sty}. For example:%
4085 }
```

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

```
4086 \newcommand{\GlsXtrNoGlsWarningEmptyNotMain}[1]{%
4087   Did you forget to use \texttt{type=#1} when you defined your
4088   entries? If you tried to load entries into this glossary with
4089   \texttt{\string\loadglsentries} did you remember to use
4090   \texttt{\string[#1]} as the optional argument? If you did, check that
4091   the definitions in the file you loaded all had the type set
4092   to \texttt{\string\glsdefaulttype}.%
4093 }
```

arningCheckFile Advisory message to check the file contents.

```
4094 \newcommand{\GlsXtrNoGlsWarningCheckFile}[1]{%
4095   Check the contents of the file \texttt{\#1}. If
4096   it's empty, that means you haven't indexed any of your entries in this
4097   glossary (using commands like \texttt{\string\gls} or
4098   \texttt{\string\glsadd}) so this list can't be generated.
4099   If the file isn't empty, the document build process hasn't been
4100   completed.%%
4101 }
```

WarningAutoMake Message when automake option has been used.

```
4102 \newcommand{\GlsXtrNoGlsWarningAutoMake}[1]{%
4103   You may need to rerun \LaTeX. If you already have, it may be that
4104   \TeX's shell escape doesn't allow you to run
4105   \ifglsxindy xindy\else makeindex\fi. Check the
4106   transcript file \texttt{\jobname.log}. If the shell escape is
4107   disabled, try one of the following:
4108
4109 \begin{itemize}
4110   \item Run the external (Lua) application:
4111     \texttt{\makeglossaries-lite.lua \string"\jobname\string"}
4113
4114   \item Run the external (Perl) application:
4115     \texttt{\makeglossaries \string"\jobname\string"}
4117 \end{itemize}
4118
4119 Then rerun \LaTeX on this document.
4120 \GlossariesExtraWarning{Rerun required to build the
4121 glossary '#1' or check TeX's shell escape allows
4122 you to run \ifglsxindy xindy\else makeindex\fi}%
4123 }
```

WarningMisMatch Mismatching \makenoidxglossaries.

```
4124 \newcommand{\GlsXtrNoGlsWarningMisMatch}{%
4125   You need to either replace \texttt{\string\makenoidxglossaries}
4126   with \texttt{\string\makeglossaries} or replace
4127   \texttt{\string\printglossary} (or \texttt{\string\printglossaries}) with
4128   \texttt{\string\printnoidxglossary}
4129   (or \texttt{\string\printnoidxglossaries}) and then rebuild
4130   this document.%
```

```
4131 }
```

arningBuildInfo Build advice.

```
4132 \newcommand{\GlsXtrNoGlsWarningBuildInfo}{%
4133   Try one of the following:
4134   \begin{itemize}
4135     \item Add \texttt{automake} to your package option list when you load
4136       \texttt{glossaries-extra.sty}. For example:
4137
4138       \texttt{\string\usepackage[automake]%
4139           \glsopenbrace glossaries-extra\glsclosebrace}
4140
4141     \item Run the external (Lua) application:
4142       \texttt{\makeglossaries-lite.lua \string"\jobname\string"}
4144 }
```

```

4145     \item Run the external (Perl) application:
4146
4147         \texttt{\makeglossaries \string"\jobname\string"}
4148     \end{itemize}
4149
4150 Then rerun \LaTeX\ on this document.%
4151 }

```

oGlsWarningTail Final paragraph.

```

4152 \newcommand{\GlsXtrNoGlsWarningTail}{%
4153 This message will be removed once the problem has been fixed.%
4154 }

```

GlsWarningNoOut No out file created. Build advice.

```

4155 \newcommand{\GlsXtrNoGlsWarningNoOut}[1]{%
4156 The file \texttt{\#1} doesn't exist. This most likely means you haven't used
4157 \texttt{\{string\}\makeglossaries} or you have used
4158 \texttt{\{string\}\nofiles}. If this is just a draft version of the
4159 document, you can suppress this message using the
4160 \texttt{\{nomissingglist\}} package option.%
4161 }

```

glossarywarning

```

4162 \newcommand*{\@glsxtr@defaultnoglossarywarning}[1]{%
4163 \glossarysection[\glossarytoctitle]{\glossarytitle}
4164 \GlsXtrNoGlsWarningHead{\#1}{\jobname.\csname @glotype@\gloctype @in\endcsname}
4165 \par
4166 \glsxtrifemptyglossary{\#1}%
4167 {%
4168     \GlsXtrNoGlsWarningEmptyStart\space
4169     \ifthenelse{\equal{\#1}{main}}{\GlsXtrNoGlsWarningEmptyMain\par
4170     \medskip
4171     \noindent\texttt{\{string\}\usepackage[nomain\ifglsacronym ,acronym\fi]\%
4172         \glsopenbrace glossaries-extra\glsclosebrace}
4173     \medskip
4174     }%
4175     {\GlsXtrNoGlsWarningEmptyNotMain{\#1}}%
4176 }%
4177 {%
4178     \IfFileExists{\jobname.\csname @glotype@\gloctype @out\endcsname}%
4179     {%
4180         \GlsXtrNoGlsWarningCheckFile
4181             {\jobname.\csname @glotype@\gloctype @out\endcsname}
4182
4183         \ifglsautomake
4184
4185         \GlsXtrNoGlsWarningAutoMake{\#1}
4186
4187     \else

```

```

4188      \ifthenelse{\equal{#1}{main}}%
4189      {%
4190          \GlsXtrNoGlsWarningEmptyMain\par
4191          \medskip
4192          \noindent\textrtt{\string\usepackage[nomain]%
4193              \glsopenbrace glossaries-extra\glsclosebrace}%
4194          \medskip
4195      }%
4196  }%
4197  {}%
4198
4199  \ifdefequal\makeglossaries\@no@makeglossaries
4200  {%
4201      \GlsXtrNoGlsWarningMisMatch
4202  }%
4203  {%
4204      \GlsXtrNoGlsWarningBuildInfo
4205  }%
4206  \fi
4207 }%
4208 {}%
4209  \GlsXtrNoGlsWarningNoOut
4210  {\jobname.\csname @glotypr@\glo@type \out\endcsname}%
4211 }%
4212 }%
4213 \par
4214 \GlsXtrNoGlsWarningTail
4215 }

```

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.

```
4216 \newcommand*{\glsxtrresourcefile}[2] [] {%
```

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

```

4217  \disable@keys{glossaries-extra.sty}{record}%
4218  \glsxtr@writefields
4219  \protected@write\auxout{\glsxtrresourceinit}{\string\glsxtr@resource{#1}{#2}}%
4220  \let\@glsxtr@org@see@noindex\gls@see@noindex
4221  \let\@gls@see@noindex\relax
4222  \IfFileExists{#2.glstex}%
4223  {}%

```

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

```

4224  \edef\@bibgls@restoreat{\noexpand\catcode\noexpand`\noexpand\@=\number\catcode`\@}%
4225  \makeatletter
4226  \@input{#2.glstex}%
4227  \@bibgls@restoreat

```

```

4228 }%
4229 {%
4230 \GlossariesExtraWarning{No file '#2.glstex'}%
4231 }%
4232 \let\@gls@see@noindex\@glsxtr@org@see@noindex
4233 }
4234 \onlypreamble\glsxtrresourcefile

xtrresourceinit Code used during the protected write operation.
4235 \newcommand*\glsxtrresourceinit[]{} 

trresourcecount
4236 \newcount\glsxtrresourcecount

trLoadResources Short cut that uses \glsxtrresourcefile with \jobname as the mandatory argument.
4237 \newcommand*\GlsXtrLoadResources[1][]{%
4238 \ifnum\glsxtrresourcecount=0\relax
4239 \glsxtrresourcefile[\#1]{\jobname}%
4240 \else
4241 \glsxtrresourcefile[\#1]{\jobname-\the\glsxtrresourcecount}%
4242 \fi
4243 \advance\glsxtrresourcecount by 1\relax
4244 }

glsxtr@resource
4245 \newcommand*\glsxtr@resource[2]{} 

\glsxtr@fields
4246 \newcommand*\glsxtr@fields[1]{} 

xtr@texencoding
4247 \newcommand*\glsxtr@texencoding[1]{} 

\glsxtr@langtag
4248 \newcommand*\glsxtr@langtag[1]{} 

@pluralsuffixes
4249 \newcommand*\glsxtr@pluralsuffixes[4]{} 

tr@shortcutsval
4250 \newcommand*\glsxtr@shortcutsval[1]{} 

sxtr@linkprefix
4251 \newcommand*\glsxtr@linkprefix[1]{} 

xtr@writefields This information only needs to be written once, so disable it after it's been used.
4252 \newcommand*\glsxtr@writefields{}%

```

```

4253 \protected@write\@auxout{%
4254   {\string\providecommand*{\string\glsxtr@fields}[1]{}}%
4255 \protected@write\@auxout{%
4256   {\string\providecommand*{\string\glsxtr@resource}[2]{}}%
4257 \protected@write\@auxout{%
4258   {\string\providecommand*{\string\glsxtr@pluralsuffixes}[4]{}}%
4259 \protected@write\@auxout{%
4260   {\string\providecommand*{\string\glsxtr@shortcutsval}[1]{}}%
4261 \protected@write\@auxout{%
4262   {\string\providecommand*{\string\glsxtr@linkprefix}[1]{}}%
4263 \protected@write\@auxout{}{\string\glsxtr@fields{\@gls@keymap}}%
```

```
4264 \protected@write\@auxout{%
4265   {\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`.

```

4266 \ifdef\CurrentTrackedLanguageTag
4267 {%
4268   \protected@write\@auxout{}{%
4269     \string\glsxtr@langtag{\CurrentTrackedLanguageTag}}%
4270 }%
4271 {}%
4272 \protected@write\@auxout{}{\string\glsxtr@pluralsuffixes
4273   {\glspluralsuffix}{\abbrvpluralsuffix}{\acrpluralsuffix}}%
4274   {\glsxtrabbrvpluralsuffix}}%
4275 \ifdef\inputencodingname
4276 {%
4277   \protected@write\@auxout{}{\string\glsxtr@texencoding{\inputencodingname}}%
4278 }%
4279 {}%
```

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.)

```

4280   \@ifpackageloaded{fontspec}%
4281     {\protected@write\@auxout{}{\string\glsxtr@texencoding{utf8}}}}%
4282   {}%
4283 }%
4284 \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.

```

4285 \AtBeginDocument
4286   {\protected@write\@auxout{}{\string\glsxtr@linkprefix{\glolinkprefix}}}}%
4287 \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.

```

4288 \ifglsautomake
4289   \IfFileExists{\jobname.aux}%
4290   {\immediate\write18{bib2gls \jobname}}{}%
4291   If \makeglossaries is also used, allow makeindex/xindy to also be run, otherwise disable
4292   the error message about requiring \makeglossaries with automake=true.
4293 \ifx\@gls@doautomake\@gls@doautomake@err
4294   \let\@gls@doautomake\relax
4295 \fi
4296 \newcommand*\@gls@doautomake@err}{%
4297   \PackageError{glossaries}{You must use
4298   \string\makeglossaries\space with automake=true}%
4299   {%
4300     Either remove the automake=true setting or
4301     add \string\makeglossaries\space to your document preamble.%}
4302   }%
4303 }

```

Allow locations specific to a particular counter to be recorded.

\glsxtr@record

```

4304 \newcommand*\glsxtr@record}[5]{}

```

r@counterrecord Aux file command.

```

4305 \newcommand*\glsxtr@counterrecord}[3]{%
4306   \glsxtrfieldlistgadd{\#1}{record.\#2}{\#3}%
4307 }

```

unterrecordhook Hook used by \glsxtr@dorecord.

```

4308 \newcommand*\glsxtr@counterrecordhook}{}

```

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

```

4309 \newcommand*\GlsXtrRecordCounter}[1]{%
4310   \@@glsxtr@recordcounter{\#1}%
4311 }
4312 \onlypreamble\GlsXtrRecordCounter

```

docounterrecord

```

4313 \newcommand*\glsxtr@docounterrecord}[1]{%
4314   \protected@write\auxout{}\string\glsxtr@counterrecord
4315   {\@gls@label}{\#1}{\csuse{the\#1}}}%
4316 }

```

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.

```
4317 \newcommand*{\glsxtrglossentry}[1]{%
4318   \glsxtrtitleorpdfforheading
4319   {\@glsxtrglossentry{#1}}%
4320   {\glsentryname{#1}}%
4321   {\glsxtrheadname{#1}}%
4322 }
```

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

```
4323 \newrobustcmd*{\@glsxtrglossentry}[1]{%
4324   \glsxtrtitleorpdfforheading
4325   {%
4326     \glsdoifexists{#1}%
4327     {%
4328       \begingroup
4329         \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
4330         \edef\currentglossary{\glsentrytype{\glscurrententrylabel}}%
4331         \ifglshasparent{#1}%
4332           {\glssubentryitem{#1}}%
4333           {\glsentryitem{#1}}%
4334           \glstarget{#1}{\glossentryname{#1}}%
4335         \endgroup
4336     }%
4337   }%
4338   {\glsentryname{#1}}%
4339   {\glsxtrheadname{#1}}%
4340 }
```

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.

```
4341 \newcommand*{\glsxtrglossentryother}[3]{%
4342   \ifstrempty{#1}%
4343   {%
4344     \ifcsdef{glsxtrhead#3}%
4345     {%
4346       \glsxtrtitleorpdfforheading
4347       {\@glsxtrglossentryother{#2}{#3}{#1}}%
4348       {\@gls@entry@field{#2}{#3}}%
4349       {\csuse{glsxtrhead#3}{#2}}%
4350     }%
```

```

4351   {%
4352     \glsxtrtitleorpdforheading
4353     {\@glsxtrglossentryother{\#2}{\#3}{\#1}}%
4354     {\@gls@entry@field{\#2}{\#3}}%
4355     {\@gls@entry@field{\NoCaseChange{\#2}}{\#3}}%
4356   }%
4357 }%
4358 {%
4359   \glsxtrtitleorpdforheading
4360   {\@glsxtrglossentryother{\#2}{\#3}{\#1}}%
4361   {\@gls@entry@field{\#2}{\#3}}%
4362   {\#1}%
4363 }%
4364 }

```

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

```

4365 \newrobustcmd*{\@glsxtrglossentryother}[3]{%
4366   \glsxtrtitleorpdforheading
4367   {%
4368     \glsdoifexists{\#1}%
4369   {%
4370     \begingroup
4371       \edef\glscurrententrylabel{\glsdetoklabel{\#1}}%
4372       \edef\currentglossary{\glsentrytype{\glscurrententrylabel}}%
4373       \ifglshasparent{\#1}%
4374         {\glssubentryitem{\#1}}%
4375         {\glsentryitem{\#1}}%
4376         \glstarget{\#1}{\glossentrynameother{\#1}{\#2}}%
4377       \endgroup
4378     }%
4379   }%
4380   {\@gls@entry@field{\#1}{\#2}}%
4381   {\#3}%
4382 }

```

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

```

4383 \newcommand*{\printunsrtglossary}{%
4384   \@ifstar\s@printunsrtglossary\@printunsrtglossary
4385 }

```

`printunsrtglossary` Unstarred version.

```

4386 \newcommand*{\@printunsrtglossary}[1][]{%
4387   \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%
4388 }

```

`printunsrtglossary` Starred version.

```

4389 \newcommand*{\s@printunsrtglossary}[2][]{%
4390   \begingroup

```

```

4391     #2%
4392     \@printglossary{type=\glsdefaulttype,#1}{\@print@unsrt@glossary}%
4393     \endgroup
4394 }

```

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

```

4395 \newcommand*{\printunsrtglossaries}{%
4396   \forallglossaries{\@glo@type}{\printunsrtglossary[type=\@glo@type]}%
4397 }

```

`@unsrt@glossary`

```

4398 \newcommand*{\@print@unsrt@glossary}{%
4399   \glossarysection[\glossarytoctitle]{\glossarytitle}%
4400   \glossarypreamble
      check for empty list
4401   \glsxtrifemptyglossary{@glo@type}%
4402   {%
4403     \GlossariesExtraWarning{No entries defined in glossary '\@glo@type'}%
4404   }%
4405   {%
4406     \key@ifundefined{glossentry}{group}%
4407     {\let\@gls@getgroupname\@gls@noidx@getgroupname}%
4408     {\let\@gls@getgroupname\@glsxtr@unsrt@getgroupname}%
4409     \def\@gls@currentlettergroup{}%

```

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

```

4410 \def\@glsxtr@doglossary{%
4411   \begin{theglossary}%
4412   \glossaryheader
4413   \glsresetentrylist
4414 }%
4415 \expandafter\@for\expandafter\glscurrententrylabel\expandafter
4416   :\expandafter=\csname glolist@\@glo@type\endcsname\do{%
4417   \ifdef\@gls@currententrylabel{%
4418     \glscurrententrylabel}%
4419   {}%

```

Provide a hook (for example to measure width).

```

4420   \let\glsxtr@process\@firstofone
4421   \let\printunsrtglossaryskipentry
4422     \glsxtr@printunsrtglossaryskipentry
4423     \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%

```

Don't check group for child entries.

```

4424   \glsxtr@process
4425   {%
4426     \ifglshasparent{\glscurrententrylabel}{}%
4427   {}%

```

```

4428     \glsxtr@checkgroup\glscurrententrylabel
4429     \expandafter\appto\expandafter\glsxtr@glossary\expandafter
4430         {\glsxtr@groupheading}%
4431     }%
4432     \eappto\glsxtr@glossary{%
4433         \noexpand\printunsrt@glossary@handler{\glscurrententrylabel}}%
4434     }%
4435     }%
4436     }%
4437     \appto\glsxtr@glossary{\end{theglossary}}%
4438     \printunsrtglossarypredoglossary
4439     \glsxtr@glossary
4440     }%
4441     \glossarypostamble
4442 }

```

ntryprocesshook

```
4443 \newcommand*{\printunsrtglossaryentryprocesshook}[1]{}
```

ntryprocesshook

```

4444 \newcommand*{\printunsrtglossaryskipentry}{%
4445   \PackageError{glossaries-extra}{\string\printunsrtglossaryskipentry\space
4446 can only be used within \string\printunsrtglossaryentryprocesshook}{}%
4447 }

```

ntryprocesshook

```

4448 \newcommand*{\glsxtr@printunsrtglossaryskipentry}{%
4449   \let\glsxtr@process\gobble
4450 }

```

rypredoglossary

```
4451 \newcommand*{\printunsrtglossarypredoglossary}{}%
```

lossary@handler

```

4452 \newcommand{\printunsrt@glossary@handler}[1]{%
4453   \xdef\glscurrententrylabel{\#1}%
4454   \printunsrtglossaryhandler\glscurrententrylabel
4455 }

```

glossaryhandler

```

4456 \newcommand{\printunsrtglossaryhandler}[1]{%
4457   \glsxtrunsrtodo{\#1}%
4458 }

```

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.

```
4459 \newrobustcmd*{\glsxtriflabelinlist}[4]{%
```

```
4460 \protected@edef\@glsxtr@doiflabelinlist{\noexpand@gls@ifinlist{#1}{#2}}%
4461 @glsxtr@doiflabelinlist{#3}{#4}%
4462 }
```

srtglossaryunit

```
4463 \newcommand{\print@op@unsrtglossaryunit}[2][]{%
4464   \s@printunsrtglossary[type=\glsdefaulttype,#1]{%
4465     \printunsrtglossaryunitsetup{#2}}%
4466   }%
4467 }
```

glossaryunitsetup

```
4468 \newcommand*\printunsrtglossaryunitsetup[1]{%
4469   \renewcommand{\printunsrtglossaryhandler}[1]{%
4470     \glsxtrfieldxifinlist{##1}{record.#1}{\csuse{the#1}}%
4471     {\glsxtrunsrtdo{##1}}%
4472     {}}%
4473 }
```

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

```
4474 \ifcsundef{theH#1}%
4475 {%
4476   \renewcommand*{\@glsxtrhypernameprefix}{record.#1.\csuse{the#1}. \gobble}%
4477 }%
4478 {%
4479   \renewcommand*{\@glsxtrhypernameprefix}{record.#1.\csuse{theH#1}. \gobble}%
4480 }%
4481 \renewcommand*{\glossarysection}[2][]{\gobble}%
4482 \appto\glossarypostamble{\glspar\medskip\glspar}%
4483 }
```

srtglossaryunit

```
4484 \newcommand{\print@noop@unsrtglossaryunit}[2][]{%
4485   \PackageError{glossaries-extra}{\string\printunsrtglossaryunit\space
4486     requires the record=only or record=alsoindex package option}{}%
4487 }
```

t@getgroupitle

```
4488 \newrobustcmd*{\@glsxtr@unsrt@getgroupitle}[2]{%
4489   \protected@edef\@glsxtr@titlelabel{\glsxtr@groupitle@#1}%
4490   \onelevel@sanitize\@glsxtr@titlelabel
4491   \ifcsdef{\@glsxtr@titlelabel}%
4492     {\letcs{#2}{\@glsxtr@titlelabel}}%
4493     {\def#2{#1}}%
4494 }
```

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

```
4495 \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).

```
4496 \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@glossary` is being constructed rather than in the handler.

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

```
4497 \newcommand*{\@glsxtr@checkgroup}[1]{%
4498   \def\@glsxtr@groupheading{}%
4499   \key@ifundefined{glossentry}{group}%
4500   {}%
4501   \letcs{\@gls@sort}{glo@\glsdetoklabel{#1}@sort}%
4502   \expandafter\glo@grabfirst\gls@sort{}{}\@nil
4503 }%
4504 {}%
4505   \protected@edef\@glo@thislettergrp{%
4506     \csuse{glo@\glsdetoklabel{#1}@glsxtrgroupfield}}%
4507 }%
4508 \ifdefeq{\@glo@thislettergrp}{\gls@currentlettergroup}%
4509 {}%
4510 {}%
4511 \ifdefempty{\gls@currentlettergroup}{}%
4512 { \def\@glsxtr@groupheading{\gls@groupskip}%
4513 \eappto\@glsxtr@groupheading{%
4514   \noexpand\gls@groupheading{\expandonce\@glo@thislettergrp}%
4515 }%
4516 }%
4517 \let\gls@currentlettergroup\@glo@thislettergrp
4518 }
```

`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.

```
4519 \newcommand{\@glsxtr@noidx@do}[1]{%
4520   \ifglsentryexists{#1}%
4521   {}%
4522   \global\letcs{\@gls@loclist}{glo@\glsdetoklabel{#1}@loclist}%
4523   \global\letcs{\@gls@location}{glo@\glsdetoklabel{#1}@location}%
4524   \ifglshasparent{#1}%
4525   {}%
4526   \gls@level=\csuse{glo@\glsdetoklabel{#1}@level}\relax
4527   \ifdefvoid{\@gls@location}{%
```

```

4528  {%
4529      \ifdefvoid{\@gls@loclist}{%
4530      {%
4531          \subglossentry{\gls@level}{#1}{}
4532      }%
4533      {%
4534          \subglossentry{\gls@level}{#1}{}
4535          {%
4536              \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}{%
4537          }%
4538      }%
4539  }%
4540  {%
4541      \subglossentry{\gls@level}{#1}{\glossaryentrynumbers{\@gls@location}}{%
4542  }%
4543 }%
4544 {%

4545     \ifdefvoid{\@gls@location}{%
4546     {%
4547         \ifdefvoid{\@gls@loclist}{%
4548             {%
4549                 \glossentry{#1}{}
4550             }%
4551             {%
4552                 \glossentry{#1}{}
4553                 {%
4554                     \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}{%
4555                 }%
4556             }%
4557         }%
4558         {%
4559             \glossentry{#1}{}
4560             {%
4561                 \glossaryentrynumbers{\@gls@location}{%
4562                 }%
4563             }%
4564         }%
4565     }%
4566     {}%
4567 }

```

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
4568 \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>}]
```

```
4569 \newcommand*{\glsxtrnewgls}[4]{%
4570   \ifdef{#3}{%
4571     {%
4572       \PackageError{glossaries-extra}{Command \string#3\space already
4573 defined}{}%
4574     }%
4575     {%
4576       \ifcsdef{@#4like@#2}{%
4577         {%
4578           \advance\glsxtrnewgls@inner by \one
4579           \def\glsxtrnewgls@innercsname{@#4like\number\glsxtrnewgls@inner @#2}%
4580         }%
4581         {\def\glsxtrnewgls@innercsname{@#4like@#2}}%
4582         \expandafter\newrobustcmd\expandafter*\expandafter
4583           #3\expandafter{\expandafter\gls@hyp@opt\csname\glsxtrnewgls@innercsname\endcsname}%
4584         \ifstrempty{#1}{%
4585           {%
4586             \expandafter\newcommand\expandafter*\csname\glsxtrnewgls@innercsname\endcsname[2] []{%
4587               \new@ifnextchar[%]
4588                 {\csname @#4@\endcsname{##1}{#2##2}}%
4589                 {\csname @#4@\endcsname{##1}{#2##2}[] }%
4590               }%
4591             }%
4592             {%
4593               \expandafter\newcommand\expandafter*\csname\glsxtrnewgls@innercsname\endcsname[2] []{%
4594                 \new@ifnextchar[%]
4595                   {\csname @#4@\endcsname{#1,##1}{#2##2}}%
4596                   {\csname @#4@\endcsname{#1,##1}{#2##2}[] }%
4597                 }%
4598               }%
4599             }%
4600 }
```

```
\glsxtrnewgls [\glsxtrnewgls[<options>]{<prefix>}{<cs>}]
```

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

```
4601 \newrobustcmd*{\glsxtrnewgls}[3] []{%
4602   \glsxtrnewgls{#1}{#2}{#3}{gls}}%
4603 }
```

`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.

```
4604 \newrobustcmd*{\glsxtrnewglslike}[6] [] {%
4605   \@glsxtrnewgls{#1}{#2}{#3}{gls}%
4606   \@glsxtrnewgls{#1}{#2}{#4}{glspl}%
4607   \@glsxtrnewgls{#1}{#2}{#5}{Gls}%
4608   \@glsxtrnewgls{#1}{#2}{#6}{Glspl}%
4609 }
```

`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.

```
4610 \newrobustcmd*{\glsxtrnewGLSlike}[4] [] {%
4611   \@glsxtrnewgls{#1}{#2}{#3}{GLS}%
4612   \@glsxtrnewgls{#1}{#2}{#4}{GLSpl}%
4613 }
```

`\glsxtrnewrgls` As `\glsxtrnewgls` but for `\rgls`.

```
4614 \newrobustcmd*{\glsxtrnewrgls}[3] [] {%
4615   \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
4616 }
```

`sxtrnewrglslike` As `\glsxtrnewglslike` but for `\rgls` etc.

```
4617 \newrobustcmd*{\glsxtrnewrglslike}[6] [] {%
4618   \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
4619   \@glsxtrnewgls{#1}{#2}{#4}{rglspl}%
4620   \@glsxtrnewgls{#1}{#2}{#5}{rGls}%
4621   \@glsxtrnewgls{#1}{#2}{#6}{rGlspl}%
4622 }
```

`sxtrnewrGLSlike` As `\glsxtrnewGLSlike` but for `\rGLS` etc.

```
4623 \newrobustcmd*{\glsxtrnewrGLSlike}[4] [] {%
4624   \@glsxtrnewgls{#1}{#2}{#3}{rGLS}%
4625   \@glsxtrnewgls{#1}{#2}{#4}{rGLSpl}%
4626 }
```

Provide easy access to record count fields.

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

```
4627 \newcommand*{\GlsXtrTotalRecordCount}[1] {%
4628   \ifcsdef{glo@\glsdetoklabel{#1}@recordcount}{}{%
4629     {\csname glo@\glsdetoklabel{#1}@recordcount\endcsname}%
4630   {0}%
4631 }
```

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

```
4632 \newcommand*{\GlsXtrRecordCount}[2] {%
```

```

4633 \ifcsdef{glo@\glstoklabel{#1}@recordcount.\#2}{%
4634 {\cscname glo@\glstoklabel{#1}@recordcount.\#2\endcscname}%
4635 {0}%
4636 }

```

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 \glstoklocation can be set to something sensible.

```

4637 \newcommand*{\GlsXtrLocationRecordCount}[3]{%
4638 \ifcsdef{glo@\glstoklabel{#1}@recordcount.\#2.\glstoklocation{#3}}{%
4639 {\cscname glo@\glstoklabel{#1}@recordcount.\#2.\glstoklocation{#3}\endcscname}%
4640 {0}%
4641 }

```

trdetoklocation

```
4642 \newcommand*{\glstoklocation}[1]{#1}
```

ablerecordcount

```

4643 \newcommand*{\glsxtrenablerecordcount}{%
4644 \renewcommand*{\gls}{\rgls}%
4645 \renewcommand*{\Gls}{\rGls}%
4646 \renewcommand*{\glsp}{\rglsp}%
4647 \renewcommand*{\Glsp}{\rGlsp}%
4648 \renewcommand*{\GLS}{\rGLS}%
4649 \renewcommand*{\GLSp}{\rGLSp}%
4650 }

```

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

```

4651 \newcommand*{\glstokrecordtriggervalue}[1]{%
4652 \GlsXtrTotalRecordCount{#1}%
4653 }

```

dCountAttribute

```

4654 \newcommand*{\GlsXtrSetRecordCountAttribute}[2]{%
4655 @for@{\glstok@cat:=#1\do
4656 {%
4657 \ifdefempty{\@glstok@cat}{}%
4658 {%
4659 \glstoksetcategoryattribute{\@glstok@cat}{recordcount}{#2}%
4660 }%
4661 }%
4662 }

```

rifrecordtrigger \glstokifrecordtrigger{*label*}{{*trigger format*}}{*(normal)*}

```

4663 \newcommand*{\glsxtrifrecordtrigger}[3]{%
4664   \glshasattribute{#1}{recordcount}%
4665 {%
4666   \ifnum\glsxtrrecordtriggervalue{#1}>\glsgetattribute{#1}{recordcount}\relax
4667     #3%
4668   \else
4669     #2%
4670   \fi
4671 }%
4672 {#3}%
4673 }

```

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

```

4674 \newcommand*{\@glsxtr@rgltrigger@record}[3]{%
4675   \edef\glslabel{\glsdetoklabel{#2}}%
4676   \let@gls@link@label\glslabel
4677   \def@glsxtr@thevalue{}%
4678   \def@glsxtr@theHvalue{\@glsxtr@thevalue}%
4679   \def@glsnumberformat{\glstriggerrecordformat}%
4680   \edef@gls@counter{\csname glo@\glslabel @counter\endcsname}%
4681   \edef\glstype{\csname glo@\glslabel @type\endcsname}%
4682   \def@glsxtr@thevalue{}%
4683   \def@glsxtr@theHvalue{\@glsxtr@thevalue}%
4684   \glsxtrinitwrgloss
4685   \glslinkpresetkeys
4686   \setkeys{glslink}{#1}%
4687   \glslinkpostsetkeys
4688   \ifdefempty{\@glsxtr@thevalue}%
4689 {%
4690   \gls@saveentrycounter
4691 }%
4692 {%
4693   \let\the\glsentrycounter\@glsxtr@thevalue
4694   \def\the\glsentrycounter{\@glsxtr@theHvalue}%
4695 }%
4696 \ifglsxtrinitwrglossbefore
4697   \do@wrglossary{#2}%
4698 \fi
4699 #3%
4700 \ifglsxtrinitwrglossbefore
4701 \else
4702   \do@wrglossary{#2}%
4703 \fi
4704 \ifKV@glslink@local
4705   \glslocalunset{#2}%
4706 \else
4707   \glsunset{#2}%
4708 \fi

```

```

4709 }

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

4710 \newcommand{\glstriggerrecordformat}[1]{}

\rgls
4711 \newrobustcmd{\rgls}{\gls@hyp@opt\rgls}

\@rgls
4712 \newcommand{\@rgls}[2][]{%
4713   \new@ifnextchar[{\@rgls@{\#1}{\#2}}{\@rgls@{\#1}{\#2}[]}%
4714 }

\@rgls@
4715 \def\@rgls@#1#2[#3]{%
4716   \glsxtrifrecordtrigger{#2}%
4717   {%
4718     \glsxtr@rglstrigger@record{#1}{#2}{\rglsformat{#2}{#3}}%
4719   }%
4720   {%
4721     \gls@{\#1}{\#2}[]#3%
4722   }%
4723 }%

\rglspl
4724 \newrobustcmd{\rglspl}{\gls@hyp@opt\rglspl}

\@rglspl
4725 \newcommand{\@rglspl}[2][]{%
4726   \new@ifnextchar[{\@rglspl@{\#1}{\#2}}{\@rglspl@{\#1}{\#2}[]}%
4727 }

\@rglspl@
4728 \def\@rglspl@#1#2[#3]{%
4729   \glsxtrifrecordtrigger{#2}%
4730   {%
4731     \glsxtr@rglstrigger@record{#1}{#2}{\rglsplformat{#2}{#3}}%
4732   }%
4733   {%
4734     \glspl@{\#1}{\#2}[]#3%
4735   }%
4736 }%

\rGls
4737 \newrobustcmd{\rGls}{\gls@hyp@opt\rGls}

```

```

\@rGls
4738 \newcommand*{\@rGls}[2] []{%
4739   \new@ifnextchar[{\@rGls@{\#1}{\#2}}{\@rGls@{\#1}{\#2}[] }%
4740 }

\@rGls@
4741 \def\@rGls@#1#2[#3]{%
4742   \glsxtrifrecordtrigger{#2}%
4743   {%
4744     \glsxtr@rglstrigger@record{\#1}{\#2}{\rGlsformat{\#2}{\#3}}%
4745   }%
4746   {%
4747     \@Gls@{\#1}{\#2} [#3]%
4748   }%
4749 }%

\rGlspl
4750 \newrobustcmd*{\rGlspl}{\gls@hyp@opt\@rGlspl}

\@rGlspl
4751 \newcommand*{\@rGlspl}[2] []{%
4752   \new@ifnextchar[{\@rGlspl@{\#1}{\#2}}{\@rGlspl@{\#1}{\#2}[] }%
4753 }

\@rGlspl@
4754 \def\@rGlspl@#1#2[#3]{%
4755   \glsxtrifrecordtrigger{#2}%
4756   {%
4757     \glsxtr@rglstrigger@record{\#1}{\#2}{\rGlsplformat{\#2}{\#3}}%
4758   }%
4759   {%
4760     \@Glspl@{\#1}{\#2} [#3]%
4761   }%
4762 }%

\rGLS
4763 \newrobustcmd*{\rGLS}{\gls@hyp@opt\@rGLS}

\@rGLS
4764 \newcommand*{\@rGLS}[2] []{%
4765   \new@ifnextchar[{\@rGLS@{\#1}{\#2}}{\@rGLS@{\#1}{\#2}[] }%
4766 }

\@rGLS@
4767 \def\@rGLS@#1#2[#3]{%
4768   \glsxtrifrecordtrigger{#2}%
4769   {%
4770     \glsxtr@rglstrigger@record{\#1}{\#2}{\rGLSformat{\#2}{\#3}}%

```

```

4771 }%
4772 {%
4773 \c@GLS@{#1}{#2}{#3}%
4774 }%
4775 }%


\rGLSpl
4776 \newrobustcmd*{\rGLSpl}{\gls@hyp@opt\rGLSpl}

\c@rGLSpl
4777 \newcommand*{\c@rGLSpl}[2][]{%
4778 \new@ifnextchar[\c@rGLSpl@{#1}{#2}]{\c@rGLSpl@{#1}{#2}}[]}{%
4779 }

\c@rGLSpl@
4780 \def\c@rGLSpl@#1#2[#3]{%
4781 \glsxtrifrecordtrigger{#2}%
4782 {%
4783 \c@glsxtr@rglstrigger@record{#1}{#2}{\rGLSplformat{#2}{#3}}%
4784 }%
4785 {%
4786 \c@GLSpl@{#1}{#2}{#3}%
4787 }%
4788 }%


\rglsformat
4789 \newcommand*{\rglsformat}[2]{%
4790 \glsifregular{#1}%
4791 {\glsentryfirst{#1}}%
4792 {\ifglshaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
4793 }

\rglsplformat
4794 \newcommand*{\rglsplformat}[2]{%
4795 \glsifregular{#1}%
4796 {\glsentryfirstplural{#1}}%
4797 {\ifglshaslong{#1}{\glsentrylongplural{#1}}{\glsentryfirstplural{#1}}}#2%
4798 }

\rGlsformat
4799 \newcommand*{\rGlsformat}[2]{%
4800 \glsifregular{#1}%
4801 {\Glsentryfirst{#1}}%
4802 {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
4803 }

\rGlsplformat
4804 \newcommand*{\rGlsplformat}[2]{%

```

```

4805 \glsifregular{#1}
4806 {\Glsentryfirstplural{#1}}%
4807 {\ifglshaslong{#1}{\Glsentrylongplural{#1}}{\Glsentryfirstplural{#1}}}{#2}%
4808 }

\rGLSformat
4809 \newcommand*{\rGLSformat}[2]{%
4810 \expandafter\mfirstuc\expandafter{\rglsformat{#1}{#2}}%
4811 }

\rGLSplformat
4812 \newcommand*{\rGLSplformat}[2]{%
4813 \expandafter\mfirstuc\expandafter{\rglsplformat{#1}{#2}}%
4814 }

```

1.4 Link Counting

This is different to the entry counting provided by the base package (which counts the number of times the first use flag is unset). Instead, this method hooks into `\@gls@link` (through `\glsxtr@inc@linkcount`) to increment an associated counter. To preserve resources, the counter is only defined if it needs to be incremented. This method is independent of the presence of hyperlinks. (The “link” part of the name refers to `\@gls@link` not `\hyperlink`.)

`\o@inc@linkcount` This performs the actual incrementing and counter definition. The counter is given by `\c@glsxtr@linkcount@\langle label\rangle` where `\langle label\rangle` is the entry’s label. Since this is performed within `\@gls@link` the label can be accessed with `\glslabel`.

```
4815 \newcommand{\glsxtr@do@inc@linkcount}{%
```

Does this entry have the linkcount attribute set?

```
4816 \glsifattribute{\glslabel}{linkcount}{true}%
4817 {%
```

Does the counter exist?

```
4818 \ifcsdef{c@glsxtr@linkcount@\glslabel}{}%
4819 {%
```

Counter doesn’t exist, so define it.

```
4820 \newcounter{glsxtr@linkcount@\glslabel}%
```

If `linkcountmaster` is set, add to counter reset.

```
4821 \glshasattribute{\glslabel}{linkcountmaster}%
4822 {%
```

Need to ensure values are fully expanded.

```
4823 \begingroup
4824 \edef\x{\endgroup\noexpand\@addtoreset{glsxtr@linkcount@\glslabel}%
4825 {\glsgetattribute{\glslabel}{linkcountmaster}}}%
4826 \x
4827 }%
```

```

4828     {}%
4829   }%
    Increment counter:
4830   \glsxtrinlinkcounter{glsxtr@linkcount@\glslabel}%
4831 }%
4832 {}%
4833 }

rinlinkcounter May be redefined to use \refstepcounter if required.
4834 \newcommand*{\glsxtrinlinkcounter}[1]{\stepcounter{#1}{}}

inkCounterValue Expands to the associated link counter register or 0 if not defined.
4835 \newcommand*{\GlsXtrLinkCounterValue}[1]{%
4836   \ifcsundef{c@glsxtr@linkcount@#1}{0}{\csname c@glsxtr@linkcount@#1\endcsname}%
4837 }

rTheLinkCounter Expands to the display value of the associated link counter or 0 if not defined.
4838 \newcommand*{\GlsXtrTheLinkCounter}[1]{%
4839   \ifcsundef{\theglsxtr@linkcount@#1}{0}{%
4840     \csname theglsxtr@linkcount@#1\endcsname}%
4841 }

fLinkCounterDef Tests if the counter has been defined
4842 \newcommand*{\GlsXtrIfLinkCounterDef}[3]{%
4843   \ifcsundef{\theglsxtr@linkcount@#1}{#3}{#2}%
4844 }

LinkCounterName Expands to the associated link counter name. (No check for existence.)
4845 \newcommand*{\GlsXtrLinkCounterName}[1]{glsxtr@linkcount@#1}



|                  |                                                                         |
|------------------|-------------------------------------------------------------------------|
| ableLinkCounting | \GlsXtrEnableLinkCounting[ <i>master counter</i> ]{ <i>categories</i> } |
|------------------|-------------------------------------------------------------------------|



Enable link counting for the given categories.
4846 \newcommand*{\GlsXtrEnableLinkCounting}[2][]{%
4847   \let\glsxtr@inc@linkcount\glsxtr@do@inc@linkcount
4848   \@for\@glsxtr@label:=#2\do
4849   {%
4850     \glssetcategoryattribute{\@glsxtr@label}{linkcount}{true}%
4851     \ifstrempty{#1}{%
4852       {%
4853         \ifcsundef{c@#1}{%
4854           {\@nocounterr{#1}}%
4855           \glssetcategoryattribute{\@glsxtr@label}{linkcountmaster}{#1}%
4856         }%
4857       }%
4858     }%
4859   }%
4860 }
```

1.5 Integration with glossaries-accsupp

Provide better integration with the glossaries-accsupp package. (Must be loaded before the main code of glossaries-extra either explicitly or through the accsupp package option.)

These commands have their definitions set according to whether or not glossaries-extra has been loaded.

```
4860 \@ifpackageloaded{glossaries-accsupp}
4861 {
```

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

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

```
4862 \newcommand*{\glsaccessname}[1]{%
4863   \glsnameaccessdisplay
4864   {%
4865     \glsentryname{\#1}%
4866   }%
4867   {\#1}%
4868 }
```

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

```
4869 \newcommand*{\Glsaccessname}[1]{%
4870   \glsnameaccessdisplay
4871   {%
4872     \Glsentryname{\#1}%
4873   }%
4874   {\#1}%
4875 }
```

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

```
4876 \newcommand*{\GLSaccessname}[1]{%
4877   \glsnameaccessdisplay
4878   {%
4879     \mfirstucMakeUppercase{\glsentryname{\#1}}%
4880   }%
4881   {\#1}%
4882 }
```

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

```
4883 \newcommand*{\glsaccesstext}[1]{%
4884   \glstextaccessdisplay
4885   {%
4886     \glsentrytext{\#1}%
4887   }%
4888   {\#1}%
4889 }
```

```

\Glsaccesstext Display the text value (no link and no check for existence) with the first letter converted to
upper case.
4890 \newcommand*{\Glsaccesstext}[1]{%
4891   \glstextaccessdisplay
4892   {%
4893     \Glsentrytext{#1}%
4894   }%
4895   {#1}%
4896 }

\GLSaccesstext Display the text value (no link and no check for existence) converted to upper case.
4897 \newcommand*{\GLSaccesstext}[1]{%
4898   \glstextaccessdisplay
4899   {%
4900     \mfirstucMakeUppercase{\glsentrytext{#1}}%
4901   }%
4902   {#1}%
4903 }

glsaccessplural Display the plural value (no link and no check for existence).
4904 \newcommand*{\glsaccessplural}[1]{%
4905   \glspluralaccessdisplay
4906   {%
4907     \glsentryplural{#1}%
4908   }%
4909   {#1}%
4910 }

Glsaccessplural Display the plural value (no link and no check for existence) with the first letter converted to
upper case.
4911 \newcommand*{\Glsaccessplural}[1]{%
4912   \glspluralaccessdisplay
4913   {%
4914     \Glsentryplural{#1}%
4915   }%
4916   {#1}%
4917 }

GLSaccessplural Display the plural value (no link and no check for existence) converted to upper case.
4918 \newcommand*{\GLSaccessplural}[1]{%
4919   \glspluralaccessdisplay
4920   {%
4921     \mfirstucMakeUppercase{\glsentryplural{#1}}%
4922   }%
4923   {#1}%
4924 }

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

```

```
4925 \newcommand*{\glsaccessfirst}[1]{%
4926   \glsfirstaccessdisplay
4927   {%
4928     \glsentryfirst{#1}%
4929   }%
4930   {#1}%
4931 }
```

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

```
4932 \newcommand*{\Glsaccessfirst}[1]{%
4933   \glsfirstaccessdisplay
4934   {%
4935     \Glsentryfirst{#1}%
4936   }%
4937   {#1}%
4938 }
```

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

```
4939 \newcommand*{\GLSaccessfirst}[1]{%
4940   \glsfirstaccessdisplay
4941   {%
4942     \mfirstucMakeUppercase{\glsentryfirst{#1}}%
4943   }%
4944   {#1}%
4945 }
```

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

```
4946 \newcommand*{\glsaccessfirstplural}[1]{%
4947   \glsfirstpluralaccessdisplay
4948   {%
4949     \glsentryfirstplural{#1}%
4950   }%
4951   {#1}%
4952 }
```

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

```
4953 \newcommand*{\Glsaccessfirstplural}[1]{%
4954   \glsfirstpluralaccessdisplay
4955   {%
4956     \Glsentryfirstplural{#1}%
4957   }%
4958   {#1}%
4959 }
```

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

```
4960 \newcommand*{\GLSaccessfirstplural}[1]{%
```

```

4961   \glsfirstpluralaccessdisplay
4962   {%
4963     \mfirstucMakeUppercase{\glsentryfirstplural{#1}}%
4964   }%
4965   {#1}%
4966 }

```

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

```

4967 \newcommand*{\glsaccesssymbol}[1]{%
4968   \glssymbolaccessdisplay
4969   {%
4970     \glsentrysymbol{#1}%
4971   }%
4972   {#1}%
4973 }

```

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

```

4974 \newcommand*{\Glsaccesssymbol}[1]{%
4975   \glssymbolaccessdisplay
4976   {%
4977     \Glsentrysymbol{#1}%
4978   }%
4979   {#1}%
4980 }

```

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

```

4981 \newcommand*{\GLSaccesssymbol}[1]{%
4982   \glssymbolaccessdisplay
4983   {%
4984     \mfirstucMakeUppercase{\glsentrysymbol{#1}}%
4985   }%
4986   {#1}%
4987 }

```

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

```

4988 \newcommand*{\glsaccesssymbolplural}[1]{%
4989   \glssymbolpluralaccessdisplay
4990   {%
4991     \glsentrysymbolplural{#1}%
4992   }%
4993   {#1}%
4994 }

```

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

```

4995 \newcommand*{\Glsaccesssymbolplural}[1]{%
4996   \glssymbolpluralaccessdisplay

```

```
4997   {%
4998     \Glsentrysymbolplural{#1}%
4999   }%
5000   {#1}%
5001 }
```

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

```
5002 \newcommand*{\GLSaccesssymbolplural}[1]{%
5003   \glssymbolpluralaccessdisplay
5004   {%
5005     \mfirstucMakeUppercase{\glsentrysymbolplural{#1}}%
5006   }%
5007   {#1}%
5008 }
```

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

```
5009 \newcommand*{\glsaccessdesc}[1]{%
5010   \glsdescriptionaccessdisplay
5011   {%
5012     \glsentrydesc{#1}%
5013   }%
5014   {#1}%
5015 }
```

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

```
5016 \newcommand*{\Glsaccessdesc}[1]{%
5017   \glsdescriptionaccessdisplay
5018   {%
5019     \Glsentrydesc{#1}%
5020   }%
5021   {#1}%
5022 }
```

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

```
5023 \newcommand*{\GLSaccessdesc}[1]{%
5024   \glsdescriptionaccessdisplay
5025   {%
5026     \mfirstucMakeUppercase{\glsentrydesc{#1}}%
5027   }%
5028   {#1}%
5029 }
```

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

```
5030 \newcommand*{\glsaccessdescplural}[1]{%
5031   \glsdescriptionpluralaccessdisplay
5032   {%
5033     \glsentrydescplural{#1}%
5034 }
```

```
5034    }%
5035    {#1}%
5036 }
```

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

```
5037 \newcommand*{\Glsaccessdescplural}[1]{%
5038     \glsdescriptionplural\accessdisplay
5039     {%
5040         \Glsentrydescplural{#1}%
5041     }%
5042     {#1}%
5043 }
```

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

```
5044 \newcommand*{\GLSaccessdescplural}[1]{%
5045     \glsdescriptionplural\accessdisplay
5046     {%
5047         \mfirstucMakeUppercase{\glsentrydescplural{#1}}%
5048     }%
5049     {#1}%
5050 }
```

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

```
5051 \newcommand*{\glsaccessshort}[1]{%
5052     \glsshortaccessdisplay
5053     {%
5054         \glsentryshort{#1}%
5055     }%
5056     {#1}%
5057 }
```

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

```
5058 \newcommand*{\Glsaccessshort}[1]{%
5059     \glsshortaccessdisplay
5060     {%
5061         \Glsentryshort{#1}%
5062     }%
5063     {#1}%
5064 }
```

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

```
5065 \newcommand*{\GLSaccessshort}[1]{%
5066     \glsshortaccessdisplay
5067     {%
5068         \mfirstucMakeUppercase{\glsentryshort{#1}}%
5069     }%
```

```
5070     {#1}%
5071 }
```

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

```
5072 \newcommand*{\glsaccessshortpl}[1]{%
5073     \glsshortpluralaccessdisplay
5074     {%
5075         \glsentryshortpl{#1}%
5076     }%
5077     {#1}%
5078 }
```

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

```
5079 \newcommand*{\Glsaccessshortpl}[1]{%
5080     \glsshortpluralaccessdisplay
5081     {%
5082         \Glsentryshortpl{#1}%
5083     }%
5084     {#1}%
5085 }
```

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

```
5086 \newcommand*{\GLSaccessshortpl}[1]{%
5087     \glsshortpluralaccessdisplay
5088     {%
5089         \mfirstucMakeUppercase{\glsentryshortpl{#1}}%
5090     }%
5091     {#1}%
5092 }
```

\glsaccesslong Display the long form (no link and no check for existence).

```
5093 \newcommand*{\glsaccesslong}[1]{%
5094     \glslongaccessdisplay{\glsentrylong{#1}}{#1}%
5095 }
```

\Glsaccesslong Display the long form (no link and no check for existence).

```
5096
5097 \newcommand*{\Glsaccesslong}[1]{%
5098     \glslongaccessdisplay{\Glsentrylong{#1}}{#1}%
5099 }
```

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

```
5100 \newcommand*{\GLSaccesslong}[1]{%
5101     \glslongaccessdisplay
5102     {%
5103         \mfirstucMakeUppercase{\glsentrylong{#1}}%
5104     }%
```

```

5105      {#1}%
5106  }

glsaccesslongpl  Display the long plural form (no link and no check for existence).
5107  \newcommand*{\glsaccesslongpl}[1]{%
5108      \glslongpluralaccessdisplay{\glsentrylongpl{#1}}{#1}%
5109  }

Glsaccesslongpl  Display the long plural form (no link and no check for existence).
5110
5111  \newcommand*{\Glsaccesslongpl}[1]{%
5112      \glslongpluralaccessdisplay{\Glsentrylongpl{#1}}{#1}%
5113  }

GLSaccesslongpl  Display the longplural value (no link and no check for existence) converted to upper case.
5114  \newcommand*{\GLSaccesslongpl}[1]{%
5115      \glslongpluralaccessdisplay
5116      {%
5117          \mfirstucMakeUppercase{\glsentrylongpl{#1}}%
5118      }%
5119      {#1}%
5120  }

        End of if part

5121 }
5122 {

    No accessibility support. Just define these commands to do \glsentry<xxx>

\glsaccessname  Display the name value (no link and no check for existence).
5123  \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.
5124  \newcommand*{\Glsaccessname}[1]{\Glsentryname{#1}}


\GLSaccessname  Display the name value (no link and no check for existence). converted to upper case.
5125  \newcommand*{\GLSaccessname}[1]{%
5126      \protect\mfirstucMakeUppercase{\glsentryname{#1}}%


\glsaccesstext  Display the text value (no link and no check for existence).
5127  \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.
5128  \newcommand*{\Glsaccesstext}[1]{\Glsentrytext{#1}}

```

```

\GLSaccessstext Display the text value (no link and no check for existence). converted to upper case.
5129  \newcommand*{\GLSaccessstext}[1]{%
5130    \protect\mfirstucMakeUppercase{\glsentrytext{#1}}}

glsaccessplural Display the plural value (no link and no check for existence).
5131  \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.
5132  \newcommand*{\Glsaccessplural}[1]{\Glsentryplural{#1}}

GLSaccessplural Display the plural value (no link and no check for existence). converted to upper case.
5133  \newcommand*{\GLSaccessplural}[1]{%
5134    \protect\mfirstucMakeUppercase{\glsentryplural{#1}}}

\glsaccessfirst Display the first value (no link and no check for existence).
5135  \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.
5136  \newcommand*{\Glsaccessfirst}[1]{\Glsentryfirst{#1}}

\GLSaccessfirst Display the first value (no link and no check for existence). converted to upper case.
5137  \newcommand*{\GLSaccessfirst}[1]{%
5138    \protect\mfirstucMakeUppercase{\glsentryfirst{#1}}}

cessfirstplural Display the firstplural value (no link and no check for existence).
5139  \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.
5140  \newcommand*{\Glsaccessfirstplural}[1]{\Glsentryfirstplural{#1}}

cessfirstplural Display the firstplural value (no link and no check for existence). converted to upper case.
5141  \newcommand*{\GLSaccessfirstplural}[1]{%
5142    \protect\mfirstucMakeUppercase{\glsentryfirstplural{#1}}}

glsaccesssymbol Display the symbol value (no link and no check for existence).
5143  \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.
5144  \newcommand*{\Glsaccesssymbol}[1]{\Glsentrysymbol{#1}}

GLSaccesssymbol Display the symbol value (no link and no check for existence). converted to upper case.
5145  \newcommand*{\GLSaccesssymbol}[1]{%
5146    \protect\mfirstucMakeUppercase{\glsentrysymbol{#1}}}

```

esssymbolplural Display the symbolplural value (no link and no check for existence).
 5147 \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.
 5148 \newcommand*{\Glsaccesssymbolplural}[1]{\Glsentrysymbolplural{\#1}}

esssymbolplural Display the symbolplural value (no link and no check for existence). converted to upper case.
 5149 \newcommand*{\GLSaccesssymbolplural}[1]{%
 5150 \protect\mfistucMakeUppercase{\glsentrysymbolplural{\#1}}}

\glsaccessdesc Display the desc value (no link and no check for existence).
 5151 \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.
 5152 \newcommand*{\Glsaccessdesc}[1]{\Glsentrydesc{\#1}}

\GLSaccessdesc Display the desc value (no link and no check for existence). converted to upper case.
 5153 \newcommand*{\GLSaccessdesc}[1]{%
 5154 \protect\mfistucMakeUppercase{\glsentrydesc{\#1}}}

ccessdescplural Display the descplural value (no link and no check for existence).
 5155 \newcommand*{\glsaccessdescplural}[1]{\glsentrydescplural{\#1}}

ccessdescplural Display the descplural value (no link and no check for existence) with the first letter converted to upper case.
 5156 \newcommand*{\Glsaccessdescplural}[1]{\Glsentrydescplural{\#1}}

ccessdescplural Display the descplural value (no link and no check for existence). converted to upper case.
 5157 \newcommand*{\GLSaccessdescplural}[1]{%
 5158 \protect\mfistucMakeUppercase{\glsentrydescplural{\#1}}}

\glsaccessshort Display the short form (no link and no check for existence).
 5159 \newcommand*{\glsaccessshort}[1]{\glsentryshort{\#1}}

\Glsaccessshort Display the short form with first letter converted to uppercase (no link and no check for existence).
 5160 \newcommand*{\Glsaccessshort}[1]{\Glsentryshort{\#1}}

\GLSaccessshort Display the short value (no link and no check for existence). converted to upper case.
 5161 \newcommand*{\GLSaccessshort}[1]{%
 5162 \protect\mfistucMakeUppercase{\glsentryshort{\#1}}}

lsaccessshortpl Display the short plural form (no link and no check for existence).
 5163 \newcommand*{\glsaccessshortpl}[1]{\glsentryshortpl{\#1}}

```

lsaccessshortpl Display the short plural form with first letter converted to uppercase (no link and no check for existence).
5164 \newcommand*{\Glsaccessshortpl}[1]{\Glsentryshortpl{\#1}}


LSaccessshortpl Display the shortplural value (no link and no check for existence). converted to upper case.
5165 \newcommand*{\GLSaccessshortpl}[1]{%
5166 \protect\mfistucMakeUppercase{\glsentryshortpl{\#1}}}

\glsaccesslong Display the long form (no link and no check for existence).
5167 \newcommand*{\glsaccesslong}[1]{\glsentrylong{\#1}}


\Glsaccesslong Display the long form (no link and no check for existence).
5168 \newcommand*{\Glsaccesslong}[1]{\Glsentrylong{\#1}}


\GLSaccesslong Display the long value (no link and no check for existence). converted to upper case.
5169 \newcommand*{\GLSaccesslong}[1]{%
5170 \protect\mfistucMakeUppercase{\glsentrylong{\#1}}}

glsaccesslongpl Display the long plural form (no link and no check for existence).
5171 \newcommand*{\glsaccesslongpl}[1]{\glsentrylongpl{\#1}}


\Glsaccesslongpl Display the long plural form (no link and no check for existence).
5172 \newcommand*{\Glsaccesslongpl}[1]{\Glsentrylongpl{\#1}}


\GLSaccesslongpl Display the longplural value (no link and no check for existence). converted to upper case.
5173 \newcommand*{\GLSaccesslongpl}[1]{%
5174 \protect\mfistucMakeUppercase{\glsentrylongpl{\#1}}}

    End of else part
5175 }

```

1.6 Categories

```

\glscategory Add a new storage key that can be used to indicate a category. The default category is general.
5176 \glsaddstoragekey{category}{general}{\glscategory}

\glsifcategory Convenient shortcut to determine if an entry has the given category.
5177 \newcommand{\glsifcategory}[4]{%
5178 \ifglsfieldeq{\#1}{category}{\#2}{\#3}{\#4}%
5179 }

Categories can have attributes.

```

```
categoryattribute \glssetcategoryattribute{\category}{\attribute-label}{\value}
```

Set (or override if already set) an attribute for the given category.

```
5180 \newcommand*\glssetcategoryattribute[3]{%
5181   \csdef{@glsxtr@categoryattr@@#1@#2}{#3}%
5182 }
```

```
categoryattribute \glsgetcategoryattribute{\category}{\attribute-label}
```

Get the value of the given attribute for the given category. Does nothing if the attribute isn't defined.

```
5183 \newcommand*\glsgetcategoryattribute[2]{%
5184   \csuse{@glsxtr@categoryattr@@#1@#2}%
5185 }
```

```
categoryattribute \glshascategoryattribute{\category}{\attribute-label}{\true}{\false}
```

Tests if the category has the given attribute set.

```
5186 \newcommand*\glshascategoryattribute[4]{%
5187   \ifcscvoid{@glsxtr@categoryattr@@#1@#2}{#4}{#3}%
5188 }
```

```
\glssetattribute \glssetattribute{\entry_label}{\attribute-label}{\value}
```

Short cut where the category label is obtained from the entry information.

```
5189 \newcommand*\glssetattribute[3]{%
5190   \glssetcategoryattribute{\glscategory{#1}}{#2}{#3}%
5191 }
```

```
\glsgetattribute \glsgetattribute{\entry_label}{\attribute-label}
```

Short cut where the category label is obtained from the entry information.

```
5192 \newcommand*\glsgetattribute[2]{%
5193   \glsgetcategoryattribute{\glscategory{#1}}{#2}%
5194 }
```

```
\glshasattribute \glshasattribute{\langle entry label \rangle}{\langle attribute-label \rangle}{\langle true \rangle}{\langle false \rangle}
```

Short cut to test if the given attribute has been set where the category label is obtained from the entry information.

```
5195 \newcommand*\glshasattribute[4]{%
5196   \ifglsentryexists{#1}%
5197   {\glshascategoryattribute{\glscategory{#1}}{#2}{#3}{#4}}%
5198   {#4}%
5199 }
```

```
categoryattribute \glsifcategoryattribute{\langle category \rangle}{\langle attribute-label \rangle}{\langle value \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

True if category has the attribute with the given value.

```
5200 \newcommand{\glsifcategoryattribute}[5]{%
5201   \ifcsundef{@glsxtr@categoryattr@@#1@#2}%
5202   {#5}%
5203   {\ifcsstring{@glsxtr@categoryattr@@#1@#2}{#3}{#4}{#5}}%
5204 }
```

```
\glsifattribute \glsifattribute{\langle entry label \rangle}{\langle attribute-label \rangle}{\langle value \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

Short cut to determine if the given entry has a category with the given attribute set.

```
5205 \newcommand{\glsifattribute}[5]{%
5206   \ifglsentryexists{#1}%
5207   {\glsifcategoryattribute{\glscategory{#1}}{#2}{#3}{#4}{#5}}%
5208   {#5}%
5209 }
```

Set attributes for the default general category:

```
5210 \glssetcategoryattribute{general}{regular}{true}
```

Acronyms are regular by default, since they're typically just treated like normal words.

```
5211 \glssetcategoryattribute{acronym}{regular}{true}
```

regularcategory Convenient shortcut to create add the regular attribute.

```
5212 \newcommand*\glssetregularcategory[1]{%
5213   \glssetcategoryattribute{#1}{regular}{true}}%
```

```
fregularcategory \glsifregularcategory{\langle category \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

Short cut to determine if a category has the regular attribute explicitly set to true.

```
5215 \newcommand{\glsifregularcategory}[3]{%
5216   \glsifcategoryattribute{\#1}{regular}{true}{\#2}{\#3}%
5217 }
```

```
tregularcategory \glsifnotregularcategory{\langle category \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

Short cut to determine if a category has the regular attribute explicitly set to false.

```
5218 \newcommand{\glsifnotregularcategory}[3]{%
5219   \glsifcategoryattribute{\#1}{regular}{false}{\#2}{\#3}%
5220 }
```

```
\glsifregular \glsifregular{\langle entry label \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

Short cut to determine if an entry has a regular attribute set to true.

```
5221 \newcommand{\glsifregular}[3]{%
5222   \glsifregularcategory{\glscategory{\#1}}{\#2}{\#3}%
5223 }
```

```
\glsifnotregular \glsifnotregular{\langle entry label \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

Short cut to determine if an entry has a regular attribute set to false.

```
5224 \newcommand{\glsifnotregular}[3]{%
5225   \glsifnotregularcategory{\glscategory{\#1}}{\#2}{\#3}%
5226 }
```

```
oreachincategory \glsforeachincategory[\langle glossary labels \rangle]{\langle category-label \rangle}
{\langle glossary-cs \rangle}{\langle label-cs \rangle}{\langle body \rangle}
```

Iterates through all entries in all the glossaries (or just those listed in *\langle glossary labels \rangle*) and does *\langle body \rangle* if the category matches *\langle category-label \rangle*. The control sequences *\langle glossary-cs \rangle* and *\langle label-cs \rangle* may be used in *\langle body \rangle* to access the glossary label and entry label for the current iteration.

```
5227 \newcommand{\glsforeachincategory}[5][\@glo@types]{%
```

```

5228 \forallglossaries[#1]{#3}%
5229 {%
5230   \forglsentries[#3]{#4}%
5231   {%
5232     \glsifcategory{#4}{#2}{#5}{()}%
5233   }%
5234 }%
5235 }

```

```

achwithattribute \glsforeachwithattribute[<glossary labels>]{<attribute-label>}%
{<attribute-value>}{<glossary-cs>}{<label-cs>}{<body>}

```

Iterates through all entries in all the glossaries (or just those listed in *<glossary labels>*) and does *<body>* if the category attribute *<attribute-label>* matches *<attribute-value>*. The control sequences *<glossary-cs>* and *<label-cs>* may be used in *<body>* to access the glossary label and entry label for the current iteration.

```

5236 \newcommand{\glsforeachwithattribute}[6][\@glo@types]{%
5237   \forallglossaries[#1]{#4}%
5238   {%
5239     \forglsentries[#4]{#5}%
5240     {%
5241       \glsifattribute{#5}{#2}{#3}{#6}{()}%
5242     }%
5243   }%
5244 }

```

If `\newterm` has been defined, redefine it so that it automatically sets the category label to `index` and add `\glsxtrpostdescription`.

```

5245 \ifdef\newterm
5246 {%

```

`\newterm`

```

5247 \renewcommand*\newterm[2][]{%
5248   \newglossaryentry[#2]{%
5249     type=index,category=index,name={#2},%
5250     description={\glsxtrpostdescription\nopostdesc},#1}%
5251 }

```

Indexed terms are regular by default.

```

5252 \glssetcategoryattribute[index]{regular}{true}

```

`trpostdescindex`

```

5253 \newcommand*\glsxtrpostdescindex[]{}
5254 {}
5255 {}

```

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.

```
5256 \ifdef\printsymbols  
5257 {%
```

`glsxtrnewsymbol` Unlike `\newterm`, this has a separate argument for the label (since the symbol will likely contain commands).

```
5258 \newcommand*{\glsxtrnewsymbol}[3] []{  
5259   \newglossaryentry[#2]{name=#3,sort=#2,type=symbols,category=symbol,#1}  
5260 }
```

Symbols are regular by default.

```
5261 \glssetcategoryattribute{symbol}{regular}{true}
```

`rpostdescsymbol`

```
5262 \newcommand*{\glsxtrpostdescsymbol}{}  
  
5263 }  
5264 {}
```

Similar for the numbers option.

```
5265 \ifdef\printnumbers  
5266 {%
```

`glsxtrnewnumber`

```
5267 \ifdef\printnumbers  
5268 \newcommand*{\glsxtrnewnumber}[3] []{  
5269   \newglossaryentry[#2]{name=#3,sort=#2,type=numbers,category=number,#1}  
5270 }
```

Numbers are regular by default.

```
5271 \glssetcategoryattribute{number}{regular}{true}
```

`rpostdescnumber`

```
5272 \newcommand*{\glsxtrpostdescnumber}{}  
  
5273 }  
5274 {}
```

`sxtersetcategory` Set the category for all listed labels. The first argument is the list of entry labels and the second argument is the category label.

```
5275 \newcommand*{\glsxtrsetcategory}[2]{%  
5276   @for@glsxtr@label:=#1\do  
5277   {  
5278     \glsfieldxdef{@glsxtr@label}{category}{#2}  
5279   }%  
5280 }
```

`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.

```
5281 \newcommand*{\glsxtrsetcategoryforall}[2]{%
5282   \forallglossaries[#1]{\@glsxtr@type}{%
5283     \forglsentries[\@glsxtr@type]{\@glsxtr@label}{%
5284       {%
5285         \glsfieldxdef{\@glsxtr@label}{category}{#2}{%
5286       }%
5287     }%
5288   }%
```

```
\glsxtrfieldtitlecase{\langle label \rangle}{\langle field \rangle}
```

Apply title casing to the contents of the given field.

```
5289 \newcommand*{\glsxtrfieldtitlecase}[2]{%
5290   \expandafter\glsxtrfieldtitlecasecs\expandafter
5291   {\csname glo@\glsdetoklabel{#1}@#2\endcsname}{%
5292 }}
```

`ieldtitlecasecs` The command used by `\glsxtrfieldtitlecase`. May be redefined to use a different command, for example, `\xcapitalisefmtwords`.

```
5293 \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.

```
5294 \@ifpackageloaded{glossaries-accsupp}
5295 {
5296   \renewcommand*{\glossentrydesc}[1]{%
5297     \glsdoifexistsorwarn{#1}{%
5298       {%
5299         \glssetabbrvfmt{\glscategory{#1}}{}}
```

As from version 1.04, allow the `glossdescfont` attribute to determine the font applied.

```
5300   \glshasattribute{#1}{glossdescfont}{%
5301     {%
5302       \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}{%
5303         \ifcsdef{\@glsxtr@attrval}{%
5304           {%
5305             \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}{%
5306           }%
5307           {%
5308             \GlossariesExtraWarning{Unknown control sequence name
5309               '\@glsxtr@attrval' supplied in glossdescfont attribute}
```

```

5310      for entry '#1'. Ignoring}%
5311      \let\@glsxtr@glossdescfont\@firstofone
5312  }%
5313 }%
5314 {\let\@glsxtr@glossdescfont\@firstofone}%
5315 \glsifattribute{#1}{glossdesc}{firstuc}%
5316 {%
5317   \glsxtr@glossdescfont{\Glsaccessdesc{#1}}%
5318 }%
5319 {%
5320   \glsifattribute{#1}{glossdesc}{title}%
5321   {%
5322     \glsxtr@do@titlecaps@warn
5323     \glsdescriptionaccessdisplay
5324     {%
5325       \glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
5326     }%
5327     {#1}%
5328   }%
5329   {%
5330     \glsxtr@glossdescfont{\glsaccessdesc{#1}}%
5331   }%
5332 }%
5333 }%
5334 }%
5335 }
5336 {
5337 \renewcommand*\glossentrydesc}[1]{%
5338   \glsdoifexistsorwarn{#1}%
5339   {%
5340     \glssetabbrvfmt{\glscategory{#1}}%
5341     \glshasattribute{#1}{glossdescfont}%
5342     {%
5343       \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%
5344       \ifcsdef{\@glsxtr@attrval}%
5345       {%
5346         \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}%
5347       }%
5348     }%
5349     \GlossariesExtraWarning{Unknown control sequence name
5350       '@glsxtr@attrval' supplied in glossdescfont attribute
5351       for entry '#1'. Ignoring}%
5352     \let\@glsxtr@glossdescfont\@firstofone
5353   }%
5354 }%
5355 {\let\@glsxtr@glossdescfont\@firstofone}%
5356 \glsifattribute{#1}{glossdesc}{firstuc}%
5357 {%
5358   \glsxtr@glossdescfont{\Glsentrydesc{#1}}%

```

```

5359 }%
5360 {%
5361     \glsifattribute{#1}{glossdesc}{title}%
5362     {%
5363         \glsxtr@do@titlecaps@warn
5364         \glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
5365     }%
5366     {%
5367         \glsxtr@glossdescfont{\glsentrydesc{#1}}%
5368     }%
5369     {%
5370     }%
5371 }
5372 }

```

\glossentryname If the glossname attribute is “firstuc” convert first letter to upper case. If the attribute is “title” use title case.

```

5373 \@ifpackageloaded{glossaries-accsupp}
5374 {%
5375     \renewcommand*\glossentryname[1]{%
5376         \glsdoifexistsorwarn{#1}%
5377     }%
5378     \glssetabbrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the glossnamefont attribute to determine the font applied.

```

5379     \glshasattribute{#1}{glossnamefont}%
5380     {%
5381         \edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5382         \ifcsdef{\glsxtr@attrval}%
5383             {%
5384                 \let\glsxtr@glossnamefont{\glsxtr@attrval}%
5385             }%
5386             {%
5387                 \GlossariesExtraWarning{Unknown control sequence name
5388                     ‘\glsxtr@attrval’ supplied in glossnamefont attribute
5389                     for entry ‘#1’. Reverting to default \string\glsnamefont}%
5390                 \let\glsxtr@glossnamefont\glsnamefont
5391             }%
5392         }%
5393         {\let\glsxtr@glossnamefont\glsnamefont}%
5394         \glsifattribute{#1}{glossname}{firstuc}%
5395         {%
5396             \glsnameaccessdisplay
5397             {%
5398                 \glsxtr@glossnamefont{\Glsentryname{#1}}%
5399             }%
5400             {#1}%
5401         }%
5402         {%
5403             \glsifattribute{#1}{glossname}{title}%

```

```

5404      {%
5405          \glsxstr@do@titlecaps@warn
5406          \glsnameaccessdisplay
5407          {%
5408              \glsxstr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
5409          }%
5410          {#1}%
5411      }%
5412      {%
5413          \glsifattribute{#1}{glossname}{uc}%
5414          {%
5415              \glsnameaccessdisplay
5416          }%

```

Hide the label from the upper-casing command.

```

5417          \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5418          \glsxstr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
5419          }%
5420          {#1}%
5421      }%
5422      {%
5423          \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5424          \glsnameaccessdisplay
5425          {%
5426              \expandafter\glsxstr@glossnamefont\expandafter{\glo@name}%
5427          }%
5428          {#1}%
5429      }%
5430      {%
5431  }%

```

Do post-name hook:

```

5432      \glsxtrpostnamehook{#1}%
5433  }%
5434 }
5435 }
5436 {
5437 \renewcommand*{\glossentryname}[1]{%
5438     \glsdoifexistsorwarn{#1}%
5439     {%
5440         \glssetabbrvfmt{\glscategory{#1}}%
5441         \glshasattribute{#1}{glossnamefont}%
5442     }%
5443     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5444     \ifcsdef{\@glsxtr@attrval}%
5445     {%
5446         \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5447     }%
5448     {%
5449         \GlossariesExtraWarning{Unknown control sequence name}

```

```

5450     '@glsxtr@attrval' supplied in glossnamefont attribute
5451     for entry '#1'. Reverting to default \string\glsnamefont}%
5452     \let\@glsxtr@glossnamefont\glsnamefont
5453     }%
5454   }%
5455   {\let\@glsxtr@glossnamefont\glsnamefont}%
5456   \glsifattribute{#1}{glossname}{firstuc}%
5457   {%
5458     \@glsxtr@glossnamefont{\Glsentryname{#1}}%
5459   }%
5460   {%
5461     \glsifattribute{#1}{glossname}{title}%
5462     {%
5463       \@glsxtr@do@titlecaps@warn
5464       \@glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
5465     }%
5466     {%
5467       \glsifattribute{#1}{glossname}{uc}%
5468     }%

```

Hide the label from the upper-casing command.

```

5469   \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5470   \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
5471   }%
5472   {%

```

This little trick is used by glossaries to allow the user to redefine \glsnamefont to use \makefirstuc. Support it even though they can now use the firstuc attribute.

```

5473   \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5474   \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
5475   }%
5476   {%
5477   }%

```

Do post-name hook.

```

5478   \glsxtrpostnamehook{#1}%
5479   }%
5480 }
5481 }

```

\Glossentryname Redefine to set the abbreviation format and accessibility support.

```

5482 \ifpackageloaded{glossaries-accsupp}
5483 {
5484   \renewcommand*\Glossentryname[1]{%
5485     \glsdoifexistsorwarn{#1}%
5486     {%
5487       \glssetabbrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the glossnamefont attribute to determine the font applied.

```

5488   \glshasattribute{#1}{glossnamefont}%
5489   {%

```

```

5490     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5491     \ifcsdef{\@glsxtr@attrval}%
5492     {%
5493         \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5494     }%
5495     {%
5496         \GlossariesExtraWarning{Unknown control sequence name
5497             '\@glsxtr@attrval' supplied in glossnamefont attribute
5498             for entry '#1'. Reverting to default \string\glsnamefont}%
5499         \let\@glsxtr@glossnamefont\glsnamefont
5500     }%
5501 }%
5502 {\let\@glsxtr@glossnamefont\glsnamefont}%
5503 \glsnameaccessdisplay
5504 {%
5505     \@glsxtr@glossnamefont{\Glsentryname{#1}}%
5506 }%
5507 {#1}%

```

Do post-name hook:

```

5508     \glsxtrpostnamehook{#1}%
5509     }%
5510 }
5511 }%
5512 {
5513 \renewcommand*\Glossentryname[1]{%
5514     \glsdoifexistsorwarn{#1}%
5515     {%
5516         \glssetabbrvfmt{\glscategory{#1}}%
5517         \glssetattribute{#1}{glossnamefont}%
5518     }%
5519     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5520     \ifcsdef{\@glsxtr@attrval}%
5521     {%
5522         \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5523     }%
5524     {%
5525         \GlossariesExtraWarning{Unknown control sequence name
5526             '\@glsxtr@attrval' supplied in glossnamefont attribute
5527             for entry '#1'. Reverting to default \string\glsnamefont}%
5528         \let\@glsxtr@glossnamefont\glsnamefont
5529     }%
5530 }%
5531 {\let\@glsxtr@glossnamefont\glsnamefont}%
5532 \@glsxtr@glossnamefont{\Glsentryname{#1}}%

```

Do post-name hook:

```

5533     \glsxtrpostnamehook{#1}%
5534     }%
5535 }

```

```
5536 }
```

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.

```
5537 \newcommand*{\glsxtrpostnamehook}[1]{%
5538   \let\@glsnumberformat\glsxtr@defaultnumberformat
5539   \glsxtrdoautoindexname{#1}{indexname}}%
```

Allow additional code regardless of category:

```
5540   \glsxtrapostnamehook{#1}%
```

Allow categories to hook in here.

```
5541   \csuse{glsxtrpostname\glscategory}{#1}}%
5542 }
```

trapostnamehook

```
5543 \newcommand*{\glsxtrapostnamehook}[1]{}%
```

etaccessdisplay

```
5544 \@ifpackageloaded{glossaries-accsupp}
5545 {
5546   \newcommand*{\glsxtr@setaccessdisplay}[1]{%
5547     \ifcsdef{gls#1accessdisplay}%
5548       {\let\cs\glsxtr@accessdisplay\gls#1accessdisplay}%
5549     {}%
```

This is essentially the reverse of \gls@fetchfield, since the field supplied to \glossentryname has to be the internal label, but the \gls<field>accessdisplay commands use the key name.

```
5550   \edef\@gls@thisval{#1}%
5551   \@for\@gls@map:=\gls@keymap\do{%
5552     \edef\@this@key{\expandafter\@secondoftwo\@gls@map}%
5553     \ifdefequal{\@this@key}{\@gls@thisval}%
5554     {}%
5555     \edef\@gls@thisval{\expandafter\@firstoftwo\@gls@map}%
5556     \endfortrue
5557   }%
5558   {}%
5559 }%
5560 \ifcsdef{gls\@gls@thisval accessdisplay}%
5561   {\let\cs\glsxtr@accessdisplay{gls\@gls@thisval accessdisplay}}%
5562   {\let\@glsxtr@accessdisplay\@firstoftwo}%
5563 }%
5564 }
5565 }
5566 {}%
5567 \newcommand*{\glsxtr@setaccessdisplay}[1]{%
```

```
5568 \let\@glsxtr@accessdisplay@\firstoftwo{%
5569 }
```

sentrynameother Provide a command that works like `\glossentryname` but accesses a different field (which must be supplied using its internal field label).

```
5570 \newrobustcmd*{\glossentrynameother}[2]{%
5571   \glsdoifexistsorwarn{#1}%
5572 }
```

Accessibility support:

```
5573 \glsxtr@setaccessdisplay{#2}%
```

Set the abbreviation format:

```
5574 \glssetabrvfmt{\glscategory{#1}%
5575 \glshasattribute{#1}{glossnamefont}%
5576 }%
5577 \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5578 \ifcsdef{\@glsxtr@attrval}%
5579 }%
5580 \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5581 }%
5582 }%
5583 \GlossariesExtraWarning{Unknown control sequence name
5584 '\@glsxtr@attrval' supplied in glossnamefont attribute
5585 for entry '#1'. Reverting to default \string\glsnamefont}%
5586 \let\@glsxtr@glossnamefont\glsnamefont
5587 }%
5588 }%
5589 {\let\@glsxtr@glossnamefont\glsnamefont}%
5590 \glsifattribute{#1}{glossname}{firstuc}%
5591 }%
5592 \glsxtr@accessdisplay
5593 {\@glsxtr@glossnamefont{\@Gls@entry@field{#1}{#2}}}%
5594 {#1}%
5595 }%
5596 }%
5597 \glsifattribute{#1}{glossname}{title}%
5598 }%
5599 \glsxtr@do@titlecaps@warn
5600 \glsxtr@accessdisplay
5601 {\@glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{#2}}}%
5602 {#1}%
5603 }%
5604 }%
5605 \glsifattribute{#1}{glossname}{uc}%
5606 }%
5607 \letcs{\glo@name}{glo@\glsdetoklabel{#1}@#2}%
5608 \glsxtr@accessdisplay
5609 {\@glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}}%
5610 {#1}%
```

```

5611      }%
5612      {%
5613          \letcs{\glo@name}{\glo@glstoklabel{#1}@#2}%
5614          \@glsxtr@accessdisplay
5615          {\expandafter\@glsxtr@glossnamefont\expandafter{\glo@name}}%
5616          {#1}%
5617      }%
5618  }%
5619 }%

```

Do post-name hook.

```

5620      \glsxtrpostnamehook{#1}%
5621  }%
5622 }

```

`format@override` Determines if the format key should override the indexing attribute value.

```

5623 \newif\if@glsxtr@format@override
5624 \@glsxtr@format@overridefalse

```

If overriding is enabled, the `\glshypernumber` command will have to be redefined in the index to use `\hyperpage` instead.

`xFormatOverride`

```

5625 @ifpackageloaded{hyperref}
5626 {

```

If hyperref's hyperindex option is on, then hyperref will automatically add `\hyperpage`, so don't add it.

```

5627 \ifHy@hyperindex
5628     \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
5629         \@glsxtr@format@overridetrue
5630         \appto\theindex{\let\glshypernumber\firstofone}%
5631     }
5632 \else
5633     \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
5634         \@glsxtr@format@overridetrue
5635         \appto\theindex{\let\glshypernumber\hyperpage}%
5636     }
5637 \fi
5638 }
5639 {
5640 \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
5641     \@glsxtr@format@overridetrue
5642 }
5643 }
5644 @onlypreamble\GlsXtrEnableIndexFormatOverride

```

`doautoindexname`

```

5645 \newcommand*{\glsxtrdoautoindexname}[2]{%
5646     \glshasattribute{#1}{#2}%
5647     {%

```

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.

5648 \glsxstr@autoindex@setname{#1}%

If the attribute value is simply “true” don’t add an encap, otherwise use the value as the encap.

5649 \protected@edef\glsxstr@attrval{\glsgetattribute{#1}{#2}}%

5650 \if@glsxstr@format@override

5651 \ifx\glsnumberformat\glsxtr@defaultnumberformat

5652 \else

5653 \let\glsxstr@attrval\glsnumberformat

5654 \fi

5655 \fi

5656 \ifdefstring{\glsxstr@attrval}{true}%

5657 {}%

5658 {\eappto\glo@name{\glsxstr@autoindex@encap\glsxstr@attrval}}%

5659 \expandafter\glsxtrautoindex\expandafter{\glo@name}%

5660 }%

5661 {}%

5662 }

glsxtrautoindex

5663 \newcommand*\glsxtrautoindex{\index}

toindex@setname Assign \glo@name for use with indexname attribute.

5664 \newcommand*\glsxtr@autoindex@setname[1]{%

5665 \protected@edef\glo@name{\glsxtrautoindexentry{#1}}%

5666 \glsxtrautoindexassingsort{\glo@sort}{#1}%

5667 \gls@checkmkidxchars\glo@sort

5668 \glsxtr@autoindex@doextra@esc\glo@sort

5669 \epreto\glo@name{\glo@sort\glsxtr@autoindex@at}%

5670 }

rautoindexentry Command used for the actual part when auto-indexing.

5671 \newcommand*\glsxtrautoindexentry[1]{\string\glsentryname{#1}}

indexassingsort Used to assign the sort value when auto-indexing.

5672 \newcommand*\glsxtrautoindexassingsort[2]{%

5673 \glsletentryfield{#1}{#2}{sort}%

5674 }

dex@doextra@esc

5675 \newcommand*\glsxtr@autoindex@doextra@esc[1]{%

Escape the escape character unless it has already been escaped.

5676 \ifx\glsxtr@autoindex@esc\gls@quotechar

5677 \else

5678 \def\gls@checkedmkidx{}%

5679 \edef\glsxtr@checkspch{}%

```

5680      \noexpand\@glsxtr@autoindex@escquote\expandonce{#1}%
5681      \noexpand\@empty\@glsxtr@autoindex@esc\noexpand\@nnil
5682      \@glsxtr@autoindex@esc\noexpand\@empty\noexpand\@glsxtr@endescspch}%
5683      \@@glsxtr@checkspch
5684      \let#1\@gls@checkedmkidx\relax
5685 \fi

```

Escape actual character unless it has already been escaped.

```

5686 \ifx\@glsxtr@autoindex@at\@gls@actualchar
5687 \else
5688   \def\@gls@checkedmkidx{}%
5689   \edef\@glsxtr@checkspch{}%
5690   \noexpand\@glsxtr@autoindex@escat\expandonce{#1}%
5691   \noexpand\@empty\@glsxtr@autoindex@at\noexpand\@nnil
5692   \@glsxtr@autoindex@at\noexpand\@empty\noexpand\@glsxtr@endescspch}%
5693   \@@glsxtr@checkspch
5694   \let#1\@gls@checkedmkidx\relax
5695 \fi

```

Escape level character unless it has already been escaped.

```

5696 \ifx\@glsxtr@autoindex@level\@gls@levelchar
5697 \else
5698   \def\@gls@checkedmkidx{}%
5699   \edef\@glsxtr@checkspch{}%
5700   \noexpand\@glsxtr@autoindex@esclevel\expandonce{#1}%
5701   \noexpand\@empty\@glsxtr@autoindex@level\noexpand\@nnil
5702   \@glsxtr@autoindex@level\noexpand\@empty\noexpand\@glsxtr@endescspch}%
5703   \@@glsxtr@checkspch
5704   \let#1\@gls@checkedmkidx\relax
5705 \fi

```

Escape encap character unless it has already been escaped.

```

5706 \ifx\@glsxtr@autoindex@encap\@gls@encapchar
5707 \else
5708   \def\@gls@checkedmkidx{}%
5709   \edef\@glsxtr@checkspch{}%
5710   \noexpand\@glsxtr@autoindex@escencap\expandonce{#1}%
5711   \noexpand\@empty\@glsxtr@autoindex@encap\noexpand\@nnil
5712   \@glsxtr@autoindex@encap\noexpand\@empty\noexpand\@glsxtr@endescspch}%
5713   \@@glsxtr@checkspch
5714   \let#1\@gls@checkedmkidx\relax
5715 \fi
5716 }

```

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.

```
5717 \newcommand*\@glsxtr@autoindex@at{}%
```

trSetActualChar Set the actual character.

```

5718 \newcommand*{\GlsXtrSetActualChar}[1]{%
5719   \gdef\@glsxtr@autoindex@at{#1}%
5720   \def\@glsxtr@autoindex@escat##1##2##3\@glsxtr@endescspch{%
5721     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escat}{##1}{##2}{##3}%
5722   }%
5723 }%
5724 \@onlypreamble\GlsXtrSetActualChar
5725 \makeatother
5726 \GlsXtrSetActualChar{@}
5727 \makeatletter

```

autoindex@encap Encap character for use with \index.

```

5728 \newcommand*{\@glsxtr@autoindex@encap}{}%

```

XtrSetEncapChar Set the encap character.

```

5729 \newcommand*{\GlsXtrSetEncapChar}[1]{%
5730   \gdef\@glsxtr@autoindex@encap{#1}%
5731   \def\@glsxtr@autoindex@escencap##1##2##3\@glsxtr@endescspch{%
5732     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escencap}{##1}{##2}{##3}%
5733   }%
5734 }%
5735 \GlsXtrSetEncapChar{}%
5736 \@onlypreamble\GlsXtrSetEncapChar

```

autoindex@level Level character for use with \index.

```

5737 \newcommand*{\@glsxtr@autoindex@level}{}%

```

XtrSetLevelChar Set the encap character.

```

5738 \newcommand*{\GlsXtrSetLevelChar}[1]{%
5739   \gdef\@glsxtr@autoindex@level{#1}%
5740   \def\@glsxtr@autoindex@esclevel##1##2##3\@glsxtr@endescspch{%
5741     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@esclevel}{##1}{##2}{##3}%
5742   }%
5743 }%
5744 \GlsXtrSetLevelChar{!}%
5745 \@onlypreamble\GlsXtrSetLevelChar

```

r@autoindex@esc Escape character for use with \index.

```

5746 \newcommand*{\@glsxtr@autoindex@esc}{"}%

```

lsXtrSetEscChar Set the escape character.

```

5747 \newcommand*{\GlsXtrSetEscChar}[1]{%
5748   \gdef\@glsxtr@autoindex@esc{#1}%
5749   \def\@glsxtr@autoindex@escquote##1##2##3\@glsxtr@endescspch{%
5750     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escquote}{##1}{##2}{##3}%
5751   }%
5752 }%

```

```

5753 \GlsXtrSetEscChar{"}
5754 \@onlypreamble\GlsXtrSetEscChar

    Set if defined. (For example, if doc package has been loaded.) Actual character \actualchar:
5755 \ifdef\actualchar
5756 {\expandafter\GlsXtrSetActualChar\expandafter{\actualchar}}
5757 {}

    Quote character \quotechar:
5758 \ifdef\quotechar
5759 {\expandafter\GlsXtrSetEscChar\expandafter{\quotechar}}
5760 {}

    Level character \levelchar:
5761 \ifdef\levelchar
5762 {\expandafter\GlsXtrSetLevelChar\expandafter{\levelchar}}
5763 {}

    Encap character \encapchar:
5764 \ifdef\encapchar
5765 {\expandafter\GlsXtrSetEncapChar\expandafter{\encapchar}}
5766 {}

leto@endescspch
5767 \def\@glsxtr@gobbleto@endescspch#1\@glsxtr@endescspch{}


```

`\@glsxtr@autoindex@escspch{<char>}{<cs>}{{<pre>}}{<mid>}{<post>}`

```

5768 \newcommand*{\@glsxtr@autoindex@escspch}[5]{%
5769   \gls@tmpb=\expandafter{\gls@checkedmidx}%
5770   \toks@={#3}%
5771   \ifx\@nnil#3\relax
5772     \def\@glsxtr@checkspch{\glsxtr@gobbleto@endescspch#5@glsxtr@endescspch}%
5773   \else
5774     \ifx\@nnil#4\relax
5775       \edef\gls@checkedmidx{\the\gls@tmpb\the\toks@}%
5776       \def\@glsxtr@checkspch{\glsxtr@gobbleto@endescspch
5777         #4#5@glsxtr@endescspch}%
5778     \else
5779       \edef\gls@checkedmidx{\the\gls@tmpb\the\toks@%
5780         @glsxtr@autoindex@esc#1}%
5781       \def\@glsxtr@checkspch{\glsxtr@autoindex@esc#1}%
5782     \fi
5783   \fi
5784   \def\@glsxtr@checkspch
5785 }


```

\Glossentrydesc Redefine to set the abbreviation format and accessibility support.

```
5786 \renewcommand*{\Glossentrydesc}[1]{%
5787   \glsdoifexistsorwarn{#1}%
5788   {%
5789     \glssetabbrvfmt{\glscategory{#1}}%
5790     \Glsaccessdesc{#1}%
5791   }%
5792 }
```

\lossentrysymbol Redefine to set the abbreviation format and accessibility support.

```
5793 \renewcommand*{\glossentrysymbol}[1]{%
5794   \glsdoifexistsorwarn{#1}%
5795   {%
5796     \glssetabbrvfmt{\glscategory{#1}}%
5797     \glsaccesssymbol{#1}%
5798   }%
5799 }
```

\lossentrysymbol Redefine to set the abbreviation format and accessibility support.

```
5800 \renewcommand*{\Glossentrysymbol}[1]{%
5801   \glsdoifexistsorwarn{#1}%
5802   {%
5803     \glssetabbrvfmt{\glscategory{#1}}%
5804     \Glsaccesssymbol{#1}%
5805   }%
5806 }
```

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.

```
5807 \newcommand*{\GlsXtrEnableInitialTagging}{%
5808   \@ifstar\s@glsxtr@enabletagging\@glsxtr@enabletagging
5809 }
5810 \onlypreamble\GlsXtrEnableInitialTagging
```

r@enabletagging Starred version undefines command.

```
5811 \newcommand*{\s@glsxtr@enabletagging}[2]{%
5812   \undef#2%
5813   \@glsxtr@enabletagging{#1}{#2}%
5814 }
```

r@enabletagging Internal command.

```
5815 \newcommand*{\@glsxtr@enabletagging}[2]{%
  Set attributes for categories given in the first argument.
```

```
5816  \@for\@glsxtr@cat:=#1\do
5817  {%
```

```

5818     \ifdefempty{\glsxstr@cat}
5819     {}%
5820     {\glssetcategoryattribute{\glsxstr@cat}{tagging}{true}}%
5821   }%
5822   \newrobustcmd*#2[1]{##1}%
5823   \def\glsxstr@taggingcs{#2}%
5824   \renewcommand*\glsxstr@activate@initialtagging{%
5825     \let#2\glsxstr@tag
5826   }%
5827   \ifundef{\gls@preglossaryhook}
5828   {\GlossariesExtraWarning{Initial tagging requires at least
5829     glossaries.sty v4.19 to work correctly}}%
5830   {}%
5831 }

```

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`

```

5832 \ifundef{\mfp@checkword@do}
5833 {
5834   \newcommand*{\mfp@checkword@do}[1]{%
5835     \ifdefstring{\mfp@checkword@arg}{#1}%
5836     {}%
5837     \let\mfp@domakefirstuc\@firstofone
5838     \listbreak
5839   }%
5840   {}%
5841 }

```

`\mfp@checkword` `\capitalisewords` was introduced in `mfirstuc` v1.06. If `\mfp@checkword` hasn't been defined `mfirstuc` is too old to support the title case attribute.

```

5842 \ifundef{\mfp@checkword}
5843 {
5844   \newcommand{\glsxstr@do@titlecaps@warn}{%
5845     \GlossariesExtraWarning{mfirstuc.sty too old. Title Caps
5846       support not available}}%

```

One warning should suffice.

```

5847   \let\glsxstr@do@titlecaps@warn\relax
5848   }
5849 }
5850 {
5851   \renewcommand*{\mfp@checkword}[1]{%
5852     \def\mfp@checkword@arg{#1}%
5853     \let\mfp@domakefirstuc\makefirstuc
5854     \forlistloop{\mfp@checkword@do}{\mfp@nocaplist}
5855   }
5856 }
5857 }

```

```

5858 {}% no patch required

@titlecaps@warn Do warning if title case not supported.
5859 \newcommand*{\@glsxtr@do@titlecaps@warn}{}}

@initialtagging Used in \printglossary but at least v4.19 of glossaries required.
5860 \newcommand*\@glsxtr@activate@initialtagging{}


\@glsxtr@tag Definition of tagging command when used in glossary.
5861 \newrobustcmd*{\@glsxtr@tag}[1]{%
5862   \glsifattribute{\glscurrententrylabel}{tagging}{true}{%
5863     {\glsxtrtagfont{\#1}}{\#1}{%
5864   }%
5865 }%


\glsxtrtagfont Used in the glossary.
5865 \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.
5866 \ifdef{\gls@preglossaryhook}
5867 {%
5868   \renewcommand*{\gls@preglossaryhook}{%
5869     \@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.
5870   \ifundef{\glsxtr@org@postdescription}
5871   {%
5872     \let{\glsxtr@org@postdescription}{\gls@postdescription}
5873     \renewcommand*{\gls@postdescription}{%
5874       \ifglsentryexists{\glscurrententrylabel}{%
5875         {%
5876           \glsxtrpostdescription
5877           \glsxtr@org@postdescription
5878         }%
5879         {}%
5880       }%
5881     }%
5882   }%
5883 }%


Enable the options used by \@@glsxtrp:
5883   \glossxtrsetpopts
5884 }%
5885 }
5886 {}%

```

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.

```
5887 \newcommand*{\glsxtrpostdescription}{%
5888   \csuse{glsxtrpostdesc\glscategory{\glscurrententrylabel}}%
5889 }
```

postdescgeneral

```
5890 \newcommand*{\glsxtrpostdescgeneral}{}%
```

xtrpostdescterm

```
5891 \newcommand*{\glsxtrpostdescterm}{}%
```

postdescacronym

```
5892 \newcommand*{\glsxtrpostdescacronym}{}%
```

escabbreviation

```
5893 \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.

```
5894 \renewcommand*{\glspostlinkhook}{%
5895   \ifglsentryexists{\glslabel}{\glsxtrpostlinkhook}{}%
5896 }
```

xtrpostlinkhook The entry label should already be stored in `\glslabel` by `\@gls@link`.

```
5897 \newcommand*{\glsxtrpostlinkhook}{%
5898   \glsxtrdiscardperiod{\glslabel}%
5899   {\glsxtrpostlinkendsentence}%
5900   {\glsxtrifcustomdiscardperiod
5901     {\glsxtrifperiod{\glsxtrpostlinkendsentence}{\glsxtrpostlink}}%
5902     {\glsxtrpostlink}%
5903   }%
5904 }
```

omdiscardperiod Allow user to provide a custom check. Should expand to #2 if no check is required otherwise expand to #1.

```
5905 \newcommand*{\glsxtrifcustomdiscardperiod}[2]{#2}
```

`\glsxtrpostlink`

```
5906 \newcommand*{\glsxtrpostlink}{%
5907   \csuse{glsxtrpostlink\glscategory{\glslabel}}%
5908 }
```

`linkendsentence` Done by `\glsxtrpostlinkhook` if a full stop is discarded.

```

5909 \newcommand*{\glsxtrpostlinkendsentence}{%
5910   \ifcsdef{glsxtrpostlink}{\glscategory{\glslabel}}{%
5911     {%
5912       \csuse{glsxtrpostlink}{\glscategory{\glslabel}}{%
5913         .\spacefactor\sfcode`\!. \relax
5914       }%
5915     }%
5916     \spacefactor\sfcode`\!. \relax
5917   }%
5918 }

```

Assume the full stop was discarded because the entry ends with a period, so adjust the space-factor.

```

5916   \spacefactor\sfcode`\!. \relax
5917 }%
5918 }

```

`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.

```

5919 \newcommand*{\glsxtrpostlinkAddDescOnFirstUse}{%
5920   \glsxtrifwasfirstuse{\space\glsxtrparen{\glsaccessdesc{\glslabel}}}{\relax}%
5921 }

```

`symbolOnFirstUse` 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.

```

5922 \newcommand*{\glsxtrpostlinkAddSymbolOnFirstUse}{%
5923   \glsxtrifwasfirstuse
5924   {%
5925     \ifglshassymbol{\glslabel}{%
5926       {\space\glsxtrparen{\glsaccesssymbol{\glslabel}}}{\relax}%
5927     }%
5928   }%
5929   {%
5930 }

```

`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).

```

5931 \newcommand*{\glsxtrdiscardperiod}[3]{%
5932   \glsxtrifwasfirstuse
5933   {%
5934     \glsifattribute{#1}{retainfirstuseperiod}{true}{%
5935       {#3}%
5936     }%
5937     \glsifattribute{#1}{discardperiod}{true}{%
5938       {%
5939         \glsifplural{%
5940       }%
5941     }%
5942   }%
5943 }

```

```

5941     \glsifattribute{#1}{pluraldiscardperiod}{true}%
5942     {\glsxtrifperiod{#2}{#3}}%
5943     {#3}%
5944     }%
5945     {%
5946     \glsxtrifperiod{#2}{#3}%
5947     }%
5948     }%
5949     {#3}%
5950   }%
5951 }%
5952 {%
5953 \glsifattribute{#1}{discardperiod}{true}%
5954 {%
5955 \glsifplural
5956 {%
5957 \glsifattribute{#1}{pluraldiscardperiod}{true}%
5958 {\glsxtrifperiod{#2}{#3}}%
5959 {#3}%
5960 }%
5961 {%
5962 \glsxtrifperiod{#2}{#3}%
5963 }%
5964 }%
5965 {#3}%
5966 }%
5967 }

```

`\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`

```
5968 \newcommand*{\glsxtrifperiod}[1]{\new@ifnextchar.{\@firstoftwo{#1}}}
```

Sometimes it's useful to test if there's a punctuation character following the glossary entry.

`glsxtr@punctlist` List of characters identified as punctuation marks. (Be careful of babel shorthands!) This doesn't allow for punctuation marks made up from multiple characters (such as ' ').

```
5969 \newcommand*{\glsxtr@punctlist}{.,;?!}
```

`punctuationmark` Add character to punctuation list.

```
5970 \newcommand*{\glsxtraddpunctuationmark}[1]{\appto\glsxtr@punctlist{#1}}
```

`unctuationmarks` Reset the punctuation list.

```
5971 \newcommand*{\glsxtrsetpunctuationmarks}[1]{\def\glsxtr@punctlist{#1}}
```

`\glsxtrifpunc` `\glsxtrifnextpunc{<true part>}{<false part>}`

Test if this is followed by a punctuation mark. (Adapted from \new@ifnextchar.)

```
5972 \newcommand{\glsxtrifnextpunc}[2]{%
5973   \def\reserved@a{#1}%
5974   \def\reserved@b{#2}%
5975   \futurelet\glspunc@token\glsxtr@ifnextpunc
5976 }

sxt@ifnextpunc
5977 \newcommand{\glsxtr@ifnextpunc}{%
5978   \glsxtr@ifpunctoken{\@glspunc@token}{\let\reserved@b\reserved@a}{}%
5979   \reserved@b
5980 }
```

xtr@ifpunctoken Test if the token given in the first argument is in the punctuation list.

```
5981 \newcommand{\glsxtr@ifpunctoken}[1]{%
5982   \expandafter\glsxtr@ifpunctoken\expandafter#1\glsxtr@punctlist\@nnil
5983 }
```

xtr@ifpunctoken

```
5984 \def\@glsxtr@ifpunctoken#1#2{%
5985   \let\reserved@d=#2%
5986   \ifx\reserved@d\@nnil
5987     \let\glsxtr@next\glsxtr@notfoundinlist
5988   \else
5989     \ifx#1\reserved@d
5990       \let\glsxtr@next\glsxtr@foundinlist
5991     \else
5992       \let\glsxtr@next\glsxtr@ifpunctoken
5993     \fi
5994   \fi
5995   \glsxtr@next#1%
5996 }
```

xtr@foundinlist

```
5997 \def\@glsxtr@foundinlist#1\@nnil{\@firstoftwo}
```

@notfoundinlist

```
5998 \def\@glsxtr@notfoundinlist#1{\@secondoftwo}
```

`\glsxtrdopostpunc{<code>}`

If this is followed be a punctuation character, do `<code>` after the character otherwise do `<code>` before whatever comes next.

```
5999 \newcommand{\glsxtrdopostpunc}[1]{%
6000   \glsxtrifnextpunc{\@glsxtr@swaptwo{#1}}{#1}%
6001 }
```

```
@glsxtr@swaptwo
6002 \newcommand{\glsxtr@swaptwo}[2]{#2#1}
```

1.7 Abbreviations

The “acronym” code from `glossaries` is misnamed as it’s more often used for other forms of abbreviations. This code corrects this inconsistency, but rather than just having synonyms, provide commands for abbreviations that have a similar, but not identical, underlying mechanism to acronyms.

If there’s a style for the given category, apply it.

```
6003 \define@key{glsxtrabbrv}{category}{%
6004   \edef\glscategorylabel{\#1}%
6005   \ifcsdef{@glsabbrv@current@\#1}%
6006   {}%
```

Warning should already have been issued.

```
6007   \let\@glsxtr@orgwarndep\GlsXtrWarnDeprecatedAbbrStyle
6008   \let\GlsXtrWarnDeprecatedAbbrStyle\@gobbletwo
6009   \glsxtr@applyabbrvstyle{\csname@glsabbrv@current@\#1\endcsname}%
6010   \let\GlsXtrWarnDeprecatedAbbrStyle\@glsxtr@orgwarndep
6011 }%
6012 {}%
6013 }
```

Save the short plural form. This may be needed before the entry is defined.

```
6014 \define@key{glsxtrabbrv}{shortplural}{%
6015   \def\@gls@shortpl{\#1}%
6016 }
```

Similarly for the long plural form.

```
6017 \define@key{glsxtrabbrv}{longplural}{%
6018   \def\@gls@longpl{\#1}%
6019 }
```

Token registers for the short plural and long plural, provided for use in the abbreviation style definitions.

```
\glsshortpltok
6020 \newtoks\glsshortpltok
```

```
\glslongpltok
6021 \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.

```

xtr@insert@dots
6022 \newcommand*{\@glsxtr@insertdots}[2]{%
6023   \def#1{}%
6024   \@glsxtr@insert@dots#1#2\@nnil
6025 }

xtr@insert@dots
6026 \newcommand*{\@glsxtr@insert@dots}[2]{%
6027   \ifx\@nnil#2\relax
6028     \let\@glsxtr@insert@dots@next\@gobble
6029   \else
6030     \ifx\relax#2\relax
6031       \else
6032         \appto#1{#2.}%
6033       \fi
6034     \let\@glsxtr@insert@dots@next\@glsxtr@insert@dots
6035   \fi
6036   \@glsxtr@insert@dots@next#1%
6037 }

```

Similarly provide a way of replacing spaces with \glsxtrwordsep, which first needs to be defined:

```
\glsxtrwordsep
6038 \newcommand*{\glsxtrwordsep}{\space}
```

Each word is marked with

```
\glsxtrword
6039 \newcommand*{\glsxtrword}[1]{#1}
```

```
tr@markwordseps
6040 \newcommand*{\@glsxtr@markwordseps}[2]{%
6041   \def#1{}%
6042   \@glsxtr@mark@wordseps#1#2 \@nnil
6043 }
```

```
r@mark@wordseps
6044 \def\@glsxtr@mark@wordseps#1#2 #3{%
6045   \ifdefempty{#1}{%
6046     {\def#1{\protect\glsxtrword{#2}}}}%
6047     {\appto#1{\protect\glsxtrwordsep\protect\glsxtrword{#2}}}}%
6048   \ifx\@nnil#3\relax
6049     \let\@glsxtr@mark@wordseps@next\relax
6050   \else
6051     \def\@glsxtr@mark@wordseps@next{%
6052       \@glsxtr@mark@wordseps#1#3}%
6053   \fi
6054   \@glsxtr@mark@wordseps@next
6055 }
```

```

newabbreviation Define a new generic abbreviation.
6056 \newcommand*{\newabbreviation}[4] []{%
6057   \glsxtr@newabbreviation{#1}{#2}{#3}{#4}%
6058 }

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.)
6059 \newcommand*{\glsxtr@newabbreviation}[4] {%
6060   \glskeylisttok{#1}%
6061   \glslabeltok{#2}%
6062   \glsshorttok{#3}%
6063   \glslongtok{#4}%

Save the original short and long values (before attribute settings modify them).
6064 \def\glsxtrorgshort{#3}%
6065 \def\glsxtrorglong{#4}%

Get the category.
6066 \def\glscategorylabel{abbreviation}%
6067 \glsxtr@applyabbrvstyle{\glsabbrv@current@abbreviation}%

Ignore the shortplural and longplural keys.
6068 \setkeys*{\glsxtrabbrv}{[shortplural, longplural]{#1}%

Set the default long plural
6069 \def\@gls@longpl{#4\glspluralsuffix}%
6070 \let\@gls@default@longpl\@gls@longpl

Has the markwords attribute been set?
6071 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
6072 {%
6073   \glsxtr@markwordseps\@gls@long{#4}%
6074   \expandafter\def\expandafter\@gls@longpl\expandafter
6075     {\@gls@long\glspluralsuffix}%
6076 \let\@gls@default@longpl\@gls@longpl

Update \glslongtok.
6077 \expandafter\glslongtok\expandafter{\@gls@long}%
6078 }%
6079 {}%

Has the markshortwords attribute been set? (Not compatible with insertdots.)
6080 \glsifcategoryattribute{\glscategorylabel}{markshortwords}{true}%
6081 {%
6082   \glsxtr@markwordseps\@gls@short{#3}%
6083 }%
6084 {}%

Has the insertdots attribute been set?
6085 \glsifcategoryattribute{\glscategorylabel}{insertdots}{true}%
6086 {%
6087   \glsxtr@insertdots\@gls@short{#3}%

```

```
6088     \expandafter\glsshorttok\expandafter{\@gls@short\spacefactor1000 \relax}%
6089     }%
6090     {\def\@gls@short{#3}}%
6091 }
```

Has the `aposplural` attribute been set? (Not compatible with `noshortplural`.)

```
6092 \glsifcategoryattribute{\glscategorylabel}{aposplural}{true}%
6093 {%
6094     \expandafter\def\expandafter\@gls@shortpl\expandafter{\@gls@short
6095         '\abrvpluralsuffix}%
6096 }%
6097 {%
```

Has the `noshortplural` attribute been set?

```
6098 \glsifcategoryattribute{\glscategorylabel}{noshortplural}{true}%
6099 {%
6100     \let\@gls@shortpl\@gls@short
6101 }%
6102 {%
6103     \expandafter\def\expandafter\@gls@shortpl\expandafter{\@gls@short
6104         '\abrvpluralsuffix}%
6105 }%
6106 {%
```

Update `\glsshorttok`:

```
6107 \expandafter\glsshorttok\expandafter{\@gls@short}%
```

Hook for further customisation if required:

```
6108 \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).

```
6109 \setkeys*{\glsxtrabbrv}[category]{#1}%
```

Has the plural been explicitly set?

```
6110 \ifx\@gls@default@longpl\@gls@longpl
6111 \else
```

Has the `markwords` attribute been set?

```
6112 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
6113 {%
6114     \expandafter\@glsxtr@markwordseps\expandafter\@gls@longpl\expandafter
6115     {\@gls@longpl}%
6116 }%
6117 {%
6118 \fi
```

Set the plural token registers so the values can be accessed by the abbreviation styles.

```
6119 \expandafter\glsshortpltok\expandafter{\@gls@shortpl}%
6120 \expandafter\glslongpltok\expandafter{\@gls@longpl}%
```

Do any extra setup provided by hook:

```
6121 \newabbreviationhook
```

Define this entry:

```
6122 \protected@edef\@do@newglossaryentry{%
6123   \noexpand\newglossaryentry{\the\glslabeltok}%
6124   {%
6125     type=\glsxtrabbrvtype,%
6126     category=abbreviation,%
6127     short={\the\glsshorttok},%
6128     shortplural={\the\glsshortpltok},%
6129     long={\the\glslongtok},%
6130     longplural={\the\glslongpltok},%
6131     name={\the\glsshorttok},%
6132     \CustomAbbreviationFields,%
6133     \the\glskeylisttok
6134   }%
6135 }%
6136 \@do@newglossaryentry
6137 \GlsXtrPostNewAbbreviation
6138 }
```

evpresetkeyhook Hook for extra stuff in \newabbreviation

```
6139 \newcommand*\glsxtrnewabbrevpreshapekeyhook}[3]{}
```

NewAbbreviation Hook used by abbreviation styles.

```
6140 \newcommand*\GlsXtrPostNewAbbreviation{}{}
```

bbreivationhook Hook for use with \newabbreviation.

```
6141 \newcommand*\newabbreivationhook{}{}
```

reviationFields

```
6142 \newcommand*\CustomAbbreviationFields{}{}
```

\glsxtrparen For the parenthetical styles.

```
6143 \newcommand*\glsxtrparen}[1]{(#1)}
```

lsxtrfullformat Full format without case change.

```
6144 \newcommand*\glsxtrfullformat}[2]{%
6145   \glsfirstlongfont{\glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
6146   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
6147 }
```

lsxtrfullformat Full format with case change.

```
6148 \newcommand*\Glsxtrfullformat}[2]{%
6149   \glsfirstlongfont{\Glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
6150   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
6151 }
```

```
xtrfullplformat Plural full format without case change.  
6152 \newcommand*{\glsxtrfullplformat}[2]{%  
6153   \glsfirstlongfont{\glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%  
6154   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}}%  
6155 }
```

```
xtrfullplformat Plural full format with case change.  
6156 \newcommand*{\Glsxtrfullplformat}[2]{%  
6157   \glsfirstlongfont{\Glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%  
6158   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}}%  
6159 }
```

```
\glsxtrfullsep Separator used by full format is a space by default. The argument is the entry's label.  
6160 \newcommand*{\glsxtrfullsep}[1]{\space}
```

In-line formats in case first use isn't compatible with `\glsentryfull` (for example, first use suppresses the long form or uses a footnote).

```
nlnefullformat Full format without case change.  
6161 \newcommand*{\glsxtrinelinefullformat}{\glsxtrfullformat}
```

```
nlnefullformat Full format with case change.  
6162 \newcommand*{\Glsxtrinelinefullformat}{\Glsxtrfullformat}
```

```
xtrfullplformat Plural full format without case change.  
6163 \newcommand*{\glsxtrinelinefullplformat}{\glsxtrfullplformat}
```

```
inefullplformat Plural full format with case change.  
6164 \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  
6165 \renewcommand*{\glsentryfull}[1]{\glsxtrinelinefullformat{#1}{}}
```

```
\Glsentryfull  
6166 \renewcommand*{\Glsentryfull}[1]{\Glsxtrinelinefullformat{#1}{}}
```

```
\glsentryfullpl  
6167 \renewcommand*{\glsentryfullpl}[1]{\glsxtrinelinefullplformat{#1}{}}
```

```
\Glsentryfullpl  
6168 \renewcommand*{\Glsentryfullpl}[1]{\Glsxtrinelinefullplformat{#1}{}}
```

```
glsfirstabbrvfont Font changing command used for the abbreviation on first use or in the full format.  
6169 \newcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{#1}}
```

```

bbrvdefaultfont  Font changing command used for the abbreviation on first use or in the full format.
6170 \newcommand*{\glsfirstabbrvdefaultfont}[1]{\glsabbrvfont{#1}}


\glsabbrvfont  Font changing command used for the abbreviation on subsequent use.
6171 \newcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{#1}}


bbrvdefaultfont
6172 \newcommand*{\glsabbrvdefaultfont}[1]{#1}

\glslongfont  Font changing command used for the long form in commands like \glsxtrlong.
6173 \newcommand*{\glslongfont}[1]{\glslongdefaultfont{#1}}


longdefaultfont  Default font changing command used for the long form in commands like \glsxtrlong.
6174 \newcommand*{\glslongdefaultfont}[1]{#1}

lsfirstlongfont  Font changing command used for the long form on first use or in the full format.
6175 \newcommand*{\glsfirstlongfont}[1]{\glslongfont{#1}}


longdefaultfont
6176 \newcommand*{\glsfirstlongdefaultfont}[1]{\glslongdefaultfont{#1}}


brvpluralsuffix  Default plural suffix. Allow an alternative default suffix for abbreviations.
6177 \newcommand*{\glsxtrabbbrvpluralsuffix}{\glspluralsuffix}

brvpluralsuffix  Default plural suffix.
6178 \newcommand*{\abbrvpluralsuffix}{\glsxtrabbbrvpluralsuffix}

\glsxtrfull  Full form (no case-change).
6179 \newrobustcmd*{\glsxtrfull}{\@gls@hyp@opt\ns@glsxtrfull}
6180 \newcommand*{\ns@glsxtrfull}[2][]{%
6181   \new@ifnextchar[\{\@glsxtr@full{#1}{#2}\}%
6182     {\@glsxtr@full{#1}{#2}}[]\%
6183 }

\@glsxtr@full  Low-level macro:
6184 \def\@glsxtr@full#1#2[#3]{%
6185   \glsdoifexists{#2}%
6186   {%
6187     \glssetabbrvfmt{\glscategory{#2}}%
6188     \let\do@gls@link@checkfirhyper\@gls@link@nocheckfirhyper
6189     \let\glsifplural\@secondoftwo
6190     \let\glscapscase\@firstofthree
6191     \let\glsinsert\@empty
6192     \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, to it make 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.

```

6193     \glsxtrsetupfulldefs
6194     \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6195   }%
6196   \glspostlinkhook
6197 }
```

trsetupfulldefs

```

6198 \newcommand*\glsxtrsetupfulldefs{%
6199   \let\glsxtrifwasfirstuse\@firstoftwo
6200 }
```

\Glsxtrfull Full form (first letter uppercase).

```

6201 \newrobustcmd*\Glsxtrfull{\@gls@hyp@opt\ns@Glsxtrfull}
6202 \newcommand*\ns@Glsxtrfull[2][]{%
6203   \new@ifnextchar[\{@Glsxtr@full{#1}{#2}\}%
6204           {\@Glsxtr@full{#1}{#2}[]}%
6205 }
```

\@Glsxtr@full Low-level macro:

```

6206 \def\@Glsxtr@full#1#2[#3]{%
6207   \glsdoifexists{#2}%
6208   {%
6209     \glssetabrvfmt{\glscategory{#2}}%
6210     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6211     \let\glsifplural\@secondoftwo
6212     \let\glscapscase\@secondofthree
6213     \let\glsinsert\@empty
6214     \def\glscustomtext{\Glsxtrinlinefullformat{#2}{#3}}%
6215     \glsxtrsetupfulldefs
6216     \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6217   }%
6218   \glspostlinkhook
6219 }
```

\GLSxtrfull Full form (all uppercase).

```

6220 \newrobustcmd*\GLSxtrfull{\@gls@hyp@opt\ns@GLSxtrfull}
6221 \newcommand*\ns@GLSxtrfull[2][]{%
6222   \new@ifnextchar[\{@GLSxtr@full{#1}{#2}\}%
6223           {\@GLSxtr@full{#1}{#2}[]}%
6224 }
```

\@GLSxtr@full Low-level macro:

```

6225 \def\@GLSxtr@full#1#2[#3]{%
6226   \glsdoifexists{#2}%
```

```

6227  {%
6228    \glssetabrvfmt{\glscategory{#2}}%
6229    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6230    \let\glsifplural@\secondoftwo
6231    \let\glscapscase@\thirdofthree
6232    \let\glsinsert@\empty
6233    \def\glscustomtext{\mfirstrucMakeUppercase{\glsxtrinlinefullformat{#2}{#3}}}%
6234    \glsxtrsetupfulldefs
6235    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6236  }%
6237  \glspostlinkhook
6238 }

```

\glsxtrfullpl Plural full form (no case-change).

```

6239 \newrobustcmd*\glsxtrfullpl{\gls@hyp@opt\ns@glsxtrfullpl}
6240 \newcommand*\ns@glsxtrfullpl[2][]{%
6241   \new@ifnextchar[\glsxtr@fullpl{#1}{#2}}%
6242     {\glsxtr@fullpl{#1}{#2}[]}}%
6243 }

```

\glsxtr@fullpl Low-level macro:

```

6244 \def\glsxtr@fullpl#1#2[#3]{%
6245   \glsdoifexists{#2}}%
6246 {%
6247   \glssetabrvfmt{\glscategory{#2}}%
6248   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6249   \let\glsifplural@\firstoftwo
6250   \let\glscapscase@\firstofthree
6251   \let\glsinsert@\empty
6252   \def\glscustomtext{\glsxtrinlinefullplformat{#2}{#3}}%
6253   \glsxtrsetupfulldefs
6254   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6255 }%
6256 \glspostlinkhook
6257 }

```

\Glsxtrfullpl Plural full form (first letter uppercase).

```

6258 \newrobustcmd*\Glsxtrfullpl{\gls@hyp@opt\ns@Glsxtrfullpl}
6259 \newcommand*\ns@Glsxtrfullpl[2][]{%
6260   \new@ifnextchar[\Glsxtr@fullpl{#1}{#2}}%
6261     {\Glsxtr@fullpl{#1}{#2}[]}}%
6262 }

```

\Glsxtr@fullpl Low-level macro:

```

6263 \def\Glsxtr@fullpl#1#2[#3]{%
6264   \glsdoifexists{#2}}%
6265 {%
6266   \glssetabrvfmt{\glscategory{#2}}%
6267   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper

```

```

6268     \let\glsifplural@\firstoftwo
6269     \let\glscapscase@\secondofthree
6270     \let\glsinsert@\empty
6271     \def\glscustomtext{\Glsxtrinlinefullplformat{#2}{#3}}%
6272     \glsxtrsetupfulldefs
6273     \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6274   }%
6275   \glspostlinkhook
6276 }

```

\Glsxtrfullpl Plural full form (all upper case).

```

6277 \newrobustcmd*\Glsxtrfullpl{\gls@hyp@opt\ns@Glsxtrfullpl}
6278 \newcommand*\ns@Glsxtrfullpl[2][]{%
6279   \new@ifnextchar[\{@Glsxtr@fullpl{#1}{#2}}%
6280           {\@Glsxtr@fullpl{#1}{#2}[]}}%
6281 }

```

\@Glsxtr@fullpl Low-level macro:

```

6282 \def\@Glsxtr@fullpl#1#2[#3]{%
6283   \glsdoifexists{#2}%
6284   {%
6285     \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6286     \let\glsifplural@\firstoftwo
6287     \let\glscapscase@\thirdofthree
6288     \let\glsinsert@\empty
6289     \def\glscustomtext{%
6290       \mfirstucMakeUppercase{\Glsxtrinlinefullplformat{#2}{#3}}}}%
6291     \glsxtrsetupfulldefs
6292     \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6293   }%
6294   \glspostlinkhook
6295 }

```

The short and long forms work in a similar way to acronyms.

\glsxtrshort

```
6296 \newrobustcmd*\glsxtrshort{\gls@hyp@opt\ns@glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

6297 \newcommand*\ns@glsxtrshort[2][]{%
6298   \new@ifnextchar[\{@glsxtrshort{#1}{#2}}{\@glsxtrshort{#1}{#2}[]}}%
6299 }
```

Read in the final optional argument:

```

6300 \def\@glsxtrshort#1#2[#3]{%
6301   \glsdoifexists{#2}%
6302   {%
```

Need to make sure \glsabrvfont is set correctly.

```
6303   \glssetabrvfmt{\glscategory{#2}}%
```

```

6304 \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6305 \let\glsxtrifwasfirstuse\@secondoftwo
6306 \let\glsifplural\@secondoftwo
6307 \let\glscapscase\@firstofthree
6308 \let\glsinsert\@empty
6309 \def\glscustomtext{%
6310   \glsabbrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
6311   \ifglsxtrinsertinside\else#3\fi
6312 }%
6313 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6314 }%
6315 \glspostlinkhook
6316 }

```

\Glsxtrshort

```
6317 \newrobustcmd*\Glsxtrshort{\gls@hyp@opt\ns@Glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

6318 \newcommand*\ns@Glsxtrshort[2][]{%
6319   \new@ifnextchar[\ns@Glsxtrshort{#1}{#2}]{\ns@Glsxtrshort{#1}{#2}}[]%
6320 }

```

Read in the final optional argument:

```

6321 \def\@Glsxtrshort#1#2[#3]{%
6322   \glsdoifexists{#2}%
6323 {%
6324   \glssetabbrvfmt{\glscategory{#2}}%
6325   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6326   \let\glsxtrifwasfirstuse\@secondoftwo
6327   \let\glsifplural\@secondoftwo
6328   \let\glscapscase\@secondofthree
6329   \let\glsinsert\@empty
6330   \def\glscustomtext{%
6331     \glsabbrvfont{\Glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
6332     \ifglsxtrinsertinside\else#3\fi
6333   }%
6334   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6335 }%
6336 \glspostlinkhook
6337 }

```

\GLSxtrshort

```
6338 \newrobustcmd*\GLSxtrshort{\gls@hyp@opt\ns@GLSxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

6339 \newcommand*\ns@GLSxtrshort[2][]{%
6340   \new@ifnextchar[\ns@GLSxtrshort{#1}{#2}]{\ns@GLSxtrshort{#1}{#2}}[]%
6341 }

```

Read in the final optional argument:

```
6342 \def\@GLSxtrshort#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@secondoftwo
6349   \let\glscapscase@thirdofthree
6350   \let\glsinsert@\empty
6351   \def\glscustomtext{%
6352     \mfirstucMakeUppercase
6353     {\glsabbrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
6354      \ifglsxtrinsertinside\else#3\fi
6355    }%
6356  }%
6357  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6358 }%
6359 \glspostlinkhook
6360 }

```

\glsxtrlong

```
6361 \newrobustcmd*\glsxtrlong{\gls@hyp@opt\ns@glsxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

6362 \newcommand*{\ns@glsxtrlong}[2][]{%
6363   \new@ifnextchar[\glsxtrlong[#1]{#2}{\glsxtrlong[#1]{#2}[]}{%
6364 }

```

Read in the final optional argument:

```

6365 \def\glsxtrlong#1#2[#3]{%
6366   \glsdoifexists{#2}%
6367 {%
6368   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6369   \let\glsxtrifwasfirstuse@secondoftwo
6370   \let\glsifplural@secondoftwo
6371   \let\glscapscase@firstofthree
6372   \let\glsinsert@\empty
6373   \def\glscustomtext{%
6374     \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
6375     \ifglsxtrinsertinside\else#3\fi
6376   }%
6377   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6378 }%
6379 \glspostlinkhook
6380 }

```

\Glsxtrlong

```
6381 \newrobustcmd*\Glsxtrlong{\gls@hyp@opt\ns@Glsxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
6382 \newcommand*{\ns@Glsxtrlong}[2][]{%
```

```

6383 \new@ifnextchar[{\@Glsxtrlong{#1}{#2}}{\@Glsxtrlong{#1}{#2}[]}]%
6384 }

```

Read in the final optional argument:

```

6385 \def\@Glsxtrlong#1#2[#3]{%
6386   \glsdoifexists{#2}%
6387   {%
6388     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6389     \let\glsxtrifwasfirstuse\@secondoftwo
6390     \let\glsifplural\@secondoftwo
6391     \let\glscapscase\@secondofthree
6392     \let\glsinsert\@empty
6393     \def\glscustomtext{%
6394       \glslongfont{\Glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
6395       \ifglsxtrinsertinside\else#3\fi
6396     }%
6397     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6398   }%
6399   \glspostlinkhook
6400 }

```

\GLSxtrlong

```

6401 \newrobustcmd*\GLSxtrlong{\gls@hyp@opt\ns@GLSxtrlong}

```

Define the un-starred form. Need to determine if there is a final optional argument

```

6402 \newcommand*{\ns@GLSxtrlong}[2][]{%
6403   \new@ifnextchar[{\@GLSxtrlong{#1}{#2}}{\@GLSxtrlong{#1}{#2}[]}]%
6404 }

```

Read in the final optional argument:

```

6405 \def\@GLSxtrlong#1#2[#3]{%
6406   \glsdoifexists{#2}%
6407   {%
6408     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6409     \let\glsxtrifwasfirstuse\@secondoftwo
6410     \let\glsifplural\@secondoftwo
6411     \let\glscapscase\@thirdofthree
6412     \let\glsinsert\@empty
6413     \def\glscustomtext{%
6414       \mfirstrucMakeUppercase
6415       \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
6416       \ifglsxtrinsertinside\else#3\fi
6417     }%
6418   }%
6419   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6420 }%
6421 \glspostlinkhook
6422 }

```

Plural short forms:

```

\glsxtrshortpl
6423 \newrobustcmd*\glsxtrshortpl{\gls@hyp@opt\ns@glsxtrshortpl}
    Define the un-starred form. Need to determine if there is a final optional argument
6424 \newcommand*\ns@glsxtrshortpl[2][]{%
6425   \new@ifnextchar[\glsxtrshortpl{#1}{#2}]{\glsxtrshortpl{#1}{#2}[]}{%
6426 }

    Read in the final optional argument:
6427 \def\glsxtrshortpl#1#2[#3]{%
6428   \glsdoifexists{#2}{%
6429     {%
6430       \glssetabrvfmt{\glscategory{#2}}{%
6431         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6432         \let\glsxtrifwasfirstuse\secondoftwo
6433         \let\glsifplural\firstoftwo
6434         \let\glscapscase\firstofthree
6435         \let\glsinsert\empty
6436         \def\glscustomtext{%
6437           \glsabbrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}{%
6438             \ifglsxtrinsertinside\else#3\fi
6439           }{%
6440             \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}{%
6441           }{%
6442             \glspostlinkhook
6443           }
6444 \newrobustcmd*\Glsxtrshortpl{\gls@hyp@opt\ns@Glsxtrshortpl}
    Define the un-starred form. Need to determine if there is a final optional argument
6445 \newcommand*\ns@Glsxtrshortpl[2][]{%
6446   \new@ifnextchar[\Glsxtrshortpl{#1}{#2}]{\Glsxtrshortpl{#1}{#2}[]}{%
6447 }

    Read in the final optional argument:
6448 \def\@Glsxtrshortpl#1#2[#3]{%
6449   \glsdoifexists{#2}{%
6450     {%
6451       \glssetabrvfmt{\glscategory{#2}}{%
6452         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6453         \let\glsxtrifwasfirstuse\secondoftwo
6454         \let\glsifplural\firstoftwo
6455         \let\glscapscase\secondofthree
6456         \let\glsinsert\empty
6457         \def\glscustomtext{%
6458           \glsabbrvfont{\Glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}{%
6459             \ifglsxtrinsertinside\else#3\fi
6460           }{%
6461             \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}{%
6462           }{%
6463           }

```

```

6463 \glspostlinkhook
6464 }

\GLSxtrshortpl
6465 \newrobustcmd*{\GLSxtrshortpl}{\gls@hyp@opt\ns@GLSxtrshortpl}
    Define the un-starred form. Need to determine if there is a final optional argument
6466 \newcommand*{\ns@GLSxtrshortpl}[2][]{%
6467 \new@ifnextchar[{\ns@GLSxtrshortpl[#1]{#2}}{\ns@GLSxtrshortpl[#1]{#2}}[]}{%
6468 }

```

Read in the final optional argument:

```

6469 \def\@GLSxtrshortpl#1#2[#3]{%
6470 \glsdoifexists{#2}%
6471 {%
6472 \glssetabrvfmt{\glscategory{#2}}%
6473 \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6474 \let\glsxtrifwasfirstuse\secondoftwo
6475 \let\glsifplural\firstoftwo
6476 \let\glscapscase\thirdofthree
6477 \let\glsinsert\empty
6478 \def\glscustomtext{%
6479 \mfirstrucMakeUppercase
6480 {\glsabrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
6481 \ifglsxtrinsertinside\else#3\fi
6482 }%
6483 }%
6484 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6485 }%
6486 \glspostlinkhook
6487 }

```

Plural long forms:

```

\glsxtrlongpl
6488 \newrobustcmd*{\glsxtrlongpl}{\gls@hyp@opt\ns@glsxtrlongpl}
    Define the un-starred form. Need to determine if there is a final optional argument
6489 \newcommand*{\ns@glsxtrlongpl}[2][]{%
6490 \new@ifnextchar[{\ns@glsxtrlongpl[#1]{#2}}{\ns@glsxtrlongpl[#1]{#2}}[]}{%
6491 }

```

Read in the final optional argument:

```

6492 \def\@glsxtrlongpl#1#2[#3]{%
6493 \glsdoifexists{#2}%
6494 {%
6495 \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6496 \let\glsxtrifwasfirstuse\secondoftwo
6497 \let\glsifplural\firstoftwo
6498 \let\glscapscase\firstofthree
6499 \let\glsinsert\empty

```

```

6500 \def\glscustomtext{%
6501   \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
6502   \ifglsxtrinsertinside\else#3\fi
6503 }%
6504 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6505 }%
6506 \glspostlinkhook
6507 }

```

\Glsxtrlongpl

```

6508 \newrobustcmd*\Glsxtrlongpl{\gls@hyp@opt\ns@Glsxtrlongpl}
Define the un-starred form. Need to determine if there is a final optional argument
6509 \newcommand*\ns@Glsxtrlongpl[2][]{%
6510   \new@ifnextchar[\{@Glsxtrlongpl{#1}{#2}\}{\@Glsxtrlongpl{#1}{#2}[]}}%
6511 }

```

Read in the final optional argument:

```

6512 \def\@Glsxtrlongpl#1#2[#3]{%
6513   \glsdoifexists{#2}%
6514 {%
6515   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6516   \let\glsxtrifwasfirstuse\secondoftwo
6517   \let\glsifplural\firstoftwo
6518   \let\glscapscase\secondofthree
6519   \let\glsinsert\empty
6520   \def\glscustomtext{%
6521     \glslongfont{\Glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
6522     \ifglsxtrinsertinside\else#3\fi
6523   }%
6524   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6525 }%
6526 \glspostlinkhook
6527 }

```

\GLSxtrlongpl

```

6528 \newrobustcmd*\GLSxtrlongpl{\gls@hyp@opt\ns@GLSxtrlongpl}
Define the un-starred form. Need to determine if there is a final optional argument
6529 \newcommand*\ns@GLSxtrlongpl[2][]{%
6530   \new@ifnextchar[\{@GLSxtrlongpl{#1}{#2}\}{\@GLSxtrlongpl{#1}{#2}[]}}%
6531 }

```

Read in the final optional argument:

```

6532 \def\@GLSxtrlongpl#1#2[#3]{%
6533   \glsdoifexists{#2}%
6534 {%
6535   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6536   \let\glsxtrifwasfirstuse\secondoftwo
6537   \let\glsifplural\firstoftwo
6538   \let\glscapscase\thirdofthree

```

```

6539   \let\glsinsert\empty
6540   \def\glscustomtext{%
6541     \mfirstucMakeUppercase
6542     {\glslongfont{\glsaccesslongpl{\#2}\ifglsxtrinsertinside#3\fi}%
6543      \ifglsxtrinsertinside\else#3\fi
6544    }%
6545  }%
6546  \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
6547 }%
6548 \glspostlinkhook
6549 }

```

\glssetabbrvfmt Set the current format for the given category (or the abbreviation category if unset).

```

6550 \newcommand*{\glssetabbrvfmt}[1]{%
6551   \ifcsdef{\glsabbrv@current}{\#1}{%
6552     {\glsxtr@applyabbrvfmt{\csname \glsabbrv@current\#1\endcsname}}%
6553     {\glsxtr@applyabbrvfmt{\glsabbrv@current@abbreviation}}%
6554   }

```

\glsuseabbrvfont Provide a way to use the abbreviation font for a given category for arbitrary text.

```
6555 \newrobustcmd*{\glsuseabbrvfont}[2]{{\glssetabbrvfmt{\#2}\glsabbrvfont{\#1}}}
```

\glsuselongfont Provide a way to use the long font for a given category for arbitrary text.

```
6556 \newrobustcmd*{\glsuselongfont}[2]{{\glssetabbrvfmt{\#2}\glslongfont{\#1}}}
```

\sxtrgenabbrvfmt Similar to \glsgenacfmt, but for abbreviations.

```

6557 \newcommand*{\glsxtrgenabbrvfmt}{%
6558   \ifdefempty\glscustomtext
6559   {%
6560     \ifglsused\glslabel
6561   }%

```

Subsequent use:

```
6562   \glsifplural
6563   {%
```

Subsequent plural form:

```
6564   \glscapscase
6565   {%
```

Subsequent plural form, don't adjust case:

```
6566   \glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
6567   {%
6568   }%
```

Subsequent plural form, make first letter upper case:

```
6569   \Glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
6570   {%
6571   }%
```

Subsequent plural form, all caps:

```
6572      \mfirstucMakeUppercase
6573          {\glsxtrsubsequentplfmt{\glslabel}{\glsinsert}}%
6574      }%
6575      }%
6576      {%
```

Subsequent singular form

```
6577      \glscapscase
6578      {%
```

Subsequent singular form, don't adjust case:

```
6579      \glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
6580      }%
6581      {%
```

Subsequent singular form, make first letter upper case:

```
6582      \Glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
6583      }%
6584      {%
```

Subsequent singular form, all caps:

```
6585      \mfirstucMakeUppercase
6586          {\glsxtrsubsequentfmt{\glslabel}{\glsinsert}}%
6587      }%
6588      }%
6589      }%
6590      {%
```

First use:

```
6591      \glsifplural
6592      {%
```

First use plural form:

```
6593      \glscapscase
6594      {%
```

First use plural form, don't adjust case:

```
6595      \glsxtrfullplformat{\glslabel}{\glsinsert}%
6596      }%
6597      {%
```

First use plural form, make first letter upper case:

```
6598      \Glsxtrfullplformat{\glslabel}{\glsinsert}%
6599      }%
6600      {%
```

First use plural form, all caps:

```
6601      \mfirstucMakeUppercase
6602          {\glsxtrfullplformat{\glslabel}{\glsinsert}}%
6603      }%
6604      }%
6605      {%
```

First use singular form

```
6606      \glscapscase
6607      {%
```

First use singular form, don't adjust case:

```
6608      \glsxtrfullformat{\glslabel}{\glsinsert}%
6609      }%
6610      {%
```

First use singular form, make first letter upper case:

```
6611      \Glsxtrfullformat{\glslabel}{\glsinsert}%
6612      }%
6613      {%
```

First use singular form, all caps:

```
6614      \mfirstucMakeUppercase
6615      {\glsxtrfullformat{\glslabel}{\glsinsert}}%
6616      }%
6617      }%
6618      }%
6619      }%
6620      {%
```

User supplied text.

```
6621      \glscustomtext
6622      }%
6623 }
```

trsubsequentfmt Subsequent use format (singular no case change).

```
6624 \newcommand*{\glsxtrsubsequentfmt}[2]{%
6625   \glsabbrvfont{\glsaccessshort{\#1}\ifglsxtrinsertinside #2\fi}%
6626   \ifglsxtrinsertinside \else#2\fi
6627 }
6628 \let\glsxtrdefaultsubsequentfmt\glsxtrsubsequentfmt
```

subsequentplfmt Subsequent use format (plural no case change).

```
6629 \newcommand*{\glsxtrsubsequentplfmt}[2]{%
6630   \glsabbrvfont{\glsaccessshort{\#1}\ifglsxtrinsertinside #2\fi}%
6631   \ifglsxtrinsertinside \else#2\fi
6632 }
6633 \let\glsxtrdefaultsubsequentplfmt\glsxtrsubsequentplfmt
```

trsubsequentfmt Subsequent use format (singular, first letter uppercase).

```
6634 \newcommand*{\Glsxtrsubsequentfmt}[2]{%
6635   \glsabbrvfont{\Glsaccessshort{\#1}\ifglsxtrinsertinside #2\fi}%
6636   \ifglsxtrinsertinside \else#2\fi
6637 }
6638 \let\Glsxtrdefaultsubsequentfmt\Glsxtrsubsequentfmt
```

```
subsequentplfmt Subsequent use format (plural, first letter uppercase).
```

```
6639 \newcommand*{\Glsxtrsubsequentplfmt}[2]{%
6640   \glsabbrvfont{\Glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
6641   \ifglsxtrinsertinside \else#2\fi
6642 }
6643 \let\Glsxtrdefaultsubsequentplfmt\Glsxtrsubsequentplfmt
```

1.7.1 Abbreviation Styles Setup

```
breviaitonstyle
```

```
6644 \newcommand*{\setabbreviationstyle}[2][abbreviation]{%
6645   \ifcsundef{@glsabbrv@dispstyle@setup@#2}%
6646   {%
6647     \PackageError{glossaries-extra}{Undefined abbreviation style ‘#2’}{}%
6648   }%
6649 }
```

Have abbreviations already been defined for this category?

```
6650 \ifcsstring{@glsabbrv@current@#1}{#2}%
6651 {%
```

Style already set.

```
6652 }%
6653 {%
6654   \def@\glsxtr@dostylewarn{%
6655     \glsforeachincategory{#1}{\gls@type}{\gls@label}%
6656   }%
6657   \def@\glsxtr@dostylewarn{\GlossariesWarning{Abbreviation
6658     style has been switched \MessageBreak
6659     for category ‘#1’, \MessageBreak
6660     but there have already been entries \MessageBreak
6661     defined for this category. Unwanted \MessageBreak
6662     side-effects may result}%
6663   }%
6664   \glsxtr@dostylewarn
6665 }
```

Set up the style for the given category.

```
6666 \csdef{@glsabbrv@current@#1}{#2}%
6667 \glsxtr@applyabbrvstyle{#2}%
6668 }%
6669 }%
6670 }
```

```
applyabbrvstyle Apply the abbreviation style without existence check.
```

```
6671 \newcommand*{\glsxtr@applyabbrvstyle}[1]{%
6672   \csuse{@glsabbrv@dispstyle@setup@#1}%
6673   \csuse{@glsabbrv@dispstyle@fmcts@#1}%
6674 }
```

r@applyabbrfmt Only apply the style formats.

```
6675 \newcommand*{\glsxtr@applyabbrfmt}[1]{%
6676   \csuse{@glsabrv@dispstyle@fmts@#1}%
6677 }
```

abbreviationstyle This is different from `\newacronymstyle`. The first argument is the label, the second argument sets the information required when defining the new abbreviation and the third argument sets the commands used to display the full format.

```
6678 \newcommand*{\newabbreviationstyle}[3]{%
6679   \ifcsdef{@glsabrv@dispstyle@setup@#1}%
6680   {%
6681     \PackageError{glossaries-extra}{Abbreviation style '#1' already%
6682       defined}{}%
6683   }%
6684   {%
6685     \csdef{@glsabrv@dispstyle@setup@#1}{%
```

Initialise hook to do nothing. The style may change this.

```
6686   \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
6687   #2}%
6688   \csdef{@glsabrv@dispstyle@fmts@#1}{%
```

Assume in-line form is the same as first use. The style may change this.

```
6689   \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}%
6690   \renewcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}%
6691   \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}%
6692   \renewcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}%
```

Reset `\glsxtrsubsequentfmt` etc in case a style changes this.

```
6693   \let\glsxtrsubsequentfmt\glsxtrdefaultsubsequentfmt
6694   \let\glsxtrsubsequentplfmt\glsxtrdefaultsubsequentplfmt
6695   \let\Glsxtrsubsequentfmt\Glsxtrdefaultsubsequentfmt
6696   \let\Glsxtrsubsequentplfmt\Glsxtrdefaultsubsequentplfmt
6697   #3}%
6698 }%
6699 }
```

abbreviationstyle

```
6700 \newcommand*{\renewabbreviationstyle}[3]{%
6701   \ifcsundef{@glsabrv@dispstyle@setup@#1}%
6702   {%
6703     \PackageError{glossaries-extra}{Abbreviation style '#1' not defined}{}%
6704   }%
6705   {%
6706     \csdef{@glsabrv@dispstyle@setup@#1}{%
```

Initialise hook to do nothing. The style may change this.

```
6707   \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
6708   #2}%
6709   \csdef{@glsabrv@dispstyle@fmts@#1}{%
```

Assume in-line form is the same as first use. The style may change this.

```
6710 \renewcommand*\{\glsxtrinlinefullformat\}{\glsxtrfullformat}%
6711 \renewcommand*\{\Glsxtrinlinefullformat\}{\Glsxtrfullformat}%
6712 \renewcommand*\{\glsxtrinlinefullplformat\}{\glsxtrfullplformat}%
6713 \renewcommand*\{\Glsxtrinlinefullplformat\}{\Glsxtrfullplformat}%
6714 #3}%
6715 }%
6716 }
```

abbreviationstyle Define a synonym for an abbreviation style. The first argument is the new name. The second argument is the original style's name.

```
6717 \newcommand*\{\letabbreviationstyle\}[2]{%
6718 \csletcs{@glsabbrv@dispstyle@setup@#1}{@glsabbrv@dispstyle@setup@#2}%
6719 \csletcs{@glsabbrv@dispstyle@fmts@#1}{@glsabbrv@dispstyle@fmts@#2}%
6720 }
```

ecated@abbrstyle \glsxtr@deprecated@abbrstyle{\old-name}{\new-name}

Define a synonym for a deprecated abbreviation style.

```
6721 \newcommand*\{\@glsxtr@deprecated@abbrstyle\}[2]{%
6722 \csdef{@glsabbrv@dispstyle@setup@#1}{%
6723 \GlsXtrWarnDeprecatedAbbrStyle{#1}{#2}%
6724 \csuse{@glsabbrv@dispstyle@setup@#2}%
6725 }%
6726 \csletcs{@glsabbrv@dispstyle@fmts@#1}{@glsabbrv@dispstyle@fmts@#2}%
6727 }
```

ecatedAbbrStyle Generate warning for deprecated style use.

```
6728 \newcommand*\{\GlsXtrWarnDeprecatedAbbrStyle\}[2]{%
6729 \GlossariesExtraWarning{Deprecated abbreviation style name '#1',
6730 use '#2' instead}%
6731 }
```

eAbbrStyleSetup

```
6732 \newcommand*\{\GlsXtrUseAbbrStyleSetup\}[1]{%
6733 \ifcsundef{@glsabbrv@dispstyle@setup@#1}%
6734 {%
6735 \PackageError{glossaries-extra}%
6736 {Unknown abbreviation style definitions '#1'}{}%
6737 }%
6738 {%
6739 \csname @glsabbrv@dispstyle@setup@#1\endcsname
6740 }%
6741 }
```

```

seAbbrStyleFmts
6742 \newcommand*{\GlsXtrUseAbbrStyleFmts}[1]{%
6743   \ifcsundef{glsabbrv@dispstyle@fmts@#1}{%
6744     {%
6745       \PackageError{glossaries-extra}{%
6746         Unknown abbreviation style formats '#1'}{}%
6747     }%
6748     {%
6749       \csname glsabbrv@dispstyle@fmts@#1\endcsname
6750     }%
6751 }

```

1.7.2 Predefined Styles (Default Font)

Define some common styles. These will set the first, firstplural, text and plural keys, even if the regular attribute isn't set to "true". If this attribute is set, commands like \gls will use them as per a regular entry, otherwise those keys will be ignored unless explicitly invoked by the user with commands like \glsfirst. In order for the first letter uppercase versions to work correctly, \glsxtrfullformat needs to be expanded when those keys are set. The final optional argument of \glsfirst will behave differently to the final optional argument of \gls with some styles.

`xtrinsertinside` Switch to determine if the insert text should be inside or outside the font changing command.
The default is outside.

```

6752 \newif\ifglsxtrinsertinside
6753 \glsxtrinsertinsidefalse

```

`trlongshortname`

```

6754 \newcommand*{\glsxtrlongshortname}{%
6755   \protect\glsabbrvfont{\the\glsshorttok}%
6756 }

```

`long-short`

```

6757 \newabbreviationstyle{long-short}{%
6758 {%
6759   \renewcommand*{\CustomAbbreviationFields}{%
6760     name={\glsxtrlongshortname},
6761     sort={\the\glsshorttok},
6762     first={\protect\glsfirstlongfont{\the\glslongtok}%
6763       \protect\glsxtrfullsep{\the\glslabeltok}%
6764       \glsxtrparen{\protect\glsfirststabrvfont{\the\glsshorttok}}},%
6765     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}%
6766       \protect\glsxtrfullsep{\the\glslabeltok}%
6767       \glsxtrparen{\protect\glsfirststabrvfont{\the\glsshortpltok}}},%
6768     plural={\protect\glsabbrvfont{\the\glsshortpltok}},%
6769     description={\the\glslongtok}}%

```

Unset the regular attribute if it has been set.

```
6770 \renewcommand*\GlsXtrPostNewAbbreviation{%
6771   \glshasattribute{\the\glslabeltok}{regular}%
6772   {%
6773     \glssetattribute{\the\glslabeltok}{regular}{false}%
6774   }%
6775   {}%
6776 }%
6777 }%
6778 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
6779 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
6780 \renewcommand*\glsabrvfont[1]{\glsabrvdefaultfont{##1}}%
6781 \renewcommand*\glsfirstabrvfont[1]{\glsfirstabrvdefaultfont{##1}}%
6782 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
6783 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
6784 \renewcommand*\glsxtrfullformat[2]{%
6785   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
6786   \ifglsxtrinsertinside\else##2\fi
6787   \glsxtrfullsep{##1}%
6788   \glsxtrparen{\glsfirstabrvfont{\glsaccessshort{##1}}}%
6789 }%
6790 \renewcommand*\glsxtrfullplformat[2]{%
6791   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
6792   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6793   \glsxtrparen{\glsfirstabrvfont{\glsaccessshortpl{##1}}}%
6794 }%
6795 \renewcommand*\Glsxtrfullformat[2]{%
6796   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
6797   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6798   \glsxtrparen{\glsfirstabrvfont{\glsaccessshort{##1}}}%
6799 }%
6800 \renewcommand*\Glsxtrfullplformat[2]{%
6801   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
6802   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6803   \glsxtrparen{\glsfirstabrvfont{\glsaccessshortpl{##1}}}%
6804 }%
6805 }
```

Set this as the default style for general abbreviations:

```
6806 \setabbreviationstyle{long-short}
```

ngshortdescsort

```
6807 \newcommand*\glsxtrlongshortdescsort{%
6808   \expandonce\glsxtrorglong\space (\expandonce\glsxtrorgshort)%
6809 }
```

```

ngshortdescname
6810 \newcommand*{\glsxtrlongshortdescname}{%
6811   \protect\glslongfont{\the\glslongtok}%
6812   \glsxtrparen{\protect\glsabbrvfont{\the\glsshorttok}}%
6813 }

```

long-short-desc User supplies description. The long form is included in the name.

```

6814 \newabbreviationstyle{long-short-desc}%
6815 {%
6816   \renewcommand*{\CustomAbbreviationFields}{%
6817     name={\glsxtrlongshortdescname},%
6818     sort={\glsxtrlongshortdescsort},%
6819     first={\protect\glsfirstlongfont{\the\glslongtok}}%
6820     \protect\glsxtrfullsep{\the\glslabeltok}%
6821     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
6822     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}}%
6823     \protect\glsxtrfullsep{\the\glslabeltok}%
6824     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%
6825   text={\protect\glsabbrvfont{\the\glsshorttok}},%
6826   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
6827 }

```

The text key should only have the short form.

```

6828 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
6829   \glshasattribute{\the\glslabeltok}{regular}%
6830   {%
6831     \glssetattribute{\the\glslabeltok}{regular}{false}%
6832   }%
6833   {}%
6834 }%
6835 }%
6836 {%
6837 \GlsXtrUseAbbrStyleFmts{long-short}%
6838 }

```

trshortlongname

```

6839 \newcommand*{\glsxtrshortlongname}{%
6840   \protect\glsabbrvfont{\the\glsshorttok}%
6841 }

```

short-long Short form followed by long form in parenthesis on first use.

```

6842 \newabbreviationstyle{short-long}%
6843 {%
6844   \renewcommand*{\CustomAbbreviationFields}{%
6845     name={\glsxtrshortlongname},%
6846     sort={\the\glsshorttok},%
6847     description={\the\glslongtok},%

```

```

6848   first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
6849     \protect\glsxtrfullsep{\the\glslabeltok}%
6850     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
6851   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
6852     \protect\glsxtrfullsep{\the\glslabeltok}%
6853     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
6854   plural={\protect\glsabbrvfont{\the\glsshortpltok}}}

```

Unset the regular attribute if it has been set.

```

6855 \renewcommand*\GlsXtrPostNewAbbreviation}{%
6856   \glshasattribute{\the\glslabeltok}{regular}%
6857   {%
6858     \glssetattribute{\the\glslabeltok}{regular}{false}%
6859   }%
6860   {}%
6861 }%
6862 }%
6863 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

6864 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
6865 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
6866 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
6867 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
6868 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

6869 \renewcommand*\glsxtrfullformat[2]{%
6870   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6871   \ifglsxtrinsertinside\else##2\fi
6872   \glsxtrfullsep{##1}%
6873   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}}%
6874 }%
6875 \renewcommand*\glsxtrfullplformat[2]{%
6876   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6877   \ifglsxtrinsertinside\else##2\fi
6878   \glsxtrfullsep{##1}%
6879   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}}%
6880 }%
6881 \renewcommand*\Glsxtrfullformat[2]{%
6882   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6883   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6884   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}}%
6885 }%
6886 \renewcommand*\Glsxtrfullplformat[2]{%
6887   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6888   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6889   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}}%
6890 }%
6891 }

```

```
ortlongdescsort  
6892 \newcommand*{\glsxtrshortlongdescsort}{\the\glsshorttok}
```

```
ortlongdescname  
6893 \newcommand*{\glsxtrshortlongdescname}{%  
6894   \protect\glsabbrvfont{\the\glsshorttok}  
6895   \glsxtrparen{\protect\glslongfont{\the\glslongtok}}%  
6896 }
```

short-long-desc User supplies description. The long form is included in the name.

```
6897 \newabbreviationstyle{short-long-desc}{%  
6898 {  
6899   \renewcommand*{\CustomAbbreviationFields}{%  
6900     name={\glsxtrshortlongdescname},  
6901     sort={\glsxtrshortlongdescsort},  
6902     first={\protect\glsfirstabbrvfont{\the\glsshorttok}}%  
6903     \protect\glsxtrfullsep{\the\glslabeltok}%  
6904     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%  
6905     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}}%  
6906     \protect\glsxtrfullsep{\the\glslabeltok}%  
6907     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%  
6908     text={\protect\glsabbrvfont{\the\glsshorttok}},%  
6909     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%  
6910 }
```

Unset the regular attribute if it has been set.

```
6911 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  
6912   \glshasattribute{\the\glslabeltok}{regular}}%  
6913 {  
6914   \glssetattribute{\the\glslabeltok}{regular}{false}}%  
6915 }%  
6916 {}%  
6917 }%  
6918 }%  
6919 {  
6920 \GlsXtrUseAbbrStyleFmts{short-long}}%  
6921 }
```

ongfootnotefont Only used by the “footnote” styles.

```
6922 \newcommand*{\glsfirstlongfootnotefont}[1]{\glslongfootnotefont{#1}}%
```

ongfootnotefont Only used by the “footnote” styles.

```
6923 \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`).

```
6924 \newcommand*{\glsxtrabbrvfootnote}[2]{\footnote{#2}}
```

xtrfootnotename

```
6925 \newcommand*{\glsxtrfootnotename}{%
6926   \protect\glsabbrvfont{\the\glsshorttok}%
6927 }
```

footnote Short form followed by long form in footnote on first use.

```
6928 \newabbreviationstyle{footnote}%
6929 {%
6930   \renewcommand*{\CustomAbbreviationFields}{%
6931     name={\glsxtrfootnotename},
6932     sort={\the\glsshorttok},
6933     description={\the\glslongtok},%
6934     first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
6935       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
6936         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
6937     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
6938       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
6939         {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
6940     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.

```
6941 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
6942   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
6943   \glshasattribute{\the\glslabeltok}{regular}%
6944 {%
6945   \glssetattribute{\the\glslabeltok}{regular}{false}%
6946 }%
6947 {}%
6948 }%
6949 }%
6950 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
6951 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
6952 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
6953 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
6954 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
6955 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```
6956 \renewcommand*{\glsxtrfullformat}[2]{%
6957   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6958   \ifglsxtrinsertinside\else##2\fi
6959   \protect\glsxtrabrvfootnote{##1}%
6960   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6961 }%
6962 \renewcommand*{\glsxtrfullplformat}[2]{%
6963   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6964   \ifglsxtrinsertinside\else##2\fi
6965   \protect\glsxtrabrvfootnote{##1}%
6966   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6967 }%
6968 \renewcommand*{\Glsxtrfullformat}[2]{%
6969   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6970   \ifglsxtrinsertinside\else##2\fi
6971   \protect\glsxtrabrvfootnote{##1}%
6972   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6973 }%
6974 \renewcommand*{\Glsxtrfullplformat}[2]{%
6975   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6976   \ifglsxtrinsertinside\else##2\fi
6977   \protect\glsxtrabrvfootnote{##1}%
6978   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6979 }%
```

The first use full form and the inline full form use the short (long) style.

```
6980 \renewcommand*{\glsxtrinlinefullformat}[2]{%
6981   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6982   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6983   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6984 }%
6985 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
6986   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6987   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6988   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6989 }%
6990 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
6991   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6992   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6993   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
6994 }%
6995 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
6996   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6997   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6998   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
6999 }%
7000 }
```

```

short-footnote
7001 \let\abbreviationstyle{\shortfootnote}{\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.
7002 \newabbreviationstyle{\postfootnote}{%
7003 {%
7004   \renewcommand*{\CustomAbbreviationFields}{%
7005     name={\glsxtrfootnotename},
7006     sort={\the\glsshorttok},
7007     description={\the\glslongtok},%
7008     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
7009     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
7010     plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%
7011   Make this category insert a footnote after the link if this was the first use, and unset the regular
7012   attribute if it has been set.
7013   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7014     \csdef{\glsxtrpostlink\glscategorylabel}{%
7015       \glsxtrifwasfirstuse
7016       \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
7017       {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}%
7018     }%
7019     {}%
7020     \glshasattribute{\the\glslabeltok}{regular}%
7021     {}%
7022     \glssetattribute{\the\glslabeltok}{regular}{false}%
7023     }%
7024     {}%
7025   }%
7026   The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first
7027   use switch off.
7028   \renewcommand*{\glsxtrsetupfulldefs}{%
7029     \let\glsxtrifwasfirstuse\@secondoftwo
7030   }%
7031   In case the user wants to mix and match font styles, these are redefined here.
7032   \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7033   \renewcommand*{\glsabbrvfont[1]}{\glsabbrvdefaultfont{##1}}%
7034   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%

```

```

7034 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
7035 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

7036 \renewcommand*{\glsxtrfullformat}[2]{%
7037   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7038   \ifglsxtrinsertinside\else##2\fi
7039 }%
7040 \renewcommand*{\glsxtrfullplformat}[2]{%
7041   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7042   \ifglsxtrinsertinside\else##2\fi
7043 }%
7044 \renewcommand*{\Glsxtrfullformat}[2]{%
7045   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7046   \ifglsxtrinsertinside\else##2\fi
7047 }%
7048 \renewcommand*{\Glsxtrfullplformat}[2]{%
7049   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7050   \ifglsxtrinsertinside\else##2\fi
7051 }%

```

The first use full form and the inline full form use the short (long) style.

```

7052 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7053   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7054   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
7055 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7056 }%
7057 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7058   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7059   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
7060 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7061 }%
7062 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7063   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7064   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
7065 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7066 }%
7067 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7068   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7069   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
7070 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7071 }%
7072 }

```

rt-postfootnote

```

7073 \letabbreviationstyle{short-postfootnote}{postfootnote}

```

shortnolongname

```

7074 \newcommand*{\glsxtrshortnolongname}{%
7075   \protect\glsabbrvfont{\the\glsshorthtok}%

```

```
7076 }
```

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.

```
7077 \newabbreviationstyle{short}{%
7078 {%
7079   \renewcommand*{\CustomAbbreviationFields}{%
7080     name={\glsxtrshortnolongname},
7081     sort={\the\glsshorttok},
7082     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
7083     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
7084     text={\protect\glsabbrvfont{\the\glsshorttok}},
7085     plural={\protect\glsabbrvfont{\the\glsshortpltok}},
7086     description={\the\glslongtok}}%
7087   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7088     \glssetattribute{\the\glslabeltok}{regular}{true}}%
7089 }%
7090 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
7091 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7092 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
7093 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
7094 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7095 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short form followed by the long form in parentheses.

```
7096 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7097   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
7098   \ifglsxtrinsertinside##2\fi}%
7099   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7100   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7101 }%
7102 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7103   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
7104   \ifglsxtrinsertinside##2\fi}%
7105   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7106   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7107 }%
7108 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7109   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
7110   \ifglsxtrinsertinside##2\fi}%
7111   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7112   \glsxtrparen{\glsfirstlongfont{\Glsaccesslong{##1}}}%
7113 }%
7114 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7115   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
7116   \ifglsxtrinsertinside##2\fi}%

```

```

7117     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7118     \glsxtrparen{\glsfirstlongfont{\Glsaccesslongpl{##1}}}%
7119 }%

```

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.

```

7120 \renewcommand*{\glsxtrfullformat}[2]{%
7121   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7122   \ifglsxtrinsertinside\else##2\fi
7123 }%
7124 \renewcommand*{\glsxtrfullplformat}[2]{%
7125   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7126   \ifglsxtrinsertinside\else##2\fi
7127 }%
7128 \renewcommand*{\Glsxtrfullformat}[2]{%
7129   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7130   \ifglsxtrinsertinside\else##2\fi
7131 }%
7132 \renewcommand*{\Glsxtrfullplformat}[2]{%
7133   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7134   \ifglsxtrinsertinside\else##2\fi
7135 }%
7136 }

```

Set this as the default style for acronyms:

```
7137 \setabbreviationstyle[acronym]{short}
```

short-nolong

```
7138 \letabbreviationstyle{short-nolong}{short}
```

rt-nolong-noreg Like `short-nolong` but doesn't set the `regular` attribute.

```

7139 \newabbreviationstyle{short-nolong-noreg}%
7140 {%
7141   \GlsXtrUseAbbrStyleSetup{short-nolong}%

```

Unset the `regular` attribute if it has been set.

```

7142 \renewcommand*{\GlsXtrPostNewAbbreviation}%
7143   \glshasattribute{\the\glslabeltok}{regular}%
7144 {%
7145   \glssetattribute{\the\glslabeltok}{regular}{false}%
7146 }%
7147 {}%
7148 }%
7149 }%
7150 {}%
7151 \GlsXtrUseAbbrStyleFmts{short-nolong}%
7152 }

```

trshortdescname

```

7153 \newcommand*{\glsxtrshortdescname}{%
7154   \protect\glsabbrvfont{\the\glsshorttok}%
7155 }

```

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.

```

7156 \newabbreviationstyle{short-desc}%
7157 {%
7158   \renewcommand*{\CustomAbbreviationFields}{%
7159     name={\glsxtrshortdescname},
7160     sort={\the\glsshorttok},
7161     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
7162     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
7163     text={\protect\glsabbrvfont{\the\glsshorttok}},
7164     plural={\protect\glsabbrvfont{\the\glsshortpltok}},
7165     description={\the\glslongtok}}%
7166   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7167     \glssetattribute{\the\glslabeltok}{regular}{true}}%
7168 }%
7169 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

7170 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7171 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{\##1}}%
7172 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{\##1}}%
7173 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\##1}}%
7174 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{\##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

7175 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7176   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
7177   \ifglsxtrinsertinside\else{\##2}\fi\glsxtrfullsep{\##1}%
7178   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{\##1}}}%
7179 }%
7180 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7181   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
7182   \ifglsxtrinsertinside\else{\##2}\fi\glsxtrfullsep{\##1}%
7183   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{\##1}}}%
7184 }%
7185 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7186   \glsfirstabbrvfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
7187   \ifglsxtrinsertinside\else{\##2}\fi\glsxtrfullsep{\##1}%
7188   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{\##1}}}%
7189 }%
7190 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7191   \glsfirstabbrvfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
7192   \ifglsxtrinsertinside\else{\##2}\fi\glsxtrfullsep{\##1}%
7193   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{\##1}}}%
7194 }%

```

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.

```
7195 \renewcommand*{\glsxtrfullformat}[2]{%
7196   \glsfirstabbrvfont{\glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
7197   \ifglsxtrinsertinside\else##2\fi
7198 }%
7199 \renewcommand*{\glsxtrfullplformat}[2]{%
7200   \glsfirstabbrvfont{\glsaccessshortpl{\#1}\ifglsxtrinsertinside##2\fi}%
7201   \ifglsxtrinsertinside\else##2\fi
7202 }%
7203 \renewcommand*{\Glsxtrfullformat}[2]{%
7204   \glsfirstabbrvfont{\glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
7205   \ifglsxtrinsertinside\else##2\fi
7206 }%
7207 \renewcommand*{\Glsxtrfullplformat}[2]{%
7208   \glsfirstabbrvfont{\glsaccessshortpl{\#1}\ifglsxtrinsertinside##2\fi}%
7209   \ifglsxtrinsertinside\else##2\fi
7210 }%
7211 }
```

short-nolong-desc

```
7212 \letabbreviationstyle{short-nolong-desc}{short-desc}
```

long-desc-noreg Like short-nolong-desc but doesn't set the regular attribute.

```
7213 \newabbreviationstyle{short-nolong-desc-noreg}%
7214 {%
7215   \GlsXtrUseAbbrStyleSetup{short-nolong-desc}%

```

Unset the regular attribute if it has been set.

```
7216 \renewcommand*{\GlsXtrPostNewAbbreviation}%
7217   \glshasattribute{\the\glslabeltok}{regular}%
7218 {%
7219   \glssetattribute{\the\glslabeltok}{regular}{false}%
7220 }%
7221 {%
7222 }%
7223 }%
7224 {%
7225   \GlsXtrUseAbbrStyleFmts{short-nolong-desc}%
7226 }
```

nolong-short Similar to short-nolong but the full form shows the long form followed by the short form in parentheses.

```
7227 \newabbreviationstyle{nolong-short}%
7228 {%
7229   \GlsXtrUseAbbrStyleSetup{short-nolong}%
7230 }%
7231 {%
7232   \GlsXtrUseAbbrStyleFmts{short-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```
7233 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7234   \protect\glsfirstlongfont{\glsaccesslong{##1}%
7235     \ifglsxtrinsertinside##2\fi}%
7236   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7237   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
7238 }%
7239 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7240   \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
7241     \ifglsxtrinsertinside##2\fi}%
7242   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7243   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
7244 }%
7245 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7246   \protect\glsfirstlongfont{\glsaccesslong{##1}%
7247     \ifglsxtrinsertinside##2\fi}%
7248   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7249   \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshort{##1}}}}%
7250 }%
7251 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7252   \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
7253     \ifglsxtrinsertinside##2\fi}%
7254   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7255   \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshortpl{##1}}}}%
7256 }%
7257 }
```

ong-short-noreg Like `nolong-short` but doesn't set the `regular` attribute.

```
7258 \newabbreviationstyle{nolong-short-noreg}{%
7259 }%
7260 \GlsXtrUseAbbrStyleSetup{nolong-short}
```

Unset the `regular` attribute if it has been set.

```
7261 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7262   \glshasattribute{\the\glslabeltok}{regular}%
7263 {%
7264   \glssetattribute{\the\glslabeltok}{regular}{false}%
7265 }%
7266 {}%
7267 }%
7268 }%
7269 {}%
7270 \GlsXtrUseAbbrStyleFmts{nolong-short}%
7271 }
```

noshortdescname

```
7272 \newcommand*{\glsxtrlongnoshortdescname}{%
7273   \protect\glslongfont{\the\glslongtok}%
7274 }
```

`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.

```

7275 \newabbreviationstyle{long-desc}%
7276 {%
7277   \renewcommand*{\CustomAbbreviationFields}{%
7278     name={\glsxtrlongnoshortdescname},
7279     sort={\the\glslongtok},
7280     first={\protect\glsfirstlongfont{\the\glslongtok}},
7281     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
7282     text={\glslongfont{\the\glslongtok}},
7283     plural={\glslongfont{\the\glslongpltok}}%
7284   }%
7285   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7286     \glssetattribute{\the\glslabeltok}{regular}{true}}%
7287 }%
7288 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

7289 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7290 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{\##1}}%
7291 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{\##1}}%
7292 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\##1}}%
7293 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{\##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

7294 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
7295   \glslongfont{\glsaccesslong{\##1}\ifglsxtrinsertinside ##2\fi}%
7296   \ifglsxtrinsertinside \else##2\fi
7297 }%
7298 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
7299   \glslongfont{\glsaccesslongpl{\##1}\ifglsxtrinsertinside ##2\fi}%
7300   \ifglsxtrinsertinside \else##2\fi
7301 }%
7302 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
7303   \glslongfont{\Glsaccesslong{\##1}\ifglsxtrinsertinside ##2\fi}%
7304   \ifglsxtrinsertinside \else##2\fi
7305 }%
7306 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
7307   \glslongfont{\Glsaccesslongpl{\##1}\ifglsxtrinsertinside ##2\fi}%
7308   \ifglsxtrinsertinside \else##2\fi
7309 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

7310 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7311   \glsfirstlongfont{\glsaccesslong{\##1}\ifglsxtrinsertinside##2\fi}%
7312   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\##1}%
7313   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{\##1}}}%
7314 }%
7315 \renewcommand*{\glsxtrinlinefullplformat}[2]{%

```

```

7316   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7317   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7318   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
7319 }%
7320 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7321   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7322   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7323   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
7324 }%
7325 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7326   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7327   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7328   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
7329 }%

```

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.

```

7330 \renewcommand*{\glsxtrfullformat}[2]{%
7331   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7332   \ifglsxtrinsertinside\else##2\fi
7333 }%
7334 \renewcommand*{\glsxtrfullplformat}[2]{%
7335   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7336   \ifglsxtrinsertinside\else##2\fi
7337 }%
7338 \renewcommand*{\Glsxtrfullformat}[2]{%
7339   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7340   \ifglsxtrinsertinside\else##2\fi
7341 }%
7342 \renewcommand*{\Glsxtrfullplformat}[2]{%
7343   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7344   \ifglsxtrinsertinside\else##2\fi
7345 }%
7346 }

```

`ng-noshort-desc` Provide a synonym that matches similar styles.

```
7347 \letabbreviationstyle{long-noshort-desc}{long-desc}
```

`hort-desc-noreg` Like `long-noshort-desc` but doesn't set the regular attribute.

```

7348 \newabbreviationstyle{long-noshort-desc-noreg}%
7349 {%
7350   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%

```

Unset the regular attribute if it has been set.

```

7351 \renewcommand*{\GlsXtrPostNewAbbreviation}%
7352   \glshasattribute{\the\glslabeltok}{regular}%
7353 {%
7354   \glssetattribute{\the\glslabeltok}{regular}{false}%
7355 }%
7356 {}%

```

```

7357  }%
7358 }%
7359 {%
7360   \GlsXtrUseAbbrStyleFmts{long-noshort-desc}%
7361 }

```

longnoshortname

```

7362 \newcommand*\glsxtrlongnoshortname}{%
7363   \protect\glsabbrvfont{\the\glsshorttok}%
7364 }

```

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.

```

7365 \newabbreviationstyle{long}%
7366 {%
7367   \renewcommand*\CustomAbbreviationFields}{%
7368     name={\glsxtrlongnoshortname},
7369     sort={\the\glsshorttok},
7370     first={\protect\glsfirstlongfont{\the\glslongtok}},
7371     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
7372     text={\glslongfont{\the\glslongtok}},
7373     plural={\glslongfont{\the\glslongpltok}},%
7374     description={\the\glslongtok}%
7375 }%
7376 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7377   \glssetattribute{\the\glslabeltok}{regular}{true}}%
7378 }%
7379 {%
7380   \GlsXtrUseAbbrStyleFmts{long-desc}%
7381 }

```

long-noshort Provide a synonym that matches similar styles.

```
7382 \letabbreviationstyle{long-noshort}{long}
```

g-noshort-noreg Like **long-noshort** but doesn't set the `regular` attribute.

```

7383 \newabbreviationstyle{long-noshort-noreg}%
7384 {%
7385   \GlsXtrUseAbbrStyleSetup{long-noshort}%
    Unset the regular attribute if it has been set.
7386   \renewcommand*\GlsXtrPostNewAbbreviation}{%
7387     \glshasattribute{\the\glslabeltok}{regular}}%
7388     {%
7389       \glssetattribute{\the\glslabeltok}{regular}{false}}%
7390     }%
7391     {}%
7392   }%
7393 }

```

```

7394 {%
7395   \GlsXtrUseAbbrStyleFmts{long-noshort}%
7396 }

```

1.7.3 Predefined Styles (Small Capitals)

These styles use `\textsc` for the short form.

`\glsxtrscfont` Maintained for backward-compatibility.

```
7397 \newcommand*{\glsxtrscfont}[1]{\textsc{#1}}
```

`\glsabbrvscfont` Added for consistent naming.

```
7398 \newcommand*{\glsabbrvscfont}{\glsxtrscfont}
```

`\sxtrfirstscfont` Maintained for backward-compatibility.

```
7399 \newcommand*{\sxtrfirstscfont}[1]{\glsabbrvscfont{#1}}
```

`\irstabbrvscfont` Added for consistent naming.

```
7400 \newcommand*{\irstabbrvscfont}{\sxtrfirstscfont}
```

and for the default short form suffix:

`\glsxtrscsuffix`

```
7401 \newcommand*{\glsxtrscsuffix}{\glstextup{\glsxtrabbrypluralsuffix}}
```

`long-short-sc`

```

7402 \newabbreviationstyle{long-short-sc}{%
7403 {%
7404   \renewcommand*{\CustomAbbreviationFields}{%
7405     name={\glsxtrlongshortname},%
7406     sort={\the\glsshorttok},%
7407     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%%
7408     \protect\glsxtrfullsep{\the\glslabeltok}%
7409     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
7410     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%%
7411     \protect\glsxtrfullsep{\the\glslabeltok}%
7412     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
7413     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%
7414     description={\the\glslongtok}}%
7415   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7416     \glshasattribute{\the\glslabeltok}{regular}}%
7417   {%
7418     \glssetattribute{\the\glslabeltok}{regular}{false}}%
7419   }%
7420   {}%
7421 }%
7422 }%
7423 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```
7424 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7425 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7426 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
```

Use the default long fonts.

```
7427 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7428 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
7429 \renewcommand*{\glsxtrfullformat}[2]{%
7430   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7431   \ifglsxtrinsertinside\else##2\fi
7432   \glsxtrfullsep{##1}%
7433   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7434 }%
7435 \renewcommand*{\glsxtrfullplformat}[2]{%
7436   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7437   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7438   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7439 }%
7440 \renewcommand*{\Glsxtrfullformat}[2]{%
7441   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7442   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7443   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7444 }%
7445 \renewcommand*{\Glsxtrfullplformat}[2]{%
7446   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7447   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7448   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7449 }%
7450 }
```

g-short-sc-desc

```
7451 \newabbreviationstyle{long-short-sc-desc}%
7452 {%
7453   \renewcommand*{\CustomAbbreviationFields}{%
7454     name={\glsxtrlongshortdescname},%
7455     sort={\glsxtrlongshortdescsort},%
7456     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
7457       \protect\glsxtrfullsep{\the\glslabeltok}%
7458       \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
7459     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
7460       \protect\glsxtrfullsep{\the\glslabeltok}%
7461       \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
7462     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
7463     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
7464   }%
```

Unset the regular attribute if it has been set.

```

7465 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7466   \glshasattribute{\the\glslabeltok}{regular}{%
7467   {%
7468     \glssetattribute{\the\glslabeltok}{regular}{false}{%
7469   }%
7470   {}{%
7471 }%
7472 }%
7473 {%

```

As long-short-sc style:

```

7474 \GlsXtrUseAbbrStyleFmts{long-short-sc}{%
7475 }%

```

Now the short (long) version

```

7476 \newabbreviationstyle{short-sc-long}{%
7477 {%
7478   \renewcommand*\CustomAbbreviationFields}{%
7479     name={\glsxtrshortlongname},%
7480     sort={\the\glsshorttok},%
7481     description={\the\glslongtok},%
7482     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}}{%
7483       \protect\glsxtrfullsep{\the\glslabeltok}}{%
7484         \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
7485     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}}{%
7486       \protect\glsxtrfullsep{\the\glslabeltok}}{%
7487         \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
7488     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}}%

```

Unset the regular attribute if it has been set.

```

7489 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7490   \glshasattribute{\the\glslabeltok}{regular}{%
7491   {%
7492     \glssetattribute{\the\glslabeltok}{regular}{false}{%
7493   }%
7494   {}{%
7495 }%
7496 }%
7497 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7498 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7499 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\##1}}{%
7500 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\##1}}{%
7501 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\##1}}{%
7502 \renewcommand*\glslongfont}[1]{\glslongdefaultfont{\##1}}{%

```

The first use full form and the inline full form are the same for this style.

```

7503 \renewcommand*\glsxtrfullformat}[2]{%
7504   \glsfirstabbrvscfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}{%
7505   \ifglsxtrinsertinside\else##2\fi

```

```

7506   \glsxtrfullsep{##1}%
7507   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7508 }%
7509 \renewcommand*{\glsxtrfullplformat}[2]{%
7510   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7511   \ifglsxtrinsertinside\else##2\fi
7512   \glsxtrfullsep{##1}%
7513   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
7514 }%
7515 \renewcommand*{\Glsxtrfullformat}[2]{%
7516   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7517   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7518   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7519 }%
7520 \renewcommand*{\Glsxtrfullplformat}[2]{%
7521   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7522   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7523   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
7524 }%
7525 }

```

As before but user provides description

```

7526 \newabbreviationstyle{short-sc-long-desc}{%
7527 }%
7528 \renewcommand*{\CustomAbbreviationFields}{%
7529   name={\glsxtrshortlongdescname},
7530   sort={\glsxtrshortlongdescsort},
7531   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
7532     \protect\glsxtrfullsep{\the\glslabeltok}%
7533     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
7534   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
7535     \protect\glsxtrfullsep{\the\glslabeltok}%
7536     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
7537   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
7538   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
7539 }%

```

Unset the regular attribute if it has been set.

```

7540 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7541   \glshasattribute{\the\glslabeltok}{regular}%
7542   {%
7543     \glssetattribute{\the\glslabeltok}{regular}{false}%
7544   }%
7545   {}%
7546 }%
7547 }%
7548 }%

```

As short-sc-long style:

```

7549 \GlsXtrUseAbbrStyleFmts{short-sc-long}%

```

```

7550 }

short-sc

7551 \newabbreviationstyle{short-sc}{%
7552 {%
7553   \renewcommand*{\CustomAbbreviationFields}{%
7554     name={\glsxtrshortnolongname},
7555     sort={\the\glsshorttok},
7556     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
7557     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
7558     text={\protect\glsabbrvscfont{\the\glsshorttok}},
7559     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},
7560     description={\the\glslongtok}}%
7561   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7562     \glssetattribute{\the\glslabeltok}{regular}{true}}%
7563 }%
7564 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7565 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7566 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\##1}}%
7567 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\##1}}%
7568 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\##1}}%
7569 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{\##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

7570 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7571   \protect\glsfirstabbrvscfont{\glsaccessshort{\##1}}%
7572   \ifglsxtrinsertinside{\##2\fi}%
7573   \ifglsxtrinsertinside{\else{\##2\fi}\glsxtrfullsep{\##1}}%
7574   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}%
7575 }%
7576 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7577   \protect\glsfirstabbrvscfont{\glsaccessshortpl{\##1}}%
7578   \ifglsxtrinsertinside{\##2\fi}%
7579   \ifglsxtrinsertinside{\else{\##2\fi}\glsxtrfullsep{\##1}}%
7580   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{\##1}}}%
7581 }%
7582 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7583   \protect\glsfirstabbrvscfont{\Glsaccessshort{\##1}}%
7584   \ifglsxtrinsertinside{\##2\fi}%
7585   \ifglsxtrinsertinside{\else{\##2\fi}\glsxtrfullsep{\##1}}%
7586   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}%
7587 }%
7588 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7589   \protect\glsfirstabbrvscfont{\Glsaccessshortpl{\##1}}%
7590   \ifglsxtrinsertinside{\##2\fi}%
7591   \ifglsxtrinsertinside{\else{\##2\fi}\glsxtrfullsep{\##1}}%
7592   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{\##1}}}%
7593 }%

```

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.

```
7594 \renewcommand*{\glsxtrfullformat}[2]{%
7595   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7596   \ifglsxtrinsertinside\else##2\fi
7597 }%
7598 \renewcommand*{\glsxtrfullplformat}[2]{%
7599   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7600   \ifglsxtrinsertinside\else##2\fi
7601 }%
7602 \renewcommand*{\Glsxtrfullformat}[2]{%
7603   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7604   \ifglsxtrinsertinside\else##2\fi
7605 }%
7606 \renewcommand*{\Glsxtrfullplformat}[2]{%
7607   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7608   \ifglsxtrinsertinside\else##2\fi
7609 }%
7610 }
```

short-sc-nolong

```
7611 \letabbreviationstyle{short-sc-nolong}{short-sc}
```

short-sc-desc

```
7612 \newabbreviationstyle{short-sc-desc}%
7613 {%
7614   \renewcommand*{\CustomAbbreviationFields}{%
7615     name={\glsxtrshortdescname},
7616     sort={\the\glsshorttok},
7617     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
7618     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
7619     text={\protect\glsabbrvscfont{\the\glsshorttok}},
7620     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},
7621     description={\the\glslongtok}}%
7622   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7623     \glssetattribute{\the\glslabeltok}{regular}{true}}%
7624 }%
7625 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
7626 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrcsuffix}%
7627 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7628 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
7629 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7630 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short format followed by the long form in parentheses.

```
7631 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7632   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7633   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
```

```

7634     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}\%
7635   }%
7636   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7637     \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}\%
7638     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}\%
7639     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}\%
7640   }%
7641   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7642     \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}\%
7643     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}\%
7644     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}\%
7645   }%
7646   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7647     \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}\%
7648     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}\%
7649     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}\%
7650   }%

```

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.

```

7651   \renewcommand*{\glsxtrfullformat}[2]{%
7652     \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}\%
7653     \ifglsxtrinsertinside\else##2\fi
7654   }%
7655   \renewcommand*{\glsxtrfullplformat}[2]{%
7656     \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}\%
7657     \ifglsxtrinsertinside\else##2\fi
7658   }%
7659   \renewcommand*{\Glsxtrfullformat}[2]{%
7660     \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}\%
7661     \ifglsxtrinsertinside\else##2\fi
7662   }%
7663   \renewcommand*{\Glsxtrfullplformat}[2]{%
7664     \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}\%
7665     \ifglsxtrinsertinside\else##2\fi
7666   }%
7667 }

```

-sc-nolong-desc

```
7668 \letabbreviationstyle{short-sc-nolong-desc}{short-sc-desc}
```

nolong-short-sc

```

7669 \newabbreviationstyle{nolong-short-sc}%
7670 {%
7671   \GlsXtrUseAbbrStyleSetup{short-sc-nolong}%
7672 }%
7673 {%
7674   \GlsXtrUseAbbrStyleFmts{short-sc-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

7675 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7676   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}}%
7677   \ifglsxtrinsertinside##2\fi}%
7678   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7679   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7680 }%
7681 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7682   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}%
7683   \ifglsxtrinsertinside##2\fi}%
7684   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7685   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7686 }%
7687 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7688   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}}%
7689   \ifglsxtrinsertinside##2\fi}%
7690   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7691   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7692 }%
7693 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7694   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
7695   \ifglsxtrinsertinside##2\fi}%
7696   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7697   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7698 }%
7699 }

```

`long-noshort-sc` The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsxtrshort`.

```

7700 \newabbreviationstyle{long-noshort-sc}{%
7701 {%
7702   \renewcommand*{\CustomAbbreviationFields}{%
7703     name={\glsxtrlongnoshortname},
7704     sort={\the\glsshorttok},
7705     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
7706     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
7707     text={\protect\glslongdefaultfont{\the\glslongtok}},
7708     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
7709     description={\the\glslongtok}%
7710 }%
7711   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7712     \glssetattribute{\the\glslabeltok}{regular}{true}%
7713 }%
7714 }

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7715 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7716 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7717 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
7718 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7719 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```
7720 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
7721   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7722   \ifglsxtrinsertinside \else##2\fi
7723 }%
7724 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
7725   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7726   \ifglsxtrinsertinside \else##2\fi
7727 }%
7728 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
7729   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7730   \ifglsxtrinsertinside \else##2\fi
7731 }%
7732 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
7733   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7734   \ifglsxtrinsertinside \else##2\fi
7735 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
7736 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7737   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7738   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7739   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7740 }%
7741 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7742   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7743   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7744   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7745 }%
7746 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7747   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7748   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7749   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7750 }%
7751 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7752   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7753   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7754   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7755 }%
```

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.

```
7756 \renewcommand*{\glsxtrfullformat}[2]{%
7757   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7758   \ifglsxtrinsertinside\else##2\fi
7759 }%
7760 \renewcommand*{\glsxtrfullplformat}[2]{%
7761   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7762   \ifglsxtrinsertinside\else##2\fi
7763 }%
```

```

7764 \renewcommand*\Glsxtrfullformat}[2]{%
7765   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7766   \ifglsxtrinsertinside\else##2\fi
7767 }%
7768 \renewcommand*\Glsxtrfullplformat}[2]{%
7769   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7770   \ifglsxtrinsertinside\else##2\fi
7771 }%
7772 }

```

long-sc Backward compatibility:

```
7773 @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`.

```

7774 \newabbreviationstyle{long-noshort-sc-desc}%
7775 {%
7776   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
7777 }%
7778 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7779 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7780 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7781 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
7782 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7783 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

7784 \renewcommand*\glsxtrsubsequentfmt}[2]{%
7785   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7786   \ifglsxtrinsertinside \else##2\fi
7787 }%
7788 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
7789   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7790   \ifglsxtrinsertinside \else##2\fi
7791 }%
7792 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
7793   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7794   \ifglsxtrinsertinside \else##2\fi
7795 }%
7796 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
7797   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7798   \ifglsxtrinsertinside \else##2\fi
7799 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

7800 \renewcommand*\glsxtrinlinefullformat}[2]{%
7801   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7802   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%

```

```

7803   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7804 }%
7805 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7806   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7807   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7808   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7809 }%
7810 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7811   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7812   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7813   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7814 }%
7815 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7816   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7817   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7818   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7819 }%

```

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.

```

7820 \renewcommand*{\glsxtrfullformat}[2]{%
7821   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7822   \ifglsxtrinsertinside\else##2\fi
7823 }%
7824 \renewcommand*{\glsxtrfullplformat}[2]{%
7825   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7826   \ifglsxtrinsertinside\else##2\fi
7827 }%
7828 \renewcommand*{\Glsxtrfullformat}[2]{%
7829   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7830   \ifglsxtrinsertinside\else##2\fi
7831 }%
7832 \renewcommand*{\Glsxtrfullplformat}[2]{%
7833   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7834   \ifglsxtrinsertinside\else##2\fi
7835 }%
7836 }

```

long-desc-sc Backward compatibility:

```
7837 \glsxtr@deprecated@abbrstyle{long-desc-sc}{long-noshort-sc-desc}
```

ort-sc-footnote

```

7838 \newabbreviationstyle{short-sc-footnote}%
7839 {%
7840 \renewcommand*{\CustomAbbreviationFields}{%
7841   name={\glsxtrfootnotename},
7842   sort={\the\glsshorttok},
7843   description={\the\glslongtok},%
7844   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}}%

```

```

7845 \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7846   {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
7847 firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
7848   \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7849   {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
7850 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.

```

7851 \renewcommand*\GlsXtrPostNewAbbreviation{%
7852   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
7853   \glshasattribute{\the\glslabeltok}{regular}%
7854   {%
7855     \glssetattribute{\the\glslabeltok}{regular}{false}%
7856   }%
7857   {}%
7858 }%
7859 }%
7860 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7861 \renewcommand*\abbrvpluralsuffix{\protect\glsxtrscsuffix}%
7862 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\##1}}%
7863 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\##1}}%
7864 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{\##1}}%
7865 \renewcommand*\glslongfont[1]{\glslongfootnotefont{\##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

7866 \renewcommand*\glsxtrfullformat}[2]{%
7867   \glsfirstabbrvscfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
7868   \ifglsxtrinsertinside\else##2\fi
7869   \protect\glsxtrabbrvfootnote{\##1}%
7870   {\glsfirstlongfootnotefont{\glsaccesslong{\##1}}}%
7871 }%
7872 \renewcommand*\glsxtrfullplformat}[2]{%
7873   \glsfirstabbrvscfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
7874   \ifglsxtrinsertinside\else##2\fi
7875   \protect\glsxtrabbrvfootnote{\##1}%
7876   {\glsfirstlongfootnotefont{\glsaccesslong{\##1}}}%
7877 }%
7878 \renewcommand*\Glsxtrfullformat}[2]{%
7879   \glsfirstabbrvscfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
7880   \ifglsxtrinsertinside\else##2\fi
7881   \protect\glsxtrabbrvfootnote{\##1}%
7882   {\glsfirstlongfootnotefont{\glsaccesslong{\##1}}}%
7883 }%
7884 \renewcommand*\Glsxtrfullplformat}[2]{%
7885   \glsfirstabbrvscfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
7886   \ifglsxtrinsertinside\else##2\fi
7887   \protect\glsxtrabbrvfootnote{\##1}%
7888   {\glsfirstlongfootnotefont{\glsaccesslong{\##1}}}%

```

```

7889 }%
The first use full form and the inline full form use the short (long) style.
7890 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7891   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7892   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7893   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7894 }%
7895 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7896   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7897   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7898   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7899 }%
7900 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7901   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7902   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7903   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7904 }%
7905 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7906   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7907   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7908   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7909 }%
7910 }

```

footnote-sc Backward compatibility:

```
7911 \glsxtr@deprecated@abbrstyle{footnote-sc}{short-sc-footnote}
```

sc-postfootnote

```

7912 \newabbreviationstyle{short-sc-postfootnote}%
7913 }%
7914 \renewcommand*{\CustomAbbreviationFields}{%
7915   name={\glsxtrfootnotename},
7916   sort={\the\glsshorttok},
7917   description={\the\glslongtok},%
7918   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
7919   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
7920   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.

```

7921 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7922   \csdef{glsxtrpostlink\glscategorylabel}{%
7923     \glsxtrifwasfirstuse
7924   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

7925   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
7926   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%

```

```

7927     }%
7928     {}%
7929   }%
7930   \glshasattribute{\the\glslabeltok}{regular}%
7931   {}%
7932     \glssetattribute{\the\glslabeltok}{regular}{false}%
7933   }%
7934   {}%
7935 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

7936 \renewcommand*{\glsxtrsetupfulldefs}{%
7937   \let\glsxtrifwasfirstuse\@secondoftwo
7938 }%
7939 }%
7940 }%

```

Use `smallcaps` and adjust the plural suffix to revert to upright.

```

7941 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7942 \renewcommand*{\glsabbrvfont[1]}{\glsabbrvscfont{##1}}%
7943 \renewcommand*{\glsfirstabbrvfont[1]}{\glsfirstabbrvscfont{##1}}%
7944 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
7945 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

7946 \renewcommand*{\glsxtrfullformat}[2]{%
7947   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7948   \ifglsxtrinsertinside\else##2\fi
7949 }%
7950 \renewcommand*{\glsxtrfullplformat}[2]{%
7951   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7952   \ifglsxtrinsertinside\else##2\fi
7953 }%
7954 \renewcommand*{\Glsxtrfullformat}[2]{%
7955   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7956   \ifglsxtrinsertinside\else##2\fi
7957 }%
7958 \renewcommand*{\Glsxtrfullplformat}[2]{%
7959   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7960   \ifglsxtrinsertinside\else##2\fi
7961 }%

```

The first use full form and the inline full form use the short (long) style.

```

7962 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7963   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7964   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7965   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7966 }%
7967 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7968   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

7969 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7970 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7971 }%
7972 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7973   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7974   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7975   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7976 }%
7977 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7978   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7979   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7980   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7981 }%
7982 }

```

`postfootnote-sc` Backward compatibility:

```
7983 \glsxtr@deprecated@abbrstyle{postfootnote-sc}{short-sc-postfootnote}
```

1.7.4 Predefined Styles (Fake Small Capitals)

These styles require the `relsize` package, which must be loaded by the user. These styles all use:

`\glsxtrsmfont` Maintained for backward compatibility.

```
7984 \newcommand*{\glsxtrsmfont}[1]{\textsmaller{#1}}
```

`\glsabbrvsmfont` Added for consistent naming.

```
7985 \newcommand*{\glsabbrvsmfont}{\glsxtrsmfont}
```

`sxtrfirstsmfont` Maintained for backward compatibility.

```
7986 \newcommand*{\sxtrfirstsmfont}[1]{\glsabbrvsmfont{#1}}
```

`irstabbrvsmfont` Added for consistent naming.

```
7987 \newcommand*{\sxtrfirstsmfont}{\sxtrfirstsmfont}
```

and for the default short form suffix:

`\glsxtrsmsuffix`

```
7988 \newcommand*{\glsxtrsmsuffix}{\glsxtrabbrvpluralsuffix}
```

`long-short-sm`

```

7989 \newabbreviationstyle{long-short-sm}%
7990 {%
7991   \renewcommand*{\CustomAbbreviationFields}{%
7992     name={\glsxtrlongshortname},%
7993     sort={\the\glsshorttok},%
7994     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
7995     \protect\glsxtrfullsep{\the\glslabeltok}%

```

```

7996     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
7997     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
7998       \protect\glsxtrfullsep{\the\glslabeltok}%
7999       \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
8000     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},%
8001     description={\the\glslongtok}}%
8002 \renewcommand*\GlsXtrPostNewAbbreviation{%
8003   \glshasattribute{\glslabeltok}{regular}%
8004   {%
8005     \glssetattribute{\glslabeltok}{regular}{false}%
8006   }%
8007   {}%
8008 }%
8009 }%
8010 {%
8011   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8012   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8013   \renewcommand*\abbrvpluralsuffix{\protect\glsxtrsmsuffix}%

```

Use the default long fonts.

```

8014   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8015   \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8016   \renewcommand*\glsxtrfullformat[2]{%
8017     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8018     \ifglsxtrinsertinside\else##2\fi
8019     \glsxtrfullsep{##1}%
8020     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8021   }%
8022   \renewcommand*\glsxtrfullplformat[2]{%
8023     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8024     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8025     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8026   }%
8027   \renewcommand*\Glsxtrfullformat[2]{%
8028     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8029     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8030     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8031   }%
8032   \renewcommand*\Glsxtrfullplformat[2]{%
8033     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8034     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8035     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8036   }%
8037 }

```

g-short-sm-desc

```

8038 \newabbreviationstyle{long-short-sm-desc}{%
8039 {%

```

```

8040 \renewcommand*{\CustomAbbreviationFields}{%
8041   name={\glsxtrlongshortdescname},
8042   sort={\glsxtrlongshortdescsort},%
8043   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
8044     \protect\glsxtrfullsep{\the\glslabeltok}%
8045     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
8046   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
8047     \protect\glsxtrfullsep{\the\glslabeltok}%
8048     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
8049   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8050   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}%
8051 }%

```

Unset the regular attribute if it has been set.

```

8052 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8053   \glshasattribute{\the\glslabeltok}{regular}%
8054 {%
8055   \glssetattribute{\the\glslabeltok}{regular}{false}%
8056 }%
8057 {}%
8058 }%
8059 }%
8060 }%

```

As long-short-sm style:

```

8061 \GlsXtrUseAbbrStyleFmts{long-short-sm}%
8062 }

```

short-sm-long Now the short (long) version

```

8063 \newabbreviationstyle{short-sm-long}%
8064 {%
8065 \renewcommand*{\CustomAbbreviationFields}{%
8066   name={\glsxtrshortlongname},
8067   sort={\the\glsshorttok},
8068   description={\the\glslongtok},%
8069   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
8070     \protect\glsxtrfullsep{\the\glslabeltok}%
8071     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8072   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
8073     \protect\glsxtrfullsep{\the\glslabeltok}%
8074     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8075   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}}%

```

Unset the regular attribute if it has been set.

```

8076 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8077   \glshasattribute{\the\glslabeltok}{regular}%
8078 {%
8079   \glssetattribute{\the\glslabeltok}{regular}{false}%
8080 }%
8081 {}%

```

```

8082  }%
8083 }%
8084 {%
8085 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8086 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8087 \renewcommand*\{\abrvpluralsuffix}{\protect\glsxtrsnsuffix}%
8088 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8089 \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8090 \renewcommand*\{\glsxtrfullformat}[2]{%
8091   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8092   \ifglsxtrinsertinside\else##2\fi
8093   \glsxtrfullsep{##1}%
8094   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8095 }%
8096 \renewcommand*\{\glsxtrfullplformat}[2]{%
8097   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8098   \ifglsxtrinsertinside\else##2\fi
8099   \glsxtrfullsep{##1}%
8100   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8101 }%
8102 \renewcommand*\{\Glsxtrfullformat}[2]{%
8103   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8104   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8105   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8106 }%
8107 \renewcommand*\{\Glsxtrfullplformat}[2]{%
8108   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8109   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8110   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8111 }%
8112 }

```

`rt-sm-long-desc` As before but user provides description

```

8113 \newabbreviationstyle{short-sm-long-desc}{%
8114 }%
8115 \renewcommand*\{\CustomAbbreviationFields}{%
8116   name={\glsxtrshortlongdescname},%
8117   sort={\glsxtrshortlongdescsort},%
8118   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
8119     \protect\glsxtrfullsep{\the\glslabeltok}%
8120     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8121   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
8122     \protect\glsxtrfullsep{\the\glslabeltok}%
8123     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8124   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8125   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%
8126 }%

```

Unset the regular attribute if it has been set.

```
8127 \renewcommand*\GlsXtrPostNewAbbreviation{%
8128   \glshasattribute{\the\glslabeltok}{regular}%
8129   {%
8130     \glssetattribute{\the\glslabeltok}{regular}{false}%
8131   }%
8132   {}%
8133 }%
8134 }%
8135 {%
```

As short-sm-long style:

```
8136 \GlsXtrUseAbbrStyleFmts{short-sm-long}%
8137 }
```

short-sm

```
8138 \newabbreviationstyle{short-sm}%
8139 {%
8140   \renewcommand*\CustomAbbreviationFields{%
8141     name={\glsxtrshortnolongname},
8142     sort={\the\glsshorttok},
8143     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
8144     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
8145     text={\protect\glsabbrvsmfont{\the\glsshorttok}},
8146     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
8147     description={\the\glslongtok}}%
8148   \renewcommand*\GlsXtrPostNewAbbreviation{%
8149     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8150 }%
8151 {%
8152   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8153   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8154   \renewcommand*\abbrvpluralsuffix{\protect\glsxtrsuffix}%
8155   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8156   \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short form followed by the long form in parentheses.

```
8157 \renewcommand*\glsxtrinlinefullformat}[2]{%
8158   \protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}%
8159   \ifglsxtrinsertinside##2\fi}%
8160   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8161   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8162 }%
8163 \renewcommand*\glsxtrinlinefullplformat}[2]{%
8164   \protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}%
8165   \ifglsxtrinsertinside##2\fi}%
8166   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8167   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8168 }%
```

```

8169 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8170   \protect\glsfirstabbrvsmfont{\Glsaccessshort{##1}}%
8171   \ifglsxtrinsertinside##2\fi}%
8172 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8173 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8174 }%
8175 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8176   \protect\glsfirstabbrvsmfont{\Glsaccessshortpl{##1}}%
8177   \ifglsxtrinsertinside##2\fi}%
8178 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8179 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8180 }%

```

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.

```

8181 \renewcommand*{\glsxtrfullformat}[2]{%
8182   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8183   \ifglsxtrinsertinside\else##2\fi
8184 }%
8185 \renewcommand*{\glsxtrfullplformat}[2]{%
8186   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8187   \ifglsxtrinsertinside\else##2\fi
8188 }%
8189 \renewcommand*{\Glsxtrfullformat}[2]{%
8190   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8191   \ifglsxtrinsertinside\else##2\fi
8192 }%
8193 \renewcommand*{\Glsxtrfullplformat}[2]{%
8194   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8195   \ifglsxtrinsertinside\else##2\fi
8196 }%
8197 }%

```

short-sm-nolong

```
8198 \letabbreviationstyle{short-sm-nolong}{short-sm}
```

short-sm-desc

```

8199 \newabbreviationstyle{short-sm-desc}{%
8200 }%
8201 \renewcommand*{\CustomAbbreviationFields}{%
8202   name={\glsxtrshortdescname},
8203   sort={\the\glsshorttok},
8204   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
8205   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
8206   text={\protect\glsabbrvsmfont{\the\glsshorttok}},
8207   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
8208   description={\the\glslongtok}}%
8209 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8210   \glssetattribute{\the\glslabeltok}{regular}{true}}%

```

```

8211 }%
8212 {%
8213   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8214   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8215   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsnsuffix}%
8216   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8217   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

8218   \renewcommand*{\glsxtrinlinefullformat}[2]{%
8219     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8220     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8221     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8222   }%
8223   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8224     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8225     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8226     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8227   }%
8228   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8229     \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8230     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8231     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8232   }%
8233   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8234     \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8235     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8236     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8237   }%

```

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.

```

8238   \renewcommand*{\glsxtrfullformat}[2]{%
8239     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8240     \ifglsxtrinsertinside\else##2\fi
8241   }%
8242   \renewcommand*{\glsxtrfullplformat}[2]{%
8243     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8244     \ifglsxtrinsertinside\else##2\fi
8245   }%
8246   \renewcommand*{\Glsxtrfullformat}[2]{%
8247     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8248     \ifglsxtrinsertinside\else##2\fi
8249   }%
8250   \renewcommand*{\Glsxtrfullplformat}[2]{%
8251     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8252     \ifglsxtrinsertinside\else##2\fi
8253   }%
8254 }

```

-sm-nolong-desc

```
8255 \letabbreviationstyle{short-sm-nolong-desc}{short-sm-desc}
```

nolong-short-sm

```
8256 \newabbreviationstyle{nolong-short-sm}%
8257 {%
8258   \GlsXtrUseAbbrStyleSetup{short-sm-nolong}%
8259 }%
8260 {%
8261   \GlsXtrUseAbbrStyleFmts{short-sm-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```
8262 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
8263   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
8264     \ifglsxtrinsertinside##2\fi}%
8265   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8266   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
8267 }%
8268 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
8269   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
8270     \ifglsxtrinsertinside##2\fi}%
8271   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8272   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8273 }%
8274 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
8275   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
8276     \ifglsxtrinsertinside##2\fi}%
8277   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8278   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
8279 }%
8280 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
8281   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
8282     \ifglsxtrinsertinside##2\fi}%
8283   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8284   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8285 }%
8286 }
```

long-noshort-sm The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```
8287 \newabbreviationstyle{long-noshort-sm}%
8288 {%
8289   \renewcommand*\{\CustomAbbreviationFields}{%
8290     name={\glsxtrlongnoshortname},
8291     sort={\the\glsshorttok},
8292     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
8293     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
8294     text={\protect\glslongdefaultfont{\the\glslongtok}},
8295     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
```

```

8296     description={\the\glslongtok}%
8297   }%
8298 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8299   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8300 }%
8301 {%
8302   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8303   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8304   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmssuffix}%
8305   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8306   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8307 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8308   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8309   \ifglsxtrinsertinside \else##2\fi
8310 }%
8311 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8312   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8313   \ifglsxtrinsertinside \else##2\fi
8314 }%
8315 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8316   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8317   \ifglsxtrinsertinside \else##2\fi
8318 }%
8319 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8320   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8321   \ifglsxtrinsertinside \else##2\fi
8322 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8323 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8324   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8325   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8326   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8327 }%
8328 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8329   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8330   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8331   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8332 }%
8333 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8334   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8335   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8336   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8337 }%
8338 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8339   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8340   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8341   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%

```

```
8342 }%
```

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.

```
8343 \renewcommand*{\glsxtrfullformat}[2]{%
8344   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8345   \ifglsxtrinsertinside\else##2\fi
8346 }%
8347 \renewcommand*{\glsxtrfullplformat}[2]{%
8348   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8349   \ifglsxtrinsertinside\else##2\fi
8350 }%
8351 \renewcommand*{\Glsxtrfullformat}[2]{%
8352   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8353   \ifglsxtrinsertinside\else##2\fi
8354 }%
8355 \renewcommand*{\Glsxtrfullplformat}[2]{%
8356   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8357   \ifglsxtrinsertinside\else##2\fi
8358 }%
8359 }
```

long-sm Backward compatibility:

```
8360 @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`.

```
8361 \newabbreviationstyle{long-noshort-sm-desc}%
8362 {%
8363   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
8364 }%
8365 {%
8366   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8367   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8368   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsmssuffix}%
8369   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8370   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
8371 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8372   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8373   \ifglsxtrinsertinside \else##2\fi
8374 }%
8375 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8376   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8377   \ifglsxtrinsertinside \else##2\fi
8378 }%
8379 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8380   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8381   \ifglsxtrinsertinside \else##2\fi
```

```

8382 }%
8383 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8384   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8385   \ifglsxtrinsertinside \else##2\fi
8386 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8387 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8388   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8389   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8390   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8391 }%
8392 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8393   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8394   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8395   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8396 }%
8397 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8398   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8399   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8400   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8401 }%
8402 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8403   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8404   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8405   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8406 }%

```

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.

```

8407 \renewcommand*{\glsxtrfullformat}[2]{%
8408   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8409   \ifglsxtrinsertinside\else##2\fi
8410 }%
8411 \renewcommand*{\glsxtrfullplformat}[2]{%
8412   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8413   \ifglsxtrinsertinside\else##2\fi
8414 }%
8415 \renewcommand*{\Glsxtrfullformat}[2]{%
8416   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8417   \ifglsxtrinsertinside\else##2\fi
8418 }%
8419 \renewcommand*{\Glsxtrfullplformat}[2]{%
8420   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8421   \ifglsxtrinsertinside\else##2\fi
8422 }%
8423 }

```

long-desc-sm Backward compatibility:

```
8424 @glsxtr@deprecated@abbrstyle{long-desc-sm}{long-noshort-sm-desc}
```

ort-sm-footnote

```
8425 \newabbreviationstyle{short-sm-footnote}%
8426 {%
8427   \renewcommand*{\CustomAbbreviationFields}{%
8428     name={\glsxtrfootnotename},
8429     sort={\the\glsshorttok},
8430     description={\the\glslongtok},%
8431     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
8432       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8433         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8434     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
8435       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8436         {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
8437     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.

```
8438 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8439   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8440   \glshasattribute{\the\glslabeltok}{regular}%
8441   {%
8442     \glssetattribute{\the\glslabeltok}{regular}{false}%
8443   }%
8444   {}%
8445 }%
8446 }%
8447 {%
8448   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8449   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8450   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrrsmssuffix}%
8451   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8452   \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```
8453 \renewcommand*{\glsxtrfullformat}[2]{%
8454   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8455   \ifglsxtrinsertinside\else##2\fi
8456   \protect\glsxtrabbrvfootnote{##1}%
8457     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8458 }%
8459 \renewcommand*{\glsxtrfullplformat}[2]{%
8460   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8461   \ifglsxtrinsertinside\else##2\fi
8462   \protect\glsxtrabbrvfootnote{##1}%
8463     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8464 }%
8465 \renewcommand*{\GlsXtrfullformat}[2]{%
8466   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8467   \ifglsxtrinsertinside\else##2\fi
8468   \protect\glsxtrabbrvfootnote{##1}%
8469 }
```

```

8469      {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8470  }%
8471  \renewcommand*{\Glsxtrfullplformat}[2]{%
8472      \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8473      \ifglsxtrinsertinside\else##2\fi
8474      \protect\glsxtrabrvfootnote{##1}%
8475      {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8476  }%

```

The first use full form and the inline full form use the short (long) style.

```

8477  \renewcommand*{\glsxtrinlinefullformat}[2]{%
8478      \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8479      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8480      \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8481  }%
8482  \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8483      \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8484      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8485      \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8486  }%
8487  \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8488      \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8489      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8490      \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8491  }%
8492  \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8493      \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8494      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8495      \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8496  }%
8497 }

```

footnote-sm Backward compatibility:

```
8498 \glsxtr@deprecated@abbrstyle{footnote-sm}{short-sm-footnote}
```

sm-postfootnote

```

8499 \newabbreviationstyle{short-sm-postfootnote}%
8500 {%
8501  \renewcommand*{\CustomAbbreviationFields}{%
8502      name={\glsxtrfootnotename},
8503      sort={\the\glsshorttok},
8504      description={\the\glslongtok},%
8505      first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
8506      firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
8507      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.

```

8508  \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8509      \csdef{glsxtrpostlink\glscategorylabel}{%

```

```

8510      \glsxtrifwasfirstuse
8511      {%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

8512      \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}%
8513          {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}%
8514      }%
8515      {}%
8516      }%
8517      \glshasattribute{\the\glslabeltok}{regular}%
8518      {%
8519          \glssetattribute{\the\glslabeltok}{regular}{false}%
8520      }%
8521      {}%
8522  }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

8523  \renewcommand*{\glsxtrsetupfulldefs}{%
8524      \let\glsxtrifwasfirstuse\@secondoftwo
8525  }%
8526 }%
8527 {}%
8528 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8529 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8530 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsmsuffix}%
8531 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8532 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

8533 \renewcommand*{\glsxtrfullformat}[2]{%
8534     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8535     \ifglsxtrinsertinside\else##2\fi
8536 }%
8537 \renewcommand*{\glsxtrfullplformat}[2]{%
8538     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8539     \ifglsxtrinsertinside\else##2\fi
8540 }%
8541 \renewcommand*{\Glsxtrfullformat}[2]{%
8542     \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8543     \ifglsxtrinsertinside\else##2\fi
8544 }%
8545 \renewcommand*{\Glsxtrfullplformat}[2]{%
8546     \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8547     \ifglsxtrinsertinside\else##2\fi
8548 }%

```

The first use full form and the inline full form use the short (long) style.

```

8549 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8550     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%

```

```

8551     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8552     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8553 }%
8554 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8555     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8556     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8557     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8558 }%
8559 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8560     \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8561     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8562     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8563 }%
8564 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8565     \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8566     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8567     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8568 }%
8569 }

```

`postfootnote-sm` Backward compatibility:

```
8570 @glsxtr@deprecated@abbrstyle{postfootnote-sm}{short-sm-postfootnote}
```

1.7.5 Predefined Styles (Emphasized)

These styles use `\emph` for the short form.

`\glsabbrvemfont`

```
8571 \newcommand*{\glsabbrvemfont}[1]{\emph{#1}}%
```

`\irstabbrvemfont`

```
8572 \newcommand*{\glsfirstabbrvemfont}[1]{\glsabbrvemfont{#1}}%
```

The default short form suffix:

`\glsxtremsuffix`

```
8573 \newcommand*{\glsxtremsuffix}{\glsxtrabbrvpluralsuffix}
```

`\firstlongemfont` Only used by the “long-em” styles.

```
8574 \newcommand*{\glsfirstlongemfont}[1]{\glslongemfont{#1}}%
```

`\glslongemfont` Only used by the “long-em” styles.

```
8575 \newcommand*{\glslongemfont}[1]{\emph{#1}}%
```

`\long-short-em` The long form is just set in the default long font.

```
8576 \newabbreviationstyle{long-short-em}%
8577 {%
8578   \renewcommand*{\CustomAbbreviationFields}{%
```

```

8579   name={\glsxtrlongshortname},
8580   sort={\the\glsshorttok},
8581   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
8582     \protect\glsxtrfullsep{\the\glslabeltok}%
8583     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
8584   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
8585     \protect\glsxtrfullsep{\the\glslabeltok}%
8586     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
8587   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
8588   description={\the\glslongtok}}%
8589 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8590   \glshasattribute{\the\glslabeltok}{regular}%
8591   {%
8592     \glssetattribute{\the\glslabeltok}{regular}{false}%
8593   }%
8594   {}%
8595 }%
8596 }%
8597 {%
8598 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
8599 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
8600 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%

```

Use the default long fonts.

```

8601 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8602 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8603 \renewcommand*{\glsxtrfullformat}[2]{%
8604   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8605   \ifglsxtrinsertinside\else##2\fi
8606   \glsxtrfullsep{##1}%
8607   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
8608 }%
8609 \renewcommand*{\glsxtrfullplformat}[2]{%
8610   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8611   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8612   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
8613 }%
8614 \renewcommand*{\Glsxtrfullformat}[2]{%
8615   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8616   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8617   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
8618 }%
8619 \renewcommand*{\Glsxtrfullplformat}[2]{%
8620   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8621   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8622   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
8623 }%
8624 }%

```

g-short-em-desc

```
8625 \newabbreviationstyle{long-short-em-desc}%
8626 {%
8627   \renewcommand*{\CustomAbbreviationFields}{%
8628     name={\glsxtrlongshortdescname},
8629     sort={\glsxtrlongshortdescsort},%
8630     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
8631       \protect\glsxtrfullsep{\the\glslabeltok}%
8632       \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
8633     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
8634       \protect\glsxtrfullsep{\the\glslabeltok}%
8635       \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
8636     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8637     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
8638   }%
```

Unset the regular attribute if it has been set.

```
8639 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8640   \glshasattribute{\the\glslabeltok}{regular}%
8641   {%
8642     \glssetattribute{\the\glslabeltok}{regular}{false}%
8643   }%
8644   {}%
8645 }%
8646 }%
8647 {%
```

As long-short-em style:

```
8648 \GlsXtrUseAbbrStyleFmts{long-short-em}%
8649 }
```

ong-em-short-em

```
8650 \newabbreviationstyle{long-em-short-em}%
8651 {%
```

\glslongemfont is used in the description since \glsdesc doesn't set the style.

```
8652 \renewcommand*{\CustomAbbreviationFields}{%
8653   name={\glsxtrlongshortname},
8654   sort={\the\glsshorttok},
8655   first={\protect\glsfirstlongemfont{\the\glslongtok}%
8656     \protect\glsxtrfullsep{\the\glslabeltok}%
8657     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
8658   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
8659     \protect\glsxtrfullsep{\the\glslabeltok}%
8660     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
8661   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
8662   description={\protect\glslongemfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
8663 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
```

```

8664 \glshasattribute{\the\glslabeltok}{regular}%
8665 {%
8666   \glssetattribute{\the\glslabeltok}{regular}{false}%
8667 }%
8668 {}%
8669 }%
8670 }%
8671 {%
8672 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8673 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
8674 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
8675 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
8676 \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8677 \renewcommand*{\glsxtrfullformat}[2]{%
8678   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8679   \ifglsxtrinsertinside\else##2\fi
8680   \glsxtrfullsep{##1}%
8681   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8682 }%
8683 \renewcommand*{\glsxtrfullplformat}[2]{%
8684   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8685   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8686   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8687 }%
8688 \renewcommand*{\Glsxtrfullformat}[2]{%
8689   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8690   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8691   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8692 }%
8693 \renewcommand*{\Glsxtrfullplformat}[2]{%
8694   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8695   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8696   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8697 }%
8698 }

```

m-short-em-desc

```

8699 \newabbreviationstyle{long-em-short-em-desc}%
8700 {%
8701   \renewcommand*{\CustomAbbreviationFields}{%
8702     name={\glsxtrlongshortdescname},%
8703     sort={\glsxtrlongshortdescsort},%
8704     first={\protect\glsfirstlongemfont{\the\glslongtok}}%
8705     \protect\glsxtrfullsep{\the\glslabeltok}%
8706     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
8707     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}}%
8708     \protect\glsxtrfullsep{\the\glslabeltok}%
8709     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%

```

```

8710     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8711     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
8712 }%

```

Unset the regular attribute if it has been set.

```

8713 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8714   \glshasattribute{\the\glslabeltok}{regular}%
8715   {%
8716     \glssetattribute{\the\glslabeltok}{regular}{false}%
8717   }%
8718   {}%
8719 }%
8720 }%
8721 {%
8722 \GlsXtrUseAbbrStyleFmts{long-em-short-em}%
8723 }

```

`short-em-long` Now the short (long) version

```

8724 \newabbreviationstyle{short-em-long}%
8725 {%
8726   \renewcommand*{\CustomAbbreviationFields}{%
8727     name={\glsxtrshortlongname},
8728     sort={\the\glsshorttok},
8729     description={\the\glslongtok},%
8730     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
8731       \protect\glsxtrfullsep{\the\glslabeltok}%
8732       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8733     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
8734       \protect\glsxtrfullsep{\the\glslabeltok}%
8735       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8736     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

8737 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8738   \glshasattribute{\the\glslabeltok}{regular}%
8739   {%
8740     \glssetattribute{\the\glslabeltok}{regular}{false}%
8741   }%
8742   {}%
8743 }%
8744 }%
8745 {%

```

Mostly as short-long style:

```

8746 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8747 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
8748 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{\##1}}%
8749 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\##1}}%
8750 \renewcommand*\glslongfont[1]{\glslongdefaultfont{\##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8751 \renewcommand*{\glsxtrfullformat}[2]{%
8752   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8753   \ifglsxtrinsertinside\else##2\fi
8754   \glsxtrfullsep{##1}%
8755   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8756 }%
8757 \renewcommand*{\glsxtrfullplformat}[2]{%
8758   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8759   \ifglsxtrinsertinside\else##2\fi
8760   \glsxtrfullsep{##1}%
8761   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8762 }%
8763 \renewcommand*{\Glsxtrfullformat}[2]{%
8764   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8765   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8766   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8767 }%
8768 \renewcommand*{\Glsxtrfullplformat}[2]{%
8769   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8770   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8771   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8772 }%
8773 }

```

`rt-em-long-desc` As before but user provides description

```

8774 \newabbreviationstyle{short-em-long-desc}{%
8775 }%
8776 \renewcommand*{\CustomAbbreviationFields}{%
8777   name={\glsxtrshortlongdescname},
8778   sort={\glsxtrshortlongdescsort},
8779   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
8780     \protect\glsxtrfullsep{\the\glslabeltok}%
8781     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8782   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
8783     \protect\glsxtrfullsep{\the\glslabeltok}%
8784     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8785   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8786   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
8787 }%

```

Unset the regular attribute if it has been set.

```

8788 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8789   \glshasattribute{\the\glslabeltok}{regular}%
8790   {%
8791     \glssetattribute{\the\glslabeltok}{regular}{false}%
8792   }%
8793   {}%
8794 }%
8795 }%
8796 }%

```

```

8797 \GlsXtrUseAbbrStyleFmts{short-em-long}%
8798 }

hort-em-long-em
8799 \newabbreviationstyle{short-em-long-em}%
8800 {%
  \glslongemfont is used in the description since \glsdesc doesn't set the style.
8801 \renewcommand*\CustomAbbreviationFields{%
8802   name={\glsxtrshortlongname},
8803   sort={\the\glsshorttok},
8804   description={\protect\glslongemfont{\the\glslongtok}},%
8805   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%
8806   \protect\glsxtrfullsep{\the\glslabeltok}%
8807   \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}},%
8808   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}%
8809   \protect\glsxtrfullsep{\the\glslabeltok}%
8810   \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}},%
8811   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
8812
  Unset the regular attribute if it has been set.
8813 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8814   \glshasattribute{\the\glslabeltok}{regular}%
8815   {%
8816     \glssetattribute{\the\glslabeltok}{regular}{false}%
8817   }%
8818 }%
8819 }%
8820 {%
8821 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8822 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
8823 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{\##1}}%
8824 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongemfont{\##1}}%
8825 \renewcommand*\glslongfont[1]{\glslongemfont{\##1}}%
8826
  The first use full form and the inline full form are the same for this style.
8827 \renewcommand*\glsxtrfullformat}[2]{%
8828   \glsfirstabbrvemfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
8829   \ifglsxtrinsertinside\else##2\fi
8830   \glsxtrfullsep{\##1}%
8831   \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{\##1}}}%
8832 }%
8833 \renewcommand*\glsxtrfullplformat}[2]{%
8834   \glsfirstabbrvemfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside##2\fi}%
8835   \ifglsxtrinsertinside\else##2\fi
8836   \glsxtrfullsep{\##1}%
8837   \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{\##1}}}%
8838 }%
8839 \renewcommand*\Glsxtrfullformat}[2]{%

```

```

8839 \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8840 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8841 \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}%
8842 }%
8843 \renewcommand*\Glsxtrfullplformat}[2]{%
8844 \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8845 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8846 \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}%
8847 }%
8848 }

```

em-long-em-desc

```

8849 \newabbreviationstyle{short-em-long-em-desc}%
8850 {%
8851 \renewcommand*\CustomAbbreviationFields}{%
8852 name={\glsxtrshortlongdescname},%
8853 sort={\glsxtrshortlongdescsort},%
8854 first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%
8855 \protect\glsxtrfullsep{\the\glslabeltok}%
8856 \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
8857 firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}%
8858 \protect\glsxtrfullsep{\the\glslabeltok}%
8859 \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
8860 text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8861 plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
8862 }%

```

Unset the regular attribute if it has been set.

```

8863 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8864 \glshasattribute{\the\glslabeltok}{regular}%
8865 {%
8866 \glssetattribute{\the\glslabeltok}{regular}{false}%
8867 }%
8868 {}%
8869 }%
8870 }%
8871 {%
8872 \GlsXtrUseAbbrStyleFmts{short-em-long-em}%
8873 }

```

short-em

```

8874 \newabbreviationstyle{short-em}%
8875 {%
8876 \renewcommand*\CustomAbbreviationFields}{%
8877 name={\glsxtrshortnolongname},%
8878 sort={\the\glsshorttok},%
8879 first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
8880 firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
8881 text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8882 plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%

```

```

8883     description={\the\glslongtok}}%
8884 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8885     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8886 }%
8887 {%
8888 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8889 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
8890 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
8891 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8892 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

8893 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8894     \protect\glsfirstabbrvemfont{\glsaccessshort{##1}}%
8895     \ifglsxtrinsertinside##2\fi}%
8896     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8897 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8898 }%
8899 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8900     \protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}%
8901     \ifglsxtrinsertinside##2\fi}%
8902     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8903 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8904 }%
8905 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8906     \protect\glsfirstabbrvemfont{\Glsaccessshort{##1}}%
8907     \ifglsxtrinsertinside##2\fi}%
8908     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8909 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8910 }%
8911 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8912     \protect\glsfirstabbrvemfont{\Glsaccessshortpl{##1}}%
8913     \ifglsxtrinsertinside##2\fi}%
8914     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8915 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8916 }%

```

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.

```

8917 \renewcommand*{\glsxtrfullformat}[2]{%
8918     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8919     \ifglsxtrinsertinside\else##2\fi
8920 }%
8921 \renewcommand*{\glsxtrfullplformat}[2]{%
8922     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8923     \ifglsxtrinsertinside\else##2\fi
8924 }%
8925 \renewcommand*{\Glsxtrfullformat}[2]{%
8926     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%

```

```

8927     \ifglsxtrinsertinside\else##2\fi
8928   }%
8929   \renewcommand*{\Glsxtrfullplformat}[2]{%
8930     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8931     \ifglsxtrinsertinside\else##2\fi
8932   }%
8933 }

short-em-nolong
8934 \letabbreviationstyle{short-em-nolong}{short-em}

short-em-desc
8935 \newabbreviationstyle{short-em-desc}{%
8936 }%
8937 \renewcommand*{\CustomAbbreviationFields}{%
8938   name={\glsxtrshortdescname},
8939   sort={\the\glsshorttok},
8940   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
8941   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
8942   text={\protect\glsabbrvemfont{\the\glsshorttok}},
8943   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},
8944   description={\the\glslongtok}}%
8945 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8946   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8947 }%
8948 }%
8949 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8950 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
8951 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
8952 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8953 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

8954 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8955   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8956   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8957   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8958 }%
8959 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8960   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8961   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8962   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8963 }%
8964 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8965   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8966   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8967   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8968 }%
8969 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8970   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%

```

```

8971     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8972     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8973 }%

```

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.

```

8974 \renewcommand*\glsxtrfullformat}[2]{%
8975   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8976   \ifglsxtrinsertinside\else##2\fi
8977 }%
8978 \renewcommand*\glsxtrfullplformat}[2]{%
8979   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8980   \ifglsxtrinsertinside\else##2\fi
8981 }%
8982 \renewcommand*\Glsxtrfullformat}[2]{%
8983   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8984   \ifglsxtrinsertinside\else##2\fi
8985 }%
8986 \renewcommand*\Glsxtrfullplformat}[2]{%
8987   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8988   \ifglsxtrinsertinside\else##2\fi
8989 }%
8990 }%

```

-em-nolong-desc

```
8991 \letabbreviationstyle{short-em-nolong-desc}{short-em-desc}
```

nolong-short-em

```

8992 \newabbreviationstyle{nolong-short-em}%
8993 {%
8994   \GlsXtrUseAbbrStyleSetup{short-em-nolong}%
8995 }%
8996 {%
8997   \GlsXtrUseAbbrStyleFmts{short-em-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

8998 \renewcommand*\glsxtrinlinefullformat}[2]{%
8999   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
9000     \ifglsxtrinsertinside##2\fi}%
9001   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9002   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9003 }%
9004 \renewcommand*\glsxtrinlinefullplformat}[2]{%
9005   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
9006     \ifglsxtrinsertinside##2\fi}%
9007   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9008   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9009 }%
9010 \renewcommand*\Glsxtrinlinefullformat}[2]{%
9011   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%

```

```

9012     \ifglsxtrinsertinside##2\fi}%
9013     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9014     \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9015 }%
9016 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
9017     \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
9018     \ifglsxtrinsertinside##2\fi}%
9019     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9020     \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
9021 }%
9022 }

```

long-noshort-em The short form is explicitly invoked through commands like \glsshort.

```

9023 \newabbreviationstyle{long-noshort-em}%
9024 {%
9025     \renewcommand*\CustomAbbreviationFields}{%
9026         name={\glsxtrlongnoshortname},
9027         sort={\the\glsshorttok},
9028         first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
9029         firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
9030         text={\protect\glslongdefaultfont{\the\glslongtok}},
9031         plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
9032         description={\the\glslongtok}%
9033 }%
9034 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9035     \glssetattribute{\the\glslabeltok}{regular}{true}}%
9036 }%
9037 {%
9038     \renewcommand*\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9039     \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9040     \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
9041     \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9042     \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9043 \renewcommand*\glsxtrsubsequentfmt}[2]{%
9044     \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9045     \ifglsxtrinsertinside \else##2\fi
9046 }%
9047 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
9048     \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9049     \ifglsxtrinsertinside \else##2\fi
9050 }%
9051 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
9052     \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9053     \ifglsxtrinsertinside \else##2\fi
9054 }%
9055 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
9056     \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9057     \ifglsxtrinsertinside \else##2\fi

```

```

9058 }%
The inline full form displays the long format followed by the short form in parentheses.
9059 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9060   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9061   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9062   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9063 }%
9064 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9065   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9066   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9067   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
9068 }%
9069 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9070   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9071   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9072   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9073 }%
9074 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9075   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9076   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9077   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
9078 }%

```

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.

```

9079 \renewcommand*{\glsxtrfullformat}[2]{%
9080   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9081   \ifglsxtrinsertinside\else##2\fi
9082 }%
9083 \renewcommand*{\glsxtrfullplformat}[2]{%
9084   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9085   \ifglsxtrinsertinside\else##2\fi
9086 }%
9087 \renewcommand*{\Glsxtrfullformat}[2]{%
9088   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9089   \ifglsxtrinsertinside\else##2\fi
9090 }%
9091 \renewcommand*{\Glsxtrfullplformat}[2]{%
9092   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9093   \ifglsxtrinsertinside\else##2\fi
9094 }%
9095 }

```

`long-em` Backward compatibility:

```
9096 \glsxtr@deprecated@abbrstyle{long-em}{long-noshort-em}
```

`g-em-noshort-em` The short form is explicitly invoked through commands like `\glsshort`.

```
9097 \newabbreviationstyle{long-em-noshort-em}%
9098 {%
```

```

9099 \renewcommand*{\CustomAbbreviationFields}{%
9100   name={\glsxtrlongnoshortname},
9101   sort={\the\glsshorttok},
9102   first={\protect\glsfirstlongemfont{\the\glslongtok}},
9103   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
9104   text={\protect\glslongemfont{\the\glslongtok}},
9105   plural={\protect\glslongemfont{\the\glslongpltok}},%
9106   description={\protect\glslongemfont{\the\glslongtok}}%
9107 }%
9108 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9109   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9110 }%
9111 {%
9112   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9113   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
9114   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9115   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
9116   \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9117 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9118   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9119   \ifglsxtrinsertinside \else##2\fi
9120 }%
9121 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9122   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9123   \ifglsxtrinsertinside \else##2\fi
9124 }%
9125 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9126   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9127   \ifglsxtrinsertinside \else##2\fi
9128 }%
9129 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9130   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9131   \ifglsxtrinsertinside \else##2\fi
9132 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9133 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9134   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9135   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9136   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9137 }%
9138 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9139   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9140   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9141   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9142 }%
9143 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9144   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}}%

```

```

9145     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9146     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9147 }%
9148 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9149     \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9150     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9151     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9152 }%

```

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.

```

9153 \renewcommand*{\glsxtrfullformat}[2]{%
9154     \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9155     \ifglsxtrinsertinside\else##2\fi
9156 }%
9157 \renewcommand*{\glsxtrfullplformat}[2]{%
9158     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9159     \ifglsxtrinsertinside\else##2\fi
9160 }%
9161 \renewcommand*{\Glsxtrfullformat}[2]{%
9162     \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9163     \ifglsxtrinsertinside\else##2\fi
9164 }%
9165 \renewcommand*{\Glsxtrfullplformat}[2]{%
9166     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9167     \ifglsxtrinsertinside\else##2\fi
9168 }%
9169 }

```

`oshort-em-noreg` Like long-em-noshort-em but doesn't set the regular attribute.

```

9170 \newabbreviationstyle{long-em-noshort-em-noreg}%
9171 {%
9172   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em}%

```

Unset the regular attribute if it has been set.

```

9173 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9174   \glshasattribute{\the\glslabeltok}{regular}%
9175   {%
9176     \glssetattribute{\the\glslabeltok}{regular}{false}%
9177   }%
9178   {}%
9179 }%
9180 }%
9181 {%
9182   \GlsXtrUseAbbrStyleFmts{long-em-noshort-em}%
9183 }

```

`noshort-em-desc` The emphasized font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

9184 \newabbreviationstyle{long-noshort-em-desc}%

```

```

9185 {%
9186   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
9187 }%
9188 {%
9189   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9190   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9191   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
9192   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9193   \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9194   \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9195     \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9196     \ifglsxtrinsertinside \else##2\fi
9197 }%
9198   \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9199     \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9200     \ifglsxtrinsertinside \else##2\fi
9201 }%
9202   \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9203     \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9204     \ifglsxtrinsertinside \else##2\fi
9205 }%
9206   \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9207     \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9208     \ifglsxtrinsertinside \else##2\fi
9209 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9210   \renewcommand*{\glsxtrinlinefullformat}[2]{%
9211     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9212     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9213     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9214 }%
9215   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9216     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9217     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9218     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9219 }%
9220   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9221     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9222     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9223     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9224 }%
9225   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9226     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9227     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9228     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9229 }%

```

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.

```
9230 \renewcommand*{\glsxtrfullformat}[2]{%
9231   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9232   \ifglsxtrinsertinside\else##2\fi
9233 }%
9234 \renewcommand*{\glsxtrfullplformat}[2]{%
9235   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9236   \ifglsxtrinsertinside\else##2\fi
9237 }%
9238 \renewcommand*{\Glsxtrfullformat}[2]{%
9239   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9240   \ifglsxtrinsertinside\else##2\fi
9241 }%
9242 \renewcommand*{\Glsxtrfullplformat}[2]{%
9243   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9244   \ifglsxtrinsertinside\else##2\fi
9245 }%
9246 }
```

long-desc-em Backward compatibility:

```
9247 \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.

```
9248 \newabbreviationstyle{long-em-noshort-em-desc}%
9249 {%
9250   \renewcommand*{\CustomAbbreviationFields}{%
9251     name={\glsxtrlongnoshortdescname},
9252     sort={\the\glslongtok},
9253     first={\protect\glsfirstlongemfont{\the\glslongtok}},
9254     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
9255     text={\glslongemfont{\the\glslongtok}},
9256     plural={\glslongemfont{\the\glslongpltok}}%
9257 }%
9258   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9259     \glssetattribute{\the\glslabeltok}{regular}{true}%
9260 }%
9261 {%
9262   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9263   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
9264   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9265   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
9266   \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
9267 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9268   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9269   \ifglsxtrinsertinside \else##2\fi
9270 }%
```

```

9271 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9272   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9273   \ifglsxtrinsertinside \else##2\fi
9274 }%
9275 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9276   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9277   \ifglsxtrinsertinside \else##2\fi
9278 }%
9279 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9280   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9281   \ifglsxtrinsertinside \else##2\fi
9282 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9283 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9284   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9285   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9286   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9287 }%
9288 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9289   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9290   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9291   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9292 }%
9293 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9294   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9295   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9296   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9297 }%
9298 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9299   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9300   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9301   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9302 }%

```

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.

```

9303 \renewcommand*{\glsxtrfullformat}[2]{%
9304   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9305   \ifglsxtrinsertinside\else##2\fi
9306 }%
9307 \renewcommand*{\glsxtrfullplformat}[2]{%
9308   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9309   \ifglsxtrinsertinside\else##2\fi
9310 }%
9311 \renewcommand*{\Glsxtrfullformat}[2]{%
9312   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9313   \ifglsxtrinsertinside\else##2\fi
9314 }%
9315 \renewcommand*{\Glsxtrfullplformat}[2]{%

```

```

9316     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9317     \ifglsxtrinsertinside\else##2\fi
9318 }%
9319 }

t-em-desc-noreg Like long-em-noshort-em-desc but doesn't set the regular attribute.
9320 \newabbreviationstyle{long-em-noshort-em-desc-noreg}{%
9321 {%
9322   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em-desc}%
9323 
9324   Unset the regular attribute if it has been set.
9325   \renewcommand*\GlsXtrPostNewAbbreviation{%
9326     \glshasattribute{\the\glslabeltok}{regular}%
9327     {%
9328       \glssetattribute{\the\glslabeltok}{regular}{false}%
9329     }%
9330   }%
9331   \GlsXtrUseAbbrStyleFmts{long-em-noshort-em-desc}%
9332 }%
9333 }

ort-em-footnote
9334 \newabbreviationstyle{short-em-footnote}{%
9335 {%
9336   \renewcommand*\CustomAbbreviationFields{%
9337     name={\glsxtrfootnotename},
9338     sort={\the\glsshorttok},
9339     description={\the\glslongtok},%
9340     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
9341       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9342         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9343     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
9344       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9345         {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9346     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
9347 
9348   Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute
9349   if it has been set.
9350   \renewcommand*\GlsXtrPostNewAbbreviation{%
9351     \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9352     \glshasattribute{\the\glslabeltok}{regular}%
9353     {%
9354       \glssetattribute{\the\glslabeltok}{regular}{false}%
9355     }%
9356   }%

```

```

9357 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9358 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
9359 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9360 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
9361 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

9362 \renewcommand*{\glsxtrfullformat}[2]{%
9363   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9364   \ifglsxtrinsertinside\else##2\fi
9365   \protect\glsxtrabbrvfootnote{##1}%
9366   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9367 }%
9368 \renewcommand*{\glsxtrfullplformat}[2]{%
9369   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9370   \ifglsxtrinsertinside\else##2\fi
9371   \protect\glsxtrabbrvfootnote{##1}%
9372   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9373 }%
9374 \renewcommand*{\Glsxtrfullformat}[2]{%
9375   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9376   \ifglsxtrinsertinside\else##2\fi
9377   \protect\glsxtrabbrvfootnote{##1}%
9378   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9379 }%
9380 \renewcommand*{\Glsxtrfullplformat}[2]{%
9381   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9382   \ifglsxtrinsertinside\else##2\fi
9383   \protect\glsxtrabbrvfootnote{##1}%
9384   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9385 }%

```

The first use full form and the inline full form use the short (long) style.

```

9386 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9387   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9388   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9389   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9390 }%
9391 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9392   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9393   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9394   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9395 }%
9396 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9397   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9398   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9399   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9400 }%
9401 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9402   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

9403     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9404     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9405 }%
9406 }

```

`footnote-em` Backward compatibility:

```
9407 @glsxtr@deprecated@abbrstyle{footnote-em}{short-em-footnote}
```

`em-postfootnote`

```

9408 \newabbreviationstyle{short-em-postfootnote}%
9409 {%
9410   \renewcommand*{\CustomAbbreviationFields}{%
9411     name={\glsxtrfootnotename},
9412     sort={\the\glsshorttok},
9413     description={\the\glslongtok},%
9414     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
9415     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
9416     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.

```

9417 \renewcommand*{\GlsXtrPostNewAbbreviation}%
9418   \csdef{glsxtrpostlink\glscategorylabel}{%
9419     \glsxtrifwasfirstuse
9420   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

9421   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9422     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
9423   }%
9424   {}%
9425 }%
9426 \glshasattribute{\the\glslabeltok}{regular}%
9427 {}%
9428   \glssetattribute{\the\glslabeltok}{regular}{false}%
9429 }%
9430 {}%
9431 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

9432 \renewcommand*{\glsxtrsetupfulldefs}%
9433   \let\glsxtrifwasfirstuse\@secondoftwo
9434 }%
9435 }%
9436 {}%
9437 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9438 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9439 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%

```

```

9440 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
9441 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

9442 \renewcommand*{\glsxtrfullformat}[2]{%
9443   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9444   \ifglsxtrinsertinside\else##2\fi
9445 }%
9446 \renewcommand*{\glsxtrfullplformat}[2]{%
9447   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9448   \ifglsxtrinsertinside\else##2\fi
9449 }%
9450 \renewcommand*{\Glsxtrfullformat}[2]{%
9451   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9452   \ifglsxtrinsertinside\else##2\fi
9453 }%
9454 \renewcommand*{\Glsxtrfullplformat}[2]{%
9455   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9456   \ifglsxtrinsertinside\else##2\fi
9457 }%

```

The first use full form and the inline full form use the short (long) style.

```

9458 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9459   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9460   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9461   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9462 }%
9463 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9464   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9465   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9466   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9467 }%
9468 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9469   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9470   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9471   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9472 }%
9473 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9474   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9475   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9476   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9477 }%
9478 }

```

`postfootnote-em` Backward compatibility:

```

9479 @glsxtr@deprecated@abbrstyle{postfootnote-em}{short-em-postfootnote}

```

1.7.6 Predefined Styles (User Parentheses Hook)

These styles allow the user to adjust the parenthetical forms. These styles all test for the existence of the field given by:

`glsxtruserfield` Default is the `useri` field.

```
9480 \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.

```
9481 \ifdef\glscurrentfieldvalue
9482 {
9483   \newcommand*{\glsxtruserparen}[2]{%
9484     \glsxtrfullsep{#2}%
9485     \glsxtrparen
9486     {#1\ifglsishasfield{\glsxtruserfield}{#2}{, \glscurrentfieldvalue}{}}
9487   }
9488 }
9489 {
9490   \newcommand*{\glsxtruserparen}[2]{%
9491     \glsxtrfullsep{#2}%
9492     \glsxtrparen
9493     {#1\ifglsishasfield{\glsxtruserfield}{#2}{, \@glo@thisvalue}{}}
9494   }
9495 }
```

Font used for short form:

`lsabbrvuserfont`

```
9496 \newcommand*{\glsabbrvuserfont}[1]{\glsabbrvdefaultfont{#1}}
```

Font used for short form on first use:

`stabbrvuserfont`

```
9497 \newcommand*{\glsfirstabbrvuserfont}[1]{\glsabbrvuserfont{#1}}
```

Font used for long form:

`glslonguserfont`

```
9498 \newcommand*{\glslonguserfont}[1]{\glslongdefaultfont{#1}}
```

Font used for long form on first use:

`rstlonguserfont`

```
9499 \newcommand*{\glsfirstlonguserfont}[1]{\glslonguserfont{#1}}
```

The default short form suffix:

`lsxtrusersuffix`

```
9500 \newcommand*{\glsxtrusersuffix}{\glsxtrabbrvpluralsuffix}
```

```

long-short-user
9501 \newabbreviationstyle{long-short-user}%
9502 {%
9503   \renewcommand*{\CustomAbbreviationFields}{%
9504     name={\glsxtrlongshortname},
9505     sort={\the\glsshorttok},
9506     first={\protect\glsfirstlonguserfont{\the\glslongtok}%
9507       \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
9508       {\the\glslabeltok}},%
9509     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}%
9510       \protect\glsxtruserparen
9511       {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%
9512     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
9513     description={\protect\glslonguserfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```

9514   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9515     \glshasattribute{\the\glslabeltok}{regular}%
9516     {%
9517       \glssetattribute{\the\glslabeltok}{regular}{false}%
9518     }%
9519     {}%
9520   }%
9521 }%
9522 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

9523   \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9524   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
9525   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
9526   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
9527   \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

9528   \renewcommand*{\glsxtrfullformat}[2]{%
9529     \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9530     \ifglsxtrinsertinside\else##2\fi
9531     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9532   }%
9533   \renewcommand*{\glsxtrfullplformat}[2]{%
9534     \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9535     \ifglsxtrinsertinside\else##2\fi
9536     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9537   }%
9538   \renewcommand*{\Glsxtrfullformat}[2]{%
9539     \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9540     \ifglsxtrinsertinside\else##2\fi
9541     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9542   }%

```

```

9543 \renewcommand*{\Glsxtrfullplformat}[2]{%
9544   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9545   \ifglsxtrinsertinside\else##2\fi
9546   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9547 }%
9548 }

```

-postshort-user Like long-short-user but defers the parenthetical matter to after the link.

```

9549 \newabbreviationstyle{long-postshort-user}{%
9550 {%
9551   \renewcommand*{\CustomAbbreviationFields}{%
9552     name={\glsxtrlongshortname},
9553     sort={\the\glsshorttok},
9554     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9555     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9556     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
9557     description={\protect\glslonguserfont{\the\glslongtok}}}%
9558   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9559     \csdef{glsxtrpostlink\glscategorylabel}{%
9560       \glsxtrifwasfirstuse
9561     }%
9562     \glsxtruserparen
9563       {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}{%
9564         \glslabel}%
9565     }%
9566     {}%
9567   }%
9568   \glshasattribute{\the\glslabeltok}{regular}%
9569   {}%
9570     \glssetattribute{\the\glslabeltok}{regular}{false}%
9571   }%
9572   {}%
9573 }%
9574 }%
9575 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

9576 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9577 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
9578 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
9579 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
9580 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

9581 \renewcommand*{\glsxtrfullformat}[2]{%
9582   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9583   \ifglsxtrinsertinside\else##2\fi
9584 }%
9585 \renewcommand*{\glsxtrfullplformat}[2]{%

```

```

9586   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9587   \ifglsxtrinsertinside\else##2\fi
9588 }%
9589 \renewcommand*\Glsxtrfullformat[2]{%
9590   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9591   \ifglsxtrinsertinside\else##2\fi
9592 }%
9593 \renewcommand*\Glsxtrfullplformat[2]{%
9594   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9595   \ifglsxtrinsertinside\else##2\fi
9596 }%

```

In-line format:

```

9597 \renewcommand*\glsxtrinlinefullformat[2]{%
9598   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9599   \ifglsxtrinsertinside\else##2\fi
9600   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9601 }%
9602 \renewcommand*\glsxtrinlinefullplformat[2]{%
9603   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9604   \ifglsxtrinsertinside\else##2\fi
9605   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9606 }%
9607 \renewcommand*\Glsxtrinlinefullformat[2]{%
9608   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9609   \ifglsxtrinsertinside\else##2\fi
9610   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9611 }%
9612 \renewcommand*\Glsxtrinlinefullplformat[2]{%
9613   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9614   \ifglsxtrinsertinside\else##2\fi
9615   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9616 }%
9617 }

```

ortuserdescname

```

9618 \newcommand*\glsxtrlongshortuserdescname{%
9619   \protect\glslonguserfont{\the\glslongtok}%
9620   \protect\glsxtruserparen
9621   {\protect\glsabbrvuserfont{\the\glsshorttok}}{\the\glslabeltok}%
9622 }

```

short-user-desc Like **long-postshort-user** but the user supplies the description.

```

9623 \newabbreviationstyle{long-postshort-user-desc}%
9624 {%
9625   \renewcommand*\CustomAbbreviationFields{%
9626     name={\glsxtrlongshortuserdescname},
9627     sort={\the\glslongtok},
9628     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9629     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%

```

```

9630   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9631   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
9632 }%
9633 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9634   \csdef{glsxtrpostlink\glscategorylabel}{%
9635     \glsxtrifwasfirstuse
9636     {%
9637       \glsxtruserparen
9638         {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}}%
9639         {\glslabel}%
9640     }%
9641     {}%
9642   }%
9643   \glshasattribute{\the\glslabeltok}{regular}%
9644   {%
9645     \glssetattribute{\the\glslabeltok}{regular}{false}%
9646   }%
9647   {}%
9648 }%
9649 }%
9650 {%
9651   \GlsXtrUseAbbrStyleFmts{long-postshort-user}%
9652 }

```

t-postlong-user Like short-long-user but defers the parenthetical matter to after the link.

```

9653 \newabbreviationstyle{short-postlong-user}%
9654 {%
9655   \renewcommand*{\CustomAbbreviationFields}{%
9656     name={\glsxtrshortlongname},
9657     sort={\the\glsshorttok},
9658     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9659     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9660     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
9661     description={\protect\glslonguserfont{\the\glslongtok}}}}%
9662 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9663   \csdef{glsxtrpostlink\glscategorylabel}{%
9664     \glsxtrifwasfirstuse
9665     {%
9666       \glsxtruserparen
9667         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}}%
9668         {\glslabel}%
9669     }%
9670     {}%
9671   }%
9672   \glshasattribute{\the\glslabeltok}{regular}%
9673   {%
9674     \glssetattribute{\the\glslabeltok}{regular}{false}%
9675   }%
9676   {}%

```

```

9677 }%
9678 }%
9679 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

9680 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9681 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
9682 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
9683 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
9684 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

9685 \renewcommand*{\glsxtrfullformat}[2]{%
9686   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9687   \ifglsxtrinsertinside\else##2\fi
9688 }%
9689 \renewcommand*{\glsxtrfullplformat}[2]{%
9690   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9691   \ifglsxtrinsertinside\else##2\fi
9692 }%
9693 \renewcommand*{\Glsxtrfullformat}[2]{%
9694   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9695   \ifglsxtrinsertinside\else##2\fi
9696 }%
9697 \renewcommand*{\Glsxtrfullplformat}[2]{%
9698   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9699   \ifglsxtrinsertinside\else##2\fi
9700 }%

```

In-line format:

```

9701 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9702   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9703   \ifglsxtrinsertinside\else##2\fi
9704   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
9705 }%
9706 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9707   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9708   \ifglsxtrinsertinside\else##2\fi
9709   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
9710 }%
9711 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9712   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9713   \ifglsxtrinsertinside\else##2\fi
9714   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
9715 }%
9716 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9717   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9718   \ifglsxtrinsertinside\else##2\fi
9719   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
9720 }%
9721 }

```

```
onguserdescname
```

```
9722 \newcommand*{\glsxtrshortlonguserdescname}{%
9723   \protect\glsabbrvuserfont{\the\glsshorttok}%
9724   \protect\glsxtruserparen
9725   {\protect\glslonguserfont{\the\glslongpltok}}%
9726   {\the\glslabeltok}%
9727 }
```

```
tlong-user-desc Like short-postlong-user but leaves the user to specify the description.
```

```
9728 \newabbreviationstyle{short-postlong-user-desc}{%
9729 {%
9730   \renewcommand*{\CustomAbbreviationFields}{%
9731     name={\glsxtrshortlonguserdescname},
9732     sort={\the\glsshorttok},
9733     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9734     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9735     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9736     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}}%
9737 }%
9738 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9739   \csdef{glsxtrpostlink}{\glscategorylabel}{%
9740     \glsxtrifwasfirstuse
9741     {%
9742       \glsxtruserparen
9743         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}}%
9744         {\glslabel}%
9745     }%
9746     {}%
9747   }%
9748   \glshasattribute{\the\glslabeltok}{regular}%
9749   {%
9750     \glssetattribute{\the\glslabeltok}{regular}{false}%
9751   }%
9752   {}%
9753 }%
9754 }%
9755 {%
9756   \GlsXtrUseAbbrStyleFmts{short-postlong-user}%
9757 }
```

```
short-user-desc
```

```
9758 \newabbreviationstyle{long-short-user-desc}{%
9759 {%
9760   \renewcommand*{\CustomAbbreviationFields}{%
9761     name={\glsxtrlongshortuserdescname},
9762     sort={\glsxtrlongshortdescsort},%
9763     first={\protect\glsfirstlonguserfont{\the\glslongtok}}%
```

```

9764     \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
9765     {\the\glslabeltok},%
9766     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}}%
9767     \protect\glsxtruserparen
9768     {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok},%
9769     text={\protect\glsabbrvfont{\the\glsshorttok}},%
9770     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
9771 }%

```

Unset the regular attribute if it has been set.

```

9772 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9773     \glshasattribute{\the\glslabeltok}{regular}%
9774     {%
9775         \glssetattribute{\the\glslabeltok}{regular}{false}%
9776     }%
9777     {}%
9778 }%
9779 }%
9780 {%
9781     \GlsXtrUseAbbrStyleFmts{long-short-user}%
9782 }

```

short-long-user

```

9783 \newabbreviationstyle{short-long-user}%
9784 {%

```

\glslonguserfont is used in the description since \glsdesc doesn't set the style.

```

9785 \renewcommand*{\CustomAbbreviationFields}{%
9786     name={\glsxtrshortlongname},
9787     sort={\the\glsshorttok},
9788     description={\protect\glslonguserfont{\the\glslongtok}},%
9789     first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
9790     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
9791     {\the\glslabeltok},%
9792     firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}%
9793     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
9794     {\the\glslabeltok},%
9795     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

9796 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9797     \glshasattribute{\the\glslabeltok}{regular}%
9798     {%
9799         \glssetattribute{\the\glslabeltok}{regular}{false}%
9800     }%
9801     {}%
9802 }%
9803 }%
9804 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```
9805 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9806 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
9807 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
9808 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
9809 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
9810 \renewcommand*{\glsxtrfullformat}[2]{%
9811   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9812   \ifglsxtrinsertinside\else##2\fi
9813   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
9814 }%
9815 \renewcommand*{\glsxtrfullplformat}[2]{%
9816   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9817   \ifglsxtrinsertinside\else##2\fi
9818   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
9819 }%
9820 \renewcommand*{\Glsxtrfullformat}[2]{%
9821   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9822   \ifglsxtrinsertinside\else##2\fi
9823   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
9824 }%
9825 \renewcommand*{\Glsxtrfullplformat}[2]{%
9826   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9827   \ifglsxtrinsertinside\else##2\fi
9828   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
9829 }%
9830 }
```

-long-user-desc

```
9831 \newabbreviationstyle{short-long-user-desc}%
9832 {%
9833   \renewcommand*{\CustomAbbreviationFields}{%
9834     name={\glsxtrshortlonguserdescname},
9835     sort={\glsxtrshortlongdescsort},%
9836     first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
9837       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
9838       {\the\glslabeltok}},%
9839     firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
9840       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
9841       {\the\glslabeltok}},%
9842     text={\protect\glsabbrvfont{\the\glsshorttok}},%
9843     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
9844   }%
```

Unset the regular attribute if it has been set.

```
9845 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9846   \glshasattribute{\the\glslabeltok}{regular}%
```

```

9847     {%
9848         \glssetattribute{\the\glslabeltok}{regular}{false}%
9849     }%
9850     {}%
9851   }%
9852 }%
9853 {%
9854     \GlsXtrUseAbbrStyleFmts{short-long-user}%
9855 }

```

1.7.7 Predefined Styles (Hyphen)

These styles are designed to work with the `markwords` attribute. They check if the inserted material (provided by the final optional argument of commands like `\gls`) starts with a hyphen. If it does, the insert is added to the parenthetical material. Note that commands like `\glsxtrlong` set `\glsinsert` to empty with the entire link-text stored in `\glscustomtext`.

`trifhyphenstart` Checks if the argument starts with a hyphen. The argument may be `\glsinsert` so check for that and expand.

```

9856 \newrobustcmd*{\glsxtrifhyphenstart}[3]{%
9857     \ifx\glsinsert\relax
9858         \expandafter\@glsxtrifhyphenstart\relax\relax
9859         \end\@glsxtrifhyphenstart{#2}{#3}%
9860     \else
9861         \@glsxtrifhyphenstart\relax\relax\end\@glsxtrifhyphenstart{#2}{#3}%
9862     \fi
9863 }

```

`trifhyphenstart`

```

9864 \def\@glsxtrifhyphenstart#1#2\end\@glsxtrifhyphenstart#3#4{%
9865     \ifx-#1\relax#3\else #4\fi
9866 }

```

`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.

```
9867 \newcommand*{\glsxtrlonghyphenshort}[4]{%
```

Grouping is needed to localise the redefinitions.

```
9868 {%
```

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.

```
9869     \glsxtrifhyphenstart[#4]{\def\glsxtrwordsep{-}}{}}
```

```

9870 \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#4}\fi}%
9871 \ifglsxtrinsertinside\else{#4}\fi
9872 \glsxtrfullsep{#1}%
9873 \glsxtrparen{\glsfirstabbrvhypenfont{#3\ifglsxtrinsertinside{#4}\fi}%
9874 \ifglsxtrinsertinside\else{#4}\fi}%
9875 }%
9876 }

abbrvhypenfont
9877 \newcommand*\glsabbrvhypenfont{\glsabbrvdefaultfont}%

abbrvhypenfont
9878 \newcommand*\glsfirstabbrvhypenfont{\glsabbrvhypenfont}%

slonghypenfont
9879 \newcommand*\glslonghypenfont{\glslongdefaultfont}%

tlonghypenfont
9880 \newcommand*\glsfirstlonghypenfont{\glslonghypenfont}%

The default short form suffix:

xtrhyphensuffix
9881 \newcommand*\glsxtrhyphensuffix{\glsxtrabbrvpluralsuffix}

en-short-hyphen Designed for use with the markwords attribute.
9882 \newabbreviationstyle{long-hyphen-short-hyphen}%
9883 {%
9884 \renewcommand*\CustomAbbreviationFields{%
9885 name={\glsxtrlongshortname},
9886 sort={\the\glsshorttok},
9887 first={\protect\glsfirstlonghypenfont{\the\glslongtok}%
9888 \protect\glsxtrfullsep{\the\glslabeltok}%
9889 \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
9890 firstplural={\protect\glsfirstlonghypenfont{\the\glslongpltok}%
9891 \protect\glsxtrfullsep{\the\glslabeltok}%
9892 \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}}},%
9893 plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
9894 description={\protect\glslonghypenfont{\the\glslongtok}}}%

Unset the regular attribute if it has been set.
9895 \renewcommand*\GlsXtrPostNewAbbreviation{%
9896 \glshasattribute{\the\glslabeltok}{regular}%
9897 {%
9898 \glssetattribute{\the\glslabeltok}{regular}{false}%
9899 }%
9900 {}%
9901 }%
9902 }%

```

```

9903 {%
9904   \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
9905   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
9906   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
9907   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
9908   \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

9909   \renewcommand*{\glsxtrfullformat}[2]{%
9910     \glsxtrlonghypenshort{##1}{\glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
9911   }%
9912   \renewcommand*{\glsxtrfullplformat}[2]{%
9913     \glsxtrlonghypenshort{##1}{\glsaccesslongpl{##1}}%
9914     {\glsaccessshortpl{##1}}{##2}%
9915   }%
9916   \renewcommand*{\Glsxtrfullformat}[2]{%
9917     \glsxtrlonghypenshort{##1}{\Glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
9918   }%
9919   \renewcommand*{\Glsxtrfullplformat}[2]{%
9920     \glsxtrlonghypenshort{##1}{\Glsaccesslongpl{##1}}%
9921     {\glsaccessshortpl{##1}}{##2}%
9922   }%
9923 }

```

`ort-hyphen-desc` Like long-hyphen-short-hyphen but the description must be supplied by the user.

```

9924 \newabbreviationstyle{long-hyphen-short-hyphen-desc}%
9925 {%
9926   \renewcommand*{\CustomAbbreviationFields}{%
9927     name={\glsxtrlongshortdescname},
9928     sort={\glsxtrlongshortdescsort},
9929     first={\protect\glsfirstlonghypenfont{\the\glslabeltok}%
9930       \protect\glsxtrfullsep{\the\glslabeltok}%
9931       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
9932     firstplural={\protect\glsfirstlonghypenfont{\the\glslabeltok}%
9933       \protect\glsxtrfullsep{\the\glslabeltok}%
9934       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
9935     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
9936     plural={\protect\glsabbrvhypenfont{\the\glsshorttok}}%
9937   }%

```

Unset the regular attribute if it has been set.

```

9938   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9939     \glshasattribute{\the\glslabeltok}{regular}%
9940     {%
9941       \glssetattribute{\the\glslabeltok}{regular}{false}%
9942     }%
9943     {}%
9944   }%
9945 }%
9946 {%

```

```
9947 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%
9948 }
```

```
onghyphennoshort \glsxtrlonghyphennoshort{\label}{\long}{\insert}
```

```
9949 \newcommand*\glsxtrlonghyphennoshort[3]{%
```

Grouping is needed to localise the redefinitions.

```
9950 {%
```

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.

```
9951 \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
9952 \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#3}\fi}%
9953 \ifglsxtrinsertinside\else{#3}\fi
9954 }%
9955 }
```

`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.

```
9956 \newabbreviationstyle{long-hyphen-noshort-desc-noreg}%
9957 {%
9958 \renewcommand*\CustomAbbreviationFields{%
9959   name={\glsxtrlongnoshortdescname},
9960   sort={\expandonce\glsxtrorglong},
9961   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
9962   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
9963   plural={\protect\glslonghyphenfont{\the\glslongpltok}}%
9964 }%
```

Unset the regular attribute if it has been set.

```
9965 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9966   \glshasattribute{\the\glslabeltok}{regular}%
9967 {%
9968   \glssetattribute{\the\glslabeltok}{regular}{false}%
9969 }%
9970 {%
9971 }%
9972 }%
9973 {%
9974 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%

```

In case the user wants to mix and match font styles, these are redefined here.

```
9975 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%

```

```

9976 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
9977 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
9978 \renewcommand*\glsfirstlongfont[1]{\glsfirstlonghyphenfont{##1}}%
9979 \renewcommand*\glslongfont[1]{\glslonghyphenfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9980 \renewcommand*\glsxtrsubsequentfmt[2]{%
9981   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
9982 }%
9983 \renewcommand*\glsxtrsubsequentplfmt[2]{%
9984   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
9985 }%
9986 \renewcommand*\Glsxtrsubsequentfmt[2]{%
9987   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
9988 }%
9989 \renewcommand*\Glsxtrsubsequentplfmt[2]{%
9990   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
9991 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9992 \renewcommand*\glsxtrinlinefullformat[2]{%
9993   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
9994   \glsxtrfullsep{##1}%
9995   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
9996 }%
9997 \renewcommand*\glsxtrinlinefullplformat[2]{%
9998   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
9999   \glsxtrfullsep{##1}%
10000   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
10001 }%
10002 \renewcommand*\Glsxtrinlinefullformat[2]{%
10003   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10004   \glsxtrfullsep{##1}%
10005   \glsxtrparen{\protect\glsfirstabbrvfont{\Glsaccessshort{##1}}}%
10006 }%
10007 \renewcommand*\Glsxtrinlinefullplformat[2]{%
10008   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10009   \glsxtrfullsep{##1}%
10010   \glsxtrparen{\protect\glsfirstabbrvfont{\Glsaccessshortpl{##1}}}%
10011 }%

```

The first use full form only displays the long form.

```

10012 \renewcommand*\glsxtrfullformat[2]{%
10013   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
10014 }%
10015 \renewcommand*\glsxtrfullplformat[2]{%
10016   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
10017 }%
10018 \renewcommand*\Glsxtrfullformat[2]{%
10019   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10020 }%

```

```

10021 \renewcommand*\Glsxtrfullplformat}[2]{%
10022   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10023 }%
10024 }

```

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.

```

10025 \newabbreviationstyle{long-hyphen-noshort-noreg}{%
10026 {%
10027   \renewcommand*\CustomAbbreviationFields}{%
10028     name={\glsxtrlongnoshortname},
10029     sort={\the\glsshorthtok},
10030     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10031     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10032     text={\protect\glslonghyphenfont{\the\glslongtok}},%
10033     plural={\protect\glslonghyphenfont{\the\glslongpltok}},%
10034     description={\the\glslongtok}%
10035 }%

```

Unset the regular attribute if it has been set.

```

10036 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10037   \glshasattribute{\the\glslabeltok}{regular}%
10038 {%
10039   \glssetattribute{\the\glslabeltok}{regular}{false}%
10040 }%
10041 {}%
10042 }%
10043 }%
10044 {}%
10045 \GlsXtrUseAbbrStyleFmts{long-desc}%
10046 }

```

```
\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.

```
10047 \newcommand*\glsxtrlonghyphen}[3]{%
```

Grouping is needed to localise the redefinitions.

```

10048 {%
10049   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
10050   \glsfirstlonghyphenfont{#1}%
10051 }%
10052 }

```

```
rposthyphenshort \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.

```
10053 \newcommand*\glsxtrposthyphenshort[2]{%
10054 {%
10055   \glsxtrifhyphenstart[#2]{\def\glsxtrwordsep{-}}{}%
10056   \ifglsxtrinsertinside{\glsfirstlonghyphenfont[#2]}\else{#2}\fi%
10057   \glsxtrfullsep{#1}%
10058   \glsxtrparen%
10059   {\glsfirstabbrvhyphenfont{\glsentryshort{#1}\ifglsxtrinsertinside{#2}\fi}%
10060   \ifglsxtrinsertinside\else{#2}\fi%
10061   }%
10062 }%
10063 }
```

```
hyphen subsequent \glsxtrposthyphensubsequent{\label}{\insert}
```

Format in the post-link hook for subsequent use. The label is ignored by default.

```
10064 \newcommand*\glsxtrposthyphensubsequent[2]{%
10065   \glsabbrvfont{\ifglsxtrinsertinside {#2}\fi}%
10066   \ifglsxtrinsertinside \else{#2}\fi%
10067 }
```

ostshort-hyphen Like long-hyphen-short-hyphen but shifts the insert and parenthetical material to the post-link hook.

```
10068 \newabbreviationstyle{long-hyphen-postshort-hyphen}%
10069 {%
10070   \renewcommand*\CustomAbbreviationFields{%
10071     name={\glsxtrlongshortname},%
10072     sort={\the\glsshorttok},%
10073     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10074     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10075     plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}},%
10076     description={\protect\glslonghyphenfont{\the\glslongtok}}}%
10077   \renewcommand*\GlsXtrPostNewAbbreviation{%
10078     \csdef{glsxtrpostlink\glscategorylabel}{%
10079       \glsxtrifwasfirstuse%
10080       {%
10081         \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
10082       }%
10083     }%
```

Put the insertion into the post-link:

```

10084     \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10085     }%
10086   }%
10087   \glshasattribute{\the\glslabeltok}{regular}%
10088   {%
10089     \glssetattribute{\the\glslabeltok}{regular}{false}%
10090   }%
10091   {}%
10092 }%
10093 }%
10094 }%

```

In case the user wants to mix and match font styles, these are redefined here.

```

10095 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
10096 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10097 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10098 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10099 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

Subsequent use needs to omit the insertion:

```

10100 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10101   \glsabbrvfont{\glsaccessshort{##1}}%
10102 }%
10103 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
10104   \glsabbrvfont{\glsaccessshortpl{##1}}%
10105 }%
10106 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10107   \glsabbrvfont{\Glsaccessshort{##1}}%
10108 }%
10109 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10110   \glsabbrvfont{\Glsaccessshortpl{##1}}%
10111 }%

```

First use full form:

```

10112 \renewcommand*{\glsxtrfullformat}[2]{%
10113   \glsxtrlonghypen{\glsaccesslong{##1}{##1}{##2}}%
10114 }%
10115 \renewcommand*{\glsxtrfullplformat}[2]{%
10116   \glsxtrlonghypen{\glsaccesslongpl{##1}{##1}{##2}}%
10117 }%
10118 \renewcommand*{\Glsxtrfullformat}[2]{%
10119   \glsxtrlonghypen{\Glsaccesslong{##1}{##1}{##2}}%
10120 }%
10121 \renewcommand*{\Glsxtrfullplformat}[2]{%
10122   \glsxtrlonghypen{\Glsaccesslongpl{##1}{##1}{##2}}%
10123 }%

```

In-line format.

```

10124 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10125   \glsfirstlonghypenfont{\glsaccesslong{##1}}%
10126   \ifglsxtrinsertinside{##2}\fi}%

```

```

10127     \ifglsxtrinsertinside \else{##2}\fi
10128   }%
10129   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10130     \glsfirstlonghyphenfont{\glsaccesslongpl{##1}}%
10131       \ifglsxtrinsertinside{##2}\fi}%
10132     \ifglsxtrinsertinside \else{##2}\fi
10133   }%
10134   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10135     \glsfirstlonghyphenfont{\Glsaccesslong{##1}}%
10136       \ifglsxtrinsertinside{##2}\fi}%
10137     \ifglsxtrinsertinside \else{##2}\fi
10138   }%
10139   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10140     \glsfirstlonghyphenfont{\Glsaccesslongpl{##1}}%
10141       \ifglsxtrinsertinside{##2}\fi}%
10142     \ifglsxtrinsertinside \else{##2}\fi
10143   }%
10144 }

```

`ort-hyphen-desc` Like `long-hyphen-postshort-hyphen` but the description must be supplied by the user.

```

10145 \newabbreviationstyle{long-hyphen-postshort-hyphen-desc}{%
10146 }%
10147   \renewcommand*{\CustomAbbreviationFields}{%
10148     name={\glsxtrlongshortdescname},%
10149     sort={\glsxtrlongshortdescsort},%
10150     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10151     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10152     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10153     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10154   }%
10155   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10156     \csdef{glsxtrpostlink\glscategorylabel}{%
10157       \glsxtrifwasfirstuse
10158     }%
10159       \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
10160     }%
10161   }%

```

Put the insertion into the post-link:

```

10162     \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10163   }%
10164 }%
10165 \glshasattribute{\the\glslabeltok}{regular}%
10166 }%
10167   \glssetattribute{\the\glslabeltok}{regular}{false}%
10168 }%
10169 {}%
10170 }%
10171 }%
10172 }%

```

```
10173 \GlsXtrUseAbbrStyleFmts{long-hyphen-postshort-hyphen}%
10174 }
```

```
\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.

```
10175 \newcommand*\glsxtrshorthypenlong[4]{%
```

Grouping is needed to localise the redefinitions.

```
10176 {%
```

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.)

```
10177 \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
10178 \glsfirstabbrvhypenfont{#2\ifglsxtrinsertinside{#4}\fi}%
10179 \ifglsxtrinsertinside\else{#4}\fi
10180 \glsxtrfullsep{#1}%
10181 \glsxtrparen{\glsfirstlonghypenfont{#3\ifglsxtrinsertinside{#4}\fi}%
10182 \ifglsxtrinsertinside\else{#4}\fi}%
10183 }%
10184 }
```

hen-long-hyphen Designed for use with the `markwords` attribute.

```
10185 \newabbreviationstyle{short-hyphen-long-hyphen}%
10186 {%
10187 \renewcommand*\CustomAbbreviationFields{%
10188   name={\glsxtrshortlongname},
10189   sort={\the\glsshorttok},
10190   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
10191     \protect\glsxtrfullsep{\the\glslabeltok}%
10192     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}},%
10193   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
10194     \protect\glsxtrfullsep{\the\glslabeltok}%
10195     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}},%
10196   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10197   description={\protect\glslonghypenfont{\the\glslongtok}}}%
10198 }
```

Unset the regular attribute if it has been set.

```
10198 \renewcommand*\GlsXtrPostNewAbbreviation{%
10199   \glshasattribute{\the\glslabeltok}{regular}%
10200   {%
10201     \glssetattribute{\the\glslabeltok}{regular}{false}%
10202   }%
10203   {}%
10204 }
```

```

10205 }%
10206 {%
10207   \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
10208   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10209   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10210   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10211   \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10212   \renewcommand*{\glsxtrfullformat}[2]{%
10213     \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\glsaccesslong{##1}}{##2}%
10214   }%
10215   \renewcommand*{\glsxtrfullplformat}[2]{%
10216     \glsxtrshorthypenlong{##1}%
10217     {\glsaccessshortpl{##1}}{\glsaccesslongpl{##1}}{##2}%
10218   }%
10219   \renewcommand*{\Glsxtrfullformat}[2]{%
10220     \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\Glsaccesslong{##1}}{##2}%
10221   }%
10222   \renewcommand*{\Glsxtrfullplformat}[2]{%
10223     \glsxtrshorthypenlong{##1}%
10224     {\glsaccessshortpl{##1}}{\Glsaccesslongpl{##1}}{##2}%
10225   }%
10226 }

```

`ong-hyphen-desc` Like short-hyphen-long-hyphen but the description must be supplied by the user.

```

10227 \newabbreviationstyle{short-hyphen-long-hyphen-desc}%
10228 {%
10229   \renewcommand*{\CustomAbbreviationFields}{%
10230     name={\glsxtrshortlongdescname},
10231     sort={\glsxtrshortlongdescsort},
10232     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
10233       \protect\glsxtrfullsep{\the\glslabeltok}%
10234       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}},%
10235     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
10236       \protect\glsxtrfullsep{\the\glslabeltok}%
10237       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}},%
10238     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10239     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10240   }%

```

Unset the regular attribute if it has been set.

```

10241   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10242     \glshasattribute{\the\glslabeltok}{regular}%
10243     {%
10244       \glssetattribute{\the\glslabeltok}{regular}{false}%
10245     }%
10246     {}%
10247   }%
10248 }

```

```

10249 {%
10250   \GlsXtrUseAbbrStyleFmts{short-hyphen-long-hyphen}%
10251 }

```

`\glsxtrshorthypen{<short>}{{<label>}}{<insert>}`

Used by short-hyphen-postlong-hyphen. The `<insert>` is checked to determine if it starts with a hyphen but isn't used here as it's moved to the post-link hook.

```
10252 \newcommand*\glsxtrshorthypen}[3]{%
```

Grouping is needed to localise the redefinitions.

```

10253 {%
10254   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
10255   \glsfirstabbrvhypenfont{#1}%
10256 }%
10257 }

```

`\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.

```

10258 \newcommand*\glsxtrposthypenlong}[2]{%
10259 {%
10260   \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
10261   \ifglsxtrinsertinside{\glsfirstabbrvhypenfont{#2}}\else{#2}\fi
10262   \glsxtrfullsep{#1}%
10263   \glsxtrparens
10264   {\glsfirstlonghypenfont{\glsentrylong{#1}}\ifglsxtrinsertinside{#2}\fi}%
10265   \ifglsxtrinsertinside\else{#2}\fi
10266 }%
10267 }%
10268 }

```

`postlong-hyphen` Like short-hyphen-long-hyphen but shifts the insert and parenthetical material to the post-link hook.

```

10269 \newabbreviationstyle{short-hyphen-postlong-hyphen}%
10270 {%
10271   \renewcommand*\CustomAbbreviationFields{%
10272     name={\glsxtrshortlongname},
10273     sort={\the\glsshorttok},
10274     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
10275     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
10276     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
}

```

```

10277     description={\protect\glslonghyphenfont{\the\glslongtok}}}%
10278 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10279   \csdef{glsxtrpostlink}{\glscategorylabel}{%
10280     \glsxtrifwasfirstuse
10281   }%
10282   \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
10283 }%
10284 }%

```

Put the insertion into the post-link:

```

10285   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10286 }%
10287 }%
10288 \glshasattribute{\the\glslabeltok}{regular}%
10289 {%
10290   \glssetattribute{\the\glslabeltok}{regular}{false}%
10291 }%
10292 {}%
10293 }%
10294 }%
10295 }%

```

In case the user wants to mix and match font styles, these are redefined here.

```

10296 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
10297 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10298 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10299 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10300 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

Subsequent use needs to omit the insertion:

```

10301 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10302   \glsabbrvfont{\glsaccessshort{##1}}%
10303 }%
10304 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
10305   \glsabbrvfont{\glsaccessshortpl{##1}}%
10306 }%
10307 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10308   \glsabbrvfont{\Glsaccessshort{##1}}%
10309 }%
10310 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10311   \glsabbrvfont{\Glsaccessshortpl{##1}}%
10312 }%

```

First use full form:

```

10313 \renewcommand*{\glsxtrfullformat}[2]{%
10314   \glsxtrshorthypen{\glsaccessshort{##1}}{##1}{##2}%
10315 }%
10316 \renewcommand*{\glsxtrfullplformat}[2]{%
10317   \glsxtrshorthypen{\glsaccessshortpl{##1}}{##1}{##2}%
10318 }%
10319 \renewcommand*{\Glsxtrfullformat}[2]{%

```

```

10320     \glsxtrshorthyphen{\Glsaccessshort{##1}}{##1}{##2}%
10321   }%
10322   \renewcommand*{\Glsxtrfullplformat}[2]{%
10323     \glsxtrshorthyphen{\Glsaccessshortpl{##1}}{##1}{##2}%
10324   }%

```

In-line format. Commands like `\glsxtrfull` set `\glsinsert` to empty. The entire link-text (provided by the following commands) is stored in `\glscustomtext`.

```

10325   \renewcommand*{\glsxtrinlinefullformat}[2]{%
10326     \glsfirstabbrvhypenfont{\glsaccessshort{##1}}%
10327       \ifglsxtrinsertinside{##2}\fi}%
10328     \ifglsxtrinsertinside \else{##2}\fi
10329   }%
10330   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10331     \glsfirstabbrvhypenfont{\glsaccessshortpl{##1}}%
10332       \ifglsxtrinsertinside{##2}\fi}%
10333     \ifglsxtrinsertinside \else{##2}\fi
10334   }%
10335   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10336     \glsfirstabbrvhypenfont{\Glsaccessshort{##1}}%
10337       \ifglsxtrinsertinside{##2}\fi}%
10338     \ifglsxtrinsertinside \else{##2}\fi
10339   }%
10340   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10341     \glsfirstabbrvhypenfont{\Glsaccessshortpl{##1}}%
10342       \ifglsxtrinsertinside{##2}\fi}%
10343     \ifglsxtrinsertinside \else{##2}\fi
10344   }%
10345 }

```

`ong-hyphen-desc` Like `short-hyphen-postlong-hyphen` but the description must be supplied by the user.

```

10346 \newabbreviationstyle{short-hyphen-postlong-hyphen-desc}%
10347 {%
10348   \renewcommand*{\CustomAbbreviationFields}{%
10349     name={\glsxtrshortlongdescname},%
10350     sort={\glsxtrshortlongdescsort},%
10351     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
10352     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
10353     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10354     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10355   }%
10356   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10357     \csdef{glsxtrpostlink\glscategorylabel}{%
10358       \glsxtrifwasfirstuse
10359       {%
10360         \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
10361       }%
10362       {%

```

Put the insertion into the post-link:

```

10363     \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10364     }%
10365   }%
10366   \glshasattribute{\the\glslabeltok}{regular}%
10367   {%
10368     \glssetattribute{\the\glslabeltok}{regular}{false}%
10369   }%
10370   {}%
10371 }%
10372 }%
10373 {}%
10374 \GlsXtrUseAbbrStyleFmts{short-hyphen-postlong-hyphen}%
10375 }

```

1.7.8 Predefined Styles (No Short on First Use)

These styles show only the long form on first use and only the short form on subsequent use.

```

lsabbrvonlyfont
10376 \newcommand*{\glsabbrvonlyfont}{\glsabbrvdefaultfont}%

stabbrvonlyfont
10377 \newcommand*{\glsfirststabbrvonlyfont}{\glsabbrvonlyfont}%

glslongonlyfont
10378 \newcommand*{\glslongonlyfont}{\glslongdefaultfont}%

rstlongonlyfont
10379 \newcommand*{\glsfirstlongonlyfont}{\glslongonlyfont}%

```

The default short form suffix:

```

lsxtronlysuffix
10380 \newcommand*{\glsxtronlysuffix}{\glsxtrabbrvpluralsuffix}%

\glsxtronlyname The default name format for this style.
10381 \newcommand*{\glsxtronlyname}{}%
10382 \protect\glsabbrvonlyfont{\the\glsshorttok}%
10383 }

only-short-only
10384 \newabbreviationstyle{long-only-short-only}%
10385 {}%
10386 \renewcommand*{\CustomAbbreviationFields}{}%
10387   name={\glsxtronlyname},%
10388   sort={\the\glsshorttok},%
10389   first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
10390   firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
10391   plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}},%
10392   description={\protect\glslongonlyfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```
10393 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10394   \glshasattribute{\the\glslabeltok}{regular}%
10395   {%
10396     \glssetattribute{\the\glslabeltok}{regular}{false}%
10397   }%
10398   {}%
10399 }%
10400 }%
10401 {%
10402 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtronlysuffix}%
10403 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvonlyfont{##1}}%
10404 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvonlyfont{##1}}%
10405 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongonlyfont{##1}}%
10406 \renewcommand*{\glslongfont}[1]{\glslongonlyfont{##1}}%
```

The first use full form doesn't show the short form.

```
10407 \renewcommand*{\glsxtrfullformat}[2]{%
10408   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10409   \ifglsxtrinsertinside\else##2\fi
10410 }%
10411 \renewcommand*{\glsxtrfullplformat}[2]{%
10412   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10413   \ifglsxtrinsertinside\else##2\fi
10414 }%
10415 \renewcommand*{\Glsxtrfullformat}[2]{%
10416   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10417   \ifglsxtrinsertinside\else##2\fi
10418 }%
10419 \renewcommand*{\Glsxtrfullplformat}[2]{%
10420   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10421   \ifglsxtrinsertinside\else##2\fi
10422 }%
```

The inline full form does show the short form.

```
10423 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10424   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10425   \ifglsxtrinsertinside\else##2\fi
10426   \glsxtrfullsep{##1}%
10427   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshort{##1}}}%
10428 }%
10429 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10430   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10431   \ifglsxtrinsertinside\else##2\fi
10432   \glsxtrfullsep{##1}%
10433   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
10434 }%
10435 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10436   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10437   \ifglsxtrinsertinside\else##2\fi
```

```

10438     \glsxtrfullsep{##1}%
10439     \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
10440   }%
10441   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10442     \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10443     \ifglsxtrinsertinside\else##2\fi
10444     \glsxtrfullsep{##1}%
10445     \glsxtrparen{\protect\glsfirstabbrvonlyfont{\Glsaccessshortpl{##1}}}%
10446   }%
10447 }

xtronlydescsort
10448 \newcommand*{\glsxtronlydescsort}{\the\glslongtok}

xtronlydescname
10449 \newcommand*{\glsxtronlydescname}{%
10450   \protect\glslongfont{\the\glslongtok}%
10451 }

short-only-desc
10452 \newabbreviationstyle{long-only-short-only-desc}%
10453 {%
10454   \renewcommand*{\CustomAbbreviationFields}{%
10455     name={\glsxtronlydescname},
10456     sort={\glsxtronlydescsort},%
10457     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
10458     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
10459     text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
10460     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}}%
10461   }%
10462   Unset the regular attribute if it has been set.
10463   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10464     \glshasattribute{\the\glslabeltok}{regular}%
10465     \glssetattribute{\the\glslabeltok}{regular}{false}%
10466   }%
10467   {}%
10468 }%
10469 }%
10470 {%
10471   \GlsXtrUseAbbrStyleFmts{long-only-short-only}%
10472 }

```

1.8 Using Entries in Headings

There are four main problems with using entries in sectioning commands: they can mess with the first use flag if they end up in the table of contents, they can add unwanted numbers to the entry's location list, the label is corrupted if used inside `\MakeUppercase` (which

is used by the default headings style) and they need to be expandable for PDF bookmarks. The `glossaries` package therefore recommends the use of the expandable commands, such as `\glsentryshort`, instead but this doesn't reflect the formatting since it doesn't include `\glsabrvfont`. 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:

```
10473 \let\@glsxtr@org@markright\markright
```

Redefine (grouping not added in case it interferes with the original code):

```
10474 \renewcommand*{\markright}[1]{%
10475   \glsxtrmarkhook
10476   \@glsxtr@org@markright{\@glsxtrinmark#1\@glsxtrnotinmark}%
10477   \glsxtrrestoremarkhook
10478 }
```

`\markboth` Save original definition:

```
10479 \let\@glsxtr@org@markboth\markboth
```

Redefine (grouping not added in case it interferes with the original code):

```
10480 \renewcommand*{\markboth}[2]{%
10481   \glsxtrmarkhook
10482   \@glsxtr@org@markboth
10483   {\@glsxtrinmark#1\@glsxtrnotinmark}%
10484   {\@glsxtrinmark#2\@glsxtrnotinmark}%
10485   \glsxtrrestoremarkhook
10486 }
```

Also do this for `\@starttoc`

`\@starttoc` Save original definition:

```
10487 \let\@glsxtr@org@\@starttoc\@starttoc
```

Redefine:

```
10488 \renewcommand*{\@starttoc}[1]{%
```

```

10489 \glsxtrmarkhook
10490 \glsxtrinmark
10491 \glsxtr@org@@starttoc{#1}%
10492 \glsxtrnotinmark
10493 \glsxtrrestoremarkhook
10494 }

```

If this causes a problem provide a simple way of switching back to the original definitions:

sxtRevertMarks

```

10495 \newcommand*\glsxtrRevertMarks{%
10496   \let\markright\glsxtr@org@markright
10497   \let\markboth\glsxtr@org@markboth
10498   \let\@starttoc\glsxtr@org@starttoc
10499 }

```

\glsxtrifinmark

```
10500 \newcommand*\glsxtrifinmark[2]{#2}
```

\glsxtrinmark

```

10501 \newrobustcmd*\glsxtrinmark{%
10502   \let\glsxtrifinmark\firstoftwo
10503 }

```

\glsxtrnotinmark

```

10504 \newrobustcmd*\glsxtrnotinmark{%
10505   \let\glsxtrifinmark\secondoftwo
10506 }

```

eorpdforheading

```

10507 \ifdef\texorpdfstring
10508 {
10509   \newcommand*\glsxtrtitleorpdforheading[3]{\texorpdfstring{#1}{#2}}
10510 }
10511 {
10512   \newcommand*\glsxtrtitleorpdforheading[3]{#1}
10513 }

```

\glsxtrmarkhook Hook used in new definition of \markboth and \markright to make some changes to apply to the marks:

```
10514 \newcommand*\glsxtrmarkhook{%
```

Save current definitions:

```

10515 \let\@glsxtr@org@MakeUppercase\MakeUppercase
10516 \let\@glsxtr@org@glsxtrtitleorpdforheading\glsxtrtitleorpdforheading
10517 \let\@glsxtr@org@glsxtrtitleshort\glsxtrtitleshort
10518 \let\@glsxtr@org@glsxtrtitleshortpl\glsxtrtitleshortpl
10519 \let\@glsxtr@org@Glsxtrtitleshort\Glsxtrtitleshort
10520 \let\@glsxtr@org@Glsxtrtitleshortpl\Glsxtrtitleshortpl

```

```

10521 \let\@glsxtr@org@glsxrtitlename\glsxrtitlename
10522 \let\@glsxtr@org@Glsxrtitlename\Glsxrtitlename
10523 \let\@glsxtr@org@glsxrttitletext\glsxrttitletext
10524 \let\@glsxtr@org@Glsxrttitletext\Glsxrttitletext
10525 \let\@glsxtr@org@glsxrttitleplural\glsxrttitleplural
10526 \let\@glsxtr@org@Glsxrttitleplural\Glsxrttitleplural
10527 \let\@glsxtr@org@glsxrttitlefirst\glsxrttitlefirst
10528 \let\@glsxtr@org@Glsxrttitlefirst\Glsxrttitlefirst
10529 \let\@glsxtr@org@glsxrttitlefirstplural\glsxrttitlefirstplural
10530 \let\@glsxtr@org@Glsxrttitlefirstplural\Glsxrttitlefirstplural
10531 \let\@glsxtr@org@glsxrttitlelong\glsxrttitlelong
10532 \let\@glsxtr@org@glsxrttitlelongpl\glsxrttitlelongpl
10533 \let\@glsxtr@org@Glsxrttitlelong\Glsxrttitlelong
10534 \let\@glsxtr@org@Glsxrttitlelongpl\Glsxrttitlelongpl
10535 \let\@glsxtr@org@glsxrttitlefull\glsxrttitlefull
10536 \let\@glsxtr@org@glsxrttitlefullpl\glsxrttitlefullpl
10537 \let\@glsxtr@org@Glsxrttitlefull\Glsxrttitlefull
10538 \let\@glsxtr@org@Glsxrttitlefullpl\Glsxrttitlefullpl

```

New definitions

```

10539 \let\glsxtrifinmark@\firstoftwo
10540 \let\MakeUppercase\MakeTextUppercase
10541 \let\glsxrttitleorpdforheading@\thirdofthree
10542 \let\glsxrttitleshort\glsxtrheadshort
10543 \let\glsxrttitleshortpl\glsxtrheadshortpl
10544 \let\Glsxrttitleshort\Glsxtrheadshort
10545 \let\Glsxrttitleshortpl\Glsxtrheadshortpl
10546 \let\glsxrttitlename\glsxtrheadname
10547 \let\Glsxrttitlename\Glsxtrheadname
10548 \let\glsxrttitletext\glsxtrheadtext
10549 \let\Glsxrttitletext\Glsxtrheadtext
10550 \let\glsxrttitleplural\glsxtrheadplural
10551 \let\Glsxrttitleplural\Glsxtrheadplural
10552 \let\glsxrttitlefirst\glsxtrheadfirst
10553 \let\Glsxrttitlefirst\Glsxtrheadfirst
10554 \let\glsxrttitlefirstplural\glsxtrheadfirstplural
10555 \let\Glsxrttitlefirstplural\Glsxtrheadfirstplural
10556 \let\glsxrttitlelong\glsxtrheadlong
10557 \let\glsxrttitlelongpl\glsxtrheadlongpl
10558 \let\Glsxrttitlelong\Glsxtrheadlong
10559 \let\Glsxrttitlelongpl\Glsxtrheadlongpl
10560 \let\glsxrttitlefull\glsxtrheadfull
10561 \let\glsxrttitlefullpl\glsxtrheadfullpl
10562 \let\Glsxrttitlefull\Glsxtrheadfull
10563 \let\Glsxrttitlefullpl\Glsxtrheadfullpl
10564 }

```

`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.)

```
10565 \newcommand*{\glsxtrrestoremarkhook}{%
10566   \let\glsxtrifinmark\@secondoftwo
10567   \let\MakeUppercase\@glsxtr@org@MakeUppercase
10568   \let\glsxtrtitleorpdforheading\@glsxtr@org@glsxtrtitleorpdforheading
10569   \let\glsxtrtitleshort\@glsxtr@org@glsxtrtitleshort
10570   \let\glsxtrtitleshortpl\@glsxtr@org@glsxtrtitleshortpl
10571   \let\Glsxtrtitleshort\@glsxtr@org@Glsxtrtitleshort
10572   \let\Glsxtrtitleshortpl\@glsxtr@org@Glsxtrtitleshortpl
10573   \let\glsxtrtitlename\@glsxtr@org@glsxtrtitlename
10574   \let\Glsxtrtitlename\@glsxtr@org@Glsxtrtitlename
10575   \let\glsxtrtitletext\@glsxtr@org@glsxtrtitletext
10576   \let\Glsxtrtitletext\@glsxtr@org@Glsxtrtitletext
10577   \let\glsxtrtitleplural\@glsxtr@org@glsxtrtitleplural
10578   \let\Glsxtrtitleplural\@glsxtr@org@Glsxtrtitleplural
10579   \let\glsxtrtitlefirst\@glsxtr@org@glsxtrtitlefirst
10580   \let\Glsxtrtitlefirst\@glsxtr@org@Glsxtrtitlefirst
10581   \let\glsxtrtitlefirstplural\@glsxtr@org@glsxtrtitlefirstplural
10582   \let\Glsxtrtitlefirstplural\@glsxtr@org@Glsxtrtitlefirstplural
10583   \let\glsxtrtitlelong\@glsxtr@org@glsxtrtitlelong
10584   \let\glsxtrtitlelongpl\@glsxtr@org@glsxtrtitlelongpl
10585   \let\Glsxtrtitlelong\@glsxtr@org@Glsxtrtitlelong
10586   \let\Glsxtrtitlelongpl\@glsxtr@org@glsxtrtitlelongpl
10587   \let\glsxtrtitlefull\@glsxtr@org@glsxtrtitlefull
10588   \let\glsxtrtitlefullpl\@glsxtr@org@glsxtrtitlefullpl
10589   \let\Glsxtrtitlefull\@glsxtr@org@Glsxtrtitlefull
10590   \let\Glsxtrtitlefullpl\@glsxtr@org@Glsxtrtitlefullpl
10591 }
```

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.

```
10592 \newcommand*{\glsxtrheadshort}[1]{%
10593   \protect\noCaseChange
10594   {%
10595     \glsifattribute{#1}{headuc}{true}%
10596     {%
10597       \GLSxtrshort [noindex,hyper=false]{#1}[]%
10598     }%
10599     {%
10600       \glsxtrshort [noindex,hyper=false]{#1}[]%
10601     }%
10602   }%
10603 }
```

`glsxtrtitleshort` Command to display short form of abbreviation in section title and table of contents.

```
10604 \newrobustcmd*{\glsxtrtitleshort}[1]{%
10605   \glsxtrshort [noindex,hyper=false]{#1}[]%
```

10606 }

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.

```
10607 \newcommand*{\glsxtrheadshortpl}[1]{%
10608   \protect\noCaseChange
10609   {%
10610     \glsifattribute{#1}{headuc}{true}%
10611     {%
10612       \GLSxtrshortpl[noindex,hyper=false]{#1}[]%
10613     }%
10614     {%
10615       \glsxtrshortpl[noindex,hyper=false]{#1}[]%
10616     }%
10617   }%
10618 }
```

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents.

```
10619 \newrobustcmd*{\glsxtrtitleshortpl}[1]{%
10620   \glsxtrshortpl[noindex,hyper=false]{#1}[]%
10621 }
```

Glsxtrheadshort Command used to display short form in the page header with the first letter converted to upper case.

```
10622 \newcommand*{\Glsxtrheadshort}[1]{%
10623   \protect\noCaseChange
10624   {%
10625     \glsifattribute{#1}{headuc}{true}%
10626     {%
10627       \GLSxtrshort[noindex,hyper=false]{#1}[]%
10628     }%
10629     {%
10630       \Glsxtrshort[noindex,hyper=false]{#1}[]%
10631     }%
10632   }%
10633 }
```

lsxtrtitleshort Command to display short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10634 \newrobustcmd*{\Glsxtrtitleshort}[1]{%
10635   \Glsxtrshort[noindex,hyper=false]{#1}[]%
10636 }
```

sxtrheadshortpl Command used to display plural short form in the page header with the first letter converted to upper case.

```
10637 \newcommand*{\Glsxtrheadshortpl}[1]{%
10638   \protect\noCaseChange
```

```

10639  {%
10640    \glsifattribute{#1}{headuc}{true}%
10641    {%
10642      \GLSxtrshortpl[noindex,hyper=false]{#1}[]%
10643    }%
10644    {%
10645      \Glsxtrshortpl[noindex,hyper=false]{#1}[]%
10646    }%
10647  }%
10648 }

```

`xtrtitleshortpl` Command to display plural short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

10649 \newrobustcmd*\{\Glsxtrtitleshortpl\}[1]{%
10650   \Glsxtrshortpl[noindex,hyper=false]{#1}[]%
10651 }

```

`\glsxtrheadname` As above but for the name value.

```

10652 \newcommand*\{\glsxtrheadname\}[1]{%
10653   \protect\NoCaseChange
10654   {%
10655     \glsifattribute{#1}{headuc}{true}%
10656     {%
10657       \GLSname[noindex,hyper=false]{#1}[]%
10658     }%
10659     {%
10660       \glsname[noindex,hyper=false]{#1}[]%
10661     }%
10662   }%
10663 }

```

`\glsxtrtitlename` Command to display name value in section title and table of contents.

```

10664 \newrobustcmd*\{\glsxtrtitlename\}[1]{%
10665   \glsname[noindex,hyper=false]{#1}[]%
10666 }

```

`\Glsxtrheadname` First letter converted to upper case

```

10667 \newcommand*\{\Glsxtrheadname\}[1]{%
10668   \protect\NoCaseChange
10669   {%
10670     \glsifattribute{#1}{headuc}{true}%
10671     {%
10672       \GLSname[noindex,hyper=false]{#1}[]%
10673     }%
10674     {%
10675       \Glsname[noindex,hyper=false]{#1}[]%
10676     }%
10677   }%
10678 }

```

`\Glsxtrtitlename` Command to display name value in section title and table of contents with the first letter changed to upper case.

```
10679 \%changes{1.21}{2017-11-03}{new}
10680 \newrobustcmd*\{\Glsxtrtitlename\}[1]{%
10681   \Glsname[noindex,hyper=false]{#1}[]%
10682 }
```

`\glsxtrheadtext` As above but for the text value.

```
10683 \newcommand*\{\glsxtrheadtext\}[1]{%
10684   \protect\NoCaseChange
10685   {%
10686     \glsifattribute{#1}{headuc}{true}%
10687     {%
10688       \GLStext[noindex,hyper=false]{#1}[]%
10689     }%
10690     {%
10691       \glstext[noindex,hyper=false]{#1}[]%
10692     }%
10693   }%
10694 }
```

`\glsxtrtitletext` Command to display text value in section title and table of contents.

```
10695 \newrobustcmd*\{\glsxtrtitletext\}[1]{%
10696   \glstext[noindex,hyper=false]{#1}[]%
10697 }
```

`\Glsxtrheadtext` First letter converted to upper case

```
10698 \newcommand*\{\Glsxtrheadtext\}[1]{%
10699   \protect\NoCaseChange
10700   {%
10701     \glsifattribute{#1}{headuc}{true}%
10702     {%
10703       \GLStext[noindex,hyper=false]{#1}[]%
10704     }%
10705     {%
10706       \Glstext[noindex,hyper=false]{#1}[]%
10707     }%
10708   }%
10709 }
```

`\Glsxtrtitletext` Command to display text value in section title and table of contents with the first letter changed to upper case.

```
10710 \newrobustcmd*\{\Glsxtrtitletext\}[1]{%
10711   \Glstext[noindex,hyper=false]{#1}[]%
10712 }
```

`\sxtrheadplural` As above but for the plural value.

```
10713 \newcommand*\{\glsxtrheadplural\}[1]{%
```

```

10714 \protect\NoCaseChange
10715 {%
10716   \glsifattribute{#1}{headuc}{true}%
10717   {%
10718     \GLSplural [noindex,hyper=false]{#1}[]%
10719   }%
10720   {%
10721     \glsplural [noindex,hyper=false]{#1}[]%
10722   }%
10723 }%
10724 }

```

`sxtrtitleplural` Command to display plural value in section title and table of contents.

```

10725 \newrobustcmd*\{\glsxtrtitleplural}[1]{%
10726   \glsplural [noindex,hyper=false]{#1}[]%
10727 }

```

`lsxtrheadplural` Convert first letter to upper case.

```

10728 \newcommand*\{\Glsxtrheadplural}[1]{%
10729   \protect\NoCaseChange
10730   {%
10731     \glsifattribute{#1}{headuc}{true}%
10732     {%
10733       \GLSplural [noindex,hyper=false]{#1}[]%
10734     }%
10735     {%
10736       \Glsplural [noindex,hyper=false]{#1}[]%
10737     }%
10738   }%
10739 }

```

`sxtrtitleplural` Command to display plural value in section title and table of contents with the first letter changed to upper case.

```

10740 \newrobustcmd*\{\Glsxtrtitleplural}[1]{%
10741   \Glsplural [noindex,hyper=false]{#1}[]%
10742 }

```

`glsxtrheadfirst` As above but for the first value.

```

10743 \newcommand*\{\glsxtrheadfirst}[1]{%
10744   \protect\NoCaseChange
10745   {%
10746     \glsifattribute{#1}{headuc}{true}%
10747     {%
10748       \GLSfirst [noindex,hyper=false]{#1}[]%
10749     }%
10750     {%
10751       \glsfirst [noindex,hyper=false]{#1}[]%
10752     }%
10753   }%

```

```

10754 }

lsxtrtitlefirst Command to display first value in section title and table of contents.
10755 \newrobustcmd*\{\glsxtrtitlefirst\}[1]{%
10756   \glsfirst[noindex,hyper=false]{#1}[]%
10757 }

Glsxtrheadfirst First letter converted to upper case
10758 \newcommand*\{\Glsxtrheadfirst\}[1]{%
10759   \protect\NoCaseChange
10760   {%
10761     \glsifattribute{#1}{headuc}{true}%
10762     {%
10763       \GLSfirst[noindex,hyper=false]{#1}[]%
10764     }%
10765     {%
10766       \Glsfirst[noindex,hyper=false]{#1}[]%
10767     }%
10768   }%
10769 }

lsxtrtitlefirst Command to display first value in section title and table of contents with the first letter
changed to upper case.
10770 \newrobustcmd*\{\Glsxtrtitlefirst\}[1]{%
10771   \Glsfirst[noindex,hyper=false]{#1}[]%
10772 }

headfirstplural As above but for the firstplural value.
10773 \newcommand*\{\glsxtrheadfirstplural\}[1]{%
10774   \protect\NoCaseChange
10775   {%
10776     \glsifattribute{#1}{headuc}{true}%
10777     {%
10778       \GLSfirstplural[noindex,hyper=false]{#1}[]%
10779     }%
10780     {%
10781       \glsfirstplural[noindex,hyper=false]{#1}[]%
10782     }%
10783   }%
10784 }

titlefirstplural Command to display firstplural value in section title and table of contents.
10785 \newrobustcmd*\{\glsxtrtitlefirstplural\}[1]{%
10786   \glsfirstplural[noindex,hyper=false]{#1}[]%
10787 }

headfirstplural First letter converted to upper case
10788 \newcommand*\{\Glsxtrheadfirstplural\}[1]{%

```

```

10789 \protect\NoCaseChange
10790 {%
10791   \glsifattribute{#1}{headuc}{true}%
10792   {%
10793     \GLSfirstplural[noindex,hyper=false]{#1}[]%
10794   }%
10795   {%
10796     \Glsfirstplural[noindex,hyper=false]{#1}[]%
10797   }%
10798 }%
10799 }

```

`\titlefirstplural` Command to display first value in section title and table of contents with the first letter changed to upper case.

```

10800 \newrobustcmd*\{\Glsxrttitlefirstplural}[1]{%
10801   \Glsfirstplural[noindex,hyper=false]{#1}[]%
10802 }

```

`\glsxtrheadlong` Command used to display long form in the page header.

```

10803 \newcommand*\{\glsxtrheadlong}[1]{%
10804   \protect\NoCaseChange
10805 {%
10806   \glsifattribute{#1}{headuc}{true}%
10807   {%
10808     \GLSxtrlong[noindex,hyper=false]{#1}[]%
10809   }%
10810   {%
10811     \glsxtrlong[noindex,hyper=false]{#1}[]%
10812   }%
10813 }%
10814 }

```

`\glsxrttitlelong` Command to display long form of abbreviation in section title and table of contents.

```

10815 \newrobustcmd*\{\glsxrttitlelong}[1]{%
10816   \glsxtrlong[noindex,hyper=false]{#1}[]%
10817 }

```

`\sxtrheadlongpl` 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.

```

10818 \newcommand*\{\glsxtrheadlongpl}[1]{%
10819   \protect\NoCaseChange
10820 {%
10821   \glsifattribute{#1}{headuc}{true}%
10822   {%
10823     \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
10824   }%
10825   {%

```

```
10826     \glsxtrlongpl [noindex,hyper=false]{#1}[]%
10827   }%
10828 }%
10829 }
```

sxttitlelongpl Command to display plural long form of abbreviation in section title and table of contents.

```
10830 \newrobustcmd*{\glsxtrtitlelongpl}[1]{%
10831   \glsxtrlongpl [noindex,hyper=false]{#1}[]%
10832 }
```

\Glsxtrheadlong Command used to display long form in the page header with the first letter converted to upper case.

```
10833 \newcommand*{\Glsxtrheadlong}[1]{%
10834   \protect\NoCaseChange
10835 }%
10836   \glsifattribute{#1}{headuc}{true}%
10837 }%
10838   \GLSxtrlong [noindex,hyper=false]{#1}[]%
10839 }%
10840 }%
10841   \Glsxtrlong [noindex,hyper=false]{#1}[]%
10842 }%
10843 }%
10844 }
```

Glsxtrtitlelong Command to display long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10845 \newrobustcmd*{\Glsxtrtitlelong}[1]{%
10846   \Glsxtrlong [noindex,hyper=false]{#1}[]%
10847 }
```

lsxtrheadlongpl Command used to display plural long form in the page header with the first letter converted to upper case.

```
10848 \newcommand*{\Glsxtrheadlongpl}[1]{%
10849   \protect\NoCaseChange
10850 }%
10851   \glsifattribute{#1}{headuc}{true}%
10852 }%
10853   \GLSxtrlongpl [noindex,hyper=false]{#1}[]%
10854 }%
10855 }%
10856   \Glsxtrlongpl [noindex,hyper=false]{#1}[]%
10857 }%
10858 }%
10859 }
```

sxttitlelongpl Command to display plural long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10860 \newrobustcmd*\{\Glsxtrtitlelongpl\}[1]{%
10861   \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
10862 }
```

\glsxtrheadfull Command used to display full form in the page header.

```
10863 \newcommand*\{\glsxtrheadfull\}[1]{%
10864   \protect\NoCaseChange
10865   {%
10866     \glsifattribute{#1}{headuc}{true}%
10867     {%
10868       \GLSxtrfull[noindex,hyper=false]{#1}[]%
10869     }%
10870     {%
10871       \glsxtrfull[noindex,hyper=false]{#1}[]%
10872     }%
10873   }%
10874 }
```

\glsxtrtitlefull Command to display full form of abbreviation in section title and table of contents.

```
10875 \newrobustcmd*\{\glsxtrtitlefull\}[1]{%
10876   \glsxtrfull[noindex,hyper=false]{#1}[]%
10877 }
```

\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.

```
10878 \newcommand*\{\glsxtrheadfullpl\}[1]{%
10879   \protect\NoCaseChange
10880   {%
10881     \glsifattribute{#1}{headuc}{true}%
10882     {%
10883       \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
10884     }%
10885     {%
10886       \glsxtrfullpl[noindex,hyper=false]{#1}[]%
10887     }%
10888   }%
10889 }
```

\sxtrtitlefullpl Command to display plural full form of abbreviation in section title and table of contents.

```
10890 \newrobustcmd*\{\glsxtrtitlefullpl\}[1]{%
10891   \glsxtrfullpl[noindex,hyper=false]{#1}[]%
10892 }
```

\Glsxtrheadfull Command used to display full form in the page header with the first letter converted to upper case.

```
10893 \newcommand*\{\Glsxtrheadfull\}[1]{%
10894   \protect\NoCaseChange
```

```

10895  {%
10896    \glsifattribute{#1}{headuc}{true}%
10897    {%
10898      \GLSxtrfull[noindex,hyper=false]{#1}[]%
10899    }%
10900    {%
10901      \Glsxtrfull[noindex,hyper=false]{#1}[]%
10902    }%
10903  }%
10904 }

```

`Glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

10905 \newrobustcmd*\Glsxtrtitlefull[1]{%
10906   \Glsxtrfull[noindex,hyper=false]{#1}[]%
10907 }

```

`lsxtrheadfullpl` Command used to display plural full form in the page header with the first letter converted to upper case.

```

10908 \newcommand*\Glsxtrheadfullpl[1]{%
10909   \protect\NoCaseChange
10910  {%
10911    \glsifattribute{#1}{headuc}{true}%
10912    {%
10913      \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
10914    }%
10915    {%
10916      \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
10917    }%
10918  }%
10919 }

```

`sxtrttitlefullpl` Command to display plural full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

10920 \newrobustcmd*\Glsxrttitlefullpl[1]{%
10921   \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
10922 }

```

`\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.

```

10923 \ifdef\texorpdfstring
10924 {
10925   \newcommand*\glsfmtshort[1]{%
10926     \texorpdfstring
10927     {\glsxrttitleshort{#1}}%
10928     {\glsentryshort{#1}}%
10929   }%
10930 }

```

```

10931 {
10932   \newcommand*{\glsfmtshort}[1]{%
10933     \glsxtrtitleshort{#1}%
10934 }

```

Similarly for the plural version.

```
\glsfmtshortpl
10935 \ifdef\textorpdfstring
10936 {
10937   \newcommand*{\glsfmtshortpl}[1]{%
10938     \textorpdfstring
10939       {\glsxtrtitleshortpl{#1}}%
10940       {\glsentryshortpl{#1}}%
10941   }
10942 }
10943 {
10944   \newcommand*{\glsfmtshortpl}[1]{%
10945     \glsxtrtitleshortpl{#1}%
10946 }
```

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).

```

10947 \ifdef\textorpdfstring
10948 {
10949   \newcommand*{\Glsfmtshort}[1]{%
10950     \textorpdfstring
10951       {\Glsxtrtitleshort{#1}}%
10952       {\glsentryshort{#1}}%
10953   }
10954 }
10955 {
10956   \newcommand*{\Glsfmtshort}[1]{%
10957     \Glsxtrtitleshort{#1}%
10958 }
```

\Glsfmtshortpl Plural form (first letter uppercase).

```

10959 \ifdef\textorpdfstring
10960 {
10961   \newcommand*{\Glsfmtshortpl}[1]{%
10962     \textorpdfstring
10963       {\Glsxtrtitleshortpl{#1}}%
10964       {\glsentryshortpl{#1}}%
10965   }
10966 }
10967 {
10968   \newcommand*{\Glsfmtshortpl}[1]{%
10969     \Glsxtrtitleshortpl{#1}}
```

10970 }

\glsfmtname As above but for the name value.

```
10971 \ifdef\textorpdfstring
10972 {
10973   \newcommand*\glsfmtname[1]{%
10974     \textorpdfstring
10975     {\glsxtrtitlename{\#1}}%
10976     {\glsentryname{\#1}}%
10977   }
10978 }
10979 {
10980   \newcommand*\glsfmtname[1]{%
10981     \glsxtrtitlename{\#1}}
10982 }
```

\Glsfmtname First letter converted to upper case.

```
10983 \ifdef\textorpdfstring
10984 {
10985   \newcommand*\Glsfmtname[1]{%
10986     \textorpdfstring
10987     {\Glsxtrtitlename{\#1}}%
10988     {\glsentryname{\#1}}%
10989   }
10990 }
10991 {
10992   \newcommand*\Glsfmtname[1]{%
10993     \Glsxtrtitlename{\#1}}
10994 }
```

\glsfmttext As above but for the text value.

```
10995 \ifdef\textorpdfstring
10996 {
10997   \newcommand*\glsfmttext[1]{%
10998     \textorpdfstring
10999     {\glsxtrtitletext{\#1}}%
11000     {\glsentrytext{\#1}}%
11001   }
11002 }
11003 {
11004   \newcommand*\glsfmttext[1]{%
11005     \glsxtrtitletext{\#1}}
11006 }
```

\Glsfmttext First letter converted to upper case.

```
11007 \ifdef\textorpdfstring
11008 {
11009   \newcommand*\Glsfmttext[1]{%
11010     \textorpdfstring
```

```

11011     {\Glsxtrtitletext{\#1}}%
11012     {\glsentrytext{\#1}}%
11013 }
11014 }
11015 {
11016 \newcommand*{\Glsfmttext}[1]{%
11017   \Glsxtrtitletext{\#1}}
11018 }
```

\glsfmtplural As above but for the plural value.

```

11019 \ifdef\textorpdfstring
11020 {
11021   \newcommand*{\glsfmtplural}[1]{%
11022     \textorpdfstring
11023     {\Glsxtrtitleplural{\#1}}%
11024     {\glsentryplural{\#1}}%
11025 }
11026 }
11027 {
11028   \newcommand*{\glsfmtplural}[1]{%
11029     \Glsxtrtitleplural{\#1}}
11030 }
```

\Glsfmtplural First letter converted to upper case.

```

11031 \ifdef\textorpdfstring
11032 {
11033   \newcommand*{\Glsfmtplural}[1]{%
11034     \textorpdfstring
11035     {\Glsxtrtitleplural{\#1}}%
11036     {\glsentryplural{\#1}}%
11037 }
11038 }
11039 {
11040   \newcommand*{\Glsfmtplural}[1]{%
11041     \Glsxtrtitleplural{\#1}}
11042 }
```

\glsfmtfirst As above but for the first value.

```

11043 \ifdef\textorpdfstring
11044 {
11045   \newcommand*{\glsfmtfirst}[1]{%
11046     \textorpdfstring
11047     {\Glsxtrtitlefirst{\#1}}%
11048     {\glsentryfirst{\#1}}%
11049 }
11050 }
11051 {
11052   \newcommand*{\glsfmtfirst}[1]{%
11053     \Glsxtrtitlefirst{\#1}}
```

```
11054 }
```

\Glsfmtfirst First letter converted to upper case.

```
11055 \ifdef\textorpdfstring
11056 {
11057   \newcommand*\Glsfmtfirst[1]{%
11058     \textorpdfstring
11059     {\Glsxrttitlefirst{\#1}}%
11060     {\glsentryfirst{\#1}}%
11061   }
11062 }
11063 {
11064   \newcommand*\Glsfmtfirst[1]{%
11065     \Glsxrttitlefirst{\#1}}
11066 }
```

\glsfmtfirstpl As above but for the firstplural value.

```
11067 \ifdef\textorpdfstring
11068 {
11069   \newcommand*\glsfmtfirstpl[1]{%
11070     \textorpdfstring
11071     {\Glsxrttitlefirstplural{\#1}}%
11072     {\glsentryfirstplural{\#1}}%
11073   }
11074 }
11075 {
11076   \newcommand*\glsfmtfirstpl[1]{%
11077     \Glsxrttitlefirstplural{\#1}}
11078 }
```

\Glsfmtfirstpl First letter converted to upper case.

```
11079 \ifdef\textorpdfstring
11080 {
11081   \newcommand*\Glsfmtfirstpl[1]{%
11082     \textorpdfstring
11083     {\Glsxrttitlefirstplural{\#1}}%
11084     {\glsentryfirstplural{\#1}}%
11085   }
11086 }
11087 {
11088   \newcommand*\Glsfmtfirstpl[1]{%
11089     \Glsxrttitlefirstplural{\#1}}
11090 }
```

\glsfmtlong As above but for the long value.

```
11091 \ifdef\textorpdfstring
11092 {
11093   \newcommand*\glsfmtlong[1]{%
11094     \textorpdfstring
```

```

11095     {\glsxtrtitlelong{\#1}}%
11096     {\glsentrylong{\#1}}%
11097 }
11098 }
11099 {
11100 \newcommand*{\glsfmtlong}[1]{%
11101   \glsxtrtitlelong{\#1}%
11102 }
```

\Glsfmtlong First letter converted to upper case.

```

11103 \ifdef\textorpdfstring
11104 {
11105   \newcommand*{\Glsfmtlong}[1]{%
11106     \textorpdfstring
11107     {\Glsxtrtitlelong{\#1}}%
11108     {\glsentrylong{\#1}}%
11109 }
11110 }
11111 {
11112   \newcommand*{\Glsfmtlong}[1]{%
11113     \Glsxtrtitlelong{\#1}%
11114 }
```

\glsfmtlongpl As above but for the longplural value.

```

11115 \ifdef\textorpdfstring
11116 {
11117   \newcommand*{\glsfmtlongpl}[1]{%
11118     \textorpdfstring
11119     {\glsxtrtitlelongpl{\#1}}%
11120     {\glsentrylongpl{\#1}}%
11121 }
11122 }
11123 {
11124   \newcommand*{\glsfmtlongpl}[1]{%
11125     \glsxtrtitlelongpl{\#1}%
11126 }
```

\Glsfmtlongpl First letter converted to upper case.

```

11127 \ifdef\textorpdfstring
11128 {
11129   \newcommand*{\Glsfmtlongpl}[1]{%
11130     \textorpdfstring
11131     {\Glsxtrtitlelongpl{\#1}}%
11132     {\glsentrylongpl{\#1}}%
11133 }
11134 }
11135 {
11136   \newcommand*{\Glsfmtlongpl}[1]{%
11137     \Glsxtrtitlelongpl{\#1}}
```

```
11138 }
```

\glsfmtfull In-line full format.

```
11139 \ifdef\textorpdfstring
11140 {
11141   \newcommand*\glsfmtfull[1]{%
11142     \textorpdfstring
11143     {\glsxtrtitlefull{#1}}%
11144     {\glsxtrinlinefullformat{#1}{}}%
11145   }
11146 }
11147 {
11148   \newcommand*\Glsfmtfull[1]{%
11149     \glsxtrtitlefull{#1}}
11150 }
```

\Glsfmtfull First letter converted to upper case.

```
11151 \ifdef\textorpdfstring
11152 {
11153   \newcommand*\Glsfmtfull[1]{%
11154     \textorpdfstring
11155     {\Glsxtrtitlefull{#1}}%
11156     {\Glsxtrinlinefullformat{#1}{}}%
11157   }
11158 }
11159 {
11160   \newcommand*\Glsfmtfull[1]{%
11161     \Glsxtrtitlefull{#1}}
11162 }
```

\glsfmtfullpl In-line full plural format.

```
11163 \ifdef\textorpdfstring
11164 {
11165   \newcommand*\glsfmtfullpl[1]{%
11166     \textorpdfstring
11167     {\glsxtrtitlefullpl{#1}}%
11168     {\glsxtrinlinefullplformat{#1}{}}%
11169   }
11170 }
11171 {
11172   \newcommand*\Glsfmtfullpl[1]{%
11173     \glsxtrtitlefullpl{#1}}
11174 }
```

\Glsfmtfullpl First letter converted to upper case.

```
11175 \ifdef\textorpdfstring
11176 {
11177   \newcommand*\Glsfmtfullpl[1]{%
11178     \textorpdfstring
```

```

11179     {\Glsxtrtitlefullpl{#1}}%
11180     {\Glsxtrinlinefullplformat{#1}{}}
11181 }
11182 }
11183 {
11184 \newcommand*{\Glsfmtfullpl}[1]{%
11185   \Glsxtrtitlefullpl{#1}}
11186 }

```

1.9 Multi-Lingual Support

Add the facility to load language modules, if they are installed, but none are provided with this package.

sariesExtraLang

```

11187 \newcommand*{\RequireGlossariesExtraLang}[1]{%
11188   \@ifundefined{ver@glossariesxtr-#1.ldf}{\input{glossariesxtr-#1.ldf}}{}}
11189 }

```

sariesExtraLang

```

11190 \newcommand*{\ProvidesGlossariesExtraLang}[1]{%
11191   \ProvidesFile{glossariesxtr-#1.ldf}}
11192 }

```

Load any required language modules that are available. This doesn't generate any warning if none are found, since they're not essential. (The only command that really needs defining for the document is `\abbreviationsname`, which can simply be redefined. However, with `bib2gls` it might be useful to provide custom rules for a particular locale.)

xtr@loaddialect The dialect label should be stored in `\this@dialect` before using this command.

```

11193 \newcommand{\glsxtr@loaddialect}{%
11194   \IfTrackedLanguageFileExists{\this@dialect}%
11195   {glossariesxtr-}%
11196   {.ldf}%
11197   {}%
11198   \RequireGlossariesExtraLang{\CurrentTrackedTag}%
11199 }%
11200 {}%

```

If `glossaries-extra-bib2gls` has been loaded, `\glsxtrdialecthook` will check for the associated script, otherwise it will do nothing.

```

11201   \glsxtrdialecthook
11202 }

```

```

11203 \@ifpackageloaded{tracklang}%
11204 {}%
11205   \AnyTrackedLanguages
11206   {}%

```

```

11207     \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
11208   }%
11209   {}%
11210 }
11211 {}

```

Load `glossaries-extra-stylemods` if required.

```
11212 \@glsxtr@redefstyles
```

and set the style:

```
11213 \@glsxtr@do@style
```

1.10 glossaries-extra-bib2gls.sty

This package provides additional support for `bib2gls` and is automatically loaded by the `record` option.

```
11214 \NeedsTeXFormat{LaTeX2e}
```

```
11215 \ProvidesPackage{glossaries-extra-bib2gls}[2018/03/06 v1.28 (NLCT)]
```

These are some convenient macros for use with custom rules.

```
\glshex
11216 \newcommand*\glshex{\string\u}
```

`rprovidecommand` For use in `@preamble`, this behaves like `\providecommand` in the document but like `\renewcommand` in `bib2gls`.

```
11217 \newcommand*\glsxtrprovidecommand{\providecommand}
```

Provide missing Greek letters for use in maths mode. These are recognised by `bib2gls` and will be mapped to the Mathematical Greek Italic letters. This ensures that the Greek letters that have the same shape as Latin letters are kept with the other Greek letters. These commands use an upright font for capitals and italic for lower case to provide a better match with the other Greek symbols provided by the kernel.

```
\Alpha
11218 \providecommand*\Alpha{\mathrm{A}}
```

```
\Beta
11219 \providecommand*\Beta{\mathrm{B}}
```

```
\Epsilon
11220 \providecommand*\Epsilon{\mathrm{E}}
```

```
\Zeta
11221 \providecommand*\Zeta{\mathrm{Z}}
```

```
\Eta
11222 \providecommand*\Eta{\mathrm{H}}
```

```

\Iota
11223 \providecommand*\Iota{\mathrm{I}}
\Kappa
11224 \providecommand*\Kappa{\mathrm{K}}
\Mu
11225 \providecommand*\Mu{\mathrm{M}}
\nu
11226 \providecommand*\nu{\mathrm{N}}
\Omicron
11227 \providecommand*\Omicron{\mathrm{O}}
\Rho
11228 \providecommand*\Rho{\mathrm{P}}
\Tau
11229 \providecommand*\Tau{\mathrm{T}}
\Chi
11230 \providecommand*\Chi{\mathrm{X}}
\Digamma
11231 \providecommand*\Digamma{\mathrm{F}}
\omicron
11232 \providecommand*\omicron{\mathit{o}}
Provide corresponding upright characters if upgreek has been loaded.
11233 @ifpackageloaded{upgreek}%
11234 {
\Upsilon
11235 \providecommand*\Upsilon{\mathrm{A}}
\Upbeta
11236 \providecommand*\Upbeta{\mathrm{B}}
\Upsilon
11237 \providecommand*\Upsilon{\mathrm{E}}
\Upzeta
11238 \providecommand*\Upzeta{\mathrm{Z}}

```

```

\Upeta
11239 \providecommand*\Upeta{\mathrm{H}}
\Upsilon
11240 \providecommand*\Upsilon{\mathrm{I}}
\Upkappa
11241 \providecommand*\Upkappa{\mathrm{K}}
\Upmu
11242 \providecommand*\Upmu{\mathrm{M}}
\Upnu
11243 \providecommand*\Upnu{\mathrm{N}}
\Upomicron
11244 \providecommand*\Upomicron{\mathrm{O}}
\Uprho
11245 \providecommand*\Uprho{\mathrm{P}}
\Uptau
11246 \providecommand*\Uptau{\mathrm{T}}
\Upchi
11247 \providecommand*\Upchi{\mathrm{X}}
\upomicron
11248 \providecommand*\upomicron{\mathrm{o}}
11249 }%
11250 {}% upgreek.sty not loaded

```

This package provides some basic rules but is not intended for complete coverage of all locales. The CLDR should provide the appropriate locale-sensitive rules. These macros are primarily to help construct custom rules to include, for example, Greek maths symbols mixed with Latin. For the full rule syntax, see the Java API for [RuleBaseCollator](#)

If you want to provide a rule-block for a particular locale to allow for customization within that locale, create a file called `glossariesxtr-<tag>.ldf` (where `<tag>` identifies the locale) and add similar commands. See the description of `\IfTrackedLanguageFileExists` in the `tracklang` manual for the allowed forms of `<tag>`. The simplest is to just use the root language label. The file will then be automatically loaded by `glossaries-extra` if the document has support for that language.

When combining these blocks of rules, remember to separate them with the appropriate character. For example:

```
sort-rule={\glsxtrcontrolrules}
```

```

; \glsxtrspacerules
; \glsxtrnonprintablerules
; \glsxtrcombiningdiacriticrules
, \glsxtrhyphenrules
<\glsxtrgeneralpuncrules
<\glsxtrdigitrules
<\glsxtrfractionrules
<\glsxtrGeneralLatinIVrules
<\glsxtrMathItalicGreekIrules
}

```

xtrcontrolrules These are control characters that are usually placed at the start of a rule in the ‘ignored characters’ section. `\string` is used for punctuation characters in case they’ve been made active.

```

11251 \newcommand*{\glsxtrcontrolrules}{%
11252   \string' \glshex 200B\string' \string= \glshex 200C\string= \glshex 200D
11253   \string= \glshex 200E\string= \glshex 200F\string= \glshex 0000\string= \glshex 0001
11254   \string= \glshex 0002\string= \glshex 0003\string= \glshex 0004\string= \glshex 0005
11255   \string= \glshex 0006\string= \glshex 0007\string= \glshex 0008
11256   \string= \string' \glshex 0009\string' \string= \string' \glshex 000B\string'
11257   \string= \glshex 000E\string= \glshex 000F\string= \string' \glshex
11258 0010\string' \string= \glshex 0011
11259   \string= \glshex 0012\string= \glshex 0013\string= \glshex 0014\string= \glshex 0015
11260   \string= \glshex 0016\string= \glshex 0017\string= \glshex 0018\string= \glshex 0019
11261   \string= \glshex 001A\string= \glshex 001B\string= \glshex 001C\string= \glshex 001D
11262   \string= \glshex 001E\string= \glshex 001F\string= \glshex 007F\string= \glshex 0080
11263   \string= \glshex 0081\string= \glshex 0082\string= \glshex 0083\string= \glshex 0084
11264   \string= \glshex 0085\string= \glshex 0086\string= \glshex 0087\string= \glshex 0088
11265   \string= \glshex 0089\string= \glshex 008A\string= \glshex 008B\string= \glshex 008C
11266   \string= \glshex 008D\string= \glshex 008E\string= \glshex 008F\string= \glshex 0090
11267   \string= \glshex 0091\string= \glshex 0092\string= \glshex 0093\string= \glshex 0094
11268   \string= \glshex 0095\string= \glshex 0096\string= \glshex 0097\string= \glshex 0098
11269   \string= \glshex 0099\string= \glshex 009A\string= \glshex 009B\string= \glshex 009C
11270   \string= \glshex 009D\string= \glshex 009E\string= \glshex 009F
11271 }

```

lsxtrspacerules These are space characters.

```

11272 \newcommand*{\glsxtrspacerules}{%
11273   \string' \string' \string;
11274   \string' \glshex 00A0\string' \string;
11275   \string' \glshex 2000\string' \string;
11276   \string' \glshex 2001\string' \string;
11277   \string' \glshex 2002\string' \string;
11278   \string' \glshex 2003\string' \string;
11279   \string' \glshex 2004\string' \string;
11280   \string' \glshex 2005\string' \string;
11281   \string' \glshex 2006\string' \string;
11282   \string' \glshex 2007\string' \string;
11283   \string' \glshex 2008\string' \string;
11284   \string' \glshex 2009\string' \string;

```

```
11285 \string'\glshex 200A\string'\string;
11286 \string'\glshex 3000\string'
11287 }
```

nprintablerules These are non-printable characters (BOM, tabs, line feed and carriage return).

```
11288 \newcommand*{\glsxtrnonprintablerules}{%
11289 \string'\glshex FFFF\string'\string;
11290 \string'\glshex 000A\string'\string;
11291 \string'\glshex 0009\string'\string;
11292 \string'\glshex 000C\string'\string;
11293 \string'\glshex 000B\string'
11294 }
```

gdiacriticrules Combining diacritic marks. This is split into multiple macros.

```
11295 \newcommand*{\glsxtrcombiningdiacriticrules}{%
11296 \glsxtrcombiningdiacriticIrules\string;
11297 \glsxtrcombiningdiacriticIIrules\string;
11298 \glsxtrcombiningdiacriticIIIrules\string;
11299 \glsxtrcombiningdiacriticIVrules
11300 }
```

diacriticIrules First set of combining diacritic marks.

```
11301 \newcommand*{\glsxtrcombiningdiacriticIrules}{%
11302 \glshex 0301\string;% combining acute
11303 \glshex 0300\string;% combining grave
11304 \glshex 0306\string;% combining breve
11305 \glshex 0302\string;% combining circumflex
11306 \glshex 030C\string;% combining caron
11307 \glshex 030A\string;% combining ring
11308 \glshex 030D\string;% combining vertical line above
11309 \glshex 0308\string;% combining diaeresis
11310 \glshex 030B\string;% combining double acute
11311 \glshex 0303\string;% combining tilde
11312 \glshex 0307\string;% combining dot above
11313 \glshex 0304% combining macron
11314 }
```

iacriticIIrules Second set of combining diacritic marks.

```
11315 \newcommand*{\glsxtrcombiningdiacriticIIrules}{%
11316 \glshex 0337\string;% combining short solidus overlay
11317 \glshex 0327\string;% combining cedilla
11318 \glshex 0328\string;% combining ogonek
11319 \glshex 0323\string;% combining dot below
11320 \glshex 0332\string;% combining low line
11321 \glshex 0305\string;% combining overline
11322 \glshex 0309\string;% combining hook above
11323 \glshex 030E\string;% combining double vertical line above
11324 \glshex 030F\string;% combining double grave accent
11325 \glshex 0310\string;% combining candrabindu
```

```

11326 \glshex 0311\string;% combining inverted breve
11327 \glshex 0312\string;% combining turned comma above
11328 \glshex 0313\string;% combining comma above
11329 \glshex 0314\string;% combining reversed comma above
11330 \glshex 0315\string;% combining comma above right
11331 \glshex 0316\string;% combining grave accent below
11332 \glshex 0317% combining acute accent below
11333 }

```

acriticIIIrules Third set of combining diacritic marks.

```

11334 \newcommand*\glsxtrcombiningdiacriticIIIrules}{%
11335 \glshex 0318\string;% combining left tack below
11336 \glshex 0319\string;% combining right tack below
11337 \glshex 031A\string;% combining left angle above
11338 \glshex 031B\string;% combining horn
11339 \glshex 031C\string;% combining left half ring below
11340 \glshex 031D\string;% combining up tack below
11341 \glshex 031E\string;% combining down tack below
11342 \glshex 031F\string;% combining plus sign below
11343 \glshex 0320\string;% combining minus sign below
11344 \glshex 0321\string;% combining palatalized hook below
11345 \glshex 0322\string;% combining retroflex hook below
11346 \glshex 0324\string;% combining diaresis below
11347 \glshex 0325\string;% combining ring below
11348 \glshex 0326\string;% combining comma below
11349 \glshex 0329\string;% combining vertical line below
11350 \glshex 032A\string;% combining bridge below
11351 \glshex 032B\string;% combining inverted double arch below
11352 \glshex 032C\string;% combining caron below
11353 \glshex 032D\string;% combining circumflex accent below
11354 \glshex 032E\string;% combining breve below
11355 \glshex 032F\string;% combining inverted breve below
11356 \glshex 0330\string;% combining tilde below
11357 \glshex 0331\string;% combining macron below
11358 \glshex 0333\string;% combining double low line
11359 \glshex 0334\string;% combining tilde overlay
11360 \glshex 0335\string;% combining short stroke overlay
11361 \glshex 0336\string;% combining long stroke overlay
11362 \glshex 0338\string;% combining long solidus overlay
11363 \glshex 0339\string;% combining combining right half ring below
11364 \glshex 033A\string;% combining inverted bridge below
11365 \glshex 033B\string;% combining square below
11366 \glshex 033C\string;% combining seagull below
11367 \glshex 033D\string;% combining x above
11368 \glshex 033E\string;% combining vertical tilde
11369 \glshex 033F\string;% combining double overline
11370 \glshex 0342\string;% combining Greek perispomeni
11371 \glshex 0344\string;% combining Greek dialytika tonos
11372 \glshex 0345\string;% combining Greek ypogegrammeni

```

```

11373 \glshex 0360\string;% combining double tilde
11374 \glshex 0361\string;% combining double inverted breve
11375 \glshex 0483\string;% combining Cyrillic titlo
11376 \glshex 0484\string;% combining Cyrillic palatalization
11377 \glshex 0485\string;% combining Cyrillic dasia pneumata
11378 \glshex 0486% combining Cyrillic psili pneumata
11379 }

```

iacriticIVrules Fourth set of combining diacritic marks.

```

11380 \newcommand*\glsxtrcombiningdiacriticIVrules}{%
11381 \glshex 20D0\string;% combining left harpoon above
11382 \glshex 20D1\string;% combining right harpoon above
11383 \glshex 20D2\string;% combining long vertical line overlay
11384 \glshex 20D3\string;% combining short vertical line overlay
11385 \glshex 20D4\string;% combining anticlockwise arrow above
11386 \glshex 20D5\string;% combining clockwise arrow above
11387 \glshex 20D6\string;% combining left arrow above
11388 \glshex 20D7\string;% combining right arrow above
11389 \glshex 20D8\string;% combining ring overlay
11390 \glshex 20D9\string;% combining clockwise ring overlay
11391 \glshex 20DA\string;% combining anticlockwise ring overlay
11392 \glshex 20DB\string;% combining three dots above
11393 \glshex 20DC\string;% combining four dots above
11394 \glshex 20DD\string;% combining enclosing circle
11395 \glshex 20DE\string;% combining enclosing square
11396 \glshex 20DF\string;% combining enclosing diamond
11397 \glshex 20E0\string;% combining enclosing circle backslash
11398 \glshex 20E1% combining left right arrow above
11399 }

```

sxtrhyphenrules Hyphens.

```

11400 \newcommand*\glsxtrhyphenrules}{%
11401 \string'\string-\string'\string;% ASCII hyphen
11402 \glshex 00AD\string;% soft hyphen
11403 \glshex 2010\string;% hyphen
11404 \glshex 2011\string;% non-breaking hyphen
11405 \glshex 2012\string;% figure dash
11406 \glshex 2013\string;% en dash
11407 \glshex 2014\string;% em dash
11408 \glshex 2015\string;% horizontal bar
11409 \glshex 2212\string=\glshex 207B\string=\glshex 208B% minus sign
11410 }

```

eneralpuncrules General punctuation.

```

11411 \newcommand*\glsxtrgeneralpuncrules}{%
11412 \glsxtrgeneralpuncIrules
11413 \string<\glsxtrcurrencyrules
11414 \string<\glsxtrgeneralpuncIIrules
11415 }

```

neralpuncIrules First set of general punctuation.

```
11416 \newcommand*{\glsxtrgeneralpuncIrules}{%
11417   \string`\glshex 005F\string'% underscore
11418   \string<\glshex 00AF% macron
11419   \string<\string`\glshex 002C\string'% comma
11420   \string<\string`\glshex 003B\string'% semi-colon
11421   \string<\string`\glshex 003A\string'% colon
11422   \string<\string`\glshex 0021\string'% exclamation mark
11423   \string<\glshex 00A1% inverted exclamation mark
11424   \string<\string`\glshex 003F\string'% question mark
11425   \string<\glshex 00BF% inverted question mark
11426   \string<\string`\glshex 002F\string'% solidus
11427   \string<\string`\glshex 002E\string'% full stop
11428   \string<\glshex 00B4% acute accent
11429   \string<\string`\glshex 0060\string'% grave accent
11430   \string<\string`\glshex 005E\string'% circumflex accent
11431   \string<\glshex 00A8% diaersis
11432   \string<\string`\glshex 007E\string'% tilde
11433   \string<\glshex 00B7% middle dot
11434   \string<\glshex 00B8% cedilla
11435   \string<\string`\glshex 0027\string'% straight apostrophe
11436   \string<\string`\glshex 0022\string'% straight double quote
11437   \string<\glshex 00AB% left guillemet
11438   \string<\glshex 00BB% right guillemet
11439   \string<\string`\glshex 0028\string'% left parenthesis
11440   \string=\glshex 207D\string=\glshex 208D% super/subscript left parenthesis
11441   \string<\string`\glshex 0029\string'% right parenthesis
11442   \string=\glshex 207E\string=\glshex 208E% super/subscript right parenthesis
11443   \string<\string`\glshex 005B\string'% left square bracket
11444   \string<\string`\glshex 005D\string'% right square bracket
11445   \string<\string`\glshex 007B\string'% left curly bracket
11446   \string<\string`\glshex 007D\string'% right curly bracket
11447   \string<\glshex 00A7% section sign
11448   \string<\glshex 00B6% pilcrow sign
11449   \string<\glshex 00A9% copyright sign
11450   \string<\glshex 00AE% registered sign
11451   \string<\string`\glshex 0040\string'% at sign
11452 }
```

trcurrencyrules General punctuation.

```
11453 \newcommand*{\glsxtrcurrencyrules}{%
11454   \glshex 00A4% currency sign
11455   \string<\glshex 0E3F% Thai currency symbol baht
11456   \string<\glshex 00A2% cent sign
11457   \string<\glshex 20A1% colon sign
11458   \string<\glshex 20A2% cruzeiro sign
11459   \string<\string`\glshex 0024\string'% dollar sign
11460   \string<\glshex 20AB% dong sign
11461   \string<\glshex 20AC% euro sign
```

```

11462 \string<\glshex 20A3% French franc sign
11463 \string<\glshex 20A4% lira sign
11464 \string<\glshex 20A5% mill sign
11465 \string<\glshex 20A6% naira sign
11466 \string<\glshex 20A7% peseta sign
11467 \string<\glshex 00A3% pound sign
11468 \string<\glshex 20A8% rupee sign
11469 \string<\glshex 20AA% new sheqel sign
11470 \string<\glshex 20A9% won sign
11471 \string<\glshex 00A5% yen sign
11472 }

```

eralpuncIIrules Second set of general punctuation.

```

11473 \newcommand*\glsxtrgeneralpuncIIrules}{%
11474 \string'\glshex 002A\string'% asterisk
11475 \string<\string'\glshex 005C\string'% backslash
11476 \string<\string'\glshex 0026\string'% ampersand
11477 \string<\string'\glshex 0023\string'% hash sign
11478 \string<\string'\glshex 0025\string'% percent sign
11479 \string<\string'\glshex 002B\string'% plus sign
11480 \string=\glshex 207A\string=\glshex 208A% super/subscript plus sign
11481 \string<\glshex 00B1% plus-minus sign
11482 \string<\glshex 00F7% division sign
11483 \string<\glshex 00D7% multiplication sign
11484 \string<\string'\glshex 003C\string'% less-than sign
11485 \string<\string'\glshex 003D\string'% equals sign
11486 \string<\string'\glshex 003E\string'% greater-than sign
11487 \string<\glshex 00AC% not sign
11488 \string<\string'\glshex 007C\string'% vertical bar (pipe)
11489 \string<\glshex 00A6% broken bar
11490 \string<\glshex 00B0% degree sign
11491 \string<\glshex 00B5% micron sign
11492 }

```

eralLatinIrules Basic Latin alphabet.

```

11493 \newcommand*\glsxtrGeneralLatinIrules}{%
11494 \glsxtrLatinA
11495 \string<b,B%
11496 \string<c,C%
11497 \string<d,D%
11498 \string<\glsxtrLatinE
11499 \string<f,F%
11500 \string<g,G%
11501 \string<\glsxtrLatinH
11502 \string<\glsxtrLatinI
11503 \string<j,J%
11504 \string<\glsxtrLatinK
11505 \string<\glsxtrLatinL
11506 \string<\glsxtrLatinM

```

```

11507 \string<\glsxtrLatinN
11508 \string<\glsxtrLatinO
11509 \string<\glsxtrLatinP
11510 \string<q,Q%
11511 \string<r,R%
11512 \string<\glsxtrLatinS
11513 \string<\glsxtrLatinT
11514 \string<u,U%
11515 \string<v,V%
11516 \string<w,W%
11517 \string<\glsxtrLatinX
11518 \string<y,Y%
11519 \string<z,Z
11520 }

```

`ralLatinIIrules` General Latin alphabet (eth between D and E, ß treated as SS).

```

11521 \newcommand*{\glsxtrGeneralLatinIIrules}{%
11522 \glsxtrLatinA
11523 \string<b,B%
11524 \string<c,C%
11525 \string<d,D%
11526 \string<\glsxtrLatinEth
11527 \string<\glsxtrLatinE
11528 \string<f,F%
11529 \string<g,G%
11530 \string<\glsxtrLatinH
11531 \string<\glsxtrLatinI
11532 \string<j,J%
11533 \string<\glsxtrLatinK
11534 \string<\glsxtrLatinL
11535 \string<\glsxtrLatinM
11536 \string<\glsxtrLatinN
11537 \string<\glsxtrLatinO
11538 \string<\glsxtrLatinP
11539 \string<q,Q%
11540 \string<r,R%
11541 \string<\glsxtrLatinS
11542 \string& SS \string, \glsxtrLatinEszettSs
11543 \string<\glsxtrLatinT
11544 \string<u,U%
11545 \string<v,V%
11546 \string<w,W%
11547 \string<\glsxtrLatinX
11548 \string<y,Y%
11549 \string<z,Z%
11550 }

```

`allLatinIIIrules` General Latin alphabet (eth between D and E, ß treated as SZ).

```
11551 \newcommand*{\glsxtrGeneralLatinIIIrules}{%
```

```

11552 \glsxtrLatinA
11553 \string<b,B%
11554 \string<c,C%
11555 \string<d,D%
11556 \string<\glsxtrLatinEth
11557 \string<\glsxtrLatinE
11558 \string<f,F%
11559 \string<g,G%
11560 \string<\glsxtrLatinH
11561 \string<\glsxtrLatinI
11562 \string<j,J%
11563 \string<\glsxtrLatinK
11564 \string<\glsxtrLatinL
11565 \string<\glsxtrLatinM
11566 \string<\glsxtrLatinN
11567 \string<\glsxtrLatinO
11568 \string<\glsxtrLatinP
11569 \string<q,Q%
11570 \string<r,R%
11571 \string<\glsxtrLatinS
11572 \string& SZ, \glsxtrLatinEszettSz
11573 \string<\glsxtrLatinT
11574 \string<u,U%
11575 \string<v,V%
11576 \string<w,W%
11577 \string<\glsxtrLatinX
11578 \string<y,Y%
11579 \string<z,Z%
11580 }

```

`ralLatinIVrules` General Latin alphabet (Æ treated as AE and œ treated as OE, Þ treated as TH, ß treated as SS, eth between D and E).

```

11581 \newcommand*{\glsxtrGeneralLatinIVrules}{%
11582 \glsxtrLatinA
11583 \string& AE , \glsxtrLatinAEligature
11584 \string<b,B%
11585 \string<c,C%
11586 \string<d,D%
11587 \string<\glsxtrLatinEth
11588 \string<\glsxtrLatinE
11589 \string<f,F%
11590 \string<g,G%
11591 \string<\glsxtrLatinH
11592 \string<\glsxtrLatinI
11593 \string<j,J%
11594 \string<\glsxtrLatinK
11595 \string<\glsxtrLatinL
11596 \string<\glsxtrLatinM
11597 \string<\glsxtrLatinN

```

```

11598 \string<\glsxtrLatinO
11599 \string& OE , \glsxtrLatinOELigature
11600 \string<\glsxtrLatinP
11601 \string<q,Q%
11602 \string<r,R%
11603 \string<\glsxtrLatinS
11604 \string& SS , \glsxtrLatinEszettSs
11605 \string<\glsxtrLatinT
11606 \string& th =\glshex 00DE
11607 \string& TH =\glshex 00FE
11608 \string<u,U%
11609 \string<v,V%
11610 \string<w,W%
11611 \string<\glsxtrLatinX
11612 \string<y,Y%
11613 \string<z,Z%
11614 }

```

eneralLatinVrules General Latin alphabet (eth between D and E, ß treated as SS, Þ treated as TH).

```

11615 \newcommand*\{\glsxtrGeneralLatinVrules\}{%
11616 \glsxtrLatinA
11617 \string<b,B%
11618 \string<c,C%
11619 \string<d,D%
11620 \string<\glsxtrLatinEth
11621 \string<\glsxtrLatinE
11622 \string<f,F%
11623 \string<g,G%
11624 \string<\glsxtrLatinH
11625 \string<\glsxtrLatinI
11626 \string<j,J%
11627 \string<\glsxtrLatinK
11628 \string<\glsxtrLatinL
11629 \string<\glsxtrLatinM
11630 \string<\glsxtrLatinN
11631 \string<\glsxtrLatinO
11632 \string<\glsxtrLatinP
11633 \string<q,Q%
11634 \string<r,R%
11635 \string<\glsxtrLatinS
11636 \string& SS , \glsxtrLatinEszettSs
11637 \string<\glsxtrLatinT
11638 \string& th =\glshex 00DE
11639 \string& TH =\glshex 00FE
11640 \string<u,U%
11641 \string<v,V%
11642 \string<w,W%
11643 \string<\glsxtrLatinX
11644 \string<y,Y%

```

```
11645 \string<z,Z%
11646 }
```

ralLatinVIrules General Latin alphabet (eth between D and E, ß treated as SZ, Þ treated as TH).

```
11647 \newcommand*{\glsxtrGeneralLatinVIrules}{%
11648 \glsxtrLatinA
11649 \string<b,B%
11650 \string<c,C%
11651 \string<d,D%
11652 \string<\glsxtrLatinEth
11653 \string<\glsxtrLatinE
11654 \string<f,F%
11655 \string<g,G%
11656 \string<\glsxtrLatinH
11657 \string<\glsxtrLatinI
11658 \string<j,J%
11659 \string<\glsxtrLatinK
11660 \string<\glsxtrLatinL
11661 \string<\glsxtrLatinM
11662 \string<\glsxtrLatinN
11663 \string<\glsxtrLatinO
11664 \string<\glsxtrLatinP
11665 \string<q,Q%
11666 \string<r,R%
11667 \string<\glsxtrLatinS
11668 \string& SZ , \glsxtrLatinEszettSz
11669 \string<\glsxtrLatinT
11670 \string& th =\glshex 00DE
11671 \string& TH =\glshex 00FE
11672 \string<u,U%
11673 \string<v,V%
11674 \string<w,W%
11675 \string<\glsxtrLatinX
11676 \string<y,Y%
11677 \string<z,Z%
11678 }
```

allLatinVIIrules General Latin alphabet (Æ between A and B, eth between D and E, insular G as G, œ between O and P, long S equivalent to S, Þ between T and U and wynn as W).

```
11679 \newcommand*{\glsxtrGeneralLatinVIIrules}{%
11680 \glsxtrLatinA
11681 \string<\glsxtrLatinAELigature
11682 \string<b,B%
11683 \string<c,C%
11684 \string<d,D%
11685 \string<\glsxtrLatinEth
11686 \string<\glsxtrLatinE
11687 \string<f,F%
11688 \string<\glsxtrLatinInsularG
```

```

11689 \string<\glsxtrLatinH
11690 \string<\glsxtrLatinI
11691 \string<j,J%
11692 \string<\glsxtrLatinK
11693 \string<\glsxtrLatinL
11694 \string<\glsxtrLatinM
11695 \string<\glsxtrLatinN
11696 \string<\glsxtrLatinO
11697 \string<\glsxtrLatinOELigature
11698 \string<\glsxtrLatinP
11699 \string<q,Q%
11700 \string<r,R%
11701 \string<\glshex 017F=\glsxtrLatinS % s and long s
11702 \string<\glsxtrLatinT
11703 \string<\glsxtrLatinThorn
11704 \string<u,U%
11705 \string<v,V%
11706 \string< w\string=\glshex 01BF, W\string=\glshex 01F7
11707 \string<\glsxtrLatinX
11708 \string<y,Y%
11709 \string<z,Z%
11710 }

```

LatinVIIIRules General Latin alphabet (Æ treated as AE and Ø treated as OE, Þ treated as TH, ß treated as SS, eth treated as D, Ø treated as O, Ł treated as L).

```

11711 \newcommand*\glsxtrGeneralLatinVIIIRules}{%
11712 \glsxtrLatinA
11713 \string& AE , \glsxtrLatinAELigature
11714 \string<b,B%
11715 \string<c,C%
11716 \string<\glshex 00F0\string;d,\glshex 00D0\string;D% D and eth
11717 \string<\glsxtrLatinE
11718 \string<f,F%
11719 \string<g,G%
11720 \string<\glsxtrLatinH
11721 \string<\glsxtrLatinI
11722 \string<j,J%
11723 \string<\glsxtrLatinK
11724 \string<\glshex 0142\string=\glsxtrLatinL\string=\glshex 0141% L and \L
11725 \string<\glsxtrLatinM
11726 \string<\glsxtrLatinN
11727 \string<\glshex 00F8\string=\glsxtrLatinO\string=\glshex 00D8% O and \O
11728 \string& OE , \glsxtrLatinOELigature
11729 \string<\glsxtrLatinP
11730 \string<q,Q%
11731 \string<r,R%
11732 \string<\glsxtrLatinS
11733 \string& SS , \glsxtrLatinEszettSs
11734 \string<\glsxtrLatinT

```

```

11735 \string& th =\glshex 00DE
11736 \string& TH =\glshex 00FE
11737 \string<u,U%
11738 \string<v,V%
11739 \string<w,W%
11740 \string<\glsxtrLatinX
11741 \string<y,Y%
11742 \string<z,Z%
11743 }

\glsxtrLatinA
11744 \newcommand*\glsxtrLatinA{%
11745   a\string=\glshex 00AA\string=\glshex 2090,A
11746 }

\glsxtrLatinE
11747 \newcommand*\glsxtrLatinE{%
11748   e\string=\glshex 2091,E
11749 }

\glsxtrLatinH
11750 \newcommand*\glsxtrLatinH{%
11751   h\string=\glshex 2095,H
11752 }

\glsxtrLatinI
11753 \newcommand*\glsxtrLatinI{%
11754   i\string=\glshex 2071,I
11755 }

\glsxtrLatinK
11756 \newcommand*\glsxtrLatinK{%
11757   k\string=\glshex 2096,K
11758 }

\glsxtrLatinL
11759 \newcommand*\glsxtrLatinL{%
11760   l\string=\glshex 2097,L
11761 }

\glsxtrLatinM
11762 \newcommand*\glsxtrLatinM{%
11763   m\string=\glshex 2098,M
11764 }

\glsxtrLatinN
11765 \newcommand*\glsxtrLatinN{%
11766   n\string=\glshex 207F\string=\glshex 2099,N
11767 }

```

```

\glsxtrLatinO
11768 \newcommand*{\glsxtrLatinO}{%
11769   o\string=\glshex 00BA\string=\glshex 2092,0
11770 }

\glsxtrLatinP
11771 \newcommand*{\glsxtrLatinP}{%
11772   p\string=\glshex 209A,P
11773 }

\glsxtrLatinS
11774 \newcommand*{\glsxtrLatinS}{%
11775   s\string=\glshex 209B,S
11776 }

\glsxtrLatinT
11777 \newcommand*{\glsxtrLatinT}{%
11778   t\string=\glshex 209C,T
11779 }

\glsxtrLatinX
11780 \newcommand*{\glsxtrLatinX}{%
11781   x\string=\glshex 2093,X
11782 }

lsxtrLatinSchwa Latin schwa (lower case, subscript and upper case).
11783 \newcommand*{\glsxtrLatinSchwa}{%
11784   \glshex 0259\string=\glshex 2094,\glshex 018F
11785 }

trLatinEszettSs
11786 \newcommand*{\glsxtrLatinEszettSs}{%
11787   \glshex 00DF% eszett
11788   \string=\glshex 017Fs % long S s
11789 }

trLatinEszettSz
11790 \newcommand*{\glsxtrLatinEszettSz}{%
11791   \glshex 00DF% eszett
11792   \string= \glshex 017Fz % long S z
11793 }

\glsxtrLatinEth
11794 \newcommand*{\glsxtrLatinEth}{%
11795   \glshex 00F0,\glshex 00D0% eth
11796 }

```

```
lsxtrLatinThorn
11797 \newcommand*{\glsxtrLatinThorn}{%
11798  \glshex 00FE,\glshex 00DE% thorn
11799 }
```

```
LatinAELigature
11800 \newcommand*{\glsxtrLatinAELigature}{%
11801  \glshex 00E6,\glshex 00C6% AE-ligature
11802 }
```

```
LatinOELigature
11803 \newcommand*{\glsxtrLatinOELigature}{%
11804  \glshex 0153,\glshex 0152% OE-ligature
11805 }
```

```
\glsxtrLatinAA
11806 \newcommand*{\glsxtrLatinAA}{%
11807  \glshex 00E5=a\glshex 030A,% \aa
11808  \glshex 00C5=A\glshex 030A% \AA
11809 }
```

```
glsxtrLatinWynn
11810 \newcommand*{\glsxtrLatinWynn}{%
11811  \glshex 01BF,\glshex 01F7% wynn
11812 }
```

```
trLatinInsularG
11813 \newcommand*{\glsxtrLatinInsularG}{%
11814  \glshex 1D79,\glshex A77D% insular G
11815  \string; g, G
11816 }
```

```
sxtrLatinOslash
11817 \newcommand*{\glsxtrLatinOslash}{%
11818  \glshex 00F8,\glshex 00D8% \o, \O
11819 }
```

```
sxtrLatinLslash
11820 \newcommand*{\glsxtrLatinLslash}{%
11821  \glshex 0142,\glshex 0141% \l, \L
11822 }
```

```
thUpGreekIrules Includes digamma between epsilon and zeta.
11823 \newcommand*{\glsxtrMathUpGreekIrules}{%
11824  \glsxtrUpAlpha
11825  \string<\glsxtrUpBeta
11826  \string<\glsxtrUpGamma
11827  \string<\glsxtrUpDelta
```

```

11828 \string<\glsxtrUpEpsilon
11829 \string<\glsxtrUpDigamma
11830 \string<\glsxtrUpZeta
11831 \string<\glsxtrUpEta
11832 \string<\glsxtrUpTheta
11833 \string<\glsxtrUpIota
11834 \string<\glsxtrUpKappa
11835 \string<\glsxtrUpLambda
11836 \string<\glsxtrUpMu
11837 \string<\glsxtrUpNu
11838 \string<\glsxtrUpXi
11839 \string<\glsxtrUpOmicron
11840 \string<\glsxtrUpPi
11841 \string<\glsxtrUpRho
11842 \string<\glsxtrUpSigma
11843 \string<\glsxtrUpTau
11844 \string<\glsxtrUpUpsilon
11845 \string<\glsxtrUpPhi
11846 \string<\glsxtrUpChi
11847 \string<\glsxtrUpPsi
11848 \string<\glsxtrUpOmega
11849 }

```

`hUpGreekIIrules` Doesn't include digamma.

```

11850 \newcommand*{\glsxtrMathUpGreekIIrules}{%
11851 \glsxtrUpAlpha
11852 \string<\glsxtrUpBeta
11853 \string<\glsxtrUpGamma
11854 \string<\glsxtrUpDelta
11855 \string<\glsxtrUpEpsilon
11856 \string<\glsxtrUpZeta
11857 \string<\glsxtrUpEta
11858 \string<\glsxtrUpTheta
11859 \string<\glsxtrUpIota
11860 \string<\glsxtrUpKappa
11861 \string<\glsxtrUpLambda
11862 \string<\glsxtrUpMu
11863 \string<\glsxtrUpNu
11864 \string<\glsxtrUpXi
11865 \string<\glsxtrUpOmicron
11866 \string<\glsxtrUpPi
11867 \string<\glsxtrUpRho
11868 \string<\glsxtrUpSigma
11869 \string<\glsxtrUpTau
11870 \string<\glsxtrUpUpsilon
11871 \string<\glsxtrUpPhi
11872 \string<\glsxtrUpChi
11873 \string<\glsxtrUpPsi
11874 \string<\glsxtrUpOmega

```

11875 }

alicGreekIrules Includes (upright) digamma between epsilon and zeta (there isn't an italic digamma), so don't mix with \glsxtrMathUpGreekIrules or there may be unexpected results.

```
11876 \newcommand*\glsxtrMathItalicGreekIrules}{%
11877 \glsxtrMathItalicAlpha
11878 \string<\glsxtrMathItalicBeta
11879 \string<\glsxtrMathItalicGamma
11880 \string<\glsxtrMathItalicDelta
11881 \string<\glsxtrMathItalicEpsilon
11882 \string<\glsxtrUpDigamma
11883 \string<\glsxtrMathItalicZeta
11884 \string<\glsxtrMathItalicEta
11885 \string<\glsxtrMathItalicTheta
11886 \string<\glsxtrMathItalicIota
11887 \string<\glsxtrMathItalicKappa
11888 \string<\glsxtrMathItalicLambda
11889 \string<\glsxtrMathItalicMu
11890 \string<\glsxtrMathItalicNu
11891 \string<\glsxtrMathItalicXi
11892 \string<\glsxtrMathItalicOmicron
11893 \string<\glsxtrMathItalicPi
11894 \string<\glsxtrMathItalicRho
11895 \string<\glsxtrMathItalicSigma
11896 \string<\glsxtrMathItalicTau
11897 \string<\glsxtrMathItalicUpsilon
11898 \string<\glsxtrMathItalicPhi
11899 \string<\glsxtrMathItalicChi
11900 \string<\glsxtrMathItalicPsi
11901 \string<\glsxtrMathItalicOmega
11902 }
```

licGreekIIrules Doesn't include digamma.

```
11903 \newcommand*\glsxtrMathItalicGreekIIrules}{%
11904 \glsxtrMathItalicAlpha
11905 \string<\glsxtrMathItalicBeta
11906 \string<\glsxtrMathItalicGamma
11907 \string<\glsxtrMathItalicDelta
11908 \string<\glsxtrMathItalicEpsilon
11909 \string<\glsxtrMathItalicZeta
11910 \string<\glsxtrMathItalicEta
11911 \string<\glsxtrMathItalicTheta
11912 \string<\glsxtrMathItalicIota
11913 \string<\glsxtrMathItalicKappa
11914 \string<\glsxtrMathItalicLambda
11915 \string<\glsxtrMathItalicMu
11916 \string<\glsxtrMathItalicNu
11917 \string<\glsxtrMathItalicXi
11918 \string<\glsxtrMathItalicOmicron
```

```

11919 \string<\glsxtrMathItalicPi
11920 \string<\glsxtrMathItalicRho
11921 \string<\glsxtrMathItalicSigma
11922 \string<\glsxtrMathItalicTau
11923 \string<\glsxtrMathItalicUpsilon
11924 \string<\glsxtrMathItalicPhi
11925 \string<\glsxtrMathItalicChi
11926 \string<\glsxtrMathItalicPsi
11927 \string<\glsxtrMathItalicOmega
11928 }

```

`upperGreekIrules` Upper case only (includes upright digamma).

```

11929 \newcommand*{\glsxtrMathItalicUpperGreekIrules}{%
11930 \glshex 1D6E2% upper case alpha (maths italic)
11931 \string<\glshex 1D6E3% upper case beta (maths italic)
11932 \string<\glshex 1D6E4% upper case gamma (maths italic)
11933 \string<\glshex 1D6E5% upper case delta (maths italic)
11934 \string<\glshex 1D6E6% upper case epsilon (maths italic)
11935 \string<\glshex 03DC% upper case digamma
11936 \string<\glshex 1D6E7% upper case zeta (maths italic)
11937 \string<\glshex 1D6E8% upper case eta (maths italic)
11938 \string<\glshex 1D6E9% upper case theta (maths italic)
11939 \string=\glshex 1D6F3% upper case theta variant (maths italic)
11940 \string<\glshex 1D6EA% upper case iota (maths italic)
11941 \string<\glshex 1D6EB% upper case kappa (maths italic)
11942 \string<\glshex 1D6EC% upper case lambda (maths italic)
11943 \string<\glshex 1D6ED% upper case mu (maths italic)
11944 \string<\glshex 1D6EE% upper case nu (maths italic)
11945 \string<\glshex 1D6EF% upper case xi (maths italic)
11946 \string<\glshex 1D6F0% upper case omicron (maths italic)
11947 \string<\glshex 1D6F1% upper case pi (maths italic)
11948 \string<\glshex 1D6F2% upper case rho (maths italic)
11949 \string<\glshex 1D6F4% upper case sigma (maths italic)
11950 \string<\glshex 1D6F5% upper case tau (maths italic)
11951 \string<\glshex 1D6F6% upper case upsilon (maths italic)
11952 \string<\glshex 1D6F7% upper case phi (maths italic)
11953 \string<\glshex 1D6F8% upper case chi (maths italic)
11954 \string<\glshex 1D6F9% upper case psi (maths italic)
11955 \string<\glshex 1D6FA% upper case omega (maths italic)
11956 }

```

`upperGreekIIrules` Upper case only (doesn't include upright digamma).

```

11957 \newcommand*{\glsxtrMathItalicUpperGreekIIrules}{%
11958 \glshex 1D6E2% upper case alpha (maths italic)
11959 \string<\glshex 1D6E3% upper case beta (maths italic)
11960 \string<\glshex 1D6E4% upper case gamma (maths italic)
11961 \string<\glshex 1D6E5% upper case delta (maths italic)
11962 \string<\glshex 1D6E6% upper case epsilon (maths italic)
11963 \string<\glshex 1D6E7% upper case zeta (maths italic)

```

```

11964 \string<\glshex 1D6E8% upper case eta (maths italic)
11965 \string<\glshex 1D6E9% upper case theta (maths italic)
11966 \string=\glshex 1D6F3% upper case theta variant (maths italic)
11967 \string<\glshex 1D6EA% upper case iota (maths italic)
11968 \string<\glshex 1D6EB% upper case kappa (maths italic)
11969 \string<\glshex 1D6EC% upper case lambda (maths italic)
11970 \string<\glshex 1D6ED% upper case mu (maths italic)
11971 \string<\glshex 1D6EE% upper case nu (maths italic)
11972 \string<\glshex 1D6EF% upper case xi (maths italic)
11973 \string<\glshex 1D6F0% upper case omicron (maths italic)
11974 \string<\glshex 1D6F1% upper case pi (maths italic)
11975 \string<\glshex 1D6F2% upper case rho (maths italic)
11976 \string<\glshex 1D6F4% upper case sigma (maths italic)
11977 \string<\glshex 1D6F5% upper case tau (maths italic)
11978 \string<\glshex 1D6F6% upper case upsilon (maths italic)
11979 \string<\glshex 1D6F7% upper case phi (maths italic)
11980 \string<\glshex 1D6F8% upper case chi (maths italic)
11981 \string<\glshex 1D6F9% upper case psi (maths italic)
11982 \string<\glshex 1D6FA% upper case omega (maths italic)
11983 }

```

`owerGreekIrules` Lower case only (includes upright digamma).

```

11984 \newcommand*{\glsxtrMathItalicLowerGreekIrules}{%
11985 \glshex 1D6FC% lower case alpha (maths italic)
11986 \string<\glshex 1D6FD% lower case beta (maths italic)
11987 \string<\glshex 1D6FE% lower case gamma (maths italic)
11988 \string<\glshex 1D6FF% lower case delta (maths italic)
11989 \string<\glshex 1D700% lower case epsilon (maths italic)
11990 \string=\glshex 1D716% lower case epsilon variant (maths italic)
11991 \string<\glshex 03DD% lower case digamma
11992 \string<\glshex 1D701% lower case zeta (maths italic)
11993 \string<\glshex 1D702% lower case eta (maths italic)
11994 \string<\glshex 1D703% lower case theta (maths italic)
11995 \string=\glshex 1D717% lower case theta variant (maths italic)
11996 \string<\glshex 1D704% lower case iota (maths italic)
11997 \string<\glshex 1D705% lower case kappa (maths italic)
11998 \string=\glshex 1D718% lower case kappa variant (maths italic)
11999 \string<\glshex 1D706% lower case lambda (maths italic)
12000 \string<\glshex 1D707% lower case mu (maths italic)
12001 \string<\glshex 1D708% lower case nu (maths italic)
12002 \string<\glshex 1D709% lower case xi (maths italic)
12003 \string<\glshex 1D70A% lower case omicron (maths italic)
12004 \string<\glshex 1D70B% lower case pi (maths italic)
12005 \string=\glshex 1D71B% lower case pi variant (maths italic)
12006 \string<\glshex 1D70C% lower case rho (maths italic)
12007 \string=\glshex 1D71A% lower case rho variant (maths italic)
12008 \string<\glshex 1D70D% lower case final sigma (maths italic)
12009 \string=\glshex 1D70E% lower case sigma (maths italic)
12010 \string<\glshex 1D70F% lower case tau (maths italic)

```

```

12011 \string<\glshex 1D710% lower case upsilon (maths italic)
12012 \string<\glshex 1D711% lower case phi (maths italic)
12013 \string=\glshex 1D719% lower case phi variant (maths italic)
12014 \string<\glshex 1D712% lower case chi (maths italic)
12015 \string<\glshex 1D713% lower case psi (maths italic)
12016 \string<\glshex 1D714% lower case omega (maths italic)
12017 }

```

werGreekIIrules Lower case only (doesn't includes upright digamma).

```

12018 \newcommand*\glsxtrMathItalicLowerGreekIIrules}{%
12019 \glshex 1D6FC% lower case alpha (maths italic)
12020 \string<\glshex 1D6FD% lower case beta (maths italic)
12021 \string<\glshex 1D6FE% lower case gamma (maths italic)
12022 \string<\glshex 1D6FF% lower case delta (maths italic)
12023 \string<\glshex 1D700% lower case epsilon (maths italic)
12024 \string=\glshex 1D716% lower case epsilon variant (maths italic)
12025 \string<\glshex 1D701% lower case zeta (maths italic)
12026 \string<\glshex 1D702% lower case eta (maths italic)
12027 \string<\glshex 1D703% lower case theta (maths italic)
12028 \string=\glshex 1D717% lower case theta variant (maths italic)
12029 \string<\glshex 1D704% lower case iota (maths italic)
12030 \string<\glshex 1D705% lower case kappa (maths italic)
12031 \string=\glshex 1D718% lower case kappa variant (maths italic)
12032 \string<\glshex 1D706% lower case lambda (maths italic)
12033 \string<\glshex 1D707% lower case mu (maths italic)
12034 \string<\glshex 1D708% lower case nu (maths italic)
12035 \string<\glshex 1D709% lower case xi (maths italic)
12036 \string<\glshex 1D70A% lower case omicron (maths italic)
12037 \string<\glshex 1D70B% lower case pi (maths italic)
12038 \string=\glshex 1D71B% lower case pi variant (maths italic)
12039 \string<\glshex 1D70C% lower case rho (maths italic)
12040 \string=\glshex 1D71A% lower case rho variant (maths italic)
12041 \string<\glshex 1D70D% lower case final sigma (maths italic)
12042 \string=\glshex 1D70E% lower case sigma (maths italic)
12043 \string<\glshex 1D70F% lower case tau (maths italic)
12044 \string<\glshex 1D710% lower case upsilon (maths italic)
12045 \string<\glshex 1D711% lower case phi (maths italic)
12046 \string=\glshex 1D719% lower case phi variant (maths italic)
12047 \string<\glshex 1D712% lower case chi (maths italic)
12048 \string<\glshex 1D713% lower case psi (maths italic)
12049 \string<\glshex 1D714% lower case omega (maths italic)
12050 }

```

MathGreekIrules Includes both upright and italic with digamma between epsilon and zeta.

```

12051 \newcommand*\glsxtrMathGreekIrules}{%
12052 \glsxtrMathItalicAlpha
12053 \string;\glsxtrUpAlpha
12054 \string<\glsxtrMathItalicBeta
12055 \string;\glsxtrUpBeta

```

```

12056 \string<\glsxtrMathItalicGamma
12057 \string; \glsxtrUpGamma
12058 \string<\glsxtrMathItalicDelta
12059 \string; \glsxtrUpDelta
12060 \string<\glsxtrMathItalicEpsilon
12061 \string; \glsxtrUpEpsilon
12062 \string<\glsxtrUpDigamma
12063 \string<\glsxtrMathItalicZeta
12064 \string; \glsxtrUpZeta
12065 \string<\glsxtrMathItalicEta
12066 \string; \glsxtrUpEta
12067 \string<\glsxtrMathItalicTheta
12068 \string; \glsxtrUpTheta
12069 \string<\glsxtrMathItalicIota
12070 \string; \glsxtrUpIota
12071 \string<\glsxtrMathItalicKappa
12072 \string; \glsxtrUpKappa
12073 \string<\glsxtrMathItalicLambda
12074 \string; \glsxtrUpLambda
12075 \string<\glsxtrMathItalicMu
12076 \string; \glsxtrUpMu
12077 \string<\glsxtrMathItalicNu
12078 \string; \glsxtrUpNu
12079 \string<\glsxtrMathItalicXi
12080 \string; \glsxtrUpXi
12081 \string<\glsxtrMathItalicOmicron
12082 \string; \glsxtrUpOmicron
12083 \string<\glsxtrMathItalicPi
12084 \string; \glsxtrUpPi
12085 \string<\glsxtrMathItalicRho
12086 \string; \glsxtrUpRho
12087 \string<\glsxtrMathItalicSigma
12088 \string; \glsxtrUpSigma
12089 \string<\glsxtrMathItalicTau
12090 \string; \glsxtrUpTau
12091 \string<\glsxtrMathItalicUpsilon
12092 \string; \glsxtrUpUpsilon
12093 \string<\glsxtrMathItalicPhi
12094 \string; \glsxtrUpPhi
12095 \string<\glsxtrMathItalicChi
12096 \string; \glsxtrUpChi
12097 \string<\glsxtrMathItalicPsi
12098 \string; \glsxtrUpPsi
12099 \string<\glsxtrMathItalicOmega
12100 \string; \glsxtrUpOmega
12101 }

```

`athGreekIIrules` Includes both upright and italic (digamma not included).

```
12102 \newcommand*{\glsxtrMathGreekIIrules}{%
```

```

12103 \glsxtrMathItalicAlpha
12104 \string;\glsxtrUpAlpha
12105 \string<\glsxtrMathItalicBeta
12106 \string;\glsxtrUpBeta
12107 \string<\glsxtrMathItalicGamma
12108 \string;\glsxtrUpGamma
12109 \string<\glsxtrMathItalicDelta
12110 \string;\glsxtrUpDelta
12111 \string<\glsxtrMathItalicEpsilon
12112 \string;\glsxtrUpEpsilon
12113 \string<\glsxtrMathItalicZeta
12114 \string;\glsxtrUpZeta
12115 \string<\glsxtrMathItalicEta
12116 \string;\glsxtrUpEta
12117 \string<\glsxtrMathItalicTheta
12118 \string;\glsxtrUpTheta
12119 \string<\glsxtrMathItalicIota
12120 \string;\glsxtrUpIota
12121 \string<\glsxtrMathItalicKappa
12122 \string;\glsxtrUpKappa
12123 \string<\glsxtrMathItalicLambda
12124 \string;\glsxtrUpLambda
12125 \string<\glsxtrMathItalicMu
12126 \string;\glsxtrUpMu
12127 \string<\glsxtrMathItalicNu
12128 \string;\glsxtrUpNu
12129 \string<\glsxtrMathItalicXi
12130 \string;\glsxtrUpXi
12131 \string<\glsxtrMathItalicOmicron
12132 \string;\glsxtrUpOmicron
12133 \string<\glsxtrMathItalicPi
12134 \string;\glsxtrUpPi
12135 \string<\glsxtrMathItalicRho
12136 \string;\glsxtrUpRho
12137 \string<\glsxtrMathItalicSigma
12138 \string;\glsxtrUpSigma
12139 \string<\glsxtrMathItalicTau
12140 \string;\glsxtrUpTau
12141 \string<\glsxtrMathItalicUpsilon
12142 \string;\glsxtrUpUpsilon
12143 \string<\glsxtrMathItalicPhi
12144 \string;\glsxtrUpPhi
12145 \string<\glsxtrMathItalicChi
12146 \string;\glsxtrUpChi
12147 \string<\glsxtrMathItalicPsi
12148 \string;\glsxtrUpPsi
12149 \string<\glsxtrMathItalicOmega
12150 \string;\glsxtrUpOmega
12151 }

```

```

\glsxtrUpAlpha
12152 \newcommand*{\glsxtrUpAlpha}{%
12153   \glshex{03B1},% lower case alpha
12154   \glshex{0391}% upper case alpha
12155 }

\glsxtrUpBeta
12156 \newcommand*{\glsxtrUpBeta}{%
12157   \glshex{03B2},% lower case beta
12158   \glshex{0392}% upper case beta
12159 }

\glsxtrUpGamma
12160 \newcommand*{\glsxtrUpGamma}{%
12161   \glshex{03B3},% lower case gamma
12162   \glshex{0393}% upper case gamma
12163 }

\glsxtrUpDelta
12164 \newcommand*{\glsxtrUpDelta}{%
12165   \glshex{03B4},% lower case delta
12166   \glshex{0394}% upper case delta
12167 }

glsxtrUpEpsilon
12168 \newcommand*{\glsxtrUpEpsilon}{%
12169   \glshex{03B5},% lower case epsilon
12170   \string=\glshex{03F5},% lower case epsilon variant
12171   \glshex{0395}% upper case epsilon
12172 }

glsxtrUpDigamma
12173 \newcommand*{\glsxtrUpDigamma}{%
12174   \glshex{03DD},% lower case digamma
12175   \glshex{03DC}% upper case digamma
12176 }

\glsxtrUpZeta
12177 \newcommand*{\glsxtrUpZeta}{%
12178   \glshex{03B6},% lower case zeta
12179   \glshex{0396}% upper case zeta
12180 }

\glsxtrUpEta
12181 \newcommand*{\glsxtrUpEta}{%
12182   \glshex{03B7},% lower case eta
12183   \glshex{0397}% upper case eta
12184 }

```

```

\glsxtrUpTheta
12185 \newcommand*{\glsxtrUpTheta}{%
12186  \glshex{03B8} lower case theta
12187  \string=\glshex{03D1},% lower case theta variant
12188  \glshex{0398} upper case theta
12189 }

\glsxtrUpIota
12190 \newcommand*{\glsxtrUpIota}{%
12191  \glshex{03B9},% lower case iota
12192  \glshex{0399} upper case iota
12193 }

\glsxtrUpKappa
12194 \newcommand*{\glsxtrUpKappa}{%
12195  \glshex{03BA} lower case kappa
12196  \string=\glshex{03F0},% lower case kappa variant
12197  \glshex{039A} upper case kappa
12198 }

\glsxtrUpLambda
12199 \newcommand*{\glsxtrUpLambda}{%
12200  \glshex{03BB},% lower lambda
12201  \glshex{039B} upper case lambda
12202 }

\glsxtrUpMu
12203 \newcommand*{\glsxtrUpMu}{%
12204  \glshex{03BC},% lower case mu
12205  \glshex{039C} upper case mu
12206 }

\glsxtrUpNu
12207 \newcommand*{\glsxtrUpNu}{%
12208  \glshex{03BD},% lower case nu
12209  \glshex{039D} upper case nu
12210 }

\glsxtrUpXi
12211 \newcommand*{\glsxtrUpXi}{%
12212  \glshex{03BE},% lower case xi
12213  \glshex{039E} upper case xi
12214 }

glsxtrUpOmicron
12215 \newcommand*{\glsxtrUpOmicron}{%
12216  \glshex{03BF},% lower case omicron
12217  \glshex{039F} upper case omicron
12218 }

```

```

\glsxtrUpPi
12219 \newcommand*{\glsxtrUpPi}{%
12220  \glshex 03C0% lower case pi
12221  \string=\glshex 03D6,% lower case pi variant
12222  \glshex 03A0% upper case pi
12223 }

\glsxtrUpRho
12224 \newcommand*{\glsxtrUpRho}{%
12225  \glshex 03C1% lower case rho
12226  \string=\glshex 03F1,% lower case rho variant
12227  \glshex 03A1% upper case rho
12228 }

\glsxtrUpSigma
12229 \newcommand*{\glsxtrUpSigma}{%
12230  \glshex 03C2% lower case sigma
12231  \string=\glshex 03C3,% lower case sigma
12232  \glshex 03A3% upper case sigma
12233 }

\glsxtrUpTau
12234 \newcommand*{\glsxtrUpTau}{%
12235  \glshex 03C4,% lower case tau
12236  \glshex 03A4% upper case tau
12237 }

glsxtrUpUpsilon
12238 \newcommand*{\glsxtrUpUpsilon}{%
12239  \glshex 03C5,% lower case epsilon
12240  \glshex 03A5% upper case epsilon
12241 }

\glsxtrUpPhi
12242 \newcommand*{\glsxtrUpPhi}{%
12243  \glshex 03C6% lower case phi
12244  \string=\glshex 03D5,% lower case phi variant
12245  \glshex 03A6% upper case phi
12246 }

\glsxtrUpChi
12247 \newcommand*{\glsxtrUpChi}{%
12248  \glshex 03C7,% lower case chi
12249  \glshex 03A7% upper case chi
12250 }

\glsxtrUpPsi
12251 \newcommand*{\glsxtrUpPsi}{%

```

```

12252 \glshex 03C8,% lower case psi
12253 \glshex 03A8% upper case psi
12254 }

\glsxtrUpOmega
12255 \newcommand*\glsxtrUpOmega{%
12256 \glshex 03C9,% lower case omega
12257 \glshex 03A9% upper case omega
12258 }

MathItalicAlpha
12259 \newcommand*\glsxtrMathItalicAlpha{%
12260 \glshex 1D6FC,% lower case alpha (maths italic)
12261 \glshex 1D6E2% upper case alpha (maths italic)
12262 }

rMathItalicBeta
12263 \newcommand*\glsxtrMathItalicBeta{%
12264 \glshex 1D6FD,% lower case beta (maths italic)
12265 \glshex 1D6E3% upper case beta (maths italic)
12266 }

MathItalicGamma
12267 \newcommand*\glsxtrMathItalicGamma{%
12268 \glshex 1D6FE,% lower case gamma (maths italic)
12269 \glshex 1D6E4% upper case gamma (maths italic)
12270 }

MathItalicDelta
12271 \newcommand*\glsxtrMathItalicDelta{%
12272 \glshex 1D6FF,% lower case delta (maths italic)
12273 \glshex 1D6E5% upper case delta (maths italic)
12274 }

thItalicEpsilon
12275 \newcommand*\glsxtrMathItalicEpsilon{%
12276 \glshex 1D700% lower case epsilon (maths italic)
12277 \string=\glshex 1D716,% lower case epsilon variant (maths italic)
12278 \glshex 1D6E6% upper case epsilon (maths italic)
12279 }

rMathItalicZeta
12280 \newcommand*\glsxtrMathItalicZeta{%
12281 \glshex 1D701,% lower case zeta (maths italic)
12282 \glshex 1D6E7% upper case zeta (maths italic)
12283 }

```

```

trMathItalicEta
12284 \newcommand{\glsxtrMathItalicEta}{%
12285 \glshex{1D702},% lower case eta (maths italic)
12286 \glshex{1D6E8}% upper case eta (maths italic)
12287 }

MathItalicTheta
12288 \newcommand{\glsxtrMathItalicTheta}{%
12289 \glshex{1D703},% lower case theta (maths italic)
12290 \string=\glshex{1D717},% lower case theta variant (maths italic)
12291 \glshex{1D6E9}% upper case theta (maths italic)
12292 \string=\glshex{1D6F3}% upper case theta variant (maths italic)
12293 }

rMathItalicIota
12294 \newcommand{\glsxtrMathItalicIota}{%
12295 \glshex{1D704},% lower case iota (maths italic)
12296 \glshex{1D6EA}% upper case iota (maths italic)
12297 }

MathItalicKappa
12298 \newcommand{\glsxtrMathItalicKappa}{%
12299 \glshex{1D705},% lower case kappa (maths italic)
12300 \string=\glshex{1D718},% lower case kappa variant (maths italic)
12301 \glshex{1D6EB}% upper case kappa (maths italic)
12302 }

athItalicLambda
12303 \newcommand{\glsxtrMathItalicLambda}{%
12304 \glshex{1D706},% lower case lambda (maths italic)
12305 \glshex{1D6EC}% upper case lambda (maths italic)
12306 }

xtrMathItalicMu
12307 \newcommand{\glsxtrMathItalicMu}{%
12308 \glshex{1D707},% lower case mu (maths italic)
12309 \glshex{1D6ED}% upper case mu (maths italic)
12310 }

xtrMathItalicNu
12311 \newcommand{\glsxtrMathItalicNu}{%
12312 \glshex{1D708},% lower case nu (maths italic)
12313 \glshex{1D6EE}% upper case nu (maths italic)
12314 }

xtrMathItalicXi
12315 \newcommand{\glsxtrMathItalicXi}{%
12316 \glshex{1D709},% lower case xi (maths italic)

```

```

12317 \glshex 1D6EF% upper case xi (maths italic)
12318 }

thItalicOmicron

12319 \newcommand*{\glsxtrMathItalicOmicron}{%
12320 \glshex 1D70A,% lower case omicron (maths italic)
12321 \glshex 1D6F0% upper case omicron (maths italic)
12322 }

xtrMathItalicPi

12323 \newcommand*{\glsxtrMathItalicPi}{%
12324 \glshex 1D70B% lower case pi (maths italic)
12325 \string=\glshex 1D71B,% lower case pi variant (maths italic)
12326 \glshex 1D6F1% upper case pi (maths italic)
12327 }

trMathItalicRho

12328 \newcommand*{\glsxtrMathItalicRho}{%
12329 \glshex 1D70C% lower case rho (maths italic)
12330 \string=\glshex 1D71A,% lower case rho variant (maths italic)
12331 \glshex 1D6F2% upper case rho (maths italic)
12332 }

MathItalicSigma

12333 \newcommand*{\glsxtrMathItalicSigma}{%
12334 \glshex 1D70D% lower case final sigma (maths italic)
12335 \string=\glshex 1D70E,% lower case sigma (maths italic)
12336 \glshex 1D6F4% upper case sigma (maths italic)
12337 }

trMathItalicTau

12338 \newcommand*{\glsxtrMathItalicTau}{%
12339 \glshex 1D70F,% lower case tau (maths italic)
12340 \glshex 1D6F5% upper case tau (maths italic)
12341 }

thItalicUpsilon

12342 \newcommand*{\glsxtrMathItalicUpsilon}{%
12343 \glshex 1D710,% lower case upsilon (maths italic)
12344 \glshex 1D6F6% upper case upsilon (maths italic)
12345 }

trMathItalicPhi

12346 \newcommand*{\glsxtrMathItalicPhi}{%
12347 \glshex 1D711% lower case phi (maths italic)
12348 \string=\glshex 1D719,% lower case phi variant (maths italic)
12349 \glshex 1D6F7% upper case phi (maths italic)
12350 }

```

```
trMathItalicChi
12351 \newcommand{\glsxtrMathItalicChi}{%
12352 \glshex{1D712},% lower case chi (maths italic)
12353 \glshex{1D6F8}% upper case chi (maths italic)
12354 }
```

```
trMathItalicPsi
12355 \newcommand{\glsxtrMathItalicPsi}{%
12356 \glshex{1D713},% lower case psi (maths italic)
12357 \glshex{1D6F9}% upper case psi (maths italic)
12358 }
```

```
MathItalicOmega
12359 \newcommand{\glsxtrMathItalicOmega}{%
12360 \glshex{1D714},% lower case omega (maths italic)
12361 \glshex{1D6FA}% upper case omega (maths italic)
12362 }
```

```
thItalicPartial
12363 \newcommand{\glsxtrMathItalicPartial}{%
12364 \glshex{1D715}% partial differential (maths italic)
12365 }
```

```
MathItalicNabla
12366 \newcommand{\glsxtrMathItalicNabla}{%
12367 \glshex{1D6FB}% nabla (maths italic)
12368 }
```

lsxtrdigirules Digits from the Basic Latin set and subscript and superscript digit rules.

```
12369 \newcommand{\glsxtrdigirules}{%
12370 0\string=\glshex{2080}\string=\glshex{2070}
12371 \string<1\string=\glshex{2081}\string=\glshex{00B9}
12372 \string<2\string=\glshex{2082}\string=\glshex{00B2}
12373 \string<3\string=\glshex{2083}\string=\glshex{00B3}
12374 \string<4\string=\glshex{2084}\string=\glshex{2074}
12375 \string<5\string=\glshex{2085}\string=\glshex{2075}
12376 \string<6\string=\glshex{2086}\string=\glshex{2076}
12377 \string<7\string=\glshex{2087}\string=\glshex{2077}
12378 \string<8\string=\glshex{2088}\string=\glshex{2078}
12379 \string<9\string=\glshex{2089}\string=\glshex{2079}
12380 }
```

BasicDigirules Digits from the Basic Latin set.

```
12381 \newcommand{\glsxtrBasicDigirules}{%
12382 0\string<1\string<2\string<3\string<4%
12383 \string<5\string<6\string<7\string<8\string<9%
12384 }
```

criptDigitrules Subscript digits.

```
12385 \newcommand{\glsxtrSubScriptDigitrules}{%
12386 \glshex 2080% subscript 0
12387 \string<\glshex 2081% subscript 1
12388 \string<\glshex 2082% subscript 2
12389 \string<\glshex 2083% subscript 3
12390 \string<\glshex 2084% subscript 4
12391 \string<\glshex 2085% subscript 5
12392 \string<\glshex 2086% subscript 6
12393 \string<\glshex 2087% subscript 7
12394 \string<\glshex 2088% subscript 8
12395 \string<\glshex 2089% subscript 9
12396 }
```

criptDigitrules Superscript digits.

```
12397 \newcommand{\glsxtrSuperScriptDigitrules}{%
12398 \glshex 2070% superscript 0
12399 \string<\glshex 00B9% superscript 1
12400 \string<\glshex 00B2% superscript 2
12401 \string<\glshex 00B3% superscript 3
12402 \string<\glshex 2074% superscript 4
12403 \string<\glshex 2075% superscript 5
12404 \string<\glshex 2076% superscript 6
12405 \string<\glshex 2077% superscript 7
12406 \string<\glshex 2078% superscript 8
12407 \string<\glshex 2079% superscript 9
12408 }
```

trfractionrules Vulgar fractions.

```
12409 \newcommand{\glsxtrfractionrules}{%
12410 \glshex 215F% fraction numerator one (1/)
12411 \string<\glshex 2189% zero thirds (0/3 = 0)
12412 \string<\glshex 2152% one tenth (1/10 = 0.1)
12413 \string<\glshex 2151% one ninth (1/9 ~ 0.111)
12414 \string<\glshex 215B% one eighth (1/8 = 0.125)
12415 \string<\glshex 2150% one seventh (1/7 ~ 0.143)
12416 \string<\glshex 2159% one sixth (1/6 ~ 0.167)
12417 \string<\glshex 2155% one fifth (1/5 = 0.2)
12418 \string<\glshex 00BC% one quarter (1/4 = 0.25)
12419 \string<\glshex 2153% one third (1/3 ~ 0.333)
12420 \string<\glshex 215C% three eighths (3/8 = 0.375)
12421 \string<\glshex 2156% two fifths (2/5 = 0.4)
12422 \string<\glshex 00BD% one half (1/2 = 0.5)
12423 \string<\glshex 2157% three fifths (3/5 = 0.6)
12424 \string<\glshex 215D% five eighths (5/8 = 0.625)
12425 \string<\glshex 2154% two thirds (2/3 ~ 0.667)
12426 \string<\glshex 00BE% three quarters (3/4 = 0.75)
12427 \string<\glshex 2158% four fifths (4/5 = 0.8)
12428 \string<\glshex 215A% five sixths (5/6 ~ 0.833)
```

```
12429 \string<\glshex 215E% seven eighths (7/8 = 0.875)
12430 }
```

sxtrdialecthook Check for scripts associated with the document dialects.

```
12431 \renewcommand{\@glsxtrdialecthook}{%
12432 \ifundef\CurrentTrackedScript
12433 {%
12434 \TrackLangIfHasDefaultScript{\CurrentTrackedLanguage}%
12435 {%
12436 \edef\CurrentTrackedScript{%
12437 \TrackLangGetDefaultScript\CurrentTrackedLanguage}%
12438 {%
12439 {}}%
12440 }%
12441 {}}%
12442 \ifdef\CurrentTrackedScript
12443 {%
12444 \let\gls@orgTrackLangRequireDialectPrefix\TrackLangRequireDialectPrefix
12445 \def\TrackLangRequireDialectPrefix{glossariesxtr-}%
12446 \let\CurrentTrackedTag\CurrentTrackedScript
12447 \IfExists{\TrackLangRequireDialectPrefix\CurrentTrackedTag.ldf}
12448 {\RequireGlossariesExtraLang{\CurrentTrackedTag}}%
12449 {}}%
12450 \let\TrackLangRequireDialectPrefix\gls@orgTrackLangRequireDialectPrefix
12451 {%
12452 {}}%
12453 }
```

If \glsxtr@loaddialect has been defined, then glossaries-extra-bib2gls has been loaded after glossaries-extra. (For example, through \glossariesextrasetup.) Not recommended, but if this has been done try to find the associated language resources.

```
12454 \ifdef\glsxtr@loaddialect
12455 {%
12456 \c@ifpackageloaded{tracklang}%
12457 {%
12458 \AnyTrackedLanguages
12459 {%
12460 \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
12461 {}}%
12462 {}}%
12463 }%
12464 {}%
12465 }%
12466 {}
```

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:

```
12467 \NeedsTeXFormat{LaTeX2e}
12468 \ProvidesPackage{glossaries-extra-stylemods}[2018/03/06 v1.28 (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
12469 \newcommand*\@glsxtr@loadstyles{}{}
```

all Provide all known styles.

```
12470 \DeclareOption{all}{%
12471   \appto\@glsxtr@loadstyles{%
12472     \RequirePackage{glossary-inline}%
12473     \RequirePackage{glossary-list}%
12474     \RequirePackage{glossary-tree}%
12475     \RequirePackage{glossary-mcols}%
12476     \RequirePackage{glossary-long}%
12477     \RequirePackage{glossary-longragged}%
12478     \RequirePackage{glossary-longbooktabs}%
12479     \RequirePackage{glossary-super}%
12480     \RequirePackage{glossary-superragged}%
12481     \RequirePackage{glossary-bookindex}%
12482   }%
12483 }

12484 \DeclareOption*{%
12485   \IfFileExists{glossary-\CurrentOption.sty}%
12486   {\appto\@glsxtr@loadstyles{%
12487     \noexpand\RequirePackage{glossary-\CurrentOption}}%
12488   }%
12489   {%
12490     \PackageError{glossaries-extra-styles}%

```

```
12491     {Unknown option '\CurrentOption'}{}%
12492   }%
12493 }
```

Process the package options:

```
12494 \ProcessOptions
```

Load the required packages:

```
12495 \@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.

```
12496 \providecommand*\@glsxtrprelocation}{\space}
```

In case we have an old version of glossaries:

ewglossarystyle

```
12497 \providecommand{\renewglossarystyle}[2]{%
12498   \ifcsundef{@glsstyle@#1}{%
12499     {%
12500       \PackageError{glossaries-extra}{Glossary style '#1' isn't already defined}{}%
12501     }%
12502     {%
12503       \csdef{@glsstyle@#1}{#2}%
12504     }%
12505   }}
```

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.

```
12506 \ifdef{\@glsstyle@listdotted}{%
12507   {%
12508     \renewglossarystyle{listdotted}{%
12509       \setglossarystyle{list}{%
12510         \renewcommand*\@glossentry}[2]{%
12511           \item[]\makebox[\glslistdottedwidth][l]{%
12512             \glsentryitem{##1}%
12513             \glstarget{##1}{\glossentryname{##1}}%
12514             \unskip\leaders\hbox to 2.9mm{\hss.}\hfill\strut}%
12515             \glossentrydesc{##1}\glspostdescription}%
12516         \renewcommand*\@subglossentry}[3]{%
12517           \item[]\makebox[\glslistdottedwidth][l]{%
12518             \glssubentryitem{##2}%
12519             \glstarget{##2}{\glossentryname{##2}}%
12520             \unskip\leaders\hbox to 2.9mm{\hss.}\hfill\strut}%
12521             \glossentrydesc{##2}\glspostdescription}%
12522   }}
```

```
12523 }  
12524 {%
```

Assume the style isn't required if it hasn't already been defined.

```
12525 }
```

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.

```
12526 \ifdef{@glsstyle@list}  
12527 {%
```

listprelocation Space before number list for top-level entries.

```
12528 \newcommand{\glslistprelocation}{\glsxtrprelocation}
```

childprelocation Space before number list for child entries.

```
12529 \newcommand{\glslistchildprelocation}{\glslistprelocation}
```

childpostlocation Full stop after number list.

```
12530 \newcommand{\glslistchildpostlocation}{.}
```

Redefine list to use these commands.

```
12531 \renewglossarystyle{list}{%  
12532   \renewenvironment{theglossary}{%  
12533     {\begin{description}}{\end{description}}%  
12534     \renewcommand*\glossaryheader{}%  
12535     \renewcommand*\glsgroupheading[1]{}%  
12536     \renewcommand*\glossentry[2]{%  
12537       \item[\glsentryitem{##1}-%  
12538         \glstarget{##1}{\glossentryname{##1}}]  
12539         \glossentrydesc{##1}\glspostdescription\glslistprelocation ##2}%  
12540     \renewcommand*\subglossentry[3]{%  
12541       \glssubentryitem{##2}-%  
12542       \glstarget{##2}{\strut}\space  
12543       \glossentrydesc{##2}\glspostdescription  
12544       \glslistchildprelocation ##3\glslistchildpostlocation}%  
12545     \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\indexspace\fi}%  
12546   }  
12547 }  
12548 {}
```

Similarly for altlist. Since it requires list, the new commands should have been defined above.

```
12549 \ifdef{@glsstyle@altlist}  
12550 {%
```



```
12551   \renewglossarystyle{altlist}{%  
12552     \setglossarystyle{list}{%  
12553     \renewcommand*\glossentry[2]{%  
12554       \item[\glsentryitem{##1}-%
```

```

12555     \glstarget{##1}{\glossentryname{##1}}]%
12556     \mbox{} \par \nobreak \afterheading
12557     \glossentrydesc{##1} \glspostdescription \glslistprelocation ##2}%
12558     \renewcommand{\subglossentry}[3]{%
12559         \par
12560         \glssubentryitem{##2}%
12561         \glstarget{##2}{\strut} \glossentrydesc{##2} \glspostdescription
12562         \glslistchildprelocation ##3}%
12563     }
12564 }
12565 {}

```

Redefine `listgroup` so that it discourages a break after group headings.

```

12566 \ifdef{\@glsstyle@listgroup}
12567 {%
12568     \renewglossarystyle{listgroup}{%
12569         \setglossarystyle{list}%
12570         \renewcommand*{\glsgroupheading}[1]{%
12571             \item[\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}]%
12572             \mbox{} \par \nobreak \afterheading
12573         }%
12574     }
12575 }
12576 {}

```

Similarly for `listhypergroup`.

```

12577 \ifdef{\@glsstyle@listhypergroup}
12578 {%
12579     \renewglossarystyle{listhypergroup}{%
12580         \setglossarystyle{list}%
12581         \renewcommand*{\glossaryheader}{%
12582             \glslistnavigationitem{\glsnavigation}}%
12583         \renewcommand*{\glsgroupheading}[1]{%
12584             \item[\glslistgroupheaderfmt
12585                 {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}]%
12586             \mbox{} \par \nobreak \afterheading
12587         }%
12588     }
12589 }
12590 {}

```

Similarly for `altlistgroup`.

```

12591 \ifdef{\@glsstyle@altlistgroup}
12592 {%
12593     \renewglossarystyle{altlistgroup}{%
12594         \setglossarystyle{altlist}%
12595         \renewcommand*{\glsgroupheading}[1]{%
12596             \item[\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}]%
12597             \mbox{} \par \nobreak \afterheading
12598         }%
12599     }

```

```

12600 }
12601 {}

Similarly for altlisthypergroup.

12602 \ifdef{\@glsstyle@altlisthypergroup}
12603 {%
12604   \renewglossarystyle{altlisthypergroup}{%
12605     \setglossarystyle{altlist}{%
12606       \renewcommand*{\glossaryheader}{%
12607         \glslistnavigationitem{\glsnavigation}}%
12608       \renewcommand*{\glsgroupheading}[1]{%
12609         \item[\glslistgroupheaderfmt
12610           {\glsnavhypertarget{\#\#1}{\glsgetgrouptitle{\#\#1}}}]%
12611         \mbox{}\par\nobreak\@afterheading
12612       }%
12613     }%
12614   }%
12615 }

```

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`.

```

12616 \ifcsdef{@glsstyle@long}
12617 {%
12618   \renewglossarystyle{long}{%
12619     \renewenvironment{theglossary}%
12620       {\begin{longtable}{lp{\glsdescwidth}}}%
12621       {\end{longtable}}%
12622     \renewcommand*{\glossaryheader}{}%
12623     \renewcommand*{\glsgroupheading}[1]{}%
12624     \renewcommand{\glossentry}[2]{%
12625       \glsentryitem{\#\#1}\glstarget{\#\#1}{\glossentryname{\#\#1}} &
12626       \glossentrydesc{\#\#1}\glspostdescription
12627       \glsxtrprelocation ##2\tabularnewline
12628     }%
12629     \renewcommand{\subglossentry}[3]{%
12630       &
12631       \glssubentryitem{\#\#2}%
12632       \glstarget{\#\#2}{\strut}\glossentrydesc{\#\#2}\glspostdescription
12633       \glsxtrprelocation ##3\tabularnewline
12634     }%
12635     \ifglsnogroupskip
12636       \renewcommand*{\glsgroupskip}{}%
12637     \else
12638       \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
12639     \fi
12640   }

```

```
12641 }
12642 {}
```

Three column style:

```
12643 \ifcsdef{@glsstyle@long3col}
12644 {%
12645   \renewglossarystyle{long3col}{%
12646     \renewenvironment{theglossary}{%
12647       {\begin{longtable}{lp{\glsdescwidth}p{\glspagelistwidth}}}%
12648       {\end{longtable}}%
12649     \renewcommand*\glossaryheader{}{%
12650       \renewcommand*\glsgroupheading}[1]{}}{%
12651       \renewcommand{\glossentry}[2]{%
12652         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12653           \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
12654       }{%
12655         \renewcommand{\subglossentry}[3]{%
12656           &
12657             \glosssubentryitem{##2}{%
12658               \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12659                 ##3\tabularnewline
12660             }{%
12661             \ifglsnogroupskip
12662               \renewcommand*\glsgroupskip{}{%
12663               \else
12664                 \renewcommand*\glsgroupskip}{\& \tabularnewline}{%
12665               \fi
12666             }{%
12667           }
12668 }}
```

Conditional needs to be outside of \glsgroupskip otherwise it can cause “Incomplete \iftrue” errors.

```
12661   \ifglsnogroupskip
12662     \renewcommand*\glsgroupskip{}{%
12663   \else
12664     \renewcommand*\glsgroupskip}{\& \tabularnewline}{%
12665   \fi
12666 }
12667 }
12668 {}
```

Four column style:

```
12669 \ifcsdef{@glsstyle@long4col}
12670 {%
12671   \renewglossarystyle{long4col}{%
12672     \renewenvironment{theglossary}{%
12673       {\begin{longtable}{llll}}{%
12674       {\end{longtable}}{%
12675     \renewcommand*\glossaryheader{}{%
12676       \renewcommand*\glsgroupheading}[1]{}}{%
12677       \renewcommand{\glossentry}[2]{%
12678         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12679           \glossentrydesc{##1}\glspostdescription &
12680             \glossentrysymbol{##1} &
12681               ##2\tabularnewline
12682       }{%
12683         \renewcommand{\subglossentry}[3]{%
12684           &
```

```

12685     \glssubentryitem{##2}%
12686     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12687     \glossentrysymbol{##2} & ##3\tabularnewline
12688 }%
12689 \ifglsnogroupskip
12690     \renewcommand*\glsgroupskip{}%
12691 \else
12692     \renewcommand*\glsgroupskip{\& \&\tabularnewline}%
12693 \fi
12694 }
12695 }
12696 {}
```

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`.

```

12697 \ifcsdef@glsstyle@longragged}
12698 {%
12699     \renewglossarystyle{longragged}{%
12700         \renewenvironment{theglossary}{%
12701             {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}}%
12702             {\end{longtable}}%
12703         \renewcommand*\glossaryheader{}%
12704         \renewcommand*\glsgroupheading}[1]{}%
12705         \renewcommand{\glossentry}[2]{%
12706             \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12707             \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
12708             \tabularnewline
12709 }%
12710         \renewcommand{\subglossentry}[3]{%
12711             &
12712             \glssubentryitem{##2}%
12713             \glstarget{##2}{\strut}\glossentrydesc{##2}%
12714             \glspostdescription\glsxtrprelocation ##3%
12715             \tabularnewline
12716 }%
12717 \ifglsnogroupskip
12718     \renewcommand*\glsgroupskip{}%
12719 \else
12720     \renewcommand*\glsgroupskip{\& \tabularnewline}%
12721 \fi
12722 }
12723 }
```

12724 {}

Three and four column styles don't use \glsxtrprelocation since the number list is in its own column.

```
12725 \ifcsdef{@glsstyle@longragged3col}{%
12726 }{%
12727   \renewglossarystyle{longragged3col}{%
12728     \renewenvironment{theglossary}{%
12729       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}{%
12730         >{\raggedright}p{\glspagelistwidth}}}}{%
12731       {\end{longtable}}}{%
12732     \renewcommand*\glossaryheader{}{%
12733     \renewcommand*\glsgroupheading}[1]{}}{%
12734     \renewcommand{\glossentry}[2]{%
12735       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12736       \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
12737     }{%
12738     \renewcommand{\subglossentry}[3]{%
12739       &
12740       \glssubentryitem{##2}{%
12741         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12742         ##3\tabularnewline
12743     }{%
12744       \ifglsnogroupskip
12745         \renewcommand*\glsgroupskip{}{%
12746       \else
12747         \renewcommand*\glsgroupskip}{\& \&\tabularnewline}{%
12748       \fi
12749     }{%
12750   }{%
12751 }}
```

Four column style:

```
12752 \ifcsdef{@glsstyle@altlongragged4col}{%
12753 }{%
12754   \renewglossarystyle{altlongragged4col}{%
12755     \renewenvironment{theglossary}{%
12756       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}}{%
12757         >{\raggedright}p{\glspagelistwidth}}}}{%
12758       {\end{longtable}}}{%
12759     \renewcommand*\glossaryheader{}{%
12760     \renewcommand*\glsgroupheading}[1]{}}{%
12761     \renewcommand{\glossentry}[2]{%
12762       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12763       \glossentrydesc{##1}\glspostdescription & \glossentrysymbol{##1} &
12764       ##2\tabularnewline
12765     }{%
12766     \renewcommand{\subglossentry}[3]{%
12767       &
```

```

12768     \glssubentryitem{##2}%
12769     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12770     \glossentrysymbol{##2} & ##3\tabularnewline
12771   }%
12772   \ifglsnogroupskip
12773     \renewcommand*\glsgroupskip{}%
12774   \else
12775     \renewcommand*\glsgroupskip{\& \&\tabularnewline}%
12776   \fi
12777 }
12778 }
12779 {}
```

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`.

```

12780 \ifcsdef{@glsstyle@super}%
12781 {%
12782   \renewglossarystyle{super}{%
12783     \renewenvironment{theglossary}{%
12784       {\tablehead{}\tabletail{}}%
12785       \begin{supertabular}{lp{\glsdescwidth}}{}}%
12786       \end{supertabular}}%
12787     \renewcommand*\glossaryheader{}%
12788     \renewcommand*\glsgroupheading[1]{}%
12789     \renewcommand{\glossentry}[2]{%
12790       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12791       \glossentrydesc{##1}\glspostdescription
12792       \glsxtrprelocation ##2\tabularnewline
12793     }%
12794     \renewcommand{\subglossentry}[3]{%
12795       &
12796       \glssubentryitem{##2}%
12797       \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
12798       \glsxtrprelocation ##3\tabularnewline
12799     }%
12800   \ifglsnogroupskip
12801     \renewcommand*\glsgroupskip{}%
12802   \else
12803     \renewcommand*\glsgroupskip{\& \tabularnewline}%
12804   \fi
12805 }
12806 }
12807 {}
```

Three column style:

```
12808 \ifcsdef{@glsstyle@super3col}
```

```

12809 {%
12810   \renewglossarystyle{super3col}{%
12811     \renewenvironment{theglossary}{%
12812       {\tablehead{}\tabletail{}%
12813       \begin{supertabular}{lp{\glscolumnwidth}p{\glspagelistwidth}}}}{%
12814       \end{supertabular}}{%
12815       \renewcommand*\glossaryheader{}{%
12816         \renewcommand*\glsgroupheading[1]{}{%
12817           \renewcommand{\glossentry}[2]{%
12818             \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12819               \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
12820             }{%
12821             \renewcommand{\subglossentry}[3]{%
12822               &
12823                 \glssubentryitem{##2}{%
12824                   \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12825                     ##3\tabularnewline
12826             }{%
12827               \ifglsnogroupskip
12828                 \renewcommand*\glsgroupskip{}{%
12829               \else
12830                 \renewcommand*\glsgroupskip{}{ & \tabularnewline}%
12831               \fi
12832             }{%
12833           }
12834         }{%

```

Four column styles:

```

12835 \ifcsdef{@glsstyle@super4col}{%
12836 {%
12837   \renewglossarystyle{super4col}{%
12838     \renewenvironment{theglossary}{%
12839       {\tablehead{}\tabletail{}%
12840       \begin{supertabular}{llll}{%
12841       \end{supertabular}}{%
12842       \renewcommand*\glossaryheader{}{%
12843         \renewcommand*\glsgroupheading[1]{}{%
12844           \renewcommand{\glossentry}[2]{%
12845             \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12846               \glossentrydesc{##1}\glspostdescription &
12847                 \glossentrysymbol{##1} & ##2\tabularnewline
12848             }{%
12849             \renewcommand{\subglossentry}[3]{%
12850               &
12851                 \glssubentryitem{##2}{%
12852                   \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12853                     \glossentrysymbol{##2} & ##3\tabularnewline
12854             }{%

```

```

12855     \ifglsnogroupskip
12856         \renewcommand*{\glsgroupskip}{}%
12857     \else
12858         \renewcommand*{\glsgroupskip}{\& & \tabularnewline}%
12859     \fi
12860 }
12861 }
12862 {}

```

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`.

```

12863 \ifcsdef{@glsstyle@superragged}{%
12864 }{%
12865     \renewglossarystyle{superragged}{%
12866         \renewenvironment{theglossary}{%
12867             {\tablehead{}\tabletail{}}{%
12868                 \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}}{%
12869                     \end{supertabular}}{%
12870                     \renewcommand*{\glossaryheader}{}{%
12871                         \renewcommand*{\glsgroupheading}[1]{}{%
12872                             \renewcommand{\glossentry}[2]{%
12873                                 \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12874                                 \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%{%
12875                                     \tabularnewline
12876                                 }{%
12877                         \renewcommand{\subglossentry}[3]{%
12878                             &
12879                             \glssubentryitem{##2}{%
12880                                 \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
12881                                 \glsxtrprelocation ##3%{%
12882                                     \tabularnewline
12883                                 }{%
12884                         \ifglsnogroupskip
12885                             \renewcommand*{\glsgroupskip}{}{%
12886                         \else
12887                             \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
12888                         \fi
12889                     }{%
12890                 }
12891 {}

```

Three column style:

```

12892 \ifcsdef{@glsstyle@superragged3col}{%
12893 }{%
12894     \renewglossarystyle{superragged3col}{%

```

```

12895 \renewenvironment{theglossary}%
12896   {\tablehead{}\tabletail{}%
12897    \begin{supertabular}{l>{\raggedright\p{\glscdescwidth}}%
12898      >{\raggedright\p{\glspagelistwidth}}}%
12899    \end{supertabular}%
12900  \renewcommand*\glossaryheader{}%
12901  \renewcommand*\glsgrouphheading}[1]{}%
12902  \renewcommand{\glossentry}[2]{%
12903    \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12904    \glossentrydesc{##1}\glspostdescription &
12905    ##2\tabularnewline
12906  }%
12907  \renewcommand{\subglossentry}[3]{%
12908    &
12909    \glssubentryitem{##2}%
12910    \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12911    ##3\tabularnewline
12912  }%
12913 \ifglsnogroupskip
12914   \renewcommand*\glsgroupskip{}%
12915 \else
12916   \renewcommand*\glsgroupskip{\&\tabularnewline}%
12917 \fi
12918 }
12919 }
12920 {}
```

Four columns:

```

12921 \ifcsdef{@glsstyle@altsuperragged4col}%
12922 {}%
12923 \renewglossarystyle{altsuperragged4col}{%
12924   \renewenvironment{theglossary}%
12925     {\tablehead{}\tabletail{}%
12926      \begin{supertabular}{l>{\raggedright\p{\glscdescwidth}l}%
12927        >{\raggedright\p{\glspagelistwidth}}}%
12928      \end{supertabular}%
12929  \renewcommand*\glossaryheader{}%
12930  \renewcommand{\glossentry}[2]{%
12931    \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12932    \glossentrydesc{##1}\glspostdescription &
12933    \glossentrysymbol{##1} & ##2\tabularnewline
12934  }%
12935  \renewcommand{\subglossentry}[3]{%
12936    &
12937    \glssubentryitem{##2}%
12938    \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12939    \glossentrysymbol{##2} & ##3\tabularnewline
12940  }%
```

```

12941     \ifglsnogroupskip
12942         \renewcommand*\{\glsgroupskip\}{\}
12943     \else
12944         \renewcommand*\{\glsgroupskip\}{\& \& \tabularnewline\}
12945     \fi
12946 }
12947 }
12948 {}

```

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`.

```

12949 \ifdef{@glsstyle@inline}
12950 {%
12951     \renewcommand*\{\glspostinline\}{.\spacefactor\sfcode`\.}
    Just use \glsxtrpostdescription instead of \glspostdescription.
12952     \renewcommand*\{\glsinlinedescformat\}[3]{%
12953         \space#1\glsxtrpostdescription}
12954     \renewcommand*\{\glsinlinesubdescformat\}[3]{%
12955         #1\glsxtrpostdescription}

```

The default settings don't show the location lists, so there's no adjustment for `\glsxtrprelocation`.

```

12956 }
12957 {}

```

2.8 Tree Styles

The index style is redefined so that the space before the number list isn't hard coded.

```

12958 \ifdef{@glsstyle@index}
12959 {%

```

`treeprelocation` The space before the number list for top-level entries. This is shared by the other tree styles.

```

12960     \newcommand*\{\glstreeprelocation\}{\glsxtrprelocation}

```

`childprelocation` The space before the number list for child entries. This is shared by the other tree styles.

```

12961     \newcommand*\{\glstreechildprelocation\}{\glstreeprelocation}

```

```

12962     \renewglossarystyle{index}{%
12963         \renewenvironment{theglossary}{%
12964             {\setlength{\parindent}{0pt}}%
12965             \setlength{\parskip}{0pt plus 0.3pt}%
12966             \let\item\glstreeitem
12967             \let\subitem\glstreesubitem

```

```

12968     \let\subsubitem\glstreesubsubitem
12969     }%
12970 {\par}%
12971 \renewcommand*\glossaryheader{}%
12972 \renewcommand*\glsgroupheading}[1]{%
12973 \renewcommand*\glossentry}[2]{%
12974     \item\glstreeentryitem{##1}%
12975     \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
12976     \ifglshassymbol{##1}{\space(\glossentrysymbol{##1})}{}%
12977     \glstreepredesc \glossentrydesc{##1}\glspostdescription
12978     \glstreeprelocation ##2%
12979 }%
12980 \renewcommand{\subglossentry}[3]{%
12981     \ifcase##1\relax
12982         \item
12983     \or
12984         \subitem
12985         \glssubentryitem{##2}%
12986     \else
12987         \subsubitem
12988     \fi
12989     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
12990     \ifglshassymbol{##2}{\space(\glossentrysymbol{##2})}{}%
12991     \glstreechildpredesc\glossentrydesc{##2}\glspostdescription
12992     \glstreechildprelocation ##3%
12993 }%
12994 \renewcommand*\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
12995 }
12996 }
12997 {}
```

The `indexgroup` style is redefined to discourage a page break after the heading.

```

12998 \ifdef{@glsstyle@indexgroup}
12999 {%
13000     \renewglossarystyle{indexgroup}{%
13001         \setglossarystyle{index}%
13002         \renewcommand*\glsgroupheading}[1]{%
13003             \item\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
13004             \nopagebreak\indexspace
13005             \nobreak\@afterheading
13006         }%
13007     }
13008 }
13009 {}
```

Similarly for `indexhypergroup`.

```

13010 \ifdef{@glsstyle@indexhypergroup}
13011 {%
13012     \renewglossarystyle{indexhypergroup}{%
13013         \setglossarystyle{index}%
```

```

13014 \renewcommand*\glossaryheader}{%
13015     \item\glstreenavigationfmt{\glsnavigation}%
13016     \nobreak\@afterheading\indexspace}%
13017 \renewcommand*\glsgroupheading}[1]{%
13018     \item\glstreegroupheaderfmt
13019     {\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
13020     \nopagebreak\indexspace
13021     \nobreak\@afterheading}%
13022 }%
13023 }%
13024 {}
```

Adjust tree style to remove hard coded space before number list.

```

13025 \ifdef{@glsstyle@tree}%
13026 {%
13027     \renewglossarystyle{tree}{%
13028         \renewenvironment{theglossary}%
13029             {\setlength{\parindent}{0pt}%
13030                 \setlength{\parskip}{0pt plus 0.3pt}}%
13031             {}%}
13032         \renewcommand*\glossaryheader}{%
13033         \renewcommand*\glsgroupheading}[1]{%
13034         \renewcommand{\glossentry}[2]{%
13035             \hangindent0pt\relax
13036             \parindent0pt\relax
13037             \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
13038             \ifglshassymbol{##1}{\space(\glossentrysymbol{##1})}{}%
13039             \glstreepredesc\glossentrydesc{##1}\glspostdescription
13040             \glstreeprelocation##2\par
13041         }%
13042         \renewcommand{\subglossentry}[3]{%
13043             \hangindent##1\glstreeindent\relax
13044             \parindent##1\glstreeindent\relax
13045             \ifnum##1=1\relax
13046                 \glssubentryitem{##2}%
13047             \fi
13048             \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
13049             \ifglshassymbol{##2}{\space(\glossentrysymbol{##2})}{}%
13050             \glstreechildpredesc\glossentrydesc{##2}\glspostdescription
13051             \glstreechildprelocation ##3\par
13052         }%
13053         \renewcommand*\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
13054     }%
13055 }%
13056 {}
```

The treegroup style is redefined to discourage a page break after the heading.

```

13057 \ifdef{@glsstyle@treegroup}%
13058 {%
13059     \renewglossarystyle{treegroup}{%
```

```

13060     \setglossarystyle{tree}%
13061     \renewcommand{\glsgroupheding}[1]{\par
13062         \noindent\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}\par
13063         \nopagebreak\indexspace\nobreak\@afterheading}%
13064 }
13065 }
13066 {}

```

Similarly for treehypergroup

```

13067 \ifdef{\@glsstyle@treehypergroup}
13068 {%
13069     \renewglossarystyle{treehypergroup}{%
13070         \setglossarystyle{tree}%
13071         \renewcommand*\glossaryheader{%
13072             \par\noindent\glstreenavigationfmt{\glsnavigation}\par
13073             \nobreak\@afterheading\indexspace}%
13074         \renewcommand*\glsgroupheding[1]{%
13075             \par\noindent
13076             \glstreegroupheaderfmt
13077             {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}\par
13078             \nopagebreak\indexspace\nobreak\@afterheading}%
13079 }
13080 }
13081 {}

```

Adjust treenoname style to remove hard coded space before number list.

```

13082 \ifdef{\@glsstyle@treenoname}
13083 {%
13084     \renewglossarystyle{treenoname}{%
13085         \renewenvironment{theglossary}{%
13086             {\setlength{\parindent}{0pt}%
13087                 \setlength{\parskip}{0pt plus 0.3pt}}%
13088             {}%
13089         \renewcommand*\glossaryheader{}%
13090         \renewcommand*\glsgroupheding[1]{}%
13091         \renewcommand{\glossentry}[2]{%
13092             \hangindent0pt\relax
13093             \parindent0pt\relax
13094             \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
13095             \ifglshassymbol{##1}{\space(\glossentrysymbol{##1})}{}%
13096             \glstreepredesc\glossentrydesc{##1}\glspostdescription
13097             \glstreeprelocation##2\par
13098         }%
13099         \renewcommand{\subglossentry}[3]{%
13100             \hangindent##1\glstreeindent\relax
13101             \parindent##1\glstreeindent\relax
13102             \ifnum##1=1\relax
13103                 \glssubentryitem{##2}%
13104             \fi
13105             \glstarget{##2}{\strut}%

```

```

13106      \glossentrydesc{##2}\glspostdescription\glstreechildprelocation##3\par
13107  }%
13108  \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
13109  }
13110 }
13111 {}
```

The treenonamegroup style is redefined to discourage a page break after the heading.

```

13112 \ifdef{@glsstyle@treenonamegroup}%
13113 {%
13114  \renewglossarystyle{treenonamegroup}{%
13115    \setglossarystyle{treenoname}%
13116    \renewcommand{\glsgroupheading}[1]{\par
13117      \noindent\glstreegroupheaderfmt
13118      {\glsgetgroupname{##1}}%
13119      \nopagebreak\indexspace\nobreak\@afterheading
13120    }%
13121  }%
13122 }
13123 {}
```

Similarly for treenamehypergroup

```

13124 \ifdef{@glsstyle@treenamehypergroup}%
13125 {%
13126  \renewglossarystyle{treenamehypergroup}{%
13127    \setglossarystyle{treenoname}%
13128    \renewcommand*{\glossaryheader}{%
13129      \par\noindent\glstreenavigationfmt{\glsnavigation}\par
13130      \nobreak\@afterheading\indexspace}%
13131    \renewcommand*{\glsgroupheading}[1]{%
13132      \par\noindent
13133      \glstreegroupheaderfmt
13134      {\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
13135      \nopagebreak\indexspace\nobreak\@afterheading}%
13136  }%
13137 }
13138 {}
```

The alttree style is redefined to make it easier to made minor adjustments.

```

13139 \ifdef{@glsstyle@alttree}%
13140 {%
```

Only redefine this style if it's already been defined.

```
\glsxtralttreeSymbolDescLocation{<label>}{{<location list>}}
```

Layout the symbol, description and location for top-level entries.

```

13141 \newcommand{\glsxtralttreeSymbolDescLocation}[2]{%
```

```

13142   {%
13143     \let\par\glsxtrAltTreePar
13144     \ifglshassymbol{#1}{(\glossentrysymbol{#1})\space}{}%
13145     \glossentrydesc{#1}\glspostdescription\glstreeprelocation #2\par
13146   }%
13147 }

```

`trAltTreeIndent` Paragraph indent for subsequent paragraphs in multi-paragraph descriptions.

```
13148 \newlength\glsxtrAltTreeIndent
```

`lsxtrAltTreePar` Multi-paragraph descriptions need to keep the hanging indent.

```

13149 \newcommand{\glsxtrAltTreePar}{%
13150   \@@par
13151   \glsxtrAltTreeSetHangIndent
13152   \setlength{\parindent}{\dimexpr\hangindent+\glsxtrAltTreeIndent}%
13153 }

```

`mbolDescLocation` `\glsxtralmtreeSubSymbolDescLocation{<level>}{<label>}{<location list>}`

Layout the symbol, description and location for sub-entries. Defaults to the same as the top-level.

```

13154 \newcommand{\glsxtralmtreeSubSymbolDescLocation}[3]{%
13155   \glsxtralmtreeSymbolDescLocation{#2}{#3}%
13156 }

```

`trtreeopindent` The original style has to keep computing the width of the name at each entry. This register allows the style to compute it once for the top-level at the start of the glossary.

```
13157 \newlength\glsxtrtrreetopindent
```

`sxtalmtreeInit` User-level initialisation for the almtree style.

```

13158 \newcommand*{\glsxtralmtreeInit}{%
13159   \settowidth{\glsxtrtrreetopindent}{\glstreenamefmt{\glsgetwidestname\space}}%
13160   \glsxtrAltTreeIndent=\parindent
13161 }

```

`\gglsetwidest` The original `\glssetwidest` only uses `\def`. This uses `\gdef`.

```

13162 \newcommand*{\gglsetwidest}[2][0]{%
13163   \csgdef{@glswidestname\romannumeral#1}{#2}%
13164 }

```

`\eglsetwidest` The original `\glssetwidest` only uses `\def`. This uses `\protected@csedef`.

```

13165 \newcommand*{\eglsetwidest}[2][0]{%
13166   \protected@csedef{@glswidestname\romannumeral#1}{#2}%
13167 }

```

\xglssetwidest Like the above but uses \protected@csxdef.

```
13168 \newcommand*{\xglssetwidest}[2][0]{%
13169   \protected@csxdef{@\glswidestname\romannumeral#1}{#2}%
13170 }
```

glsupdatewidest Only sets if new value is wider than old value.

```
13171 \newcommand*{\glsupdatewidest}[2][0]{%
13172   \ifcsundef{@\glswidestname\romannumeral#1}%
13173     {\csdef{@\glswidestname\romannumeral#1}{#2}}%
13174   {%
13175     \settowidth{\dimen@}{\csuse{@\glswidestname\romannumeral#1}}%
13176     \settowidth{\dimen@ii}{#2}%
13177     \ifdim\dimen@ii>\dimen@
13178       \csdef{@\glswidestname\romannumeral#1}{#2}%
13179     \fi
13180   }%
13181 }
```

glsupdatewidest As above but global definition.

```
13182 \newcommand*{\gglsupdatewidest}[2][0]{%
13183   \ifcsundef{@\glswidestname\romannumeral#1}%
13184     {\csgdef{@\glswidestname\romannumeral#1}{#2}}%
13185   {%
13186     \settowidth{\dimen@}{\csuse{@\glswidestname\romannumeral#1}}%
13187     \settowidth{\dimen@ii}{#2}%
13188     \ifdim\dimen@ii>\dimen@
13189       \csgdef{@\glswidestname\romannumeral#1}{#2}%
13190     \fi
13191   }%
13192 }
```

glsupdatewidest As \glsupdatewidest but expands value.

```
13193 \newcommand*{\eglsupdatewidest}[2][0]{%
13194   \ifcsundef{@\glswidestname\romannumeral#1}%
13195     {\protected@csedef{@\glswidestname\romannumeral#1}{#2}}%
13196   {%
13197     \settowidth{\dimen@}{\csuse{@\glswidestname\romannumeral#1}}%
13198     \settowidth{\dimen@ii}{#2}%
13199     \ifdim\dimen@ii>\dimen@
13200       \protected@csedef{@\glswidestname\romannumeral#1}{#2}%
13201     \fi
13202   }%
13203 }
```

glsupdatewidest As above but global.

```
13204 \newcommand*{\xglsupdatewidest}[2][0]{%
13205   \ifcsundef{@\glswidestname\romannumeral#1}%
13206     {\protected@csxdef{@\glswidestname\romannumeral#1}{#2}}%
13207   {%
```

```

13208      \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
13209      \settowidth{\dimen@ii}{#2}%
13210      \ifdim\dimen@ii>\dimen@
13211          \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
13212      \fi
13213  }%
13214 }

```

`\lsgetwidestname` Provide a user-level macro to obtain the widest top-level name.

```
13215 \newcommand*{\lsgetwidestname}{\glswidestname}
```

`\etwidestsubname` Provide a user-level macro to obtain the widest sub-entry name.

```

13216 \newcommand*{\etwidestsubname}[1]{%
13217     \ifcsundef{@glswidestname\romannumeral#1}%
13218     {\glswidestname}%
13219     {\csuse{@glswidestname\romannumeral#1}}%
13220 }

```

`\estTopLevelName` CamelCase is easier for long command names. Provide a CamelCase synonym of `\glsfindwidesttoplevelname`

```
13221 \let\glsFindWidestTopLevelName\glsfindwidesttoplevelname
```

`\sedTopLevelName` Like `\glsfindwidesttoplevelname` but has an additional check that the entry has been used. Only useful if the glossaries occur at the end of the document, in which case this command should go at the start of the glossary. Alternatively, place at the end of the document and save for the next run.

```

13222 \newrobustcmd*{\glsFindWidestUsedTopLevelName}[1][\glo@types]{%
13223     \dimen@=0pt\relax
13224     \gls@tmp@len=0pt\relax
13225     \forallglossaries[#1]{\gls@type}%
13226     {%
13227         \forglsentries[\gls@type]{\glo@label}%
13228     }%
13229         \ifglsused{\glo@label}%
13230             {%
13231                 \ifglshasparent{\glo@label}%
13232                     {}%
13233                     {%
13234                         \settowidth{\dimen@}%
13235                         {\glstreenamefmt{\glsentryname{\glo@label}}}%
13236                         \ifdim\dimen@>\gls@tmp@len
13237                             \gls@tmp@len=\dimen@
13238                             \eglssetwidest{\glsentryname{\glo@label}}%
13239                         \fi
13240                     }%
13241             }%
13242             {}%
13243         }%
13244     }%
13245 }

```

`destUsedAnyName` Like the above but doesn't check the parent key. Useful if all levels should have the same width for the name.

```
13246 \newrobustcmd*{\glsFindWidestUsedAnyName}[1][\@glo@types]{%
13247   \dimen@=0pt\relax
13248   \gls@tmp@len=0pt\relax
13249   \forallglossaries[#1]{\gls@type}{%
13250     {%
13251       \forglse{[\gls@type]}{\glo@label}{%
13252         {%
13253           \ifglsused{\glo@label}{%
13254             {%
13255               \settowidth{\dimen@}{%
13256                 {\glsentryname{\glo@label}}}}%
13257               \ifdim\dimen@>\gls@tmp@len
13258                 \gls@tmp@len=\dimen@
13259                 \glssetwidest{\glsentryname{\glo@label}}{%
13260                   \fi
13261                 }%
13262               {}%
13263             }%
13264           }%
13265         }%
13266 }
```

`ndWidestAnyName` Like the above but doesn't check if the entry has been used.

```
13266 \newrobustcmd*{\glsFindWidestAnyName}[1][\@glo@types]{%
13267   \dimen@=0pt\relax
13268   \gls@tmp@len=0pt\relax
13269   \forallglossaries[#1]{\gls@type}{%
13270     {%
13271       \forglse{[\gls@type]}{\glo@label}{%
13272         {%
13273           \settowidth{\dimen@}{%
13274             {\glsentryname{\glo@label}}}}%
13275           \ifdim\dimen@>\gls@tmp@len
13276             \gls@tmp@len=\dimen@
13277             \glssetwidest{\glsentryname{\glo@label}}{%
13278               \fi
13279             }%
13280           }%
13281         }%
13282 }
```

`estUsedLevelTwo` This is like `\glsFindWidestUsedTopLevelName` but also sets the first two sub-levels as well.
Any entry that has a great-grandparent is ignored.

```
13282 \newrobustcmd*{\glsFindWidestUsedLevelTwo}[1][\@glo@types]{%
13283   \dimen@=0pt\relax
13284   \dimen@i=0pt\relax
13285   \dimen@ii=0pt\relax
13286   \forallglossaries[#1]{\gls@type}{%
13287     {%
```

```

13288 \forglsentries[\@gls@type]{\@glo@label}%
13289 {%
13290     \ifglsused{\@glo@label}%
13291     {%
13292         \ifglshasparent{\@glo@label}%
13293         {%
13294             \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@label}}@parent}%
13295             \ifglshasparent{\@glo@parent}%
13296             {%
13297                 \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@parent}}@parent}%
13298                 \ifglshasparent{\@glo@parent}%
13299                 {}%
13300                 {%
13301                     \settowidth{\gls@tmp[1]}%
13302                         {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13303                     \ifdim\gls@tmp[1]>\dimen@ii
13304                         \dimen@ii=\gls@tmp[1]
13305                         \eglssetwidest[2]{\glsentryname{\@glo@label}}%
13306                     \fi
13307                 }%
13308             }%
13309             {%
13310                 \settowidth{\gls@tmp[1]}%
13311                     {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13312                     \ifdim\gls@tmp[1]>\dimen@i
13313                         \dimen@i=\gls@tmp[1]
13314                         \eglssetwidest[1]{\glsentryname{\@glo@label}}%
13315                     \fi
13316                 }%
13317             }%
13318             {%
13319                 \settowidth{\gls@tmp[1]}%
13320                     {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13321                     \ifdim\gls@tmp[1]>\dimen@o
13322                         \dimen@o=\gls@tmp[1]
13323                         \eglssetwidest{\glsentryname{\@glo@label}}%
13324                     \fi
13325                 }%
13326             }%
13327             {}%
13328         }%
13329     }%
13330 }

```

`dWidestLevelTwo` This is like `\glsFindWidestUsedLevelTwo` but doesn't check if the entry has been used.

```

13331 \newrobustcmd*\glsFindWidestLevelTwo[1][\@glo@types]{%
13332     \dimen@=0pt\relax
13333     \dimen@i=0pt\relax
13334     \dimen@ii=0pt\relax

```

```

13335 \forallglossaries[#1]{\@gls@type}%
13336 {%
13337   \forglsentries[\@gls@type]{\@glo@label}%
13338   {%
13339     \ifglshasparent{\@glo@label}%
13340     {%
13341       \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@label}}@parent}%
13342       \ifglshasparent{\@glo@parent}%
13343       {%
13344         \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@parent}}@parent}%
13345         \ifglshasparent{\@glo@parent}%
13346         {}%
13347         {%
13348           \settowidth{\gls@tmp[1]}%
13349             {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13350           \ifdim\gls@tmp[1]>\dimen@ii
13351             \dimen@ii=\gls@tmp[1]
13352             \eglssetwidest[2]{\glsentryname{\@glo@label}}%
13353           \fi
13354         }%
13355       }%
13356     {%
13357       \settowidth{\gls@tmp[1]}%
13358         {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13359       \ifdim\gls@tmp[1]>\dimen@i
13360         \dimen@i=\gls@tmp[1]
13361         \eglssetwidest[1]{\glsentryname{\@glo@label}}%
13362       \fi
13363     }%
13364   }%
13365   {%
13366     \settowidth{\gls@tmp[1]}%
13367       {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13368     \ifdim\gls@tmp[1]>\dimen@o
13369       \dimen@o=\gls@tmp[1]
13370       \eglssetwidest{\glsentryname{\@glo@label}}%
13371     \fi
13372   }%
13373 }%
13374 }%
13375 }

```

`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.

```

13376 \newrobustcmd*\glsFindWidestUsedAnyNameSymbol}[2][\@glo@types]{%
13377   \dimen@=0pt\relax
13378   \gls@tmp[1]=0pt\relax
13379   #2=0pt\relax
13380   \forallglossaries[#1]{\@gls@type}%

```

```

13381  {%
13382      \forglsentries[\@gls@type]{\@glo@label}%
13383      {%
13384          \ifglsused{\@glo@label}%
13385          {%
13386              \settowidth{\dimen@}%
13387                  {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
13388          \ifdim\dimen@>\gls@tmpplen
13389              \gls@tmpplen=\dimen@
13390              \glssetwidest{\glsentryname{\@glo@label}}%
13391          \fi
13392          \settowidth{\dimen@}%
13393              {\glstrysymbol{\@glo@label}}%
13394          \ifdim\dimen@>\#2\relax
13395              \#2=\dimen@
13396          \fi
13397      }%
13398      {}%
13399  }%
13400 }%
13401 }

```

`\stAnyNameSymbol` Like the above but doesn't check if the entry has been used.

```

13402  \newrobustcmd*\glsFindWidestAnyNameSymbol}[2][\@glo@types]{%
13403      \dimen@=0pt\relax
13404      \gls@tmpplen=0pt\relax
13405      \#2=0pt\relax
13406      \forallglossaries[#1]{\@gls@type}%
13407      {%
13408          \forglsentries[\@gls@type]{\@glo@label}%
13409          {%
13410              \settowidth{\dimen@}%
13411                  {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
13412          \ifdim\dimen@>\gls@tmpplen
13413              \gls@tmpplen=\dimen@
13414              \glssetwidest{\glsentryname{\@glo@label}}%
13415          \fi
13416          \settowidth{\dimen@}%
13417              {\glstrysymbol{\@glo@label}}%
13418          \ifdim\dimen@>\#2\relax
13419              \#2=\dimen@
13420          \fi
13421      }%
13422  }%
13423 }

```

`\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.

```
13424 \newrobustcmd*\glsFindWidestUsedAnyNameSymbolLocation}[3][\@glo@types]{%
13425   \dimen@=0pt\relax
13426   \gls@tmp@len=0pt\relax
13427   #2=0pt\relax
13428   #3=0pt\relax
13429   \forallglossaries[#1]{\gls@type}{%
13430   {%
13431     \forglsentries[\gls@type]{\glo@label}{%
13432     {%
13433       \ifglsused{\glo@label}{%
13434       {%
13435         \settowidth{\dimen@}{%
13436           {\glsentryname{\glo@label}}}}%
13437         \ifdim\dimen@>\gls@tmp@len
13438           \gls@tmp@len=\dimen@
13439           \glssetwidest{\glsentryname{\glo@label}}{%
13440             \fi
13441             \settowidth{\dimen@}{%
13442               {\glsentrysymbol{\glo@label}}}}%
13443             \ifdim\dimen@>#2\relax
13444               #2=\dimen@
13445             \fi
13446             \settowidth{\dimen@}{%
13447               {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}}%
13448             \ifdim\dimen@>#3\relax
13449               #3=\dimen@
13450             \fi
13451           }%
13452           {}%
13453         }%
13454       }%
13455     }%
```

eSymbolLocation Like the \glsFindWidestUsedAnyNameSymbol but doesn't check if the entry has been used.

```
13456 \newrobustcmd*\glsFindWidestAnyNameSymbolLocation}[3][\@glo@types]{%
13457   \dimen@=0pt\relax
13458   \gls@tmp@len=0pt\relax
13459   #2=0pt\relax
13460   #3=0pt\relax
13461   \forallglossaries[#1]{\gls@type}{%
13462   {%
13463     \forglsentries[\gls@type]{\glo@label}{%
13464     {%
13465       \settowidth{\dimen@}{%
13466         {\glsentryname{\glo@label}}}}%
13467         \ifdim\dimen@>\gls@tmp@len
13468           \gls@tmp@len=\dimen@
13469           \glssetwidest{\glsentryname{\glo@label}}{%
```

```

13470     \fi
13471     \settowidth{\dimen@}%
13472     {\glsentrysymbol{@glo@label}}%
13473     \ifdim\dimen@>\#2\relax
13474         #2=\dimen@
13475     \fi
13476     \settowidth{\dimen@}%
13477     {\GlsXtrFormatLocationList{\glsentrynumberlist{@glo@label}}}%
13478     \ifdim\dimen@>\#3\relax
13479         #3=\dimen@
13480     \fi
13481     }%
13482 }%
13483 }

```

`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.

```

13484 \newrobustcmd*{\glsFindWidestUsedAnyNameLocation}[2][{@glo@types}]{%
13485     \dimen@=0pt\relax
13486     \gls@tmp@len=0pt\relax
13487     #2=0pt\relax
13488     \forallglossaries[#1]{\gls@type}%
13489     {%
13490         \forallglsentries[\gls@type]{\glo@label}%
13491         {%
13492             \ifglsused{\glo@label}%
13493             {%
13494                 \settowidth{\dimen@}%
13495                 {\glstreenamefmt{\glsentryname{\glo@label}}}%
13496                 \ifdim\dimen@>\gls@tmp@len
13497                     \gls@tmp@len=\dimen@
13498                     \glssetwidest{\glsentryname{\glo@label}}%
13499                 \fi
13500                 \settowidth{\dimen@}%
13501                 {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}%
13502                 \ifdim\dimen@>\#2\relax
13503                     #2=\dimen@
13504                 \fi
13505             }%
13506             {}%
13507         }%
13508     }%
13509 }

```

`AnyNameLocation` Like the `\glsFindWidestAnyNameLocation` but doesn't check the `first use` flag.

```

13510 \newrobustcmd*{\glsFindWidestAnyNameLocation}[2][{@glo@types}]{%
13511     \dimen@=0pt\relax
13512     \gls@tmp@len=0pt\relax

```

```

13513     #2=0pt\relax
13514     \forallglossaries[#1]{\@gls@type}%
13515     {%
13516         \forglentries[\@gls@type]{\@glo@label}%
13517         {%
13518             \settowidth{\dimen@}%
13519             {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
13520             \ifdim\dimen@>\gls@tmpplen
13521                 \gls@tmpplen=\dimen@
13522                 \eglssetwidest{\glsentryname{\@glo@label}}%
13523             \fi
13524             \settowidth{\dimen@}%
13525             {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}}%
13526             \ifdim\dimen@#2\relax
13527                 #2=\dimen@
13528             \fi
13529         }%
13530     }%
13531 }

```

`\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`.

```

13532 \newcommand*{\glsxtrComputeTreeIndent}[1]{%
13533     \glstreeindent=\glsxtrtreeopindent\relax
13534 }

```

`\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.

```

13535 \newcommand*{\glsxtrComputeTreeSubIndent}[3]{%
13536     \ifcsundef{\glswidestname\romannumeral#1}%
13537     {%
13538         \settowidth{#3}{\glstreenamefmt{\@glswidestname\space}}%
13539     }%
13540     {%
13541         \settowidth{#3}{\glstreenamefmt{%
13542             \csname\glswidestname\romannumeral#1\endcsname\space}}%
13543     }%
13544 }

```

`\eeSetHangIndent` Set `\hangindent` for top-level entries:

```

13545 \newcommand*{\glsxtrAltTreeSetHangIndent}{\hangindent\glstreeindent}

```

etSubHangIndent Set \hangindent for sub-entries:

```
13546 \newcommand*{\glsxtrAltTreeSetSubHangIndent}[1]{\hangindent\glstreeindent}
```

Redefine alttree:

```
13547 \renewglossarystyle{alttree}{%
13548   \renewenvironment{theglossary}{%
13549     {%
13550       \glsxtralttreeInit
13551       \def\@gls@prevlevel{-1}%
13552       \mbox{}\par}%
13553     {\par}%
13554     \renewcommand*{\glossaryheader}{}%
13555     \renewcommand*{\glsgroupheading}[1]{}%
13556     \renewcommand{\glossentry}[2]{%
13557       \ifnum\@gls@prevlevel=0\relax
13558       \else
13559         \glsxtrComputeTreeIndent{##1}%
13560       \fi
13561       \parindent\glstreeindent
13562       \glsxtrAltTreeSetHangIndent
13563       \makebox[0pt][r]%
13564     {%
13565       \glstreenamebox{\glstreeindent}%
13566     {%
13567       \glsentryitem{##1}%
13568       \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
13569     }%
13570   }%
13571   \glsxtralttreeSymbolDescLocation{##1}{##2}%
13572   \def\@gls@prevlevel{0}%
13573 }
13574 \renewcommand{\subglossentry}[3]{%
13575   \ifnum##1=1\relax
13576     \glssubentryitem{##2}%
13577   \fi
13578   \ifnum\@gls@prevlevel=##1\relax
13579   \else
13580     \glsxtrComputeTreeSubIndent{##1}{##2}{\gls@tmp{len}}%
13581     \ifnum\@gls@prevlevel<##1\relax
13582       \setlength\glstreeindent\gls@tmp{len}
13583       \addtolength\glstreeindent\parindent
13584       \parindent\glstreeindent
13585     \else
13586       \ifnum\@gls@prevlevel=0\relax
13587         \glsxtrComputeTreeIndent{##2}%
13588       \else
13589         \glsxtrComputeTreeSubIndent{\@gls@prevlevel}{##2}{\glstreeindent}%
13590       \fi
13591     \addtolength\parindent{-\glstreeindent}%

```

```

13592      \setlength\glstreeindent\parindent
13593      \fi
13594      \fi
13595      \glsxtrAltTreeSetSubHangIndent{##1}%
13596      \makebox[0pt][r]{\glstreenamebox{\gls@tmplen}{%
13597          \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}}}%
13598      \glsxtralttreeSubSymbolDescLocation{##1}{##2}{##3}%
13599      \def\@gls@prevlevel{##1}%
13600  }%
13601  \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
13602 }
13603 }%
13604 {%
13605 }

```

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.

```

13606 \ifdef{\@glsstyle@alttreegroup}
13607 {%
13608     \renewglossarystyle{alttreegroup}{%
13609         \setglossarystyle{alttree}{%
13610             \renewcommand{\glsgroupheading}[1]{\par
13611                 \def\@gls@prevlevel{-1}%
13612                 \hangindent0pt\relax
13613                 \parindent0pt\relax
13614                 \glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
13615                 \nopagebreak\indexspace\nopagebreak
13616             }%
13617         }%
13618     }%
13619     {%
13620 }

```

Similarly for `alttreehypergroup`.

```

13621 \ifdef{\@glsstyle@alttreehypergroup}
13622 {%
13623     \renewglossarystyle{alttreehypergroup}{%
13624         \setglossarystyle{alttree}{%
13625             \renewcommand*{\glossaryheader}{%
13626                 \par
13627                 \def\@gls@prevlevel{-1}%
13628                 \hangindent0pt\relax
13629                 \parindent0pt\relax
13630                 \glstreenavigationfmt{\glsnavigation}\par\indexspace
13631             }%
13632             \renewcommand*{\glsgroupheading}[1]{%
13633                 \par
13634                 \def\@gls@prevlevel{-1}%
13635                 \hangindent0pt\relax
13636                 \parindent0pt\relax

```

```

13637     \glstreegroupheaderfmt
13638         {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}\par
13639         \nopagebreak\indexspace\nopagebreak
13640     }%
13641 }
13642 }%
13643 {%
13644 }

```

2.9 Multicolumn Styles

Adjust `mcolindexgroup` to discourage page breaks after the group headings.

```

13645 \ifdef{@glsstyle@mcolindexgroup}%
13646 {%
13647     \renewglossarystyle{mcolindexgroup}{%
13648         \setglossarystyle{mcolindex}{%
13649             \renewcommand*\{\glsgroupheading}[1]{%
13650                 \item\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
13651                 \nopagebreak\indexspace\nobreak\@afterheading
13652             }%
13653     }%
13654 }%
13655 {%
13656 }

```

Similarly for `mcolindexhypergroup`.

```

13657 \ifdef{@glsstyle@mcolindexhypergroup}%
13658 {%
13659     \renewglossarystyle{mcolindexhypergroup}{%
13660         \setglossarystyle{mcolindex}{%
13661             \renewcommand*\{\glossaryheader}{%
13662                 \item\glstreenavigationfmt{\glsnavigation}%
13663                 \indexspace
13664             }%
13665             \renewcommand*\{\glsgroupheading}[1]{%
13666                 \item\glstreegroupheaderfmt
13667                     {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}\%
13668                     \nopagebreak\indexspace\nobreak\@afterheading
13669             }%
13670     }%
13671 }%
13672 {%
13673 }

```

Similarly for `mcolindexspannav`.

```

13674 \ifdef{@glsstyle@mcolindexspannav}%
13675 {%
13676     \renewglossarystyle{mcolindexspannav}{%
13677         \setglossarystyle{index}{%

```

```

13678 \renewenvironment{theglossary}%
13679 {%
13680   \begin{multicols}{\glsmcols}[\noindent\glstreenavigationfmt{\glsnavigation}]%
13681   \setlength{\parindent}{0pt}%
13682   \setlength{\parskip}{0pt plus 0.3pt}%
13683   \let\item\glstreeitem}%
13684 \end{multicols}}%
13685 \renewcommand*\glsgroupheading[1]{%
13686   \item\glstreegroupheaderfmt
13687   {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
13688   \nopagebreak\indexspace\nobreak\@afterheading
13689 }%
13690 }%
13691 }%
13692 {%
13693 }

```

Similarly for mcoltreegroup.

```

13694 \ifdef{@glsstyle@mcoltreegroup}%
13695 {%
13696   \renewglossarystyle{mcoltreegroup}{%
13697     \setglossarystyle{mcoltree}%
13698     \renewcommand{\glsgroupheading}[1]{\par
13699       \noindent\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}}%
13700       \nopagebreak\indexspace\nobreak\@afterheading
13701     }%
13702   }%
13703 }%
13704 {%
13705 }

```

Similarly for mcoltreehypergroup.

```

13706 \ifdef{@glsstyle@mcoltreehypergroup}%
13707 {%
13708   \renewglossarystyle{mcoltreehypergroup}{%
13709     \setglossarystyle{mcoltree}%
13710     \renewcommand*{\glossaryheader}{%
13711       \par\noindent\glstreenavigationfmt{\glsnavigation}\par\indexspace
13712     }%
13713     \renewcommand*\glsgroupheading[1]{%
13714       \par\noindent
13715       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
13716       \nopagebreak\indexspace\nobreak\@afterheading
13717     }%
13718   }%
13719 }%
13720 {%
13721 }

```

Similarly for mcoltreespannav.

```

13722 \ifdef{@glsstyle@mcoltreespannav}%

```

```

13723 {%
13724   \renewglossarystyle{mcoltreeespannav}{%
13725     \setglossarystyle{tree}%
13726     \renewenvironment{theglossary}%
13727     {%
13728       \begin{multicols}{\glsmcols}%
13729         [\noindent\glstreenavigationfmt{\glsnavigation}]%
13730         \setlength{\parindent}{0pt}%
13731         \setlength{\parskip}{0pt plus 0.3pt}%
13732     }%
13733   {\end{multicols}}%
13734   \renewcommand*\glsgroupheading[1]{%
13735     \par\noindent
13736     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
13737     \nopagebreak\indexspace\nobreak\@afterheading
13738   }%
13739 }
13740 }%
13741 {%
13742 }

```

Similarly for mcoltreeonamegroup.

```

13743 \ifdef{@glsstyle@mcoltreeonamegroup}%
13744 {%
13745   \renewglossarystyle{mcoltreeonamegroup}{%
13746     \setglossarystyle{mcoltreeoname}%
13747     \renewcommand{\glsgroupheading}[1]{\par
13748       \noindent\glstreegroupheaderfmt{\glsgetgroupname{##1}}}%
13749       \nopagebreak\indexspace\nobreak\@afterheading
13750   }%
13751 }
13752 }%
13753 {%
13754 }

```

Similarly for mcoltreeonamehypergroup.

```

13755 \ifdef{@glsstyle@mcoltreeonamehypergroup}%
13756 {%
13757   \renewglossarystyle{mcoltreeonamehypergroup}{%
13758     \setglossarystyle{mcoltreeoname}%
13759     \renewcommand*\glossaryheader{%
13760       \par\noindent\glstreenavigationfmt{\glsnavigation}\par\indexspace}%
13761     \renewcommand*\glsgroupheading[1]{%
13762       \par\noindent
13763       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
13764       \nopagebreak\indexspace\nobreak\@afterheading
13765   }%
13766 }%
13767 {%
13768 }

```

Similarly for mcoltreeonenamespannav.

```
13769 \ifdef{@glsstyle@mcoltreeonenamespannav}{%
13770 {%
13771   \renewglossarystyle{mcoltreeonenamespannav}{%
13772     \setglossarystyle{treenoname}{%
13773     \renewenvironment{theglossary}{%
13774       {%
13775         \begin{multicols}{\glsmcols}{%
13776           [\noindent\glstreenavigationfmt{\glsnavigation}]{%
13777             \setlength{\parindent}{0pt}{%
13778               \setlength{\parskip}{0pt plus 0.3pt}{%
13779             }{%
13780           }{%
13781           \renewcommand*\glsgroupheading[1]{%
13782             \par\noindent
13783             \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}{%
13784               \nopagebreak\indexspace\nobreak\@afterheading}{%
13785             }{%
13786           }{%
13787           {%
13788         }
```

mcolaltree needs adjusting so that it uses \glsxtralttreeInit This doesn't use \mbox{} \par which would unbalance the top of the columns.

```
13789 \ifdef{@glsstyle@mcolaltree}{%
13790 {%
13791   \renewglossarystyle{mcolaltree}{%
13792     \setglossarystyle{alttree}{%
13793     \renewenvironment{theglossary}{%
13794       {%
13795         \glsxtralttreeInit
13796         \def@gls@prevlevel{-1}{%
13797           \begin{multicols}{\glsmcols}{%
13798             }{%
13799             {\par\end{multicols}}{%
13800           }{%
13801         }{%
13802         {%
13803       }
```

Redefine mcolalttreegroup to discourage page breaks after the group headings.

```
13804 \ifdef{@glsstyle@mcolalttreegroup}{%
13805 {%
13806   \renewglossarystyle{mcolalttreegroup}{%
13807     \setglossarystyle{mcolalttree}{%
13808     \renewcommand*\glsgroupheading[1]{\par
13809       \def@gls@prevlevel{-1}{%
13810         \hangindent0pt\relax
13811         \parindent0pt\relax
13812         \glstreegroupheaderfmt{\glsgetgroupname{##1}}{%
```

```

13813     \nopagebreak\indexspace\nopagebreak
13814   }%
13815 }
13816 }%
13817 {%
13818 }

```

Similarly for mcolaltreehypergroup.

```

13819 \ifdef{\@glsstyle@mcolaltreehypergroup}
13820 {%
13821   \renewglossarystyle{mcolaltreehypergroup}{%
13822     \setglossarystyle{mcolaltree}{%
13823       \renewcommand*{\glossaryheader}{%
13824         \par
13825         \def\@gls@prevlevel{-1}%
13826         \hangindent0pt\relax
13827         \parindent0pt\relax
13828         \glstreenavigationfmt{\glsnavigation}%
13829         \par\indexspace
13830       }%
13831       \renewcommand*{\glsgroupheading}[1]{%
13832         \par
13833         \def\@gls@prevlevel{-1}%
13834         \hangindent0pt\relax
13835         \parindent0pt\relax
13836         \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroup{##1}}}%
13837         \nopagebreak\indexspace\nopagebreak
13838       }%
13839     }%
13840   }%
13841 {%
13842 }

```

Similarly for mcolaltreespannav.

```

13843 \ifdef{\@glsstyle@mcolaltreespannav}
13844 {%
13845   \renewglossarystyle{mcolaltreespannav}{%
13846     \setglossarystyle{alttree}{%
13847       \renewenvironment{theglossary}{%
13848         {%
13849           \glsxtralttreeInit
13850           \def\@gls@prevlevel{-1}%
13851           \begin{multicols}{\glsmcols}%
13852             [\noindent\glstreenavigationfmt{\glsnavigation}]%
13853         }%
13854         {\par\end{multicols}}%
13855         \renewcommand*{\glsgroupheading}[1]{%
13856           \par
13857           \def\@gls@prevlevel{-1}%
13858           \hangindent0pt\relax

```

```
13859     \parindent0pt\relax
13860     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroup{##1}}}{%
13861         \nopagebreak\indexspace\nopagebreak
13862     }%
13863 }
13864 }%
13865 {%
13866 }
```

Reset the default style

```
13867 \ifx\@glossary@default@style\relax
13868 \else
13869   \setglossarystyle{@glsxtr@current@style}
13870 \fi
```

3 bookindex style (glossary-bookindex.sty)

3.1 Package Initialisation and Options

```
13871 \NeedsTeXFormat{LaTeX2e}
13872 \ProvidesPackage{glossary-bookindex}[2018/03/06 v1.28 (NLCT)]

    Load required packages.
13873 \RequirePackage{multicol}
13874 \RequirePackage{glossary-tree}

trbookindexcols  Number of columns.
13875 \newcommand{\glsxtrbookindexcols}{2}

trbookindexname  Format used for top-level entries. (Argument is the label.)
13876 \newcommand*{\glsxtrbookindexname}[1]{\glossentryname{#1}}


ookindexsubname  Format used for sub entries.
13877 \newcommand*{\glsxtrbookindexsubname}[1]{\glsxtrbookindexname{#1}}


sxtrprelocation  Provide in case glossaries-stylemods isn't loaded.
13878 \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.
13879 \newcommand*{\glsxtrbookindexprelocation}[1]{%
13880     \glsxtrifhasfield{location}{#1}%
13881     {,\glsxtrprelocation}%
13882     {\glsxtrprelocation}%
13883 }
```

xsubprelocation Separator used before location list for sub-entries.

```
13884 \newcommand*{\glsxtrbookindexsubprelocation}[1]{%
13885     \glsxtrbookindexprelocation{#1}%
13886 }
```

xparentchildsep Separator used between top-level parent and child entry.

```
13887 \newcommand{\glsxtrbookindexparentchildsep}{\nopagebreak}
```

rentsubchildsep Separator used between sub-level parent and child entry.

```
13888 \newcommand{\glsxtrbookindexparentsubchildsep}{\glsxtrbookindexparentchildsep}
```

ookindexbetween Between two top-level entries identified by the labels in the arguments.
13889 \newcommand{\glsxtrbookindexbetween}[2]{}

indexsubbetween Between two level 1 entries identified by the labels in the arguments.
13890 \newcommand{\glsxtrbookindexsubbetween}[2]{}

exsubsubbetween Between two level 2 entries identified by the labels in the arguments.
13891 \newcommand{\glsxtrbookindexsubsubbetween}[2]{}

indexatendgroup At the end of a letter group. The argument is the index of the last top-level entry.
13892 \newcommand{\glsxtrbookindexatendgroup}[1]{}

exsubatendgroup At the end of a letter group. The argument is the index of the last level 1 entry.
13893 \newcommand{\glsxtrbookindexsubatendgroup}[1]{}

ubsubatendgroup At the end of a letter group. The argument is the index of the last level 2 entry.
13894 \newcommand{\glsxtrbookindexsubsubatendgroup}[1]{}

kindexgroupskip Group separator.
13895 \newcommand{\glsxtrbookindexgroupskip}{\ifglsnogroupskip\else\indexspace\fi}
Format group title.

dexformatheader Group separator.
13896 \newcommand*{\glsxtrbookindexformatheader}[1]{%
13897 \par{\centering\glstreegroupheaderfmt{\#1}\par}%
13898 }

okindexbookmark Book mark group heading if supported.
13899 \ifdef\pdfbookmark
13900 {%
13901 \newcommand*{\glsxtrbookindexbookmark}[2]{%
13902 \ifdefstring{\@glossarysec}{chapter}{%
13903 {\pdfbookmark[1]{\#1}{\#2}}%
13904 {\pdfbookmark[2]{\#1}{\#2}}%
13905 }%
13906 }%
13907 {%
13908 \newcommand*{\glsxtrbookindexbookmark}[2]{%
13909 }

kindexcolspread
13910 \newcommand*{\glsxtrbookindexcolspread}{}

dexmulticolsenv
13911 \newcommand*{\glsxtrbookindexmulticolsenv}{\multicols}

Define the style.

```
13912 \newglossarystyle{bookindex}{%
13913   \setglossarystyle{index}%
13914   \renewenvironment{theglossary}%
13915 {%
13916   \ifempty{\glsxtrbookindexcols}{%
13917     \expandafter\begin\expandafter{\glsxtrbookindexmulticolsenv}%
13918     {\glsxtrbookindexcols}%
13919   }%
13920   \expandafter\begin\expandafter{\glsxtrbookindexmulticolsenv}%
13921   {\glsxtrbookindexcols}[\glsxtrbookindexcols]{%
13922   }%
13923   \setlength{\parindent}{0pt}%
13924   \setlength{\parskip}{0pt plus 0.3pt}%
13925   \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
13926   \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
13927   \let\@glsxtr@bookindex@between\gobble
13928   \let\@glsxtr@bookindex@subbetween\gobble
13929   \let\@glsxtr@bookindex@subsubbetween\gobble
13930   \let\@glsxtr@bookindex@atendgroup\relax
13931   \let\@glsxtr@bookindex@subatendgroup\relax
13932   \let\@glsxtr@bookindex@subsubatendgroup\relax
13933   \let\@glsxtr@bookindexgroupskip\relax
13934 }%
13935 }%
13936 }%
13937 }%
```

Do end group hooks.

```
13938   \@glsxtr@bookindex@subsubatendgroup
13939   \@glsxtr@bookindex@subatendgroup
13940   \@glsxtr@bookindex@atendgroup
```

End multicols environment.

```
13941   \expandafter\end\expandafter{\glsxtrbookindexmulticolsenv}%
13942 }%
```

Use ragged right as columns are likely to be narrow and indexes tend not to be fully justified.

```
13943   \renewcommand*{\glossaryheader}{\raggedright}%
```

Top level entry format.

```
13944   \renewcommand*{\glossentry}[2]{%
```

Do separator.

```
13945   \@glsxtr@bookindex@between{##1}%
```

Update separators.

```
13946   \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
13947   \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
13948   \let\@glsxtr@bookindex@subbetween\gobble
13949   \let\@glsxtr@bookindex@subsubbetween\gobble
13950   \edef\@glsxtr@bookindex@between{%
```

```

13951     \noexpand\glsxtrbookindexbetween{##1}%
13952   }%
13953   \edef\@glsxtr@bookindex@atendgroup{%
13954     \noexpand\glsxtrbookindexatendgroup{##1}%
13955   }%
13956   \let\@glsxtr@bookindex@subatendgroup\relax
13957   \let\@glsxtr@bookindex@subsubatendgroup\relax

```

Format entry.

```

13958   \glstreeitem
13959     \glsentryitem{##1}%
13960     \glstarget{##1}{\glsxtrbookindexname{##1}}%
13961     \glsxtrbookindexprelocation{##1}##2%
13962   }%
13963   \renewcommand{\subglossentry}[3]{%
13964     \ifcase##1\relax

```

Level 0 (shouldn't happen as that's formatted with \glossentry).

```

13965     \glstreeitem
13966     \or

```

Level 1.

```

13967   \glsxtr@bookindex@sep
13968   \glsxtr@bookindex@subbetween{##2}%
13969   \let\@glsxtr@bookindex@sep\relax

```

Update separators.

```

13970   \let\@glsxtr@bookindex@subsubbetween@gobble
13971   \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
13972   \edef\@glsxtr@bookindex@subbetween{%
13973     \noexpand\glsxtrbookindexsubbetween{##2}%
13974   }%
13975   \edef\@glsxtr@bookindex@atsubendgroup{%
13976     \noexpand\glsxtrbookindexatsubendgroup{##1}%
13977   }%

```

Start sub-item.

```

13978   \glstreesubitem
13979     \glssubentryitem{##2}%
13980   \else

```

All other levels.

```

13981   \glsxtr@bookindex@subsep
13982   \glsxtr@bookindex@subsubbetween{##2}%

```

Update separators.

```

13983   \let\@glsxtr@bookindex@subsep\relax
13984   \edef\@glsxtr@bookindex@subsubbetween{%
13985     \noexpand\glsxtrbookindexsubsubbetween{##2}%
13986   }%
13987   \edef\@glsxtr@bookindex@atsubsubendgroup{%
13988     \noexpand\glsxtrbookindexatsubsubendgroup{##1}%
13989   }%

```

Start sub-sub-item.

```
13990     \glstreesubsubitem
13991     \fi
```

Format entry.

```
13992     \glstarget{##2}{\glsxtrbookindexsubname{##2}}%
13993     \glsxtrbookindexsubprelocation{##2}##3%
13994 }%
```

The group skip is moved to the group heading to avoid interfering with the end letter group hooks.

```
13995 \renewcommand*\glsgroupskip{}%
```

Group heading format.

```
13996 \renewcommand*\glsgroupheading[1]{%
```

Do end group hooks.

```
13997 \@glsxtr@bookindex@subsubatendgroup
13998 \@glsxtr@bookindex@subatendgroup
13999 \@glsxtr@bookindex@atendgroup
14000 \@glsxtr@bookindexgroupskip
```

Update separators.

```
14001 \let@\glsxtr@bookindexgroupskip\glsxtrbookindexgroupskip
14002 \let@\glsxtr@bookindex@between@\gobble
14003 \let@\glsxtr@bookindex@atendgroup\relax
14004 \let@\glsxtr@bookindex@subatendgroup\relax
14005 \let@\glsxtr@bookindex@subsubatendgroup\relax
```

Fetch the group title from the label supplied in #1.

```
14006 \glsxtrgetgrouptitle{##1}{\thisgrptitle}%
```

Do the PDF bookmark if supported.

```
14007 \glsxtrbookindexbookmark{\thisgrptitle}{index.##1}%
```

Format the group title.

```
14008 \glsxtrbookindexformatheader{\thisgrptitle}%
14009 \nopagebreak\indexspace\nopagebreak\@afterheading
14010 }%
14011 }
```

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.

```
14012 \newcommand{\glsxtrbookindexthepage}{%
14013 \ifdef\currentglossary{\currentglossary.\arabic{page}}{\arabic{page}}%
14014 }
```

`kindexmarkentry` Writes entry information to the .aux file. The argument is the entry label.

```
14015 \newcommand*{\glsxtrbookindexmarkentry}[1]{%
14016   \protected@write\@auxout{%
14017   {\let\glsxtrbookindexthepage\relax}%
14018   {\string\glsxtr@setbookindexmark{\glsxtrbookindexthepage}{#1}}%
14019 }
```

`etbookindexmark`

```
14020 \newcommand*{\glsxtr@setbookindexmark}[2]{%
14021   \ifcsundef{\glsxtr@idxfirstmark@#1}{%
14022     {\csgdef{\glsxtr@idxfirstmark@#1}{#2}}%
14023   {}%
14024   {\csgdef{\glsxtr@idxlastmark@#1}{#2}}%
14025 }
```

`dexfirstmarkfmt`

```
14026 \newcommand*{\glsxtrbookindexfirstmarkfmt}[1]{%
14027   \glsentryname{#1}%
14028 }
```

`kindexfirstmark`

```
14029 \newcommand*{\glsxtrbookindexfirstmark}{%
14030   \letcs{\glsxtr@label}{\glsxtr@idxfirstmark@\glsxtrbookindexthepage}%
14031   \ifdef{\glsxtr@label}{%
14032     {\glsxtrbookindexfirstmarkfmt{\glsxtr@label}}%
14033   {}%
14034 }
```

`ndexlastmarkfmt`

```
14035 \newcommand*{\glsxtrbookindexlastmarkfmt}[1]{%
14036   \glsentryname{#1}%
14037 }
```

`okindexlastmark`

```
14038 \newcommand*{\glsxtrbookindexlastmark}{%
14039   \letcs{\glsxtr@label}{\glsxtr@idxlastmark@\glsxtrbookindexthepage}%
14040   \ifdef{\glsxtr@label}{%
14041     {\glsxtrbookindexlastmarkfmt{\glsxtr@label}}%
14042   {}%
14043 }
```

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 307
\glsfmtshort: new 306
\Glsfmtshortpl: new 307
\glsfmtshortpl: new 307
short: switched inline full form to short
(long) 210

0.3 (2015-12-02)

\@ACRlong: added redefinition 71
\@ACRlongpl: added redefinition 72
\@ACRshort: added redefinition 69
\@ACRshortpl: added redefinition 70
\@Acrlong: added redefinition 71
\@Acrlongpl: added redefinition 72
\@Acrshort: added redefinition 69
\@Acrshortpl: added redefinition 70
\@GLSdesc@: added redefinition 65
\@GLSdescplural@: added redefinition 65
\@GLSfirst@: added redefinition 62
\@GLSfirstplural@: added redefinition 64
\@GLSname@: added redefinition 64
\@GLSplural@: added redefinition 63
\@GLSsymbol@: added redefinition 66
\@GLSsymbolplural@: added
redefinition 66
\@GLStext@: added redefinition 61
\@GLSuseri@: added redefinition 67
\@GLSuserii@: added redefinition 67
\@GLSuseriii@: added redefinition 67
\@GLSuseriv@: added redefinition 68
\@GLSuserv@: added redefinition 68
\@GLSuservi@: added redefinition 68
\@Glsdesc@: added redefinition 65
\@Glsdescplural@: added redefinition 65
\@Glsfirst@: added redefinition 62
\@Glsfirstplural@: added redefinition 63
\@Glsname@: added redefinition 64
\@Glsplural@: added redefinition 63

\@Glssymbol@: added redefinition 66
\@Glssymbolplural@: added
redefinition 66
\@Gls{text@: added redefinition 61
\@Gls{useri@: added redefinition 66
\@Gls{userii@: added redefinition 67
\@Gls{useriii@: added redefinition 67
\@Gls{useriv@: added redefinition 67
\@Gls{userserv@: added redefinition 68
\@Gls{userservi@: added redefinition 68
\@Acrlong: added redefinition 70
\@Acrlongpl: added redefinition 71
\@acrshort: added redefinition 68
\@acrshortpl: added redefinition 69
\@gls@field@link: added optional
argument 55
\@glsdescplural@: added redefinition 65
\@glsfirst@: added redefinition 62
\@glsfirstplural@: added redefinition 63
\@glsplural@: added redefinition 63
\@glssymbolplural@: added
redefinition 66
\@glsxtr@defaultnoglossarywarning:
new 122
\@glsxtr@field@linkdefs: new 60
\@glsxtr@insertdots: new 179
\@print@glossary: added redefinition 119
\glsabbrvdefaultfont: renamed from
 \abbrvdefaultfont 185
\glsaccessdesc: new 147
\glsaccessdescplural: new 147
\glsaccessfirst: new 144
\glsaccessfirstplural: new 145
\Glsaccesslong: new 149
\glsaccesslong: new 149
\glsaccessname: new 143
\glsaccessplural: new 144
\Glsaccessshort: new 148
\glsaccessshort: new 148
\Glsaccessshortpl: new 149

\glsaccessshortpl: new	149	\@cGLSpl: new	96
\glsaccesssymbol: new	146	\@cGLSpl@: new	96
\glsaccesssymbolplural: new	146	\@glsxtr@setentrycountunsetattr:	
\glsaccesstext: new	143	new	91
\glsentryfmt: added check for short ..	54	\cGLS: new	95
\glslongpltok: new	179	\cGLSformat: new	96
\glsshortpltok: new	179	\cGLSpl: new	96
\glsxtr@newabbreviation: fixed family name in \setkeys	181	\cGLSplformat: new	96
\glsxtrdiscardperiod: added check for plural	176	\GlossariesExtraWarningNoLine:	
\GLSxtrlongpl: new	194	new	15
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\glsxtrlongpl: new	193	\glsfirstabrvdefaultfont: new ..	185
\glsxtrNoGlossaryWarning: new ..	20	\glsfirstlongdefaultfont: new ..	185
\glsxtrpostlinkAddDescOnFirstUse: new	176	\Glsfmtfirst: new	310
\glsxtrpostlinkAddSymbolOnFirstUse: new	176	\glsfmtfirst: new	309
\glsxtrpostlinkendsentence: new ..	176	\Glsfmtfirstpl: new	310
\GLSxtrshortpl: new	193	\glsfmtfirstpl: new	310
\Glsxtrshortpl: new	192	\Glsfmtplural: new	309
\glsxtrshortpl: new	192	\glsfmtplural: new	309
short-long-desc: fixed name to use \glslabeltok	205	\Glsfmtshort: changed to use \Glsxtrtitleshort	307
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0.4 (2015-12-03)		\glsfmtshort: changed to use \glsxtrtitleshort	306
\@glsxtr@doabbreviationsdef: added redefinition of \acronymtype	17	\Glsfmtshortpl: changed to use \Glsxtrtitleshortpl	307
\Glsfmtshort: changed to use \Glsxtrshort	307	renamed from \Glsentryfmtshortpl	307
\glsfmtshort: changed to use \glsxtrshort	306	\glsfmtshortpl: changed to use \glsxtrtitleshortpl	307
\Glsfmtshortpl: changed to use \glsxtrshortpl	307	renamed from \glsentryfmtshortpl	307
\glsfmtshortpl: changed to use \glsxtrshortpl	307	\Glsfmttext: new	308
\glsxtrifemptyglossary: new	26	\glsfmttext: new	308
\glsxtrnewnumber: added extra argument	158	\glshasattribute: new	155
\glsxtrnewsymbol: added extra argument	158	\glshascategoryattribute: new ..	154
\MakeAcronymsAbbreviations: set the default type to \acronymtype	104	\glsxtremsuffix: new	246
\newterm: fixed name argument	157	\GlsXtrEnableEntryCounting: new ..	91
0.5 (2015-12-07)		\glsxtrcounttrigger: new	93
\@cGLS: new	96	\glsxtrscfont: new	218
\@cGLS@: new	96	\glsxtrscsuffix: new	218
		\glsxtrsmfont: new	232
		\glsxtrsmsuffix: new	232
		short-em: new	253
		short-em-desc: new	255
		short-em-footnote: new	264
		short-em-long: new	250
		short-em-long-desc: new	251

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short-sm-desc: new	237
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short-sm-long-desc: new	235
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long-noshort-em-desc: new	260
long-noshort-sm: new	239
long-noshort-sm-desc: new	241
long-short-em: new	246
long-short-em-desc: new	248
long-short-sm: new	232
long-short-sm-desc: new	233
0.5.1 (2015-12-02)	
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0.5.1 (2015-12-07)	
\@glsxtr@doaccsupp: new	20
General: removed \ifglsxtruseuchhead	297
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\Glsaccessdescplural: new	148
\Glsaccessfirst: new	145
\Glsaccessfirstplural: new	145
\Glsaccessname: new	143
\Glsaccessplural: new	144
\Glsaccesssymbol: new	146
\Glsaccesssymbolplural: new	146
\Glsxtrheadfirst: now uses headuc attribute	302
\glsxtrheadfirst: now uses headuc attribute	301
\Glsxtrheadfirstplural: now uses headuc attribute	302
\glsxtrheadfirstplural: now uses headuc attribute	302
\Glsxtrheadplural: now uses headuc attribute	301
\glsxtrheadplural: now uses headuc attribute	300
\Glsxtrheadshort: now uses headuc attribute	298
\glsxtrheadshort: now uses headuc attribute	297
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short-sm-footnote: switch off regular attribute if set	243
long-short: switch off regular attribute if set	202
long-short-desc: switch off regular attribute if set	203
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\@GLSdesc@: added accessibility support	65
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\@GLSfirst@: added accessibility support	62
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\@GLSname@: added accessibility support	64
\@GLSplural@: added accessibility support	63
\@GLSsymbol@: added accessibility support	66
\@GLSsymbolplural@: added accessibility support	66
\@GLStext@: added accessibility support	61
\@Glsdesc@: added accessibility support	65
\@Glsdescplural@: added accessibility support	65
\@Glsfirst@: added accessibility support	62
\@Glsfirstplural@: added accessibility support	63

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\@Glosssymbol@: added accessibility support	66
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\@Glstext@: added accessibility support ..	61
\@glsdesc@: added accessibility support ..	64
\@glsdescplural@: added accessibility support	65
\@glsfirst@: added accessibility support	62
\@glsfirstplural@: added accessibility support	63
\@glsname@: added accessibility support ..	64
\@glsplural@: added accessibility support	63
\@glosssymbol@: added accessibility support	65
\@glosssymbolplural@: added accessibility support	66
\@glstext@: added accessibility support ..	61
\@glsxtr@activate@initialtagging: new	174
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\@glsxtr@tag: new	174
General: fixed typo in glossaries-accsupp and tidied up code to use just one	
\@ifpackageloading	143
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\Glossentryname: added	163
\Glossentrysymbol: added	172
\glossentrysymbol: added	172
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\GLSaccessname: new	143, 150
\GLSaccessplural: new	144, 151
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\@glsxtr@autoindex@encap: new ..	170
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\@glsxtr@autoindex@setname: new ..	168
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\glsxtrdoautoindexname: new	167
\glsxtrpostnamehook: new	165
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\@GLSxtr@p@long@: new	83
\@GLSxtr@p@longpl@: new	84
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\@GlsXtrEnableOnTheFly: new	47
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\@Glsxtr@p@acrlong@: new	84
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\@Glsxtr@p@long@: new	83	\glsifattribute: added check for entry's existence	155
\@Glsxtr@p@longpl@: new	83	\glspostlinkhook: added existence check	175
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\@Glsxtr@p@short@: new	82	\glsxtr: new	48
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\@alt@gls@hyp@opt: new	78	\GlsXtrEnableOnTheFly: new	47
\@gls@alt@hyp@opt: new	78	\Glsxtrpl: new	49
\@gls@alt@hyp@opt@char: new	78	\glsxtrpl: new	48
\@gls@alt@hyp@opt@keys: new	78	\glsxtrpostlocalreset: new	90
\@gls@increment@currunitcount: new	98	\glsxtrpostlocalunset: new	90
\@gls@local@increment@currunitcount: new	98	\glsxtrpostreset: new	90
\@gls@setdefault@glslink@opts: new	75	\glsxtrpostunset: new	90
\@glsxtr: new	48	\glsxtrprotectlinks: new	81
\@glsxtr@addunitcounter: new	97	\GlsXtrSetAltModifier: new	78
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\@glsxtrpl: new	48	\glsxtrdiscardperiod: added check for first use	176
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\Glsxtrheadfullpl: new	306
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\Glsxtrheadlongpl: new	304
\glsxtrheadlongpl: new	303
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\glsxrttitlefullpl: new	305
\Glsxrttitlelong: new	304
\glsxrttitlelong: new	303
\Glsxrttitlelongpl: new	304
\glsxrttitlelongpl: new	304
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\@Glsplural@: fixed bug \@Glsplural@ should be redefined not \@Glsplural	63
\@Glsfirstplural@: bug fix: misspelt cs name	63
\@Glsplural@: fixed bug \@Glsplural@ should be redefined not \@Glsplural	63
\@glsplural@: fixed bug \@glsplural@ should be redefined not \@glsplural	63
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\@GLSdescplural@: set abbreviation and regular format	65
\@GLSfirst@: set abbreviation format ..	62
\@GLSfirstplural@: set abbreviation and regular format	63
\@GLSname@: set abbreviation and regular format	64
\@Glsdesc@: set abbreviation and regular format	63
\@Glsdescplural@: set abbreviation and regular format	66
\@GLSsymbol@: set regular format	66
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