

# **glossaries-extra.sty v1.42: documented code**

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## **Abstract**

This is the documented code for the glossaries-extra package. See glossaries-extra-manual.pdf for the user manual.

This package is experimental and not stable. It's provided for testing purposes only. Future versions may not be compatible with this version. Once it has stabilised I'll add it to CTAN, at which point compatibility with the first stable version will be maintained.

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# 1 Main Package Code (`glossaries-extra.sty`)

## 1.1 Package Initialisation and Options

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{glossaries-extra}[2020/02/13 v1.42 (NLCT)]
```

Requires `xkeyval` to define package options.

```
3 \RequirePackage{xkeyval}
```

Requires `etoolbox` package.

```
4 \RequirePackage{etoolbox}
```

Has `glossaries` already been loaded?

```
5 \@ifpackageloaded{glossaries}
6 {%
```

Already loaded so pass any options to `\setupglossaries`. This means that the options that can only be set when `glossaries` is loaded can't be used.

```
7   \newcommand{\glsxtr@dooption}[1]{\setupglossaries{#1}}%
8   \let\@glsxtr@declareoption\@gls@declareoption
9 }
10 {%
```

Not already loaded, so pass options to `glossaries`.

```
11  \newcommand{\glsxtr@dooption}[1]{%
12    \PassOptionsToPackage{#1}{glossaries}%
13  }%
```

Set the defaults.

```
14  \PassOptionsToPackage{toc}{glossaries}
15  \PassOptionsToPackage{nopostdot}{glossaries}
16  \PassOptionsToPackage{noredefwarn}{glossaries}
17  \@ifpackageloaded{polyglossia}%
18  {}%
19  {%
20    \@ifpackageloaded{babel}%
21    {\PassOptionsToPackage{translate=babel}{glossaries}}%
22    {}%
23  }%
24  \newcommand*{\@glsxtr@declareoption}[2]{%
25    \DeclareOptionX{#1}{#2}%
26    \DeclareOption{#1}{#2}%
27  }
28 }
```

sxtrundefaction Declare package options.  
 Determines what to do if an entry hasn't been defined. The two arguments are the error or warning message and the help message if an error should be produced.

```

29 \newcommand*{\glsxtrundefaction}[2]{%
30   \@glsxtrundeftag\PackageError{glossaries-extra}{#1}{#2}%
31 }
```

arnonexistsordo If user wants undefaction=warn, then glossaries v4.19 is required.

```

32 \newcommand*{\glsxtr@warnonexistsordo}[1]{}
```

\glsxtrundeftag Text to display when an entry doesn't exist.

```

33 \newcommand*{\glsxtrundeftag}{??}
34 \newcommand*{\@glsxtrundeftag}{}%
```

This text is switched on at the start of the document to prevent unwanted text inserted into the preamble if any tests are made before the start of the document.

arn@undefaction This is how \glsxtrundefaction should behave if undefaction=warn is set.

```

35 \newcommand*{\@glsxtr@warn@undefaction}[2]{%
36   \@glsxtrundeftag\GlossariesExtraWarning{#1}%
37 }
```

err@undefaction This is how \glsxtrundefaction should behave if undefaction=error is set.

```

38 \newcommand*{\@glsxtr@err@undefaction}[2]{%
39   \@glsxtrundeftag\PackageError{glossaries-extra}{#1}{#2}%
40 }
```

rn@onexistsordo This is how \glsxtr@warnonexistsordo should behave if undefaction=warn is set.

```

41 \newcommand*{\@glsxtr@warn@onexistsordo}[1]{%
42   \GlossariesExtraWarning{\string#1\space hasn't been defined, so
43   some errors won't be converted to warnings.
44   (This most likely means your version of
45   glossaries.sty is below version 4.19.)}%
46 }
```

f@forglsentries

```

47 \newcommand*{\@glsxtr@redef@forglsentries}{}%
```

f@forglsentries

```

48 \newcommand*{\@glsxtr@do@redef@forglsentries}{}%
49 \renewcommand*{\forglsentries}[3][\glsdefaulttype]{%
50   \edef\@glo@list{\csname glolist@\#\#\!endcsname}%
51   \ifdefstring{\@glo@list}{,}{}%
52   {}%
53   \GlossariesExtraWarning{No entries defined in glossary '\#\!\!'}%
54 }%
55 {}%
56 \for##2:=\@glo@list\do
```

```

57      {%
58      \ifdefempty{##2}{}{##3}%
59    }%
60  }%
61 }%
62 }%



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

```

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

```

@glsxtr@record Does nothing by default.
77 \newcommand*{\glsxtr@record}[3]{}

lsxtr@recordsee Does nothing by default.
78 \newcommand*{\glsxtr@recordsee}[2]{}

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

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

```

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

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

```
83 \newcommand*{\glsxtr@do@record@wrglossary}[1]{%
84   \begingroup
85   \ifKV@glslink@noindex
86   \else
87     \edef\gls@label{\glsdetoklabel{#1}}%
88     \let\glslabel\gls@label
89     \glswriteentry{#1}%
90   {%
91     \ifdefempty{\glsxtr@thevalue}{%
92     {%
93       \ifx\glsxtr@org@theHvalue\glsxtr@theHvalue
94       \else
95         \let\theHglsentrycounter\glsxtr@theHvalue
96       \fi
97       \glsxtr@saveentrycounter
98       \let\@@do@@wrglossary\glsxtr@dorecord
99     }%
100   {%
101     \let\theHglsentrycounter\glsxtr@thevalue
102     \let\theHglsentrycounter\glsxtr@theHvalue
103     \let\@@do@@wrglossary\glsxtr@dorecordnodefer
104   }%
105   \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
106     \glsxtr@do@wrglossary{#1}%
107   \else
108     \@@glsxtrwrglossmark
109     \glsxtr@inc@wrglossaryctr{#1}%
110     \@@do@@wrglossary
111     \fi
112   }%
113   \fi
114 \endgroup
115 }
```

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

```
116 \newcommand*{\glsxtr@do@alsoindex@wrglossary}[1]{%
117   \glsxtr@do@wrglossary{#1}%
118   \glsxtr@do@record@wrglossary{#1}%
119 }
```

@@glsxtr@record The record=only option sets \glsxtr@record to this. This performs the recording if the entry *doesn't exist* and is done at the start of \gls@field@link and commands like \gls@ (before the existence test). This means that it disregards the wrgloss key.

The first argument is the option list (as passed in the first optional argument to commands like \gls). This allows the noindex setting to be picked up. The second argument is the entry's

label. The third argument is the key family (`\glslink` in most cases, `\glossadd` for `\glsadd`).  
120 `\newcommand*{\@glsxtr@record}{[3]{%`

Save the label in case it's needed. This needs to be outside the existence check to allow the post-link hook to reference it.

```
121 \edef\@gls@label{\glsdetoklabel{#2}}%
122 \let\glslabel\@gls@label
123 \ifglsentryexists{#2}{}%
124 {%
125   \@@glsxtrwrglossmark
126   \begingroup
127     \let\@glsnumberformat\@glsxtr@defaultnumberformat
128     \def\@glsxtr@thevalue{}%
129     \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
130     \let\@glsxtr@org@theHvalue\@glsxtr@theHvalue
```

Entry hasn't been defined, so we'll have to assume it's `\glscounter` by default.

```
131 \let\@gls@counter\glscounter
```

Unless the `equations` option is on and this is inside a numbered maths environment.

```
132 \if@glsxtr@equations
133   \glsxtr@use@equation@counter
134 \fi
```

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

```
135 \gls@setdefault@glslink@opts
```

Implement any pre-key settings.

```
136 \csuse{@glsxtr@#3@prekeys}%
```

Assign keys.

```
137 \setkeys{#3}{#1}%
```

Implement any post-key settings. Is the auto-add on?

```
138 \glsxtr@do@autoadd{#3}%
```

Check post-key hook.

```
139 \csuse{@glsxtr@#3@postkeys}%
```

Increment associated counter.

```
140 \glsxtr@inc@wrglossaryctr{#2}%
```

Check if `noindex` option has been used.

```
141 \ifKV@glslink@noindex
142 \else
143   \glswriteentry{#2}%
144 {%
```

Check if `thevalue` has been set.

```
145 \ifdefempty{\@glsxtr@thevalue}%
146 {%
```

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

```
147          \ifx\@glsxtr@org@theHvalue\@glsxtr@theHvalue
148          \else
149              \let\theHglsentrycounter\@glsxtr@theHvalue
150          \fi
```

Save the entry counter.

```
151          \glsxtr@saveentrycounter
```

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

```
152          \let\@@do@@wrglossary\@glsxtr@dorecord
153          }%
154          {%
```

thevalue has been set, so there's no need to defer writing the location value. (If it's dependent on the page counter, the counter key should be set instead.)

```
155          \let\theglsentrycounter\@glsxtr@thevalue
156          \let\theHglsentrycounter\@glsxtr@theHvalue
157          \let\@@do@@wrglossary\@glsxtr@dorecordnodefer
158          }%
159          \ifx\@glsxtr@record@setting\@glsxtr@record@setting@alsoindex
160              \glsxtr@@do@wrglossary{#2}%
161          \else
```

No need to escape special characters.

```
162          \@@do@@wrglossary
163          \fi
164          }%
165          \fi
166      \endgroup
167  }%
168 }
```

glslink@prekeys

```
169 \newcommand{\@glsxtr@glslink@prekeys}{\glslinkpresetkeys}
```

glslink@postkeys

```
170 \newcommand{\@glsxtr@glslink@postkeys}{\glslinkpostsetkeys}
```

glossadd@prekeys

```
171 \newcommand{\@glsxtr@glossadd@prekeys}{\glsaddpresetkeys}
```

glossadd@postkeys

```
172 \newcommand{\@glsxtr@glossadd@postkeys}{\glsaddpostsetkeys}
```

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

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

```

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

```

Protect against non-expandable commands occurring in the location.

```

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

```

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

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

```

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

```

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

```

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

```

```

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

```

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

```

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

```

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

```

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

```

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

```

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

```

```

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

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

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

p@recordcounter
255 \newcommand*{\@glsxtr@op@recordcounter}[1]{%
256   \appto{\glsxtr@counterrecordhook}{\noexpand\glsxtr@docounterrecord{#1}}%
257 }

lsxtr@recordsee Deal with \glssee in record mode. (This doesn't increment the associated counter.)
258 \newcommand*{\@glsxtr@recordsee}[2]{%
259   \glsxtrwrglossmark
260   \def\gls@xref{#2}%
261   \onelevel@sanitize\gls@xref
262   \protected@write\auxout{}{\string\glsxtr@recordsee{#1}{\gls@xref}}%
263 }

srtglossaryunit
264 \newcommand{\printunsrtglossaryunit}{%
265   \print@noop@unsrtglossaryunit
266 }

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

aveentrycounter Only store the entry counter information if the indexing is on.
268 \newcommand*{\glsxtr@indexonly@saveentrycounter}{%
269   \ifKV@glslink@noindex
270   \else
271     \glsxtr@saveentrycounter
272   \fi
273 }

addloclistfield
274 \newcommand*{\glsxtr@addloclistfield}{%
275   \key@ifundefined{glossentry}{loclist}%
276   {%

```

```

277 \define@key{glossentry}{loclist}{\def\@glo@loclist{##1}}%
278 \appto\@gls@keymap{, {loclist}{loclist}}%
279 \appto\@newglossaryentryprehook{\def\@glo@loclist{} }%
280 \appto\@newglossaryentryposthook{%
281   \gls@assign@field{}{\@glo@label}{loclist}{\@glo@loclist}%
282 }%
283 \glssetnoexpandfield{loclist}%
284 }%
285 {}%

```

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

```

286 \key@ifundefined{glossentry}{location}%
287 {}%
288 \define@key{glossentry}{location}{\def\@glo@location{##1}}%
289 \appto\@gls@keymap{, {location}{location}}%
290 \appto\@newglossaryentryprehook{\def\@glo@location{} }%
291 \appto\@newglossaryentryposthook{%
292   \gls@assign@field{}{\@glo@label}{location}{\@glo@location}%
293 }%
294 \glssetnoexpandfield{location}%
295 }%
296 {}%

```

Add a key to store the group heading.

```

297 \key@ifundefined{glossentry}{group}%
298 {}%
299 \define@key{glossentry}{group}{\def\@glo@group{##1}}%
300 \appto\@gls@keymap{, {group}{group}}%
301 \appto\@newglossaryentryprehook{\def\@glo@group{} }%
302 \appto\@newglossaryentryposthook{%
303   \gls@assign@field{}{\@glo@label}{group}{\@glo@group}%
304 }%
305 \glssetnoexpandfield{group}%
306 }%
307 {}%
308 }%

```

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

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

`tting@alsoindex`

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

`rd@setting@only`

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

`setting@nameref`

```
312 \newcommand*{\@glsxtr@record@setting@nameref}{nameref}
```

```

@if@record@only
313 \newcommand*{\@glsxtr@if@record@only}[2]{%
314   \ifx\@glsxtr@record@setting\@glsxtr@record@setting@only
315     #1%
316   \else
317     \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
318       #1%
319     \else
320       #2%
321     \fi
322   \fi
323 }

@ord@setting@off
324 \newcommand*{\@glsxtr@record@setting@off}{off}

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

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

```

```

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

```

Don't record.

```

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

```

Only record (don't index).

```

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

```

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

```

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

```

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

```

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

```

Version 1.06 changes the `docdef` option to a choice rather than boolean setting. The available values are: `false`, `true` or `restricted`. The `restricted` option permits document definitions as long as they occur before the first glossary is displayed.

lsxtr@docdefval The docdef value is stored as an integer: 0 (false), 1 (true) and 2 (restricted).  
384 \newcommand\*{\glsxtr@docdefval}{0}

Need to provide conditional commands that are backward compatible:

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

docdef By default don't allow entries to be defined in the document to encourage the user to define them in the preamble, but if the user is really determined to define them in the document allow them to request this.

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

ocdefrestricted  
398 \newcommand\*{\if@glsxtrdocdefrestricted}{\ifnum\glsxtr@docdefval>1 }

oifexistsorwarn Need an error to notify user if an undefined entry is being referenced in the glossary for the docdef=restricted option. This is used by \glossentryname (but not by \glossentrydesc etc as one error per entry is sufficient).

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

indexcrossrefs Automatically index cross references at the end of the document

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

Switch off since this can increase the build time.

```
406 \glsxtrindexcrossrefsfalse
```

But allow see key to switch it on automatically.

```

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

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

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

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

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

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

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

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

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

```

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

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

postdot Shortcut for nopostdot=false

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

nopostdot Needs to redefine \glsxtr@defpostpunc

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

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

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

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

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

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

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

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

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

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

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

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

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

```

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

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

```

Disable this command after it's been used.

```

526 \let\GlsXtrDefineAbbreviationShortcuts\relax
527 }

```

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

```

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

```

```

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

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

```

Always use the long forms, not the shortcuts, where portability is an issue. (For example, when defining entries in a file that may be input by multiple documents.)

@setupshortcuts Command used to set the shortcuts option.

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

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

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

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

```

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

```

```

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

```

Leave none and false as last option.

```

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

```

lsxtr@doaccsupp

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

glossaries-accsupp can't be loaded after glossaries-extra. glossaries-accsupp v4.29+ checks \@glsxtr@doaccsupp to determine if it's been loaded too late.

```

accsupp If accsupp, load glossaries-accsupp package.
619 \@glsxtr@declareoption{accsupp}{%
620   \renewcommand*{\@glsxtr@doaccsupp}{\RequirePackage{glossaries-accsupp}}}

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

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

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

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

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

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

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

```

```

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

```

glsxtr@do@style

```
675 \newcommand*{\@glsxtr@do@style}{}%
```

**style** Since the `stylemods` option can automatically load extra style packages, deal with the `style` option after those packages have been loaded.

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

Defer actual style change:

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

Set this as the default style:

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

Set this style:

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

**c@wrglossaryctr** Increments the associated counter if enabled. Does nothing by default. The optional argument is the entry label in case it's required, but the `wrglossary` counter is globally used by all entries.

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

cationHyperlink

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

The first two arguments are always control sequences.

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

cationhyperlink

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

**indexcounter** Define the `wrglossary` counter that's incremented every time an entry is indexed, except for cross-references. This is designed for use with `bib2gls v1.4+`. It can work with the other indexing methods but it will interfere with the number list collation. This option automatically implements `counter=wrglossary`.

Since glossaries automatically loads `amsmath`, there may be a problem if the indexing occurs in the equation environment, because only one `\label` is allowed in each instance of that environment. It's best to change the counter when in maths mode.

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

Only increment if the current counter is `wrglossary`.

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

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

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

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

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

sxtrwrglossmark Does nothing by default.

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

debug Provide extra debug options.

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

Pass all other options to glossaries.

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

Process options.

```
740 \ProcessOptionsX
```

Load glossaries if not already loaded.

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

Load the glossaries-accsupp package if required.

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

Load the glossaries-prefix package if required.

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

Redefine \glspostdescription if required.

```
744 \@glsxtr@defpostpunc
```

\glsshowtarget This command was introduced to glossaries v4.32 so it may not be defined. Therefore it's defined here using \def. \glsshowtargetouter was introduced in glossaries v4.45, so that also may not be defined.

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

Old definition.

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

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

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

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

```

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

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

@org@gloautosee Save and restore original definition of \glo@autosee. (That command may not be defined
as it was only introduced to glossaries v4.30, in which case the synonym won't be defined
either.)
794 \let\glsxtr@org@gloautosee\glo@autosee

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

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

checkseeallowed Don't prohibit the use of the see key before the indexing files have been opened if the auto-
matic see indexing has been disabled, since it's no longer an issue.
810 \renewcommand*{\gls@checkseeallowed}{}%
811 \if@glsxtr@autoseeindex\gls@see@noindex\fi
812 }

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

Setup shortcuts if required.
815 \glsxtr@setupshortcuts

```

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

816 `\glsxtr@redef@forglsentries`

`ariesextrasetup` Allow user to set options after the package has been loaded. First modify `\glsxtr@dooption` so that it now uses `\setupglossaries`:

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

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

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

Now define the user command:

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

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

832 `\let\glsxtr@org@@do@wrglossary\@@do@wrglossary`

`@@do@wrglossary` The new version adds code that can show a marker for debugging and increments the associated counter if enabled.

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

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

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

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

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

`etcOUNTERPREFIX` This command is provided by the base glossaries package, but is redefined here. The standard indexing methods don't directly store the hypertarget but instead need to split it into the counter, prefix and location parts, which can be reconstituted in the location list. Unfortunately, not all targets are in this form, so the links fail. With `record=nameref`, the complete target name can be saved, so this modification adjusts the warning.

```

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

```

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

```

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

```

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

#### sxtrdialecthook

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

Set up record option if required.

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

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

```

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

## 1.2 Extra Utilities

usedOrUndefined

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

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

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

isemptyglossary

```
\glsxtrisemptyglossary{\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.)

```
880 \newcommand\glsxtrisemptyglossary[3]{%
881   \ifcsdef{glolist@#1}%
882   {}%
883   \ifcsstring{glolist@#1}{,}{#2}{#3}%
884   {}%
885   {}%
886   \glsxtrundefaction{Glossary type '#1' doesn't exist}{}%
887   #2%
888   {}%
889 }
```

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

```
890 \newcommand*\glsxtrifkeydefined[3]{%
891   \key@ifundefined{glossentry}{#1}{#3}{#2}%
892 }
```

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

```
893 \newcommand*\glsxtrprovidestoragekey{}%
894   \@ifstar\sglsxtr@provide@storagekey\glsxtr@provide@storagekey
895 }
```

vide@storagekey Unstarred version.

```
896 \newcommand*{\@glsxtr@provide@storagekey}[3]{%
897   \key@ifundefined{glossentry}{#1}%
898   {%
899     \define@key{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
900     \appto{\gls@keymap}{, {#1}{#1}}%
901     \appto{\@newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
902     \appto{\@newglossaryentryposthook}{%
903       \letcs{\@glo@tmp}{@glo@#1}%
904       \gls@assign@field{#2}{\glo@label}{#1}{\@glo@tmp}}%
905   }%
```

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

```
906   \ifblank{#3}%
907   {}%
908   {%
909     \newcommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
910   }%
911 }%
912 {%
```

Provide the no-link command if not already defined.

```
913   \ifblank{#3}%
914   {}%
915   {%
916     \providecommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
917   }%
918 }%
919 }
```

vide@storagekey Starred version.

```
920 \newcommand*{\s@glsxtr@provide@storagekey}[1]{%
921   \key@ifundefined{glossentry}{#1}%
922   {%
923     \expandafter\newcommand\expandafter*\expandafter
924     {\csname gls@assign@#1@field\endcsname}[2]{%
925       \gls@expand@field{##1}{#1}{##2}}%
926   }%
927 }%
928 {}%
929 \glsxtr@provide@addstoragekey{#1}%
930 }
```

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
 931 \newcommand{\GlsXtrFmtField}[useri]{}

tDefaultOptions
 932 \newcommand{\GlsXtrFmtDefaultOptions}[noindex]{}

\glsxtrfmt The post-link hook isn't done. This now has a starred form that checks for a final optional argument.
 933 \newrobustcmd*\glsxtrfmt{\@ifstar{s@glsxtrfmt}{\glsxtrfmt}{}}

@glsxtrfmt Unstarred form.
 934 \newcommand*{@glsxtrfmt}[3][]{\@glsxtrfmt{#1}{#2}{#3}{}}}

@s@glsxtrfmt Starred form.
 935 \newcommand*{s@glsxtrfmt}[3][]{%
 936   \new@ifnextchar[{\s@glsxtrfmt{#1}{#2}{#3}}{%
 937     {\@glsxtrfmt{#1}{#2}{#3}{}}}}%
 938 }

@s@@glsxtrfmt Pick up final optional argument.
 939 \def@s@@glsxtrfmt#1#2#3[#4]{\@glsxtrfmt{#1}{#2}{#3}{#4}{}}

@@glsxtrfmt Actual inner working.
 940 \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).
 941 \begingroup
 942   \def\glslabel{#2}%
 943   \glsdoifexistsordo{#2}%
 944   {%
 945     \ifglshasfield{\GlsXtrFmtField}{#2}%
 946     {%
 947       \let\do@gls@link@checkfirsthyper\relax
 948       \expandafter\gls@link\expandafter[\GlsXtrFmtDefaultOptions,#1]{#2}%
 949         {\glsxtrfmtdisplay{\glscurrentfieldvalue}{#3}{#4}}%
 950     }%
 951     {\glsxtrfmtdisplay{@firstofone}{#3}{#4}}%
 952   }%
 953 }

Has the default noindex been counteracted? If so, this needs \glsadd in case bib2gls needs to pick up the record.
 954 \begingroup
 955   @gls@setdefault@glslink@opts
 956   \setkeys{glslink}{\GlsXtrFmtDefaultOptions,#1}%
 957   \ifKV@glslink@noindex\else\glsadd{#2}\fi
 958 \endgroup

```

```

959     \glsxtrfmtdisplay{@firstofone}{#3}{#4}%
960   }%
961 \endgroup
962 }

```

`\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).

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

`\glsxtryentryfmt` No link or indexing.

```

964 \ifdef\texorpdfstring
965 {
966   \newcommand*{\glsxtryentryfmt}[2]{%
967     \texorpdfstring{@\glsxtryentryfmt{#1}{#2}}{\glsxtrpdfentryfmt{#1}{#2}}%
968   }
969 }
970 {
971   \newcommand*{\glsxtryentryfmt}{@\glsxtryentryfmt}
972 }

```

`\glsxtrpdfentryfmt` Use for the PDF bookmarks.

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

`@\glsxtryentryfmt`

```
974 \newrobustcmd*{@\glsxtryentryfmt}[2]{%
```

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

```

975 {%
976   \def\glslabel{#1}%
977   \glsdoifexistsodo{#1}%
978   {%
979     \ifglshasfield{\GlsXtrFmtField}{#1}%
980     {%
981       \csuse{\glscurrentfieldvalue}{#2}%
982     }%
983     {#2}%
984   }%
985   {#2}%
986 }%
987 }
```

`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.

```

988 \newcommand*{\glsxtrfieldlistadd}[3]{%
989   \listcsadd{glo@\glsdetoklabel{#1}@#2}{#3}%
990 }
```

```

trfieldlistgadd  Similarly but uses \listcsgadd.
991 \newcommand*{\glsxtrfieldlistgadd}[3]{%
992   \listcsgadd{glo@\glsdetoklabel{#1}@#2}{#3}%
993 }

trfieldlisteadd  Similarly but uses \listcseadd.
994 \newcommand*{\glsxtrfieldlisteadd}[3]{%
995   \listcseadd{glo@\glsdetoklabel{#1}@#2}{#3}%
996 }

trfieldlistxadd  Similarly but uses \listcsxadd.
997 \newcommand*{\glsxtrfieldlistxadd}[3]{%
998   \listcsxadd{glo@\glsdetoklabel{#1}@#2}{#3}%
999 }

```

Now provide commands to iterate over these lists.

```

fielddolistloop
1000 \newcommand*{\glsxtrfielddolistloop}[2]{%
1001   \dolistcsloop{glo@\glsdetoklabel{#1}@#2}%
1002 }

ieldforlistloop
1003 \newcommand*{\glsxtrfieldforlistloop}[3]{%
1004   \forlistcsloop{#3}{glo@\glsdetoklabel{#1}@#2}%
1005 }

fieldformatlist
1006 \newrobustcmd*{\glsxtrfieldformatlist}[2]{%
1007   \begingroup
1008   \def\@dtl@formatlist@itemsep{}%
1009   \def\@dtl@formatlist@lastitem{}%
1010   \def\@dtl@formatlist@prelastitem{}%
1011   \def\@dtl@formatlist@prelastitemsep{}%
1012   \forlistcsloop{\@dtl@formatlist@handler}{glo@\glsdetoklabel{#1}@#2}%
1013   \@\dtl@formatlist@prelastitem\@dtl@formatlist@lastitem
1014   \endgroup
1015 }

```

List element tests:

```

trfieldifinlist  First argument label, second argument field, third argument item, fourth true part and fifth
false part.
1016 \newcommand*{\glsxtrfieldifinlist}[5]{%
1017   \ifinlistcs{#3}{glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
1018 }

```

```
rfieldxifinlist Expands item.
```

```
1019 \newcommand*{\glsxtrfieldxifinlist}[5]{%
1020   \xifinlistcs{#3}{\glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
1021 }
```

```
sxtrforcsvfield
```

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

```
1022 \newcommand*{\glsxtrforcsvfield}[3]{%
1023   \@glsxtrifhasfield{#2}{#1}%
1024   {%
1025     \let\glsxtrtrendfor\@endfortrue
1026     \@for\glsxtr@label:=\glscurrentfieldvalue\do
1027       {\expandafter#3\expandafter{\@glsxtr@label}}%
1028   }%
1029 }
```

```
ldformatcsvlist
```

```
1030 \newrobustcmd*{\glsxtrfieldformatcsvlist}[2]{%
1031   \@glsxtrifhasfield{#2}{#1}%
1032   {\@dtlformatlist\glscurrentfieldvalue}%
1033   {}%
1034 }
```

```
dValueInCsvList
```

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

```
1035 \newcommand*{\GlsXtrIfFieldValueInCsvList}{%
1036   \@ifstar\s@GlsXtrIfFieldValueInCsvList\@GlsXtrIfFieldValueInCsvList
1037 }
```

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

```
dValueInCsvList Unstarred version.
```

```
1038 \newcommand*{\@GlsXtrIfFieldValueInCsvList}[5]{%
1039   \@glsxtrifhasfield{#2}{#1}%
1040   {%
1041     \expandafter\DTLifinlist\expandafter{\glscurrentfieldvalue}%
1042     {#3}{#4}{#5}%
1043   }%
1044   {#5}%
1045 }
```

```

dValueInCsvList Starred version.

1046 \newcommand{\s@GlsXtrIfFieldValueInCsvList}[5]{%
1047   \s@glsxtrifhasfield{#2}{#1}%
1048   {%
1049     \expandafter\DTLifinlist\expandafter{\glscurrentfieldvalue}%
1050     {#3}{#4}{#5}%
1051   }%
1052   {#5}%
1053 }

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.

1054 \newrobustcmd{\glsxtrifhasfield}{%
1055   \@ifstar{\s@glsxtrifhasfield}{\glsxtrifhasfield}%
1056 }

lsxtrifhasfield Unstarred version adds grouping.

1057 \newcommand{\glsxtrifhasfield}[4]{%
1058   {\s@glsxtrifhasfield{#1}{#2}{#3}{#4}}%
1059 }

lsxtrifhasfield Starred version omits grouping.

1060 \newcommand{\s@glsxtrifhasfield}[4]{%
1061   \letcs{\glscurrentfieldvalue}{\glo@\glsdetoklabel{#2}@#1}%
1062   \ifdef\glscurrentfieldvalue
1063   {#4}%
1064   {%
1065     \ifdefempty\glscurrentfieldvalue{#4}{#3}%
1066   }%
1067 }

rIfFieldNonZero Designed for numeric fields.

1068 \newcommand{\GlsXtrIfFieldNonZero}{%
1069   \@ifstar\s@GlsXtrIfFieldNonZero\@GlsXtrIfFieldNonZero
1070 }

rIfFieldNonZero

1071 \newcommand{\@GlsXtrIfFieldNonZero}[4]{%
1072   \@GlsXtrIfFieldCmpNum{#1}{#2}{=}{0}{#4}{#3}%
1073 }

XtrIfFieldEqNum

```

$\backslash\text{GlsXtrIfFieldEqNum}\{\langle\text{field}\rangle\}\{\langle\text{label}\rangle\}\{\langle\text{value}\rangle\}\{\langle\text{true}\rangle\}\{\langle\text{false}\rangle\}$

Designed for numeric fields.

```
1074 \newcommand{\GlsXtrIfFieldEqNum}{%
1075   \@ifstar{s@GlsXtrIfFieldEqNum}@GlsXtrIfFieldEqNum
1076 }
```

#### XtrIfFieldEqNum

```
1077 \newcommand{\@GlsXtrIfFieldEqNum}[5]{%
1078   \@GlsXtrIfFieldCmpNum{#1}{#2}{=}{#3}{#4}{#5}%
1079 }
```

#### XtrIfFieldEqNum

```
1080 \newcommand{\s@GlsXtrIfFieldEqNum}[5]{%
1081   \s@GlsXtrIfFieldCmpNum{#1}{#2}{=}{#3}{#4}{#5}%
1082 }
```

#### trIfFieldCmpNum

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

Designed for numeric fields.

```
1083 \newcommand{\GlsXtrIfFieldCmpNum}{%
1084   \@ifstar{s@GlsXtrIfFieldCmpNum}@GlsXtrIfFieldCmpNum
1085 }
```

#### trIfFieldCmpNum

```
1086 \newcommand{\@GlsXtrIfFieldCmpNum}[6]{%
1087   {%
1088     \letcs{\glscurrentfieldvalue}{\glo@\glstoklabel{#2}@#1}%
1089     \ifundefined\glscurrentfieldvalue
1090       {\def\glscurrentfieldvalue{0}}%
1091       {%
1092         \ifdefempty\glscurrentfieldvalue
1093           {\def\glscurrentfieldvalue{0}}%
1094           {}%
1095       }%
1096       \ifnum\glscurrentfieldvalue#3#4\relax #5\else #6\fi
1097   }%
1098 }
```

#### trIfFieldCmpNum

```
1099 \newcommand{\s@GlsXtrIfFieldCmpNum}[6]{%
1100   \letcs{\glscurrentfieldvalue}{\glo@\glstoklabel{#2}@#1}%
1101   \ifundefined\glscurrentfieldvalue
1102     {\def\glscurrentfieldvalue{0}}%
1103     {%
1104       \ifdefempty\glscurrentfieldvalue
1105         {\def\glscurrentfieldvalue{0}}%
```

```

1106     {}%
1107   }%
1108 \ifnum\glscurrentfieldvalue#3#4\relax #5\else #6\fi
1109 }

```

XtrIfFieldUndef

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

Just uses \ifcsundef.

```

1110 \newcommand{\GlsXtrIfFieldUndef}[2]{%
1111   \ifcsundef{glo@\glscurrentfieldvalue}{%
1112 }

```

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

```

1113 \newcommand*\glsxtrusefield[2]{%
1114   \@gls@entry@field{#1}{#2}%
1115 }

```

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

```

1116 \ifdef\texorpdfstring
1117 {
1118   \newcommand*\Glsxtrusefield[2]{%
1119     \texorpdfstring
1120     {\@gls@entry@field{#1}{#2}}
1121     {\gls@entry@field{#1}{#2}}%
1122   }
1123 }
1124 {
1125   \newcommand*\Glsxtrusefield[2]{%
1126     \@gls@entry@field{#1}{#2}%
1127   }
1128 }

```

\GLSxtrusefield As above but convert to all caps.

```

1129 \ifdef\texorpdfstring
1130 {
1131   \newcommand*\GLSxtrusefield[2]{%
1132     \texorpdfstring
1133     {\glsdoifexists{#1}{\mfirstucMakeUppercase{\@gls@entry@field{#1}{#2}}}{%
1134       {\gls@entry@field{#1}{#2}}}}%
1135   }
1136 }
1137 {
1138   \newcommand*\GLSxtrusefield[2]{%
1139     \glsdoifexists{#1}{\mfirstucMakeUppercase{\@gls@entry@field{#1}{#2}}}{%

```

```

1140  }
1141 }

entryparentname
1142 \newcommand*{\glsxtrentryparentname}[1]{%
1143   \ifcsdef{glo@\glsdetoklabel{#1}@parent}{%
1144     {\csuse{glo@\csuse{glo@\glsdetoklabel{#1}@parent}@\name}}{%
1145   }{%
1146 }

\glsxtrdeffield Just use \csdef to provide a field value for the given entry.
1147 \newcommand*{\glsxtrdeffield}[2]{\csdef{glo@\glsdetoklabel{#1}@#2}{}

\glsxtreffield Just use \csedef to provide a field value for the given entry.
1148 \newcommand*{\glsxtreffield}[2]{\protected@csedef{glo@\glsdetoklabel{#1}@#2}{}

setfieldifexists
1149 \newcommand*{\glsxtrsetfieldifexists}[3]{\glsdo@ifexists{#1}{#3}{}

\GlsXtrSetField Allow the user to set a field. First argument entry label, second argument field label, third argument value.
1150 \newrobustcmd*{\GlsXtrSetField}[3]{%
1151   \glsxtrsetfieldifexists{#1}{#2}{%
1152     {\csdef{glo@\glsdetoklabel{#1}@#2}{#3}}{%
1153   }

\GlsXtrLetField Uses \cslet instead. Third argument should be a macro.
1154 \newrobustcmd*{\GlstrLetField}[3]{%
1155   \glsxtrsetfieldifexists{#1}{#2}{%
1156     {\cslet{glo@\glsdetoklabel{#1}@#2}{#3}}{%
1157   }

\GlsXtrLetField Uses \csletcs instead. Third argument should be a control sequence name.
1158 \newrobustcmd*{\csGlsXtrLetField}[3]{%
1159   \glsxtrsetfieldifexists{#1}{#2}{%
1160     {\csletcs{glo@\glsdetoklabel{#1}@#2}{#3}}{%
1161   }

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.
1162 \newrobustcmd*{\GlsXtrLetFieldToField}[4]{%
1163   \glsxtrsetfieldifexists{#1}{#2}{%
1164     {\csletcs{glo@\glsdetoklabel{#1}@#2}{glo@\glsdetoklabel{#3}@#4}}{%
1165   }

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

```

```

1166 \newrobustcmd*{\glsXtrSetField}[3]{%
1167   \glsxtrsetfieldifexists{#1}{#2}%
1168   {\csgdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1169 }

xGlsXtrSetField
1170 \newrobustcmd*{\xGlsXtrSetField}[3]{%
1171   \glsxtrsetfieldifexists{#1}{#2}%
1172   {\protected@csxdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1173 }

```

```

eGlsXtrSetField
1174 \newrobustcmd*{\eGlsXtrSetField}[3]{%
1175   \glsxtrsetfieldifexists{#1}{#2}%
1176   {\protected@csedef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1177 }

```

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

```

1178 \newcommand*{\GlsXtrIfFieldEqStr}{%
1179   \@ifstar{s@\GlsXtrIfFieldEqStr@\GlsXtrIfFieldEqStr}%
1180 }

```

```

XtrIfFieldEqStr
1181 \newrobustcmd*{\@GlsXtrIfFieldEqStr}[5]{%
1182   \glsxtrifhasfield{#1}{#2}%
1183   {%
1184     \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}%
1185   }%
1186   {#5}%
1187 }

```

```

XtrIfFieldEqStr
1188 \newrobustcmd*{\s@\GlsXtrIfFieldEqStr}[5]{%
1189   \s@glsxtrifhasfield{#1}{#2}%
1190   {%
1191     \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}%
1192   }%
1193   {#5}%
1194 }

```

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

```

1195 \newcommand*{\GlsXtrIfFieldEqXpStr}{%
1196   \@ifstar{s@\GlsXtrIfFieldEqXpStr@\GlsXtrIfFieldEqXpStr}%
1197 }

```

```

rIfFieldEqXpStr
1198 \newrobustcmd*{\@GlsXtrIfFieldEqXpStr}[5]{%

```

```

1199  \@glsxtrifhasfield{#1}{#2}%
1200  {%
1201    \protected@edef\@gls@tmp{#3}%
1202    \ifdefequal{\glscurrentfieldvalue}{\@gls@tmp}{#4}{#5}%
1203  }%
1204  {#5}%
1205 }

```

### rIfFieldEqXpStr

```

1206 \newrobustcmd*\s@GlsXtrIfFieldEqXpStr}[5]{%
1207   \s@glsxtrifhasfield{#1}{#2}%
1208   {%
1209     \protected@edef\@gls@tmp{#3}%
1210     \ifdefequal{\glscurrentfieldvalue}{\@gls@tmp}{#4}{#5}%
1211   }%
1212   {#5}%
1213 }

```

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

```

1214 \newcommand*\GlsXtrIfXpFieldEqXpStr{%
1215   \@ifstar\s@GlsXtrIfXpFieldEqXpStr\@GlsXtrIfXpFieldEqXpStr
1216 }

```

### fXpFieldEqXpStr

```

1217 \newrobustcmd*\@GlsXtrIfXpFieldEqXpStr}[5]{%
1218   \glsxtrifhasfield{#1}{#2}%
1219   {%
1220     \protected@edef\@gls@tmp{\glscurrentfieldvalue}%
1221     \let\glscurrentfieldvalue\@gls@tmp
1222     \protected@edef\@gls@tmp{#3}%
1223     \ifdefequal{\glscurrentfieldvalue}{\@gls@tmp}{#4}{#5}%
1224   }%
1225   {#5}%
1226 }

```

### fXpFieldEqXpStr

```

1227 \newrobustcmd*\s@GlsXtrIfXpFieldEqXpStr}[5]{%
1228   \s@glsxtrifhasfield{#1}{#2}%
1229   {%
1230     \protected@edef\@gls@tmp{\glscurrentfieldvalue}%
1231     \let\glscurrentfieldvalue\@gls@tmp
1232     \protected@edef\@gls@tmp{#3}%
1233     \ifdefequal{\glscurrentfieldvalue}{\@gls@tmp}{#4}{#5}%
1234   }%
1235   {#5}%
1236 }

```

## sXtrForeignText

```
\GlsXtrForeignText{\<entry label>}{\<text>}
```

If a field is used to store a language tag (such as en-GB or de-CH-1996) then this command uses tracklang's interface to encapsulate *<text>*. The field identifying the locale is given by \GlsXtrForeignTextField.

```
1237 \ifdef\foreignlanguage
1238 {
1239   \ifdef\GetTrackedDialectFromLanguageTag
1240   {
1241     \newcommand{\GlsXtrForeignText}[2]{%
```

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

```
1242   \let\@glsxtr@org@currentfieldvalue\glscurrentfieldvalue
1243   \glsxtrifhasfield{\GlsXtrForeignTextField}{#1}%
1244   {%
1245     \expandafter\GetTrackedDialectFromLanguageTag\expandafter
1246     {\glscurrentfieldvalue}{\@glsxtr@dialect}%
1247     \let\@glsxtr@locale\glscurrentfieldvalue
1248     \let\glscurrentfieldvalue\@glsxtr@org@currentfieldvalue
1249     \ifdefempty\@glsxtr@dialect
1250     {%
```

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

```
1251   \ifdef\TrackedDialectClosestSubMatch
1252   {%
1253     \GlossariesExtraWarning{Can't obtain dialect label
1254       (tracklang v1.3.6+ required)}%
1255   }%
1256   {\let\@glsxtr@dialect\TrackedDialectClosestSubMatch}%
1257 }%
1258 {}%
1259 \ifdefempty\@glsxtr@dialect
1260 {%
```

No tracked dialect found for the root language.

```
1261 }%
1262 {%
```

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

```
1263 \ifcsundef{captions\@glsxtr@dialect}{}%
1264 {%
```

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

```
1265 \IfTrackedDialectHasMapping{\@glsxtr@dialect}%
1266 {%
1267   \edef\@glsxtr@dialect{%
1268     \GetTrackedDialectToMapping{\@glsxtr@dialect}}%
```

Does a caption hook exist for this?

```
1269      \ifcsundef{captions@\glsxtr@dialect}{}%
1270      {%
```

No mapping. Try root language label instead.

```
1271      \ifcsundef{captions@\tracklang@lang}{}%
1272      {%
1273          \let\@glsxtr@dialect\@tracklang@lang
1274      }%
1275      }%
1276      }%
1277      {%
```

No mapping. Try root language label instead.

```
1278      \ifcsundef{captions@\tracklang@lang}{}%
1279      {%
1280          \let\@glsxtr@dialect\@tracklang@lang
1281      }%
1282      }%
1283      }%
1284      }%
1285      \ifdefempty\@glsxtr@dialect
1286      {%
1287          \GlsXtrUnknownDialectWarning{\@glsxtr@locale}{\@tracklang@lang}%
1288          #2%
1289      }%
1290      {\foreignlanguage{\@glsxtr@dialect}{#2}}%
1291      }%
1292      {#2% key not set
1293  }
1294 }
1295 {
1296 \newcommand{\GlsXtrForeignText}[2]{%
1297     \GlossariesExtraWarning{Can't encapsulate foreign text:
1298         tracklang v1.3.6+ required}%
1299     #2%
1300 }
1301 }
1302 }
1303 {
\foreignlanguage isn't defined so just do <text>.
1304 \newcommand{\GlsXtrForeignText}[2]{#2}
1305 }
```

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

```
1306 \newcommand*\{\GlsXtrForeignTextField\}{userii}
```

`nDialectWarning`

```
1307 \newcommand*\{\GlsXtrUnknownDialectWarning\}[2]{%
```

```

1308 \GlossariesExtraWarning{Can't determine valid dialect label
1309   for locale '#1' (root language: #2)}%
1310 }

```

\glsxtrpageref Like \glsrefentry but references the page number instead (if entry counting is on). The base glossaries package only introduced \GlsEntryCounterLabelPrefix in version 4.38, so it may not be defined.

```

1311 \ifdef{\GlsEntryCounterLabelPrefix}%
1312 {%
1313   \newcommand*{\glsxtrpageref}[1]{%
1314     \ifglsentrycounter
1315       \pageref{\GlsEntryCounterLabelPrefix\glsdetoklabel{#1}}%
1316     \else
1317       \ifglssubentrycounter
1318         \pageref{\GlsEntryCounterLabelPrefix\glsdetoklabel{#1}}%
1319       \else
1320         \gls{#1}%
1321       \fi
1322     \fi
1323   }%
1324 }%
1325 {%
1326   \newcommand*{\glsxtrpageref}[1]{%
1327     \ifglsentrycounter
1328       \pageref{glsentry-\glsdetoklabel{#1}}%
1329     \else
1330       \ifglssubentrycounter
1331         \pageref{glsentry-\glsdetoklabel{#1}}%
1332       \else
1333         \gls{#1}%
1334       \fi
1335     \fi
1336   }%
1337 }%

```

glossarypreamble

```

1338 \newcommand{\apptoglossarypreamble}[2][\glsdefaulttype]{%
1339   \ifcsdef{glolist@#1}{%
1340     {%
1341       \ifcsundef{@glossarypreamble@#1}{%
1342         {\csdef{@glossarypreamble@#1}{}{}}%
1343       {}%
1344       \csappto{@glossarypreamble@#1}{#2}%
1345     }%
1346     {%
1347       \GlossariesExtraWarning{Glossary '#1' is not defined}%
1348     }%
1349   }%

```

```

lossarypreamble
1350 \newcommand{\preglossarypreamble}[2][\glsdefaulttype]{%
1351   \ifcsdef{glolist@\#1}{%
1352     {}%
1353     \ifcsundef{@glossarypreamble@\#1}{%
1354       {\csdef{@glossarypreamble@\#1}{}{}}%
1355       {}%
1356       \cspreto{@glossarypreamble@\#1}{\#2}%
1357     }%
1358     {}%
1359     \GlossariesExtraWarning{Glossary '#1' is not defined}%
1360   }%
1361 }

```

## 1.3 Modifications to Commands Provided by glossaries

Some of the commands provided by glossaries are modified to take into account new options or to change default behaviour.

The original `\@gls@entry@field` causes a problem for undefined entries when used in section headings or captions. Since entries must be defined with just the base package this isn't a significant issue, but it will cause a problem with `bib2gls` where no entries are defined on the first L<sup>A</sup>T<sub>E</sub>X call, so redefine `\@gls@entry@field` to use `\csuse` instead of `\csname`.

`gls@entry@field`

`\@gls@entry@field{\langle label \rangle}{\langle field \rangle}`

This command was introduced to glossaries version 4.03 but older versions are likely to be incompatible with `glossaries-extra`.

```

1362 \ifdef{\gls@entry@field}{%
1363   {}%
1364   \renewcommand*{\gls@entry@field}[2]{\csuse{glo@\glsdetoklabel{\#1}\#2}}%
1365 }%
1366 {}

```

`\ifglsused`

`\ifglsused{\langle label \rangle}{\langle true part \rangle}{\langle false part \rangle}`

In the event that undefined entries should trigger a warning rather than an error, `\ifglsused` needs to be modified to check for existence. If the boolean variable is undefined, then its state is indeterminate and is neither true nor false, so neither `\langle true part \rangle` nor `\langle false part \rangle` part will be performed if `\langle label \rangle` is undefined.

```

1367 \renewcommand*{\ifglsused}[3]{%

```

```
1368 \glsdoifexists{#1}{\ifbool{glo@\glsdetoklabel{#1}@flag}{#2}{#3}}%
1369 }
```

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

```
1370 \renewcommand*\longnewglossaryentry{%
1371   \@ifstar\@glsxtr@s@longnewglossaryentry\@glsxtr@longnewglossaryentry
1372 }
```

ewglossaryentry Starred version.

```
1373 \newcommand{\@glsxtr@s@longnewglossaryentry}[3]{%
1374   \glsdoifnoexists{#1}%
1375   {%
1376     \bgroup
1377       \let\@org@newglossaryentryprehook\@newglossaryentryprehook
1378       \long\def\@newglossaryentryprehook{%
1379         \long\def\@glo@desc{#3}%
1380         \@org@newglossaryentryprehook
1381       }%
1382       \renewcommand*\gls@assign@desc}[1]{%
1383         \global\cslet{glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%
1384         \global\cslet{glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
1385       }
1386       \gls@defglossaryentry{#1}{#2}%
1387     \egroup
1388   }%
1389 }
```

ewglossaryentry Unstarred version.

```
1390 \newcommand{\@glsxtr@longnewglossaryentry}[3]{%
1391   \glsdoifnoexists{#1}%
1392   {%
1393     \bgroup
1394       \let\@org@newglossaryentryprehook\@newglossaryentryprehook
1395       \long\def\@newglossaryentryprehook{%
1396         \long\def\@glo@desc{#3\glsxtrpostlongdescription}%
1397         \@org@newglossaryentryprehook
1398       }%
1399       \renewcommand*\gls@assign@desc}[1]{%
1400         \global\cslet{glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%
1401         \global\cslet{glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
1402       }
1403       \gls@defglossaryentry{#1}{#2}%
1404     \egroup
1405   }
```

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

```
1401   \global\cslet{glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
1402   }
1403   \gls@defglossaryentry{#1}{#2}%
1404 }
```

```
1405  }%
1406 }
```

`longdescription` Hook at the end of the description when using the unstarred `\longnewglossaryentry`.  
1407 `\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.

```
1408 \renewcommand{\newignoredglossary}{%
1409   @ifstar\glsxtr@s@newignoredglossary\glsxtr@org@newignoredglossary
1410 }
```

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

```
1411 \newcommand*{\glsxtr@org@newignoredglossary}[1]{%
1412   \ifcsdef{glolist@#1}
1413   {%
1414     \glsxtrundefinedaction{Glossary type '#1' already exists}{}%
1415   }%
1416   {%
1417     \ifdefempty{\@ignored@glossaries}
1418     {%
1419       \edef{\@ignored@glossaries{#1}}%
1420     }%
1421     {%
1422       \appto{\@ignored@glossaries{, #1}}%
1423     }%
1424     \csgdef{glolist@#1}{,}%
1425     \ifcsundef{gls@#1@entryfmt}%
1426     {%
1427       \def{glsentryfmt[#1]}{\glsentryfmt}%
1428     }%
1429     {}%
1430     \ifdefempty{\gls@nohyperlist}
1431     {%
1432       \renewcommand*{\gls@nohyperlist}{#1}%
1433     }%
1434     {%
1435       \appto{\gls@nohyperlist{, #1}}%
1436     }%
1437   }%
1438 }
```

`ignoredglossary` Starred form.

```
1439 \newcommand*{\glsxtr@s@newignoredglossary}[1]{%
1440   \ifcsdef{glolist@#1}
1441   {%
1442     \glsxtrundefinedaction{Glossary type '#1' already exists}{}%
```

```

1443 }%
1444 {%
1445   \ifdefempty{\@ignored@glossaries}%
1446   {%
1447     \edef{\@ignored@glossaries}{\#1}%
1448   }%
1449 {%
1450   \eappto{\@ignored@glossaries}{,\#1}%
1451 }%
1452 \csgdef{glolist@#1}{,}%
1453 \ifcsundef{gls@#1@entryfmt}%
1454 {%
1455   \def{glsentryfmt[\#1]}{\glsentryfmt}%
1456 }%
1457 {}%
1458 }%
1459 }

```

\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.

```

1460 \glsifusetranslator
1461 {%
1462   \renewcommand*{\glssettoctitle}[1]{%
1463     \ifcsdef{gls@tr@set@#1@toctitle}%
1464     {%
1465       \csuse{gls@tr@set@#1@toctitle}%
1466     }%
1467     {%
1468       \ifcsdef{@glotype@#1@title}%
1469         {\def{\glossarytoctitle}{\csname @glotype@#1@title\endcsname}}%
1470         {\def{\glossarytoctitle}{\glossarytitle}}%
1471     }%
1472   }%
1473 }
1474 {%
1475   \renewcommand*{\glssettoctitle}[1]{%
1476     \ifcsdef{@glotype@#1@title}%
1477       {\def{\glossarytoctitle}{\csname @glotype@#1@title\endcsname}}%
1478       {\def{\glossarytoctitle}{\glossarytitle}}%
1479   }%
1480 }

```

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

```

1481 \newcommand{\provideignoredglossary}{%
1482   \@ifstar{\glsxtr@s}{\provideignoredglossary}{\glsxtr@provideignoredglossary}%
1483 }

```

ignoredglossary Unstarred version.

```

1484 \newcommand*{\glsxtr@provideignoredglossary}[1]{%

```

```

1485 \ifcsdef{glolist@#1}
1486 {}%
1487 {%
1488   \ifdefempty{@ignored@glossaries}
1489   {}%
1490   \edef{@ignored@glossaries{#1}%
1491   }%
1492   {}%
1493   \eappto{@ignored@glossaries{,#1}%
1494   }%
1495 \csgdef{glolist@#1}{,}%
1496 \ifcsundef{gls@#1@entryfmt}%
1497 {}%
1498   \defglsentryfmt[#1]{\glsentryfmt}%
1499 }%
1500 {}%
1501 \ifdefempty{@gls@nohyperlist}
1502 {}%
1503   \renewcommand*{\gls@nohyperlist}{#1}%
1504 }%
1505 {}%
1506   \eappto{@gls@nohyperlist{,#1}%
1507 }%
1508 }%
1509 }

```

`ignoredglossary` Starred form.

```

1510 \newcommand*{\glsxtr@s@provideignoredglossary}[1]{%
1511   \ifcsdef{glolist@#1}
1512   {}%
1513   {}%
1514   \ifdefempty{@ignored@glossaries}
1515   {}%
1516   \edef{@ignored@glossaries{#1}%
1517   }%
1518   {}%
1519   \eappto{@ignored@glossaries{,#1}%
1520   }%
1521 \csgdef{glolist@#1}{,}%
1522 \ifcsundef{gls@#1@entryfmt}%
1523 {}%
1524   \defglsentryfmt[#1]{\glsentryfmt}%
1525 }%
1526 {}%
1527 }%
1528 }

```

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

```

1529 \newcommand*\glsxtrcopytoglossary}[2]{%
1530   \glsdoifexists{#1}%
1531   {%
1532     \ifcsdef{glolist@#2}%
1533     {%
1534       \cseappto{glolist@#2}{#1,}%
1535     }%
1536     {%
1537       \glsxtrundefaction{Glossary type '#2' doesn't exist}{}%
1538     }%
1539   }%
1540 }

```

### 1.3.1 Existence Checks

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

```

1541 \renewcommand{\glsdoifexists}[2]{%
1542   \ifglsentryexists{#1}{#2}%
1543   {%

```

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

```

1544   \edef\glslabel{\glsdetoklabel{#1}}%
1545   \glsxtrundefaction{Glossary entry '\glslabel'%
1546   has not been defined}{You need to define a glossary entry before%
1547   you can reference it.}%
1548 }%
1549 }

```

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

```

1550 \renewcommand{\glsdoifnoexists}[2]{%
1551   \ifglsentryexists{#1}{%
1552     \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'%
1553     has already been defined}{}{#2}%
1554 }

```

\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.

```

1555 \ifdef{\glsdoifexistsordo}%
1556 {%
1557   \renewcommand{\glsdoifexistsordo}[3]{%
1558     \ifglsentryexists{#1}{#2}%
1559     {%
1560       \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'%
1561       has not been defined}{You need to define a glossary entry%
1562       before you can use it.}%
1563     #3%
1564   }%
1565 }

```

```

1566 }
1567 {%
1568   \glsxtr@warnnonexistsordo\glsdoifexistsordo
1569   \newcommand{\glsdoifexistsordo}[3]{%
1570     \ifglsentryexists{#1}{#2}{%
1571       {%
1572         \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’
1573           has not been defined}{You need to define a glossary entry
1574           before you can use it.}{%
1575             #3{%
1576           }{%
1577         }{%
1578       }{%
1579     }{%
1580   }{%
1581     \renewcommand{\doifglossarynoexistsordo}[3]{%
1582       \ifglossaryexists{#1}{%
1583         {%
1584           \glsxtrundefaction{Glossary type ‘#1’ already exists}{%
1585             #3{%
1586           }{%
1587             {#2}{%
1588           }{%
1589         }{%
1590       }{%
1591       \glsxtr@warnnonexistsordo\doifglossarynoexistsordo
1592       \newcommand{\doifglossarynoexistsordo}[3]{%
1593         \ifglossaryexists{#1}{%
1594           {%
1595             \glsxtrundefaction{Glossary type ‘#1’ already exists}{%
1596               #3{%
1597             }{%
1598             {#2}{%
1599           }{%
1600 }{%
1601

```

arynoexistsordo Similarly for \doifglossarynoexistsordo.

```

1579 \ifdef\doifglossarynoexistsordo
1580 {%
1581   \renewcommand{\doifglossarynoexistsordo}[3]{%
1582     \ifglossaryexists{#1}{%
1583       {%
1584         \glsxtrundefaction{Glossary type ‘#1’ already exists}{%
1585           #3{%
1586         }{%
1587           {#2}{%
1588         }{%
1589       }{%
1590     }{%
1591     \glsxtr@warnnonexistsordo\doifglossarynoexistsordo
1592     \newcommand{\doifglossarynoexistsordo}[3]{%
1593       \ifglossaryexists{#1}{%
1594         {%
1595           \glsxtrundefaction{Glossary type ‘#1’ already exists}{%
1596             #3{%
1597           }{%
1598             {#2}{%
1599           }{%
1600 }{%
1601

```

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.

```

1602 \appto\@newglossaryentryposthook{%
1603   \ifdefvoid\@glo@see
1604     {\csxdef{\glo@\glo@label}{\glo@see}}{%
1605     {%
1606       \csxdef{\glo@\glo@label}{\glo@see}{\glo@see}%

```

```

1607     \if@glsxstr@autoseeindex
1608         \glsxstr@autoindexcrossrefs
1609     \fi
1610 }%
1611 }
1612 \appto\@gls@keymap{,{see}{see}}

```

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

```

1613 \newcommand*{\glsxtrusesee}[1]{%
1614     \glsdoifexists{#1}%
1615 }%
1616     \letcs{\@glo@see}{\glsdetoklabel{#1}@see}%
1617     \ifdefempty{\glo@see}%
1618     {}%
1619     {}%
1620     \expandafter\glsxtr@usesee\@glo@see\@end@glsxtr@usesee
1621 }%
1622 }%
1623 }

```

\glsxtr@usesee

```

1624 \newcommand*{\glsxtr@usesee}[1][\seename]{%
1625     \glsxtr@usesee[#1]%
1626 }

```

\@glsxtr@usesee

```

1627 \def\@glsxtr@usesee[#1]#2\@end@glsxtr@usesee{%
1628     \glsxtrusesefORMAT{#1}{#2}%
1629 }

```

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.

```

1630 \newcommand*{\glsxtruseseeformat}[2]{%
1631     \glsseefORMAT[#1]{#2}{}%
1632 }

```

lsseeitemformat glossaries originally defined \glsseeitemformat to use \glsentryname but in v3.0 this was switched to use \glsentrytext due to problems occurring with the name field being sanitized. Since this is no longer a problem, glossaries-extra restored the original definition as it makes more sense to use the name in the cross-reference list. Unfortunately this doesn't take style changes into account, so as from v1.42, this now uses \glsfmttext and \glsfmtname instead. (The text field is chosen rather than the short field to allow for the "noshort" styles.)

```

1633 \renewcommand*{\glsseeitemformat}[1]{%
1634     \ifgls hasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1635 }

```

\glsxtrhiername

```
\glsxtrhiername{\label}
```

Displays the hierarchical name for the given entry. The cross-reference format \glsseeitemformat may be redefined to use this command to show the hierarchy, if required. This now uses \glsfmttext and \glsfmtname instead of \glsaccessshort and \glsaccessname to allow for style formatting.

```
1636 \newcommand*\glsxtrhiername[1]{%
1637   \glsdoifexists{#1}%
1638   {%
1639     \glsxtrifhasfield{parent}{#1}%
1640     {\glsxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1641     {}%
1642     \ifglshasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1643   }%
1644 }
```

\Glsxtrhiername

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

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

```
1645 \newcommand*\Glsxtrhiername[1]{%
1646   \glsdoifexists{#1}%
1647   {%
1648     \glsxtrifhasfield{parent}{#1}%
1649     {}%
1650     \Glsxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep
1651     \ifglshasshort{#1}{\glsfmttext{#1}}{\glsfmtname{#1}}%
1652   }%
1653   \ifglshasshort{#1}{\Glsfmttext{#1}}{\Glsfmtname{#1}}%
1654 }%
1655 }
```

\GlsXtrhiername

```
\GlsXtrhiername{\label}
```

As above but converts the first letter of each name to a capital. (Note that this isn't applying title case, just capitalising the start of each hierarchical element.)

```
1656 \newcommand*\GlsXtrhiername[1]{%
1657   \glsdoifexists{#1}%
1658   {%
1659     \glsxtrifhasfield{parent}{#1}%
1660     {\GlsXtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1661   }%
```

```

1662     \ifglshasshort{#1}{\Glsfmttext{#1}}{\Glsfmtname{#1}}%
1663   }%
1664 }

```

\GLSxtrhiername

\GLSxtrhiername{\langle label \rangle}

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

```

1665 \newcommand*{\GLSxtrhiername}[1]{%
1666   \glsdoifexists{#1}%
1667   {%
1668     \glsxtrifhasfield{parent}{#1}%
1669     {%
1670       \GLSxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep
1671       \ifglshasshort{#1}{\Glsfmttext{#1}}{\Glsfmtname{#1}}%
1672     }%
1673     {\ifglshasshort{#1}{\Glsfmttext{#1}}{\Glsfmtname{#1}}}}%
1674   }%
1675 }

```

\GLSXTRhiername

\GLSXTRhiername{\langle label \rangle}

As above but displays all names in all-caps.

```

1676 \newcommand*{\GLSXTRhiername}[1]{%
1677   \glsdoifexists{#1}%
1678   {%
1679     \glsxtrifhasfield{parent}{#1}%
1680     {\GLSXTRhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1681     {}%
1682     \ifglshasshort{#1}{\Glsfmttext{#1}}{\Glsfmtname{#1}}%
1683   }%
1684 }

```

sxtrhiernamesep Separator used in \glsxtrhiername and variants.

```
1685 \newcommand*{\glsxtrhiernamesep}{\,,{\small\triangleright}\,,}
```

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

```

1686 \newcommand*{\glsxtruseseealso}[1]{%
1687   \glsdoifexists{#1}%
1688   {%
1689     \letcs{\@glo@see}{\glo@\glsdetoklabel{#1}@seealso}%
1690     \ifdefempty{\@glo@see}

```

```

1691     {}%
1692     {%
1693         \expandafter\glsxtruseseealsoformat\expandafter{\@glo@see}%
1694     }%
1695 }%
1696 }

```

`\glsxtrusealias` Apply `\glsseeformat` to the alias key if not empty. There's no optional tag to worry about here. The value also isn't a comma-separated list, but use the same interface.

```

1697 \newcommand*{\glsxtrusealias}[1]{%
1698     \glsdoifexists{#1}{%
1699     {%
1700         \letcs{\@glo@see}{\glsdetoklabel{#1}@alias}%
1701         \ifdefempty{\@glo@see}%
1702             {}%
1703             {}%

```

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

```

1704         \glsxtruseseeformat{\seename}{\@glo@see}%
1705     }%
1706 }%
1707 }

```

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

```

1708 \newcommand*{\glsxtruseseealsoformat}[1]{%
1709     \glsseeformat[\seealsoname]{#1}{}%
1710 }

```

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

```

1711 \newrobustcmd{\glsxtrseelist}[1]{%
1712     \edef\@glo@tmp{\noexpand\glsseelist{#1}}\@glo@tmp%
1713 }

```

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

```

1714 \ifdef\alsoname
1715 {\providecommand{\seealsoname}{\alsoname}}
1716 {\providecommand{\seealsoname}{\see~also}}

```

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

```

1717 \ifdef\xdycrossrefhook
1718 {

```

Add the cross-reference class definition to the hook.

```
1719 \appto\@xdycrossrefhook{%
1720   \write\glswrite{(\def\@name{#1}{\def\@name{#2}{%
1721     :unverified }{}}%
1722   \write\glswrite{(\markup-crossref-list
1723     :class \string"seealso\string"^\J\space\space\space
1724     :open \string"\string\glsxtruseealsoformat\glsopenbrace\string"
1725     :close \string"\glsclosebrace\string")}%
1726 }
```

Append to class list.

```
1727 \appto\@xdylocationclassorder{\space\string"seealso\string"}
```

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

```
1728 \newrobustcmd*\glsxtrindexseealso}[2]{%
1729   \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
1730     \glsxtr@recordsee{#1}{#2}%
1731   \fi
1732   \glsdoifexists{#1}%
1733   {%
1734     \glsxtrwrglossmark
1735     \def\gls@xref{#2}%
1736     \onelevel@sanitize\gls@xref
1737     \gls@checkmkidxchars\gls@xref
1738     \gls@glossary{\csname glo@\#1@type\endcsname}{%
1739       (indexentry
1740         :tkey (\csname glo@\#1@index\endcsname)
1741         :xref (\string"\gls@xref\string")
1742         :attr \string"seealso\string"
1743       )
1744     }%
1745   }%
1746 }
1747 }
1748 {
```

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

```
1749 \newrobustcmd*\glsxtrindexseealso}{\glssee[\seealsoname]}
1750 }
```

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

```
1751 \ifdef\gls@set@xr@key
1752 {
```

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

```
1753 \define@key{glossentry}{alias}{%
1754   \gls@set@xr@key{alias}{\@glo@alias}{#1}%
1755 }
1756 \define@key{glossentry}{seealso}{%
1757   \gls@set@xr@key{seealso}{\@glo@seealso}{#1}%
1758 }
```

Add to the key mappings.

```
1759 \appto{\gls@keymap}{, {alias}{alias}, {seealso}{seealso}}
```

Set the default value.

```
1760 \appto{\newglossaryentryprehook}{\def{\glo@alias}{}{\def{\glo@seealso}{}{}}}
```

Assign the field values.

```
1761 \appto{\newglossaryentryposthook}{%
1762   \ifdefvoid{\glo@seealso}%
1763     {\csxdef{\glo@\glo@label}{\glo@seealso}{}{}}%
1764   {%
1765     \csxdef{\glo@\glo@label}{\glo@seealso}{\glo@seealso}%
1766     \if@glstr@autoseeindex%
1767       \glstr@autoindexcrossrefs%
1768     \fi%
1769   }%
```

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

```
1770 \ifdefvoid{\glo@alias}%
1771   {\csxdef{\glo@\glo@label}{\glo@alias}{}{}}%
1772   {%
1773     \csxdef{\glo@\glo@label}{\glo@alias}{\glo@alias}%
1774   }%
1775 }
```

Provide user-level commands to access the values.

```
\glsxtralias
1776 \newcommand*{\glsxtralias}[1]{\gls@entry@field{#1}{alias}}
\trseealsolabels
1777 \newcommand*{\glsxtrseealsolabels}[1]{\gls@entry@field{#1}{seealso}}
```

Add to the \glo@autosee hook.

```
1778 \appto{\glo@autoseehook}{%
1779   \ifdefvoid{\glo@alias}%
1780   {%
1781     \ifdefvoid{\glo@seealso}%
1782     {}%
1783   }%
1784   \edef{\do@glssee}{\noexpand\glstrindexseealso}
```

```

1785      {\@glo@label}{\@glo@seealso}%
1786      \do@glsee
1787  }%
1788 }%
1789 {%

```

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

```

1790  \ifdefvoid{\glo@see}
1791  {%
1792      \edef{\do@glsee}{\noexpand\glsee{\@glo@label}{\@glo@alias}}%
1793      \do@glsee
1794  }%
1795  {}%
1796  }%
1797 }%
1798 }
1799 {%

```

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

```

\glsxtralias
1800 \glsaddstoragekey*{alias}{}{\glsxtralias}

\trseealsolabels
1801 \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.

```

1802 \appto{\newglossaryentryposthook}{%
1803     \ifcsvoid{\glo@\@glo@label}{\alias}{%
1804     {%
1805         \ifcsvoid{\glo@\@glo@label}{\seealso}{%
1806             {}%
1807         {%
1808             \edef{\do@glsee}{\noexpand\glsxtrindexseealso
1809                 {\@glo@label}{\csuse{\glo@\@glo@label}{\seealso}}}%
1810             \do@glsee
1811         }%
1812     }%
1813     {%

```

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

```

1814  \ifdefvoid{\glo@see}
1815  {%
1816      \edef{\do@glsee}{\noexpand\glsee
1817          {\@glo@label}{\csuse{\glo@\@glo@label}{\alias}}}%
1818      \do@glsee
1819 }%

```

```
1820      {}%
1821    }%
1822  }
1823 }
```

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

```
1824 \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.

```
1825 \newcommand*\glsxtraddallcrossrefs{%
1826   \forallglossaries{@glo@type}%
1827   {%
1828     \forglsentries[@glo@type]{@glo@label}%
1829     {%
1830       \ifglsused{@glo@label}%
1831         {\expandafter\glsxtr@addunusedxrefs\expandafter{@glo@label}}{}%
1832     }%
1833   }%
1834 }
```

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

```
1835 \newcommand*\glsxtr@addunusedxrefs[1]{%
1836   \letcs{@glo@see}{glo@glsdetoklabel{#1}@see}%
1837   \ifdefvoid@glo@see
1838   {}%
1839   {%
1840     \expandafter\glsxtr@addunused@glo@see@end@glsxtr@addunused
1841   }%
1842   \letcs{@glo@see}{glo@glsdetoklabel{#1}@seealso}%
1843   \ifdefvoid@glo@see
1844   {}%
1845   {%
1846     \expandafter\glsxtr@addunused@glo@see@end@glsxtr@addunused
1847   }%
1848 }
```

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

```
1849 \newcommand*\glsxtr@addunused[1][]{%
1850   \glsxtr@addunused
1851 }
```

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

```
1852 \def\glsxtr@addunused#1\end@glsxtr@addunused{%
1853   @for@glsxtr@label:=#1\do
1854   {%
1855     \ifglsused{@glsxtr@label}{}%
```

```

1856  {%
1857    \glsadd[format=glsxtrunusedformat]{\glsxtr@label}%
1858    \glsunset{\glsxtr@label}%
1859    \expandafter\glsxtr@addunusedxrefs\expandafter{\glsxtr@label}%
1860  }%
1861 }%
1862 }

xtrunusedformat
1863 \newcommand*\glsxtrunusedformat[1]{\unskip}

```

### 1.3.2 Document Definitions

ls@begindocdefs This command was only introduced to glossaries v4.37, so it may not be defined. If it has been defined, redefine it to check \glsxtr@docdefval so that it only inputs the .glsdefs file if docdef=true.

```

1864 \ifdef\gls@begindocdefs
1865 {%
1866   \renewcommand*\gls@begindocdefs{%
1867     \ifnum\glsxtr@docdefval=1\relax
1868       \gls@enablesavenonumberlist
1869       \edef\gls@restoreat{%
1870         \noexpand\catcode`\noexpand\@=\number\catcode`\@}%
1871       \makeatletter
1872       \InputIfFileExists{\jobname.glsdefs}{}{%
1873         \gls@restoreat
1874         \undef\gls@restoreat
1875         \gls@defdocnewglossaryentry
1876       }%
1877     \else
1878       \ifnum\glsxtr@docdefval=3\relax

```

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

```

1878       \gls@enablesavenonumberlist
1879       \let\gls@checkseeallowed\relax
1880       \let\newglossaryentry\new@atom@glossaryentry
1881       \global\newwrite\gls@deffile
1882       \immediate\openout\gls@deffile=\jobname.glsdefs

```

Write all currently defined entries.

```

1883     \forallglsentries{\glsentry}{\gls@writedef{\glsentry}}%
1884   \fi
1885   \fi
1886 }
1887 }%
1888 {%
1889 \ifnum\glsxtr@docdefval=3\relax
1890   \PackageError{glossaries-extra}{Package option
1891     'docdef=\glsxtr@docdefsetting' requires at least version 4.37}

```

```

1892     of the base glossaries.sty package}{}}
1893 \fi
1894 }

m@glossaryentry
1895 \newrobustcmd{\new@atom@glossaryentry}[2]{%
1896   \gls@defglossaryentry{#1}{#2}%
1897   \gls@writedef{#1}%
1898 }

noidxglossaries Modify \makenoidxglossaries so that it automatically sets docdef=false (unless the restricted setting is on) and disables the docdef key. This command isn't allowed with the record option.
1899 \let\glsxtr@orgmakenoidxglossaries\makenoidxglossaries
1900 \renewcommand{\makenoidxglossaries}{%
1901   \domakeglossaries
1902   {%
1903     \ifdefequal\glsxtr@record@setting\glsxtr@record@setting@off
1904     {%
1905       \glsxtr@orgmakenoidxglossaries
1906       Add marker to \@do@seeglossary but don't increment associated counter.
1907       \renewcommand{\@do@seeglossary}[2]{%
1908         \glsxtrwrglossmark
1909         \edef\gls@label{\glsdetoklabel{##1}}%
1910         \protected@write\auxout{}{%
1911           \string\gls@reference
1912           {\csname glo@\gls@label\space\endcsname}%
1913           {\gls@label}%
1914           \string\glsseeformat##2{}%
1915         }%
1916       }%
1917     }%
1918     Check for docdefs=restricted:
1919     \if@glsxtrdocdefrestricted
1920       If restricted document definitions allowed, adjust \@gls@reference so that it doesn't test for existence.
1921       \renewcommand*{\@gls@reference}[3]{%
1922         \ifcsundef{glsref@##1}{\csgdef{glsref@##1}{}{}}{%
1923           \ifinlistcs{##2}{glsref@##1}{%
1924             {}{%
1925               \listcsgadd{glsref@##1}{##2}{}%
1926               \ifcsundef{glo@\glsdetoklabel{##2}@loclist}{%
1927                 \csgdef{glo@\glsdetoklabel{##2}@loclist}{}{%
1928                   \listcsgadd{glo@\glsdetoklabel{##2}@loclist}{##3}{}}%
1929               }%
1930             }%
1931           }%
1932         }%
1933       }%
1934     }%
1935   }%
1936 }

```

```

1929     \else
1930         Disable document definitions.
1931         \@glsxtrdocdeffalse
1932         \fi
1933         \disable@keys{glossaries-extra.sty}{docdef}%
1934     }%
1935     {%
1936         \PackageError{glossaries-extra}{\string\makenoidxglossaries\space
1937             not permitted\MessageBreak
1938             with record=\@glsxtr@record@setting\space package option}%
1939         {You may only use \string\makenoidxglossaries\ space with the
1940             record=off option}%
1941     }%
1942 }

```

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

```

1943 \renewcommand*{\gls@defdocnewglossaryentry}{%
1944     \ifcase\@glsxtr@docdefval
1945         docdef=false:
1946             \renewcommand*{\newglossaryentry}[2]{%
1947                 \PackageError{glossaries-extra}{Glossary entries must
1948                     be \MessageBreak defined in the preamble with \MessageBreak
1949                     package option ‘docdef=false’\MessageBreak(consider using
1950                     ‘docdef=restricted’)\{Move your glossary definitions to
1951                     the preamble. You can also put them in a \MessageBreak separate file
1952                     and load them with \string\loadglsentries.\}%
1953             }%
1954         \or

```

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

```

1954     \let\gls@checkseeallowed\relax
1955     \let\newglossaryentry\new@glossaryentry
1956     \else

```

Restricted mode just needs to allow the see value.

```

1957     \let\gls@checkseeallowed\relax
1958     \fi
1959 }

```

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`

```

1960 \newcommand*{\GlsXtrEnableOnTheFly}{%
1961     \@ifstar\@sGlsXtrEnableOnTheFly\@GlsXtrEnableOnTheFly
1962 }

```

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.)

```

1963 \newcommand*{\@sGlsXtrEnableOnTheFly}{%
1964   \renewcommand*{\glsdetoklabel}[1]{%
1965     \expandafter\glsxtr@ifcsstart\string##1 \glsxtr@end@%
1966     {%
1967       \expandafter\detokenize\expandafter{##1}%
1968     }%
1969     {\detokenize{##1}}%
1970   }%
1971   \GlsXtrEnableOnTheFly
1972 }
1973 \def\glsxtr@ifcsstart#1#2\glsxtr@end@#3#4{%
1974   \expandafter\if\glsbackslash#1%
1975   #3%
1976   \else
1977   #4%
1978   \fi
1979 }
```

#### sxtrstarflywarn

```

1980 \newcommand*{\glsxtrstarflywarn}{%
1981   \GlossariesExtraWarning{Experimental starred version of
1982   \string\GlsXtrEnableOnTheFly\space in use (please ensure you have
1983   read the warnings in the glossaries-extra user manual)}%
1984 }
```

#### rEnableOnTheFly

```
1985 \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
1986 \newcommand*{\glsxtrcat}{general}

\glsxtr
1987 \newcommand*{\glsxtr}[1][]{%
1988   \def\glsxtr@keylist{##1}%
1989   \glsxtr
1990 }

\@glsxtr
1991 \newcommand*{\@glsxtr}[2][]{%
1992   \ifglsentryexists{##2}%

```

```

1993  {%
1994    \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1995  }%
1996  {%
1997    \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1998      description={\nopostdesc},##1}%
1999  }%
2000  \expandafter\gls\expandafter[\glsxtr@keylist]{##2}%
2001 }

\Glsxtr
2002 \newcommand*\Glsxtr[1][]{%
2003   \def\glsxtr@keylist{##1}%
2004   \Glsxtr
2005 }

\@Glsxtr
2006 \newcommand*\@Glsxtr[2][]{%
2007   \ifglsentryexists{##2}%
2008   {%
2009     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2010   }%
2011   {%
2012     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2013       description={\nopostdesc},##1}%
2014   }%
2015   \expandafter\Gls\expandafter[\glsxtr@keylist]{##2}%
2016 }

\glsxtrpl
2017 \newcommand*\glsxtrpl[1][]{%
2018   \def\glsxtr@keylist{##1}%
2019   \glsxtrpl
2020 }

\@glsxtrpl
2021 \newcommand*\@glsxtrpl[2][]{%
2022   \ifglsentryexists{##2}%
2023   {%
2024     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2025   }%
2026   {%
2027     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2028       description={\nopostdesc},##1}%
2029   }%
2030   \expandafter\glspl\expandafter[\glsxtr@keylist]{##2}%
2031 }

```

```

2032 \newcommand*{\Glsxtrpl}[1] []{%
2033   \def\glsxtr@keylist{##1}%
2034   \Glsxtrpl
2035 }

\Glsxtrpl
2036 \newcommand*{\@Glsxtrpl}[2] []{%
2037   \ifglsentryexists{##2}%
2038   {%
2039     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
2040   }%
2041   {%
2042     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
2043       description={\nopostrdesc},##1}%
2044   }%
2045   \expandafter\Glspl\expandafter[\glsxtr@keylist]{##2}%
2046 }

```

```

\GlsXtrWarning
2047 \newcommand*{\GlsXtrWarning}[2]{%
2048   \def\@glsxtr@optlist{##1}%
2049   \onelevel@sanitize\@glsxtr@optlist
2050   \GlossariesExtraWarning{The options ‘\@glsxtr@optlist’ have
2051   been ignored for entry ‘##2’ as it has already been defined}%
2052 }

```

Disable commands after the glossary:

```

2053 \renewcommand{\printglossary}[2]{%
2054   \def\@glsxtr@printglossopts{##1}%
2055   \@glsxtr@orgprintglossary{##1}{##2}%
2056   \def\@glsxtr{\@glsxtr@disabledflycommand\glsxtr}%
2057   \def\@glsxtrpl{\@glsxtr@disabledflycommand\glsxtrpl}%
2058   \def\@Glsxtr{\@glsxtr@disabledflycommand\Glsxtr}%
2059   \def\@Glsxtrpl{\@glsxtr@disabledflycommand\Glsxtrpl}%
2060 }

```

```

abledflycommand
2061 \newcommand*{\@glsxtr@disabledflycommand}[1]{%
2062   \PackageError{glossaries-extra}%
2063   {\string##1\space can't be used after any of the \MessageBreak
2064   glossaries have been displayed}%
2065   {The on-the-fly commands enabled by
2066   \string\GlsXtrEnableOnTheFly\space may only be used \MessageBreak
2067   before the glossaries. If you want to use any entries \MessageBreak
2068   after any of the glossaries, you must use the standard \MessageBreak
2069   method of first defining the entry and then using the \MessageBreak
2070   entry with commands like \string\gls}%
2071   \@@glsxtr@disabledflycommand
2072 }

```

```

2073 \newcommand*{\@glsxtr@disabledflycommand}[2] []{##2}
      End of \GlsXtrEnableOnTheFly. Disable since it can only be used once.
2074 \let\GlsXtrEnableOnTheFly\relax
2075 }
2076 \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.

```

2077 \newcommand*{\@glsxtr@current@style}{\@glossary@default@style}
      Modify \setglossarystyle to set \@glsxtr@current@style.

```

`etglossarystyle`

```

2078 \renewcommand*{\setglossarystyle}[1]{%
2079   \ifcsundef{@glsstyle@#1}{%
2080     {%
2081       \PackageError{glossaries-extra}{Glossary style '#1' undefined}{}%
2082     }%
2083     {%
2084       \csname @glsstyle@#1\endcsname

```

Only set the current style if it exists.

```

2085   \protected@edef{\@glsxtr@current@style}{#1}%
2086   }%
2087   \ifx{\@glossary@default@style}\relax
2088     \protected@edef{\@glossary@default@style}{#1}%
2089   \fi
2090 }

```

In case we have an old version of glossaries:

```

2091 \ifdef{\@glossary@default@style}
2092 {}
2093 {%
2094   \let{\@glossary@default@style}\relax
2095 }

```

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

```

2096 \ifdef{\glslistdottedwidth}
2097 {%
2098   \ifdim\glslistdottedwidth=.5\hsize
2099     \setlength{\glslistdottedwidth}{-\dimexpr\maxdimen-1sp\relax}%
2100   \AtBeginDocument{%
2101     \ifdim\glslistdottedwidth=-\dimexpr\maxdimen-1sp\relax

```

```

2102      \setlength{\glslistdottedwidth}{.5\columnwidth}%
2103      \fi
2104  }%
2105 \fi
2106 }
2107 {}%

```

Similarly for `\glsdescwidth`:

```

\glsdescwidth
2108 \ifdef\glsdescwidth
2109 {%
2110   \ifdim\glsdescwidth=.6\hsize
2111     \setlength{\glsdescwidth}{-\dimexpr\maxdimen-1sp\relax}
2112   \AtBeginDocument{%
2113     \ifdim\glsdescwidth=-\dimexpr\maxdimen-1sp\relax
2114       \setlength{\glsdescwidth}{.6\columnwidth}%
2115     \fi
2116   }%
2117 }%
2118 \fi
2119 {}%

```

and for `\glspagelistwidth`:

```

lspagelistwidth
2120 \ifdef\glspagelistwidth
2121 {%
2122   \ifdim\glspagelistwidth=.1\hsize
2123     \setlength{\glspagelistwidth}{-\dimexpr\maxdimen-1sp\relax}
2124   \AtBeginDocument{%
2125     \ifdim\glspagelistwidth=-\dimexpr\maxdimen-1sp\relax
2126       \setlength{\glspagelistwidth}{.1\columnwidth}%
2127     \fi
2128   }%
2129 }%
2130 \fi
2131 {}%

```

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

```

2132 \def\org@glossaryentrynumbers#1{#1\gls@save@numberlist{#1}}%
2133 \ifx\org@glossaryentrynumbers\glossaryentrynumbers
2134   \glsnonumberlistfalse
2135   \renewcommand*\glossaryentrynumbers[1]{%
2136     \ifglsentryexists{\glscurrententrylabel}{%
2137       {}%
2138       \@glsxtrpreloctag
2139       \GlsXtrFormatLocationList{#1}%
2140       \@glsxtrpostloctag
2141       \gls@save@numberlist{#1}%

```

```

2142     }{}}%
2143   }%
2144 \else
2145   \glsnonumberlisttrue
2146   \renewcommand*{\glossaryentrynumbers}[1]{%
2147     \ifglsentryexists{\glscurrententrylabel}{%
2148       {%
2149         \gls@save@numberlist{#1}%
2150       }{}}%
2151     }%
2152 \fi

```

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

```
2153 \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`

```

2154 \newcommand*{\GlsXtrEnablePreLocationTag}[2]{%
2155   \let\@glsxtrpreloctag\@glsxtrpreloctag
2156   \let\@glsxtrpostloctag\@glsxtrpostloctag
2157   \renewcommand*{\@glsxtr@pagetag}{#1}%
2158   \renewcommand*{\@glsxtr@pagestag}{#2}%
2159   \renewcommand*{\@glsxtr@savepreloctag}[2]{%
2160     \csgdef{@glsxtr@preloctag@##1}{##2}%
2161   }%
2162   \renewcommand*{\@glsxtr@doloctag}{%
2163     \ifcsundef{@glsxtr@preloctag@\glscurrententrylabel}{%
2164       {%
2165         \GlossariesWarning{Missing pre-location tag for ‘\glscurrententrylabel’}.
2166         Rerun required}%
2167       }%
2168     }%
2169     \csuse{@glsxtr@preloctag@\glscurrententrylabel}%
2170   }%
2171 }%
2172 }
2173 \onlypreamble\GlsXtrEnablePreLocationTag

```

`glsxtrpreloctag`

```

2174 \newcommand*{\@glsxtrpreloctag}{%
2175   \let\@glsxtr@org@delimN\delimN
2176   \let\@glsxtr@org@delimR\delimR
2177   \let\@glsxtr@org@glsignore\glsignore

```

```

\gdef is required as the delimiters may occur inside a scope.

2178  \gdef\@glsxtr@thisloctag{\@glsxtr@pagetag}%
2179  \renewcommand*\{\delimN}{%
2180    \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
2181    \@glsxtr@org@delimN}%
2182  \renewcommand*\{\delimR}{%
2183    \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
2184    \@glsxtr@org@delimR}%
2185  \renewcommand*\{\glsignore}[1]{%
2186    \gdef\@glsxtr@thisloctag{\relax}%
2187    \@glsxtr@org@glsignore{##1}}%
2188  \glsxtr@doloctag
2189 }

glsxtrpreloctag
2190 \newcommand*\{@glsxtrpreloctag}{}%

@glsxtr@pagetag
2191 \newcommand*\{@glsxtr@pagetag}{}%


glsxtr@pagestag
2192 \newcommand*\{@glsxtr@pagestag}{}%


lsxtrpostloctag
2193 \newcommand*\{@glsxtrpostloctag}{}%
2194   \let\delimN\@glsxtr@org@delimN
2195   \let\delimR\@glsxtr@org@delimR
2196   \let\glsignore\@glsxtr@org@glsignore
2197   \protected@write\@auxout{}{%
2198     {\string\@glsxtr@savepreloctag{\glscurrententrylabel}{\@glsxtr@thisloctag}}}%
2199 }

lsxtrpostloctag
2200 \newcommand*\{@glsxtrpostloctag}{}%


lsxtr@preloctag
2201 \newcommand*\{@glsxtr@savepreloctag}[2]{}%
2202 \protected@write\@auxout{}{%
2203   \string\providecommand\string\@glsxtr@savepreloctag[2]{}}

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


ss@nonumberlist  Modify the nonumberlist key to use \GlsXtrFormatLocationList (and also save the number
list):
2205 \renewcommand*\KV@printgloss@nonumberlist}[1]{%
2206   \XKV@plfalse
2207   \XKV@sttrue

```

```

2208 \XKV@checkchoice[\XKV@resa]{#1}{true,false}%
2209 {%
2210   \csname glsnonumberlist\XKV@resa\endcsname
2211   \ifglsnonumberlist
2212     \def\glossaryentrynumbers##1{\gls@save@numberlist{##1}}%
2213   \else
2214     \def\glossaryentrynumbers##1{%
2215       \@glsxtrpreloctag
2216       \GlsXtrFormatLocationList{##1}%
2217       \@glsxtrpostloctag
2218       \gls@save@numberlist{##1}}%
2219   \fi
2220 }%
2221 }

```

### 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.

```

2222 \renewcommand*\glsentryfmt{%
2223   \ifglshasshort{\glslabel}{\glssetabrvfmt{\glscategory{\glslabel}}}{}%
2224   \glsifregular{\glslabel}%
2225   {\glsxtrregularfont{\glsgenentryfmt}}%
2226 }%
2227   \ifglshasshort{\glslabel}%
2228   {\glsxtrabbreviationfont{\glsxtrgenabrvfmt}}%
2229   {\glsxtrregularfont{\glsgenentryfmt}}%
2230 }%
2231 }

```

sxtrregularfont Font used for regular entries.

```
2232 \newcommand*\glsxtrregularfont[1]{#1}
```

bbreviationfont Font used for abbreviation entries.

```
2233 \newcommand*\glsxtrabbreviationfont[1]{#1}
```

Commands like \glsifplural are only used by the \gls-like commands in the glossaries package, but it might be useful for the postlink hook to know if the user has used, say, \glsfirst or \glsplural. This can provide better consistency with the formatting of the \gls-like commands, even though they don't use \glsentryfmt.

@gls@field@link Redefine \@gls@field@link so that commands like \glsfirst can setup \glsxtrifwasfirstuse etc to allow the postlink hook to work better. This now has an optional argument that sets up the defaults.

```
2234 \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).

```
2235  \@glsxtr@record{#2}{#3}{glslink}%
2236  \glsdoifexists{#3}%
2237  {}%
```

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).

```
2238  \let\glsxtrorg@ifKV@glslink@hyper\ifKV@glslink@hyper
2239  \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
2240  \def\glscustomtext{#4}%
2241  \@glsxtr@field@linkdefs
2242  #1%
2243  \@gls@link[#2]{#3}{#4}%
2244  \let\ifKV@glslink@hyper\glsxtrorg@ifKV@glslink@hyper
2245  }%
2246  \glspostlinkhook
2247 }
```

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.

```
2248 \let\@glsxtr@org@gls@\@gls@
2249 \def\@gls@#1#2{%
2250  \@glsxtr@record{#1}{#2}{glslink}%
2251  \@glsxtr@org@gls@{#1}{#2}%
2252 }%
```

\@glspl@ Save the original definition and redefine.

```
2253 \let\@glsxtr@org@glspl@\@glspl@
2254 \def\@glspl@#1#2{%
2255  \@glsxtr@record{#1}{#2}{glslink}%
2256  \@glsxtr@org@glspl@{#1}{#2}%
2257 }%
```

\@Gls@ Save the original definition and redefine.

```
2258 \let\@glsxtr@org@Gls@\@Gls@
2259 \def\@Gls@#1#2{%
2260  \@glsxtr@record{#1}{#2}{glslink}%
2261  \@glsxtr@org@Gls@{#1}{#2}%
2262 }%
```

\@Glspl@ Save the original definition and redefine.

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

```

```
2266  \glsxtr@org@Glspl@{#1}{#2}%
2267 }%
```

\@GLS@ Save the original definition and redefine.

```
2268 \let\glsxtr@org@GLS@\@GLS@
2269 \def\@GLS@#1#2{%
2270   \glsxtr@record{#1}{#2}{glslink}%
2271   \glsxtr@org@GLS@{#1}{#2}%
2272 }%
```

\@GLSpl@ Save the original definition and redefine.

```
2273 \let\glsxtr@org@GLSpl@\@GLSpl@
2274 \def\@GLSpl@#1#2{%
2275   \glsxtr@record{#1}{#2}{glslink}%
2276   \glsxtr@org@GLSpl@{#1}{#2}%
2277 }%
```

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

```
2278 \renewcommand*\@glsdisp}[3][]{%
2279   \glsxtr@record{#1}{#2}{glslink}%
2280   \glsdoifexists{#2}{%
2281     \let\do@gls@link@checkfirsthyper\gls@link@checkfirsthyper
2282     \let\glsifplural\@secondoftwo
2283     \let\glscapscase\@firstofthree
2284     \def\glscustomtext{#3}%
2285     \def\glsinsert{}%
2286     \def\@glo@text{\csname gls@\glstype @entryfmt\endcsname}%
2287     \gls@link[#1]{#2}{\@glo@text}%
2288     \ifKV@glslink@local
2289       \glslocalunset{#2}%
2290     \else
2291       \glsunset{#2}%
2292     \fi
2293   }%
2294   \glspostlinkhook
2295 }
```

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

```
2296 \renewcommand*\@gls@link}[3][]{%
2297   \glsxtr@record{#1}{#2}{glslink}%
2298   \glsdoifexistsord{#2}{%
2299   }%
2300   \let\do@gls@link@checkfirsthyper\relax
```

Post-link hook commands need initialising.

```
2301   \def\glscustomtext{#3}%
2302   \glsxtr@field@linkdefs
2303   \gls@link[#1]{#2}{#3}%
```

```

2304 }%
2305 {%
2306   \glstextformat{#3}%
2307 }%
2308 \glspostlinkhook
2309 }

```

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

```

2310 \newcommand*\glsxtrinitwrgloss}{%
2311   \glsifattribute{\glslabel}{wrgloss}{after}{%
2312   {%
2313     \glsxtrinitwrglossbeforefalse
2314   }%
2315   {%
2316     \glsxtrinitwrglossbeforetrue
2317   }%
2318 }

```

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

```

2319 \newif\ifglsxtrinitwrglossbefore
2320 \glsxtrinitwrglossbeforetrue

```

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

```

2321 \define@choicekey{glslink}{wrgloss}{%
2322 [ \glsxtr@wrglossval \glsxtr@wrglossnr ]{%
2323 {before,after}}{%
2324 {%
2325   \ifcase\glsxtr@wrglossnr\relax
2326     \glsxtrinitwrglossbeforetrue
2327   \or
2328     \glsxtrinitwrglossbeforefalse
2329   \fi
2330 }%
2331 \define@key{glslink}{thevalue}{\def\glsxtr@thevalue{#1}}
2332 \define@key{glslink}{theHvalue}{\def\glsxtr@theHvalue{#1}}

```

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

```

2333 \define@boolkey{glslink}{glsxtr@}{hyperoutside}[true]{}
2334 \glsxtr@hyperoutsidetrue

```

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

```

2335 \define@key{glslink}{textformat}{%
2336   \ifcsdef{#1}{%
2337   {%
2338     \letcs{\glsxtr@local@textformat}{#1}%
2339   }%

```

```

2340  {%
2341    \PackageError{glossaries-extra}{Unknown control sequence name '#1'}{}%
2342  }%
2343 }

2344 \define@key{glslink}{prefix}{\def\glolinkprefix{\#1}{}}

nithyperoutside Set the default if the hyperoutside is omitted.
2345 \newcommand*{\glsxtrinithyperoutside}{%
2346   \glsifattribute{\glslabel}{hyperoutside}{false}{%
2347   {%
2348     \glsxtr@hyperoutsidefalse
2349   }%
2350   {%
2351     \glsxtr@hyperoutsidetrue
2352   }%
2353 }
}

r@inc@linkcount Does nothing by default.
2354 \newcommand*{\glsxtr@inc@linkcount}{}

slinkpresetkeys User hook performed immediately before options are set. Does nothing by default.
2355 \newcommand*{\glsxlinkpresetkeys}{}

sXtrExpandedFmt Helper command that (protected) fully expands second argument and then applies it to the first, which must be a command that takes a single argument.
2356 \newrobustcmd*{\GlsXtrExpandedFmt}[2]{%
2357   \protected@edef{\glsxtr@tmp{\#2}}{%
2358     \expandafter{\expandafter{\glsxtr@tmp}}%
2359   }
}

tion@counter@or If in a numbered equation, change the counter to equation. This can be overridden by explicitly setting the counter in the optional argument of commands like \gls and \glslink.
2360 \newcommand*{\@glsxtr@use@equation@counter}{%
2361   \glsxtr@ifnum@mmode{\def{\gls@counter{equation}}}{}
2362 }

sxtr@do@autoadd If \GlsXtrAutoAddOnFormat is used, this will automatically use \glsadd. It's therefore only used with \gls@link not with \glsadd otherwise it could trigger an infinite loop. The argument indicates the key family (glslink or glossadd).
2363 \newcommand*{\glsxtr@do@autoadd}[1]{}

AutoAddOnFormat
```

```
\GlsXtrAutoAddOnFormat[<label>]{<format list>}{{glsadd options}}
```

If an entry is indexed with the format set to one identified in the comma-separated list, then automatically index it using \glsadd with the given options, which may override the current options. Scoping is needed to prevent leakage.

```
2364 \newcommand*{\GlsXtrAutoAddOnFormat}[3] [\"glslabel]{%
2365   \renewcommand*{\glsxtr@do@autoadd}[1]{%
2366     \begingroup
2367       \protected@edef{\glsxtr@do@autoadd}{%
2368         \noexpand\ifstreq{\##1}{glslink}%
2369           {%
2370             \noexpand\DTLifinlist{\@glsnumberformat}{\#2}{\noexpand\glsadd[format={\@glsnumberfor
2371           }{%
2372             {}{%
2373           }%
2374             \glsxtr@do@autoadd
2375           \endgroup
2376         }%
2377 }
```

\@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.

```
2378 \def\@gls@link[#1]{#2}{%
2379   \leavevmode
2380   \edef\glslabel{\glsdetoklabel{#2}}%
2381   \def\@gls@link@opts{#1}%
2382   \let\@gls@link@label\glslabel
2383   \let\@glsnumberformat\glsxtr@defaultnumberformat
2384   \edef\@gls@counter{\csname glo@\glslabel\@counter\endcsname}%
2385   \edef\glstype{\csname glo@\glslabel\@type\endcsname}%
2386   \let\org@ifKV@glslink@hyper\ifKV@glslink@hyper
```

Save current value of \gloalinkprefix:

```
2387   \let\@glsxtr@org@gloalinkprefix\gloalinkprefix
2388   Initialise \glsxtr@local@textformat
2389   \let\@glsxtr@local@textformat\relax
```

Initialise thevalue and theHvalue (v1.19).

```
2390   \def\@glsxtr@thevalue{}%
2391   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
```

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

```
2392   \glsxtrinitwrgloss
```

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

```
2393   \glsxtrinithyperoutside
```

Note that the default link options may override \glsxtrinitwrgloss.

```
2394   \@gls@setdefault@glslink@opts
```

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

```
2394 \glsxtr@inc@linkcount
```

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

```
2395 \if@glsxtr@equations  
2396   \@glsxtr@use@equation@counter  
2397 \fi
```

As the original definition.

```
2398 \do@glsdisablehyperinlist  
2399 \do@gls@link@checkfirsthyper
```

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

```
2400 \glslinkpresetkeys
```

Set options.

```
2401 \setkeys{glslink}{#1}%
```

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

```
2402 \glsxtr@do@autoadd{glslink}%
```

User hook after options are set:

```
2403 \glslinkpostsetkeys
```

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

```
2404 \ifdefempty{\glsxtr@thevalue}{%  
2405 {  
2406   \@gls@saveentrycounter  
2407 }%  
2408 {  
2409   \let\theglsentrycounter\glsxtr@thevalue  
2410   \def\theHglsentrycounter{\glsxtr@theHvalue}{%  
2411 }%  
2412 \gls@setsort{\glslabel}{%
```

Check if the textformat key has been used.

```
2413 \ifx\glsxtr@local@textformat\relax
```

Check textformat attribute (new to v1.21).

```
2414 \glshasattribute{\glslabel}{textformat}{%  
2415 {  
2416   \edef\glsxtr@attrval{\glsgetattribute{\glslabel}{textformat}}%  
2417   \ifcsdef{\glsxtr@attrval}{%  
2418     {  
2419       \letcs{\glsxtr@textformat}{\glsxtr@attrval}{%  
2420     }%  
2421     {  
2422       \GlossariesExtraWarning{Unknown control sequence name  
2423         '\glsxtr@attrval' supplied in textformat attribute  
2424         for entry '\glslabel'. Reverting to default \string\glstextformat}{%  
2425         \let\glsxtr@textformat\glstextformat  
2426     }%  
2427   }%
```

```

2428     {%
2429         \let\@glsxtr@textformat\glstextformat
2430     }%
2431 \else
2432     \let\@glsxtr@textformat\@glsxtr@local@textformat
2433 \fi

```

Do write if it should occur before the link text:

```

2434 \ifglsxtrinitwrglossbefore
2435   \do@wrglossary{#2}%
2436 \fi

```

Do the link text:

```

2437 \ifKV@glslink@hyper
2438   \ifglsxtr@hyperoutside
2439     \@glslink{\glolinkprefix\glslabel}{\@glsxtr@textformat{#3}}%
2440   \else
2441     \@glsxtr@textformat{\@glslink{\glolinkprefix\glslabel}{#3}}%
2442   \fi
2443 \else
2444   \ifglsxtr@hyperoutside
2445     \glsdonohyperlink{\glolinkprefix\glslabel}{\@glsxtr@textformat{#3}}%
2446   \else
2447     \@glsxtr@textformat{\glsdonohyperlink{\glolinkprefix\glslabel}{#3}}%
2448   \fi
2449 \fi

```

Do write if it should occur after the link text:

```

2450 \ifglsxtrinitwrglossbefore
2451 \else
2452   \do@wrglossary{#2}%
2453 \fi

```

Restore original value of \glolinkprefix:

```
2454 \let\glolinkprefix\@glsxtr@org@glolinkprefix
```

As the original definition:

```

2455 \let\ifKV@glslink@hyper\org@ifKV@glslink@hyper
2456 }

```

```
2457 \define@key{glossadd}{thevalue}{\def\@glsxtr@thevalue{#1}}
```

```
2458 \define@key{glossadd}{theHvalue}{\def\@glsxtr@theHvalue{#1}}
```

lsaddpresetkeys

```
2459 \newcommand*{\glsaddpresetkeys}{}%
```

saddpostsetkeys

```
2460 \newcommand*{\glsaddpostsetkeys}{}%
```

```

\glsadd Redefine to include \@glsxtr@record and suppress in headings
2461 \renewrobustcmd*\{\glsadd\}[2] [] {%
2462   \glsxtrifinmark
2463   {}%
2464   {}%
2465   \@gls@adjustmode
2466   \begingroup
2467     \@glsxtr@record{#1}{#2}{glossadd}%
2468     \glsdoifexists{#2}%
2469     {}%
2470     \let\@glsnumberformat\@glsxtr@defaultnumberformat
2471     \edef\@gls@counter{\csname glo@\glsdetoklabel{#2}@counter\endcsname}%
2472     \def\@glsxtr@thevalue{}%
2473     \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%

```

Implement any default settings (before options are set)

```

2474   \glsaddpresetkeys
2475   \setkeys{glossadd}{#1}%

```

Implement any default settings (after options are set)

```

2476   \glsaddpostsetkeys
2477   \ifdefempty{\@glsxtr@thevalue}%
2478   {}%
2479   \@gls@saveentrycounter
2480   }%
2481   {}%
2482   \let\theglsentrycounter\@glsxtr@thevalue
2483   \def\theHglsentrycounter{\@glsxtr@theHvalue}%
2484   }%

```

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

```

2485   \@gls@setsort{#2}%

```

Ensure that indexing occurs (since that's the point of \glsadd). If indexing has been switched off by default, don't want the setting to affect \glsadd. The ignored format \glsignore can be used for selection without location, but the indexing still needs to be performed.

```

2486   \KV@glslink@noindexfalse
2487   \@@do@wrglossary{#2}%
2488   }%
2489   \endgroup
2490 }%
2491 }

```

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

```

2492 \newrobustcmd*\{\glsaddeach\}[2] [] {%
2493   \@for\@gls@thislabel:=#2\do{\glsadd[#1]{\@gls@thislabel}}%
2494 }

```

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

```

2495 \newcommand*\{\glsxtr@field@linkdefs\}%

```

```

2496 \let\glsxtrifwasfirstuse@\secondoftwo
2497 \let\glsifplural@\secondoftwo
2498 \let\glscapscase@\firstofthree
2499 \let\glsinsert@\empty
2500 }

```

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

#### assignfieldfont

```

2501 \newcommand*{\glsxtrassignfieldfont}[1]{%
2502   \ifglsentryexists{#1}{%
2503     {%
2504       \ifglshasshort{#1}{%
2505         {%
2506           \glssetabbrvfmt{\glscategory{#1}}{%
2507             \glsifregular{#1}{%
2508               {\let\@gls@field@font\glsxtrregularfont}{%
2509                 {\let\@gls@field@font\@firstofone}{%
2510                   }{%
2511                     {%
2512                       \glsifnotregular{#1}{%
2513                         {\let\@gls@field@font\@firstofone}{%
2514                           {\let\@gls@field@font\glsxtrregularfont}{%
2515                             }{%
2516                           }{%
2517                           {%
2518                             \let\@gls@field@font@gobble
2519                           }{%
2520                         }
2521 }{%
2522   \glsxtrassignfieldfont{#2}{%
2523     \gls@field@link{#1}{#2}{\gls@field{\glsaccesstext{#2}{#3}}}{%
2524   }

```

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

```

2521 \def\@glstext@#1#2[#3]{%
2522   \glsxtrassignfieldfont{#2}{%
2523     \gls@field@link{\let\glscapscase@\thirdofthree}{#1}{#2}{%
2524       {\gls@field{\GLSaccesstext{#2}\mfirstuclMakeUppercase{#3}}}{%
2529     }

```

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

```

2525 \def\@GLStext@#1#2[#3]{%
2526   \glsxtrassignfieldfont{#2}{%
2527     \gls@field@link[\let\glscapscase@\thirdofthree]{#1}{#2}{%
2528       {\gls@field{\GLSaccesstext{#2}\mfirstuclMakeUppercase{#3}}}{%
2529     }

```

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

```

2530 \def\@Glstext@#1#2[#3]{%
2531   \glsxtrassignfieldfont{#2}{%
2532     \gls@field@link[\let\glscapscase@\secondofthree]{#1}{#2}{%
2533       {\gls@field{\Glsaccesstext{#2}{#3}}}{%
2534     }

```

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

```
2535 \newcommand*{\glsxtrchecknohyperfirst}[1]{%
2536   \glsifattribute{#1}{nohyperfirst}{true}{\KV@glslink@hyperfalse}{}%
2537 }
```

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

```
2538 \def\@glsfirst@#1#2[#3]{%
2539   \glsxtrassignfieldfont{#2}}%
```

Ensure that \glsfirst honours the nohyperfirst attribute.

```
2540   \@gls@field@link
2541   [\let\glsxtrifwasfirstuse\@firstoftwo
2542     \glsxtrchecknohyperfirst{#2}%
2543   ]{#1}{#2}%
2544   {\@gls@field@font{\glsaccessfirst{#2}#3}}%
2545 }
```

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

```
2546 \def\@Glsfirst@#1#2[#3]{%
2547   \glsxtrassignfieldfont{#2}}%
```

Ensure that \Glsfirst honours the nohyperfirst attribute.

```
2548   \@gls@field@link
2549   [\let\glsxtrifwasfirstuse\@firstoftwo
2550     \let\glscapscase\@secondofthree
2551     \glsxtrchecknohyperfirst{#2}%
2552   ]%
2553   {#1}{#2}{\@gls@field@font{\Glsaccessfirst{#2}#3}}%
2554 }
```

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

```
2555 \def\@GLSfirst@#1#2[#3]{%
2556   \glsxtrassignfieldfont{#2}}%
```

Ensure that \GLSfirst honours the nohyperfirst attribute.

```
2557   \@gls@field@link
2558   [\let\glsxtrifwasfirstuse\@firstoftwo
2559     \let\glscapscase\@thirdofthree
2560     \glsxtrchecknohyperfirst{#2}%
2561   ]%
2562   {#1}{#2}{\@gls@field@font{\GLSaccessfirst{#2}\mfirstucMakeUppercase{#3}}}%
2563 }
```

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

```
2564 \def\@glplural@#1#2[#3]{%
2565   \glsxtrassignfieldfont{#2}}%
2566   \@gls@field@link[\let\glplural\@firstoftwo]{#1}{#2}%
```

```
2567     {\@gls@field@font{\glsaccessplural{#2}#3}}%
2568 }
```

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

```
2569 \def\@Glsplural@#1#2[#3]{%
2570   \glsxtrassignfieldfont{#2}%
2571   \@gls@field@link
2572   [\let\glsifplural\@firstoftwo
2573    \let\glscapscase\@secondofthree
2574   ]%
2575   {#1}{#2}{\@gls@field@font{\Glsaccessplural{#2}#3}}%
2576 }
```

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

```
2577 \def\@GLSplural@#1#2[#3]{%
2578   \glsxtrassignfieldfont{#2}%
2579   \@gls@field@link
2580   [\let\glsifplural\@firstoftwo
2581    \let\glscapscase\@thirdofthree
2582   ]%
2583   {#1}{#2}{\@gls@field@font{\GLSaccessplural{#2}\mfirstrucMakeUppercase{#3}}}}%
2584 }
```

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

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


```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2587   \@gls@field@link
2588   [\let\glsxtrifwasfirstuse\@firstoftwo
2589    \let\glsifplural\@firstoftwo
2590    \glsxtrchecknohyperfirst{#2}%
2591   ]%
2592   {#1}{#2}{\@gls@field@font{\glsaccessfirstplural{#2}#3}}%
2593 }
```

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

```
2594 \def\@Glsfirstplural@#1#2[#3]{%
2595   \glsxtrassignfieldfont{#2}%


```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2596   \@gls@field@link
2597   [\let\glsxtrifwasfirstuse\@firstoftwo
2598    \let\glsifplural\@firstoftwo
2599    \let\glscapscase\@secondofthree
2600    \glsxtrchecknohyperfirst{#2}%
2601   ]%
2602   {#1}{#2}{\@gls@field@font{\Glsaccessfirstplural{#2}#3}}%
2603 }
```

```

GLSfirstplural@ All uppercase version. The abbreviation format may also need setting.
2604 \def\@GLSfirstplural[#1#2[#3]{%
2605   \glsxtrassignfieldfont{#2}%
Ensure that \glsxtrfirstplural honours the nohyperfirst attribute.
2606   \gls@field@link
2607   [\let\glsxtrifwasfirstuse\@firstoftwo
2608   \let\glsifplural\@firstoftwo
2609   \let\glscapscase\@thirddofthree
2610   \glsxtrchecknohyperfirst{#2}%
2611 ]%
2612 {#1}{#2}%
2613 {\gls@field@font{\GLSaccessfirstplural{#2}\mfirstucMakeUppercase{#3}}}}
2614 }

\@glsname@ Redefine to use accessibility support. The abbreviation format may also need setting.
2615 \def\@glsname[#1#2[#3]{%
2616   \glsxtrassignfieldfont{#2}%
2617   \gls@field@link{#1}{#2}{\gls@font{\glsaccessname{#2}{#3}}}}
2618 }

\@Glsname@ First letter uppercase version. The abbreviation format may also need setting.
2619 \def\@Glsname[#1#2[#3]{%
2620   \glsxtrassignfieldfont{#2}%
2621   \gls@field@link
2622   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2623 {\gls@font{\Glsaccessname{#2}{#3}}}}
2624 }

\@GLSname@ All uppercase version. The abbreviation format may also need setting.
2625 \def\@GLSname[#1#2[#3]{%
2626   \glsxtrassignfieldfont{#2}%
2627   \gls@field@link[\let\glscapscase\@thirddofthree]%
2628   {#1}{#2}%
2629   {\gls@font{\GLSaccessname{#2}\mfirstucMakeUppercase{#3}}}}
2630 }

\@glsdesc@
2631 \def\@glsdesc[#1#2[#3]{%
2632   \glsxtrassignfieldfont{#2}%
2633   \gls@field@link{#1}{#2}{\gls@font{\glsaccessdesc{#2}{#3}}}}
2634 }

\@Glsdesc@ First letter uppercase version.
2635 \def\@Glsdesc[#1#2[#3]{%
2636   \glsxtrassignfieldfont{#2}%
2637   \gls@field@link
2638   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2639   {\gls@font{\Glsaccessdesc{#2}{#3}}}}
2640 }

```

```

\@GLSdesc@ All uppercase version.
2641 \def\@GLSdesc@#1#2[#3]{%
2642   \glsxtrassignfieldfont{#2}%
2643   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2644   {#1}{#2}{\gls@field@font{\GLSaccessdesc{#2}\mfirstucMakeUppercase{#3}}}}%
2645 }

@glsdescplural@ No case-changing version.
2646 \def\@glsdescplural@#1#2[#3]{%
2647   \glsxtrassignfieldfont{#2}%
2648   \gls@field@link
2649   [\let\glscapscase\@secondoftwo
2650   \let\glsifplural\@firstoftwo
2651   ]{#1}{#2}{\gls@field@font{\glsaccessdescplural{#2}{#3}}}}%
2652 }

@Glsdescplural@ First letter uppercase version.
2653 \def\@Glsdescplural@#1#2[#3]{%
2654   \glsxtrassignfieldfont{#2}%
2655   \gls@field@link
2656   [\let\glscapscase\@secondoftwo
2657   \let\glsifplural\@firstoftwo
2658   ]{#1}{#2}{\gls@field@font{\Glsaccessdescplural{#2}{#3}}}}%
2659 }

@GLSdescplural@ All uppercase version.
2660 \def\@GLSdesc@#1#2[#3]{%
2661   \glsxtrassignfieldfont{#2}%
2662   \gls@field@link
2663   [\let\glscapscase\@thirdoftwo
2664   \let\glsifplural\@firstoftwo
2665   ]%
2666   {#1}{#2}%
2667   {\gls@field@font{\GLSaccessdescplural{#2}\mfirstucMakeUppercase{#3}}}}%
2668 }

\@glssymbol@
2669 \def\@glssymbol@#1#2[#3]{%
2670   \glsxtrassignfieldfont{#2}%
2671   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccesssymbol{#2}{#3}}}}%
2672 }

@Glssymbol@ First letter uppercase version.
2673 \def\@Glssymbol@#1#2[#3]{%
2674   \glsxtrassignfieldfont{#2}%
2675   \gls@field@link
2676   [\let\glscapscase\@secondoftwo]%
2677   {#1}{#2}{\gls@field@font{\Glsaccesssymbol{#2}{#3}}}}%
2678 }

```

```

\@GLSsymbol@ All uppercase version.
2679 \def\@GLSsymbol@#1#2[#3]{%
2680   \glsxtrassignfieldfont{#2}%
2681   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2682   {#1}{#2}{\gls@field@font{\GLSaccesssymbol{#2}\mfirstucMakeUppercase{#3}}}}%
2683 }

lssymbolplural@ No case-changing version.
2684 \def\@glssymbolplural@#1#2[#3]{%
2685   \glsxtrassignfieldfont{#2}%
2686   \gls@field@link
2687   [\let\glscapscase\@secondoftwo
2688   \let\glsifplural\@firstoftwo
2689   ]{#1}{#2}{\gls@field@font{\glsaccesssymbolplural{#2}{#3}}}}%
2690 }

lssymbolplural@ First letter uppercase version.
2691 \def\@Glssymbolplural@#1#2[#3]{%
2692   \glsxtrassignfieldfont{#2}%
2693   \gls@field@link
2694   [\let\glscapscase\@secondoftwo
2695   \let\glsifplural\@firstoftwo
2696   ]{#1}{#2}{\gls@field@font{\Glsaccesssymbolplural{#2}{#3}}}}%
2697 }

LSSymbolplural@ All uppercase version.
2698 \def\@GLSsymbol@#1#2[#3]{%
2699   \glsxtrassignfieldfont{#2}%
2700   \gls@field@link
2701   [\let\glscapscase\@thirdoftwo
2702   \let\glsifplural\@firstoftwo
2703   ]%
2704   {#1}{#2}%
2705   {\gls@field@font{\GLSaccesssymbolplural{#2}\mfirstucMakeUppercase{#3}}}}%
2706 }

\@Glsuseri@ First letter uppercase version.
2707 \def\@Glsuseri@#1#2[#3]{%
2708   \glsxtrassignfieldfont{#2}%
2709   \gls@field@link
2710   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2711   {\gls@field@font{\Glsentryuseri{#2}{#3}}}}%
2712 }

\@GLSuseri@ All uppercase version.
2713 \def\@GLSuseri@#1#2[#3]{%
2714   \glsxtrassignfieldfont{#2}%
2715   \gls@field@link[\let\glscapscase\@thirdoftwo]%

```

```
2716      {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseri{#2}#3}}}%  
2717 }
```

\@Glsuserii@ First letter uppercase version.

```
2718 \def\@Glsuserii@#1#2[#3]{%  
2719   \glsxtrassignfieldfont{#2}%">  
2720   \gls@field@link  
2721   [\let\glscapscase\@secondoftwo]%">  
2722   {#1}{#2}{\@gls@field@font{\Glsentryuserii{#2}#3}}%  
2723 }
```

\@GLSuserii@ All uppercase version.

```
2724 \def\@GLSuserii@#1#2[#3]{%  
2725   \glsxtrassignfieldfont{#2}%">  
2726   \gls@field@link[\let\glscapscase\@thirdoftwo]%">  
2727   {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuserii{#2}#3}}}}%  
2728 }
```

\@Glsuseriii@ First letter uppercase version.

```
2729 \def\@Glsuseriii@#1#2[#3]{%  
2730   \glsxtrassignfieldfont{#2}%">  
2731   \gls@field@link  
2732   [\let\glscapscase\@secondoftwo]%">  
2733   {#1}{#2}{\@gls@field@font{\Glsentryuseriii{#2}#3}}%  
2734 }
```

\@GLSuseriii@ All uppercase version.

```
2735 \def\@GLSuseriii@#1#2[#3]{%  
2736   \glsxtrassignfieldfont{#2}%">  
2737   \gls@field@link[\let\glscapscase\@thirdoftwo]%">  
2738   {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseriii{#2}#3}}}}%  
2739 }
```

\@Glsuseriv@ First letter uppercase version.

```
2740 \def\@Glsuseriv@#1#2[#3]{%  
2741   \glsxtrassignfieldfont{#2}%">  
2742   \gls@field@link  
2743   [\let\glscapscase\@secondoftwo]%">  
2744   {#1}{#2}{\@gls@field@font{\Glsentryuseriv{#2}#3}}%  
2745 }
```

\@GLSuseriv@ All uppercase version.

```
2746 \def\@GLSuseriv@#1#2[#3]{%  
2747   \glsxtrassignfieldfont{#2}%">  
2748   \gls@field@link[\let\glscapscase\@thirdoftwo]%">  
2749   {#1}{#2}%">  
2750   {\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseriv{#2}#3}}}}%  
2751 }
```

\@Glsuserv@ First letter uppercase version.

```
2752 \def \@Glsuserv@#1#2[#3]{%
2753   \glsxtrassignfieldfont{#2}%
2754   \gls@field@link
2755   [\let\glscapscase\@secondoftwo]%
2756   {#1}{#2}{\gls@field@font{\Glsentryuserv{#2}#3}}%
2757 }
```

\@GLSuser@ All uppercase version.

```
2758 \def \@GLSuser@#1#2[#3]{%
2759   \glsxtrassignfieldfont{#2}%
2760   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2761   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuserv{#2}#3}}}%
2762 }
```

\@Glsuservi@ First letter uppercase version.

```
2763 \def \@Glsuservi@#1#2[#3]{%
2764   \glsxtrassignfieldfont{#2}%
2765   \gls@field@link
2766   [\let\glscapscase\@secondoftwo]%
2767   {#1}{#2}{\gls@field@font{\Glsentryuservi{#2}#3}}%
2768 }
```

\@GLSuservi@ All uppercase version.

```
2769 \def \@GLSuservi@#1#2[#3]{%
2770   \glsxtrassignfieldfont{#2}%
2771   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2772   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuservi{#2}#3}}}%
2773 }
```

Commands like \acrshort already set \glsifplural, but they don't set \glsxtrifwasfirstuse so they need adjusting. These commands shouldn't be used with \newabbreviation, but the redefinitions below allow for users reverting \newacronym back to its base definition.

ase@acrcmd@warn Warn user that they need to use new abbreviation commands.

```
2774 \newcommand*{\@glsxtr@base@acrcmd@warn}[2]{%
2775   \GlossariesExtraWarning{Base acronym command \string#1\space
2776   should not be used with new abbreviation definitions. Use
2777   \string#2\space instead}%
2778 }
```

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

```
2779 \let\@glsxtr@base@acrcmd\@glsxtr@base@acrcmd@warn
```

\@acrshort No case change.

```
2780 \def \@acrshort#1#2[#3]{%
2781   \glsxtr@base@acrcmd\acrshort\glsxtrshort
2782   \glsdoifexists{#2}%
```

```

2783 {%
2784   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2785   \let\glsxtrifwasfirstuse\@secondoftwo
2786   \let\glsifplural\@secondoftwo
2787   \let\glscapscase\@firstofthree
2788   \let\glsinsert\@empty
2789   \def\glscustomtext{%
2790     \acronymfont{\glsaccessshort{#2}}#3%
2791   }%
2792   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2793 }%
2794 \glspostlinkhook
2795 }

```

\@Acrshort First letter uppercase.

```

2796 \def\@Acrshort#1#2[#3]{%
2797   \glsxtr@base@acrcmd\Acrshort\Glsxtrshort
2798   \glsdoifexists{#2}%
2799 {%
2800   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2801   \let\glsxtrifwasfirstuse\@secondoftwo
2802   \let\glsifplural\@secondoftwo
2803   \let\glscapscase\@secondofthree
2804   \let\glsinsert\@empty
2805   \def\glscustomtext{%
2806     \acronymfont{\Glsaccessshort{#2}}#3%
2807   }%
2808   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2809 }%
2810 \glspostlinkhook
2811 }

```

\@ACRshort All uppercase.

```

2812 \def\@ACRshort#1#2[#3]{%
2813   \glsxtr@base@acrcmd\ACRshort\GLSxtrshort
2814   \glsdoifexists{#2}%
2815 {%
2816   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2817   \let\glsxtrifwasfirstuse\@secondoftwo
2818   \let\glsifplural\@secondoftwo
2819   \let\glscapscase\@thirdofthree
2820   \let\glsinsert\@empty
2821   \def\glscustomtext{%
2822     \mfirstrucMakeUppercase{\acronymfont{\glsaccessshort{#2}}#3}%
2823   }%
2824   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2825 }%
2826 \glspostlinkhook
2827 }

```

\@acrshortpl No case change.

```
2828 \def\@acrshortpl#1#2[#3]{%
2829   \glsxtr@base@acrcmd\acrshortpl\glsxtrshortpl
2830   \glsdoifexists{#2}%
2831 {%
2832   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2833   \let\glsxtrifwasfirstuse\@secondoftwo
2834   \let\glsifplural\@firstoftwo
2835   \let\glscapscase\@firstofthree
2836   \let\glsinsert\@empty
2837   \def\glscustomtext{%
2838     \acronymfont{\glsaccessshortpl{#2}}#3%
2839   }%
2840   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2841 }%
2842 \glspostlinkhook
2843 }
```

\@Acrshortpl First letter uppercase.

```
2844 \def\@Acrshortpl#1#2[#3]{%
2845   \glsxtr@base@acrcmd\Acrshortpl\Glsxtrshortpl
2846   \glsdoifexists{#2}%
2847 {%
2848   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2849   \let\glsxtrifwasfirstuse\@secondoftwo
2850   \let\glsifplural\@firstoftwo
2851   \let\glscapscase\@secondofthree
2852   \let\glsinsert\@empty
2853   \def\glscustomtext{%
2854     \acronymfont{\Glsaccessshortpl{#2}}#3%
2855   }%
2856   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2857 }%
2858 \glspostlinkhook
2859 }
```

\@ACRshortpl All uppercase.

```
2860 \def\@ACRshortpl#1#2[#3]{%
2861   \glsxtr@base@acrcmd\ACRshortpl\GLSxtrshortpl
2862   \glsdoifexists{#2}%
2863 {%
2864   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2865   \let\glsxtrifwasfirstuse\@secondoftwo
2866   \let\glsifplural\@firstoftwo
2867   \let\glscapscase\@thirdofthree
2868   \let\glsinsert\@empty
2869   \def\glscustomtext{%
2870     \mfirstucMakeUppercase{\acronymfont{\glsaccessshortpl{#2}}#3}%
2871   }%
```

```

2872     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2873   }%
2874   \glspostlinkhook
2875 }

\@acrlong No case change.
2876 \def\@acrlong#1#2[#3]{%
2877   \glsxtr@base@acrcmd\acrlong\glsxtrlong
2878   \glsdoifexists{#2}%
2879   {%
2880     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2881     \let\glsxtrifwasfirstuse\@secondoftwo
2882     \let\glsifplural\@secondoftwo
2883     \let\glscapscase\@firstofthree
2884     \let\glsinsert\@empty
2885     \def\glscustomtext{%
2886       \acronymfont{\glsaccesslong{#2}}#3%
2887     }%
2888     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2889   }%
2890   \glspostlinkhook
2891 }

\@Acrlong First letter uppercase.
2892 \def\@Acrlong#1#2[#3]{%
2893   \glsxtr@base@acrcmd\Acrlong\Glsxtrlong
2894   \glsdoifexists{#2}%
2895   {%
2896     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2897     \let\glsxtrifwasfirstuse\@secondoftwo
2898     \let\glsifplural\@secondoftwo
2899     \let\glscapscase\@secondofthree
2900     \let\glsinsert\@empty
2901     \def\glscustomtext{%
2902       \acronymfont{\Glsaccesslong{#2}}#3%
2903     }%
2904     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2905   }%
2906   \glspostlinkhook
2907 }

\@ACRlong All uppercase.
2908 \def\@ACRlong#1#2[#3]{%
2909   \glsxtr@base@acrcmd\ACRlong\GLSxtrlong
2910   \glsdoifexists{#2}%
2911   {%
2912     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2913     \let\glsxtrifwasfirstuse\@secondoftwo
2914     \let\glsifplural\@secondoftwo

```

```

2915   \let\glscapscase\@thirdofthree
2916   \let\glsinsert\@empty
2917   \def\glscustomtext{%
2918     \mfirstucMakeUppercase{\acronymfont{\glsaccesslong{#2}}#3}%
2919   }%
2920   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2921 }%
2922 \glspostlinkhook
2923 }

```

\@acrlongpl No case change.

```

2924 \def\@acrlongpl#1#2[#3]{%
2925   \glsxtr@base@acrcmd\acrlongpl\glsxtrlongpl
2926   \glsdoifexists{#2}%
2927 {%
2928   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2929   \let\glsxtrifwasfirstuse\@secondoftwo
2930   \let\glsifplural\@firstoftwo
2931   \let\glscapscase\@firstofthree
2932   \let\glsinsert\@empty
2933   \def\glscustomtext{%
2934     \acronymfont{\glsaccesslongpl{#2}}#3}%
2935   }%
2936   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2937 }%
2938 \glspostlinkhook
2939 }

```

\@Acrlongpl First letter uppercase.

```

2940 \def\@Acrlongpl#1#2[#3]{%
2941   \glsxtr@base@acrcmd\Acrlongpl\Glsxtrlongpl
2942   \glsdoifexists{#2}%
2943 {%
2944   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2945   \let\glsxtrifwasfirstuse\@secondoftwo
2946   \let\glsifplural\@firstoftwo
2947   \let\glscapscase\@secondofthree
2948   \let\glsinsert\@empty
2949   \def\glscustomtext{%
2950     \acronymfont{\Glsaccesslongpl{#2}}#3}%
2951   }%
2952   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2953 }%
2954 \glspostlinkhook
2955 }

```

\@ACRlongpl All uppercase.

```

2956 \def\@ACRlongpl#1#2[#3]{%
2957   \glsxtr@base@acrcmd\ACRlongpl\GLSxtrlongpl

```

```

2958 \glsdoifexists{#2}%
2959 {%
2960   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2961   \let\glsxtrifwasfirstuse\secondoftwo
2962   \let\glsifplural\firstoftwo
2963   \let\glscapscase\thirdofthree
2964   \let\glsinsert\empty
2965   \def\glscustomtext{%
2966     \mfirstucMakeUppercase{\acronymfont{\glsaccesslongpl{#2}}#3}%
2967   }%
2968   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2969 }%
2970 \glspostlinkhook
2971 }

```

The full formats use the internal long and short commands (such as `\acrshort` and `\acrlong`). Therefore they don't need adjustments, but they do need clearer warnings. This means three warnings per use (once for the full command and once each for the short and long commands), but at least this way the most important warning (replace `\acrfull` with `\glsxtrfull` etc) is present.

```

\@acrfull
2972 \def\@acrfull#1#2[#3]{%
2973   \glsxtr@base@acrcmd\acrfull\glsxtrfull
2974   \acrfullfmt{#1}{#2}{#3}%
2975 }

\@Acrfull
2976 \def\@Acrfull#1#2[#3]{%
2977   \glsxtr@base@acrcmd\Acrfull\Glsxtrfull
2978   \Acrfullfmt{#1}{#2}{#3}%
2979 }

\@ACRfull
2980 \def\@ACRfull#1#2[#3]{%
2981   \glsxtr@base@acrcmd\ACRfull\GLSxtrfull
2982   \ACRfullfmt{#1}{#2}{#3}%
2983 }

\@acrfullpl
2984 \def\@acrfullpl#1#2[#3]{%
2985   \glsxtr@base@acrcmd\acrfullpl\glsxtrfullpl
2986   \acrfullplfmt{#1}{#2}{#3}%
2987 }

\@Acrfullpl
2988 \def\@Acrfullpl#1#2[#3]{%
2989   \glsxtr@base@acrcmd\Acrfullpl\Glsxtrfullpl

```

```

2990 \Acrfullplfmt{#1}{#2}{#3}%
2991 }

\@ACRfullpl
2992 \def\@ACRfullpl#1#2[#3]{%
2993 \@glsxtr@base@acrcmd\ACRfullpl\GLSxtrfullpl
2994 \ACRfullplfmt{#1}{#2}{#3}%
2995 }

```

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

```

\glsaddkey
2996 \renewcommand*{\glsaddkey}[7]{%
2997 \key@ifundefined{glossentry}{#1}{%
2998 {%
2999 \define@key{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
3000 \appto{\gls@keymap}{, #1}{#1}}%
3001 \appto{\newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
3002 \appto{\newglossaryentryposthook}{%
3003 \letcs{@glo@tmp}{@glo@#1}}%
3004 \gls@assign@field{#2}{\glo@label}{#1}{@glo@tmp}}%
3005 }%
3006 \newcommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
3007 \newcommand*{#4}[1]{\Gls@entry@field{##1}{#1}}%

```

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

```

3008 \ifcsdef{@gls@user@#1@}{%
3009 {%
3010 \PackageError{glossaries}{%
3011 {Can't define '\string#5' as helper command
3012 '\expandafter\string\csname @gls@user@#1@\endcsname' already
3013 exists}}%
3014 {}}%
3015 }%
3016 {%
3017 \expandafter\newcommand\expandafter*\expandafter
3018 {\csname @gls@user@#1\endcsname}[2][]{%
3019 \new@ifnextchar[%
3020 {\csuse{@gls@user@#1@}{##1}{##2}}%
3021 {\csuse{@gls@user@#1@}{##1}{##2}[]}}%
3022 \csdef{@gls@user@#1@}{##1##2##3}{%
3023 \gls@field@link{##1}{##2}{##3}{##2}{##3}}%
3024 }%
3025 \newrobustcmd*{#5}{%
3026 \expandafter\gls@hyp@opt\csname @gls@user@#1\endcsname}%
3027 }%

```

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

```

3028 \ifcsdef{@Gls@user@#1@}{%

```

```

3029  {%
3030      \PackageError{glossaries}%
3031      {Can't define '\string#6' as helper command
3032       '\expandafter\string\csname @Gls@user@#1@\\endcsname' already
3033       exists}%
3034   {}%
3035 }%
3036 {%
3037     \expandafter\newcommand\expandafter*\expandafter
3038     {\csname @Gls@user@#1\\endcsname}[2] [] {%
3039         \new@ifnextchar[%
3040             {\csuse{@Gls@user@#1@}{##1}{##2}}%
3041             {\csuse{@Gls@user@#1@}{##1}{##2}[]}}%
3042     \csdef{@Gls@user@#1@}##1##2[##3]{%
3043         \@gls@field@link[\let\glscapscase@\secondofthree]%
3044         {##1}{##2}{##4{##2}##3}}%
3045     }%
3046     \newrobustcmd*{#6}{%
3047         \expandafter\@gls@hyp@opt\csname @Gls@user@#1\\endcsname}%
3048 }%

```

Finally the all caps version (modified):

```

3049  \ifcsdef{@GLS@user@#1@}%
3050  {%
3051      \PackageError{glossaries}%
3052      {Can't define '\string#7' as helper command
3053       '\expandafter\string\csname @GLS@user@#1@\\endcsname' already
3054       exists}%
3055   {}%
3056 }%
3057 {%
3058     \expandafter\newcommand\expandafter*\expandafter
3059     {\csname @GLS@user@#1\\endcsname}[2] [] {%
3060         \new@ifnextchar[%
3061             {\csuse{@GLS@user@#1@}{##1}{##2}}%
3062             {\csuse{@GLS@user@#1@}{##1}{##2}[]}}%
3063     \csdef{@GLS@user@#1@}##1##2[##3]{%
3064         \@gls@field@link[\let\glscapscase@\thirdofthree]%
3065         {##1}{##2}{\mfirstucMakeUppercase{##3{##2}##3}}}}%
3066     }%
3067     \newrobustcmd*{#7}{%
3068         \expandafter\@gls@hyp@opt\csname @GLS@user@#1\\endcsname}%
3069   {}%
3070 }%
3071 {%
3072     \PackageError{glossaries-extra}{Key '#1' already exists}{}%
3073 }%
3074 }%

```

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

```
3075 \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.

```
3076 \let\@glsxtr@org@checkfirsthyper\@gls@link@checkfirsthyper  
3077 \renewcommand*{\@gls@link@checkfirsthyper}{%
```

\ifglsused isn't useful in the post link hook as it's already been unset by then, so define a command that can be used in the post link hook. Since \@gls@link@checkfirsthyper is only used by commands like \gls but not by other commands, this seems the best place to put it to automatically set the value for the commands that change the first use flag. The other commands should set \glsxtrifwasfirstuse to \@secondoftwo (which is done in \@glsxtr@field@linkdefs).

```
3078 \ifglsused{\glslabel}{%  
3079 {\let\glsxtrifwasfirstuse\@secondoftwo}  
3080 {\let\glsxtrifwasfirstuse\@firstoftwo}{%
```

Store the category label for convenience.

```
3081 \edef\glscategorylabel{\glscategory{\glslabel}}%  
3082 \ifglsused{\glslabel}{%  
3083 {  
3084 \glsifcategoryattribute{\glscategorylabel}{nohypernext}{true}{%  
3085 {\KV@glslink@hyperfalse}{}}%  
3086 }%  
3087 {  
3088 \glsifcategoryattribute{\glscategorylabel}{nohyperfirst}{true}{%  
3089 {\KV@glslink@hyperfalse}{}}%  
3090 }%  
3091 \glslinkcheckfirsthyperhook  
3092 }
```

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.

```
3093 \ifdef\do@glsdisablehyperinlist  
3094 {}%  
3095 \let\@glsxtr@do@glsdisablehyperinlist\do@glsdisablehyperinlist  
3096 \renewcommand*{\do@glsdisablehyperinlist}{%  
3097 \glsxtr@do@glsdisablehyperinlist  
3098 \glsifattribute{\glslabel}{nohyper}{true}{\KV@glslink@hyperfalse}{}}%  
3099 }  
3100 }  
3101 {}
```

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

```
3102 \define@boolkey{glslink}{noindex}[true]{}  
3103 \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
3104 \ifdef{\gls@setdefault@glslink@opts}
3105 {
3106   \renewcommand*{\gls@setdefault@glslink@opts}{%
3107     \KV@glslink@noindexfalse
3108     \glsxtrsetaliasnoindex
3109   }
3110 }
3111 {
  Not defined so prepend it to \do@glsdisablehyperinlist to achieve the same effect.
3112   \newcommand*{\gls@setdefault@glslink@opts}{%
3113     \KV@glslink@noindexfalse
3114     \glsxtrsetaliasnoindex
3115   }
3116   \preto\do@glsdisablehyperinlist{\gls@setdefault@glslink@opts}
3117 }

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.)
3118 \providecommand*{\glsxtrsetaliasnoindex}{%
3119   \KV@glslink@noindextrue
3120 }

setaliasnoindex
3121 \newcommand*{\glsxtrsetaliasnoindex}{%
3122   \glsxtrifhasfield{alias}{\glslabel}%
3123   {%
3124     \let\glsxtrindexaliased\glsxtrindexaliased
3125     \glsxtrsetaliasnoindex
3126     \let\glsxtrindexaliased\@no@glsxtrindexaliased
3127   }%
3128 {}%
3129 }

xtrindexaliased
3130 \newcommand{\glsxtrindexaliased}{%
3131   \ifKV@glslink@noindex
3132   \else
3133     \begingroup
3134     \let\glsnumberformat\glsxtr@defaultnumberformat
3135     \edef\gls@counter{\csname glo@\glsdetoklabel{\glslabel}@counter\endcsname}%
3136     \glsxtr@saveentrycounter
3137     \glsxtralias{\glslabel}%
3138     \endgroup
3139   \fi
3140 }

```

```

xtrindexaliased
3141 \newcommand{\@no@glsxtrindexaliased}{%
3142   \PackageError{glossaries-extra}{\string\glsxtrindexaliased\space
3143   not permitted outside definition of \string\glsxtrsetaliasnoindex}{%
3144   }%
3145 }

xtrindexaliased Provide a command to redirect alias indexing, but only allow it to be used within \glsxtrsetaliasnoindex.
3146 \let\glsxtrindexaliased\@no@glsxtrindexaliased

DefaultGlsOpts Set the default options for \glslink etc.
3147 \newcommand*\GlsXtrSetDefaultGlsOpts[1]{%
3148   \renewcommand*\@gls@setdefault@glslink@opts{%
3149     \setkeys{glslink}{#1}%
3150     \glsxtrsetaliasnoindex
3151   }%
3152 }

lsxtrifindexing Provide user level command to access it in \glswriteentry.
3153 \newcommand*\glsxtrifindexing[2]{%
3154   \ifKV@glslink@noindex #2\else #1\fi
3155 }

\glswriteentry Redefine to test for indexonlyfirst category attribute.
3156 \renewcommand*\glswriteentry[2]{%
3157   \glsxtrifindexing
3158   {%
3159     \ifglsindexonlyfirst
3160       \ifglsused{#1}
3161         {\glsxtrdoautoindexname{#1}{dualindex}}%
3162         {#2}%
3163     \else
3164       \glsifattribute{#1}{indexonlyfirst}{true}%
3165     {%
3166       \ifglsused{#1}%
3167         {\glsxtrdoautoindexname{#1}{dualindex}}%
3168         {#2}%
3169     }%
3170     {#2}%
3171   \fi
3172 }%
3173 {%
3174 }

@do@@wrglossary Hook into glossary indexing command so that it can also use \index at the same time if
 required and add user hook.
3175 \appto{\@do@@wrglossary}{\glsxtr@do@@wrindex
3176   \glsxtrdowrglossaryhook{\gls@label}%
3177 }

```

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

Similarly for the “noidx” version:

```
s@noidxglossary
3178 \appto\gls@noidxglossary{\@glsxtr@do@@wrindex
3179   \glsxtrdowrglossaryhook{\@gls@label}%
3180 }

xtr@do@@wrindex
3181 \newcommand*{\@glsxtr@do@@wrindex}{%
3182   \glsxtrdoautoindexname{\@gls@label}{dualindex}%
3183 }

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.)
3184 \newcommand*{\glsxtrdowrglossaryhook}[1]{}

gls@alt@hyp@opt Commands like \gls have a star or plus version. Provide a third symbol that the user can adapt for convenience.
3185 \newcommand*{\@gls@alt@hyp@opt}[1]{%
3186   \let\glslinkvar\@firstofthree
3187   \let\@gls@hyp@opt@cs\relax
3188   \@ifstar{\s@gls@hyp@opt}%
3189   {\@ifnextchar+{%
3190     {\@firstoftwo{\p@gls@hyp@opt}}%
3191   {%
3192     \expandafter\@ifnextchar\@gls@alt@hyp@opt@char
3193     {\@firstoftwo{\@alt@gls@hyp@opt}}%
3194     {#1}%
3195   }%
3196 }%
3197 }

alt@gls@hyp@opt User version
3198 \newcommand*{\@alt@gls@hyp@opt}[1][]{%
3199   \let\glslinkvar\@firstofthree
3200   \expandafter\gls@hyp@opt@cs\expandafter[\@gls@alt@hyp@opt@keys,#1]}

lt@hyp@opt@char Contains the character used as the command modifier.
3201 \newcommand*{\@gls@alt@hyp@opt@char}{}}

lt@hyp@opt@keys Contains the option list used as the command modifier.
3202 \newcommand*{\@gls@alt@hyp@opt@keys}{}}

rSetAltModifier
3203 \newcommand*{\GlsXtrSetAltModifier}[2]{%
3204   \let\@gls@hyp@opt\@gls@alt@hyp@opt
```

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

```
3205 \ifstrequal{#1}{+}%
3206 {\PackageError{glossaries-extra}%
3207 {Can't use '#1' as modifier (it's already in use)}{}%
3208 {%
3209 \ifstrequal{#1}{*}%
3210 {\PackageError{glossaries-extra}%
3211 {Can't use '#1' as modifier (it's already in use)}{}%
3212 {}%
3213 }%
3214 \def\@gls@alt@hyp@opt@char{#1}%
3215 \def\@gls@alt@hyp@opt@keys{#2}%
3216 \ifdefequal\@glsxtr@record@setting\@glsxtr@record@setting@off
3217 {}%
3218 {}%
```

Let **bib2gls** know the modifier.

```
3219 \protected@write\@auxout{\string\providecommand{\string\@glsxtr@altmodifier}[1]{}%
3220 \protected@write\@auxout{\string\@glsxtr@altmodifier{#1}}%
3221 }%
3222 }
```

org@dohyperlink

```
3223 \let\glsxtr@org@dohyperlink\glsdohyperlink
```

glsnavhyperlink Since `\glsnavhyperlink` uses `\@glslink`, it's necessary to patch it uses `\glsdohyperlink` instead of `\glsxtrdohyperlink`. The simplest way to achieve this is to locally let `\glsxtrdohyperlink` to `\glsdohyperlink`.

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

```
3224 \ifdef\glsnavhyperlink
3225 {
3226 \renewcommand*\glsnavhyperlink[3][\@glo@type]{%
3227 \edef\gls@grplabel{#2}\protected@edef\gls@grptitle{#3}%
```

Scope:

```
3228 {%
3229 \let\glsxtrdohyperlink\glsxtr@org@dohyperlink
3230 \@glslink{\glsnavhyperlinkname{#1}{#2}}{#3}%
3231 }%
3232 }%
3233 }
3234 {}
```

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

sxtrdohyperlink

Unpleasant complications can occur if the text or first key etc contains `\gls`, particularly if there are hyperlinks. To get around this problem, patch `\glsdohyperlink` so that it temporarily makes `\gls` behave like `\glstext[<hyper=false,noindex>]`. (This will be overridden if the user explicitly cancels either of those options in the optional argument of `\gls`

or using the plus version.) This also patches the short form commands like `\acrshort` and `\glsxtrshort` to use `\glsentryshort` and, similarly, the long form commands like `\acrlong` and `\glsxtrlong` to use `\glsentrylong`. Added attribute check.

```

3235 \newcommand*{\glsxtrdohyperlink}[2]{%
3236   \glshasattribute{\glslabel}{targeturl}%
3237 {%
3238   \glshasattribute{\glslabel}{targetname}%
3239 {%
3240   \glshasattribute{\glslabel}{targetcategory}%
3241 {%
3242     \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
3243       {\glsgetattribute{\glslabel}{targetcategory}}%
3244       {\glsgetattribute{\glslabel}{targetname}}%
3245       {{\glsxtrprotectlinks#2}}%
3246     }%
3247 {%
3248     \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
3249       {}%
3250       {\glsgetattribute{\glslabel}{targetname}}%
3251       {{\glsxtrprotectlinks#2}}%
3252     }%
3253   }%
3254 {%
3255   \href{\glsgetattribute{\glslabel}{targeturl}}{%
3256     {{\glsxtrprotectlinks#2}}%
3257   }%
3258 }%
3259 }%

```

Check for alias.

```

3260   \glsfieldfetch{\glslabel}{alias}{\gloaliaslabel}%
3261   \ifdefvoid\gloaliaslabel
3262 {%
3263   \glsxtrhyperlink{\gloaliaslabel}{\glsxtrprotectlinks#2}%
3264 }%
3265 }%

```

Redirect link to the alias target.

```

3266   \glsxtrhyperlink
3267   {\glolinkprefix\glsdetoklabel{\gloaliaslabel}}%
3268   {{\glsxtrprotectlinks#2}}%
3269 }%
3270 }%
3271 }

```

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

```

3272 \ifdef{@glsshowtarget
3273 {%
3274   \newcommand{\glsxtrhyperlink}[2]{%
3275     \glsshowtarget{#1}%

```

```

3276     \hyperlink{#1}{#2}%
3277   }%
3278 }
3279 {
3280   \newcommand{\glsxtrhyperlink}[2]{\hyperlink{#1}{#2}}%
3281 }

```

`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.

```

3282 \renewrobustcmd*{\glshyperlink}[2][\glsentrytext{\@glo@label}]{%
3283   \glsdoifexists{#2}%
3284   {%
3285     \def\@glo@label{#2}%
3286     {\edef\glslabel{#2}%
3287       \glslink{\glolinkprefix\glslabel}{#1}}%
3288   }%
3289 }

```

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

```

3290 \renewcommand{\glsdisablehyper}{%
3291   \KV@glslink@hyperfalse
3292   \def\@glslink{\glsdonohyperlink}%
3293   \let\@glstarget\@secondoftwo
3294 }

```

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

```

3295 \renewcommand{\glsenablehyper}{%
3296   \KV@glslink@hypertrue
3297   \def\@glslink{\glsxtrdohyperlink}%
3298   \def\@glstarget{\glsdohypertarget}%
3299 }

```

`\glsdonohyperlink` This command was only introduced in glossaries v4.20, so it may not be defined (therefore use `\def`). For older glossaries versions, this won't be used if `hyperref` hasn't been loaded, which means the indexing will still take place. The generated text is scoped (the link text in `\hyperlink` is also scoped, so it's consistent).

```
3300 \def\glsdonohyperlink#1#2{{\glsxtrprotectlinks #2}}
```

`\@glslink` Reset `\@glslink` with patched versions:

```

3301 \ifcsundef{hyperlink}%
3302 {%
3303   \def\@glslink{\glsdonohyperlink}%
3304 }%

```

```

3305 {%
3306   \def\@glslink{\glsxtrdohyperlink}
3307 }

```

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

```

3308 \newcommand*\glsxtrprotectlinks{%
3309   \KV@glslink@hyperfalse
3310   \KV@glslink@noindextrue
3311   \let\@gls@\glsxtr@p@text@
3312   \let\@Gls@\Glsxtr@p@text@
3313   \let\@GLS@\GLSxtr@p@text@
3314   \let\@glspl@\glsxtr@p@plural@
3315   \let\@Glspl@\Glsxtr@p@plural@
3316   \let\@GLSpl@\GLSxtr@p@plural@
3317   \let\@glsxtrshort@\glsxtr@p@short@
3318   \let\@Glsxtrshort@\Glsxtr@p@short@
3319   \let\@GLSxtrshort@\GLSxtr@p@short@
3320   \let\@glsxtrlong@\glsxtr@p@long@
3321   \let\@Glsxtrlong@\Glsxtr@p@long@
3322   \let\@GLSxtrlong@\GLSxtr@p@long@
3323   \let\@glsxtrshortpl@\glsxtr@p@shortpl@
3324   \let\@Glsxtrshortpl@\Glsxtr@p@shortpl@
3325   \let\@GLSxtrshortpl@\GLSxtr@p@shortpl@
3326   \let\@glsxtrlongpl@\glsxtr@p@longpl@
3327   \let\@Glsxtrlongpl@\Glsxtr@p@longpl@
3328   \let\@GLSxtrlongpl@\GLSxtr@p@longpl@
3329   \let\@acrshort@\glsxtr@p@acrshort@
3330   \let\@Acrshort@\Glsxtr@p@acrshort@
3331   \let\@ACRshort@\GLSxtr@p@acrshort@
3332   \let\@acrshortpl@\glsxtr@p@acrshortpl@
3333   \let\@Acrshortpl@\Glsxtr@p@acrshortpl@
3334   \let\@ACRshortpl@\GLSxtr@p@acrshortpl@
3335   \let\@acrlong@\glsxtr@p@acrlong@
3336   \let\@Acrlong@\Glsxtr@p@acrlong@
3337   \let\@ACRLong@\GLSxtr@p@acrlong@
3338   \let\@acrlongpl@\glsxtr@p@acrlongpl@
3339   \let\@Acrlongpl@\Glsxtr@p@acrlongpl@
3340   \let\@ACRLongpl@\GLSxtr@p@acrlongpl@
3341 }

```

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

```

@glsxtr@p@text@
3342 \def\glsxtr@p@text@#1#2[#3]{{\glstext@{#1}{#2}[#3]}}
@Glsxtr@p@text@
3343 \def\Glsxtr@p@text@#1#2[#3]{{\Glstext@{#1}{#2}[#3]}}

```

```

@GLSxtr@p@text@
 3344 \def\@GLSxtr@p@text@#1#2[#3]{{\@GLStext@{#1}{#2}[#3]}}
lsxtr@p@plural@
 3345 \def\@glsxtr@p@plural@#1#2[#3]{{\@glsplural@{#1}{#2}[#3]}}
lsxtr@p@plural@
 3346 \def\@Glsxtr@p@plural@#1#2[#3]{{\@Glsplural@{#1}{#2}[#3]}}
LSxtr@p@plural@
 3347 \def\@GLSxtr@p@plural@#1#2[#3]{{\@GLSplural@{#1}{#2}[#3]}}
glsxtr@p@short@
 3348 \def\@glsxtr@p@short@#1#2[#3]{%
 3349   {%
 3350     \glssetabbrvfmt{\glscategory{#2}}%
 3351     \glsabbrvfont{\glsentryshort{#2}}#3%
 3352   }%
 3353 }
Glsxtr@p@short@
 3354 \def\@Glsxtr@p@short@#1#2[#3]{%
 3355   {%
 3356     \glssetabbrvfmt{\glscategory{#2}}%
 3357     \glsabbrvfont{\Glsentryshort{#2}}#3%
 3358   }%
 3359 }
GLSxtr@p@short@
 3360 \def\@GLSxtr@p@short@#1#2[#3]{%
 3361   {%
 3362     \glssetabbrvfmt{\glscategory{#2}}%
 3363     \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshort{#2}}#3}%
 3364   }%
 3365 }
sxtr@p@shortpl@
 3366 \def\@glsxtr@p@shortpl@#1#2[#3]{%
 3367   {%
 3368     \glssetabbrvfmt{\glscategory{#2}}%
 3369     \glsabbrvfont{\glsentryshortpl{#2}}#3%
 3370   }%
 3371 }
sxtr@p@shortpl@
 3372 \def\@Glsxtr@p@shortpl@#1#2[#3]{%
 3373   {%
 3374     \glssetabbrvfmt{\glscategory{#2}}%

```

```

3375   \glsabbrvfont{\Glsentryshortpl{#2}}#3%
3376 }%
3377 }

Sxtr@p@shortpl@

3378 \def\@GLSxtr@p@shortpl@#1#2[#3] {%
3379   {%
3380     \glssetabrvfmt{\glscategory{#2}}%
3381     \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshortpl{#2}}#3}%
3382   }%
3383 }

@glsxtr@p@long@

3384 \def\@glsxtr@p@long@#1#2[#3]{{\glsentrylong{#2}}#3}

@Glsxtr@p@long@

3385 \def\@Glsxtr@p@long@#1#2[#3]{{\Glsentrylong{#2}}#3}

@GLSxtr@p@long@

3386 \def\@GLSxtr@p@long@#1#2[#3] {%
3387   {\mfirstucMakeUppercase{\glslongfont{\glsentrylong{#2}}#3}}}

lsxtr@p@longpl@

3388 \def\@glsxtr@p@longpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}

lsxtr@p@longpl@

3389 \def\@Glsxtr@p@longpl@#1#2[#3]{{\glslongfont{\Glsentrylongpl{#2}}#3}}

LSxtr@p@longpl@

3390 \def\@GLSxtr@p@longpl@#1#2[#3] {%
3391   {\mfirstucMakeUppercase{\glslongfont{\glsentrylongpl{#2}}#3}}}

xtr@p@acrshort@

3392 \def\@glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\glsentryshort{#2}}#3} }

xtr@p@acrshort@

3393 \def\@Glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\Glsentryshort{#2}}#3} }

xtr@p@acrshort@

3394 \def\@GLSxtr@p@acrshort@#1#2[#3] {%
3395   {\mfirstucMakeUppercase{\acronymfont{\glsentryshort{#2}}#3}}}

r@p@acrshortpl@

3396 \def\@glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\glsentryshortpl{#2}}#3} }

r@p@acrshortpl@

3397 \def\@Glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\Glsentryshortpl{#2}}#3}}

```

```

r@p@acrshortpl@
 3398 \def\@GLSxtr@p@acrshortpl@#1#2[#3]{%
 3399   {\mfirstucMakeUppercase{\acronymfont{\glsentryshortpl{#2}}#3}}}

sxtr@p@acrlong@
 3400 \def\@glsxtr@p@acrlong@#1#2[#3]{{\glsentrylong{#2}}#3}

sxtr@p@acrlong@
 3401 \def\@Glsxtr@p@acrlong@#1#2[#3]{{\Glsentrylong{#2}}#3}

Sxtr@p@acrlong@
 3402 \def\@GLSxtr@p@acrlong@#1#2[#3]{%
 3403   {\mfirstucMakeUppercase{\glsentrylong{#2}}#3}}}

tr@p@acrlongpl@
 3404 \def\@glsxtr@p@acrlongpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}

tr@p@acrlongpl@
 3405 \def\@Glsxtr@p@acrlongpl@#1#2[#3]{{\Glsentrylongpl{#2}}#3}

tr@p@acrlongpl@
 3406 \def\@GLSxtr@p@acrlongpl@#1#2[#3]{%
 3407   {\mfirstucMakeUppercase{\glsentrylongpl{#2}}#3}}}

Commands to minimise conflict.

\@glsxtrp@opt
 3408 \newcommand*{\@glsxtrp@opt}{hyper=false,noindex}

\glsxtrsetpopts Used in glossary to switch hyperlinks on for the \glsxtrp type of commands.
 3409 \newcommand*{\glsxtrsetpopts}[1]{%
 3410   \renewcommand*{\@glsxtrp@opt}{#1}%
 3411 }

\lossxtrsetpopts Used in glossary to switch hyperlinks on for the \glossxtrp type of commands.
 3412 \newcommand*{\glossxtrsetpopts}{%
 3413   \glsxtrsetpopts{noindex}%
 3414 }

\@@glsxtrp
 3415 \newrobustcmd*{\@@glsxtrp}[2]{%
    Add scope.
 3416   {%
 3417     \let\glspostlinkhook\relax
 3418     \csname#1\expandafter\endcsname\expandafter[\@glsxtrp@opt]{#2}[]%
 3419   }%
 3420 }

```

```

\@glsxtrp
3421 \newrobustcmd*\{@glsxtrp}[2]{%
3422   \ifcsdef{gls#1}%
3423   {%
3424     \@@glsxtrp{gls#1}{#2}%
3425   }%
3426   {%
3427     \ifcsdef{glsxtr#1}%
3428     {%
3429       \@@glsxtrp{glsxtr#1}{#2}%
3430     }%
3431     {%
3432       \PackageError{glossaries-extra}{‘#1’ not recognised by
3433         \string\glsxtrp{}}%
3434     }%
3435   }%
3436 }

\@Glsxtrp
3437 \newrobustcmd*\{@Glsxtrp}[2]{%
3438   \ifcsdef{Gls#1}%
3439   {%
3440     \@@glsxtrp{Gls#1}{#2}%
3441   }%
3442   {%
3443     \ifcsdef{Glsxtr#1}%
3444     {%
3445       \@@glsxtrp{Glsxtr#1}{#2}%
3446     }%
3447     {%
3448       \PackageError{glossaries-extra}{‘#1’ not recognised by
3449         \string\Glsxtrp{}}%
3450     }%
3451   }%
3452 }

\@GLSxtrp
3453 \newrobustcmd*\{@GLSxtrp}[2]{%
3454   \ifcsdef{GLS#1}%
3455   {%
3456     \@@glsxtrp{GLS#1}{#2}%
3457   }%
3458   {%
3459     \ifcsdef{GLSxtr#1}%
3460     {%
3461       \@@glsxtrp{GLSxtr#1}{#2}%
3462     }%
3463     {%
3464       \PackageError{glossaries-extra}{‘#1’ not recognised by

```

```

3465      \string\GLSxtrp{}%
3466  }%
3467 }%
3468 }

\glsxtr@entry@p
3469 \newrobustcmd*\glsxtr@headentry@p[2]{%
3470   \glsifattribute{#1}{headuc}{true}%
3471   {%
3472     \mfirstucMakeUppercase{\gls@entry@field{#1}{#2}}%
3473   }%
3474   {%
3475     \gls@entry@field{#1}{#2}%
3476   }%
3477 }

\glsxtrp Not robust as it needs to expand somewhat.
3478 \ifdef\texorpdfstring
3479 {
3480   \newcommand{\glsxtrp}[2]{%
3481     \protect\NoCaseChange
3482     {%
3483       \protect\texorpdfstring
3484       {%
3485         \protect\glsxtrifinmark
3486         {%
3487           \ifcsdef{glsxtrhead#1}%
3488             {%
3489               \protect\csuse{glsxtrhead#1}{#2}}%
3490             {%
3491               {%
3492                 \glsxtr@headentry@p{#2}{#1}}%
3493               {%
3494                 {%
3495                   \glsxtrp{#1}{#2}}%
3496                 {%
3497                   \protect\@glsxtrp{#1}{#2}}%
3498                 {%
3499                   {%
3500                     \protect\gls@entry@field{#2}{#1}}%
3501                   {%
3502                     {%
3503                   }%
3504                 }%
3505               }%
3506             \newcommand{\glsxtrp}[2]{%
3507               \protect\NoCaseChange
3508               {%
3509                 \protect\glsxtrifinmark

```

```

3510      {%
3511          \ifcsdef{glsxtrhead#1}%
3512              {%
3513                  {\protect\csuse{glsxtrhead#1}}%
3514              }%
3515              {%
3516                  \glsxtr@headentry@p{\#2}{\#1}%
3517              }%
3518          }%
3519          {%
3520              {\glsxtrp{\#1}{\#2}}%
3521          }%
3522      }%
3523  }
3524 }

```

Provide short synonyms for the most common option.

```

\glsps
3525 \newcommand*\glsps{\glsxtrp{short}}
\glspt
3526 \newcommand*\glspt{\glsxtrp{text}}

```

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

```

3527 \ifdef\texorpdfstring
3528 {
3529     \newcommand{\Glsxtrp}[2]{%
3530         \protect\NoCaseChange
3531         {%
3532             \protect\texorpdfstring
3533             {%
3534                 \protect\glsxtrifinmark
3535             }%
3536             \ifcsdef{Glsxtrhead#1}%
3537                 {%
3538                     {\protect\csuse{Glsxtrhead#1}{\#2}}%
3539                 }%
3540                 {%
3541                     \protect{@Gls@entry@field{\#2}{\#1}}%
3542                 }%
3543             }%
3544             {%
3545                 {\glsxtrp{\#1}{\#2}}%
3546             }%
3547         }%
3548         {%
3549             \protect{@gls@entry@field{\#2}{\#1}}%

```

```

3550      }%
3551    }%
3552  }
3553}%
3554{%
3555 \newcommand{\Glsxtrp}[2]{%
3556   \protect\NoCaseChange
3557   {%
3558     \protect\glsxtrifinmark
3559     {%
3560       \ifcsdef{Glsxtrhead#1}{%
3561         {%
3562           {\protect\csuse{Glsxtrhead#1}}%
3563         }%
3564         {%
3565           \protect{@Gls@entry@field{#2}{#1}}%
3566         }%
3567       }%
3568       {%
3569         {\@Glsxtrp{#1}{#2}}%
3570       }%
3571     }%
3572   }%
3573 }%

```

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

```

3574 \ifdef\texorpdfstring
3575 {%
3576   \newcommand{\GLSxtrp}[2]{%
3577     \protect\NoCaseChange
3578     {%
3579       \protect\texorpdfstring
3580       {%
3581         \protect\glsxtrifinmark
3582         {%
3583           \ifcsdef{GLSxtr#1}{%
3584             {%
3585               {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
3586             }%
3587             {%
3588               \protect\mfirstrucMakeUppercase
3589               {%
3590                 \protect{@gls@entry@field{#2}{#1}}%
3591               }%
3592             }%
3593           }%
3594           {%
3595             {\@GLSxtrp{#1}{#2}}%
3596           }%

```

```

3597      }%
3598      {%
3599          \protect\@gls@entry@field{#2}{#1}%
3600      }%
3601  }%
3602 }
3603 }
3604 {
3605 \newcommand{\GLSxtrp}[2]{%
3606     \protect\NoCaseChange
3607     {%
3608         \protect\glsxtrifinmark
3609     {%
3610         \ifcsdef{GLSxtr#1}%
3611         {%
3612             {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
3613         }%
3614     {%
3615         \protect\mfirstucMakeUppercase
3616     {%
3617         \protect\@gls@entry@field{#2}{#1}%
3618     }%
3619 }%
3620 }%
3621 {%
3622     \@GLSxtrp{#1}{#2}%
3623 }%
3624 }%
3625 }
3626 }

```

### 1.3.5 Entry Counting

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

First adjust definitions of the unset and reset commands to provide a hook, but changing the flag can cause problems in certain situations, so to allow the normal unsetting to be temporarily disabled, `\@glsunset` is let to `\@glsxtr@unset`, which performs the actual unsetting through `\@glsunset` and then does the hook. This means that the unsetting (and the hook) can be switched off by redefining `\@glsunset` and then switched back on again by changing the definition back to `\@glsxtr@unset`.

```
\@glsxtr@unset Global unset.

3627 \newcommand*{\@glsxtr@unset}[1]{%
```

```

3628  \@@glsunset{#1}%
3629  \glsxtrpostunset{#1}%
3630 }%

\@glsunset Global unset.
3631 \let\@glsunset\glsxtrunset

glsxtrpostunset
3632 \newcommand*\glsxtrpostunset[1] {}

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

tUnsetBuffering
3633 \newcommand*\GlsXtrStartUnsetBuffering{%
3634  \@ifstar\s@GlsXtrStartUnsetBuffering\GlsXtrStartUnsetBuffering
3635 }

tUnsetBuffering Unstarred version doesn't check for duplicates.
3636 \newcommand*\GlsXtrStartUnsetBuffering{%
3637  \let\@glsxtr@org@unset@buffer\glsxtrunset@buffer
3638  \def\@glsxtr@unset@buffer{}%
3639  \let\@glsunset\glsxtrbuffer@unset
3640 }

tUnsetBuffering Starred version checks for duplicates.
3641 \newcommand*\s@GlsXtrStartUnsetBuffering{%
3642  \let\@glsxtr@org@unset@buffer\glsxtrunset@buffer
3643  \def\@glsxtr@unset@buffer{}%
3644  \let\@glsunset\glsxtrbuffer@nodup@unset
3645 }

xtrbuffer@unset This must use a global change since \gls may have to be placed inside \mbox (for example,
with soul commands).
3646 \newcommand*\glsxtrbuffer@unset[1]{%
3647  \listxadd\glsxtrunset@buffer{#1}%
3648 }

fer@nodup@unset Alternative version that avoids duplicates. One level of expansion is performed on the argument
in case it's a control sequence containing the label. (Not using \xifinlist as the added complexity might cause problems that the buffering is trying to overcome.)
3649 \newcommand*\glsxtrbuffer@nodup@unset[1]{%
3650  \expandafter\ifinlist\expandafter{#1}{\glsxtrunset@buffer}{}%
3651  {\listxadd\glsxtrunset@buffer{#1}}%
3652 }

pUnsetBuffering
3653 \newcommand*\GlsXtrStopUnsetBuffering{%
3654  \@ifstar\s@GlsXtrStopUnsetBuffering\GlsXtrStopUnsetBuffering
3655 }

```

```

pUnsetBuffering Unstarred form (global unset).
3656 \newcommand*{\@GlsXtrStopUnsetBuffering}{%
3657   \let\glsunset\glsxtr@unset
3658   \forlistloop\glsunset\glsxtr@unset@buffer
3659   \let\glsxtr@unset@buffer\glsxtr@org@unset@buffer
3660 }

pUnsetBuffering Starred form (local unset).
3661 \newcommand*{\s@GlsXtrStopUnsetBuffering}{%
3662   \forlistloop\glslocalunset\glsxtr@unset@buffer
3663   \let\glsunset\glsxtr@unset
3664 }

dUnsetBuffering Discards pending buffer and restores \glsunset.
3665 \newcommand*{\GlsXtrDiscardUnsetBuffering}{%
3666   \let\glsunset\glsxtr@unset
3667   \let\glsxtr@unset@buffer\glsxtr@org@unset@buffer
3668 }

setBufferedList Iterate over labels stored in the current buffer. The argument is the handler macro.
3669 \newcommand*{\GlsXtrForUnsetBufferedList}[1]{%
3670   \forlistloop#1\glsxtr@unset@buffer
3671 }

\glslocalunset Local unset.
3672 \renewcommand*{\glslocalunset}[1]{%
3673   \@@glslocalunset{#1}%
3674   \glsxtrpostlocalunset{#1}%
3675 }%

rpostlocalunset
3676 \newcommand*{\glsxtrpostlocalunset}[1]{}}

\glsreset Global reset.
3677 \renewcommand*{\glsreset}[1]{%
3678   \@@glsreset{#1}%
3679   \glsxtrpostreset{#1}%
3680 }%

glsxtrpostreset
3681 \newcommand*{\glsxtrpostreset}[1]{}}

\glslocalreset Local reset.
3682 \renewcommand*{\glslocalreset}[1]{%
3683   \@@glslocalreset{#1}%
3684   \glsxtrpostlocalreset{#1}%
3685 }%

```

```
rpostlocalreset  
3686 \newcommand*{\glsxtrpostlocalreset}[1] {}
```

slocalreseteach Locally reset a list of entries.

```
3687 \newcommand*{\glslocalreseteach}[1]{%  
3688   \gls@ifnotmeasuring  
3689   {  
3690     \@for\@gls@thislabel:=#1\do{  
3691       \glsdoifexists{\@gls@thislabel}{%  
3692         {  
3693           \glslocalreset{\@gls@thislabel}{%  
3694         }%  
3695       }%  
3696     }%  
3697 }
```

slocalunseteach Locally unset a list of entries.

```
3698 \newcommand*{\glslocalunseteach}[1]{%  
3699   \gls@ifnotmeasuring  
3700   {  
3701     \@for\@gls@thislabel:=#1\do{  
3702       \glsdoifexists{\@gls@thislabel}{%  
3703         {  
3704           \glslocalunset{\@gls@thislabel}{%  
3705         }%  
3706       }%  
3707     }%  
3708 }
```

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

```
3709 \newcommand*{\GlsXtrEnableEntryCounting}[2]{%
```

  Enable entry counting:

```
3710   \glsenableentrycount
```

  Redefine \gls etc:

```
3711   \renewcommand*{\gls}{\cgls}{%  
3712   \renewcommand*{\Gls}{\cGls}{%  
3713   \renewcommand*{\glsp}{\cglspl}{%  
3714   \renewcommand*{\Glsp}{\cGlsp}{%  
3715   \renewcommand*{\GLS}{\cGLS}{%  
3716   \renewcommand*{\GLSp}{\cGLSp}{%
```

  Set the entrycount attribute:

```
3717   \@glsxtr@setentrycountunsetattr{#1}{#2}{%
```

  In case this command is used again:

```
3718   \let\GlsXtrEnableEntryCounting\@glsxtr@setentrycountunsetattr  
3719   \renewcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
```

```

3720 \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryUnitCounting\space
3721   can't be used with \string\GlsXtrEnableEntryCounting}%
3722 {Use one or other but not both commands}%
3723 }

```

### ycountunsetattr

```

3724 \newcommand*{\@glsxtr@setentrycountunsetattr}[2]{%
3725   \@for\@glsxtr@cat:=#1\do
3726   {%
3727     \ifdefempty{\@glsxtr@cat}{%
3728     {%
3729       \glssetcategoryattribute{\@glsxtr@cat}{entrycount}{#2}%
3730     }%
3731   }%
3732 }

```

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

### enableentrycount

```

3733 \renewcommand*{\glsenableentrycount}{%

```

Enable new fields:

```

3734 \appto\@newglossaryentry@defcounters{\@newglossaryentry@defcounters}%

```

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

```

3735 \renewcommand*{\gls@defdocnewglossaryentry}{%
3736   \renewcommand*{\newglossaryentry}[2]{%
3737     \PackageError{glossaries}{\string\newglossaryentry\space
3738       may only be used in the preamble when entry counting has
3739       been activated}{If you use \string\glsenableentrycount\space
3740       you must place all entry definitions in the preamble not in
3741       the document environment}%
3742   }%
3743 }

```

New commands to access new fields:

```

3744 \newcommand*{\glsentrycurrcount}[1]{%
3745   \ifcsundef{glo@\glsdetoklabel{##1}@currcount}%
3746   {0}{\@gls@entry@field{##1}{currcount}}%
3747 }%
3748 \newcommand*{\glsentryprevcount}[1]{%
3749   \ifcsundef{glo@\glsdetoklabel{##1}@prevcount}%
3750   {0}{\@gls@entry@field{##1}{prevcount}}%
3751 }%

```

Adjust post unset and reset:

```

3752 \let\@glsxtr@entrycount@org@unset\glsxtrpostunset
3753 \renewcommand*{\glsxtrpostunset}[1]{%
3754   \@glsxtr@entrycount@org@unset{##1}%
3755   \@gls@increment@currcount{##1}%
3756 }

```

```

3757 \let\@glsxtr@entrycount@org@localunset\glsxtrpostlocalunset
3758 \renewcommand*{\glsxtrpostlocalunset}[1]{%
3759   \@glsxtr@entrycount@org@localunset{##1}%
3760   \@gls@local@increment@currcount{##1}%
3761 }%
3762 \let\@glsxtr@entrycount@org@reset\glsxtrpostreset
3763 \renewcommand*{\glsxtrpostreset}[1]{%
3764   \@glsxtr@entrycount@org@reset{##1}%
3765   \csgdef{glo@\glsdetoklabel{##1}@currcount}{0}%
3766 }%
3767 \let\@glsxtr@entrycount@org@localreset\glsxtrpostlocalreset
3768 \renewcommand*{\glsxtrpostlocalreset}[1]{%
3769   \@glsxtr@entrycount@org@localreset{##1}%
3770   \csdef{glo@\glsdetoklabel{##1}@currcount}{0}%
3771 }%

```

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

```

3772 \let\@cgls@\@@cgls@
3773 \let\@cglspl@\@@cglspl@

3774 \let\@cGls@\@@cGls@
3775 \let\@cGlspl@\@@cGlspl@
3776 \let\@cGLS@\@@cGLS@
3777 \let\@cGLSpl@\@@cGLSpl@

```

The rest is as the original definition.

```

3778 \AtEndDocument{\@gls@write@entrycounts}%
3779 \renewcommand*{\@gls@entry@count}[2]{%
3780   \csgdef{glo@\glsdetoklabel{##1}@prevcount}{##2}%
3781 }%
3782 \let\glseenableentrycount\relax
3783 \renewcommand*{\glseenableentryunitcount}{%
3784   \PackageError{glossaries-extra}{\string\glseenableentryunitcount\space
3785   can't be used with \string\glseenableentrycount}%
3786   {Use one or other but not both commands}%
3787 }%
3788 }

```

`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.

```

3789 \renewcommand*{\@gls@write@entrycounts}{%
3790   \immediate\write\auxout
3791   {\string\providetomark{\string\gls@entry@count}[2]{}}
3792   \count@=0\relax
3793   \forallglsentries{\glsentry}{%
3794     \glshasattribute{\glsentry}{entrycount}%
3795     {%
3796       \ifglsused{\glsentry}%
3797       {%

```

```

3798     \immediate\write\@auxout
3799     {\string\@gls@entry@count{\@glsentry}{\glsentrycurrcount{\@glsentry}}}%%
3800   }%
3801   {}%
3802   \advance\count@ by \cne
3803 }%
3804 {}%
3805 }%
3806 \ifnum\count@=0
3807   \GlossariesExtraWarning{Entry counting has been enabled
3808   \MessageBreak with \string\glsenableentrycount\space but the
3809   \MessageBreak attribute ‘entrycount’ hasn’t
3810   \MessageBreak been assigned to any of the defined
3811   \MessageBreak entries}%
3812 \fi
3813 }

```

rifcounttrigger

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

```

3814 \newcommand*{\glsxtrifcounttrigger}[3]{%
3815   \glshasattribute{#1}{entrycount}%
3816   {}%
3817   \ifnum\glsentryprevcount{#1}>\glsgetattribute{#1}{entrycount}\relax
3818     #3%
3819   \else
3820     #2%
3821   \fi
3822 }%
3823 {#3}%
3824 }

```

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

```

\@@cglss@
3825 \def\@@cglss@#1#2[#3]{%
3826   \glsxtrifcounttrigger{#2}%
3827   {}%
3828   \cglssformat{#2}{#3}%
3829   \glsunset{#2}%
3830 }%
3831 {}%
3832   \gls@{#1}{#2}{#3}%
3833 }%
3834 }%

```

```
\@@cglspl@  
3835 \def\@@cglspl@#1#2[#3]{%  
3836   \glsxtrifcounttrigger{#2}{%  
3837   {  
3838     \cglsplformat{#2}{#3}{%  
3839     \glsunset{#2}{%  
3840   }{  
3841   {  
3842     \glspl@{#1}{#2}{#3}{%  
3843   }{  
3844 }{%
```

```
\@@cGls@
```

```
3845 \def\@@cGls@#1#2[#3]{%  
3846   \glsxtrifcounttrigger{#2}{%  
3847   {  
3848     \cGlsformat{#2}{#3}{%  
3849     \glsunset{#2}{%  
3850   }{  
3851   {  
3852     \Gls@{#1}{#2}{#3}{%  
3853   }{  
3854 }{%
```

```
\@@cGlsp@
```

```
3855 \def\@@cGlsp@#1#2[#3]{%  
3856   \glsxtrifcounttrigger{#2}{%  
3857   {  
3858     \cGlspformat{#2}{#3}{%  
3859     \glsunset{#2}{%  
3860   }{  
3861   {  
3862     \Glsp@{#1}{#2}{#3}{%  
3863   }{  
3864 }{%
```

```
\@@cGLS@
```

```
3865 \def\@@cGLS@#1#2[#3]{%  
3866   \glsxtrifcounttrigger{#2}{%  
3867   {  
3868     \cGLSformat{#2}{#3}{%  
3869     \glsunset{#2}{%  
3870   }{  
3871   {  
3872     \GLS@{#1}{#2}{#3}{%  
3873   }{  
3874 }{%
```

```
\@@cGLSp@
```

```

3875 \def\@cGLSpl@#1#2[#3]{%
3876   \glsxtrifcounttrigger{#2}%
3877   {%
3878     \cGLSplformat{#2}{#3}%
3879     \glsunset{#2}%
3880   }%
3881   {%
3882     \cGLSpl@{#1}{#2}[#3]%
3883   }%
3884 }%

```

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

```

\@cgl@
3885 \def\@cgl@#1#2[#3]{\@gls@{#1}{#2}[#3]}

\@cGls@
3886 \def\@cGls@#1#2[#3]{\@Gls@{#1}{#2}[#3]}

\@cglspl@
3887 \def\@cglspl@#1#2[#3]{\@glspl@{#1}{#2}[#3]}

\@cGlspl@
3888 \def\@cGlspl@#1#2[#3]{\@Glspl@{#1}{#2}[#3]}

```

Add all upper case versions not provided by glossaries.

```

\cGLS
3889 \newrobustcmd*\cGLS{\@gls@hyp@opt\@cGLS}

\@cGLS Defined the un-starred form. Need to determine if there is a final optional argument
3890 \newcommand*\@cGLS[2][]{%
3891   \new@ifnextchar[\@cGLS@{#1}{#2}]{\@cGLS@{#1}{#2}[]}{%
3892 }

\@cGLS@
3893 \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.
3894 \newcommand*\cGLSformat[2]{%
3895   \expandafter\mfirstuc\expandafter{\cglformat{#1}{#2}}%
3896 }

\cGLSpl
3897 \newrobustcmd*\cGLSpl{\@gls@hyp@opt\@cGLSpl}

```

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

```
3898 \newcommand*\@cGLSp1[2] []{%
3899   \new@ifnextchar[\{\@cGLSp1@{\#1}{\#2}\}{\@cGLSp1@{\#1}{\#2}[] }%
3900 }
```

\@cGLSp1@

```
3901 \def\@cGLSp1@#1#2[#3]{\@cGLSp1@{\#1}{\#2} [#3]}
```

\cGLSp1format Format used by \cGLSp1 if entry only used once on previous run. The first argument is the label, the second argument is the insert text.

```
3902 \newcommand*\cGLSp1format[2]{%
3903   \expandafter\mfistucMakeUppercase\expandafter{\cGLSp1format{\#1}{\#2}}%
3904 }
```

Modify the trigger formats to check for the regular attribute.

\cglspformat

```
3905 \renewcommand*\cglspformat[2]{%
3906   \glsifregular{\#1}%
3907   {\glsentryfirst{\#1}}%
3908   {\ifglshaslong{\#1}{\glsentrylong{\#1}}{\glsentryfirst{\#1}}}#2%
3909 }
```

\cGlsformat

```
3910 \renewcommand*\cGlsformat[2]{%
3911   \glsifregular{\#1}%
3912   {\Glsentryfirst{\#1}}%
3913   {\ifglshaslong{\#1}{\Glsentrylong{\#1}}{\Glsentryfirst{\#1}}}#2%
3914 }
```

\cglsp1format

```
3915 \renewcommand*\cglsp1format[2]{%
3916   \glsifregular{\#1}%
3917   {\glsentryfirstplural{\#1}}%
3918   {\ifglshaslong{\#1}{\glsentrylongpl{\#1}}{\glsentryfirstplural{\#1}}}#2%
3919 }
```

\cGls1format

```
3920 \renewcommand*\cGls1format[2]{%
3921   \glsifregular{\#1}%
3922   {\Glsentryfirstplural{\#1}}%
3923   {\ifglshaslong{\#1}{\Glsentrylongpl{\#1}}{\Glsentryfirstplural{\#1}}}#2%
3924 }
```

New code similar to above for unit counting.

defunitcounters

```
3925 \newcommand*\@newglossaryentry@defunitcounters{%
```

```

3926 \edef\@glo@countunit{\csuse{glsxtr@categoryattr@@\@glo@category \unitcount}}%
3927 \ifdefvoid\@glo@countunit
3928 {}%
3929 {}%
3930 \@glsxtr@ifunitcounter{\@glo@countunit}%
3931 {}%
3932 {\expandafter\glsxtr@addunitcounter\expandafter{\@glo@countunit}}%
3933 {}%
3934 }

r@unitcountlist List to keep track of which counters are being used by the entry unit count facility.
3935 \newcommand*{\@glsxtr@unitcountlist}{}

@addunitcounter
3936 \newcommand*{\@glsxtr@addunitcounter}[1]{%
3937 \listadd{\@glsxtr@unitcountlist}{#1}%
3938 \ifcsundef{glsxtr@theunit@#1}
3939 {}%
3940 \ifcsdef{theH#1}%
3941 {\csdef{glsxtr@theunit@#1}{\csuse{theH#1}}}%
3942 {\csdef{glsxtr@theunit@#1}{\csuse{the#1}}}%
3943 }%
3944 {}%
3945 }

r@ifunitcounter
3946 \newcommand*{\@glsxtr@ifunitcounter}[3]{%
3947 \xifinlist{#1}{\@glsxtr@unitcountlist}{#2}{#3}%
3948 }

urrentunitcount
3949 \newcommand*{\@glsxtr@currentunitcount}[1]{%
3950 glo@\glstoklabel{#1}@currunit@\glsgetattribute{#1}{unitcount}.%
3951 \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3952 }

eviousunitcount
3953 \newcommand*{\@glsxtr@previousunitcount}[1]{%
3954 glo@\glstoklabel{#1}@prevunit@\glsgetattribute{#1}{unitcount}.%
3955 \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3956 }

t@currunitcount
3957 \newcommand*{\@gls@increment@currunitcount}[1]{%
3958 \glshasattribute{#1}{unitcount}%
3959 {}%
3960 \edef\@glsxtr@csname{\@glsxtr@currentunitcount{#1}}%
3961 \ifcsundef{\@glsxtr@csname}%

```

```

3962   {%
3963     \csgdef{\@glsxtr@csname}{1}%
3964     \listcsxadd
3965       {\glo@\glsdetoklabel{#1}@unitlist}%
3966       {\@glsgetattribute{#1}{unitcount}.%
3967         \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%}
3968     }%
3969   }%
3970   {%
3971     \csxdef{\@glsxtr@csname}%
3972       {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
3973     }%
3974   }%
3975   {}%
3976 }

t@currunitcount
3977 \newcommand*{\@gls@local@increment@currunitcount}[1]{%
3978   \glshasattribute{#1}{unitcount}%
3979   {%
3980     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{#1}}%
3981     \ifcsundef{\@glsxtr@csname}%
3982     {%
3983       \csdef{\@glsxtr@csname}{1}%
3984       \listcseadd
3985         {\glo@\glsdetoklabel{#1}@unitlist}%
3986         {\@glsgetattribute{#1}{unitcount}.%
3987           \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%}
3988     }%
3989   }%
3990   {%
3991     \csedef{\@glsxtr@csname}%
3992       {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
3993     }%
3994   }%
3995   {}%
3996 }

r@currunitcount
3997 \newcommand*{\@glsxtr@currunitcount}[2]{%
3998   \ifcsundef
3999     {\glo@\glsdetoklabel{#1}@currunit@#2}%
4000     {0}%
4001     {\csuse{\glo@\glsdetoklabel{#1}@currunit@#2}}%
4002   }%

r@prevunitcount
4003 \newcommand*{\@glsxtr@prevunitcount}[2]{%
4004   \ifcsundef

```

```

4005 {glo@\glsdetoklabel{#1}@prevunit@#2}%
4006 {0}%
4007 {\csuse{glo@\glsdetoklabel{#1}@prevunit@#2}}%
4008 }%


entryunitcount
4009 \newcommand*{\glsenableentryunitcount}{%
    Enable new fields:
4010 \appto{@newglossaryentry@defcounters{\@newglossaryentry@defunitcounters}}%
    Just in case the user has switched on the docdef option.
4011 \renewcommand*{\gls@defdocnewglossaryentry}{%
4012     \renewcommand*{\newglossaryentry}[2]{%
4013         \PackageError{glossaries}{\string\newglossaryentry\space
4014             may only be used in the preamble when entry counting has
4015             been activated}{If you use \string\glsenableentryunitcount\space
4016             you must place all entry definitions in the preamble not in
4017             the document environment}%
4018 }%
4019 }%


New commands to access new fields:
4020 \newcommand*{\glsentrycurrcount}[1]{%
4021     \@glsxtr@currunitcount{##1}{\glsgetattribute{##1}{unitcount}.%
4022     \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
4023 }%
4024 \newcommand*{\glsentryprevcount}[1]{%
4025     \@glsxtr@prevunitcount{##1}{\glsgetattribute{##1}{unitcount}.%
4026     \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
4027 }%


Access total count:
4028 \newcommand*{\glsentryprevtotalcount}[1]{%
4029     \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
4030     {0}%
4031     {%
4032         \number\csuse{glo@\glsdetoklabel{##1}@prevunittotal}%
4033     }%
4034 }%


Access max value:
4035 \newcommand*{\glsentryprevmaxcount}[1]{%
4036     \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
4037     {0}%
4038     {%
4039         \number\csuse{glo@\glsdetoklabel{##1}@prevunitmax}%
4040     }%
4041 }%


Adjust post unset and reset:
4042 \let@\glsxtr@entryunitcount@org@unset\glsxtrpostunset

```

```

4043 \renewcommand*{\glsxtrpostunset}[1]{%
4044   \@glsxtr@entryunitcount@org@unset{##1}%
4045   \@gls@increment@currunitcount{##1}%
4046 }%
4047 \let\@glsxtr@entryunitcount@org@localunset\glsxtrpostlocalunset
4048 \renewcommand*{\glsxtrpostlocalunset}[1]{%
4049   \@glsxtr@entryunitcount@org@localunset{##1}%
4050   \@gls@local@increment@currunitcount{##1}%
4051 }%
4052 \let\@glsxtr@entryunitcount@org@reset\glsxtrpostreset
4053 \renewcommand*{\glsxtrpostreset}[1]{%
4054   \glshasattribute{##1}{unitcount}%
4055   {%
4056     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
4057     \ifcsundef{\@glsxtr@csname}%
4058     {}%
4059     {\csgdef{\@glsxtr@csname}{0}}%
4060   }%
4061   {}%
4062 }%
4063 \let\@glsxtr@entryunitcount@org@localreset\glsxtrpostlocalreset
4064 \renewcommand*{\glsxtrpostlocalreset}[1]{%
4065   \@glsxtr@entryunitcount@org@localreset{##1}%
4066   \glshasattribute{##1}{unitcount}%
4067   {%
4068     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
4069     \ifcsundef{\@glsxtr@csname}%
4070     {}%
4071     {\csgdef{\@glsxtr@csname}{0}}%
4072   }%
4073   {}%
4074 }%

```

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

```

4075 \let\@ccls@\@ccls@
4076 \let\@cclspl@\@cclspl@

4077 \let\@cGls@\@cGls@
4078 \let\@cGlspl@\@cGlspl@
4079 \let\@cGLS@\@cGLS@
4080 \let\@cGLSpl@\@cGLSpl@

```

Write information to the aux file.

```

4081 \AtEndDocument{\@gls@write@entryunitcounts}%
4082 \renewcommand*{\@gls@entry@unitcount}[3]{%
4083   \csgdef{glo@\glsdetoklabel{##1}@prevunit@##3}{##2}%
4084   \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
4085   {\csgdef{glo@\glsdetoklabel{##1}@prevunittotal}{##2}}%
4086   {}%

```

```

4087     \csxdef{glo@\glsdetoklabel{##1}@prevunittotal}{
4088         \number\numexpr\csuse{glo@\glsdetoklabel{##1}@prevunittotal}+##2}%
4089     }%
4090     \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
4091     {\csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}}%
4092     {%
4093         \ifnum\csuse{glo@\glsdetoklabel{##1}@prevunitmax}<##2
4094             \csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}%
4095         \fi
4096     }%
4097   }%
4098   \let\glsenableentryunitcount\relax
4099   \renewcommand*\{\glsenableentrycount}{%
4100       \PackageError{glossaries-extra}{\string\glsenableentrycount\space
4101           can't be used with \string\glsenableentryunitcount}%
4102       {Use one or other but not both commands}%
4103   }%
4104 }
4105 \onlypreamble\glsenableentryunitcount

```

#### entry@unitcount

```
4106 \newcommand*\{@gls@entry@unitcount}[3]{}
```

#### ryunitcounts@do

```

4107 \newcommand*\{@gls@write@entryunitcounts@do}[1]{%
4108     \immediate\write\auxout
4109     {\string\@gls@entry@unitcount
4110      {\@glsentry}%
4111      {\@glsxtr@currunitcount{\@glsentry}{#1}}%
4112      }%
4113      {#1}}%
4114 }
```

#### entryunitcounts

```

4115 \newcommand*\{@gls@write@entryunitcounts}{%
4116     \immediate\write\auxout
4117     {\string\providecommand*\{\string\@gls@entry@unitcount}[3]{} }%
4118     \count@=0\relax
4119     \forallglsentries{\@glsentry}{%
4120         \glshasattribute{\@glsentry}{unitcount}%
4121         {%
4122             \ifglsused{\@glsentry}%
4123             {%
4124                 \forlistcsloop
4125                     {\@gls@write@entryunitcounts@do}%
4126                     {glo@\glsdetoklabel{\@glsentry}@unitlist}%
4127             }%
4128             {}%
4129             \advance\count@ by \cne

```

```

4130    }%
4131    {}%
4132  }%
4133 \ifnum\count@=0
4134   \GlossariesExtraWarning{Entry counting has been enabled
4135     \MessageBreak with \string\glsenableentryunitcount\space but the
4136     \MessageBreak attribute ‘unitcount’ hasn’t
4137     \MessageBreak been assigned to any of the defined
4138     \MessageBreak entries}%
4139 \fi
4140 }

```

`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.

```
4141 \newcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
```

  Enable entry counting:

```
4142   \glsenableentryunitcount
```

  Redefine `\gls` etc:

```

4143 \renewcommand*{\gls}{\cgls}%
4144 \renewcommand*{\Gls}{\cGls}%
4145 \renewcommand*{\glspol}{\cglspl}%
4146 \renewcommand*{\Glspol}{\cGlspol}%
4147 \renewcommand*{\GLS}{\cGLS}%
4148 \renewcommand*{\GLSpol}{\cGLSpol}%

```

  Set the `entrycount` attribute:

```
4149 \@glsxtr@setentryunitcountunsetattr{#1}{#2}{#3}%
```

  In case this command is used again:

```

4150 \let\GlsXtrEnableEntryUnitCounting@glsxtr@setentryunitcountunsetattr
4151 \renewcommand*{\GlsXtrEnableEntryCounting}[2]{%
4152   \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryCounting\space
4153   can’t be used with \string\GlsXtrEnableEntryUnitCounting}%
4154 {Use one or other but not both commands}}%
4155 }

```

`tcountunsetattr`

```

4156 \newcommand*{\@glsxtr@setentryunitcountunsetattr}[3]{%
4157 \@for \@glsxtr@cat:=#1\do
4158 {%
4159   \ifdefempty{\@glsxtr@cat}{}%
4160   {%
4161     \glssetcategoryattribute{\@glsxtr@cat}{entrycount}{#2}%
4162     \glssetcategoryattribute{\@glsxtr@cat}{unitcount}{#3}%
4163   }%
4164 }%
4165 }

```

### 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

```
4166 \renewcommand*{\SetGenericNewAcronym}{%
    Make sure \RestoreAcronyms has been used.
4167 \ifdefequal{\@addtoacronymlists}{\glsxtr@org}{\@addtoacronymlists}
4168 {}%
4169 {}%
4170     \GlossariesWarning{\string\SetGenericNewAcronym space used
4171         without restoring base acronym functions with
4172         \string\RestoreAcronyms}%
4173 }%
4174 \let\@Gls@entryname\@Gls@acrentryname

    Redefine \newacronym:
4175 \renewcommand{\newacronym}[4][]{%
4176     \ifdefempty{\@glsacronymlists}{%
4177         {}%
4178         \def\@glo@type{\acronymtype}%
4179         \setkeys{glossentry}{##1}%
4180         \DeclareAcronymList{\@glo@type}%
4181     }%
4182     {}%
4183     \glskeylisttok{##1}%
4184     \glslabeltok{##2}%
4185     \glsshorttok{##3}%
4186     \glslongtok{##4}%
4187     \newacronymhook
4188     \protected@edef\@do@newglossaryentry{%
4189         \noexpand\newglossaryentry{\the\glslabeltok}%
4190     }%
4191         type=\acronymtype,%
4192         name={\expandonce{\acronymentry{##2}}},%
4193         sort={\acronymsort{\the\glsshorttok}{\the\glslongtok}},%
4194         text={\the\glsshorttok},%
4195         short={\the\glsshorttok},%
4196         shortplural={\the\glsshorttok\noexpand\acrpluralsuffix},%
4197         long={\the\glslongtok},%
4198         longplural={\the\glslongtok\noexpand\acrpluralsuffix},%
4199         category=acronym,
4200         \GenericAcronymFields,%
4201         \the\glskeylisttok
```

```

4202      }%
4203      }%
4204      \do@newglossaryentry
4205      }%
4206      \renewcommand*\acrfullfmt}[3]{%
4207          \glslink[##1]{##2}{\genacrfullformat{##2}{##3}}}}%
4208      \renewcommand*\Acrfullfmt}[3]{%
4209          \glslink[##1]{##2}{\Genacrfullformat{##2}{##3}}}}%
4210      \renewcommand*\ACRfullfmt}[3]{%
4211          \glslink[##1]{##2}{%
4212              \mfirstucMakeUppercase{\genacrfullformat{##2}{##3}}}}}}%
4213      \renewcommand*\acrfullplfmt}[3]{%
4214          \glslink[##1]{##2}{\genplacrfullformat{##2}{##3}}}}%
4215      \renewcommand*\Acrfullplfmt}[3]{%
4216          \glslink[##1]{##2}{\Genplacrfullformat{##2}{##3}}}}%
4217      \renewcommand*\ACRfullplfmt}[3]{%
4218          \glslink[##1]{##2}{%
4219              \mfirstucMakeUppercase{\genplacrfullformat{##2}{##3}}}}}}%
4220      \renewcommand*\glsentryfull}[1]{\genacrfullformat{##1}{}}}%
4221      \renewcommand*\Glsentryfull}[1]{\Genacrfullformat{##1}{}}}%
4222      \renewcommand*\glsentryfullpl}[1]{\genplacrfullformat{##1}{}}}%
4223      \renewcommand*\Glsentryfullpl}[1]{\Genplacrfullformat{##1}{}}}%
4224 }

```

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:

```

4225 \let\@glsxtr@org@setacronymstyle\setacronymstyle
4226 \let\@glsxtr@org@newacronymstyle\newacronymstyle

```

Save the list of acronyms in case they are required.

```

tr@acronymlists
4227 \let\@glsxtr@acronymlists\@glsacronymlists

dtoacronymlists
4228 \let\@glsxtr@org@addtoacronymlists\@addtoacronymlists

setacronymlists
4229 \let\@glsxtr@org@setacronymlists\SetAcronymLists

```

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

```

lsxtr@abbrlists
4230 \newcommand{\@glsxtr@abbrlists}{}}

breviationlists
4231 \newcommand*\forallabbreviationlists}[2]{%

```

```

4232  \@for#1:=\@glsxtr@abbrlists\do{\ifdefempty{#1}{}{#2}}%
4233 }

bbrevglist

4234 \newcommand*\@glsxtr@addabbreviationlist}[1]{%
4235   \edef\@glo@type{#1}%
4236   \ifdefempty\@glsxtr@abbrlists
4237   {\let\@glsxtr@abbrlists\@glo@type}%
4238   {%
4239     \ifdefequal\@glsxtr@abbrlists\@glo@type
4240     {}%
4241     {%
4242       \expandafter\DTLifinlist\expandafter{\@glo@type}{\@glsxtr@abbrlists}{}%
4243       {\eappto\@glsxtr@abbrlists{,\@glo@type}}%
4244     }%
4245   }%
4246 }

\forallacronyms Modify to add warning.

4247 \renewcommand*\@forallacronyms}[2]{%
4248   \glsxtr@base@acr@cmd\forallacronyms\forallabbreviationlists
4249   \@for#1:=\@glsacronymlists\do{\ifx#1\empty\else#2\fi}%
4250 }

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

4251 \newcommand*\@MakeAcronymsAbbreviations}{%

  Undo acronym display style:

4252  \@for\@gls@type:=\@glsacronymlists\do{%
4253    \csgdef{\gls@\@gls@type}{\entryfmt}{\glsentryfmt}%
4254  }%

  Save and clear acronym list.

4255  \let\@glsxtr@acronymlists\@glsacronymlists
4256  \let\@glsacronymlists\empty
4257  \let\@addtoacronymlists\gobble
4258  \let\SetAcronymLists\gobble

  Warn if \acrshort etc are used.

4259  \let\@glsxtr@base@acr@cmd\@glsxtr@base@acr@cmd@warn

  Redefine \newacronym to use same interface as \newabbreviation.

4260  \renewcommand*\@newacronym}[4][]{%
4261    \glsxtr@newabbreviation{type=\acronymtype,category=acronym,##1}{##2}{##3}{##4}}%
4262  }%
4263  \renewcommand*\@firstacronymfont}[1]{\glsfirstabbrvfont{##1}}%
4264  \renewcommand*\@acronymfont}[1]{\glsabbrvfont{##1}}%
4265  \renewcommand*\@setacronymstyle}[1]{%

```

```

4266     \PackageError{glossaries-extra}{\string\setacronymstyle{##1}
4267     unavailable.
4268     Use \string\setabbreviationstyle[acronym]\space instead.
4269     The original acronym interface can be restored with
4270     \string\RestoreAcronyms}{}%
4271   }%
4272   \renewcommand*\newacronymstyle[1]{%
4273     \GlossariesExtraWarning{New acronym style ‘##1’ won’t be
4274     available unless you restore the original acronym interface with
4275     \string\RestoreAcronyms}%
4276     \@glsxtr@org@newacronymstyle{##1}%
4277   }%
4278 }
```

Switch acronyms to abbreviations:

```
4279 \MakeAcronymsAbbreviations
```

**RestoreAcronyms** Restore acronyms to glossaries interface.

```
4280 \newcommand*\RestoreAcronyms}{%
```

Restore acronym list.

```

4281 \let\glsacronymlists\@glsxtr@acronymlists
4282 \let\addtoacronymlists\@glsxtr@org@addtoacronymlists
4283 \let\SetAcronymLists\@glsxtr@org@setacronymlists
```

Suppress warnings if \acrshort etc are used.

```
4284 \let\@glsxtr@base@acrcmd@gobbletwo
```

Restore acronym display style:

```

4285 \cfor\gls@type:=\glsacronymlists\do{%
4286   \SetDefaultAcronymDisplayStyle{\gls@type}%
4287 }%
```

Switch to the generic acronym mechanism.

```

4288 \SetGenericNewAcronym
4289 \renewcommand*\firstacronymfont[1]{\acronymfont{##1}}%
4290 \renewcommand*\acronymfont[1]{##1}%
4291 \let\setacronymstyle\@glsxtr@org@setacronymstyle
4292 \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.

```

4293 \renewcommand*\gls@link@checkfirsthyper{%
4294   \ifglsused{\glslabel}%
4295   {\let\glsxtrifwasfirstuse\@secondoftwo}%
4296   {\let\glsxtrifwasfirstuse\@firstoftwo}%
4297   \@glsxtr@org@checkfirsthyper
4298 }
4299 \glssetcategoryattribute{acronym}{regular}{false}%
4300 \setacronymstyle{long-short}%
4301 }
```

\glsacspace Allow the user to customise the maximum value.

```
4302 \renewcommand*{\glsacspace}[1]{%
4303   \settowidth{\dimen@}{(\firstacronymfont{\glsentryshort{#1}})}%
4304   \ifdim\dimen@<\glsacspacemax\else\space\fi
4305 }
```

\glsacspacemax Value used in the above.

```
4306 \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

```
4307 \newcommand*{\@glsxtr@reg@glosslist}{}%
```

Save the original definition of `\makeglossaries`:

```
4308 \let\@glsxtr@org@makeglossaries\makeglossaries
```

\makeglossaries glossaries v4.45 introduced `\@domakeglossaries` to provide a way of disabling `\makeglossaries`. If it hasn’t been defined, define here to do its argument:

```
4309 \providecommand{\@domakeglossaries}[1]{#1}
```

Redefine `\makeglossaries` to take an optional argument. This should be empty for the usual behaviour (all glossaries need processing with an indexing application) or a comma-separated list of glossary labels indicating those glossaries that should be processed with an indexing application. The optional argument version shouldn’t be used with record.

\makeglossaries

```
4310 \renewcommand*{\makeglossaries}[1] []{%
4311   \@domakeglossaries
4312   {%
4313     \@glsxtr@if@record@only
4314     {%
4315       \PackageError{glossaries-extra}{\string\makeglossaries\space
4316         not permitted\MessageBreak with record=\@glsxtr@record@setting\space
4317         package option}%
4318       {You may only use \string\makeglossaries\space with
4319         record=off or record=alsoindex options}%
4320     }%
4321     {%
4322       \ifblank{#1}%
4323         {\@glsxtr@org@makeglossaries}%
4324         {%
4325           \ifx\@glsxtr@record@setting\@glsxtr@record@setting@alsoindex
```

```

4326     \PackageError{glossaries-extra}{\string\makeglossaries[#1]\space
4327         not permitted\MessageBreak with record=alsoindex package option}%
4328         {You may only use the hybrid \string\makeglossaries[...]\space with
4329             record=off option}%
4330     \else
4331         \@gls@@automake@immediate was introduced to glossaries v4.42 so it may not be defined.
4332         \ifdef{\gls@@automake@immediate}{\@gls@@automake@immediate}{}%
4333         \edef{\glsxtr@reg@glosslist}{\#1}%
4334         \ifundefined{\glswrite}{\newwrite\glswrite}{}%
4335         \protected@write{\auxout}{\string\providecommand
4336             \string\glsorder[1]}{}%
4337         \protected@write{\auxout}{\string\providecommand
4338             \string\@istfilename[1]}{}%
4339         \protected@write{\auxout}{\string\@istfilename{\@istfilename}}%
4340         \protected@write{\auxout}{\string\@glsorder{\glsorder}}%
4341         \protected@write{\auxout}{\string\glsxtr@makeglossaries{\#1}}%
4341         \write{\auxout}{\string\providecommand\string@gls@reference[3]}%

```

Iterate through each supplied glossary type and activate it.

```

4342     \@for\@glo@type:=\#1\do{%
4343         \ifempty{\@glo@type}{}{\@makeglossary{\@glo@type}}%
4344     }%

```

New glossaries must be created before \makeglossaries:

```

4345     \renewcommand*\newglossary[4][]{%
4346         \PackageError{glossaries}{New glossaries
4347             must be created before \string\makeglossaries}{You need
4348             to move \string\makeglossaries\space after all your
4349             \string\newglossary\space commands}}%

```

Any subsequence instances of this command should have no effect.

```

4350     \let\@makeglossary\@gobble

```

Version 1.42 removed letting \makeglossary to \relax (no kernel redefs may be in effect).

```

4351     \renewcommand\makeglossaries[1][]{%

```

Disable all commands that have no effect after \makeglossaries

```

4352     \disable@onlypremakeg

```

Allow see key:

```

4353     \let\gls@checkseeallowed\relax

```

Adjust \@do@seeglossary. This needs to check for the entry's existence but don't increment associated counter.

```

4354     \renewcommand*{\@do@seeglossary}[2]{%
4355         \glsdoifexists{\#1}%
4356         {%
4357             \edef{\gls@label}{\glsdetoklabel{\#1}}%
4358             \edef{\gls@type}{\csname glo@\gls@label \type\endcsname}%
4359             \expandafter\DTLifinlist\expandafter{\@gls@type}{\glsxtr@reg@glosslist}%
4360             {\glsxtr@org@doseeglossary{\#1}{\#2}}%

```

```

4361   {%
4362     \@@glsxtrwrglossmark
4363     \protected@write\@auxout{}{%
4364       \string\@gls@reference
4365       {\gls@type}{\@gls@label}{\string\glsseefORMAT##2{}}
4366     }%
4367   }%
4368 }%
4369 }%

  Adjust \@@do@@wrglossary
4370   \let\@glsxtr\@@do\@@wrglossary\@@do\@@wrglossary
4371   \def\@@do\@@wrglossary{%
4372     \edef\@gls@type{\csname glo@\@gls@label @type\endcsname}%
4373     \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
4374     {\@glsxtr\@@do\@@wrglossary}%
4375     {\gls@noidxglossary}%
4376   }%
4377 
  Suppress warning about no \makeglossaries
4378   \let\warn@nomakeglossaries\relax
4379   \def\warn@noprintglossary{%
4380     \GlossariesWarning{No \string\printglossary\space
4381       or \string\printglossaries\space
4382       found.}^J(Remove \string\makeglossaries\space if you don't want
4383       any glossaries.)^JThis document will not have a glossary}%
4384   }%
4385 
  Only warn for glossaries not listed.
4386   \renewcommand{\@gls@noref@warn}[1]{%
4387     \edef\@gls@type{\#1}%
4388     \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
4389     {%
4390       \GlossariesExtraWarning{Can't use
4391         \string\printnoidxglossary[type={\@gls@type}]
4392         when '@gls@type' is listed in the optional argument of
4393         \string\makeglossaries}%
4394     }%
4395   }%
4396   \GlossariesWarning{Empty glossary for
4397     \string\printnoidxglossary[type={##1}].
4398     Rerun may be required (or you may have forgotten to use
4399     commands like \string\gls)}%
4400   }%
4401 }%

  Adjust display number list to check for type:
4402   \renewcommand*\glsdisplaynumberlist[1]{%
4403     \expandafter\DTLifinlist\expandafter{\#1}{\@glsxtr@reg@glosslist}%
4404     {\@glsxtr@idx@displaynumberlist{\#1}}%
4405     {\@glsxtr@noidx@displaynumberlist{\#1}}%

```

```

4404      }%
4405
4406      Adjust entry list:
4407
4408      \renewcommand*\glsentrynumberlist}[1]{%
4409          \expandafter\DTLifinlist\expandafter{##1}{\glsxtr@reg@glosslist}%
4410          {\glsxtr@idx@entrynumberlist{##1}}%
4411          {\glsxtr@noidx@entrynumberlist{##1}}%
4412      }%
4413
4414      Adjust number list loop
4415
4416      \renewcommand*\glsnumberlistloop}[2]{%
4417          \expandafter\DTLifinlist\expandafter{##1}{\glsxtr@reg@glosslist}%
4418          {%
4419              \PackageError{glossaries-extra}{\string\glsnumberlistloop\space
4420                  not available for glossary '##1'}{}%
4421          }%
4422          {\glsxtr@noidx@numberlistloop{##1}{##2}}%
4423      }%
4424
4425      Only sanitize sort for normal indexing glossaries.
4426
4427      \renewcommand*\glsprestandardsort}[3]{%
4428          \expandafter\DTLifinlist\expandafter{##2}{\glsxtr@reg@glosslist}%
4429          {%
4430              \glsdosanitizesort
4431          }%
4432          {%
4433              \ifglssanitizesort
4434                  \gls@noidx@sanitizesort
4435              \else
4436                  \gls@noidx@nosanitizesort
4437              \fi
4438          }%
4439      }%
4440
4441      Unlike \makenoidxglossaries we can't automatically set sanitizesort=false. All entries must
4442      be defined in the preamble.
4443
4444      \renewcommand*\new@glossaryentry}[2]{%
4445          \PackageError{glossaries-extra}{Glossary entries must be defined
4446              in the preamble\MessageBreak when you use the optional argument
4447              of \string\makeglossaries}{Either move your definitions to the
4448              preamble or don't use the optional argument of
4449              \string\makeglossaries}%
4450      }%
4451
4452      Only activate sort key for glossaries that aren't listed in #1 (glossary label is stored in
4453      \glo@type but this defaults to \glsdefaulttype so some expansion is required).
4454
4455      \let\glo@assign@sortkey\glsxtr@mixed@assign@sortkey
4456      \renewcommand*\@printgloss@setsort}{%
4457
4458      Need to extract just the type value.
4459
4460      \expandafter\glsxtr@gettype\expandafter,\glsxtr@printglossopts,%
```

```

4441         type=\glsdefaulttype,\@end@glsxstr@gettype
4442         \def\@glo@sorttype{\@glo@default@sorttype}%
4443     }%

```

Check automake setting:

```

4444     \ifglsautomake
4445         \renewcommand*\@gls@doautomake{}%
4446         \@for\@gls@type:=\glsxstr@reg@glosslist\do{%
4447             \ifdefempty{\@gls@type}{}{\@gls@automake{\@gls@type}}%
4448         }%
4449     }%
4450     \fi

```

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

```

4451     \ifdef\@glo@check@sortallowed{\@glo@check@sortallowed\makeglossaries}{}%
4452     \fi
4453 }%
4454 }%
4455 }%
4456 }

```

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.)

```

4457 \newcommand{\glsxstr@orgprintglossary}[2]{%
4458   \def\@glo@type{\glsdefaulttype}%

```

Add check here.

```

4459 \def\glossarytitle{%
4460   \ifcsdef{@glotype}{\@glo@type}{\@title}{%
4461     {\@csuse{@glotype}{\@glo@type}{\@title}}%
4462     {\glossaryname}}%
4463 \def\glossarytoctitle{\glossarytitle}%
4464 \let\org@glossarytitle\glossarytitle
4465 \def@\glossarystyle{%
4466   \ifx\@glossary@default@style\relax
4467     \GlossariesWarning{No default glossary style provided}\MessageBreak
4468     for the glossary '\@glo@type'. \MessageBreak
4469     Using deprecated fallback. \MessageBreak
4470     To fix this set the style with \MessageBreak
4471     \string\setglossarystyle\space or use the \MessageBreak
4472     style key=value option}%
4473 }%
4474 }%
4475 \def\gls@dotocitle{\glssettoctitle{\@glo@type}}%
4476 \let\org@glossaryentrynumbers\glossaryentrynumbers

```

```

4477 \bgroup
4478   \@printgloss@setsort
4479   \setkeys{printgloss}{#1}%
4480   \ifx\glossarytitle\org@glossarytitle
4481   \else
4482     \cslet{@glotype@\glo@type}{\glossarytitle}%
4483   \fi
4484   \let\currentglossary\glo@type
4485   \let\org@glossaryentrynumbers\glossaryentrynumbers
4486   \let\glsnonextpages\glsnonextpages
4487   \let\glsnextpages\glsnextpages

4488 \glsxtractivenopost
4489 \gls@dotocitle
4490 \glossarystyle
4491 \let\gls@org@glossaryentryfield\glossentry
4492 \let\gls@org@glossarysubentryfield\subglossentry
4493 \renewcommand{\glossentry}[1]{%
4494   \xdef\glscurrententrylabel{\glsdetoklabel{##1}}%
4495   \gls@org@glossaryentryfield{##1}%
4496 }%
4497 \renewcommand{\subglossentry}[2]{%
4498   \xdef\glscurrententrylabel{\glsdetoklabel{##2}}%
4499   \gls@org@glossarysubentryfield{##1}{##2}%
4500 }%
4501 \gls@preglossaryhook
4502 #2%
4503 \egroup
4504 \global\let\glossaryentrynumbers\org@glossaryentrynumbers
4505 \global\let\warn@noprintglossary\relax
4506 }

```

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

```

4507 \newcommand*{\glsxtractivenopost}{%
4508   \let\nopostdesc\@nopostdesc
4509   \let\glsxtrnropostpunc\glsxtr@nopostpunc
4510 }

```

`lsxtrnropostpunc`

```
4511 \newrobustcmd*{\glsxtrnropostpunc}{}%
```

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

```

4512 \newcommand{\@glsxtr@nopostpunc}{%
4513   \let\@glsxtr@org@postdescription\glspostdescription
4514   \ifglsnopostdot
4515     \renewcommand{\glspostdescription}{%
4516       \glsnopostdottrue
4517       \let\glspostdescription\@glsxtr@org@postdescription

```

```

4518      \let\glsxtrrestorepostpunc\@glsxtr@restore@postpunc
4519      \glsxtrpostdescription
4520      \glsxtr@nopostpunc@postdesc}%
4521 \else
4522   \renewcommand{\glspostdescription}{%
4523     \let\glspostdescription\@glsxtr@org@postdescription
4524     \let\glsxtrrestorepostpunc\@glsxtr@restore@postpunc
4525     \glsxtrpostdescription
4526     \glsxtr@nopostpunc@postdesc}%
4527 \fi
4528 \glsnopostrdotfalse
4529 }

stpunc@postdesc
4530 \newcommand*{\glsxtr@nopostpunc@postdesc}{}}

estore@postpunc
4531 \newcommand*{\glsxtr@restore@postpunc}{%
4532   \def\glsxtr@nopostpunc@postdesc{%
4533     \glsxtr@org@postdescription
4534     \let\glsxtr@nopostpunc@postdesc\empty
4535     \let\glsxtrrestorepostpunc\empty
4536   }%
4537 }

restorepostpunc Does nothing outside of glossary.
4538 \newcommand*{\glsxtrrestorepostpunc}{}}

\@printglossary Redefine.
4539 \renewcommand{\@printglossary}[2]{%
4540   \def\glsxtr@printglossopts{\#1}%
4541   \glsxtr@orgprintglossary{\#1}{\#2}%
4542 }

Add a key that switches off the entry targets:
4543 \define@choicekey{printgloss}{target}
4544 [\glsxtr@printglossval\glsxtr@printglossnr]%
4545 {true,false}[true]%
4546 {%
4547   \ifcase\glsxtr@printglossnr
4548     \def\glstarget{\glsdohypertarget}%
4549   \else
4550     \let\glstarget\@secondoftwo
4551   \fi
4552 }

hypernameprefix
4553 \newcommand{\glsxtrhypernameprefix}{}}

```

New to v1.20:

```
4554 \define@key{printgloss}{targetnameprefix}{%
4555   \renewcommand{\@glsxtrhypernameprefix}{#1}%
4556 }

4557 \define@key{printgloss}{prefix}{%
4558   \renewcommand{\glolinkprefix}{#1}%
4559 }

4560 \define@key{printgloss}{label}{%
4561   \glsxtrsetglossarylabel{#1}%
4562 }
```

`etglossarylabel` Set the label for subsequent glossaries. If the label is fixed (that is, doesn't change with each glossary) this will need to be scoped or changed again to prevent duplicate labels.

```
4563 \newcommand{\glsxtrsetglossarylabel}[1]{%
4564   \renewcommand*\{@glossaryseclabel}{%
4565     \protected@edef\@currentlabelname{\glossarytoctitle}%
4566     \label{#1}%
4567   }%
4568 }
```

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

```
4569 \let\@glsxtr@org@glsdohypertarget\glsdohypertarget
4570 \renewcommand{\glsdohypertarget}[2]{%
4571   \@glsxtr@org@glsdohypertarget{\@glsxtrhypernameprefix#1}{#2}%
4572 }
```

Update `\glstarget` to use `\def` instead being assigned with `\let` so that it can pick up the new definition and allow any further redefinitions:

```
4573 \ifx\glstarget\glsxtr@org@glsdohypertarget
4574   \def\glstarget{\glsdohypertarget}%
4575 \fi
```

`@makeglossaries` For the benefit of `makeglossaries`

```
4576 \newcommand*{\glsxtr@makeglossaries}[1]{}
```

`@glsxtr@gettype` Get just the type.

```
4577 \def\glsxtr@gettype#1,type=#2,#3\end@glsxtr@gettype{%
4578   \def\@glo@type{#2}%
4579 }
```

`@assign@sortkey` Assign the sort key.

```
4580 \newcommand{\glsxtr@mixed@assign@sortkey}[1]{%
4581   \edef\@glo@type{\@glo@type}%
4582   \expandafter\DTLifinlist\expandafter{\@glo@type}{\glsxtr@reg@glosslist}%
4583   {%
4584     \@glo@no@assign@sortkey{#1}%
4585   }%
```

```

4586  {%
4587      \@@glo@assign@sortkey{#1}%
4588  }%
4589 }%

```

Display number list for the regular version:

splaynumberlist

```
4590 \let\@glsxtr@idx@displaynumberlist\glsdisplaynumberlist
```

Display number list for the “noidx” version:

splaynumberlist

```

4591 \newcommand*{\@glsxtr@noidx@displaynumberlist}[1]{%
4592     \letcs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@locist}%
4593     \ifdef{\gls@locist}
4594     {%
4595         \def{\gls@noidxlocist@sep}{%
4596             \def{\gls@noidxlocist@sep}{%
4597                 \def{\gls@noidxlocist@sep}{%
4598                     \glsnumlistsep
4599                 }%
4600                 \def{\gls@noidxlocist@finalsep}{\glsnumlistlastsep}%
4601             }%
4602         }%
4603         \def{\gls@noidxlocist@finalsep}{}
4604         \def{\gls@noidxlocist@prev}{}
4605         \forlistloop{\glsnoidxdisplayloclisthandler}{\@gls@locist}%
4606         \gls@noidxlocist@finalsep
4607         \gls@noidxlocist@prev
4608     }%
4609     {%
4610         \glsxtrundeftag
4611         \glsdoifexists{#1}%
4612     }%
4613     \GlossariesWarning{Missing location list for ‘#1’. Either
4614         a rerun is required or you haven’t referenced the entry.}%
4615   }%
4616 }%
4617 }%
4618

```

And for the number list loop:

@numberlistloop

```

4619 \newcommand*{\@glsxtr@noidx@numberlistloop}[3]{%
4620     \letcs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@locist}%
4621     \let{\@gls@org@glsnoidxdisplayloc}{\glsnoidxdisplayloc}
4622     \let{\@gls@org@glsseeformat}{\glsseeformat}
4623     \let{\glsnoidxdisplayloc#2}{\relax}

```

```

4624 \let\glsseefORMAT#3\relax
4625 \ifdef@\gls@locList
4626 {%
4627   \forListLoop{\glsnoidxnumberListLoopHandler}{\@gls@locList}%
4628 }%
4629 {%
4630   \glsxtrundeFTag
4631   \glsdOIfexists{#1}%
4632 {%
4633   \GlossariesWarning{Missing location list for ‘##1’. Either
4634     a rerun is required or you haven’t referenced the entry.}%
4635 }%
4636 }%
4637 \let\glsnoidxdisplayLoc\@gls@org@glsnoidxdisplayLoc
4638 \let\glsseefORMAT\@gls@org@glsseefORMAT
4639 }%

```

Same for entry number list.

#### entrynumberlist

```

4640 \newcommand*{\@glsxtr@noidx@entrynumberlist}[1]{%
4641   \let\cs{\@gls@locList}\glo@\glsdetokLabel{#1}@locList}%
4642 \ifdef@\gls@locList
4643 {%
4644   \glsnoidxlocList{\@gls@locList}%
4645 }%
4646 {%
4647   \glsxtrundeFTag
4648   \glsdOIfexists{#1}%
4649 {%
4650   \GlossariesWarning{Missing location list for ‘#1’. Either
4651     a rerun is required or you haven’t referenced the entry.}%
4652 }%
4653 }%
4654 }%

```

#### entrynumberlist

```
4655 \newcommand*{\@glsxtr@idx@entrynumberlist}[1]{\glsentrynumberlist{#1}}
```

#### x@getgroupTitle Patch.

```

4656 \renewcommand*{\@gls@noidx@getgroupTitle}[2]{%
4657   \protected@edef\@glsxtr@titleLabel{#1}%
4658 \ifdefvoid\@glsxtr@titleLabel
4659 {}%
4660 {}%
4661   \protected@edef\@glsxtr@titleLabel{\csuse{\glsxtr@groupTitle@#1}}%
4662 }%
4663 \ifdefvoid{\@glsxtr@titleLabel}%

```

```

4664  {%
4665    \DTLifint{#1}%
4666    {%
4667      \ifnum#1<256\relax
4668        \edef#2{\char#1\relax}%
4669      \else
4670        \edef#2{#1}%
4671      \fi
4672    }%
4673    {%
4674      \ifcsundef{#1groupname}%
4675        {\def#2{#1}}%
4676        {\letcs#2{#1groupname}}%
4677    }%
4678  }%
4679  {%
4680    \let#2\@glsxtr@titlelabel
4681  }%
4682 }

g@getgrouptitle Save original definition of \gls@getgrouptitle
4683 \let\glsxtr@org@grouptitle\gls@grouptitle

trgetgrouptitle 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.
4684 \newrobustcmd{\glsxtrgetgrouptitle}[2]{%
4685   \protected@edef\@glsxtr@titlelabel{\glsxtr@grouptitle@#1}%
4686   \onelevel@sanitize\@glsxtr@titlelabel
4687   \ifcsdef{\@glsxtr@titlelabel}%
4688     {\letcs{#2}{\@glsxtr@titlelabel}}%
4689     {\glsxtr@org@grouptitle{#1}{#2}}%
4690 }
4691 \let\@gls@grouptitle\glsxtrgetgrouptitle

trsetgrouptitle Sets the title for the given group label.
4692 \newcommand{\glsxtrsetgrouptitle}[2]{%
4693   \protected@edef\@glsxtr@titlelabel{\glsxtr@grouptitle@#1}%
4694   \onelevel@sanitize\@glsxtr@titlelabel
4695   \protected@csxdef{\@glsxtr@titlelabel}{#2}%
4696 }

alsetgrouptitle As above put only locally defines the title.
4697 \newcommand{\glsxtrlocalsetgrouptitle}[2]{%
4698   \protected@edef\@glsxtr@titlelabel{\glsxtr@grouptitle@#1}%
4699   \onelevel@sanitize\@glsxtr@titlelabel
4700   \protected@csedef{\@glsxtr@titlelabel}{#2}%
4701 }

```

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

```
4702 \renewcommand*{\glsnavigation}{%
4703   \def\@gls@between{}%
4704   \ifcsundef{@gls@hypergroupelist@\@glo@type}%
4705   {}%
4706   \def\@gls@list{}%
4707 }%
4708 {}%
4709   \expandafter\let\expandafter\@gls@list
4710     \csname @gls@hypergroupelist@\@glo@type\endcsname
4711 }%
4712 \@for\@gls@tmp:=\@gls@list\do{%
4713   \@gls@between
4714   \glsxtrgetgroup title{\@gls@tmp}{\@gls@grptitle}%
4715   \glsnavhyperlink{\@gls@tmp}{\@gls@grptitle}%
4716   \let\@gls@between\glshypernavsep
4717 }%
4718 }
```

```
@noidx@glossary
```

```
4719 \renewcommand*{\@print@noidx@glossary}{%
4720   \ifcsdef{@glsref@\@glo@type}%
4721   {}%
4722   \ifcsdef{@glo@sortmacro@\@glo@sorttype}%
4723   {}%
4724   \csuse{@glo@sortmacro@\@glo@sorttype}{\@glo@type}%
4725 }%
4726 {}%
4727   \PackageError{glossaries}{Unknown sort handler '\@glo@sorttype'}{}%
4728 }%
4729 \glossarysection[\glossarytoctitle]{\glossarytitle}%
4730 \glossarypreamble
```

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

```
4731 \def\@gls@currentlettergroup{}%
4732 \begin{theglossary}%
4733 \glossaryheader
4734 \glsresetentrylist
4735 \forlistcsloop{\@gls@noidx@do}{@glsref@\@glo@type}%
4736 \end{theglossary}%
4737 \glossarypostamble
4738 }%
4739 {}
```

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

```
4740 \glsxtrifemptyglossary{\@glo@type}%
4741 {}%
4742 {\glossarysection[\glossarytoctitle]{\glossarytitle}}%
```

```

4743     \gls@noref@warn{\glo@type}%
4744   }%
4745 }

noidxdisplayloc Patch to check for range formations.
4746 \renewcommand*{\glsnoidxdisplayloc}[4]{%
4747   \setentrycounter[#1]{#2}%
4748   \glsxtr@display@loc#3\empty\end@glsxtr@display@loc{#4}%
4749 }

```

```

xtr@display@loc Patch to check for range formations.
4750 \def\glsxtr@display@loc#1#2\end@glsxtr@display@loc#3{%
4751   \ifx#1(\relax
4752     \glsxtrdisplaystartloc{#2}{#3}%
4753   \else
4754     \ifx#1)\relax
4755       \glsxtrdisplayendloc{#2}{#3}%
4756     \else
4757       \glsxtrdisplaysingleloc{#1#2}{#3}%
4758     \fi
4759   \fi
4760 }

```

```

isplaysingleloc Single location.
4761 \newcommand*{\glsxtrdisplaysingleloc}[2]{%
4762   \csuse{#1}{#2}%
4763 }

```

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.
4764 \newcommand*{\glsxtrdisplaystartloc}[2]{%
4765   \edef\glsxtrlocrengfmt{#1}%
4766   \ifx\glsxtrlocrengfmt\empty
4767     \def\glsxtrlocrengfmt{\glsnumberformat}%
4768   \fi
4769   \expandafter\glsxtrdisplaysingleloc
4770   \expandafter{\glsxtrlocrengfmt}{#2}%
4771 }

```

```

trdisplayendloc End of a location range.
4772 \newcommand*{\glsxtrdisplayendloc}[2]{%
4773   \edef\@glsxtr@tmp{#1}%
4774   \ifdefempty{\@glsxtr@tmp}{\def\@glsxtr@tmp{\glsnumberformat}}{}%
4775   \ifx\glsxtrlocrengfmt\@glsxtr@tmp
4776   \else
4777     \GlossariesExtraWarning{Mismatched end location range
4778     (start=\glsxtrlocrengfmt, end=\@glsxtr@tmp)}%

```

```

4779 \fi
4780 \expandafter\glsxtrdisplayendlohook\expandafter{\@glsxtr@tmp}{#2}%
4781 \expandafter\glsxtrdisplaysingleloc
4782 \expandafter{\glsxtrlocregfmt}{#2}%
4783 \def\glsxtrlocregfmt{}%
4784 }

```

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

```
4785 \newcommand*\glsxtrdisplayendlohook}[2]{}
```

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

```
4786 \newcommand*\glsxtrlocregfmt{}
```

setentrycounter Adjust \setentrycounter to save the original prefix.

```

4787 \renewcommand*\setentrycounter}[2][]{%
4788 \def\glsxtrcounterprefix{#1}%
4789 \ifx\glsxtrcounterprefix\empty
4790 \def\@glo@counterprefix{.}%
4791 \else
4792 \def\@glo@counterprefix{.#1.}%
4793 \fi
4794 \def\glsentrycounter{#2}%
4795 }
```

ls@removespaces Redefine to allow adjustments to location hyperlink.

```

4796 \def\gls@removespaces#1 #2\@nil{%
4797 \toks@=\expandafter{\the\toks@#1}%
4798 \ifx\#2\%
4799 \edef\@glo@tmp{\the\toks@}%
4800 \ifx\@glo@tmp\empty
4801 \else
```

Expand location (just in case \toks@ is needed for something else).

```

4802 \expandafter\glsxtrlocationhyperlink\expandafter
4803 \glsentrycounter\expandafter\@glo@counterprefix\expandafter{\the\toks@}%
4804 \fi
4805 \else
4806 \gls@ReturnAfterFi{%
4807 \gls@removespaces#2\@nil
4808 }%
4809 \fi
4810 }
```

cationhyperlink

$\glsxtrlocationhyperlink{\langle counter \rangle}{\langle prefix \rangle}{\langle location \rangle}$

```

4811 \newcommand*{\glsxtrlocationhyperlink}[3]{%
4812   \ifdefvoid{\glsxtrspplocationurl}%
4813   {%
4814     \GlsXtrInternalLocationHyperlink{#1}{#2}{#3}%
4815   }%
4816   {%
4817     \hyperref{\glsxtrspplocationurl}{}{#1#2#3}{#3}%
4818   }%
4819 }

suphypernumber
4820 \newcommand*{\glsxtrspphypernumber}[1]{%
4821   {%
4822     \glshasattribute{\glscurrententrylabel}{externalallocation}%
4823   }%
4824   \def\glsxtrspplocationurl{%
4825     \glsgetattribute{\glscurrententrylabel}{externalallocation}{}%
4826   }%
4827   {%
4828     \def\glsxtrspplocationurl{}%
4829   }%
4830   \glshypernumber{#1}%
4831 }%
4832 }

```

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

@print@glossary

```

4833 \renewcommand{\@print@glossary}{%
4834   \makeatletter
4835   \cinput{\jobname.\csname \glotype@\glo@type @in\endcsname}%
4836   \IfFileExists{\jobname.\csname \glotype@\glo@type @in\endcsname}%
4837   {}%
4838   {\glsxtrNoGlossaryWarning{@glo@type}}%
4839   \ifglsxindy
4840     \ifcsundef{\xdy@\glo@type @language}%
4841     {}%
4842     \edef\@do@auxoutstuff{%
4843       \noexpand\AtEndDocument{%
4844         \noexpand\immediate\noexpand\write\auxout{%
4845           \string\providecommand\string\@xdylanguage[2]{}%
4846         }%
4847         \noexpand\immediate\noexpand\write\auxout{%
4848           \string\@xdylanguage{\glo@type}\{\xdy@main@language\}%
4849         }%
4850       }%
4851     }%
4852     \edef\@do@auxoutstuff{%

```

```

4853     \noexpand\AtEndDocument{%
4854         \noexpand\immediate\noexpand\write\@auxout{%
4855             \string\providecommand\string\@xdylanguage[2]{}%}
4856         \noexpand\immediate\noexpand\write\@auxout{%
4857             \string\@xdylanguage{\@glo@type}{\csname\@xdy@\@glo@type
4858             @language\endcsname}}%}
4859     }%
4860   }%
4861 }%
4862 \@do@auxoutstuff
4863 \edef\@do@auxoutstuff{%
4864     \noexpand\AtEndDocument{%
4865         \noexpand\immediate\noexpand\write\@auxout{%
4866             \string\providecommand\string\@gls@codepage[2]{}%}
4867         \noexpand\immediate\noexpand\write\@auxout{%
4868             \string\@gls@codepage{\@glo@type}{\@gls@codepage}}%}
4869     }%
4870   }%
4871   \@do@auxoutstuff
4872 \fi
4873 \renewcommand*\@warn@nomakeglossaries{%
4874   \GlossariesWarningNoLine{\string\makeglossaries\space
4875   hasn't been used, ^J the glossaries will not be updated}}%
4876 }%
4877 }

```

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

`\GlsWarningHead` Header message.

```

4878 \newcommand{\GlsXtrNoGlsWarningHead}[2]{%
4879 This document is incomplete. The external file associated with
4880 the glossary '#1' (which should be called \texttt{\#2})
4881 hasn't been created.%
4882 }

```

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

```

4883 \newcommand{\GlsXtrNoGlsWarningEmptyStart}{%
4884 This has probably happened because there are no entries defined
4885 in this glossary.%
4886 }

```

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

```

4887 \newcommand{\GlsXtrNoGlsWarningEmptyMain}{%
4888 If you don't want this glossary,
4889 add \texttt{nomain} to your package option list when you load
4890 \texttt{glossaries-extra.sty}. For example:%
4891 }

```

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

```
4892 \newcommand{\GlsXtrNoGlsWarningEmptyNotMain}[1]{%
4893 Did you forget to use \texttt{\{type=\#1\}} when you defined your
4894 entries? If you tried to load entries into this glossary with
4895 \texttt{\{string\}loadglsentries} did you remember to use
4896 \texttt{\{[#1]\}} as the optional argument? If you did, check that
4897 the definitions in the file you loaded all had the type set
4898 to \texttt{\{string\}glsdefaulttype}.%
4899 }
```

warningCheckFile Advisory message to check the file contents.

```
4900 \newcommand{\GlsXtrNoGlsWarningCheckFile}[1]{%
4901 Check the contents of the file \texttt{\{#1\}}. If
4902 it's empty, that means you haven't indexed any of your entries in this
4903 glossary (using commands like \texttt{\{string\}gls} or
4904 \texttt{\{string\}glsadd}) so this list can't be generated.
4905 If the file isn't empty, the document build process hasn't been
4906 completed.%
```

```
4907 }
```

WarningAutoMake Message when automake option has been used.

```
4908 \newcommand{\GlsXtrNoGlsWarningAutoMake}[1]{%
4909 You may need to rerun \LaTeX. If you already have, it may be that
4910 \TeX's shell escape doesn't allow you to run
4911 \texttt{\{ifglsxindy xindy\}else makeindex\fi}. Check the
4912 transcript file \texttt{\{jobname.log\}}. If the shell escape is
4913 disabled, try one of the following:
4914
4915 \begin{itemize}
4916   \item Run the external (Lua) application:
4917
4918     \texttt{\{makeglossaries-lite string"\jobname\string"\}}
4919
4920   \item Run the external (Perl) application:
4921
4922     \texttt{\{makeglossaries string"\jobname\string"\}}
4923 \end{itemize}
4924
4925 Then rerun \LaTeX\ on this document.
4926 \GlossariesExtraWarning{Rerun required to build the
4927 glossary '#1' or check TeX's shell escape allows
4928 you to run \texttt{\{ifglsxindy xindy\}else makeindex\fi}}%
```

```
4929 }
```

WarningMisMatch Mismatching \makenoidxglossaries.

```
4930 \newcommand{\GlsXtrNoGlsWarningMisMatch}{%
4931 You need to either replace \texttt{\{string\}makenoidxglossaries}
4932 with \texttt{\{string\}makeglossaries} or replace
4933 \texttt{\{string\}printglossary} (or \texttt{\{string\}printglossaries}) with
```

```

4934 \texttt{\string\printnoidxglossary}
4935 (or \texttt{\string\printnoidxglossaries}) and then rebuild
4936 this document.%
4937 }

arningBuildInfo Build advice.

4938 \newcommand{\GlsXtrNoGlsWarningBuildInfo}{%
4939 Try one of the following:
4940 \begin{itemize}
4941 \item Add \texttt{automake} to your package option list when you load
4942 \texttt{glossaries-extra.sty}. For example:
4943
4944 \texttt{\string\usepackage[automake]{glossaries-extra}}
4945 \glsopenbrace glossaries-extra\glsclosebrace
4946
4947 \item Run the external (Lua) application:
4948
4949 \texttt{\string\maketitlepage-lua \string"\jobname\string"}
4950
4951 \item Run the external (Perl) application:
4952
4953 \texttt{\string\maketitlepage \string"\jobname\string"}
4954 \end{itemize}
4955
4956 Then rerun \LaTeX\ on this document.%
4957 }

```

trRecordWarning Paragraph for record=only.

```

4958 \newcommand{\GlsXtrRecordWarning}[1]{%
4959 \texttt{\string\printglossary} doesn't work
4960 with the \texttt{record=only} package option
4961 use\par\texttt{\string\printunsrtglossary[type=\#1]}\par
4962 instead (or change the package option).%
4963 }

```

oGlsWarningTail Final paragraph.

```

4964 \newcommand{\GlsXtrNoGlsWarningTail}{%
4965 This message will be removed once the problem has been fixed.%
4966 }

```

GlsWarningNoOut No out file created. Build advice.

```

4967 \newcommand{\GlsXtrNoGlsWarningNoOut}[1]{%
4968 The file \texttt{\#1} doesn't exist. This most likely means you haven't used
4969 \texttt{\string\makeglossaries} or you have used
4970 \texttt{\string\nofiles}. If this is just a draft version of the
4971 document, you can suppress this message using the
4972 \texttt{nomissingglostext} package option.%
4973 }

```

```

glossarywarning
4974 \newcommand*{\@glsxtr@defaultnoglossarywarning}[1]{%
4975   \glossarysection[\glossarytoctitle]{\glossarytitle}%
4976   \GlsXtrNoGlsWarningHead{#1}{\jobname.\csname@glo@type @in\endcsname}%
4977   \par
4978   \glsxtrifemptyglossary{#1}%
4979   {%
4980     \GlsXtrNoGlsWarningEmptyStart\space
4981     \ifthenelse{\equal{#1}{main}}{\GlsXtrNoGlsWarningEmptyMain\par
4982       \medskip
4983       \noindent\textrtt{\string\usepackage[nomain\ifglsacronym ,acronym\fi]%
4984         \glsopenbrace glossaries-extra\glsclosebrace}
4985       \medskip
4986     }%
4987     {\GlsXtrNoGlsWarningEmptyNotMain{#1}}%
4988   }%
4989   {%
4990     \IfFileExists{\jobname.\csname@glo@type @out\endcsname}%
4991     {%
4992       \GlsXtrNoGlsWarningCheckFile
4993         {\jobname.\csname@glo@type @out\endcsname}%
4994
4995       \ifglsautomake
4996
4997       \GlsXtrNoGlsWarningAutoMake{#1}%
4998
4999     \else
5000
5001       \ifthenelse{\equal{#1}{main}}{%
5002         {%
5003           \GlsXtrNoGlsWarningEmptyMain\par
5004           \medskip
5005           \noindent\textrtt{\string\usepackage[nomain]%
5006             \glsopenbrace glossaries-extra\glsclosebrace}
5007           \medskip
5008         }%
5009       }%
5010
5011       \ifdefequal{\makeglossaries}{no@makeglossaries}%
5012       {%
5013         \GlsXtrNoGlsWarningMisMatch
5014       }%
5015       {%
5016         \GlsXtrNoGlsWarningBuildInfo
5017       }%
5018       \fi
5019     }%
5020   }%
5021   \GlsXtrNoGlsWarningNoOut

```

```

5022      {\jobname.\csname @glo@type @out\endcsname}%
5023  }%
5024 }%
5025 \par
5026 \GlsXtrNoGlsWarningTail
5027 }

glossarywarning Warn about using \printglossary with record
5028 \newcommand*{\glsxtr@record@noglossarywarning}[1]{%
5029   \GlossariesExtraWarning{\string\printglossary\space doesn't work\MessageBreak
5030   with record=only package option\MessageBreak(use
5031   \string\printunsrtglossary[type=#1])\MessageBreak
5032   instead (or change the package option)}%
5033 \glossarysection[\glossarytoctitle]{\glossarytitle}
5034 \GlsXtrRecordWarning{#1}
5035 \GlsXtrNoGlsWarningTail
5036 }

Provide some commands to accompany the record option for use with bib2gls.
ResourceOptions Default resource options.
5037 \newcommand*{\GlsXtrDefaultResourceOptions}{}}

xtrresourcefile Since it's dangerous for an external application to create a file with a .tex extension, as from
v1.11 this enforces a .glstex extension to avoid conflict.
5038 \newcommand*{\glsxtrresourcefile}[2][]{%
  The record option can't be set after this command.
5039 \disable@keys{glossaries-extra.sty}{record}%
5040 \glsxtr@writefields
5041 \ifempty{\GlsXtrDefaultResourceOptions}%
5042 {%
5043   \protected@write\@auxout{\glsxtrresourceinit}%
5044   {\string\glsxtr@resource{#1}{#2}}%
5045 }%
5046 {%
5047   \protected@write\@auxout{\glsxtrresourceinit}%
5048   {\string\glsxtr@resource{\GlsXtrDefaultResourceOptions,#1}{#2}}%
5049 }%
5050 \let\@glsxtr@org@see@noindex\gls@see@noindex
5051 \let\@gls@see@noindex\relax
5052 \IfFileExists{#2.glstex}%
5053 {%
  Can't scope \@input so save and restore the category code of @ to allow for internal com-
  mands in the location list.
5054 \edef\@bibgls@restoreat{\noexpand\catcode\noexpand`\noexpand\@=\number\catcode`\@}%
5055 \makeatletter
5056 \@input{#2.glstex}%
5057 \@bibgls@restoreat

```

If the record=nameref option has been set, check if this is supported by the installed version of bib2gls.

```
5058     \@glsxtr@check@bibgls@nameref
5059   }%
5060   {%
5061     \GlossariesExtraWarning{No file '#2.glstex'}%
5062   }%
5063   \let\@gls@see@noindex\@glsxtr@org@see@noindex
5064 }
5065 \onlypreamble\glsxtrresourcefile
```

@bibgls@nameref This will only warn after bib2gls has created the .glostex file, but there's way to check before.

```
5066 \newcommand{\@glsxtr@check@bibgls@nameref}{%
5067   \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
5068     \ifdef\bibglshrefchar
5069     {}%
5070   {%
5071     \GlossariesExtraWarning{record=nameref requires at least
5072       version 1.8 of bib2gls}%
5073   }%
5074 \fi
5075 \let\@glsxtr@check@bibgls@nameref\relax
5076 }
```

xtrresourceinit Code used during the protected write operation.

```
5077 \newcommand*\glsxtrresourceinit{}
```

trresourcecount

```
5078 \newcount\glsxtrresourcecount
```

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

```
5079 \newcommand*\GlsXtrLoadResources[1][]{%
5080   \ifnum\glsxtrresourcecount=0\relax
5081     \glsxtrresourcefile[#1]{\jobname}%
5082   \else
5083     \glsxtrresourcefile[#1]{\jobname-\the\glsxtrresourcecount}%
5084   \fi
5085   \advance\glsxtrresourcecount by 1\relax
5086 }
```

glsxtr@resource

```
5087 \newcommand*\glsxtr@resource[2]{}
```

\glsxtr@fields

```
5088 \newcommand*\glsxtr@fields[1]{}
```

xtr@texencoding

```
5089 \newcommand*\glsxtr@texencoding[1]{}
```

```

\glsxtr@langtag
 5090 \newcommand*\glsxtr@langtag[1]{}

@pluralsuffixes
 5091 \newcommand*\glsxtr@pluralsuffixes[4]{}

tr@shortcutsval
 5092 \newcommand*\glsxtr@shortcutsval[1]{}

sxtr@linkprefix
 5093 \newcommand*\glsxtr@linkprefix[1]{}

xtr@writefields This information only needs to be written once, so disable it after it's been used.
 5094 \newcommand*\glsxtr@writefields{%
 5095   \protected@write\@auxout{}{%
 5096     {\string\providecommand*\string\glsxtr@fields[1]{}{}}%
 5097   \protected@write\@auxout{}{%
 5098     {\string\providecommand*\string\glsxtr@resource[2]{}{}}%
 5099   \protected@write\@auxout{}{%
 5100     {\string\providecommand*\string\glsxtr@pluralsuffixes[4]{}{}}%
 5101   \protected@write\@auxout{}{%
 5102     {\string\providecommand*\string\glsxtr@shortcutsval[1]{}{}}%
 5103   \protected@write\@auxout{}{%
 5104     {\string\providecommand*\string\glsxtr@linkprefix[1]{}{}}%
 5105   \protected@write\@auxout{}{\string\glsxtr@fields{\@gls@keymap}}{}}%
 5106   \protected@write\@auxout{}{%
 5107     {\string\providecommand*\string\glsxtr@record[5]{}{}}%
 5108   \ifx\glsxtr@record@setting\glsxtr@record@setting@nameref
 5109     \protected@write\@auxout{}{%
 5110       {\string\providecommand*\string\glsxtr@record@nameref[8]{}{}}%
 5111   \fi

```

If any languages have been loaded, the language tag will be available in `\CurrentTrackedLanguageTag` (provided by `tracklang`). For multilingual documents, the required locale will have to be indicated in the `sort` key when using `\glsxtrresourcefile`.

```

5112 \ifdef\CurrentTrackedLanguageTag
5113 {%
5114   \protected@write\@auxout{}{%
5115     {\string\glsxtr@langtag{\CurrentTrackedLanguageTag}}{}}%
5116 }%
5117 {}%
5118 \protected@write\@auxout{}{\string\glsxtr@pluralsuffixes
5119   {\glspluralsuffix}{\abbrvpluralsuffix}{\acrpluralsuffix}}{%
5120   {\glsxtrabbrvpluralsuffix}}{}}%
5121 \ifdef\inputencodingname
5122 {%

```

```

5123     \protected@write\@auxout{}{\string\glsxtr@texencoding{\inputencodingname}}%
5124 }%
5125 {%
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.)
5126     \@ifpackageloaded{fontspec}%
5127     {\protected@write\@auxout{}{\string\glsxtr@texencoding{utf8}}}}%
5128 }%
5129 }%
5130 \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.
5131 \AtBeginDocument
5132   {\protected@write\@auxout{}{\string\glsxtr@linkprefix{\glolinkprefix}}}}%
5133 \let\glsxtr@writefields\relax
If the automake option is on, try running bib2gls if the aux file exists. This has to be done before the aux file is opened (so package options automake=immediate and automake=true are identical if just bib2gls is used). The double-quotes around \jobname have been removed (v1.19) since \jobname will include double-quotes if the file name has spaces.
5134 \ifglsautomake
5135   \IfFileExists{\jobname.aux}{%
5136     {\immediate\write18{bib2gls \jobname}}}}%
If \makeglossaries is also used, allow makeindex/xindy to also be run, otherwise disable the error message about requiring \makeglossaries with automake=true.
5137 \ifx\gls@doautomake\gls@doautomake@err
5138   \let\gls@doautomake\relax
5139 \fi
5140 \fi
Check if order=letter has been used by mistake (but not if record=alsoindex has been used).
5141 \glsxtr@if@record@only
5142 {\ifdefstring{\glsorder}{letter}{%
5143   {\GlossariesExtraWarningNoLine{Package option 'order=letter' isn't
5144     supported with 'record=\glsxtr@record@setting'. Use 'break-at=none'
5145     resource option instead}}}}%
5146 }%
5147 }%
5148 }%
5149 }
do@automake@err
5150 \newcommand*{\gls@doautomake@err}{%
5151   \PackageError{glossaries}{You must use
5152     \string\makeglossaries\space with automake=true}{%
5153   }%
5154   Either remove the automake=true setting or

```

```
5155     add \string\makeglossaries\space to your document preamble.%  
5156 }%  
5157 }
```

Allow locations specific to a particular counter to be recorded.

\glsxstr@record

```
5158 \newcommand*\glsxstr@record[5] {}
```

@record@nameref Used with record=nameref to include current label information.

```
5159 \newcommand*\glsxstr@record@nameref[8] {}
```

r@counterrecord Aux file command.

```
5160 \newcommand*\glsxstr@counterrecord[3] {%
```

```
5161   \glsxtrfieldlistgadd{#1}{record.#2}{#3}%
```

```
5162 }
```

unterrecordhook Hook used by \glsxstr@dorecord.

```
5163 \newcommand*\glsxstr@counterrecordhook[] {}
```

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

```
5164 \newcommand*\GlsXtrRecordCounter[1] {%
```

```
5165   @@glsxtr@recordcounter{#1}%
```

```
5166 }
```

```
5167 @onlypreamble\GlsXtrRecordCounter
```

docounterrecord

```
5168 \newcommand*\glsxstr@docounterrecord[1] {%
```

```
5169   \protected@write\auxout{}{\string\glsxtr@counterrecord
```

```
5170     {\glslabel{#1}\csuse{the#1}}}%
```

```
5171 }
```

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.

```
5172 \newcommand*\glsxtrglossentry[1] {%
```

```
5173   \glsxtrtitleorpdforheading
```

```
5174   {\glsxtrglossentry{#1}}%
```

```
5175   {\glsentryname{#1}}%
```

```
5176   {\glsxtrheadname{#1}}%
```

```
5177 }
```

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

```

5178 \newrobustcmd*{\@glsxtrglossentry}[1]{%
5179   \glsxtrtitleorpdforheading
5180   {%
5181     \glsdoifexists{#1}%
5182     {%
5183       \begingroup
5184         \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
5185         \edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
5186         \ifglshasparent{#1}%
5187           {\GlsXtrStandaloneSubEntryItem{#1}}%
5188           {\glsentryitem{#1}}%
5189           \GlsXtrStandaloneEntryName{#1}%
5190       \endgroup
5191     }%
5192   }%
5193   {\glsentryname{#1}}%
5194   {\glsxtrheadname{#1}}%
5195 }

```

**daloneEntryName**

```

5196 \newcommand*{\GlsXtrStandaloneEntryName}[1]{%
5197   \glstarget{#1}{\glossentryname{#1}}%
5198 }

```

**oneGlossaryType** To make it easier to adjust the definition of `\currentglossary` within `\glsxtrglossentry`, this expands to the default definition. (If redefined, it must fully expand to the appropriate label.)

```
5199 \newcommand{\GlsXtrStandaloneGlossaryType}{\glsentrytype{\glscurrententrylabel}}
```

**oneSubEntryItem** Used for sub-entries in standalone format. The argument is the entry's label.

```

5200 \newcommand*{\GlsXtrStandaloneSubEntryItem}[1]{%
5201   \GlsXtrIfFieldEqNum{level}{#1}{1}{\glssubentryitem{#1}}{}%
5202 }

```

**glossentryother** As `\glsxtrglossentry` but uses a different field. First argument is code to use in the header. The second argument is the entry's label. The third argument is the internal field label. This needs to be expandable in case it occurs in a sectioning command so it can't have an optional argument.

```

5203 \newcommand*{\glsxtrglossentryother}[3]{%
5204   \ifstrempty{#1}%
5205   {%
5206     \ifcsdef{glsxtrhead#3}%
5207     {%
5208       \glsxtrtitleorpdforheading
5209       {\@glsxtrglossentryother{#2}{#3}{#1}}%
5210       {\@gls@entry@field{#2}{#3}}%
5211       {\csuse{glsxtrhead#3}{#2}}%
5212     }%

```

```

5213   {%
5214     \glsxtrtitleorpdforheading
5215     {\@glsxtrglossentryother{#2}{#3}{#1}}%
5216     {\@gls@entry@field{#2}{#3}}%
5217     {\@gls@entry@field{\NoCaseChange{#2}}{#3}}%
5218   }%
5219 }%
5220 {%
5221   \glsxtrtitleorpdforheading
5222   {\@glsxtrglossentryother{#2}{#3}{#1}}%
5223   {\@gls@entry@field{#2}{#3}}%
5224   {#1}%
5225 }%
5226 }

```

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

```

5227 \newrobustcmd*{\@glsxtrglossentryother}[3]{%
5228   \glsxtrtitleorpdforheading
5229   {%
5230     \glsdoifexists{#1}%
5231     {%
5232       \begingroup
5233         \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
5234         \edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
5235         \ifglsishasparent{#1}%
5236           {\GlsXtrStandaloneSubEntryItem{#1}}%
5237           {\glsentryitem{#1}}%
5238           \GlsXtrStandaloneEntryOther{#1}%
5239       \endgroup
5240     }%
5241   }%
5242   {\@gls@entry@field{#1}{#2}}%
5243   {#3}%
5244 }

```

`aloneEntryOther`

```

5245 \newcommand*{\GlsXtrStandaloneEntryOther}[2]{%
5246   \glstarget{#1}{\glossentrynameother{#1}{#2}}%
5247 }

```

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

```

5248 \newcommand*{\printunsrtglossary}{%
5249   \c@ifstar{s@\printunsrtglossary\@printunsrtglossary}%
5250 }

```

`ntunsrtglossary` Unstarred version.

```

5251 \newcommand*{\@printunsrtglossary}[1][]{%
5252   \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%

```

5253 }

ntunsrtglossary Starred version.

```
5254 \newcommand*{\s@printunsrtglossary}[2] [] {%
5255   \begingroup
5256   #2%
5257   \c@printglossary{type=\glsdefaulttype,#1}{\c@print@unsrt@glossary}%
5258   \endgroup
5259 }
```

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

```
5260 \newcommand*{\printunsrtglossaries}{%
5261   \forallglossaries{\c@glo@type}{\printunsrtglossary[type=\c@glo@type]}%
5262 }
```

#### @unsrt@glossary

```
5263 \newcommand*{\c@print@unsrt@glossary}{%
5264   \glossarysection[\glossarytoctitle]{\glossarytitle}%
5265   \glossarypreamble
      check for empty list
5266   \glsxtrifemptyglossary{\c@glo@type}%
5267   {%
5268     \GlossariesExtraWarning{No entries defined in glossary '\c@glo@type'}%
5269   }%
5270   {%
5271     \key@ifundefined{glossentry}{group}%
5272     {\let\@gls@getgroupname\@gls@noidx@getgroupname}%
5273     {\let\@gls@getgroupname\@glsxtr@unsrt@getgroupname}%
5274     \def\@gls@currentlettergroup{}%
```

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

```
5275 \def\glsxtr@doglossary{%
5276   \begin{theglossary}%
5277   \glossaryheader
5278   \glsresetentrylist
5279 }%
5280 \expandafter\for\expandafter\glscurrententrylabel\expandafter
5281   :\expandafter=\csname glolist@\c@glo@type\endcsname\do{%
5282   \ifdefempty{\glscurrententrylabel}%
5283   {}%
5284   {}%
```

Provide a hook (for example to measure width).

```
5285 \let\glsxtr@process@\firstofone
5286 \let\printunsrtglossaryskipentry
5287   \glsxtr@printunsrtglossaryskipentry
5288   \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%
```

Don't check group for child entries.

```
5289      \glsxstr@process
5290      {%
5291          \ifglshasparent{\glscurrententrylabel}{}%
5292          {%
5293              \glsxstr@checkgroup\glscurrententrylabel
5294              \expandafter\appto\expandafter\@glsxstr@doglossary\expandafter
5295                  {\@glsxstr@groupheading}%
5296          }%
5297          \eappto\@glsxstr@doglossary{%
5298              \noexpand\@printunsrt@glossary@handler{\glscurrententrylabel}}%
5299          }%
5300      }%
5301  }%
5302  \appto\@glsxstr@doglossary{\end{theglossary}}%
5303  \printunsrtglossarypredoglossary
5304  \@glsxstr@doglossary
5305 }%
5306 \glossarypostamble
5307 }
```

ntryprocesshook

```
5308 \newcommand*{\printunsrtglossaryentryprocesshook}[1]{}
```

ossaryskipentry

```
5309 \newcommand*{\printunsrtglossaryskipentry}{%
5310   \PackageError{glossaries-extra}{\string\printunsrtglossaryskipentry\space
5311 can only be used within \string\printunsrtglossaryentryprocesshook}{}%
5312 }
```

ntryprocesshook

```
5313 \newcommand*{\@glsxstr@printunsrtglossaryskipentry}{%
5314   \let\glsxstr@process\@gobble
5315 }
```

rypredoglossary

```
5316 \newcommand*{\printunsrtglossarypredoglossary}{}
```

lossary@handler

```
5317 \newcommand{\@printunsrt@glossary@handler}[1]{%
5318   \xdef\glscurrententrylabel{\#1}%
5319   \printunsrtglossaryhandler\glscurrententrylabel
5320 }
```

glossaryhandler

```
5321 \newcommand{\printunsrtglossaryhandler}[1]{%
5322   \glsxtrunsrtdo{\#1}%
5323 }
```

triflabelinlist

```
\glsxtriflabelinlist{\label}{\list}{\true}{\false}
```

Might be useful for the handler to check if an entry label or category label is contained in a list, so provide a user-level version of \gls@ifinlist which ensures the label and list are fully expanded.

```
5324 \newrobustcmd*\glsxtriflabelinlist}[4]{%
5325   \protected@edef@glsxtr@doiflabelinlist{\noexpand@gls@ifinlist{#1}{#2}}{%
5326     \glsxtr@doiflabelinlist{#3}{#4}}{%
5327 }
```

srtglossaryunit

```
5328 \newcommand{\print@op@unsrtglossaryunit}[2][]{%
5329   \s@printunsrtglossary[type=\glsdefaulttype,#1]{%
5330     \printunsrtglossaryunitsetup[#2]}{%
5331   }{%
5332 }
```

glossaryunitsetup

```
5333 \newcommand*\printunsrtglossaryunitsetup}[1]{%
5334   \renewcommand*\printunsrtglossaryhandler}[1]{%
5335     \glsxtrfieldxifinlist{##1}{record.#1}{\csuse{the#1}}{%
5336       \glsxtrunsrtdo{##1}}}{%
5337     {}{%
5338   }}{%
```

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

```
5339 \ifcsundef{theH#1}{%
5340   {}{%
5341     \renewcommand*\@glsxtrhypernameprefix}{record.#1.\csuse{the#1}.\@gobble}}{%
5342   }{%
5343   {}{%
5344     \renewcommand*\@glsxtrhypernameprefix}{record.#1.\csuse{theH#1}.\@gobble}}{%
5345   }{%
5346   \renewcommand*\glossarysection}[2][]{%
5347     \appto\glossarypostamble{\glspar\medskip\glspar}}{%
5348 }
```

srtglossaryunit

```
5349 \newcommand{\print@noop@unsrtglossaryunit}[2][]{%
5350   \PackageError{glossaries-extra}{\string\printunsrtglossaryunit\space
5351     requires the record=only or record=alsoindex package option}{}}{%
5352 }
```

t@getgroupitle

```
5353 \newrobustcmd*\@glsxtr@unsrt@getgroupitle}[2]{%
```

```

5354 \protected@edef{\glsxtr@titlelabel{\glsxtr@grouptitle@#1}%
5355 \onelevel@sanitize\glsxtr@titlelabel
5356 \ifcsdef{\glsxtr@titlelabel}
5357 {\letcs{\glsxtr@titlelabel}{\glsxtr@titlelabel}}%
5358 {\def#2{#1}}%
5359 }

```

\glsxtrunsrtdo Provide a user-level call to \glsxtr@noidx@do to make it easier to define a new handler.  
5360 \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).  
5361 \newcommand\*{\glsxtrgroupfield}[1]{group}

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

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

```

5362 \newcommand*{\glsxtr@checkgroup}[1]{%
5363   \def{\glsxtr@groupheding}{}%
5364   \key@ifundefined{glossentry}{group}{}%
5365   {}%
5366   \letcs{\gls@sort}{\glsdetoklabel{#1}@sort}%
5367   \expandafter\glo@grabfirst\gls@sort{}{}\@nil
5368 }%
5369 {}%
5370   \protected@edef{\glo@thislettergrp}{%
5371     \csuse{\glo@glsdetoklabel{#1}@glsxtrgroupfield}%
5372   }%
5373 \ifdefeq{\glo@thislettergrp}{\gls@currentlettergroup}{}%
5374 {}%
5375 {}%
5376 \ifdefempty{\gls@currentlettergroup}{}%
5377 {\def{\glsxtr@groupheding}{\gls@groupskip}{}%
5378 \appto{\glsxtr@groupheding}{%
5379   \noexpand\gls@groupheading{\expandonce{\glo@thislettergrp}}%
5380 }%
5381 }%
5382 \let{\gls@currentlettergroup}{\glo@thislettergrp}
5383 }

```

trLocationField Stores the internal name of the location field.

```
5384 \newcommand*{\GlsXtrLocationField}[1]{location}
```

glsxtr@noidx@do Minor modification of \gls@noidx@do to check for location field if present, but also need to check for the group field.

```
5385 \newcommand{\@glsxtr@noidx@do}[1]{%
5386   \ifglsentryexists{#1}%
5387   {%
5388     \global\let\csuse{\gls@loclist}{\glsdetoklabel{#1}@loclist}%
5389     \global\let\csf{\gls@location}{\glo@glsdetoklabel{#1}@GlsXtrLocationField}%
5390     \ifglshasparent{#1}%
5391     {%
5392       \gls@level=\csuse{\glo@glsdetoklabel{#1}@level}\relax
5393       \ifdefvoid{\gls@location}%
5394       {%
5395         \ifdefvoid{\gls@loclist}%
5396         {%
5397           \subglossentry{\gls@level}{#1}{}%
5398         }%
5399         {%
5400           \subglossentry{\gls@level}{#1}%
5401           {%
5402             \glossaryentrynumbers{\glsnoidxloclist{\gls@loclist}}%
5403           }%
5404         }%
5405       }%
5406       {%
5407         \subglossentry{\gls@level}{#1}{\glossaryentrynumbers{\gls@location}}%
5408       }%
5409     }%
5410   }%
5411   \ifdefvoid{\gls@location}%
5412   {%
5413     \ifdefvoid{\gls@loclist}%
5414     {%
5415       \glossentry{#1}{}%
5416     }%
5417     {%
5418       \glossentry{#1}%
5419       {%
5420         \glossaryentrynumbers{\glsnoidxloclist{\gls@loclist}}%
5421       }%
5422     }%
5423   }%
5424   {%
5425     \glossentry{#1}%
5426     {%
5427       \glossaryentrynumbers{\gls@location}%
5428     }%
5429   }%
5430 }
```

```
5431  }%
5432  {}%
5433 }
```

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
5434 \newcount\@glsxtrnewgls@inner
```

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

```
r@providenewgls
```

```
5435 \newcommand*{\@glsxtr@providenewgls}{%
5436   \protected@write\@auxout{}{\string\providecommand{\string\@glsxtr@newglslike}[2]{}}
5437   \let\@glsxtr@providenewgls\relax
5438 }
```

`identifyglslike` Identify the command given in the second argument for the benefit of `bib2gls`.

```
5439 \newcommand{\glsxtridentifyglslike}[2]{%
5440   \ifdefequal\@glsxtr@record@setting\@glsxtr@record@setting@off
5441   {}%
5442   {}%
5443   \@glsxtr@providenewgls
5444   \protected@write\@auxout{}{\string\@glsxtr@newglslike{\#1}{\string#2}}%
5445 }%
5446 }
```

```
\@glsxtrnewgls
```

```
\glsxtrnewgls[<options>]{<prefix>}{<cs>}{<inner cs name>}
```

```
5447 \newcommand*{\@glsxtrnewgls}[4]{%
5448   \ifdef{\#3}{%
5449   {}%
5450     \PackageError{glossaries-extra}{Command \string#3\space already
5451 defined}{}%
5452   }%
5453   {}%
```

Write information to the aux file for `bib2gls`.

```
5454   \glsxtridentifyglslike{\#2}{\#3}%
5455   \ifcsdef{@#4like@#2}{%
5456   {}%
```

```

5457     \advance\@glsxtrnewgls@inner by \cne
5458     \def\@glsxtrnewgls@innercsname{\#4like\number\@glsxtrnewgls@inner \#2}%
5459 }%
5460 {\def\@glsxtrnewgls@innercsname{\#4like\#2}%
5461 \expandafter\newrobustcmd\expandafter*\expandafter
5462 #3\expandafter{\expandafter\@gls@hyp@opt\csname\@glsxtrnewgls@innercsname\endcsname}%
5463 \ifstrempty{\#1}%
5464 {%
5465     \expandafter\newcommand\expandafter*\csname\@glsxtrnewgls@innercsname\endcsname[2] []{%
5466         \new@ifnextchar[%]
5467             {\csname \#4@\endcsname{\#1}{\#2##2}}%
5468             {\csname \#4@\endcsname{\#1}{\#2##2}[]}}%
5469     }%
5470 }%
5471 {%
5472     \expandafter\newcommand\expandafter*\csname\@glsxtrnewgls@innercsname\endcsname[2] []{%
5473         \new@ifnextchar[%]
5474             {\csname \#4@\endcsname{\#1,\#1}{\#2##2}}%
5475             {\csname \#4@\endcsname{\#1,\#1}{\#2##2}[]}}%
5476     }%
5477 }%
5478 }%
5479 }

```

\glsxtrnewgls

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

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

```

5480 \newrobustcmd*{\glsxtrnewgls}[3] []{%
5481   \glsxtrnewgls{\#1}{\#2}{\#3}{gls}%
5482 }

```

**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.

```

5483 \newrobustcmd*{\glsxtrnewglslike}[6] []{%
5484   \glsxtrnewgls{\#1}{\#2}{\#3}{gls}%
5485   \glsxtrnewgls{\#1}{\#2}{\#4}{glspl}%
5486   \glsxtrnewgls{\#1}{\#2}{\#5}{Gls}%
5487   \glsxtrnewgls{\#1}{\#2}{\#6}{Glspl}%
5488 }

```

**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.

```

5489 \newrobustcmd*{\glsxtrnewGLSlike}[4] []{%
5490   \glsxtrnewgls{\#1}{\#2}{\#3}{GLS}%

```

```

5491  \@glsxtrnewgls{#1}{#2}{#4}{GLSpl}%
5492 }

\glsxtrnewrgls As \glsxtrnewgls but for \rgls.
5493 \newrobustcmd*\{\glsxtrnewrgls\}[3] [] {%
5494  \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
5495 }

sxtrnewrglslike As \glsxtrnewglslike but for \rgls etc.
5496 \newrobustcmd*\{\glsxtrnewrglslike\}[6] [] {%
5497  \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
5498  \@glsxtrnewgls{#1}{#2}{#4}{rglsp1}%
5499  \@glsxtrnewgls{#1}{#2}{#5}{rGls}%
5500  \@glsxtrnewgls{#1}{#2}{#6}{rGlp1}%
5501 }

```

sxtrnewrGLSlike As \glsxtrnewrGLSlike but for \rGLS etc.

```

5502 \newrobustcmd*\{\glsxtrnewrGLSlike\}[4] [] {%
5503  \@glsxtrnewgls{#1}{#2}{#3}{rGLS}%
5504  \@glsxtrnewgls{#1}{#2}{#4}{rGLSp1}%
5505 }

```

Provide easy access to record count fields.

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

```

5506 \newcommand*\{\GlsXtrTotalRecordCount\}[1] {%
5507  \ifcsdef{glo@\glsdetoklabel{#1}@recordcount}%
5508  {\csname glo@\glsdetoklabel{#1}@recordcount\endcsname}%
5509  {0}%
5510 }

```

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

```

5511 \newcommand*\{\GlsXtrRecordCount\}[2] {%
5512  \ifcsdef{glo@\glsdetoklabel{#1}@recordcount.#2}%
5513  {\csname glo@\glsdetoklabel{#1}@recordcount.#2\endcsname}%
5514  {0}%
5515 }

```

`tionRecordCount` Access record count for a particular counter and location. The first argument is the label. The second argument is the counter name. The third argument is the location. This command shouldn't be used if the location doesn't fully expand unless \glsxtrdetoklocation can be set to something sensible.

```

5516 \newcommand*\{\GlsXtrLocationRecordCount\}[3] {%
5517  \ifcsdef{glo@\glsdetoklabel{#1}@recordcount.#2.\glsxtrdetoklocation{#3}}%
5518  {\csname glo@\glsdetoklabel{#1}@recordcount.#2.\glsxtrdetoklocation{#3}\endcsname}%
5519  {0}%
5520 }

```

```
trdetoklocation
5521 \newcommand*{\glsxtrdetoklocation}[1]{#1}
```

```
ablerecordcount
5522 \newcommand*{\glsxtrenablerecordcount}{%
5523   \renewcommand*{\gls}{\rgls}%
5524   \renewcommand*{\Gls}{\rGls}%
5525   \renewcommand*{\glsp1}{\rglsp1}%
5526   \renewcommand*{\Glp1}{\rGlp1}%
5527   \renewcommand*{\GLS}{\rGLS}%
5528   \renewcommand*{\GLSp1}{\rGLSp1}%
5529 }
```

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

```
5530 \newcommand*{\glsxtrrecordtriggervalue}[1]{%
5531   \GlsXtrTotalRecordCount{#1}%
5532 }
```

dCountAttribute

```
5533 \newcommand*{\GlsXtrSetRecordCountAttribute}[2]{%
5534   \@for \@glsxtr@cat:=#1\do
5535   {%
5536     \ifdefempty{\@glsxtr@cat}{%
5537       {%
5538         \glssetcategoryattribute{\@glsxtr@cat}{recordcount}{#2}%
5539       }%
5540     }%
5541 }
```

ifrecordtrigger

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

```
5542 \newcommand*{\glsxtrifrecordtrigger}[3]{%
5543   \glshasattribute{#1}{recordcount}%
5544   {%
5545     \ifnum\glsxtrrecordtriggervalue{#1}>\glsgetattribute{#1}{recordcount}\relax
5546       #3%
5547     \else
5548       #2%
5549     \fi
5550   }%
5551   {#3}%
5552 }
```

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

```

5553 \newcommand*{\@glsxtr@rglstrigger@record}[3]{%
5554   \edef\glslabel{\glsdetoklabel{#2}}%
5555   \let\@gls@link@label\glslabel
5556   \def\@glsxtr@thevalue{}%
5557   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
5558   \def\@glsnumberformat{glstriggerrecordformat}%
5559   \edef\@gls@counter{\csname glo@\glslabel @counter\endcsname}%
5560   \edef\glsstype{\csname glo@\glslabel @type\endcsname}%
5561   \def\@glsxtr@thevalue{}%
5562   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
5563   \glsxtrinitwrgloss
5564   \glslinkpresetkeys
5565   \setkeys{glslink}{#1}%
5566   \glslinkpostsetkeys
5567   \ifdefempty{\@glsxtr@thevalue}{%
5568     {%
5569       \gls@saveentrycounter
5570     }%
5571     {%
5572       \let\the\glsentrycounter\@glsxtr@thevalue
5573       \def\theH\glsentrycounter{\@glsxtr@theHvalue}%
5574     }%
5575     \ifglsxtrinitwrglossbefore
5576       \do@wrglossary{#2}%
5577     \fi
5578     #3%
5579     \ifglsxtrinitwrglossbefore
5580     \else
5581       \do@wrglossary{#2}%
5582     \fi
5583     \ifKV@glslink@local
5584       \glslocalunset{#2}%
5585     \else
5586       \glsunset{#2}%
5587     \fi
5588   }%

```

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

```
5589 \newcommand*{\glstriggerrecordformat}[1]{}%
```

\rgls

```
5590 \newrobustcmd*{\rgls}{\gls@hyp@opt\rgls}
```

\@rgls

```
5591 \newcommand*{\@rgls}[2][]{%
5592   \new@ifnextchar[{\@rgls@{#1}{#2}}{\@rgls@{#1}{#2}[]}%
5593 }
```

```

\@rgls@
5594 \def\@rgls@#1#2[#3]{%
5595   \glsxtrifrecordtrigger{#2}%
5596   {%
5597     \glsxtr@rglstrigger@record{#1}{#2}{\rglsformat{#2}{#3}}%
5598   }%
5599   {%
5600     \gls@{#1}{#2}[#3]%
5601   }%
5602 }%


\rglspl
5603 \newrobustcmd*\rglspl{\gls@hyp@opt\rglspl}

\@rglspl
5604 \newcommand*\rglspl[2][]{%
5605   \new@ifnextchar[\glspl@{#1}{#2}]{\glspl@{#1}{#2}[]}{%
5606 }

\@rglspl@
5607 \def\@rglspl@#1#2[#3]{%
5608   \glsxtrifrecordtrigger{#2}%
5609   {%
5610     \glsxtr@rglstrigger@record{#1}{#2}{\rglsplformat{#2}{#3}}%
5611   }%
5612   {%
5613     \glspl@{#1}{#2}[#3]%
5614   }%
5615 }%


\rGls
5616 \newrobustcmd*\rGls{\gls@hyp@opt\rGls}

\@rGls
5617 \newcommand*\rGls[2][]{%
5618   \new@ifnextchar[\rGls@{#1}{#2}]{\rGls@{#1}{#2}[]}{%
5619 }

\@rGls@
5620 \def\@rGls@#1#2[#3]{%
5621   \glsxtrifrecordtrigger{#2}%
5622   {%
5623     \glsxtr@rglstrigger@record{#1}{#2}{\rGlsformat{#2}{#3}}%
5624   }%
5625   {%
5626     \rGls@{#1}{#2}[#3]%
5627   }%
5628 }%

```

```

\rGlspl
5629 \newrobustcmd*\rGlspl{\gls@hyp@opt\rGlspl}

\@rGlspl
5630 \newcommand*\@rGlspl[2][]{%
5631   \new@ifnextchar[\@rGlspl[#1]{#2}{\@rGlspl[#1]{#2}[]}}%
5632 }

\@rGlspl@
5633 \def\@rGlspl#1#2[#3]{%
5634   \glsxtrifrecordtrigger{#2}%
5635   {%
5636     \glsxtr@rglstrigger@record[#1]{#2}{\rGlsplformat{#2}{#3}}%
5637   }%
5638   {%
5639     \@Glspl[#1]{#2}{#3}%
5640   }%
5641 }%

\rGLS
5642 \newrobustcmd*\rGLS{\gls@hyp@opt\@rGLS}

\@rGLS
5643 \newcommand*\@rGLS[2][]{%
5644   \new@ifnextchar[\@rGLS[#1]{#2}{\@rGLS[#1]{#2}[]}}%
5645 }

\@rGLS@
5646 \def\@rGLS#1#2[#3]{%
5647   \glsxtrifrecordtrigger{#2}%
5648   {%
5649     \glsxtr@rglstrigger@record[#1]{#2}{\rGLSformat{#2}{#3}}%
5650   }%
5651   {%
5652     \@GLS[#1]{#2}{#3}%
5653   }%
5654 }%

\rGLSpl
5655 \newrobustcmd*\rGLSpl{\gls@hyp@opt\@rGLSpl}

\@rGLSpl
5656 \newcommand*\@rGLSpl[2][]{%
5657   \new@ifnextchar[\@rGLSpl[#1]{#2}{\@rGLSpl[#1]{#2}[]}}%
5658 }

```

```

\@rGLSpl@

5659 \def\@rGLSpl@#1#2[#3]{%
5660   \glsxtrifrecordtrigger{#2}%
5661   {%
5662     \glsxtr@rglstrigger@record{#1}{#2}{\rGLSplformat{#2}{#3}}%
5663   }%
5664   {%
5665     \@GLSpl@{#1}{#2}[#3]%
5666   }%
5667 }%


\rglsformat

5668 \newcommand*\rglsformat[2]{%
5669   \glsifregular{#1}%
5670   {\glsentryfirst{#1}}%
5671   {\ifglshaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
5672 }

\rglsplformat

5673 \newcommand*\rglsplformat[2]{%
5674   \glsifregular{#1}%
5675   {\glsentryfirstplural{#1}}%
5676   {\ifglshaslong{#1}{\glsentrylongplural{#1}}{\glsentryfirstplural{#1}}}#2%
5677 }

\rGlsformat

5678 \newcommand*\rGlsformat[2]{%
5679   \glsifregular{#1}%
5680   {\Glsentryfirst{#1}}%
5681   {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
5682 }

\rGlsplformat

5683 \newcommand*\rGlsplformat[2]{%
5684   \glsifregular{#1}%
5685   {\Glsentryfirstplural{#1}}%
5686   {\ifglshaslong{#1}{\Glsentrylongplural{#1}}{\Glsentryfirstplural{#1}}}#2%
5687 }

\rGLSformat

5688 \newcommand*\rGLSformat[2]{%
5689   \expandafter\mfirrstucMakeUppercase\expandafter{\rglsformat{#1}{#2}}%
5690 }

\rGLSplformat

5691 \newcommand*\rGLSplformat[2]{%
5692   \expandafter\mfirrstucMakeUppercase\expandafter{\rglsplformat{#1}{#2}}%
5693 }

```

## 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@<label>` where `<label>` is the entry’s label. Since this is performed within `\@gls@link` the label can be accessed with `\glslabel`.

```
5694 \newcommand{\glsxtr@do@inc@linkcount}{%
```

Does this entry have the `linkcount` attribute set?

```
5695 \glsifattribute{\glslabel}{linkcount}{true}%
```

```
5696 {%
```

Does the counter exist?

```
5697 \ifcsdef{c@glsxtr@linkcount@\glslabel}{}%
```

```
5698 {%
```

Counter doesn’t exist, so define it.

```
5699 \newcounter{glsxtr@linkcount@\glslabel}%
```

If `linkcountmaster` is set, add to counter reset.

```
5700 \glshasattribute{\glslabel}{linkcountmaster}%
```

```
5701 {%
```

Need to ensure values are fully expanded.

```
5702 \begingroup
```

```
5703 \edef\x{\endgroup\noexpand\addtoreset{glsxtr@linkcount@\glslabel}%
```

```
5704 {\glsgetattribute{\glslabel}{linkcountmaster}}}%
```

```
5705 \x
```

```
5706 }%
```

```
5707 {}%
```

```
5708 }%
```

Increment counter:

```
5709 \glsxtrinlinkcounter{glsxtr@linkcount@\glslabel}%
```

```
5710 {%
```

```
5711 {}%
```

```
5712 }
```

`rinlinkcounter` May be redefined to use `\refstepcounter` if required.

```
5713 \newcommand*{\glsxtrinlinkcounter}[1]{\stepcounter{#1}}
```

`linkCounterValue` Expands to the associated link counter register or 0 if not defined.

```
5714 \newcommand*{\GlsXtrLinkCounterValue}[1]{%
```

```
5715 \ifcsundef{c@glsxtr@linkcount@#1}{0}{\csname c@glsxtr@linkcount@#1\endcsname}%
```

```
5716 }
```

rTheLinkCounter Expands to the display value of the associated link counter or 0 if not defined.

```
5717 \newcommand*\GlsXtrTheLinkCounter}[1]{%
5718 \ifcsundef{\theglsxtr@linkcount@#1}{0}{%
5719 {\csname theglsxtr@linkcount@#1\endcsname}%
5720 }
```

fLinkCounterDef Tests if the counter has been defined

```
5721 \newcommand*\GlsXtrIfLinkCounterDef}[3]{%
5722 \ifcsundef{\theglsxtr@linkcount@#1}{#3}{#2}{%
5723 }
```

LinkCounterName Expands to the associated link counter name. (No check for existence.)

```
5724 \newcommand*\GlsXtrLinkCounterName}[1]{\glsxtr@linkcount@#1}
```

bleLinkCounting

```
\GlsXtrEnableLinkCounting[<master counter>]{<categories>}
```

Enable link counting for the given categories.

```
5725 \newcommand*\GlsXtrEnableLinkCounting}[2][]{%
5726 \let\glsxtr@inc@linkcount@\glsxtr@do@inc@linkcount
5727 @for@\glsxtr@label:=#2\do
5728 {%
5729 \glssetcategoryattribute{\glsxtr@label}{linkcount}{true}%
5730 \ifstrempty{#1}{%
5731 {%
5732 \ifcsundef{c@#1}{%
5733 {\nocounterr{#1}}%
5734 \glssetcategoryattribute{\glsxtr@label}{linkcountmaster}{#1}%
5735 }%
5736 }%
5737 }
5738 @onlypreamble\GlsXtrEnableLinkCounting
```

## 1.5 Integration with glossaries-accsupp

Provide better integration with the glossaries-accsupp package. (Must be loaded before the main code of glossaries-extra either explicitly or through the accsupp package option.)

These commands have their definitions set according to whether or not glossaries-extra has been loaded.

```
5739 @ifpackageloaded{glossaries-accsupp}
5740 {
```

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

```

\glsaccessname Display the name value (no link and no check for existence).
5741 \newcommand*{\glsaccessname}[1]{%
5742   \glsnameaccessdisplay
5743   {%
5744     \glsentryname{#1}%
5745   }%
5746   {#1}%
5747 }

\Glsaccessname Display the name value (no link and no check for existence) with the first letter converted to
upper case.
5748 \newcommand*{\Glsaccessname}[1]{%
5749   \glsnameaccessdisplay
5750   {%
5751     \Glsentryname{#1}%
5752   }%
5753   {#1}%
5754 }

\GLSaccessname Display the name value (no link and no check for existence) converted to upper case.
5755 \newcommand*{\GLSaccessname}[1]{%
5756   \glsnameaccessdisplay
5757   {%
5758     \mfirstucMakeUppercase{\glsentryname{#1}}%
5759   }%
5760   {#1}%
5761 }

\glsaccesstext Display the text value (no link and no check for existence).
5762 \newcommand*{\glsaccesstext}[1]{%
5763   \glstextaccessdisplay
5764   {%
5765     \glsentrytext{#1}%
5766   }%
5767   {#1}%
5768 }

\Glsaccesstext Display the text value (no link and no check for existence) with the first letter converted to
upper case.
5769 \newcommand*{\Glsaccesstext}[1]{%
5770   \glstextaccessdisplay
5771   {%
5772     \Glsentrytext{#1}%
5773   }%
5774   {#1}%
5775 }

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

```

```
5776 \newcommand*{\GLSaccesstext}[1]{%
5777   \glstextaccessdisplay
5778   {%
5779     \mfirstucMakeUppercase{\glsentrytext{#1}}%
5780   }%
5781   {#1}%
5782 }
```

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

```
5783 \newcommand*{\glsaccessplural}[1]{%
5784   \glspluralaccessdisplay
5785   {%
5786     \glsentryplural{#1}%
5787   }%
5788   {#1}%
5789 }
```

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

```
5790 \newcommand*{\Glsaccessplural}[1]{%
5791   \glspluralaccessdisplay
5792   {%
5793     \Glsentryplural{#1}%
5794   }%
5795   {#1}%
5796 }
```

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

```
5797 \newcommand*{\GLSaccessplural}[1]{%
5798   \glspluralaccessdisplay
5799   {%
5800     \mfirstucMakeUppercase{\glsentryplural{#1}}%
5801   }%
5802   {#1}%
5803 }
```

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

```
5804 \newcommand*{\glsaccessfirst}[1]{%
5805   \glsfirstaccessdisplay
5806   {%
5807     \glsentryfirst{#1}%
5808   }%
5809   {#1}%
5810 }
```

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

```
5811 \newcommand*{\Glsaccessfirst}[1]{%
```

```
5812     \glsfirstaccessdisplay
5813     {%
5814         \Glsentryfirst{#1}%
5815     }%
5816     {#1}%
5817 }
```

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

```
5818 \newcommand*{\GLSaccessfirst}[1]{%
5819     \glsfirstaccessdisplay
5820     {%
5821         \mfirstucMakeUppercase{\glsentryfirst{#1}}%
5822     }%
5823     {#1}%
5824 }
```

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

```
5825 \newcommand*{\glsaccessfirstplural}[1]{%
5826     \glsfirstpluralaccessdisplay
5827     {%
5828         \glsentryfirstplural{#1}%
5829     }%
5830     {#1}%
5831 }
```

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

```
5832 \newcommand*{\Glsaccessfirstplural}[1]{%
5833     \glsfirstpluralaccessdisplay
5834     {%
5835         \Glsentryfirstplural{#1}%
5836     }%
5837     {#1}%
5838 }
```

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

```
5839 \newcommand*{\GLSaccessfirstplural}[1]{%
5840     \glsfirstpluralaccessdisplay
5841     {%
5842         \mfirstucMakeUppercase{\glsentryfirstplural{#1}}%
5843     }%
5844     {#1}%
5845 }
```

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

```
5846 \newcommand*{\glsaccesssymbol}[1]{%
5847     \glssymbolaccessdisplay
5848     {%
```

```
5849     \glsentrysymbol{#1}%
5850   }%
5851   {#1}%
5852 }
```

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

```
5853 \newcommand*{\Glsaccesssymbol}[1]{%
5854   \glssymbolaccessdisplay
5855   {%
5856     \Glsentrysymbol{#1}%
5857   }%
5858   {#1}%
5859 }
```

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

```
5860 \newcommand*{\GLSaccesssymbol}[1]{%
5861   \glssymbolaccessdisplay
5862   {%
5863     \mfirstucMakeUppercase{\glsentrysymbol{#1}}%
5864   }%
5865   {#1}%
5866 }
```

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

```
5867 \newcommand*{\glsaccesssymbolplural}[1]{%
5868   \glssymbolpluralaccessdisplay
5869   {%
5870     \glsentrysymbolplural{#1}%
5871   }%
5872   {#1}%
5873 }
```

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

```
5874 \newcommand*{\Glsaccesssymbolplural}[1]{%
5875   \glssymbolpluralaccessdisplay
5876   {%
5877     \Glsentrysymbolplural{#1}%
5878   }%
5879   {#1}%
5880 }
```

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

```
5881 \newcommand*{\GLSaccesssymbolplural}[1]{%
5882   \glssymbolpluralaccessdisplay
5883   {%
5884     \mfirstucMakeUppercase{\glsentrysymbolplural{#1}}%
```

```
5885    }%
5886    {#1}%
5887 }
```

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

```
5888 \newcommand*{\glsaccessdesc}[1]{%
5889   \glsdescriptionaccessdisplay
5890   {%
5891     \glsentrydesc{#1}%
5892   }%
5893   {#1}%
5894 }
```

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

```
5895 \newcommand*{\Glsaccessdesc}[1]{%
5896   \glsdescriptionaccessdisplay
5897   {%
5898     \Glsentrydesc{#1}%
5899   }%
5900   {#1}%
5901 }
```

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

```
5902 \newcommand*{\GLSaccessdesc}[1]{%
5903   \glsdescriptionaccessdisplay
5904   {%
5905     \mfirstucMakeUppercase{\glsentrydesc{#1}}%
5906   }%
5907   {#1}%
5908 }
```

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

```
5909 \newcommand*{\glsaccessdescplural}[1]{%
5910   \glsdescriptionpluralaccessdisplay
5911   {%
5912     \glsentrydescplural{#1}%
5913   }%
5914   {#1}%
5915 }
```

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

```
5916 \newcommand*{\Glsaccessdescplural}[1]{%
5917   \glsdescriptionpluralaccessdisplay
5918   {%
5919     \Glsentrydescplural{#1}%
5920   }%
```

```
5921     {#1}%
5922 }
```

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

```
5923 \newcommand*{\GLSaccessdescplural}[1]{%
5924     \glsdescriptionpluralaccessdisplay
5925     {%
5926         \mfirstucMakeUppercase{\glsentrydescplural{#1}}%
5927     }%
5928     {#1}%
5929 }
```

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

```
5930 \newcommand*{\glsaccessshort}[1]{%
5931     \glsshortaccessdisplay
5932     {%
5933         \glsentryshort{#1}%
5934     }%
5935     {#1}%
5936 }
```

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

```
5937 \newcommand*{\Glsaccessshort}[1]{%
5938     \glsshortaccessdisplay
5939     {%
5940         \Glsentryshort{#1}%
5941     }%
5942     {#1}%
5943 }
```

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

```
5944 \newcommand*{\GLSaccessshort}[1]{%
5945     \glsshortaccessdisplay
5946     {%
5947         \mfirstucMakeUppercase{\glsentryshort{#1}}%
5948     }%
5949     {#1}%
5950 }
```

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

```
5951 \newcommand*{\glsaccessshortpl}[1]{%
5952     \glsshortpluralaccessdisplay
5953     {%
5954         \glsentryshortpl{#1}%
5955     }%
5956     {#1}%
5957 }
```

```

lsaccessshortpl Display the short plural form with first letter converted to uppercase (no link and no check for existence).
5958 \newcommand*{\Glsaccessshortpl}[1]{%
5959   \glsshortpluralaccessdisplay
5960   {%
5961     \Glsentryshortpl{\#1}%
5962   }%
5963   {\#1}%
5964 }

LSaccessshortpl Display the shortplural value (no link and no check for existence) converted to upper case.
5965 \newcommand*{\GLSaccessshortpl}[1]{%
5966   \glsshortpluralaccessdisplay
5967   {%
5968     \mfirstucMakeUppercase{\glsentryshortpl{\#1}}%
5969   }%
5970   {\#1}%
5971 }

\glsaccesslong Display the long form (no link and no check for existence).
5972 \newcommand*{\glsaccesslong}[1]{%
5973   \glslongaccessdisplay{\glsentrylong{\#1}}{\#1}%
5974 }

\Glsaccesslong Display the long form (no link and no check for existence).
5975
5976 \newcommand*{\Glsaccesslong}[1]{%
5977   \glslongaccessdisplay{\Glsentrylong{\#1}}{\#1}%
5978 }

\GLSaccesslong Display the long value (no link and no check for existence) converted to upper case.
5979 \newcommand*{\GLSaccesslong}[1]{%
5980   \glslongaccessdisplay
5981   {%
5982     \mfirstucMakeUppercase{\glsentrylong{\#1}}%
5983   }%
5984   {\#1}%
5985 }

\glsaccesslongpl Display the long plural form (no link and no check for existence).
5986 \newcommand*{\glsaccesslongpl}[1]{%
5987   \glslongpluralaccessdisplay{\glsentrylongpl{\#1}}{\#1}%
5988 }

\Glsaccesslongpl Display the long plural form (no link and no check for existence).
5989
5990 \newcommand*{\Glsaccesslongpl}[1]{%
5991   \glslongpluralaccessdisplay{\Glsentrylongpl{\#1}}{\#1}%
5992 }

```

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

```
5993 \newcommand*{\GLSaccesslongpl}[1]{%
5994   \glslongpluralaccessdisplay
5995   {%
5996     \mfirstucMakeUppercase{\glsentrylongpl{#1}}%
5997   }%
5998   {#1}%
5999 }
```

Keys for accessibility support.

```
6000 \define@key{glsxtrabbrv}{access}{%
6001   \def\@gls@nameaccess{#1}%
6002 }
6003 \define@key{glsxtrabbrv}{textaccess}{%
6004   \def\@gls@textaccess{#1}%
6005 }
6006 \define@key{glsxtrabbrv}{pluralaccess}{%
6007   \def\@gls@pluralaccess{#1}%
6008 }
6009 \define@key{glsxtrabbrv}{firstaccess}{%
6010   \def\@gls@firstaccess{#1}%
6011 }
6012 \define@key{glsxtrabbrv}{firstpluralaccess}{%
6013   \def\@gls@firstpluralaccess{#1}%
6014 }
6015 \define@key{glsxtrabbrv}{shortaccess}{%
6016   \def\@gls@shortaccess{#1}%
6017 }
6018 \define@key{glsxtrabbrv}{shortpluralaccess}{%
6019   \def\@gls@shortaccesspl{#1}%
6020 }
6021 \define@key{glsxtrabbrv}{longaccess}{%
6022   \def\@gls@longaccess{#1}%
6023 }
6024 \define@key{glsxtrabbrv}{shortlonglaccess}{%
6025   \def\@gls@longaccesspl{#1}%
6026 }
```

@initaccesskeys

```
6027 \newcommand*{\@gls@initaccesskeys}{%
6028   \def\@gls@nameaccess{}%
6029   \def\@gls@textaccess{}%
6030   \def\@gls@pluralaccess{}%
6031   \def\@gls@firstaccess{}%
6032   \def\@gls@firstpluralaccess{}%
```

```

6033   \def\@gls@shortaccess{}%
6034   \def\@gls@shortaccesspl{}%
6035   \def\@gls@longaccess{}%
6036   \def\@gls@longaccesspl{}%
6037 }

```

ssattribute@set

```
\gls@ifaccessattribute@set{\attribute}{\true}{\false}
```

```

6038 \newcommand*{\@gls@ifaccessattribute@set}[3]{%
6039   \glsifcategoryattribute{\glscategorylabel}{access#1}{true}%
6040   {#2}%
6041   {%
6042     \glsifcategoryattribute{\glscategorylabel}{access#1}{false}%
6043     {#3}%
6044     {%
6045       \glsifcategoryattribute{\glscategorylabel}{#1}{true}%
6046       {#2}%
6047       {#3}%
6048     }%
6049   }%
6050 }

```

As from glossaries v4.45, the replacement text support has been corrected so that the accessibility support for abbreviations use the “E” (expanded value) element. This should actually contain the long form since it’s supposed to explain the abbreviation. This is a bit redundant on first use for styles like long-short.

aultshortaccess

```
\glsdefaultshortaccess{\long}{\short}
```

This command was only introduced to glossaries-accsupp 1.42 so it may not be defined.

```
6051 \def\glsdefaultshortaccess#1#2{#1 (#2)}
```

signactualsetup

```

6052 \newcommand{\glsxtrassignactualsetup}{%
6053   \let\@\empty
6054   \let\emph\@firstofone
6055   \let\textbf\@firstofone
6056   \let\textmd\@firstofone
6057   \let\textit\@firstofone
6058   \let\textsl\@firstofone
6059   \let\textsc\@firstofone

```

```

6060     \let\textrm\@firstofone
6061     \let\textsf\@firstofone
6062     \let\texttt\@firstofone
6063 }

s@assign@actual
6064 \ifdef\pdfstringdef
6065 {
6066     \newcommand{\@gls@assign@actual}{%
6067         \begingroup
6068             \glsxtrassignactualsetup
6069             \pdfstringdef{\gls@actualshort{\glsxtrorgshort}}%
6070             \pdfstringdef{\gls@actuallong{\glsxtrorglong}}%
6071             \pdfstringdef{\gls@actualshortpl{\gls@shortpl}}%
6072             \pdfstringdef{\gls@actuallongpl{\gls@longpl}}%
6073             \protected@edef{\gls@tmp}{\endgroup
6074                 \def\noexpand{\gls@actualshort{\expandonce{\gls@actualshort}}}%
6075                 \def\noexpand{\gls@actuallong{\expandonce{\gls@actuallong}}}%
6076                 \def\noexpand{\gls@actualshortpl{\expandonce{\gls@actualshortpl}}}%
6077                 \def\noexpand{\gls@actuallongpl{\expandonce{\gls@actuallongpl}}}%
6078             }%
6079             \@gls@tmp
6080     }
6081 }
6082 {
6083     \newcommand{\@gls@assign@actual}{%
6084         \begingroup
6085             \glsxtrassignactualsetup
6086             \protected@edef{\gls@tmp}{\endgroup
6087                 \def\noexpand{\gls@actualshort{\glsxtrorgshort}}%
6088                 \def\noexpand{\gls@actuallong{\glsxtrorglong}}%
6089                 \def\noexpand{\gls@actualshortpl{\gls@shortpl}}%
6090                 \def\noexpand{\gls@actuallongpl{\gls@longpl}}%
6091             }%
6092             \@gls@tmp
6093     }
6094 }

```

`lt@short@access` Renamed `\@gls@setup@default@access` and removed argument since it can be obtained from `\glsxtrorgshort`.

`@default@access` Assign the default value of the `shortaccess` key. The argument is the short value passed to `\newabbreviation`. The `shortaccess` value should explain the abbreviation.

```

6095 \newcommand{\@gls@setup@default@access}{%
6096     \@gls@assign@actual
6097     \ifdefempty{\gls@shortaccess}
6098     {%

```

Check if the `accessinsertdots` attribute has been set but only if `shortaccess` hasn't been set.

```

6099  \@gls@ifaccessattribute@set{insertdots}%
6100  {%
6101      \expandafter\glsxtr@insertdots\expandafter\@gls@actualshort\expandafter
6102      {\@gls@actualshort}%
6103  }%
6104  {}%
6105  \ifdefempty{\gls@longaccess}
6106  {%
6107      \edef\@gls@shortaccess{\glsdefaultshortaccess
6108          {\expandonce{\gls@actuallong}}{\expandonce{\gls@actualshort}}}%
6109  }%
6110  {}%
6111  \edef\@gls@shortaccess{\glsdefaultshortaccess
6112      {\expandonce{\gls@longaccess}}{\expandonce{\gls@actualshort}}}%
6113  }%
6114  \appto{\ExtraCustomAbbreviationFields}{shortaccess={\@gls@shortaccess},}%

If shortaccessplural hasn't been set, assign plural form.

6115  \ifdefempty{\gls@shortaccesspl}
6116  {%
6117      \@gls@ifaccessattribute@set{aposplural}%
6118  }%
6119      \expandafter\def\expandafter\@gls@shortaccesspl\expandafter{%
6120          \@gls@actualshort'\glsxtrabbrvpluralsuffix}%
6121  }%
6122  {}%
6123      \@gls@ifaccessattribute@set{noshortplural}%
6124  }%
6125      \let{\gls@shortaccesspl}{\gls@shortaccess}
6126  }%
6127  {}%
6128      \let{\gls@shortaccesspl}{\gls@actualshortpl}
6129  }%
6130  }%
6131  \ifdefempty{\gls@longaccesspl}
6132  {%
6133      \edef{\gls@shortaccesspl}{\glsdefaultshortaccess
6134          {\expandonce{\gls@actuallongpl}}{\expandonce{\gls@actualshortpl}}}%
6135  }%
6136  {}%
6137      \edef{\gls@shortaccesspl}{\glsdefaultshortaccess
6138          {\expandonce{\gls@longaccesspl}}{\expandonce{\gls@actualshort}}}%
6139  }%
6140  \appto{\ExtraCustomAbbreviationFields}{shortpluralaccess={\@gls@shortaccesspl},}%
6141  }%
6142  {}%
6143  }%
6144  {}%
6145  \ifdefempty{\gls@shortaccesspl}
6146  {\let{\gls@shortaccesspl}{\gls@shortaccess}}%

```

```

6147     {}%
6148   }%
   If access key hasn't been set, check if the nameshortaccess attribute has been set.
6149   \ifdefempty{@gls@nameaccess}
6150     {}%
6151       \glscategoryattribute{\glscategorylabel}{nameshortaccess}{true}%
6152     {}%
6153       \eappto\ExtraCustomAbbreviationFields{access={\@gls@shortaccess},}%
6154     {}%
6155     {}%
6156   }%
6157   {}%
   If textaccess key hasn't been set, check if the textshortaccess attribute has been set.
6158   \ifdefempty{@gls@textaccess}
6159     {}%
6160       \glscategoryattribute{\glscategorylabel}{textshortaccess}{true}%
6161     {}%
6162       \eappto\ExtraCustomAbbreviationFields{textaccess={\@gls@shortaccess},}%
6163     {}%
6164     {}%
6165   }%
6166   {}%
6167   \ifdefempty{@gls@pluralaccess}
6168     {}%
6169       \glscategoryattribute{\glscategorylabel}{textshortaccess}{true}%
6170     {}%
6171       \eappto\ExtraCustomAbbreviationFields{%
6172         pluralaccess={\@gls@shortaccesspl},%
6173       }%
6174     {}%
6175     {}%
6176   }%
6177   {}%
   If firstaccess key hasn't been set, check if the firstshortaccess attribute has been set.
6178   \ifdefempty{@gls@firstaccess}
6179     {}%
6180       \glscategoryattribute{\glscategorylabel}{firstshortaccess}{true}%
6181     {}%
6182       \eappto\ExtraCustomAbbreviationFields{firstaccess={\@gls@shortaccess},}%
6183     {}%
6184     {}%
6185   }%
6186   {}%
6187   \ifdefempty{@gls@firstpluralaccess}
6188     {}%
6189       \glscategoryattribute{\glscategorylabel}{firstshortaccess}{true}%
6190     {}%
6191       \eappto\ExtraCustomAbbreviationFields{%

```

```

6192         firstpluralaccess={\@gls@shortaccesspl},%
6193     }%
6194   }%
6195   {}%
6196   }%
6197   {}%
6198 }

```

Provide hooks for \setabbreviationstyle that automatically set the attributes appropriate for the style. If the name is just the short form and the description contains the long form, then it may not be necessary to set nameshortaccess but it would depend on the glossary style.

Need to provide \glsxtr<category><field>accsupp if not already defined.

ovideaccsuppcmd

```

6199 \newcommand*{\glsxtrprovideaccsuppcmd}[2]{%
6200   \ifcsundef{glsxtr#1#2accsupp}%
6201   {\csdef{glsxtr#1#2accsupp}{\glsshortaccsupp}}%
6202   {}%
6203 }

```

rSetNoLongAttrs For styles where the name, first and text are just the abbreviation.

```

6204 \newcommand*{\glsxtrAccSuppAbbrSetNoLongAttrs}[1]{%
6205   \glssetcategoryattribute{#1}{nameshortaccess}{true}%
6206   \glssetcategoryattribute{#1}{firstshortaccess}{true}%
6207   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6208   \glsxtrprovideaccsuppcmd{#1}{name}%
6209   \glsxtrprovideaccsuppcmd{#1}{first}%
6210   \glsxtrprovideaccsuppcmd{#1}{firstpl}%
6211   \glsxtrprovideaccsuppcmd{#1}{text}%
6212   \glsxtrprovideaccsuppcmd{#1}{plural}%
6213 }

```

tFirstLongAttrs For styles where the name and text are just the abbreviation. The first form may just be long or may be short and long.

```

6214 \newcommand*{\glsxtrAccSuppAbbrSetFirstLongAttrs}[1]{%
6215   \glssetcategoryattribute{#1}{nameshortaccess}{true}%
6216   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6217   \glsxtrprovideaccsuppcmd{#1}{name}%
6218   \glsxtrprovideaccsuppcmd{#1}{text}%
6219   \glsxtrprovideaccsuppcmd{#1}{plural}%
6220 }

```

tTextShortAttrs For styles where only the text is just the abbreviation. The name and first form may just be long or may be short and long. The name may also be short but followed by the long form in the description.

```

6221 \newcommand*{\glsxtrAccSuppAbbrSetTextShortAttrs}[1]{%
6222   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6223   \glsxtrprovideaccsuppcmd{#1}{text}%

```

```
6224     \glsxtrprovideaccsuppcmd{#1}{plural}%
6225 }
```

**tNameShortAttrs** For styles where only the name is just the abbreviation. The first and subsequent form may just be long or may be short and long.

```
6226 \newcommand*{\glsxtrAccSuppAbbrSetNameShortAttrs}[1]{%
6227   \glssetcategoryattribute{#1}{nameshortaccess}{true}%
6228   \glsxtrprovideaccsuppcmd{#1}{name}%
6229 }
```

**etNameLongAttrs** For styles where the first and text are just the abbreviation. The name may just be long or may be short and long or the name may be short.

```
6230 \newcommand*{\glsxtrAccSuppAbbrSetNameLongAttrs}[1]{%
6231   \glssetcategoryattribute{#1}{firstshortaccess}{true}%
6232   \glssetcategoryattribute{#1}{textshortaccess}{true}%
6233   \glsxtrprovideaccsuppcmd{#1}{first}%
6234   \glsxtrprovideaccsuppcmd{#1}{firstpl}%
6235   \glsxtrprovideaccsuppcmd{#1}{text}%
6236   \glsxtrprovideaccsuppcmd{#1}{plural}%
6237 }
```

End of if accsupp part

```
6238 }
6239 {
```

No accessibility support. Just define these commands to do \glsentry<xxx>

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

```
6240 \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.

```
6241 \newcommand*{\Glsaccessname}[1]{\Glsentryname{#1}}
```

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

```
6242 \newcommand*{\GLSaccessname}[1]{%
6243   \protect\mfirstrucMakeUppercase{\glsentryname{#1}}}
```

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

```
6244 \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.

```
6245 \newcommand*{\Glsaccesstext}[1]{\Glsentrytext{#1}}
```

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

```
6246 \newcommand*{\GLSaccesstext}[1]{%
6247   \protect\mfirstrucMakeUppercase{\glsentrytext{#1}}}
```

glsaccessplural Display the plural value (no link and no check for existence).  
 6248 \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.  
 6249 \newcommand\*{\Glsaccessplural}[1]{\Glsentryplural{\#1}}

GLSaccessplural Display the plural value (no link and no check for existence). converted to upper case.  
 6250 \newcommand\*{\GLSaccessplural}[1]{%  
 6251 \protect\mfirstucMakeUppercase{\glsentryplural{\#1}}}

\glsaccessfirst Display the first value (no link and no check for existence).  
 6252 \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.  
 6253 \newcommand\*{\Glsaccessfirst}[1]{\Glsentryfirst{\#1}}

\GLSaccessfirst Display the first value (no link and no check for existence). converted to upper case.  
 6254 \newcommand\*{\GLSaccessfirst}[1]{%  
 6255 \protect\mfirstucMakeUppercase{\glsentryfirst{\#1}}}

cessfirstplural Display the firstplural value (no link and no check for existence).  
 6256 \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.  
 6257 \newcommand\*{\Glsaccessfirstplural}[1]{\Glsentryfirstplural{\#1}}

cessfirstplural Display the firstplural value (no link and no check for existence). converted to upper case.  
 6258 \newcommand\*{\GLSaccessfirstplural}[1]{%  
 6259 \protect\mfirstucMakeUppercase{\glsentryfirstplural{\#1}}}

glsaccesssymbol Display the symbol value (no link and no check for existence).  
 6260 \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.  
 6261 \newcommand\*{\Glsaccesssymbol}[1]{\Glsentrysymbol{\#1}}

GLSaccesssymbol Display the symbol value (no link and no check for existence). converted to upper case.  
 6262 \newcommand\*{\GLSaccesssymbol}[1]{%  
 6263 \protect\mfirstucMakeUppercase{\glsentrysymbol{\#1}}}

esssymbolplural Display the symbolplural value (no link and no check for existence).  
 6264 \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.  
 6265 \newcommand\*{\Glsaccesssymbolplural}[1]{\Glsentrysymbolplural{\#1}}

esssymbolplural Display the symbolplural value (no link and no check for existence). converted to upper case.  
 6266 \newcommand\*{\GLSaccesssymbolplural}[1]{%  
 6267 \protect\mfirstucMakeUppercase{\glsentrysymbolplural{\#1}}}

\glsaccessdesc Display the desc value (no link and no check for existence).  
 6268 \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.  
 6269 \newcommand\*{\Glsaccessdesc}[1]{\Glsentrydesc{\#1}}

\GLSaccessdesc Display the desc value (no link and no check for existence). converted to upper case.  
 6270 \newcommand\*{\GLSaccessdesc}[1]{%  
 6271 \protect\mfirstucMakeUppercase{\glsentrydesc{\#1}}}

ccessdescplural Display the descplural value (no link and no check for existence).  
 6272 \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.  
 6273 \newcommand\*{\Glsaccessdescplural}[1]{\Glsentrydescplural{\#1}}

ccessdescplural Display the descplural value (no link and no check for existence). converted to upper case.  
 6274 \newcommand\*{\GLSaccessdescplural}[1]{%  
 6275 \protect\mfirstucMakeUppercase{\glsentrydescplural{\#1}}}

\glsaccessshort Display the short form (no link and no check for existence).  
 6276 \newcommand\*{\glsaccessshort}[1]{\glsentryshort{\#1}}

\Glsaccessshort Display the short form with first letter converted to uppercase (no link and no check for existence).  
 6277 \newcommand\*{\Glsaccessshort}[1]{\Glsentryshort{\#1}}

\GLSaccessshort Display the short value (no link and no check for existence). converted to upper case.  
 6278 \newcommand\*{\GLSaccessshort}[1]{%  
 6279 \protect\mfirstucMakeUppercase{\glsentryshort{\#1}}}

lsaccessshortpl Display the short plural form (no link and no check for existence).  
 6280 \newcommand\*{\glsaccessshortpl}[1]{\glsentryshortpl{\#1}}

```

lsaccessshortpl Display the short plural form with first letter converted to uppercase (no link and no check for existence).
6281 \newcommand*{\Glsaccessshortpl}[1]{\Glsentryshortpl{\#1}}


LSaccessshortpl Display the shortplural value (no link and no check for existence). converted to upper case.
6282 \newcommand*{\GLSaccessshortpl}[1]{%
6283 \protect\mfirstucMakeUppercase{\glsentryshortpl{\#1}}}

\glsaccesslong Display the long form (no link and no check for existence).
6284 \newcommand*{\glsaccesslong}[1]{\glsentrylong{\#1}}


\Glsaccesslong Display the long form (no link and no check for existence).
6285 \newcommand*{\Glsaccesslong}[1]{\Glsentrylong{\#1}}


\GLSaccesslong Display the long value (no link and no check for existence). converted to upper case.
6286 \newcommand*{\GLSaccesslong}[1]{%
6287 \protect\mfirstucMakeUppercase{\glsentrylong{\#1}}}

glsaccesslongpl Display the long plural form (no link and no check for existence).
6288 \newcommand*{\glsaccesslongpl}[1]{\glsentrylongpl{\#1}}


Glsaccesslongpl Display the long plural form (no link and no check for existence).
6289 \newcommand*{\Glsaccesslongpl}[1]{\Glsentrylongpl{\#1}}


GLSaccesslongpl Display the longplural value (no link and no check for existence). converted to upper case.
6290 \newcommand*{\GLSaccesslongpl}[1]{%
6291 \protect\mfirstucMakeUppercase{\glsentrylongpl{\#1}}}

@initaccesskeys This does nothing if there's no accessibility support.
6292 \newcommand*{\@gls@initaccesskeys}{}

@default@access This does nothing if there's no accessibility support.
6293 \newcommand{\@gls@setup@default@access}{}

rSetNoLongAttrs This does nothing if there's no accessibility support.
6294 \newcommand*{\glsxtrAccSuppAbbrSetNoLongAttrs}[1]{}

tFirstLongAttrs This does nothing if there's no accessibility support.
6295 \newcommand*{\glsxtrAccSuppAbbrSetFirstLongAttrs}[1]{}

tTextShortAttrs This does nothing if there's no accessibility support.
6296 \newcommand*{\glsxtrAccSuppAbbrSetTextShortAttrs}[1]{}

tNameShortAttrs This does nothing if there's no accessibility support.
6297 \newcommand*{\glsxtrAccSuppAbbrSetNameShortAttrs}[1]{}

etNameLongAttrs This does nothing if there's no accessibility support.
6298 \newcommand*{\glsxtrAccSuppAbbrSetNameLongAttrs}[1]{}

    End of else part
6299 }

```

## 1.6 Categories

\glscategory Add a new storage key that can be used to indicate a category. The default category is general.  
6300 \glsaddstoragekey{category}{general}{\glscategory}

\glsifcategory Convenient shortcut to determine if an entry has the given category.  
6301 \newcommand{\glsifcategory}[4]{%  
6302 \ifglsfieldeq{\#1}{category}{\#2}{\#3}{\#4}}%  
6303 }

Categories can have attributes.

categoryattribute

```
\glssetcategoryattribute{\category}{\attribute-label}{\value}
```

Set (or override if already set) an attribute for the given category.

6304 \newcommand\*\glssetcategoryattribute[3]{%  
6305 \csdef{@glsxtr@categoryattr@@#1@#2}{#3}}%  
6306 }

categoryattribute

```
\glsgetcategoryattribute{\category}{\attribute-label}
```

Get the value of the given attribute for the given category. Does nothing if the attribute isn't defined.

6307 \newcommand\*\glsgetcategoryattribute[2]{%  
6308 \csuse{@glsxtr@categoryattr@@#1@#2}}%  
6309 }

categoryattribute

```
\glshascategoryattribute{\category}{\attribute-label}{\true}{\false}
```

Tests if the category has the given attribute set.

6310 \newcommand\*\glshascategoryattribute[4]{%  
6311 \ifcvoid{@glsxtr@categoryattr@@#1@#2}{\#4}{\#3}}%  
6312 }

glssetattribute

```
\glssetattribute{\entry_label}{\attribute_label}{\value}
```

Short cut where the category label is obtained from the entry information.

```
6313 \newcommand*{\glssetattribute}[3]{%
6314   \glssetcategoryattribute{\glscategory{\#1}}{\#2}{\#3}%
6315 }
```

glsgetattribute

```
\glsgetattribute{\entry_label}{\attribute_label}
```

Short cut where the category label is obtained from the entry information.

```
6316 \newcommand*{\glsgetattribute}[2]{%
6317   \glsgetcategoryattribute{\glscategory{\#1}}{\#2}%
6318 }
```

glshasattribute

```
\glshasattribute{\entry_label}{\attribute_label}{\true}{\false}
```

Short cut to test if the given attribute has been set where the category label is obtained from the entry information.

```
6319 \newcommand*{\glshasattribute}[4]{%
6320   \ifglsentryexists{\#1}%
6321     {\glshascategoryattribute{\glscategory{\#1}}{\#2}{\#3}{\#4}}%
6322   {\#4}%
6323 }
```

tegoryattribute

```
\glsifcategoryattribute{\category}{\attribute_label}{\value}{\true}{\false}
```

True if category has the attribute with the given value.

```
6324 \newcommand{\glsifcategoryattribute}[5]{%
6325   \ifcsundef{@glsxtr@categoryattr@\#1@\#2}%
6326     {\#5}%
6327   {\ifcsstring{@glsxtr@categoryattr@\#1@\#2}{\#3}{\#4}{\#5}}%
6328 }
```

\glsifattribute

```
\glsifattribute{\entrylabel}{\attributelabel}{\value}{\truepart}{\falsepart}
```

Short cut to determine if the given entry has a category with the given attribute set.

```
6329 \newcommand{\glsifattribute}[5]{%
6330   \ifglsentryexists{#1}%
6331     {\glsifcategoryattribute{\glscategory{#1}}{#2}{#3}{#4}{#5}}%
6332     {#5}%
6333 }
```

Set attributes for the default general category:

```
6334 \glssetcategoryattribute{general}{regular}{true}
```

Acronyms are regular by default, since they're typically just treated like normal words.

```
6335 \glssetcategoryattribute{acronym}{regular}{true}
```

`regularcategory` Convenient shortcut to add the regular attribute.

```
6336 \newcommand*\glssetregularcategory[1]{%
6337   \glssetcategoryattribute{#1}{regular}{true}}%
```

`regularcategory`

```
\glsifregularcategory{\category}{\truepart}{\falsepart}
```

Short cut to determine if a category has the regular attribute explicitly set to true.

```
6339 \newcommand{\glsifregularcategory}[3]{%
6340   \glsifcategoryattribute{#1}{regular}{true}{#2}{#3}}%
```

`regularcategory`

```
\glsifnotregularcategory{\category}{\truepart}{\falsepart}
```

Short cut to determine if a category has the regular attribute explicitly set to false.

```
6342 \newcommand{\glsifnotregularcategory}[3]{%
6343   \glsifcategoryattribute{#1}{regular}{false}{#2}{#3}}%
```

`\glsifregular`

```
\glsifregular{\entrylabel}{\truepart}{\falsepart}
```

Short cut to determine if an entry has a regular attribute set to true.

```
6345 \newcommand{\glsifregular}[3]{%
6346   \glsifregularcategory{\glscategory{#1}}{#2}{#3}%
6347 }
```

glsifnotregular

```
\glsifnotregular{<entry label>}{<true part>}{<false part>}
```

Short cut to determine if an entry has a regular attribute set to false.

```
6348 \newcommand{\glsifnotregular}[3]{%
6349   \glsifnotregularcategory{\glscategory{#1}}{#2}{#3}%
6350 }
```

reachincategory

```
\glsforeachincategory[<glossary labels>]{<category-label>}{<glossary-cs>}{<label-cs>}{<body>}
```

Iterates through all entries in all the glossaries (or just those listed in *<glossary labels>*) and does *<body>* if the category matches *<category-label>*. The control sequences *<glossary-cs>* and *<label-cs>* may be used in *<body>* to access the glossary label and entry label for the current iteration.

```
6351 \newcommand{\glsforeachincategory}[5][\@glo@types]{%
6352   \forallglossaries[#1]{#3}%
6353   {%
6354     \forglsentries[#3]{#4}%
6355     {%
6356       \glsifcategory{#4}{#2}{#5}{}%
6357     }%
6358   }%
6359 }
```

chwithattribute

```
\glsforeachwithattribute[<glossary labels>]{<attribute-label>}{<attribute-value>}{<glossary-cs>}{<label-cs>}{<body>}
```

Iterates through all entries in all the glossaries (or just those listed in *<glossary labels>*) and does *<body>* if the category attribute *<attribute-label>* matches *<attribute-value>*. The control sequences *<glossary-cs>* and *<label-cs>* may be used in *<body>* to access the glossary label and entry label for the current iteration.

```
6360 \newcommand{\glsforeachwithattribute}[6][\@glo@types]{%
6361   \forallglossaries[#1]{#4}%
```

```

6362  {%
6363    \forglsentries[#4]{#5}%
6364    {%
6365      \glsifattribute{#5}{#2}{#3}{#6}{ }%
6366    }%
6367  }%
6368 }

```

If `\newterm` has been defined, redefine it so that it automatically sets the category label to `index` and add `\glsxtrpostdescription`.

```

6369 \ifdef\newterm
6370 {%

```

#### `\newterm`

```

6371  \renewcommand*{\newterm}[2][]{%
6372    \newglossaryentry[#2]{%
6373      {type={index},category=index,name={#2},%
6374      description={\glsxtrpostdescription\nopostdesc},#1}%
6375    }%

```

Indexed terms are regular by default.

```

6376  \glssetcategoryattribute{index}{regular}{true}

```

#### `\trpostdescindex`

```

6377  \newcommand*{\glsxtrpostdescindex}{}%
6378 }%
6379 {}

```

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`.

```

6380 \ifdef\printsymbols
6381 {%

```

`\glsxtrnewsymbol` Unlike `\newterm`, this has a separate argument for the label (since the symbol will likely contain commands).

```

6382  \newcommand*{\glsxtrnewsymbol}[3][]{%
6383    \newglossaryentry[#2]{name={#3},sort={#2},type=symbols,category=symbol, #1}%
6384  }%

```

Symbols are regular by default.

```

6385  \glssetcategoryattribute{symbol}{regular}{true}

```

#### `\rpostdescsymbol`

```

6386  \newcommand*{\glsxtrpostdescsymbol}{}%
6387 }%
6388 {}

```

Similar for the numbers option.

```
6389 \ifdef\printnumbers
6390 {%
glsxtrnewnumber
6391 \ifdef\printnumbers
6392   \newcommand*\glsxtrnewnumber[3] []{%
6393     \newglossaryentry{\#2}{name=\#3,sort=\#2,type=numbers,category=number,\#1}%
6394   }
```

Numbers are regular by default.

```
6395 \glsetcategoryattribute{number}{regular}{true}
```

rpostdescnumber

```
6396 \newcommand*\glsxtrpostdescnumber(){}
6397 {}
6398 {}
```

sxtrsetcategory Set the category for all listed labels. The first argument is the list of entry labels and the second argument is the category label.

```
6399 \newcommand*\glsxtrsetcategory[2]{%
6400   \foreach\glsxtr@label:=\#1\do
6401   {%
6402     \glsfieldxdef{\glsxtr@label}{category}\#2%
6403   }%
6404 }
```

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.

```
6405 \newcommand*\glsxtrsetcategoryforall[2]{%
6406   \forallglossaries[\#1]{\glsxtr@type}{%
6407     \forglsentries[\glsxtr@type]{\glsxtr@label}{%
6408       \glsfieldxdef{\glsxtr@label}{category}\#2%
6409     }%
6410   }%
6411 }%
6412 }
```

rfieldtitlecase

```
\glsxtrfieldtitlecase{\label}{\field}
```

Apply title casing to the contents of the given field.

```
6413 \newcommand*\glsxtrfieldtitlecase[2]{%
6414   \expandafter\glsxtrfieldtitlecasecs\expandafter
6415   {\csname glo@\glsdetoklabel{\#1}@#2\endcsname}%
6416 }
```

`\fieldtitlecasecs` The command used by `\glsxtrfieldtitlecase`. May be redefined to use a different command, for example, `\xcapitalisefmtwords`.

6417 `\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.

6418 `\@ifpackageloaded{glossaries-accsupp}`  
6419 {  
6420   `\renewcommand*{\glossentrydesc}[1]{%`  
6421     `\glsdoifexistsorwarn{#1}%`  
6422     `{%`  
6423     `\glssetabrvfmt{\glscategory{#1}}%`

As from version 1.04, allow the `glossdescfont` attribute to determine the font applied.

6424   `\glshasattribute{#1}{glossdescfont} %`  
6425   `{%`  
6426     `\edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%`  
6427     `\ifcsdef{\@glsxtr@attrval}{%`  
6428       `{%`  
6429         `\letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval} %`  
6430         `} %`  
6431         `{%`  
6432         `\GlossariesExtraWarning{Unknown control sequence name`  
6433         `'\@glsxtr@attrval' supplied in glossdescfont attribute`  
6434         `for entry '#1'. Ignoring} %`  
6435         `\let\@glsxtr@glossdescfont\@firstofone`  
6436         `} %`  
6437         `} %`  
6438         `{\let\@glsxtr@glossdescfont\@firstofone} %`  
6439         `\glsifattribute{#1}{glossdesc}{firstuc} %`  
6440         `{%`  
6441         `\@glsxtr@glossdescfont{\Glsaccessdesc{#1}} %`  
6442         `} %`  
6443         `{%`  
6444         `\glsifattribute{#1}{glossdesc}{title} %`  
6445         `{%`  
6446         `\@glsxtr@do@titlecaps@warn`  
6447         `\glsdescriptionaccessdisplay`  
6448         `{%`  
6449         `\@glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}} %`  
6450         `} %`  
6451         `{#1} %`  
6452         `} %`  
6453         `{%`  
6454         `\@glsxtr@glossdescfont{\glsaccessdesc{#1}} %`  
6455         `} %`

```

6456      }%
6457    }%
6458  }
6459}
6460{%
6461 \renewcommand*\glossentrydesc[1]{%
6462   \glsdoifexistsorwarn{#1}%
6463   {%
6464     \glssetabrvfmt{\glscategory{#1}}%
6465     \glshasattribute{#1}{glossdescfont}%
6466     {%
6467       \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%
6468       \ifcsdef{\@glsxtr@attrval}%
6469       {%
6470         \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}%
6471       }%
6472     {%
6473       \GlossariesExtraWarning{Unknown control sequence name
6474         '@glsxtr@attrval' supplied in glossdescfont attribute
6475         for entry '#1'. Ignoring}%
6476       \let\@glsxtr@glossdescfont\@firstofone
6477     }%
6478   }%
6479   {\let\@glsxtr@glossdescfont\@firstofone}%
6480   \glsifattribute{#1}{glossdesc}{firstuc}%
6481   {%
6482     \@glsxtr@glossdescfont{\Glsentrydesc{#1}}%
6483   }%
6484   {%
6485     \glsifattribute{#1}{glossdesc}{title}%
6486     {%
6487       \glsxtr@do@titlecaps@warn
6488       \glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
6489     }%
6490     {%
6491       \@glsxtr@glossdescfont{\glsentrydesc{#1}}%
6492     }%
6493   }%
6494 }%
6495 }%
6496 }%

```

\glossentryname If the glossname attribute is “firstuc” convert first letter to upper case. If the attribute is “title” use title case.

```

6497 \ifpackageloaded{glossaries-accsupp}%
6498 {%
6499 \renewcommand*\glossentryname[1]{%
6500   \glsdoifexistsorwarn{#1}%
6501   {%

```

```

6502      \glssetabbrvfmt{\glscategory{#1}}%
As from version 1.04, allow the glossnamefont attribute to determine the font applied.
6503      \glshasattribute{#1}{glossnamefont}%
6504      {%
6505          \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6506          \ifcsdef{\@glsxtr@attrval}%
6507          {%
6508              \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6509          }%
6510          {%
6511              \GlossariesExtraWarning{Unknown control sequence name
6512                  '\@glsxtr@attrval' supplied in glossnamefont attribute
6513                  for entry '#1'. Reverting to default \string\glsnamefont}%
6514              \let\@glsxtr@glossnamefont\glsnamefont
6515          }%
6516      }%
6517      {\let\@glsxtr@glossnamefont\glsnamefont}%
6518      \glsifattribute{#1}{glossname}{firstuc}%
6519      {%
6520          \glsnameaccessdisplay
6521          {%
6522              \glsxtr@glossnamefont{\Glsentryname{#1}}%
6523          }%
6524          {#1}%
6525      }%
6526      {%
6527          \glsifattribute{#1}{glossname}{title}%
6528          {%
6529              \glsxtr@do@titlecaps@warn
6530              \glsnameaccessdisplay
6531              {%
6532                  \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
6533              }%
6534              {#1}%
6535          }%
6536          {%
6537              \glsifattribute{#1}{glossname}{uc}%
6538              {%
6539                  \glsnameaccessdisplay
6540              }%

```

Hide the label from the upper-casing command.

```

6541      \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6542      \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
6543      {%
6544          {#1}%
6545      }%
6546      {%
6547          \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%

```

```

6548     \glsnameaccessdisplay
6549     {%
6550         \expandafter\@glsxtr@glossnamefont\expandafter{\glo@name}%
6551     }%
6552     {#1}%
6553     }%
6554     }%
6555     }%

```

Do post-name hook:

```

6556     \glsxtrpostnamehook{#1}%
6557     }%
6558 }
6559 }
6560 {
6561 \renewcommand*\glossentryname[1]{%
6562     \@glsdoifexistsorwarn{#1}%
6563     {%
6564         \glssetabbrvfmt{\glscategory{#1}}%
6565         \glshasattribute{#1}{glossnamefont}%
6566         {%
6567             \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6568             \ifcsdef\@glsxtr@attrval{%
6569                 {%
6570                     \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6571                 }%
6572                 {%
6573                     \GlossariesExtraWarning{Unknown control sequence name
6574                         ‘\@glsxtr@attrval’ supplied in glossnamefont attribute
6575                         for entry ‘#1’. Reverting to default \string\glsnamefont}%
6576                     \let\@glsxtr@glossnamefont\glsnamefont
6577                 }%
6578                 {%
6579                     \let\@glsxtr@glossnamefont\glsnamefont}%
6580                     \glsifattribute{#1}{glossname}{firstuc}%
6581                 {%
6582                     \glsxtr@glossnamefont{\Glsentryname{#1}}%
6583                 }%
6584                 {%
6585                     \glsifattribute{#1}{glossname}{title}%
6586                 {%
6587                     \glsxtr@do@titlecaps@warn
6588                     \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
6589                 }%
6590                 {%
6591                     \glsifattribute{#1}{glossname}{uc}%
6592                 }%

```

Hide the label from the upper-casing command.

```
6593     \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
```

```

6594     \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
6595     }%
6596     {%

```

This little trick is used by glossaries to allow the user to redefine `\glossnamefont` to use `\makefirstuc`. Support it even though they can now use the `firstuc` attribute.

```

6597     \letcs{\glo@name}{\glsdetoklabel{#1}@name}%
6598     \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
6599     }%
6600     }%
6601     }%

```

Do post-name hook.

```

6602     \glsxtrpostnamehook{#1}%
6603     }%
6604   }
6605 }

```

`\Glossentryname` Redefine to set the abbreviation format and accessibility support.

```

6606 @ifpackageloaded{glossaries-accsupp}%
6607 {
6608   \renewcommand*{\Glossentryname}[1]{%
6609     \glsdoifexistsorwarn{#1}%
6610     {%
6611       \glssetabbrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the `glossnamefont` attribute to determine the font applied.

```

6612   \glshasattribute{#1}{glossnamefont}%
6613   {%
6614     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6615     \ifcsdef{\@glsxtr@attrval}%
6616     {%
6617       \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6618     }%
6619     {%
6620       \GlossariesExtraWarning{Unknown control sequence name
6621         '\@glsxtr@attrval' supplied in glossnamefont attribute
6622         for entry '#1'. Reverting to default \string\glossnamefont}%
6623       \let\@glsxtr@glossnamefont\glossnamefont
6624     }%
6625   }%
6626   {\let\@glsxtr@glossnamefont\glossnamefont}%
6627   \glossnameaccessdisplay
6628   {%
6629     \@glsxtr@glossnamefont{\Glossentryname{#1}}%
6630   }%
6631   {#1}%

```

Do post-name hook:

```

6632   \glsxtrpostnamehook{#1}%
6633   }%

```

```

6634 }
6635 }
6636 {
6637 \renewcommand*{\Glossentryname}[1]{%
6638   \@glsdoifexistsorwarn{#1}%
6639   {%
6640     \glssetabrvfmt{\glscategory{#1}}%
6641     \glshasattribute{#1}{glossnamefont}%
6642   }%
6643   \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6644   \ifcsdef{\@glsxtr@attrval}%
6645   {%
6646     \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6647   }%
6648   {%
6649     \GlossariesExtraWarning{Unknown control sequence name
6650       '\@glsxtr@attrval' supplied in glossnamefont attribute
6651       for entry '#1'. Reverting to default \string\glsnamefont}%
6652     \let\@glsxtr@glossnamefont\glsnamefont
6653   }%
6654 }%
6655 {\let\@glsxtr@glossnamefont\glsnamefont}%
6656 \glsxtr@glossnamefont{\Glossentryname{#1}}%

```

Do post-name hook:

```

6657   \glsxtrpostnamehook{#1}%
6658 }%
6659 }%
6660 }

```

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.

```

6661 \newcommand*{\glsxtrpostnamehook}[1]{%
6662   \let\@glsnumberformat\@glsxtr@defaultnumberformat
6663   \glsxtrdoautoindexname{#1}{indexname}}%

```

Allow additional code regardless of category:

```
6664 \glsxtrapostnamehook{#1}%

```

Allow categories to hook in here.

```

6665 \csuse{glsxtrpostname\glscategory{#1}}%
6666 }

```

`trapostnamehook`

```
6667 \newcommand*{\glsxtrapostnamehook}[1]{}%
```

`\glsdefpostname` Provide a convenient command for defining the post-name hook for the given category.

```

6668 \newcommand*{\glsdefpostname}[2]{%
6669   \csdef{glsxtrpostname#1}{#2}%
6670 }

etaccessdisplay
6671 \@ifpackageloaded{glossaries-accsupp}%
6672 {
6673   \newcommand*{\glsxtr@setaccessdisplay}[1]{%
6674     \ifcsdef{gls#1accessdisplay}%
6675       {\let\cs\glsxtr@accessdisplay\gls#1accessdisplay}%
6676     {}%
6677     \edef\gls@thisval{\#1}%
6678     \for\gls@map:=\gls@keymap\do{%
6679       \edef\@this@key{\expandafter\@secondoftwo\gls@map}%
6680       \ifdefeq{\@this@key}{\gls@thisval}%
6681         {}%
6682         \edef\gls@thisval{\expandafter\@firstoftwo\gls@map}%
6683         \endfortrue
6684       }%
6685     {}%
6686   }%
6687   \ifcsdef{gls\gls@thisval accessdisplay}%
6688     {\let\cs\glsxtr@accessdisplay\gls\gls@thisval accessdisplay}%
6689     {\let\cs\glsxtr@accessdisplay\@firstoftwo}%
6690   }%
6691 }
6692 }
6693 {%
6694   \newcommand*{\glsxtr@setaccessdisplay}[1]{%
6695     \let\cs\glsxtr@accessdisplay\@firstoftwo}
6696 }

```

sentrynameother Provide a command that works like `\glossentryname` but accesses a different field (which must be supplied using its internal field label).

```

6697 \newrobustcmd*{\glossentrynameother}[2]{%
6698   \glsdoifexistsorwarn{#1}%
6699   {}%

```

Accessibility support:

```

6700   \glsxtr@setaccessdisplay{#2}%

```

Set the abbreviation format:

```

6701   \glssetabbrvfmt{\glscategory{#1}}%
6702   \glshasattribute{#1}{glossnamefont}%
6703   {}%
6704   \edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%

```

```

6705      \ifcsdef{\@glsxtr@attrval}{%
6706      }{%
6707          \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}{%
6708      }{%
6709      }{%
6710          \GlossariesExtraWarning{Unknown control sequence name
6711              '\@glsxtr@attrval' supplied in glossnamefont attribute
6712              for entry '#1'. Reverting to default \string\glsnamefont}{%
6713              \let\@glsxtr@glossnamefont\glsnamefont
6714          }{%
6715      }{%
6716      }{%
6717          \let\@glsxtr@glossnamefont\glsnamefont{%
6718              \glsifattribute{#1}{glossname}{firstuc}{%
6719                  \glsxtr@accessdisplay
6720                  {\@glsxtr@glossnamefont{\@Gls@entry@field{#1}{#2}}}{%
6721                      {#1}}{%
6722                  }{%
6723              }{%
6724                  \glsifattribute{#1}{glossname}{title}{%
6725                      \glsxtr@do@titlecaps@warn
6726                      \glsxtr@accessdisplay
6727                      {\@glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{#2}}}{%
6728                          {#1}}{%
6729                      }{%
6730                  }{%
6731              }{%
6732                  \glsifattribute{#1}{glossname}{uc}{%
6733                      \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}{%
6734                          \glsxtr@accessdisplay
6735                          {\@glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}}{%
6736                              {#1}}{%
6737                          }{%
6738                      }{%
6739                  }{%
6740                      \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}{%
6741                          \glsxtr@accessdisplay
6742                          {\expandafter\@glsxtr@glossnamefont\expandafter{\glo@name}}}{%
6743                              {#1}}{%
6744                          }{%
6745                      }{%
6746                  }{%
6747          }{%
6748      }{%
6749 }

```

Do post-name hook.

```

6747      \glsxtrpostnamehook{#1}{%
6748  }{%
6749 }

```

**format@override** Determines if the format key should override the indexing attribute value.  
 6750 \newif\if@glsxtr@format@override

```
6751 \@glsxtr@format@overridefalse
```

If overriding is enabled, the `\glshypernumber` command will have to be redefined in the index to use `\hyperpage` instead.

xFormatOverride

```
6752 \@ifpackageloaded{hyperref}{%  
6753 {%
```

If hyperref's hyperindex option is on, then hyperref will automatically add `\hyperpage`, so don't add it.

```
6754 \ifHy@hyperindex{  
6755   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%  
6756     \@glsxtr@format@overridetrue  
6757     \appto\theindex{\let\glshypernumber\@firstofone}{%  
6758   }  
6759 \else{  
6760   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%  
6761     \@glsxtr@format@overridetrue  
6762     \appto\theindex{\let\glshypernumber\hyperpage}{%  
6763   }  
6764 \fi  
6765 }  
6766 {\  
6767   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%  
6768     \@glsxtr@format@overridetrue  
6769   }  
6770 }  
6771 \onlypreamble\GlsXtrEnableIndexFormatOverride
```

doautoindexname

```
6772 \newcommand*{\glsxtrdoautoindexname}[2]{%  
6773   \glshasattribute{#1}{#2}{%  
6774   {%
```

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.

```
6775 \glsxtr@autoindex@setname{#1}{%
```

If the attribute value is simply "true" don't add an encap, otherwise use the value as the encap.

```
6776 \protected@edef\glsxtr@attrval{\glsgetattribute{#1}{#2}}{  
6777 \if@glsxtr@format@override{  
6778   \ifx\glsnumberformat\glsxtr@defaultnumberformat  
6779   \else{  
6780     \let\glsxtr@attrval\glsnumberformat  
6781   \fi  
6782 \fi  
6783 \ifdefstring{\glsxtr@attrval}{true}{  
6784   {}{}}
```

```

6785   {\eappto{\glo@name{\glsxtr@autoindex@encap{\glsxtr@attrval}}}{%
6786     \expandafter\glsxtrautoindex\expandafter{\glo@name}}%
6787   }%
6788   {}%
6789 }

glsxtrautoindex
6790 \newcommand*{\glsxtrautoindex}[1]{}

xtrautoindexesc
6791 \newcommand{\glsxtrautoindexesc}{%
6792   \@gls@checkmkidxchars{\glo@sort}%
6793   \glsxtr@autoindex@doextra@esc{\glo@sort}%
6794 }

toindex@setname Assign \glo@name for use with indexname attribute.
6795 \newcommand*{\glsxtr@autoindex@setname}[1]{%
6796   \protected@edef{\glo@name{\glsxtrautoindexentry{#1}}}{%
6797     \glsxtrautoindexassingsort{\glo@sort}{#1}}%
6798   \glsxtrautoindexesc%
6799   \epreto{\glo@name{\glo@sort\glsxtr@autoindex@at}}%
6800 }

rautoindexentry Command used for the actual part when auto-indexing.
6801 \newcommand*{\glsxtrautoindexentry}[1]{\string\glsentryname{#1}{}}

indexassingsort Used to assign the sort value when auto-indexing.
6802 \newcommand*{\glsxtrautoindexassingsort}[2]{%
6803   \glsletentryfield{#1}{#2}{sort}%
6804 }

dex@doextra@esc
6805 \newcommand*{\glsxtr@autoindex@doextra@esc}[1]{%
  Escape the escape character unless it has already been escaped.
6806   \ifx\glsxtr@autoindex@esc\gls@quotechar%
6807   \else%
6808     \def\gls@checkedmkidx{}%
6809     \edef\glsxtr@checkspch{%
6810       \noexpand\glsxtr@autoindex@esc\expandonce{#1}%
6811       \noexpand\empty\glsxtr@autoindex@esc\noexpand\@nnil%
6812       \glsxtr@autoindex@esc\noexpand\empty\noexpand\glsxtr@endescspch}%
6813     \glsxtr@checkspch%
6814     \let\gls@checkedmkidx\relax%
6815   \fi%
  Escape actual character unless it has already been escaped.
6816   \ifx\glsxtr@autoindex@at\gls@actualchar%
6817   \else%

```

```

6818 \def\@gls@checkedmkidx{}%
6819 \edef\@glsxtr@checkspch{%
6820   \noexpand\@glsxtr@autoindex@escat\expandonce{#1}%
6821   \noexpand\@empty\@glsxtr@autoindex@at\noexpand\@nnil
6822   \@glsxtr@autoindex@at\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6823 \@@glsxtr@checkspch
6824 \let#1\@gls@checkedmkidx\relax
6825 \fi

  Escape level character unless it has already been escaped.

6826 \ifx\@glsxtr@autoindex@level\@gls@levelchar
6827 \else
6828   \def\@gls@checkedmkidx{}%
6829   \edef\@glsxtr@checkspch{%
6830     \noexpand\@glsxtr@autoindex@escllevel\expandonce{#1}%
6831     \noexpand\@empty\@glsxtr@autoindex@level\noexpand\@nnil
6832     \@glsxtr@autoindex@level\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6833 \@@glsxtr@checkspch
6834 \let#1\@gls@checkedmkidx\relax
6835 \fi

  Escape encap character unless it has already been escaped.

6836 \ifx\@glsxtr@autoindex@encap\@gls@encapchar
6837 \else
6838   \def\@gls@checkedmkidx{}%
6839   \edef\@glsxtr@checkspch{%
6840     \noexpand\@glsxtr@autoindex@escencap\expandonce{#1}%
6841     \noexpand\@empty\@glsxtr@autoindex@encap\noexpand\@nnil
6842     \@glsxtr@autoindex@encap\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6843 \@@glsxtr@checkspch
6844 \let#1\@gls@checkedmkidx\relax
6845 \fi
6846 }

```

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`.

```
6847 \newcommand*\{@glsxtr@autoindex@at}{}
```

`trSetActualChar` Set the actual character.

```

6848 \newcommand*\GlsXtrSetActualChar[1]{%
6849   \gdef\@glsxtr@autoindex@at{#1}%
6850   \def\@glsxtr@autoindex@escat##1##2##3\@glsxtr@endescspch{%
6851     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escat}{##1}{##2}{##3}}%
6852 }%
6853 }
6854 \onlypreamble\GlsXtrSetActualChar
6855 \makeatother
6856 \GlsXtrSetActualChar{0}

```

```

6857 \makeatletter

autoindex@encap  Encap character for use with \index.
6858 \newcommand*{\glsxtr@autoindex@encap}{}}

XtrSetEncapChar  Set the encap character.
6859 \newcommand*{\GlsXtrSetEncapChar}[1]{%
6860   \gdef\@glsxtr@autoindex@encap{#1}%
6861   \def\@glsxtr@autoindex@escencap##1##2##3\@glsxtr@endescspch{%
6862     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escencap}{##1}{##2}{##3}%
6863   }%
6864 }
6865 \GlsXtrSetEncapChar{|
6866 \onlypreamble\GlsXtrSetEncapChar

autoindex@level  Level character for use with \index.
6867 \newcommand*{\glsxtr@autoindex@level}{}}

XtrSetLevelChar  Set the encap character.
6868 \newcommand*{\GlsXtrSetLevelChar}[1]{%
6869   \gdef\@glsxtr@autoindex@level{#1}%
6870   \def\@glsxtr@autoindex@escllevel##1##2##3\@glsxtr@endescspch{%
6871     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escllevel}{##1}{##2}{##3}%
6872   }%
6873 }
6874 \GlsXtrSetLevelChar{!}
6875 \onlypreamble\GlsXtrSetLevelChar

r@autoindex@esc  Escape character for use with \index.
6876 \newcommand*{\glsxtr@autoindex@esc}{"}

lsXtrSetEscChar  Set the escape character.
6877 \newcommand*{\GlsXtrSetEscChar}[1]{%
6878   \gdef\@glsxtr@autoindex@esc{#1}%
6879   \def\@glsxtr@autoindex@escquote##1##2##3\@glsxtr@endescspch{%
6880     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escquote}{##1}{##2}{##3}%
6881   }%
6882 }
6883 \GlsXtrSetEscChar{"}
6884 \onlypreamble\GlsXtrSetEscChar

      Set if defined. (For example, if doc package has been loaded.) Actual character \actualchar:
6885 \ifdef\actualchar
6886   {\expandafter\GlsXtrSetActualChar\expandafter{\actualchar}}
6887 {}

      Quote character \quotechar:
6888 \ifdef\quotechar
6889   {\expandafter\GlsXtrSetEscChar\expandafter{\quotechar}}
6890 {}

```

Level character \levelchar:

```
6891 \ifdef\levelchar  
6892 {\expandafter\GlsXtrSetLevelChar\expandafter{\levelchar}}  
6893 {}
```

Encap character \encapchar:

```
6894 \ifdef\encapchar  
6895 {\expandafter\GlsXtrSetEncapChar\expandafter{\encapchar}}  
6896 {}
```

leto@endescspch

```
6897 \def\@glsxtr@gobbleto@endescspch#1\@glsxtr@endescspch{}
```

oindex@esc@spch

```
\@@glsxtr@autoindex@escspch{\char}{\cs}{\pre}{\mid}{\post}
```

```
6898 \newcommand*\@glsxtr@autoindex@escspch}[5]{%  
6899  \@gls@tmpb=\expandafter{\@gls@checkedmkidx}-%  
6900  \toks@={#3}-%  
6901  \ifx\@nnil#3\relax  
6902  \def\@glsxtr@checkspch{\@glsxtr@gobbleto@endescspch#5\@glsxtr@endescspch}-%  
6903  \else  
6904  \ifx\@nnil#4\relax  
6905  \edef\@gls@checkedmkidx{\the\@gls@tmpb\the\toks@}-%  
6906  \def\@glsxtr@checkspch{\@glsxtr@gobbleto@endescspch  
6907  #4#5\@glsxtr@endescspch}-%  
6908  \else  
6909  \edef\@gls@checkedmkidx{\the\@gls@tmpb\the\toks@  
6910  \@glsxtr@autoindex@esc#1}-%  
6911  \def\@glsxtr@checkspch{\#2#5#1\@nnil#1\@glsxtr@endescspch}-%  
6912  \fi  
6913 \fi  
6914 \@@glsxtr@checkspch  
6915 }
```

\Glossentrydesc Redefine to set the abbreviation format and accessibility support.

```
6916 \renewcommand*\Glossentrydesc}[1]{%  
6917  \@glsdoifexistsorwarn{\#1}-%  
6918  {%-  
6919  \glssetabrvfmt{\glscategory{\#1}}-%  
6920  \Glsaccessdesc{\#1}-%  
6921  }-%  
6922 }
```

\lossentrysymbol Redefine to set the format and accessibility support. Allow for the possibility of being used in a section heading for standalone entry definitions.

```

6923 \ifdef\textorpdfstring
6924 {
6925   \renewcommand*\glossentrysymbol[1]{%
6926     \textorpdfstring{\@glossentrysymbol{#1}}{\glsentrypdfsymbol{#1}}%
6927   }
6928 }
6929 {
6930   \renewcommand*\glossentrysymbol[1]{\@glossentrysymbol{#1}}
6931 }

```

`sentrypdfsymbol` May be redefined to a field that expands to a value that's more suitable for PDF bookmarks.

```

6932 \newcommand{\glsentrypdfsymbol}[1]{\glossentrysymbol{#1}}

```

`lossentrysymbol` There are no case-changing attributes as it's less usual for symbols.

```

6933 \newrobustcmd*\glossentrysymbol[1]{%
6934   \glsdoifexistsorwarn{#1}%
6935   {%
6936     \begingroup
6937       \glssetabbrvfmt{\glscategory{#1}}%
6938       \glshasattribute{#1}{glosssymbolfont}%
6939     {%
6940       \edef\glsxtr@attrval{\glsgetattribute{#1}{glosssymbolfont}}%
6941       \ifcsdef{\glsxtr@attrval}%
6942         {%
6943           \letcs{\glsxtr@glosssymbolfont}{\glsxtr@attrval}%
6944         }%
6945       {%
6946         \GlossariesExtraWarning{Unknown control sequence name
6947           '\glsxtr@attrval' supplied in glosssymbolfont attribute
6948           for entry '#1'. Ignoring}%
6949         \let\glsxtr@glosssymbolfont\firstofone
6950       }%
6951     }%
6952     {\let\glsxtr@glosssymbolfont\firstofone}%
6953     \glsxtr@glosssymbolfont{\glsaccesssymbol{#1}}%
6954   \endgroup
6955 }%
6956 }

```

`lossentrysymbol` Redefine to set the abbreviation format and accessibility support.

```

6957 \renewcommand*\Glossentrysymbol[1]{%
6958   \glsdoifexistsorwarn{#1}%
6959   {%
6960     \glssetabbrvfmt{\glscategory{#1}}%
6961     \Glsaccesssymbol{#1}%
6962   }%
6963 }

```

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.

```
6964 \newcommand*{\GlsXtrEnableInitialTagging}{%
6965   \@ifstar\s@glsxtr@enabletagging\@glsxtr@enabletagging
6966 }
6967 \@onlypreamble\GlsXtrEnableInitialTagging
```

r@enabletagging Starred version undefines command.

```
6968 \newcommand*{\s@glsxtr@enabletagging}[2]{%
6969   \undef#2%
6970   \@glsxtr@enabletagging{#1}{#2}%
6971 }
```

r@enabletagging Internal command.

```
6972 \newcommand*{\@glsxtr@enabletagging}[2]{%
```

Set attributes for categories given in the first argument.

```
6973 \@for\@glsxtr@cat:=#1\do
6974 {%
6975   \ifdefempty\@glsxtr@cat
6976   {}
6977   {\glssetcategoryattribute{\@glsxtr@cat}{tagging}{true}}%
6978 }%
6979 \newrobustcmd*#2[1]{##1}%
6980 \def\@glsxtr@taggingcs{#2}%
6981 \renewcommand*{\glsxtr@activate@initialtagging}{%
6982   \let#2\@glsxtr@tag
6983 }%
6984 \ifundef\gls@preglossaryhook
6985 {\GlossariesExtraWarning{Initial tagging requires at least
6986   glossaries.sty v4.19 to work correctly}}%
6987 {}
6988 }
```

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

```
6989 \ifundef\mfu@checkword@do
6990 {
6991   \newcommand*{\mfu@checkword@do}[1]{%
6992     \ifdefstring{\mfu@checkword@arg}{#1}%
6993     {}
6994     \let\@mfu@domakefirstuc\@firstofone
6995     \listbreak
6996   }%
6997   {}
6998 }
```

\mfu@checkword \capitalisewords was introduced in mfirstuc v1.06. If \mfu@checkword hasn't been defined mfirstuc is too old to support the title case attribute.

```
6999 \ifundefined{mfp@checkword}
7000 {
7001     \newcommand{\@glsxtr@do@titlecaps@warn}{%
7002         \GlossariesExtraWarning{mfirstuc.sty too old. Title Caps
7003             support not available}%

```

One warning should suffice.

```
7004     \let\@glsxstr@do@titlecaps@warn\relax
7005 }
7006 }
7007 {
7008     \renewcommand*{\mfp@checkword}[1]{%
7009         \def\mfp@checkword@arg{#1}%
7010         \let\@mfp@domakefirststc\makefirststc
7011         \forlistloop\mfp@checkword@do\@mfp@nocaplist
7012     }
7013 }
7014 }
7015 {}% no patch required
```

`@titlecaps@warn` Do warning if title case not supported.

```
7016 \newcommand*{\@glsxstr@do@titlecaps@warn}{}%
```

`@initialtagging` Used in `\printglossary` but at least v4.19 of glossaries required.

```
7017 \newcommand*\@glsxstr@activate@initialtagging{}
```

\@glsxstr@tag Definition of tagging command when used in glossary.

```
7018 \newrobustcmd*\@glsxstr@tag}[1]{%
7019   \glsifattribute{\glscurrententrylabel}{tagging}{true}%
7020   {\glsxtrtagfont{#1}}{#1}%
7021 }
```

\glsxtrtagfont Used in the glossary.

```
7022 \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.

```
7023 \ifdef\@gls@preglossaryhook  
7024 {  
7025   \renewcommand*{\@gls@preglossaryhook}{%  
7026     \@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.

```

7027 \ifundefined@glsxtr@org@postdescription
7028 {%
7029   \let@glsxtr@org@postdescription\glspostdescription
7030   \renewcommand*\glspostdescription{%
7031     \ifglsentryexists{\glscurrententrylabel}{%
7032       {%
7033         \glsxtrpostdescription
7034         \glsxtr@org@postdescription
7035       }%
7036       {}%
7037     }%
7038   }%
7039 }

```

Enable the options used by \glossxtrp:

```

7040   \glossxtrsetopts
7041 }%
7042 }
7043 {}

```

**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.

```

7044 \newcommand*\glsxtrpostdescription{%
7045   \csuse{glsxtrpostdesc\glscategory}{\glscurrententrylabel}}%
7046 }

```

**postdescgeneral**

```
7047 \newcommand*\glsxtrpostdescgeneral{}%
```

**xtrpostdescterm**

```
7048 \newcommand*\glsxtrpostdescterm{}%
```

**postdescacronym**

```
7049 \newcommand*\glsxtrpostdescacronym{}%
```

**escabbreviation**

```
7050 \newcommand*\glsxtrpostdescabbreviation{}%
```

**\glsdefpostdesc** Provide a convenient command for defining the post-description hook for the given category.

```

7051 \newcommand*\glsdefpostdesc}[2]{%
7052   \csdef{glsxtrpostdesc#1}{#2}%
7053 }

```

**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.

```
7054 \renewcommand*{\glspostlinkhook}{%
7055   \ifglsentryexists{\glslabel}{\glsxtrpostlinkhook}{}%
7056 }
```

`xtrpostlinkhook` The entry label should already be stored in `\glslabel` by `\@gls@link`.

```
7057 \newcommand*{\glsxtrpostlinkhook}{%
7058   \glsxtrdiscardperiod{\glslabel}%
7059   {\glsxtrpostlinkendsentence}%
7060   {\glsxtrifcustomdiscardperiod
7061     {\glsxtrifperiod{\glsxtrpostlinkendsentence}{\glsxtrpostlink}}%
7062     {\glsxtrpostlink}%
7063   }%
7064 }
```

`omdiscardperiod` Allow user to provide a custom check. Should expand to #2 if no check is required otherwise expand to #1.

```
7065 \newcommand*{\glsxtrifcustomdiscardperiod}[2]{#2}
```

`\glsxtrpostlink`

```
7066 \newcommand*{\glsxtrpostlink}{%
7067   \csuse{glsxtrpostlink}\glscategory{\glslabel}%
7068 }
```

`\glsdefpostlink` Provide a convenient command for defining the post-link hook for the given category. Doesn't allow an empty argument (which) would overwrite `\glsxtrpostlink`.

```
7069 \newcommand*{\glsdefpostlink}[2]{%
  \ifthenelse{\equal{#1}{}}
    {\PackageError{glossaries-extra}
      {Invalid empty category label in \string\glsdefpostlink}{}}
    {\csdef{glsxtrpostlink#1}{#2}}%
7074 }
```

`linkendsentence` Done by `\glsxtrpostlinkhook` if a full stop is discarded.

```
7075 \newcommand*{\glsxtrpostlinkendsentence}{%
7076   \ifcsdef{glsxtrpostlink}\glscategory{\glslabel}%
7077   {}%
7078   \csuse{glsxtrpostlink}\glscategory{\glslabel}%
  Put the full stop back.
7079   .\spacefactor\sfcodes`.\relax
7080 }%
7081 {%
```

Assume the full stop was discarded because the entry ends with a period, so adjust the space-factor.

```
7082   \spacefactor\sfcode`\.\relax
7083 }%
7084 }
```

`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.

```
7085 \newcommand*\glsxtrpostlinkAddDescOnFirstUse}{%
7086   \glsxtrifwasfirstuse{\space\glsxtrparen{\glsaccessdesc{\glslabel}}}}{}}%
7087 }
```

`ymbolOnFirstUse` Provide a command for appending the symbol (if defined) in parentheses on first use, for the convenience of users wanting to add this to the post link hook.

```
7088 \newcommand*\glsxtrpostlinkAddSymbolOnFirstUse}{%
7089   \glsxtrifwasfirstuse
7090 }%
7091   \ifglshassymbol{\glslabel}%
7092     {\space\glsxtrparen{\glsaccesssymbol{\glslabel}}}}{}}%
7093 }%
7094 }%
7095 }%
7096 }
```

`lDescOnFirstUse` Provide a command for appending the symbol (if defined) and description in parentheses on first use, for the convenience of users wanting to add this to the post link hook.

```
7097 \newcommand*\glsxtrpostlinkAddSymbolDescOnFirstUse}{%
7098   \glsxtrifwasfirstuse
7099 }%
7100   \space\glsxtrparen
7101 }%
7102   \ifglshassymbol{\glslabel}%
7103     {\glsaccesssymbol{\glslabel}, }%
7104 }%
7105   \glsaccessdesc{\glslabel}%
7106 }%
7107 }%
7108 }%
7109 }
```

`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).

```
7110 \newcommand*\glsxtrdiscardperiod}[3]{%
7111   \glsxtrifwasfirstuse
7112 }%
7113   \glsifattribute{#1}{retainfirstuseperiod}{true}{%
```

```

7114 {#3}%
7115 {%
7116   \glsifattribute{#1}{discardperiod}{true}%
7117   {%
7118     \glsifplural
7119     {%
7120       \glsifattribute{#1}{pluraldiscardperiod}{true}%
7121       {\glsxtrifperiod{#2}{#3}}%
7122       {#3}%
7123     }%
7124     {%
7125       \glsxtrifperiod{#2}{#3}%
7126     }%
7127   }%
7128   {#3}%
7129 }
7130 }%
7131 {%
7132   \glsifattribute{#1}{discardperiod}{true}%
7133   {%
7134     \glsifplural
7135     {%
7136       \glsifattribute{#1}{pluraldiscardperiod}{true}%
7137       {\glsxtrifperiod{#2}{#3}}%
7138       {#3}%
7139     }%
7140     {%
7141       \glsxtrifperiod{#2}{#3}%
7142     }%
7143   }%
7144   {#3}%
7145 }%
7146 }

```

`\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`

```
7147 \newcommand*{\glsxtrifperiod}[1]{\new@ifnextchar.{\@firstoftwo{#1}}}
```

Sometimes it's useful to test if there's a punctuation character following the glossary entry.

`glsxtr@punclist` List of characters identified as punctuation marks. (Be careful of babel shorthands!) This doesn't allow for punctuation marks made up from multiple characters (such as ' ').

```
7148 \newcommand*{\glsxtr@punclist}{.,;?!}
```

`punctuationmark` Add character to punctuation list.

```
7149 \newcommand*{\glsxtraddpunctuationmark}[1]{\appto\glsxtr@punclist{#1}}
```

`unctuationmarks` Reset the punctuation list.

```
7150 \newcommand*{\glsxtrsetpunctuationmarks}[1]{\def\glsxtr@punclist{#1}}
```

```
\glsxtrifpunc
```

```
\glsxtrifnextpunc{\true part}{\false part}
```

Test if this is followed by a punctuation mark. (Adapted from \new@ifnextchar.)

```
7151 \newcommand*\glsxtrifnextpunc}[2]{%
7152   \def\reserved@a{\#1}%
7153   \def\reserved@b{\#2}%
7154   \futurelet\glspunc@token\glsxtr@ifnextpunc
7155 }
```

```
sxtr@ifnextpunc
```

```
7156 \newcommand*\glsxtr@ifnextpunc}{%
7157   \glsxtr@ifpunctoken{\glspunc@token}{\let\reserved@b\reserved@a}{}%
7158   \reserved@b
7159 }
```

```
xtr@ifpunctoken Test if the token given in the first argument is in the punctuation list.
```

```
7160 \newcommand*\glsxtr@ifpunctoken}[1]{%
7161   \expandafter\glsxtr@ifpunctoken\expandafter#1\glsxtr@punclist\@nnil
7162 }
```

```
xtr@ifpunctoken
```

```
7163 \def\glsxtr@ifpunctoken#1#2{%
7164   \let\reserved@d=#2%
7165   \ifx\reserved@d\@nnil
7166     \let\glsxtr@next\glsxtr@notfoundinlist
7167   \else
7168     \ifx#1\reserved@d
7169       \let\glsxtr@next\glsxtr@foundinlist
7170     \else
7171       \let\glsxtr@next\glsxtr@ifpunctoken
7172     \fi
7173   \fi
7174   \glsxtr@next#1%
7175 }
```

```
xtr@foundinlist
```

```
7176 \def\glsxtr@foundinlist#1\@nnil{@firstoftwo}
```

```
@notfoundinlist
```

```
7177 \def\glsxtr@notfoundinlist#1{@secondoftwo}
```

```
lsxtrdopostpunc
```

```
\glsxtrdopostpunc{\code}
```

If this is followed be a punctuation character, do `\code` after the character otherwise do `\code` before whatever comes next.

```
7178 \newcommand{\glsxtrdopostpunc}[1]{%
7179   \glsxtrifnextpunc{@glsxtr@swaptwo{#1}}{#1}%
7180 }
```

```
@glsxtr@swaptwo
```

```
7181 \newcommand{\@glsxtr@swaptwo}[2]{#2#1}
```

## 1.7 Abbreviations

The “acronym” code from glossaries is misnamed as it’s more often used for other forms of abbreviations. This code corrects this inconsistency, but rather than just having synonyms, provide commands for abbreviations that have a similar, but not identical, underlying mechanism to acronyms.

If there’s a style for the given category, it needs to be applied by `\newabbreviation`.

```
7182 \define@key{glsxtrabbrv}{category}{%
7183   \edef\glscategorylabel{#1}%
7184 }
```

Save the short plural form. This may be needed before the entry is defined.

```
7185 \define@key{glsxtrabbrv}{shortplural}{%
7186   \def\@gls@shortpl{#1}%
7187 }
```

Similarly for the long plural form.

```
7188 \define@key{glsxtrabbrv}{longplural}{%
7189   \def\@gls@longpl{#1}%
7190 }
```

Token registers for the short plural and long plural, provided for use in the abbreviation style definitions.

```
\glsshortpltok
7191 \newtoks\glsshortpltok
```

```
\glslongpltok
7192 \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.

```

7193 \newcommand*{\@glsxtr@insertdots}[2]{%
7194   \def#1{}%
7195   \@glsxtr@insert@dots#1#2\@nnil
7196 }

xtr@insert@dots
7197 \newcommand*{\@glsxtr@insert@dots}[2]{%
7198   \ifx\@nnil#2\relax
7199     \let\@glsxtr@insert@dots@next\@gobble
7200   \else
7201     \ifx\relax#2\relax
7202       \else
7203         \appto#1{#2.}%
7204       \fi
7205     \let\@glsxtr@insert@dots@next\@glsxtr@insert@dots
7206   \fi
7207   \@glsxtr@insert@dots@next#1%
7208 }

```

Similarly provide a way of replacing spaces with \glsxtrwordsep, which first needs to be defined:

```
\glsxtrwordsep
7209 \newcommand*{\glsxtrwordsep}{\space}
```

Each word is marked with

```
\glsxtrword
7210 \newcommand*{\glsxtrword}[1]{#1}
```

```
tr@markwordseps
7211 \newcommand*{\@glsxtr@markwordseps}[2]{%
7212   \def#1{}%
7213   \@glsxtr@mark@wordseps#1#2 \@nnil
7214 }
```

```
r@mark@wordseps
7215 \def\@glsxtr@mark@wordseps#1#2 #3{%
7216   \ifdefempty{#1}{%
7217     {\def#1{\protect\glsxtrword{#2}}}%
7218     {\appto#1{\protect\glsxtrwordsep\protect\glsxtrword{#2}}}%
7219   \ifx\@nnil#3\relax
7220     \let\@glsxtr@mark@wordseps@next\relax
7221   \else
7222     \def\@glsxtr@mark@wordseps@next{%
7223       \@glsxtr@mark@wordseps#1#3}%
7224   \fi
7225   \@glsxtr@mark@wordseps@next
7226 }
```

`newabbreviation` Define a new generic abbreviation.

```
7227 \newcommand*{\newabbreviation}[4] []{%
7228   \glsxtr@newabbreviation{#1}{#2}{#3}{#4}%
7229 }
```

`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.)

```
7230 \newcommand*{\glsxtr@newabbreviation}[4]{%
7231   \glskeylisttok{#1}%
7232   \glslabeltok{#2}%
7233   \glsshorttok{#3}%
7234   \glslongtok{#4}%
```

Save the original short and long values (before attribute settings modify them).

```
7235 \def\glsxtrorgshort{#3}%
7236 \def\glsxtrorglong{#4}%
```

Provide extra settings for hooks (if modified, this command must end with a comma).

```
7237 \def\ExtraCustomAbbreviationFields{}%
```

Initialise accessibility settings if required.

```
7238 \gls@initaccesskeys
```

Get the category.

```
7239 \def\glscategorylabel{abbreviation}%
```

Ignore the shortplural and longplural keys.

```
7240 \setkeys*{\glsabbrv}{[shortplural,longplural]{#1}}%
```

Set the abbreviation style.

```
7241 \ifcsdef{@glsabbrv@current@\glscategorylabel}{}%
7242 {}%
```

Warning should already have been issued.

```
7243 \let\@glsxtr@orgwarndep\GlsXtrWarnDeprecatedAbbrStyle
7244 \let\GlsXtrWarnDeprecatedAbbrStyle\gobbletwo
7245 \glsxtr@applyabbrvstyle{\csname@glsabbrv@current@\glscategorylabel\endcsname}%
7246 \let\GlsXtrWarnDeprecatedAbbrStyle\@glsxtr@orgwarndep
7247 {}%
7248 {}%
```

If no style has been associated with this category, fallback on the style for the abbreviation category.

```
7249 \glsxtr@applyabbrvstyle{\@glsabbrv@current@abbreviation}%
7250 {}%
```

Set the default long plural

```
7251 \def\gls@longpl{#4\glspluralsuffix}%
7252 \let\gls@default@longpl\gls@longpl
```

Has the markwords attribute been set?

```
7253 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
7254 {}%
```

```

7255     \@glsxtr@markwordseps\@gls@long{#4}%
7256     \expandafter\def\expandafter\@gls@longpl\expandafter
7257         {\@gls@long\glspluralsuffix}%
7258     \let\@gls@default@longpl\@gls@longpl
    Update \glslongtok.

7259     \expandafter\glslongtok\expandafter{\@gls@long}%
7260 }%
7261 {}%

Has the markshortwords attribute been set? (Not compatible with insertdots.)

7262 \glsifcategoryattribute{\glscategorylabel}{markshortwords}{true}%
7263 {%
7264     \@glsxtr@markwordseps\@gls@short{#3}%
7265 }%
7266 {}%

Has the insertdots attribute been set?

7267 \glsifcategoryattribute{\glscategorylabel}{insertdots}{true}%
7268 {%
7269     \@glsxtr@insertdots\@gls@short{#3}%
7270     \appto\@gls@short{\@}%
7271 }%
7272 {\def\@gls@short{#3}}%
7273 }%

Has the aposplural attribute been set? (Not compatible with noshortplural.)

7274 \glsifcategoryattribute{\glscategorylabel}{aposplural}{true}%
7275 {%
7276     \expandafter\def\expandafter\@gls@shortpl\expandafter{\@gls@short
7277         '\abrvpluralsuffix}%
7278 }%
7279 {}%

Has the noshortplural attribute been set?

7280 \glsifcategoryattribute{\glscategorylabel}{noshortplural}{true}%
7281 {%
7282     \let\@gls@shortpl\@gls@short
7283 }%
7284 {%
7285     \expandafter\def\expandafter\@gls@shortpl\expandafter{\@gls@short
7286         '\abrvpluralsuffix}%
7287 }%
7288 }%

Update \glsshorttok:

7289 \expandafter\glsshorttok\expandafter{\@gls@short}%

Hook for further customisation if required:

7290 \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).

```
7291 \setkeys*{glsxtrabbrv}[category]{#1}%
```

Save in case required.

```
7292 \let\@gls@org@longpl\@gls@longpl  
7293 \let\@gls@org@shortpl\@gls@shortpl
```

Has the plural been explicitly set?

```
7294 \ifx\@gls@default@longpl\@gls@longpl  
7295 \else
```

Has the markwords attribute been set?

```
7296 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}-%  
7297 {%-  
7298 \expandafter\glsxtr@markwordseps\expandafter\@gls@longpl\expandafter  
7299 {\@gls@longpl}%-  
7300 }%-  
7301 {}%-  
7302 \fi
```

Set the plural token registers so the values can be accessed by the abbreviation styles.

```
7303 \expandafter\glsshortpltok\expandafter{\@gls@shortpl}%-  
7304 \expandafter\glslongpltok\expandafter{\@gls@longpl}%-
```

Hook for accessibility support (does nothing if glossaries-accsupp hasn't been loaded).

```
7305 \@gls@setup@default@access
```

Do any extra setup provided by hook:

```
7306 \newabbreviationhook
```

Define this entry:

```
7307 \protected@edef\do@newglossaryentry{%-  
7308 \noexpand\newglossaryentry{\the\glslabeltok}%-  
7309 {%-  
7310 type=\glsxtrabbrvtype,%  
7311 category=abbreviation,%  
7312 short={\the\glsshorttok},%  
7313 shortplural={\the\glsshortpltok},%  
7314 long={\the\glslongtok},%  
7315 longplural={\the\glslongpltok},%  
7316 name={\the\glsshorttok},%  
7317 \CustomAbbreviationFields,%
```

Hook may override abbreviation style default settings (this hook must end with a comma if set).

```
7318 \ExtraCustomAbbreviationFields
```

Any explicit fields set in the optional argument override all other settings.

```
7319 \the\glskeylisttok  
7320 }%-  
7321 }%-  
7322 \do@newglossaryentry
```

Obtain the type and add it to the list of abbreviations.

```
7323  \@glsxtr@addabbreviationlist{\glsentrytype{\the\glslabeltok}}%
7324  \GlsXtrPostNewAbbreviation
7325 }
```

evpresetkeyhook Hook for extra stuff in \newabbreviation

```
7326 \newcommand*{\glsxtrnewabbrevpresetkeyhook}[3]{}
```

NewAbbreviation Hook used by abbreviation styles.

```
7327 \newcommand*{\GlsXtrPostNewAbbreviation}{}
```

bbreivationhook Hook for use with \newabbreviation.

```
7328 \newcommand*{\newabbreviationhook}{}
```

reviationFields

```
7329 \newcommand*{\CustomAbbreviationFields}{}
```

\glsxtrparen For the parenthetical styles.

```
7330 \newcommand*{\glsxtrparen}[1]{(#1)}
```

lsxtrfullformat Full format without case change.

```
7331 \newcommand*{\glsxtrfullformat}[2]{%
7332  \glsfirstlongfont{\glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
7333  \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
7334 }
```

lsxtrfullformat Full format with case change.

```
7335 \newcommand*{\Glsxtrfullformat}[2]{%
7336  \glsfirstlongfont{\Glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
7337  \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
7338 }
```

xtrfullplformat Plural full format without case change.

```
7339 \newcommand*{\glsxtrfullplformat}[2]{%
7340  \glsfirstlongfont{\glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
7341  \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}%
7342 }
```

xtrfullplformat Plural full format with case change.

```
7343 \newcommand*{\Glsxtrfullplformat}[2]{%
7344  \glsfirstlongfont{\Glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
7345  \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}%
7346 }
```

\glsxtrfullsep Separator used by full format is a space by default. The argument is the entry's label.

```
7347 \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).

`inlinefullformat` Full format without case change.

```
7348 \newcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}
```

`inlinefullformat` Full format with case change.

```
7349 \newcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}
```

`xtrfullplformat` Plural full format without case change.

```
7350 \newcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}
```

`inefullplformat` Plural full format with case change.

```
7351 \newcommand*{\Glsxtrinlinefullplformat}{\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`

```
7352 \renewcommand*{\glsentryfull}[1]{\glsxtrinlinefullformat{#1}{}}
```

`\Glsentryfull`

```
7353 \renewcommand*{\Glsentryfull}[1]{\Glsxtrinlinefullformat{#1}{}}
```

`\glsentryfullpl`

```
7354 \renewcommand*{\glsentryfullpl}[1]{\glsxtrinlinefullplformat{#1}{}}
```

```
7355 \renewcommand*{\Glsentryfullpl}[1]{\Glsxtrinlinefullplformat{#1}{}}
```

`sfirstabbrvfont` Font changing command used for the abbreviation on first use or in the full format.

```
7356 \newcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{#1}}
```

`bbrvdefaultfont` Font changing command used for the abbreviation on first use or in the full format.

```
7357 \newcommand*{\glsfirstabbrvdefaultfont}[1]{\glsabbrvdefaultfont{#1}}
```

`\glsabbrvfont` Font changing command used for the abbreviation on subsequent use. This is redefined by the abbreviation styles, as appropriate.

```
7358 \newcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{#1}}
```

`bbrvdefaultfont`

```
7359 \newcommand*{\glsabbrvdefaultfont}[1]{#1}
```

`\glslongfont` Font changing command used for the long form in commands like `\glsxtrlong`.

```
7360 \newcommand*{\glslongfont}[1]{\glslongdefaultfont{#1}}
```

```
longdefaultfont Default font changing command used for the long form in commands like \glsxtrlong.  
7361 \newcommand*{\glslongdefaultfont}[1]{#1}
```

```
lsfirstlongfont Font changing command used for the long form on first use or in the full format.  
7362 \newcommand*{\glsfirstlongfont}[1]{\glslongfont{#1}}
```

```
longdefaultfont  
7363 \newcommand*{\glsfirstlongdefaultfont}[1]{\glslongdefaultfont{#1}}
```

```
brvpluralsuffix Default plural suffix. Allow an alternative default suffix for abbreviations.  
7364 \newcommand*{\glsxtrabbbrvpluralsuffix}{\glspluralsuffix}
```

```
brvpluralsuffix Default plural suffix.  
7365 \newcommand*{\abbrvpluralsuffix}{\glsxtrabbbrvpluralsuffix}
```

```
\glsxtrfull Full form (no case-change).  
7366 \newrobustcmd*{\glsxtrfull}{\@gls@hyp@opt\ns@glsxtrfull}  
7367 \newcommand*\ns@glsxtrfull[2][]{%  
7368   \new@ifnextchar[\{@glsxtr@full{#1}{#2}\}%  
7369     {\@glsxtr@full{#1}{#2}[]}%  
7370 }
```

```
\@glsxtr@full Low-level macro:
```

```
7371 \def\@glsxtr@full#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
7372 \@glsxtr@record{#1}{#2}{\glslink}{%  
7373 \glsdoifexists{#2}{%  
7374 { %  
7375   \glssetabbrvfmt{\glscategory{#2}}%  
7376   \let\do@gls@link@checkfirhyper@\gls@link@nocheckfirhyper  
7377   \let\glsifplural@\secondoftwo  
7378   \let\glscapscase@\firstofthree  
7379   \let\glsinsert@\empty  
7380   \def\glscustomtext{\glsxtrinlinefullformat{#2}{#3}}%
```

What should \glsxtrifwasfirstuse be set to here? Where the inline and display full forms are the same, this is essentially emulating first use, so it makes sense for the postlink hook to pretend it was a first use instance. It makes less sense if the inline and display forms are different. Provide a hook to make it easier to reconfigure.

```
7381   \glsxtrsetupfulldefs  
7382   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}{%  
7383 }%  
7384 \glspostlinkhook  
7385 }
```

```

trsetupfulldefs
7386 \newcommand*{\glsxtrsetupfulldefs}{%
7387   \let\glsxtrifwasfirstuse\@firstoftwo
7388 }

\Glsxtrfull Full form (first letter uppercase).
7389 \newrobustcmd*{\Glsxtrfull}{\@gls@hyp@opt\ns@Glsxtrfull}
7390 \newcommand*\ns@Glsxtrfull[2][]{%
7391   \new@ifnextchar[\{@Glsxtr@full{#1}{#2}}{%
7392     {\@Glsxtr@full{#1}{#2}[]}}%
7393 }

\@Glsxtr@full Low-level macro:
7394 \def\@Glsxtr@full#1#2[#3]{%
7395   \glsdoifexists{#2}{%
7396     {%
7397       \glssetabrvfmt{\glscategory{#2}}{%
7398         \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
7399         \let\glsifplural\@secondoftwo
7400         \let\glscapscase\@secondofthree
7401         \let\glsinsert\@empty
7402         \def\glscustomtext{\Glsxtrinlinefullformat{#2}{#3}}{%
7403           \glsxtrsetupfulldefs
7404           \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}}%
7405     }%
7406     \glspostlinkhook
7407   }%
}

\GLSxtrfull Full form (all uppercase).
7408 \newrobustcmd*{\GLSxtrfull}{\@gls@hyp@opt\ns@GLSxtrfull}
7409 \newcommand*\ns@GLSxtrfull[2][]{%
7410   \new@ifnextchar[\{@GLSxtr@full{#1}{#2}}{%
7411     {\@GLSxtr@full{#1}{#2}[]}}%
7412 }

\@GLSxtr@full Low-level macro:
7413 \def\@GLSxtr@full#1#2[#3]{%
7414   \glsdoifexists{#2}{%
7415     {%
7416       \glssetabrvfmt{\glscategory{#2}}{%
7417         \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
7418         \let\glsifplural\@secondoftwo
7419         \let\glscapscase\@thirdofthree
7420         \let\glsinsert\@empty
7421         \def\glscustomtext{\mfirstucMakeUppercase{\glsxtrinlinefullformat{#2}{#3}}}{%
7422           \glsxtrsetupfulldefs
7423           \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}}%
7424     }%
7425     \glspostlinkhook
}

```

```
7426 }
```

\glsxtrfullpl Plural full form (no case-change).

```
7427 \newrobustcmd*\glsxtrfullpl{\gls@hyp@opt\ns@glsxtrfullpl}
7428 \newcommand*\ns@glsxtrfullpl[2][]{%
7429   \new@ifnextchar{@\glsxtr@fullpl{#1}{#2}}{%
7430     {\glsxtr@fullpl{#1}{#2}[]}}%
7431 }
```

\@glsxtr@fullpl Low-level macro:

```
7432 \def\@glsxtr@fullpl#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
7433 \@glsxtr@record{#1}{#2}{glslink}%
7434 \glsdoifexists{#2}%
7435 {%
7436   \glssetabrvfmt{\glscategory{#2}}%
7437   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7438   \let\glsifplural@\firstoftwo
7439   \let\glscapscase@\firstofthree
7440   \let\glsinsert@\empty
7441   \def\glscustomtext{\glsxtrinlinefullplformat{#2}{#3}}%
7442   \glsxtrsetupfulldefs
7443   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7444 }%
7445 \glspostlinkhook
7446 }
```

\Glsxtrfullpl Plural full form (first letter uppercase).

```
7447 \newrobustcmd*\Glsxtrfullpl{\gls@hyp@opt\ns@Glsxtrfullpl}
7448 \newcommand*\ns@Glsxtrfullpl[2][]{%
7449   \new@ifnextchar{@\Glsxtr@fullpl{#1}{#2}}{%
7450     {\@Glsxtr@fullpl{#1}{#2}[]}}%
7451 }
```

\@Glsxtr@fullpl Low-level macro:

```
7452 \def\@Glsxtr@fullpl#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
7453 \@glsxtr@record{#1}{#2}{glslink}%
7454 \glsdoifexists{#2}%
7455 {%
7456   \glssetabrvfmt{\glscategory{#2}}%
7457   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7458   \let\glsifplural@\firstoftwo
7459   \let\glscapscase@\secondofthree
7460   \let\glsinsert@\empty
```

```

7461   \def\glscustomtext{\Glsxtrinlinefullplformat{#2}{#3}}%
7462   \glsxtrsetupfulldefs
7463   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7464 }%
7465 \glspostlinkhook
7466 }

```

\GLSxtrfullpl Plural full form (all upper case).

```

7467 \newrobustcmd*\GLSxtrfullpl{\gls@hyp@opt\ns@GLSxtrfullpl}
7468 \newcommand*\ns@GLSxtrfullpl[2][]{%
7469   \new@ifnextchar[\{@Glsxtr@fullpl{#1}{#2}}%
7470     {\@Glsxtr@fullpl{#1}{#2}[]}%
7471 }

```

\@Glsxtr@fullpl Low-level macro:

```
7472 \def\@Glsxtr@fullpl#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```

7473 \@glsxtr@record{#1}{#2}{glslink}%
7474 \glsdoifexists{#2}%
7475 {%
7476   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7477   \let\glsifplural\@firstoftwo
7478   \let\glscapscase\@thirdofthree
7479   \let\glsinsert\@empty
7480   \def\glscustomtext{%
7481     \mfirstucMakeUppercase{\Glsxtrinlinefullplformat{#2}{#3}}%
7482     \glsxtrsetupfulldefs
7483     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7484 }%
7485 \glspostlinkhook
7486 }

```

The short and long forms work in a similar way to acronyms.

\glsxtrshort

```

7487 \newrobustcmd*\glsxtrshort{\gls@hyp@opt\ns@glsxtrshort}
    Define the un-starred form. Need to determine if there is a final optional argument
7488 \newcommand*\ns@glsxtrshort[2][]{%
7489   \new@ifnextchar[\{@glsxtrshort{#1}{#2}}{\@glsxtrshort{#1}{#2}[]}%
7490 }

```

Read in the final optional argument:

```
7491 \def\@glsxtrshort#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```

7492 \@glsxtr@record{#1}{#2}{glslink}%
7493 \glsdoifexists{#2}%
7494 {%

```

Need to make sure \glsabbrvfont is set correctly.

```
7495  \glssetabbrvfmt{\glscategory{#2}}%
7496  \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7497  \let\glsxtrifwasfirstuse\secondoftwo
7498  \let\glsifplural\secondoftwo
7499  \let\glscapscase\firstofthree
7500  \let\glsinsert\empty
7501  \def\glscustomtext{%
7502      \glsabbrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
7503      \ifglsxtrinsertinside\else#3\fi
7504  }%
7505  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7506 }%
7507 \glspostlinkhook
7508 }
```

#### \Glsxtrshort

```
7509 \newrobustcmd*\Glsxtrshort{\gls@hyp@opt\ns@Glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7510 \newcommand*\ns@Glsxtrshort[2][]{%
7511   \new@ifnextchar[\@Glsxtrshort{#1}{#2}{\@Glsxtrshort{#1}{#2}[]}}%
7512 }
```

Read in the final optional argument:

```
7513 \def\@Glsxtrshort#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
7514 \glsxtr@record{#1}{#2}{\glslink}%
7515 \glsdoifexists{#2}%
7516 {%
7517   \glssetabbrvfmt{\glscategory{#2}}%
7518   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7519   \let\glsxtrifwasfirstuse\secondoftwo
7520   \let\glsifplural\secondoftwo
7521   \let\glscapscase\firstofthree
7522   \let\glsinsert\empty
7523   \def\glscustomtext{%
7524       \glsabbrvfont{\Glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
7525       \ifglsxtrinsertinside\else#3\fi
7526   }%
7527   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7528 }%
7529 \glspostlinkhook
7530 }
```

#### \GLSxtrshort

```
7531 \newrobustcmd*\GLSxtrshort{\gls@hyp@opt\ns@GLSxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7532 \newcommand*{\ns@GLSxtrshort}[2] []{%
7533   \new@ifnextchar[{\@\GLSxtrshort{#1}{#2}}{\@\GLSxtrshort{#1}{#2}[] }%
7534 }
```

Read in the final optional argument:

```
7535 \def\@\GLSxtrshort#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
7536  \@\glsxtr@record{#1}{#2}{\glslink}%
7537  \glsdoifexists{#2}%
7538  {%
7539    \glssetabrvfmt{\glscategory{#2}}%
7540    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7541    \let\glsxtrifwasfirstuse\@secondoftwo
7542    \let\glsifplural\@secondoftwo
7543    \let\glscapscase\@thirdofthree
7544    \let\glsinsert\@empty
7545    \def\glscustomtext{%
7546      \mfirstrucMakeUppercase
7547      {\glsabbrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
7548        \ifglsxtrinsertinside\else#3\fi
7549      }%
7550    }%
7551    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7552  }%
7553  \glspostlinkhook
7554 }
```

\glsxtrlong

```
7555 \newrobustcmd*{\glsxtrlong}{\gls@hyp@opt\ns@glsxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7556 \newcommand*{\ns@glsxtrlong}[2] []{%
7557   \new@ifnextchar[{\@\glsxtrlong{#1}{#2}}{\@\glsxtrlong{#1}{#2}[] }%
7558 }
```

Read in the final optional argument:

```
7559 \def\@\glsxtrlong#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
7560  \@\glsxtr@record{#1}{#2}{\glslink}%
7561  \glsdoifexists{#2}%
7562  {%
7563    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7564    \let\glsxtrifwasfirstuse\@secondoftwo
7565    \let\glsifplural\@secondoftwo
7566    \let\glscapscase\@firstofthree
7567    \let\glsinsert\@empty
```

```

7568 \def\glscustomtext{%
7569   \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7570   \ifglsxtrinsertinside\else#3\fi
7571 }%
7572 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7573 }%
7574 \glspostlinkhook
7575 }

```

### \Glsxtrlong

```
7576 \newrobustcmd*\Glsxtrlong{\gls@hyp@opt\ns@Glsxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7577 \newcommand*\ns@Glsxtrlong[2][]{%
7578   \new@ifnextchar[\{@Glsxtrlong{#1}{#2}\}{\@Glsxtrlong{#1}{#2}[]}}%
7579 }

```

Read in the final optional argument:

```
7580 \def\@Glsxtrlong#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```

7581 \glsxtr@record{#1}{#2}{glslink}%
7582 \glsdoifexists{#2}%
7583 {%
7584   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7585   \let\glsxtrifwasfirstuse\secondoftwo
7586   \let\glsifplural\secondoftwo
7587   \let\glscapscase\secondofthree
7588   \let\glsinsert\empty
7589   \def\glscustomtext{%
7590     \glslongfont{\Glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7591     \ifglsxtrinsertinside\else#3\fi
7592   }%
7593   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7594 }%
7595 \glspostlinkhook
7596 }

```

### \GLSxtrlong

```
7597 \newrobustcmd*\GLSxtrlong{\gls@hyp@opt\ns@GLSxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7598 \newcommand*\ns@GLSxtrlong[2][]{%
7599   \new@ifnextchar[\{@GLSxtrlong{#1}{#2}\}{\@GLSxtrlong{#1}{#2}[]}}%
7600 }

```

Read in the final optional argument:

```
7601 \def\@GLSxtrlong#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```

7602  \glsxstr@record{#1}{#2}{glslink}%
7603  \glsdoifexists{#2}%
7604  {%
7605    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7606    \let\glsxtrifwasfirstuse\secondoftwo
7607    \let\glsifplural\secondoftwo
7608    \let\glscapscase\thirdofthree
7609    \let\glsinsert\empty
7610    \def\glscustomtext{%
7611      \mfirstrucMakeUppercase
7612      {\glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7613        \ifglsxtrinsertinside\else#3\fi
7614      }%
7615    }%
7616    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7617  }%
7618  \glspostlinkhook
7619 }

```

Plural short forms:

\glsxtrshortpl

```

7620 \newrobustcmd*{\glsxtrshortpl}{\gls@hyp@opt\ns@glsxtrshortpl}
Define the un-starred form. Need to determine if there is a final optional argument
7621 \newcommand*{\ns@glsxtrshortpl}[2][]{%
7622   \new@ifnextchar[{\glsxtrshortpl{#1}{#2}}{\glsxtrshortpl{#1}{#2}[]}{%
7623 }

```

Read in the final optional argument:

```
7624 \def@glsxtrshortpl#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```

7625  \glsxstr@record{#1}{#2}{glslink}%
7626  \glsdoifexists{#2}%
7627  {%
7628    \glssetabrvfmt{\glscategory{#2}}%
7629    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7630    \let\glsxtrifwasfirstuse\secondoftwo
7631    \let\glsifplural\firstoftwo
7632    \let\glscapscase\firstofthree
7633    \let\glsinsert\empty
7634    \def\glscustomtext{%
7635      \glsabbrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7636      \ifglsxtrinsertinside\else#3\fi
7637    }%
7638    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%

```

```

7639  }%
7640  \glspostlinkhook
7641 }

\Glsxtrshortpl
7642 \newrobustcmd*{\Glsxtrshortpl}{\gls@hyp@opt\ns@Glsxtrshortpl}

    Define the un-starred form. Need to determine if there is a final optional argument

7643 \newcommand*{\ns@Glsxtrshortpl}[2][]{%
7644   \new@ifnextchar[{\glsxtrshortpl[#1]{#2}}{\glsxtrshortpl[#1]{#2}[]}{%
7645 }

    Read in the final optional argument:

7646 \def\@Glsxtrshortpl#1#2[#3]{%

    If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

7647  \glsxtr@record[#1]{#2}{glslink}%
7648  \glsdoifexists{#2}%
7649  {%
7650    \glssetabbrvfmt{\glscategory{#2}}%
7651    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7652    \let\glsxtrifwasfirstuse\secondoftwo
7653    \let\glsifplural\firstoftwo
7654    \let\glscapscase\secondofthree
7655    \let\glsinsert\empty
7656    \def\glscustomtext{%
7657      \glsabbrvfont{\Glsaccessshortpl[#2]\ifglsxtrinsertinside#3\fi}%
7658      \ifglsxtrinsertinside\else#3\fi
7659    }%
7660    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7661  }%
7662  \glspostlinkhook
7663 }

\GLSxtrshortpl
7664 \newrobustcmd*{\GLSxtrshortpl}{\gls@hyp@opt\ns@GLSxtrshortpl}

    Define the un-starred form. Need to determine if there is a final optional argument

7665 \newcommand*{\ns@GLSxtrshortpl}[2][]{%
7666   \new@ifnextchar[{\GLSxtrshortpl[#1]{#2}}{\GLSxtrshortpl[#1]{#2}[]}{%
7667 }

    Read in the final optional argument:

7668 \def\@GLSxtrshortpl#1#2[#3]{%

    If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

7669  \glsxtr@record[#1]{#2}{glslink}%
7670  \glsdoifexists{#2}%
7671  {%

```

```

7672 \glssetabrvfmt{\glscategory{#2}}%
7673 \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
7674 \let\glsxtrifwasfirstuse\@secondoftwo
7675 \let\glsifplural\@firstoftwo
7676 \let\glscapscase\@thirdofthree
7677 \let\glsinsert\@empty
7678 \def\glscustomtext{%
7679   \mfirstrucMakeUppercase
7680   {\glsabbrfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7681     \ifglsxtrinsertinside\else#3\fi
7682   }%
7683 }%
7684 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7685 }%
7686 \glspostlinkhook
7687 }

```

Plural long forms:

\glsxtrlongpl

```

7688 \newrobustcmd*\glsxtrlongpl{\gls@hyp@opt\ns@glsxtrlongpl}
Define the un-starred form. Need to determine if there is a final optional argument
7689 \newcommand*\ns@glsxtrlongpl[2][]{%
7690   \new@ifnextchar[\glsxtrlongpl{#1}{#2}]{\glsxtrlongpl{#1}{#2}[]}{%
7691 }

```

Read in the final optional argument:

```
7692 \def\glsxtrlongpl#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```

7693 \glsxtr@record{#1}{#2}{\glslink}%
7694 \glsdoifexists{#2}%
7695 {%
7696   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
7697   \let\glsxtrifwasfirstuse\@secondoftwo
7698   \let\glsifplural\@firstoftwo
7699   \let\glscapscase\@firstofthree
7700   \let\glsinsert\@empty
7701   \def\glscustomtext{%
7702     \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7703     \ifglsxtrinsertinside\else#3\fi
7704   }%
7705   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7706 }%
7707 \glspostlinkhook
7708 }

```

\Glsxtrlongpl

```
7709 \newrobustcmd*\Glsxtrlongpl{\gls@hyp@opt\ns@Glsxtrlongpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7710 \newcommand*{\ns@Glsxtrlongpl}[2] []{%
7711   \new@ifnextchar[{\@\Glsxtrlongpl{#1}{#2}}{\@\Glsxtrlongpl{#1}{#2}[] }%
7712 }
```

Read in the final optional argument:

```
7713 \def\@Glsxtrlongpl#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
7714 \@glsxtr@record{#1}{#2}{glslink}%
7715 \glsdoifexists{#2}%
7716 {%
7717   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7718   \let\glsxtrifwasfirstuse@secondoftwo
7719   \let\glsifplural@firstoftwo
7720   \let\glscapscase@secondofthree
7721   \let\glsinsert@\empty
7722   \def\glscustomtext{%
7723     \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7724     \ifglsxtrinsertinside\else#3\fi
7725   }%
7726   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7727 }%
7728 \glspostlinkhook
7729 }
```

## \GLSxtrlongpl

```
7730 \newrobustcmd*{\GLSxtrlongpl}{\gls@hyp@opt\ns@GLSxtrlongpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7731 \newcommand*{\ns@GLSxtrlongpl}[2] []{%
7732   \new@ifnextchar[{\@\GLSxtrlongpl{#1}{#2}}{\@\GLSxtrlongpl{#1}{#2}[] }%
7733 }
```

Read in the final optional argument:

```
7734 \def\@GLSxtrlongpl#1#2[#3]{%
```

If the record option has been used, the information needs to be written to the aux file regardless of whether the entry exists (unless indexing has been switched off).

```
7735 \@glsxtr@record{#1}{#2}{glslink}%
7736 \glsdoifexists{#2}%
7737 {%
7738   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7739   \let\glsxtrifwasfirstuse@secondoftwo
7740   \let\glsifplural@firstoftwo
7741   \let\glscapscase@thirdofthree
7742   \let\glsinsert@\empty
7743   \def\glscustomtext{%
7744     \mfirstucMakeUppercase
7745     \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%

```

```

7746      \ifglsxtrinsertinside\else#3\fi
7747      }%
7748  }%
7749  @gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7750 }%
7751 \glspostlinkhook
7752 }

```

\glssetabbrvfmt Set the current format for the given category (or the abbreviation category if unset).

```

7753 \newcommand*\glssetabbrvfmt}[1]{%
7754  \ifcsdef{@glsabrv@current@#1}{%
7755  {\glsxtr@applyabbrvfmt{\csname @glsabrv@current@#1\endcsname}}{%
7756  {\glsxtr@applyabbrvfmt{\@glsabrv@current@abbreviation}}{%
7757 }

```

\glsuseabbrvfont Provide a way to use the abbreviation font for a given category for arbitrary text.

```

7758 \newrobustcmd*\glsuseabbrvfont}[2]{{\glssetabbrvfmt{#2}\glsabrvfont{#1}}}

```

\glsuselongfont Provide a way to use the long font for a given category for arbitrary text.

```

7759 \newrobustcmd*\glsuselongfont}[2]{{\glssetabbrvfmt{#2}\glslongfont{#1}}}

```

\sxtrgenabbrvfmt Similar to \glsgenacfmt, but for abbreviations.

```

7760 \newcommand*\glsxtrgenabbrvfmt}{%
7761  \ifdefempty{\glscustomtext}{%
7762  }{%
7763  \ifglsused{\glslabel}{%
7764  }{%

```

Subsequent use:

```

7765  \glsifplural
7766  }{%

```

Subsequent plural form:

```

7767  \glscapscase
7768  }{%

```

Subsequent plural form, don't adjust case:

```

7769  \glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
7770  }{%
7771  }{%

```

Subsequent plural form, make first letter upper case:

```

7772  \Glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
7773  }{%
7774  }{%

```

Subsequent plural form, all caps:

```

7775  \mfirstucMakeUppercase
7776  {\glsxtrsubsequentplfmt{\glslabel}{\glsinsert}}{%
7777  }{%

```

```

7778      }%
7779      {%
    Subsequent singular form
7780      \glscapscase
7781      {%
    Subsequent singular form, don't adjust case:
7782          \glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
7783          }%
7784          {%
    Subsequent singular form, make first letter upper case:
7785          \Glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
7786          }%
7787          {%
    Subsequent singular form, all caps:
7788          \mfirstucMakeUppercase
7789          {\glsxtrsubsequentfmt{\glslabel}{\glsinsert}}%
7790          }%
7791          }%
7792          }%
7793          {%
    First use:
7794      \glsifplural
7795      {%
    First use plural form:
7796      \glscapscase
7797      {%
    First use plural form, don't adjust case:
7798          \glsxtrfullplformat{\glslabel}{\glsinsert}%
7799          }%
7800          {%
    First use plural form, make first letter upper case:
7801          \Glsxtrfullplformat{\glslabel}{\glsinsert}%
7802          }%
7803          {%
    First use plural form, all caps:
7804          \mfirstucMakeUppercase
7805          {\glsxtrfullplformat{\glslabel}{\glsinsert}}%
7806          }%
7807          }%
7808          {%
    First use singular form
7809      \glscapscase
7810      {%

```

First use singular form, don't adjust case:

```
7811      \glsxtrfullformat{\glslabel}{\glsinsert}%
7812      }%
7813      {%
```

First use singular form, make first letter upper case:

```
7814      \Glsxtrfullformat{\glslabel}{\glsinsert}%
7815      }%
7816      {%
```

First use singular form, all caps:

```
7817      \mfirstucMakeUppercase
7818      {\glsxtrfullformat{\glslabel}{\glsinsert}}%
7819      }%
7820      }%
7821      }%
7822      }%
7823      {%
```

User supplied text.

```
7824      \glscustomtext
7825      }%
7826 }
```

trsubsequentfmt Subsequent use format (singular no case change).

```
7827 \newcommand*{\glsxtrsubsequentfmt}[2]{%
7828   \glsabbrvfont{\glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
7829   \ifglsxtrinsertinside \else#2\fi
7830 }
7831 \let\glsxtrdefaultsubsequentfmt\glsxtrsubsequentfmt
```

subsequentplfmt Subsequent use format (plural no case change).

```
7832 \newcommand*{\glsxtrsubsequentplfmt}[2]{%
7833   \glsabbrvfont{\glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
7834   \ifglsxtrinsertinside \else#2\fi
7835 }
7836 \let\glsxtrdefaultsubsequentplfmt\glsxtrsubsequentplfmt
```

trsubsequentfmt Subsequent use format (singular, first letter uppercase).

```
7837 \newcommand*{\Glsxtrsubsequentfmt}[2]{%
7838   \glsabbrvfont{\Glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
7839   \ifglsxtrinsertinside \else#2\fi
7840 }
7841 \let\Glsxtrdefaultsubsequentfmt\Glsxtrsubsequentfmt
```

subsequentplfmt Subsequent use format (plural, first letter uppercase).

```
7842 \newcommand*{\Glsxtrsubsequentplfmt}[2]{%
7843   \glsabbrvfont{\Glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
7844   \ifglsxtrinsertinside \else#2\fi
7845 }
7846 \let\Glsxtrdefaultsubsequentplfmt\Glsxtrsubsequentplfmt
```

### 1.7.1 Abbreviation Styles Setup

```
abbreviationstyle
7847 \newcommand*{\setabbreviationstyle}[2] [abbreviation]{%
7848   \ifcsundef{@glsabbrv@dispstyle@setup@#2}%
7849   {%
7850     \PackageError{glossaries-extra}{Undefined abbreviation style '#2'}{}%
7851   }%
7852 }%

  Have abbreviations already been defined for this category?

7853   \ifcsstring{@glsabbrv@current@#1}{#2}%
7854   {%
    Style already set.

7855   }%
7856   {%
7857     \def\@glsxtr@dostylewarn{}%
7858     \glsforeachincategory{#1}{\@gls@type}{\@gls@label}%
7859   }%
7860     \def\@glsxtr@dostylewarn{\GlossariesWarning{Abbreviation
7861       style has been switched \MessageBreak
7862       for category '#1', \MessageBreak
7863       but there have already been entries \MessageBreak
7864       defined for this category. Unwanted \MessageBreak
7865       side-effects may result}}%
7866     \@endfortrue
7867   }%
7868   \@glsxtr@dostylewarn
```

Set up the style for the given category.

```
7869   \csdef{@glsabbrv@current@#1}{#2}%
7870   \edef\glscategorylabel{#1}%
7871   \glsxtr@applyabbrvstyle{#2}%
7872 }%
7873 }%
7874 }
```

applyabbrvstyle Apply the abbreviation style without existence check.

```
7875 \newcommand*{\glsxtr@applyabbrvstyle}[1]{%
7876   \csuse{@glsabbrv@dispstyle@setup@#1}%
7877   \csuse{@glsabbrv@dispstyle@fmts@#1}%
7878 }
```

r@applyabbrvfmt Only apply the style formats.

```
7879 \newcommand*{\glsxtr@applyabbrvfmt}[1]{%
7880   \csuse{@glsabbrv@dispstyle@fmts@#1}%
7881 }
```

breviactionstyle 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.

```
7882 \newcommand*{\newabbreviationstyle}[3]{%
7883   \ifcsdef{@glsabrv@dispstyle@setup@#1}{%
7884     {%
7885       \PackageError{glossaries-extra}{Abbreviation style '#1' already
7886         defined}{}{%
7887     }%
7888   }%
7889   \csdef{@glsabrv@dispstyle@setup@#1}{%
```

Initialise hook to do nothing. The style may change this.

```
7890   \renewcommand*{\GlsXtrPostNewAbbreviation}{}{%
7891     #2}{%
7892   }\csdef{@glsabrv@dispstyle@fmts@#1}{%
```

Assume in-line form is the same as first use. The style may change this.

```
7893   \renewcommand*{\glsxtrinlinetfullformat}{\glsxtrfullformat}{%
7894     \renewcommand*{\GlsXtrPostNewAbbreviation}{}{%
7895       \renewcommand*{\glsxtrinlinetfullplformat}{\glsxtrfullplformat}{%
7896         \renewcommand*{\GlsXtrPostNewAbbreviation}{}{%
```

Reset `\glsxtrsubsequentfmt` etc in case a style changes this.

```
7897   \let\glsxtrsubsequentfmt\glsxtrdefaultsubsequentfmt
7898   \let\glsxtrsubsequentplfmt\glsxtrdefaultsubsequentplfmt
7899   \let\GlsXtrPostNewAbbreviation\GlsXtrPostNewAbbreviation
7900   \let\GlsXtrPostNewAbbreviation\GlsXtrPostNewAbbreviation
7901   #3}{%
7902 }%
7903 }
```

breviactionstyle

```
7904 \newcommand*{\renewabbreviationstyle}[3]{%
7905   \ifcsundef{@glsabrv@dispstyle@setup@#1}{%
7906     {%
7907       \PackageError{glossaries-extra}{Abbreviation style '#1' not defined}{}{%
7908     }%
7909   }%
7910   \csdef{@glsabrv@dispstyle@setup@#1}{%
```

Initialise hook to do nothing. The style may change this.

```
7911   \renewcommand*{\GlsXtrPostNewAbbreviation}{}{%
7912     #2}{%
7913   }\csdef{@glsabrv@dispstyle@fmts@#1}{%
```

Assume in-line form is the same as first use. The style may change this.

```
7914   \renewcommand*{\glsxtrinlinetfullformat}{\glsxtrfullformat}{%
7915     \renewcommand*{\GlsXtrPostNewAbbreviation}{}{%
7916       \renewcommand*{\glsxtrinlinetfullplformat}{\glsxtrfullplformat}{%
7917         \renewcommand*{\GlsXtrPostNewAbbreviation}{}{%
```

```
7918     #3}%
7919   }%
7920 }
```

abbreviationstyle Define a synonym for an abbreviation style. The first argument is the new name. The second argument is the original style's name.

```
7921 \newcommand*{\letabbreviationstyle}[2]{%
7922   \csletcs{@glsabrv@dispstyle@setup@#1}{@glsabrv@dispstyle@setup@#2}%
7923   \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
7924 }
```

cated@abbrstyle

```
\@glsxtr@deprecated@abbrstyle{<old-name>}{<new-name>}
```

Define a synonym for a deprecated abbreviation style.

```
7925 \newcommand*{\@glsxtr@deprecated@abbrstyle}[2]{%
7926   \csdef{@glsabrv@dispstyle@setup@#1}{%
7927     \GlsXtrWarnDeprecatedAbbrStyle{#1}{#2}%
7928   \csuse{@glsabrv@dispstyle@setup@#2}%
7929 }%
7930 \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
7931 }
```

ecatedAbbrStyle Generate warning for deprecated style use.

```
7932 \newcommand*{\GlsXtrWarnDeprecatedAbbrStyle}[2]{%
7933   \GlossariesExtraWarning{Deprecated abbreviation style name '#1',
7934   use '#2' instead}%
7935 }
```

eAbbrStyleSetup

```
7936 \newcommand*{\GlsXtrUseAbbrStyleSetup}[1]{%
7937   \ifcsundef{@glsabrv@dispstyle@setup@#1}%
7938   {%
7939     \PackageError{glossaries-extra}%
7940     {Unknown abbreviation style definitions '#1'}{}%
7941   }%
7942   {%
7943     \csname @glsabrv@dispstyle@setup@#1\endcsname
7944   }%
7945 }
```

seAbbrStyleFmts

```
7946 \newcommand*{\GlsXtrUseAbbrStyleFmts}[1]{%
7947   \ifcsundef{@glsabrv@dispstyle@fmts@#1}%
7948   {%
7949     \PackageError{glossaries-extra}%
```

```

7950     {Unknown abbreviation style formats '#1'}{}%
7951 }%
7952 {%
7953     \csname @glsabbrv@dispstyle@fmts@#1\endcsname
7954 }%
7955 }

```

### 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.

```

7956 \newif\ifglsxtrinsertinside
7957 \glsxtrinsertinsidetru

```

trlongshortname

```

7958 \newcommand*\glsxtrlongshortname{%
7959   \protect\glsabbrvfont{\the\glsshorttok}%
7960 }

```

#### long-short

```

7961 \newabbreviationstyle{long-short}{%
7962 }%

```

Set accessibility attributes if enabled.

```
7963 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```

7964 \renewcommand*\CustomAbbreviationFields{%
7965   name={\glsxtrlongshortname},
7966   sort={\the\glsshorttok},
7967   first={\protect\glsfirstlongfont{\the\glslongtok}%
7968     \protect\glsxtrfullsep{\the\glslabeltok}%
7969     \glsxtrparen{\protect\glsfirstabrvfont{\the\glsshorttok}}},%
7970   firstplural={\protect\glsfirstlongfont{\the\glslongpltok}%
7971     \protect\glsxtrfullsep{\the\glslabeltok}%
7972     \glsxtrparen{\protect\glsfirstabrvfont{\the\glsshortpltok}}},%
7973   plural={\protect\glsabbrvfont{\the\glsshortpltok}},%
7974   text={\protect\glsabbrvfont{\the\glsshorttok}},%
7975   description={\the\glslongtok}}%

```

Unset the regular attribute if it has been set.

```
7976 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7977   \glshasattribute{\the\glslabeltok}{regular}%
7978   {%
7979     \glssetattribute{\the\glslabeltok}{regular}{false}%
7980   }%
7981   {}%
7982 }%
7983 }%
7984 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
7985 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7986 \renewcommand*{\glsabrvfont}[1]{\glsabrvdefaultfont{##1}}%
7987 \renewcommand*{\glsfirstabrvfont}[1]{\glsfirstabrvdefaultfont{##1}}%
7988 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7989 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
7990 \renewcommand*{\glsxtrfullformat}[2]{%
7991   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7992   \ifglsxtrinsertinside\else##2\fi
7993   \glsxtrfullsep{##1}%
7994   \glsxtrparen{\glsfirstabrvfont{\glsaccessshort{##1}}}%
7995 }%
7996 \renewcommand*{\glsxtrfullplformat}[2]{%
7997   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7998   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7999   \glsxtrparen{\glsfirstabrvfont{\glsaccessshortpl{##1}}}%
8000 }%
8001 \renewcommand*{\Glsxtrfullformat}[2]{%
8002   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8003   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8004   \glsxtrparen{\glsfirstabrvfont{\glsaccessshort{##1}}}%
8005 }%
8006 \renewcommand*{\Glsxtrfullplformat}[2]{%
8007   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8008   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8009   \glsxtrparen{\glsfirstabrvfont{\glsaccessshortpl{##1}}}%
8010 }%
8011 }
```

Set this as the default style for general abbreviations:

```
8012 \setabbreviationstyle{long-short}
```

ngshortdescsort

```
8013 \newcommand*{\glsxtrlongshortdescsort}{%
8014   \expandonce\glsxtrorglong\space (\expandonce\glsxtrorgshort)%
8015 }
```

```
ngshortdescname
8016 \newcommand*{\glsxtrlongshortdescname}{%
8017   \protect\glslongfont{\the\glslongtok}%
8018   \glsxtrparen{\protect\glsabbrvfont{\the\glsshorttok}}%
8019 }
```

long-short-desc User supplies description. The long form is included in the name.

```
8020 \newabbreviationstyle{long-short-desc}%
8021 {%
```

Set accessibility attributes if enabled.

```
8022 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
8023 \renewcommand*{\CustomAbbreviationFields}{%
8024   name={\glsxtrlongshortdescname},%
8025   sort={\glsxtrlongshortdescsort},%
8026   first={\protect\glsfirstlongfont{\the\glslongtok}}%
8027   \protect\glsxtrfullsep{\the\glslabeltok}%
8028   \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
8029   firstplural={\protect\glsfirstlongfont{\the\glslongpltok}}%
8030   \protect\glsxtrfullsep{\the\glslabeltok}%
8031   \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%
```

The text key should only have the short form.

```
8032   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8033   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
8034 }%
```

Unset the regular attribute if it has been set.

```
8035 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8036   \glshasattribute{\the\glslabeltok}{regular}%
8037   {%
8038     \glssetattribute{\the\glslabeltok}{regular}{false}%
8039   }%
8040   {}%
8041 }%
8042 }%
8043 {%
8044 \GlsXtrUseAbbrStyleFmts{long-short}%
8045 }
```

trshortlongname

```
8046 \newcommand*{\glsxtrshortlongname}{%
8047   \protect\glsabbrvfont{\the\glsshorttok}%
8048 }
```

short-long Short form followed by long form in parenthesis on first use.

```
8049 \newabbreviationstyle{short-long}%
8050 {%
```

Set accessibility attributes if enabled.

```
8051 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
8052 \renewcommand*\CustomAbbreviationFields{%
8053   name={\glsxtrshortlongname},
8054   sort={\the\glsshorttok},
8055   description={\the\glslongtok},%
8056   first={\protect\glsfirstabbrvfont{\the\glsshorttok}}%
8057   \protect\glsxtrfullsep{\the\glslabeltok}%
8058   \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}},%
8059   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}}%
8060   \protect\glsxtrfullsep{\the\glslabeltok}%
8061   \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}},%
8062   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8063   plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
8064 \renewcommand*\GlsXtrPostNewAbbreviation{%
8065   \glshasattribute{\the\glslabeltok}{regular}%
8066   {%
8067     \glssetattribute{\the\glslabeltok}{regular}{false}%
8068   }%
8069   {}%
8070 }%
8071 }%
8072 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
8073 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
8074 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{\##1}}%
8075 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{\##1}}%
8076 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\##1}}%
8077 \renewcommand*\glslongfont[1]{\glslongdefaultfont{\##1}}%
```

The first use full form and the inline full form are the same for this style.

```
8078 \renewcommand*\glsxtrfullformat[2]{%
8079   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
8080   \ifglsxtrinsertinside\else{\##2}\fi
8081   \glsxtrfullsep{\##1}%
8082   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{\##1}}}%
8083 }%
8084 \renewcommand*\glsxtrfullplformat[2]{%
8085   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
8086   \ifglsxtrinsertinside\else{\##2}\fi
8087   \glsxtrfullsep{\##1}%
8088   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{\##1}}}%
8089 }%
8090 \renewcommand*\Glsxtrfullformat[2]{%
8091   \glsfirstabbrvfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
8092 }
```

```

8092 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8093 \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8094 }%
8095 \renewcommand*{\Glsxtrfullplformat}[2]{%
8096   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8097   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8098   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
8099 }%
8100 }

ortlongdescsort
8101 \newcommand*{\glsxtrshortlongdescsort}{\the\glsshorttok}

ortlongdescname
8102 \newcommand*{\glsxtrshortlongdescname}{%
8103   \protect\glsabbrvfont{\the\glsshorttok}
8104   \glsxtrparen{\protect\glslongfont{\the\glslongtok}}}%
8105 }

short-long-desc User supplies description. The long form is included in the name.
8106 \newabbreviationstyle{short-long-desc}%
8107 {%

  Set accessibility attributes if enabled.
8108 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

  Setup the default fields.
8109 \renewcommand*{\CustomAbbreviationFields}{%
8110   name={\glsxtrshortlongdescname},
8111   sort={\glsxtrshortlongdescsort},
8112   first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
8113   \protect\glsxtrfullsep{\the\glslabeltok}%
8114   \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
8115   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
8116   \protect\glsxtrfullsep{\the\glslabeltok}%
8117   \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
8118   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8119   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
8120 }%

  Unset the regular attribute if it has been set.
8121 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8122   \glshasattribute{\the\glslabeltok}{regular}%
8123   {%
8124     \glssetattribute{\the\glslabeltok}{regular}{false}%
8125   }%
8126   {}%
8127 }%

```

```

8128 }%
8129 {%
8130   \GlsXtrUseAbbrStyleFmts{short-long}%
8131 }

ongfootnotefont Only used by the “footnote” styles.
8132 \newcommand*{\glsfirstlongfootnotefont}[1]{\glslongfootnotefont{\#1}}%

ongfootnotefont Only used by the “footnote” styles.
8133 \newcommand*{\glslongfootnotefont}[1]{\glslongdefaultfont{\#1}}%

trabbrvfootnote



\glsxtrabbrvfootnote{\langle label \rangle}{\langle long \rangle}



Command used by footnote abbreviation styles. The default definition ignores the first argument. The second argument ⟨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).
8134 \newcommand*{\glsxtrabbrvfootnote}[2]{\footnote{\#2}}


xtrfootnotename

8135 \newcommand*{\glsxtrfootnotename}{%
8136   \protect\glsabbrvfont{\the\glsshorttok}%
8137 }

footnote Short form followed by long form in footnote on first use.
8138 \newabbreviationstyle{footnote}{%
8139 }

Set accessibility attributes if enabled. (Add firstshortaccess since long form is hidden in a footnote on first use.)
8140 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel

Setup the default fields.
8141 \renewcommand*{\CustomAbbreviationFields}{%
8142   name={\glsxtrfootnotename},
8143   sort={\the\glsshorttok},
8144   description={\the\glslongtok},%
8145   first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
8146     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8147       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8148   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
8149     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8150       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%

```

```

8151     text={\protect\glsabbrvfont{\the\glsshorttok}},%
8152     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.

```

8153 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8154   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8155   \glshasattribute{\the\glslabeltok}{regular}%
8156   {%
8157     \glssetattribute{\the\glslabeltok}{regular}{false}%
8158   }%
8159   {}%
8160 }%
8161 }%
8162 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8163 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8164 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
8165 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8166 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8167 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

8168 \renewcommand*{\glsxtrfullformat}[2]{%
8169   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8170   \ifglsxtrinsertinside\else##2\fi
8171   \protect\glsxtrabbrvfootnote{##1}%
8172   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8173 }%
8174 \renewcommand*{\glsxtrfullplformat}[2]{%
8175   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8176   \ifglsxtrinsertinside\else##2\fi
8177   \protect\glsxtrabbrvfootnote{##1}%
8178   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8179 }%
8180 \renewcommand*{\Glsxtrfullformat}[2]{%
8181   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8182   \ifglsxtrinsertinside\else##2\fi
8183   \protect\glsxtrabbrvfootnote{##1}%
8184   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8185 }%
8186 \renewcommand*{\Glsxtrfullplformat}[2]{%
8187   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8188   \ifglsxtrinsertinside\else##2\fi
8189   \protect\glsxtrabbrvfootnote{##1}%
8190   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8191 }%

```

The first use full form and the inline full form use the short (long) style.

```

8192 \renewcommand*{\glsxtrinlinefullformat}[2]{%

```

```

8193   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8194     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8195     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8196   }%
8197   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8198     \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8199     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8200     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8201   }%
8202   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8203     \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8204     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8205     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8206   }%
8207   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8208     \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8209     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8210     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8211   }%
8212 }

```

#### short-footnote

```
8213 \letabbreviationstyle{short-footnote}{footnote}
```

#### ootnotedescname

```

8214 \newcommand*{\glsxtrfootnotedescname}{%
8215   \protect\glsabbrvfont{\the\glsshorttok}%
8216   \protect\glsxtrfullsep{\the\glslabeltok}%
8217   \protect\glsxtrparen{\protect\glslongfont{\the\glslongtok}}%
8218 }

```

#### ootnotedescsort

```
8219 \newcommand*{\glsxtrfootnotedescsort}{\the\glsshorttok}
```

#### t-footnote-desc

Like short-footnote but with user supplied description.

```
8220 \newabbreviationstyle{short-footnote-desc}{%
8221 }
```

Set accessibility attributes if enabled

```
8222 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```

8223 \renewcommand*{\CustomAbbreviationFields}{%
8224   name={\glsxtrfootnotedescname},%
8225   sort={\glsxtrfootnotedescsort},%
8226   first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
8227     \protect\glsxtrabbrrvfootnote{\the\glslabeltok}%
8228     {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8229   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
8230     \protect\glsxtrabbrrvfootnote{\the\glslabeltok}}%

```

```

8231      {\protect\glsfirstlongfootnotefont{\the\glslongpltok}},%
8232      text={\protect\glsabbrvfont{\the\glsshorttok}},%
8233      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.

8234 \renewcommand*\GlsXtrPostNewAbbreviation{%
8235   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8236   \glshasattribute{\the\glslabeltok}{regular}%
8237   {%
8238     \glssetattribute{\the\glslabeltok}{regular}{false}%
8239   }%
8240   {}%
8241 }%
8242 }%
8243 {%
8244 \GlsXtrUseAbbrStyleFmts{footnote}%
8245 }

```

**footnote-desc** Synonym.

```
8246 \letabbreviationstyle{footnote-desc}{short-footnote-desc}
```

**postfootnote** Similar to footnote but the footnote is placed afterwards, outside the link. This avoids nested links and can also move the footnote marker after any following punctuation mark. Pre v1.07 included \footnote in the first keys, which was incorrect as it caused duplicate footnotes.

```
8247 \newabbreviationstyle{postfootnote}%
8248 {%
```

Set accessibility attributes if enabled. (Add `firstshortaccess` since long form is hidden in a footnote on first use.)

```
8249 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

8250 \renewcommand*\CustomAbbreviationFields{%
8251   name={\glsxtrfootnotename},
8252   sort={\the\glsshorttok},
8253   description={\the\glslongtok},%
8254   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
8255   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
8256   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8257   plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%

```

Make this category insert a footnote after the link if this was the first use, and unset the regular attribute if it has been set.

```

8258 \renewcommand*\GlsXtrPostNewAbbreviation{%
8259   \csdef{glsxtrpostlink\glscategorylabel}{%
8260     \glsxtrifwasfirstuse
8261   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

8262     \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8263     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}{}}
8264   }%
8265   {}%
8266 }%
8267 \glshasattribute{\the\glslabeltok}{regular}%
8268 {}%
8269 \glssetattribute{\the\glslabeltok}{regular}{false}%
8270 }%
8271 {}%
8272 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

8273 \renewcommand*{\glsxtrsetupfulldefs}{%
8274   \let\glsxtrifwasfirstuse\@secondoftwo
8275 }%
8276 }%
8277 {}%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8278 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8279 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
8280 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8281 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8282 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

8283 \renewcommand*{\glsxtrfullformat}[2]{%
8284   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8285   \ifglsxtrinsertinside\else##2\fi
8286 }%
8287 \renewcommand*{\glsxtrfullplformat}[2]{%
8288   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8289   \ifglsxtrinsertinside\else##2\fi
8290 }%
8291 \renewcommand*{\Glsxtrfullformat}[2]{%
8292   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8293   \ifglsxtrinsertinside\else##2\fi
8294 }%
8295 \renewcommand*{\Glsxtrfullplformat}[2]{%
8296   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8297   \ifglsxtrinsertinside\else##2\fi
8298 }%

```

The first use full form and the inline full form use the short (long) style.

```

8299 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8300   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8301   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%

```

```

8302     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8303   }%
8304   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8305     \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8306     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8307     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8308   }%
8309   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8310     \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8311     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8312     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8313   }%
8314   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8315     \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8316     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8317     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8318   }%
8319 }

```

#### rt-postfootnote

```
8320 \letabbreviationstyle{short-postfootnote}{postfootnote}
```

#### stfootnote-desc

Like short-postfootnote but with user supplied description.

```
8321 \newabbreviationstyle{short-postfootnote-desc}{%
8322 }%
```

Set accessibility attributes if enabled.

```
8323 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
8324 \renewcommand*{\CustomAbbreviationFields}{%
8325   name={\glsxtrfootnotedescname},%
8326   sort={\glsxtrfootnotedescsort},%
8327   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
8328   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
8329   text={\protect\glsabbrvfont{\the\glsshorttok}},%
8330   plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%
```

Make this category insert a footnote after the link if this was the first use, and unset the regular attribute if it has been set.

```
8331 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8332   \csdef{glsxtrpostlink\glscategorylabel}{%
8333     \glsxtrifwasfirstuse
8334   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
8335   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8336   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}%
```

```

8337      }%
8338      {}%
8339      }%
8340      \glshasattribute{\the\glslabeltok}{regular}%
8341      {}%
8342      \glssetattribute{\the\glslabeltok}{regular}{false}%
8343      }%
8344      {}%
8345      }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

8346  \renewcommand*{\glsxtrsetupfulldefs}{%
8347    \let\glsxtrifwasfirstuse\@secondoftwo
8348  }%
8349 }%
8350 {%
8351  \GlsXtrUseAbbrStyleFmts{postfootnote}%
8352 }

```

#### stfootnote-desc

```
8353 \letabbreviationstyle{postfootnote-desc}{short-postfootnote-desc}
```

#### shortnolongname

```

8354 \newcommand*{\glsxtrshortnolongname}{%
8355  \protect\glsabbrvfont{\the\glsshorttok}%
8356 }

```

**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.

```

8357 \newabbreviationstyle{short}%
8358 {%

```

Set accessibility attributes if enabled.

```
8359 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

8360 \renewcommand*{\CustomAbbreviationFields}{%
8361   name={\glsxtrshortnolongname},
8362   sort={\the\glsshorttok},
8363   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
8364   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
8365   text={\protect\glsabbrvfont{\the\glsshorttok}},
8366   plural={\protect\glsabbrvfont{\the\glsshortpltok}},
8367   description={\the\glslongtok}}%
8368 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8369  \glssetattribute{\the\glslabeltok}{regular}{true}%
8370 }

```

```
8371 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
8372 \renewcommand*\{\abrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8373 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
8374 \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
8375 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8376 \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short form followed by the long form in parentheses.

```
8377 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
8378   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
8379   \ifglsxtrinsertinside##2\fi}%
8380   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8381   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
8382 }%
8383 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
8384   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
8385   \ifglsxtrinsertinside##2\fi}%
8386   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8387   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
8388 }%
8389 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
8390   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
8391   \ifglsxtrinsertinside##2\fi}%
8392   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8393   \glsxtrparen{\glsfirstlongfont{\Glsaccesslong{##1}}}%
8394 }%
8395 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
8396   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
8397   \ifglsxtrinsertinside##2\fi}%
8398   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8399   \glsxtrparen{\glsfirstlongfont{\Glsaccesslongpl{##1}}}%
8400 }%
```

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.

```
8401 \renewcommand*\{\glsxtrfullformat}[2]{%
8402   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8403   \ifglsxtrinsertinside\else##2\fi
8404 }%
8405 \renewcommand*\{\glsxtrfullplformat}[2]{%
8406   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8407   \ifglsxtrinsertinside\else##2\fi
8408 }%
8409 \renewcommand*\{\Glsxtrfullformat}[2]{%
8410   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8411   \ifglsxtrinsertinside\else##2\fi
8412 }%
8413 \renewcommand*\{\Glsxtrfullplformat}[2]{%
8414   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```
8415     \ifglsxtrinsertinside\else##2\fi
8416   }%
8417 }
```

Set this as the default style for acronyms:

```
8418 \setabbreviationstyle[acronym]{short}
```

short-nolong

```
8419 \letabbreviationstyle{short-nolong}{short}
```

short-nolong-noreg Like short-nolong but doesn't set the regular attribute.

```
8420 \newabbreviationstyle{short-nolong-noreg}{%
```

```
8421 {%
8422   \GlsXtrUseAbbrStyleSetup{short-nolong}{%
```

Unset the regular attribute if it has been set.

```
8423   \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
8424     \glshasattribute{\the\glslabeltok}{regular}{%
8425       {%
8426         \glssetattribute{\the\glslabeltok}{regular}{false}{%
8427           {%
8428             {}{%
8429           }{%
8430         }{%
8431       }{%
8432         \GlsXtrUseAbbrStyleFmts{short-nolong}{%
8433       }}
```

trshortdescname

```
8434 \newcommand*\{\glsxtrshortdescname}{%
8435   \protect\glsabbrvfont{\the\glsshorttok}{%
8436   \protect\glsxtrfullsep{\the\glslabeltok}{%
8437   \protect\glsxtrparen{\protect\glslongfont{\the\glslongtok}}{%
8438 }}
```

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.

```
8439 \newabbreviationstyle{short-desc}{%
```

```
8440 {%
```

Set accessibility attributes if enabled.

```
8441 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
8442 \renewcommand*\{\CustomAbbreviationFields}{%
8443   name=\{\glsxtrshortdescname\},%
8444   sort=\{\the\glsshorttok\},%
8445   first=\{\protect\glsfirstabbrvfont{\the\glsshorttok}\},%
8446   firstplural=\{\protect\glsfirstabbrvfont{\the\glsshortpltok}\},%
```

```

8447     text={\protect\glsabbrvfont{\the\glsshorttok}},  

8448     plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%  

8449 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  

8450   \glssetattribute{\the\glslabeltok}{regular}{true}}%  

8451 }%  

8452 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8453 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%  

8454 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%  

8455 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%  

8456 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%  

8457 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

8458 \renewcommand*{\glsxtrinlinefullformat}[2]{%  

8459   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%  

8460   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

8461   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%  

8462 }%  

8463 \renewcommand*{\glsxtrinlinefullplformat}[2]{%  

8464   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%  

8465   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

8466   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%  

8467 }%  

8468 \renewcommand*{\Glsxtrinlinefullformat}[2]{%  

8469   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%  

8470   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

8471   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%  

8472 }%  

8473 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%  

8474   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%  

8475   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

8476   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%  

8477 }%

```

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.

```

8478 \renewcommand*{\glsxtrfullformat}[2]{%  

8479   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

8480   \ifglsxtrinsertinside\else##2\fi  

8481 }%  

8482 \renewcommand*{\glsxtrfullplformat}[2]{%  

8483   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

8484   \ifglsxtrinsertinside\else##2\fi  

8485 }%  

8486 \renewcommand*{\Glsxtrfullformat}[2]{%  

8487   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

8488   \ifglsxtrinsertinside\else##2\fi  

8489 }%  

8490 \renewcommand*{\Glsxtrfullplformat}[2]{%

```

```
8491     \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8492     \ifglsxtrinsertinside\else##2\fi
8493 }%
8494 }
```

#### short-nolong-desc

```
8495 \letabbreviationstyle{short-nolong-desc}{short-desc}
```

#### long-desc-noreg

Like short-nolong-desc but doesn't set the regular attribute.

```
8496 \newabbreviationstyle{short-nolong-desc-noreg}%
8497 {%
8498   \GlsXtrUseAbbrStyleSetup{short-nolong-desc}%
```

Unset the regular attribute if it has been set.

```
8499  \renewcommand*\{\GlsXtrPostNewAbbreviation}%
8500    \glshasattribute{\the\glslabeltok}{regular}%
8501    {%
8502      \glssetattribute{\the\glslabeltok}{regular}{false}%
8503    }%
8504    {}%
8505  }%
8506 }%
8507 {%
8508   \GlsXtrUseAbbrStyleFmts{short-nolong-desc}%
8509 }
```

#### nolong-short

Similar to short-nolong but the full form shows the long form followed by the short form in parentheses.

```
8510 \newabbreviationstyle{nolong-short}%
8511 {%
8512   \GlsXtrUseAbbrStyleSetup{short-nolong}%
8513 }%
8514 {%
8515   \GlsXtrUseAbbrStyleFmts{short-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```
8516  \renewcommand*\{\glsxtrinlinefullformat}[2]{%
8517    \protect\glsfirstlongfont{\glsaccesslong{##1}%
8518      \ifglsxtrinsertinside##2\fi}%
8519    \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8520    \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%%
8521  }%
8522  \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
8523    \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
8524      \ifglsxtrinsertinside##2\fi}%
8525    \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8526    \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%%
8527  }%
8528  \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
8529    \protect\glsfirstlongfont{\glsaccesslong{##1}%

```

```

8530      \ifglsxtrinsertinside##2\fi}%
8531      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8532      \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshort{##1}}}%
8533  }%
8534  \renewcommand*\Glsxtrinlinefullplformat}[2]{%
8535      \protect\glsfirstlongfont{\glsaccesslongpl{##1}}%
8536      \ifglsxtrinsertinside##2\fi}%
8537      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8538      \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshortpl{##1}}}%
8539  }%
8540 }

```

`ong-short-noreg` Like `nolong-short` but doesn't set the regular attribute.

```

8541 \newabbreviationstyle{nolong-short-noreg}%
8542 {%
8543   \GlsXtrUseAbbrStyleSetup{nolong-short}%

```

Unset the regular attribute if it has been set.

```

8544 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8545   \glshasattribute{\the\glslabeltok}{regular}%
8546   {%
8547     \glssetattribute{\the\glslabeltok}{regular}{false}%
8548   }%
8549   {}%
8550 }%
8551 }%
8552 {%
8553   \GlsXtrUseAbbrStyleFmts{nolong-short}%
8554 }

```

`noshortdescname`

```

8555 \newcommand*\glsxtrlongnoshortdescname}{%
8556   \protect\glslongfont{\the\glslongtok}%
8557 }

```

`long-desc` Provide a style that only displays the long form, but the long and short form can be displayed with the "full" commands that use the inline format. The predefined glossary styles won't show the short form. The user must supply a description for this style. The accessibility attributes don't need setting here.

```

8558 \newabbreviationstyle{long-desc}%
8559 {%
8560   \renewcommand*\CustomAbbreviationFields}{%
8561     name={\glsxtrlongnoshortdescname},
8562     sort={\the\glslongtok},
8563     first={\protect\glsfirstlongfont{\the\glslongtok}},
8564     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
8565     text={\glslongfont{\the\glslongtok}},
8566     plural={\glslongfont{\the\glslongpltok}}%
8567 }

```

```

8568 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8569   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8570 }%
8571 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8572 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
8573 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
8574 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
8575 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8576 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8577 \renewcommand*\glsxtrsubsequentfmt[2]{%
8578   \glslongfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8579   \ifglsxtrinsertinside \else##2\fi
8580 }%
8581 \renewcommand*\glsxtrsubsequentplfmt[2]{%
8582   \glslongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8583   \ifglsxtrinsertinside \else##2\fi
8584 }%
8585 \renewcommand*\Glsxtrsubsequentfmt[2]{%
8586   \glslongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8587   \ifglsxtrinsertinside \else##2\fi
8588 }%
8589 \renewcommand*\Glsxtrsubsequentplfmt[2]{%
8590   \glslongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8591   \ifglsxtrinsertinside \else##2\fi
8592 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8593 \renewcommand*\glsxtrinlinefullformat[2]{%
8594   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8595   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8596   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
8597 }%
8598 \renewcommand*\glsxtrinlinefullplformat[2]{%
8599   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8600   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8601   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
8602 }%
8603 \renewcommand*\Glsxtrinlinefullformat[2]{%
8604   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8605   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8606   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
8607 }%
8608 \renewcommand*\Glsxtrinlinefullplformat[2]{%
8609   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8610   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8611   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
8612 }%

```

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.

```
8613 \renewcommand*{\glsxtrfullformat}[2]{%
8614   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8615   \ifglsxtrinsertinside\else##2\fi
8616 }%
8617 \renewcommand*{\glsxtrfullplformat}[2]{%
8618   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8619   \ifglsxtrinsertinside\else##2\fi
8620 }%
8621 \renewcommand*{\Glsxtrfullformat}[2]{%
8622   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8623   \ifglsxtrinsertinside\else##2\fi
8624 }%
8625 \renewcommand*{\Glsxtrfullplformat}[2]{%
8626   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8627   \ifglsxtrinsertinside\else##2\fi
8628 }%
8629 }
```

`ng-noshort-desc` Provide a synonym that matches similar styles.

```
8630 \letabbreviationstyle{long-noshort-desc}{long-desc}
```

`hort-desc-noreg` Like `long-noshort-desc` but doesn't set the regular attribute.

```
8631 \newabbreviationstyle{long-noshort-desc-noreg}%
8632 {%
8633 \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%

```

Unset the regular attribute if it has been set.

```
8634 \renewcommand*{\GlsXtrPostNewAbbreviation}%
8635   \glshasattribute{\the\glslabeltok}{regular}%
8636   {%
8637     \glssetattribute{\the\glslabeltok}{regular}{false}%
8638   }%
8639   {}%
8640 }%
8641 }%
8642 {%
8643 \GlsXtrUseAbbrStyleFmts{long-noshort-desc}%
8644 }
```

`longnoshortname`

```
8645 \newcommand*{\glsxtrlongnoshortname}%
8646   \protect\glsabbrvfont{\the\glsshorttok}%
8647 }
```

`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.

```

8648 \newabbreviationstyle{long}%
8649 {%
    Set accessibility attributes if enabled.
8650   \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
    Setup the default fields.
8651   \renewcommand*{\CustomAbbreviationFields}{%
8652     name={\glsxtrlongnoshortname},
8653     sort={\the\glsshorthtok},
8654     first={\protect\glsfirstlongfont{\the\glslongtok}},
8655     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
8656     text={\glslongfont{\the\glslongtok}},
8657     plural={\glslongfont{\the\glslongpltok}},%
8658     description={\the\glslongtok}%
8659   }%
8660   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8661     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8662 }%
8663 {%
8664   \GlsXtrUseAbbrStyleFmts{long-desc}%
8665 }

```

`long-noshort` Provide a synonym that matches similar styles.

```
8666 \letabbreviationstyle{long-noshort}{long}
```

`g-noshort-noreg` Like `long-noshort` but doesn't set the regular attribute.

```

8667 \newabbreviationstyle{long-noshort-noreg}%
8668 {%
8669   \GlsXtrUseAbbrStyleSetup{long-noshort}%
    Unset the regular attribute if it has been set.
8670   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8671     \glshasattribute{\the\glslabeltok}{regular}}%
8672   {%
8673     \glssetattribute{\the\glslabeltok}{regular}{false}}%
8674   }%
8675   {}%
8676 }%
8677 }%
8678 {%
8679   \GlsXtrUseAbbrStyleFmts{long-noshort}%
8680 }

```

### 1.7.3 Predefined Styles (Small Capitals)

These styles use `\textsc` for the short form.

`\glsxtrscfont` Maintained for backward-compatibility.

```
8681 \newcommand*{\glsxtrscfont}[1]{\textsc{#1}}
```

```

\glsabbrvscfont Added for consistent naming.
8682 \newcommand*\{\glsabbrvscfont\}{\glsxtrscfont}

\sxtrfirstscfont Maintained for backward-compatibility.
8683 \newcommand*\{\glsxtrfirstscfont\}[1]{\glsabbrvscfont{\#1}\}

\irstabbrvscfont Added for consistent naming.
8684 \newcommand*\{\glsfirstabbrvscfont\}{\glsxtrfirstscfont}

and for the default short form suffix:

\glsxtrscsuffix \protect needs to come inside \s to avoid interfering with all caps.
8685 \newcommand*\{\glsxtrscsuffix\}{\protect\glstextup{\glsxtrabbrvpluralsuffix}\}

long-short-sc
8686 \newabbreviationstyle{long-short-sc}%
8687 {%

Set accessibility attributes if enabled.
8688 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel

Setup the default fields.

8689 \renewcommand*\{\CustomAbbreviationFields\}%
8690   name=\{\glsxtrlongshortname\},
8691   sort=\{\the\glsshorttok\},
8692   first=\{\protect\glsfirstlongdefaultfont{\the\glslongtok}\}%
8693   \protect\glsxtrfullsep{\the\glslabeltok}\%
8694   \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}\},%
8695   firstplural=\{\protect\glsfirstlongdefaultfont{\the\glslongpltok}\}%
8696   \protect\glsxtrfullsep{\the\glslabeltok}\%
8697   \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}\},%
8698   text=\{\protect\glsabbrvscfont{\the\glsshorttok}\},%
8699   plural=\{\protect\glsabbrvscfont{\the\glsshortpltok}\},%
8700   description=\{\the\glslongtok\}\%
8701 \renewcommand*\{\GlsXtrPostNewAbbreviation\}%
8702   \glshasattribute{\the\glslabeltok}{regular}%
8703   {%
8704     \glssetattribute{\the\glslabeltok}{regular}{false}%
8705   }%
8706   {}%
8707 }%
8708 }%
8709 {%

Use smallcaps and adjust the plural suffix to revert to upright.
8710 \renewcommand*\{\abbrvpluralsuffix\}{\glsxtrscsuffix}\%
8711 \renewcommand*\{\glsabbrvfont\}[1]{\glsabbrvscfont{\##1}\}%
8712 \renewcommand*\{\glsfirstabbrvfont\}[1]{\glsfirstabbrvscfont{\##1}\}%

```

Use the default long fonts.

```
8713 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8714 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
8715 \renewcommand*{\glsxtrfullformat}[2]{%
8716   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8717   \ifglsxtrinsertinside\else##2\fi
8718   \glsxtrfullsep{##1}%
8719   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8720 }%
8721 \renewcommand*{\glsxtrfullplformat}[2]{%
8722   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8723   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8724   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8725 }%
8726 \renewcommand*{\Glsxtrfullformat}[2]{%
8727   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8728   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8729   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8730 }%
8731 \renewcommand*{\Glsxtrfullplformat}[2]{%
8732   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8733   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8734   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8735 }%
8736 }
```

g-short-sc-desc

```
8737 \newabbreviationstyle{long-short-sc-desc}%
8738 {%
```

Set accessibility attributes if enabled.

```
8739 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
8740 \renewcommand*{\CustomAbbreviationFields}{%
8741   name={\glsxtrlongshortdescname},%
8742   sort={\glsxtrlongshortdescsort},%
8743   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
8744     \protect\glsxtrfullsep{\the\glslabeltok}%
8745     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
8746   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
8747     \protect\glsxtrfullsep{\the\glslabeltok}%
8748     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
8749   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8750   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
8751 }%
```

Unset the regular attribute if it has been set.

```
8752 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
```

```

8753     \glshasattribute{\the\glslabeltok}{regular}%
8754     {%
8755         \glssetattribute{\the\glslabeltok}{regular}{false}%
8756     }%
8757     {}%
8758 }%
8759 }%
8760 {%

```

As long-short-sc style:

```

8761     \GlsXtrUseAbbrStyleFmts{long-short-sc}%
8762 }

```

**short-sc-long** Now the short (long) version

```

8763 \newabbreviationstyle{short-sc-long}%
8764 {%

```

Set accessibility attributes if enabled.

```

8765     \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel

```

Setup the default fields.

```

8766     \renewcommand*\CustomAbbreviationFields{%
8767         name={\glsxtrshortlongname},
8768         sort={\the\glsshorttok},
8769         description={\the\glslongtok},%
8770         first={\protect\glsfirstabbrvscfont{\the\glsshorttok}}%
8771             \protect\glsxtrfullsep{\the\glslabeltok}%
8772             \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8773         firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}}%
8774             \protect\glsxtrfullsep{\the\glslabeltok}%
8775             \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8776         text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8777         plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

8778     \renewcommand*\GlsXtrPostNewAbbreviation{%
8779         \glshasattribute{\the\glslabeltok}{regular}%
8780     {%
8781         \glssetattribute{\the\glslabeltok}{regular}{false}%
8782     }%
8783     {}%
8784 }%
8785 }%
8786 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8787     \renewcommand*\abbrvpluralsuffix{\glsxtrscsuffix}%
8788     \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\##1}}%
8789     \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\##1}}%
8790     \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\##1}}%
8791     \renewcommand*\glslongfont[1]{\glslongdefaultfont{\##1}}%

```

The first use full form and the inline full form are the same for this style.

```
8792 \renewcommand*{\glsxtrfullformat}[2]{%
8793   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8794   \ifglsxtrinsertinside\else##2\fi
8795   \glsxtrfullsep{##1}%
8796   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8797 }%
8798 \renewcommand*{\glsxtrfullplformat}[2]{%
8799   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8800   \ifglsxtrinsertinside\else##2\fi
8801   \glsxtrfullsep{##1}%
8802   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8803 }%
8804 \renewcommand*{\Glsxtrfullformat}[2]{%
8805   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8806   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8807   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8808 }%
8809 \renewcommand*{\Glsxtrfullplformat}[2]{%
8810   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8811   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8812   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8813 }%
8814 }
```

rt-sc-long-desc As before but user provides description

```
8815 \newabbreviationstyle{short-sc-long-desc}%
8816 {%
```

Set accessibility attributes if enabled.

```
8817 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
8818 \renewcommand*{\CustomAbbreviationFields}{%
8819   name={\glsxtrshortlongdescname},
8820   sort={\glsxtrshortlongdescsort},
8821   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
8822   \protect\glsxtrfullsep{\the\glslabeltok}%
8823   \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8824   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
8825   \protect\glsxtrfullsep{\the\glslabeltok}%
8826   \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8827   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8828   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}
8829 }%
```

Unset the regular attribute if it has been set.

```
8830 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8831   \glshasattribute{\the\glslabeltok}{regular}%
8832 {%
```

```

8833      \glssetattribute{\the\glslabeltok}{regular}{false}%
8834  }%
8835  {}%
8836 }%
8837 }%
8838 {%

```

As short-sc-long style:

```

8839  \GlsXtrUseAbbrStyleFmts{short-sc-long}%
8840 }%

```

### short-sc

```

8841 \newabbreviationstyle{short-sc}%
8842 {}%

```

Set accessibility attributes if enabled.

```

8843  \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel

```

Setup the default fields.

```

8844  \renewcommand*{\CustomAbbreviationFields}{%
8845    name={\glsxtrshortnolongname},
8846    sort={\the\glsshorttok},
8847    first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
8848    firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
8849    text={\protect\glsabbrvscfont{\the\glsshorttok}},
8850    plural={\protect\glsabbrvscfont{\the\glsshortpltok}},
8851    description={\the\glslongtok}}%
8852  \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8853    \glssetattribute{\the\glslabeltok}{regular}{true}}%
8854 }%
8855 {}%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8856  \renewcommand*{\abbrvpluralsuffix}{\glsxtrscsuffix}%
8857  \renewcommand*{\glsabbrvfont[1]}{\glsabbrvscfont{\##1}}%
8858  \renewcommand*{\glsfirstabbrvfont[1]}{\glsfirstabbrvscfont{\##1}}%
8859  \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\##1}}%
8860  \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{\##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

8861  \renewcommand*{\glsxtrinlinefullformat}[2]{%
8862    \protect\glsfirstabbrvscfont{\glsaccessshort{\##1}}%
8863    \ifglsxtrinsertinside{\##2\fi}%
8864    \ifglsxtrinsertinside\else{\##2\fi}\glsxtrfullsep{\##1}%
8865    \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}%
8866 }%
8867  \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8868    \protect\glsfirstabbrvscfont{\glsaccessshortpl{\##1}}%
8869    \ifglsxtrinsertinside{\##2\fi}%
8870    \ifglsxtrinsertinside\else{\##2\fi}\glsxtrfullsep{\##1}%
8871    \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{\##1}}}%
8872 }%

```

```

8873 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8874   \protect\glsfirstabbrvscfont{\Glsaccessshort{##1}}%
8875   \ifglsxtrinsertinside##2\fi}%
8876 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8877 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8878 }%
8879 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8880   \protect\glsfirstabbrvscfont{\Glsaccessshortpl{##1}}%
8881   \ifglsxtrinsertinside##2\fi}%
8882 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8883 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8884 }%

```

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.

```

8885 \renewcommand*{\glsxtrfullformat}[2]{%
8886   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8887   \ifglsxtrinsertinside\else##2\fi
8888 }%
8889 \renewcommand*{\glsxtrfullplformat}[2]{%
8890   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8891   \ifglsxtrinsertinside\else##2\fi
8892 }%
8893 \renewcommand*{\Glsxtrfullformat}[2]{%
8894   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8895   \ifglsxtrinsertinside\else##2\fi
8896 }%
8897 \renewcommand*{\Glsxtrfullplformat}[2]{%
8898   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8899   \ifglsxtrinsertinside\else##2\fi
8900 }%
8901 }%

```

`short-sc-nolong`

```
8902 \letabbreviationstyle{short-sc-nolong}{short-sc}
```

`short-sc-desc`

```
8903 \newabbreviationstyle{short-sc-desc}{%
8904 {%
```

Set accessibility attributes if enabled.

```
8905 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
8906 \renewcommand*{\CustomAbbreviationFields}{%
8907   name={\glsxtrshortdescname},
8908   sort={\the\glsshorttok},
8909   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
8910   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
8911   text={\protect\glsabbrvscfont{\the\glsshorttok}},
```

```

8912     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}}%
8913 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8914   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8915 }%
8916 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8917 \renewcommand*{\abbrvpluralsuffix}{\glsxtrscsuffix}%
8918 \renewcommand*{\glsabbrvfont[1]}{\glsabbrvscfont{##1}}%
8919 \renewcommand*{\glsfirstabbrvfont[1]}{\glsfirstabbrvscfont{##1}}%
8920 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8921 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

8922 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8923   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8924   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8925 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8926 }%
8927 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8928   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8929   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8930 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8931 }%
8932 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8933   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8934   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8935 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8936 }%
8937 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8938   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8939   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8940 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8941 }%

```

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.

```

8942 \renewcommand*{\glsxtrfullformat}[2]{%
8943   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8944   \ifglsxtrinsertinside\else##2\fi
8945 }%
8946 \renewcommand*{\glsxtrfullplformat}[2]{%
8947   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8948   \ifglsxtrinsertinside\else##2\fi
8949 }%
8950 \renewcommand*{\Glsxtrfullformat}[2]{%
8951   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8952   \ifglsxtrinsertinside\else##2\fi
8953 }%
8954 \renewcommand*{\Glsxtrfullplformat}[2]{%
8955   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

8956      \ifglsxtrinsertinside\else##2\fi
8957  }%
8958 }

-sc-nolong-desc
8959 \letabbreviationstyle{short-sc-nolong-desc}{short-sc-desc}

```

```

nolong-short-sc
8960 \newabbreviationstyle{nolong-short-sc}%
8961 {%
8962   \GlsXtrUseAbbrStyleSetup{short-sc-nolong}%
8963 }%
8964 {%
8965   \GlsXtrUseAbbrStyleFmts{short-sc-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

8966 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
8967   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
8968     \ifglsxtrinsertinside##2\fi}%
8969   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8970   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8971 }%
8972 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
8973   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
8974     \ifglsxtrinsertinside##2\fi}%
8975   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8976   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8977 }%
8978 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
8979   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
8980     \ifglsxtrinsertinside##2\fi}%
8981   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8982   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8983 }%
8984 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
8985   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
8986     \ifglsxtrinsertinside##2\fi}%
8987   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8988   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8989 }%
8990 }

```

long-noshort-sc The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsxtrshort`. No accessibility attributes needed here.

```

8991 \newabbreviationstyle{long-noshort-sc}%
8992 {%
8993 \renewcommand*\{\CustomAbbreviationFields}{%
8994   name={\glsxtrlongnoshortname},
8995   sort={\the\glsshorttok},

```

```

9996   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},  

9997   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},  

9998   text={\protect\glslongdefaultfont{\the\glslongtok}},  

9999   plural={\protect\glslongdefaultfont{\the\glslongpltok}},%  

9999   description={\the\glslongtok}%
9999 }%
9999 \renewcommand*\GlsXtrPostNewAbbreviation{%
9999   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9999 }%
9999 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9996 \renewcommand*\abbrvpluralsuffix}{\glsxtrscsuffix}%
9997 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9998 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9999 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9999 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9996 \renewcommand*\glsxtrsubsequentfmt}[2]{%
9997   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9998   \ifglsxtrinsertinside \else##2\fi
9999 }%
9999 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
9999   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9999   \ifglsxtrinsertinside \else##2\fi
9999 }%
9999 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
9999   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9999   \ifglsxtrinsertinside \else##2\fi
9999 }%
9999 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
9999   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9999   \ifglsxtrinsertinside \else##2\fi
9999 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9996 \renewcommand*\glsxtrinlinefullformat}[2]{%
9997   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9998   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9999 \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
9999 }%
9999 \renewcommand*\glsxtrinlinefullplformat}[2]{%
9999   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9999   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9999 \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
9999 }%
9999 \renewcommand*\Glsxtrinlinefullformat}[2]{%
9999   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9999   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9999 \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%

```

```

9041 }%
9042 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
9043   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9044   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9045   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
9046 }%

```

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.

```

9047 \renewcommand*\glsxtrfullformat}[2]{%
9048   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9049   \ifglsxtrinsertinside\else##2\fi
9050 }%
9051 \renewcommand*\glsxtrfullplformat}[2]{%
9052   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9053   \ifglsxtrinsertinside\else##2\fi
9054 }%
9055 \renewcommand*\Glsxtrfullformat}[2]{%
9056   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9057   \ifglsxtrinsertinside\else##2\fi
9058 }%
9059 \renewcommand*\Glsxtrfullplformat}[2]{%
9060   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9061   \ifglsxtrinsertinside\else##2\fi
9062 }%
9063 }

```

**long-sc** Backward compatibility:

```
9064 @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.

```

9065 \newabbreviationstyle{long-noshort-sc-desc}%
9066 {%
9067   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
9068 }%
9069 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

9070 \renewcommand*\abrvpluralsuffix}{\glsxtrscsuffix}%
9071 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9072 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9073 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9074 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9075 \renewcommand*\glsxtrsubsequentfmt}[2]{%
9076   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9077   \ifglsxtrinsertinside\else##2\fi
9078 }%

```

```

9079 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9080   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9081   \ifglsxtrinsertinside \else##2\fi
9082 }%
9083 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9084   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9085   \ifglsxtrinsertinside \else##2\fi
9086 }%
9087 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9088   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9089   \ifglsxtrinsertinside \else##2\fi
9090 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9091 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9092   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9093   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9094   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
9095 }%
9096 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9097   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9098   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9099   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
9100 }%
9101 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9102   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9103   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9104   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
9105 }%
9106 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9107   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9108   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9109   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
9110 }%

```

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.

```

9111 \renewcommand*{\glsxtrfullformat}[2]{%
9112   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9113   \ifglsxtrinsertinside\else##2\fi
9114 }%
9115 \renewcommand*{\glsxtrfullplformat}[2]{%
9116   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9117   \ifglsxtrinsertinside\else##2\fi
9118 }%
9119 \renewcommand*{\Glsxtrfullformat}[2]{%
9120   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9121   \ifglsxtrinsertinside\else##2\fi
9122 }%
9123 \renewcommand*{\Glsxtrfullplformat}[2]{%

```

```
9124     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9125     \ifglsxtrinsertinside\else##2\fi
9126 }%
9127 }
```

long-desc-sc Backward compatibility:

```
9128 @glsxtr@deprecated@abbrstyle{long-desc-sc}{long-noshort-sc-desc}
```

short-sc-footnote

```
9129 \newabbreviationstyle{short-sc-footnote}%
9130 {%
```

Set accessibility attributes if enabled.

```
9131 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
9132 \renewcommand*\CustomAbbreviationFields{%
9133   name={\glsxtrfootnotename},
9134   sort={\the\glsshorttok},
9135   description={\the\glslongtok},%
9136   first=\protect\glsfirstabbrvscfont{\the\glsshorttok}%
9137   \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9138   {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9139   firstplural=\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
9140   \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9141   {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9142   text=\protect\glsabbrvscfont{\the\glsshorttok},%
9143   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.

```
9144 \renewcommand*\GlsXtrPostNewAbbreviation{%
9145   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9146   \glshasattribute{\the\glslabeltok}{regular}%
9147 {%
9148   \glssetattribute{\the\glslabeltok}{regular}{false}%
9149 }%
9150 {}%
9151 }%
9152 }%
9153 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
9154 \renewcommand*\abbrvpluralsuffix{\glsxtrscsuffix}%
9155 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9156 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9157 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
9158 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```
9159 \renewcommand*\glsxtrfullformat[2]{%
```

```

9160 \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9161 \ifglsxtrinsertinside\else##2\fi
9162 \protect\glsxtrabbrvfootnote{##1}%
9163 {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9164 }%
9165 \renewcommand*{\glsxtrfullplformat}[2]{%
9166 \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9167 \ifglsxtrinsertinside\else##2\fi
9168 \protect\glsxtrabbrvfootnote{##1}%
9169 {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9170 }%
9171 \renewcommand*{\Glsxtrfullformat}[2]{%
9172 \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9173 \ifglsxtrinsertinside\else##2\fi
9174 \protect\glsxtrabbrvfootnote{##1}%
9175 {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9176 }%
9177 \renewcommand*{\Glsxtrfullplformat}[2]{%
9178 \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9179 \ifglsxtrinsertinside\else##2\fi
9180 \protect\glsxtrabbrvfootnote{##1}%
9181 {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9182 }%

```

The first use full form and the inline full form use the short (long) style.

```

9183 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9184 \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9185 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9186 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9187 }%
9188 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9189 \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9190 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9191 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9192 }%
9193 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9194 \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9195 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9196 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9197 }%
9198 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9199 \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9200 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9201 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9202 }%
9203 }

```

**footnote-sc Backward compatibility:**

```
9204 \@glsxtr@deprecated@abbrstyle{footnote-sc}{short-sc-footnote}
```

```

c-footnote-desc Like short-sc-footnote but with user supplied description.
9205 \newabbreviationstyle{short-sc-footnote-desc}%
9206 {%
  Set accessibility attributes if enabled.
9207 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
  Setup the default fields.
9208 \renewcommand*\CustomAbbreviationFields{%
9209   name={\glsxtrfootnotedescname},
9210   sort={\glsxtrfootnotedescsort},
9211   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}\%
9212     \protect\glsxtrabbrvfootnote{\the\glslabeltok}\%
9213     {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9214   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}\%
9215     \protect\glsxtrabbrvfootnote{\the\glslabeltok}\%
9216     {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9217   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9218   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.

```

9219 \renewcommand*\GlsXtrPostNewAbbreviation{%
9220   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}\%
9221   \glshasattribute{\the\glslabeltok}{regular}\%
9222   {}%
9223   \glssetattribute{\the\glslabeltok}{regular}{false}\%
9224   {}%
9225   {}%
9226 }%
9227 }%
9228 {%
9229 \GlsXtrUseAbbrStyleFmts{short-sc-footnote}\%
9230 }

```

sc-postfootnote

```

9231 \newabbreviationstyle{short-sc-postfootnote}%
9232 {%
  Set accessibility attributes if enabled.
9233 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
  Setup the default fields.
9234 \renewcommand*\CustomAbbreviationFields{%
9235   name={\glsxtrfootnotename},
9236   sort={\the\glsshorttok},
9237   description={\the\glslongtok},%
9238   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
9239   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
9240   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9241   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.

```
9242 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9243   \csdef{glsxtrpostlink\glscategorylabel}{%
9244     \glsxtrifwasfirstuse
9245   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
9246   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9247     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}} }%
9248   }%
9249   {}%
9250 }%
9251 \glshasattribute{\the\glslabeltok}{regular}%
9252 {}%
9253   \glssetattribute{\the\glslabeltok}{regular}{false}%
9254 }%
9255 {}%
9256 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
9257 \renewcommand*\glsxtrsetupfulldefs}{%
9258   \let\glsxtrifwasfirstuse\@secondoftwo
9259 }%
9260 }%
9261 {}
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
9262 \renewcommand*\abbrvpluralsuffix{\glsxtrscsuffix}%
9263 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
9264 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
9265 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
9266 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form. The long form is deferred.

```
9267 \renewcommand*\glsxtrfullformat}[2]{%
9268   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9269   \ifglsxtrinsertinside\else##2\fi
9270 }%
9271 \renewcommand*\glsxtrfullplformat}[2]{%
9272   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9273   \ifglsxtrinsertinside\else##2\fi
9274 }%
9275 \renewcommand*\Glsxtrfullformat}[2]{%
9276   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9277   \ifglsxtrinsertinside\else##2\fi
9278 }%
9279 \renewcommand*\Glsxtrfullplformat}[2]{%
```

```

9280   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9281   \ifglsxtrinsertinside\else##2\fi
9282 }%

```

The first use full form and the inline full form use the short (long) style.

```

9283 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9284   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9285   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9286   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9287 }%
9288 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9289   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9290   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9291   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9292 }%
9293 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9294   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9295   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9296   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9297 }%
9298 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9299   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9300   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9301   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9302 }%
9303 }

```

`postfootnote-sc` Backward compatibility:

```
9304 @glsxtr@deprecated@abbrstyle{postfootnote-sc}{short-sc-postfootnote}
```

`stfootnote-desc` Like `short-sc-footnote` but with user supplied description.

```
9305 \newabbreviationstyle{short-sc-postfootnote-desc}{%
9306 }%
```

Set accessibility attributes if enabled.

```
9307 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```

9308 \renewcommand*{\CustomAbbreviationFields}{%
9309   name={\glsxtrfootnotedescname},
9310   sort={\glsxtrfootnotedescsort},
9311   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
9312   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
9313   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
9314   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.

```

9315 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9316   \csdef{glsxtrpostlink\glscategorylabel}{%
9317     \glsxtrifwasfirstuse

```

```
9318      {%
  Needs the specific font command here as the style may have been lost by the time the foot-
  note occurs.
```

```
9319      \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9320      {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}}}%
9321      }%
9322      {}%
9323      }%
9324      \glshasattribute{\the\glslabeltok}{regular}%
9325      {}%
9326      \glssetattribute{\the\glslabeltok}{regular}{false}%
9327      }%
9328      {}%
9329      }%
```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```
9330  \renewcommand*{\glsxtrsetupfulldefs}{%
9331    \let\glsxtrifwasfirstuse\@secondoftwo
9332  }%
9333 }%
9334 {}%
9335 \GlsXtrUseAbbrStyleFmts{short-sc-postfootnote}%
9336 }
```

#### 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.

```
9337 \newcommand*{\glsxtrsmfont}[1]{\textsmaller{#1}}
```

`\glsabbrvsmfont` Added for consistent naming.

```
9338 \newcommand*{\glsabbrvsmfont}{\glsxtrsmfont}
```

`sxtrfirstsmfont` Maintained for backward compatibility.

```
9339 \newcommand*{\glsxtrfirstsmfont}[1]{\glsabbrvsmfont{#1}}
```

`irstabbrvsmfont` Added for consistent naming.

```
9340 \newcommand*{\glsfirstabbrvsmfont}{\glsxtrfirstsmfont}
```

and for the default short form suffix:

`\glsxtrsmsuffix`

```
9341 \newcommand*{\glsxtrsmsuffix}{\glsxtrabbrvpluralsuffix}
```

```
long-short-sm
```

```
9342 \newabbreviationstyle{long-short-sm}%
9343 {%
  Set accessibility attributes if enabled.
9344 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
  Setup the default fields.
9345 \renewcommand*\CustomAbbreviationFields{%
9346   name={\glsxtrlongshortname},
9347   sort={\the\glsshorttok},
9348   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
9349     \protect\glsxtrfullsep{\the\glslabeltok}%
9350     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
9351   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
9352     \protect\glsxtrfullsep{\the\glslabeltok}%
9353     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
9354   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9355   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},%
9356   description={\the\glslongtok}}%
9357 \renewcommand*\GlsXtrPostNewAbbreviation{%
9358   \glshasattribute{\the\glslabeltok}{regular}%
9359   {%
9360     \glssetattribute{\the\glslabeltok}{regular}{false}%
9361   }%
9362   {}%
9363 }%
9364 }%
9365 {%
9366 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9367 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9368 \renewcommand*\abbrvpluralsuffix{\glsxtrsmsuffix}%
```

Use the default long fonts.

```
9369 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9370 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
9371 \renewcommand*\glsxtrfullformat[2]{%
9372   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9373   \ifglsxtrinsertinside\else##2\fi
9374   \glsxtrfullsep{##1}%
9375   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9376 }%
9377 \renewcommand*\glsxtrfullplformat[2]{%
9378   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9379   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9380   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9381 }%
9382 \renewcommand*\Glsxtrfullformat[2]{%
```

```

9383   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9384   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9385   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9386 }%
9387 \renewcommand*\Glsxtrfullplformat}[2]{%
9388   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9389   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9390   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9391 }%
9392 }

```

#### g-short-sm-desc

```

9393 \newabbreviationstyle{long-short-sm-desc}%
9394 {%

```

Set accessibility attributes if enabled.

```

9395 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

9396 \renewcommand*\CustomAbbreviationFields}{%
9397   name={\glsxtrlongshortdescname},%
9398   sort={\glsxtrlongshortdescsort},%
9399   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
9400     \protect\glsxtrfullsep{\the\glslabeltok}%
9401     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glosshorttok}}},%
9402   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
9403     \protect\glsxtrfullsep{\the\glslabeltok}%
9404     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glosshortpltok}}},%
9405   text={\protect\glsabbrvsmfont{\the\glosshorttok}},%
9406   plural={\protect\glsabbrvsmfont{\the\glosshortpltok}}%
9407 }%

```

Unset the regular attribute if it has been set.

```

9408 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9409   \glshasattribute{\the\glslabeltok}{regular}%
9410   {%
9411     \glssetattribute{\the\glslabeltok}{regular}{false}%
9412   }%
9413   {}%
9414 }%
9415 }%
9416 {%

```

As long-short-sm style:

```

9417 \GlsXtrUseAbbrStyleFmts{long-short-sm}%
9418 }

```

#### short-sm-long Now the short (long) version

```

9419 \newabbreviationstyle{short-sm-long}%
9420 {%

```

Set accessibility attributes if enabled.

```
9421 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
9422 \renewcommand*\CustomAbbreviationFields{%
9423   name={\glsxtrshortlongname},
9424   sort={\the\glsshorttok},
9425   description={\the\glslongtok},%
9426   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}}%
9427   \protect\glsxtrfullsep{\the\glslabeltok}%
9428   \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}},%
9429   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}%
9430   \protect\glsxtrfullsep{\the\glslabeltok}%
9431   \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}},%
9432   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9433   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
9434 \renewcommand*\GlsXtrPostNewAbbreviation{%
9435   \glshasattribute{\the\glslabeltok}{regular}%
9436   {%
9437     \glssetattribute{\the\glslabeltok}{regular}{false}%
9438   }%
9439   {}%
9440 }%
9441 }%
9442 {%
9443 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9444 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9445 \renewcommand*\abbrvpluralsuffix{\glsxtrmsuffix}%
9446 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9447 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
9448 \renewcommand*\glsxtrfullformat}[2]{%
9449   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9450   \ifglsxtrinsertinside\else##2\fi
9451   \glsxtrfullsep{##1}%
9452   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9453 }%
9454 \renewcommand*\glsxtrfullplformat}[2]{%
9455   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9456   \ifglsxtrinsertinside\else##2\fi
9457   \glsxtrfullsep{##1}%
9458   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9459 }%
9460 \renewcommand*\GlsXtrfullformat}[2]{%
9461   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9462   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
}
```

```

9463     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9464   }%
9465   \renewcommand*{\Glsxtrfullplformat}[2]{%
9466     \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9467     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9468     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9469   }%
9470 }

```

**rt-sm-long-desc** As before but user provides description

```

9471 \newabbreviationstyle{short-sm-long-desc}{%
9472 {%

```

Set accessibility attributes if enabled.

```

9473   \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

9474   \renewcommand*{\CustomAbbreviationFields}{%
9475     name={\glsxtrshortlongdescname},
9476     sort={\glsxtrshortlongdescsort},
9477     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
9478       \protect\glsxtrfullsep{\the\glslabeltok}%
9479       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9480     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
9481       \protect\glsxtrfullsep{\the\glslabeltok}%
9482       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9483     text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9484     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}%
9485   }%

```

Unset the regular attribute if it has been set.

```

9486   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9487     \glshasattribute{\the\glslabeltok}{regular}%
9488     {%
9489       \glssetattribute{\the\glslabeltok}{regular}{false}%
9490     }%
9491   {}%
9492 }%
9493 }%
9494 {%

```

As short-sm-long style:

```

9495   \GlsXtrUseAbbrStyleFmts{short-sm-long}%
9496 }

```

**short-sm**

```

9497 \newabbreviationstyle{short-sm}{%
9498 {%

```

Set accessibility attributes if enabled.

```

9499   \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel

```

Setup the default fields.

```
9500 \renewcommand*\CustomAbbreviationFields{%
9501   name={\glsxtrshortnolongname},
9502   sort={\the\glsshorttok},
9503   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
9504   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
9505   text={\protect\glsabbrvsmfont{\the\glsshorttok}},
9506   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
9507   description={\the\glslongtok}}%
9508 \renewcommand*\GlsXtrPostNewAbbreviation{%
9509   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9510 }%
9511 {%
9512 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9513 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9514 \renewcommand*\abbrvpluralsuffix{\glsxtrmsuffix}%
9515 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9516 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short form followed by the long form in parentheses.

```
9517 \renewcommand*\glsxtrinlinefullformat[2]{%
9518   \protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}%
9519   \ifglsxtrinsertinside##2\fi}%
9520   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9521   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9522 }%
9523 \renewcommand*\glsxtrinlinefullplformat[2]{%
9524   \protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}%
9525   \ifglsxtrinsertinside##2\fi}%
9526   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9527   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9528 }%
9529 \renewcommand*\Glsxtrinlinefullformat[2]{%
9530   \protect\glsfirstabbrvsmfont{\Glsaccessshort{##1}}%
9531   \ifglsxtrinsertinside##2\fi}%
9532   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9533   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9534 }%
9535 \renewcommand*\Glsxtrinlinefullplformat[2]{%
9536   \protect\glsfirstabbrvsmfont{\Glsaccessshortpl{##1}}%
9537   \ifglsxtrinsertinside##2\fi}%
9538   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9539   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9540 }%
```

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.

```
9541 \renewcommand*\glsxtrfullformat[2]{%
```

```

9542   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9543   \ifglsxtrinsertinside\else##2\fi
9544 }%
9545 \renewcommand*{\glsxtrfullplformat}[2]{%
9546   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9547   \ifglsxtrinsertinside\else##2\fi
9548 }%
9549 \renewcommand*{\Glsxtrfullformat}[2]{%
9550   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9551   \ifglsxtrinsertinside\else##2\fi
9552 }%
9553 \renewcommand*{\Glsxtrfullplformat}[2]{%
9554   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9555   \ifglsxtrinsertinside\else##2\fi
9556 }%
9557 }

```

#### short-sm-nolong

```
9558 \letabbreviationstyle{short-sm-nolong}{short-sm}
```

#### short-sm-desc

```
9559 \newabbreviationstyle{short-sm-desc}%
9560 {%
```

Set accessibility attributes if enabled.

```
9561 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

9562 \renewcommand*{\CustomAbbreviationFields}{%
9563   name={\glsxtrshortdescname},
9564   sort={\the\glsshorttok},
9565   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
9566   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
9567   text={\protect\glsabbrvsmfont{\the\glsshorttok}},
9568   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%
9569 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9570   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9571 }%
9572 {%
9573 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9574 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9575 \renewcommand*{\abbrvpluralsuffix}{\glsxtrmsuffix}%
9576 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9577 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

9578 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9579   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9580   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%

```

```

9581   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9582 }%
9583 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9584   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9585   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9586   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
```

9587 }%

```

9588 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9589   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9590   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9591   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
```

9592 }%

```

9593 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9594   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9595   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9596   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%
```

9597 }%

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.

```

9598 \renewcommand*{\glsxtrfullformat}[2]{%
9599   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9600   \ifglsxtrinsertinside\else##2\fi
9601 }%
9602 \renewcommand*{\glsxtrfullplformat}[2]{%
9603   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9604   \ifglsxtrinsertinside\else##2\fi
9605 }%
9606 \renewcommand*{\Glsxtrfullformat}[2]{%
9607   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9608   \ifglsxtrinsertinside\else##2\fi
9609 }%
9610 \renewcommand*{\Glsxtrfullplformat}[2]{%
9611   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9612   \ifglsxtrinsertinside\else##2\fi
9613 }%
9614 }
```

#### -sm-nolong-desc

```
9615 \letabbreviationstyle{short-sm-nolong-desc}{short-sm-desc}
```

#### nolong-short-sm

```

9616 \newabbreviationstyle{nolong-short-sm}%
9617 {%
9618   \GlsXtrUseAbbrStyleSetup{short-sm-nolong}%
9619 }%
9620 {%
9621   \GlsXtrUseAbbrStyleFmts{short-sm-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

9622 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9623   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}}%
9624   \ifglsxtrinsertinside##2\fi}%
9625   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9626   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9627 }%
9628 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9629   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}%
9630   \ifglsxtrinsertinside##2\fi}%
9631   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9632   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9633 }%
9634 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9635   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}}%
9636   \ifglsxtrinsertinside##2\fi}%
9637   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9638   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9639 }%
9640 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9641   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
9642   \ifglsxtrinsertinside##2\fi}%
9643   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9644   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9645 }%
9646 }

```

`long-noshort-sm` The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

9647 \newabbreviationstyle{long-noshort-sm}%
9648 {%

```

Set accessibility attributes if enabled.

```

9649 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel

```

Setup the default fields.

```

9650 \renewcommand*{\CustomAbbreviationFields}{%
9651   name={\glsxtrlongnoshortname},
9652   sort={\the\glsshorttok},
9653   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
9654   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
9655   text={\protect\glslongdefaultfont{\the\glslongtok}},
9656   plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
9657   description={\the\glslongtok}%
9658 }%
9659 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9660   \glssetattribute{\the\glslabeltok}{regular}{true}%
9661 }%
9662 {%
9663 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%

```

```

9664 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9665 \renewcommand*\abrvpluralsuffix{\glsxtrmsuffix}%
9666 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9667 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9668 \renewcommand*\glsxtrsubsequentfmt[2]{%
9669   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9670   \ifglsxtrinsertinside \else##2\fi
9671 }%
9672 \renewcommand*\glsxtrsubsequentplfmt[2]{%
9673   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9674   \ifglsxtrinsertinside \else##2\fi
9675 }%
9676 \renewcommand*\Glsxtrsubsequentfmt[2]{%
9677   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9678   \ifglsxtrinsertinside \else##2\fi
9679 }%
9680 \renewcommand*\Glsxtrsubsequentplfmt[2]{%
9681   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9682   \ifglsxtrinsertinside \else##2\fi
9683 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9684 \renewcommand*\glsxtrinlinefullformat[2]{%
9685   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9686   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9687   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9688 }%
9689 \renewcommand*\glsxtrinlinefullplformat[2]{%
9690   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9691   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9692   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9693 }%
9694 \renewcommand*\Glsxtrinlinefullformat[2]{%
9695   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9696   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9697   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9698 }%
9699 \renewcommand*\Glsxtrinlinefullplformat[2]{%
9700   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9701   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9702   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9703 }%

```

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.

```

9704 \renewcommand*\glsxtrfullformat[2]{%
9705   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9706   \ifglsxtrinsertinside\else##2\fi

```

```

9707 }%
9708 \renewcommand*{\glsxtrfullplformat}[2]{%
9709   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9710   \ifglsxtrinsertinside\else##2\fi
9711 }%
9712 \renewcommand*{\Glsxtrfullformat}[2]{%
9713   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9714   \ifglsxtrinsertinside\else##2\fi
9715 }%
9716 \renewcommand*{\Glsxtrfullplformat}[2]{%
9717   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9718   \ifglsxtrinsertinside\else##2\fi
9719 }%
9720 }

```

`long-sm` Backward compatibility:

```
9721 \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`.

```

9722 \newabbreviationstyle{long-noshort-sm-desc}{%
9723 {%
9724   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
9725 }%
9726 {%
9727   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9728   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9729   \renewcommand*{\abbrvpluralsuffix}{\glsxtrmsuffix}%
9730   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9731   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9732 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9733   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9734   \ifglsxtrinsertinside\else##2\fi
9735 }%
9736 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9737   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9738   \ifglsxtrinsertinside\else##2\fi
9739 }%
9740 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9741   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9742   \ifglsxtrinsertinside\else##2\fi
9743 }%
9744 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9745   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9746   \ifglsxtrinsertinside\else##2\fi
9747 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```
9748 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9749   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9750   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9751   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9752 }%
9753 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9754   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9755   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9756   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9757 }%
9758 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9759   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9760   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9761   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9762 }%
9763 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9764   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9765   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9766   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9767 }%
```

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.

```
9768 \renewcommand*{\glsxtrfullformat}[2]{%
9769   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9770   \ifglsxtrinsertinside\else##2\fi
9771 }%
9772 \renewcommand*{\glsxtrfullplformat}[2]{%
9773   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9774   \ifglsxtrinsertinside\else##2\fi
9775 }%
9776 \renewcommand*{\Glsxtrfullformat}[2]{%
9777   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9778   \ifglsxtrinsertinside\else##2\fi
9779 }%
9780 \renewcommand*{\Glsxtrfullplformat}[2]{%
9781   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9782   \ifglsxtrinsertinside\else##2\fi
9783 }%
9784 }
```

long-desc-sm Backward compatibility:

```
9785 @glsxtr@deprecated@abbrstyle{long-desc-sm}{long-noshort-sm-desc}
```

short-sm-footnote

```
9786 \newabbreviationstyle{short-sm-footnote}%
9787 {%
```

Set accessibility attributes if enabled.

```
9788 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
9789 \renewcommand*\CustomAbbreviationFields{%
9790   name={\glsxtrfootnotename},
9791   sort={\the\glsshorttok},
9792   description={\the\glslongtok},%
9793   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
9794     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9795       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9796   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
9797     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9798       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9799   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9800   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.

```
9801 \renewcommand*\GlsXtrPostNewAbbreviation{%
9802   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9803   \glshasattribute{\the\glslabeltok}{regular}%
9804   {%
9805     \glssetattribute{\the\glslabeltok}{regular}{false}%
9806   }%
9807   {}%
9808 }%
9809 }%
9810 {}%

9811 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9812 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9813 \renewcommand*\abbrvpluralsuffix{\glsxtrmssuffix}%
9814 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
9815 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```
9816 \renewcommand*\glsxtrfullformat}[2]{%
9817   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9818   \ifglsxtrinsertinside\else##2\fi
9819   \protect\glsxtrabbrvfootnote{##1}%
9820     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}}%
9821 }%
9822 \renewcommand*\glsxtrfullplformat}[2]{%
9823   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9824   \ifglsxtrinsertinside\else##2\fi
9825   \protect\glsxtrabbrvfootnote{##1}%
9826     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}}%
9827 }%
9828 \renewcommand*\Glsxtrfullformat}[2]{%
```

```

9829   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9830   \ifglsxtrinsertinside\else##2\fi
9831   \protect\glsxtrabbrvfootnote{##1}%
9832     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9833   }%
9834 \renewcommand*\Glsxtrfullplformat[2]{%
9835   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9836   \ifglsxtrinsertinside\else##2\fi
9837   \protect\glsxtrabbrvfootnote{##1}%
9838     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9839 }%

```

The first use full form and the inline full form use the short (long) style.

```

9840 \renewcommand*\glsxtrinlinefullformat[2]{%
9841   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9842   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9843   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9844 }%
9845 \renewcommand*\glsxtrinlinefullplformat[2]{%
9846   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9847   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9848   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9849 }%
9850 \renewcommand*\Glsxtrinlinefullformat[2]{%
9851   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9852   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9853   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9854 }%
9855 \renewcommand*\Glsxtrinlinefullplformat[2]{%
9856   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9857   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9858   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9859 }%
9860 }

```

**footnote-sm** Backward compatibility:

```
9861 \glsxtr@deprecated@abbrstyle{footnote-sm}{short-sm-footnote}
```

**m-footnote-desc** Like short-footnote but with user supplied description.

```
9862 \newabbreviationstyle{short-sm-footnote-desc}%
9863 {%
```

Set accessibility attributes if enabled.

```
9864 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
9865 \renewcommand*\CustomAbbreviationFields{%
9866   name={\glsxtrfootnotedescname},%
9867   sort={\glsxtrfootnotedescsort},%
9868   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}}%
```

```

9869 \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9870   {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9871 firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
9872   \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9873     {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9874 text={\protect\glsabbrvsmfont{\the\glsshortttok}},%
9875 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.

```

9876 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9877   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9878   \glshasattribute{\the\glslabeltok}{regular}%
9879   {%
9880     \glssetattribute{\the\glslabeltok}{regular}{false}%
9881   }%
9882   {}%
9883 }%
9884 }%
9885 {%
9886 \GlsXtrUseAbbrStyleFmts{short-sm-footnote}%
9887 }

```

#### sm-postfootnote

```

9888 \newabbreviationstyle{short-sm-postfootnote}%
9889 {%

```

Set accessibility attributes if enabled.

```
9890 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

9891 \renewcommand*\CustomAbbreviationFields}{%
9892   name={\glsxtrfootnotename},%
9893   sort={\the\glsshorttok},%
9894   description={\the\glslongtok},%
9895   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
9896   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
9897   text={\protect\glsabbrvsmfont{\the\glsshortttok}},%
9898   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.

```

9899 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9900   \csdef{glsxtrpostlink\glscategorylabel}{%
9901     \glsxtrifwasfirstuse
9902   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

9903   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9904     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}%

```

```

9905      }%
9906      {}%
9907      }%
9908      \glshasattribute{\the\glslabeltok}{regular}%
9909      {}%
9910      \glssetattribute{\the\glslabeltok}{regular}{false}%
9911      }%
9912      {}%
9913      }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

9914  \renewcommand*{\glsxtrsetupfulldefs}{%
9915      \let\glsxtrifwasfirstuse\secondoftwo
9916      }%
9917 }%
9918 {%
9919 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9920 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9921 \renewcommand*{\abbrvpluralsuffix}{\glsxtrsnsuffix}%
9922 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
9923 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

9924 \renewcommand*{\glsxtrfullformat}[2]{%
9925     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9926     \ifglsxtrinsertinside\else##2\fi
9927 }%
9928 \renewcommand*{\glsxtrfullplformat}[2]{%
9929     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9930     \ifglsxtrinsertinside\else##2\fi
9931 }%
9932 \renewcommand*{\Glsxtrfullformat}[2]{%
9933     \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9934     \ifglsxtrinsertinside\else##2\fi
9935 }%
9936 \renewcommand*{\Glsxtrfullplformat}[2]{%
9937     \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9938     \ifglsxtrinsertinside\else##2\fi
9939 }%

```

The first use full form and the inline full form use the short (long) style.

```

9940 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9941     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9942     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9943     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9944 }%
9945 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9946     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9947     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%

```

```

9948     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9949   }%
9950   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9951     \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9952     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9953     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9954   }%
9955   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9956     \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9957     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9958     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9959   }%
9960 }

```

postfootnote-sm Backward compatibility:

```
9961 \glsxtr@deprecated@abbrstyle{postfootnote-sm}{short-sm-postfootnote}
```

stfootnote-desc Like short-sm-postfootnote but with user supplied description.

```
9962 \newabbreviationstyle{short-sm-postfootnote-desc}{%
9963 }%
```

Set accessibility attributes if enabled.

```
9964 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
9965 \renewcommand*{\CustomAbbreviationFields}{%
9966   name={\glsxtrfootnotedescname},
9967   sort={\glsxtrfootnotedescsort},
9968   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
9969   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
9970   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
9971   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.

```
9972 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9973   \csdef{glsxtrpostlink\glscategorylabel}{%
9974     \glsxtrifwasfirstuse
9975   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
9976   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9977   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}%
9978 }%
9979 {}%
9980 }%
9981 \glshasattribute{\the\glslabeltok}{regular}%
9982 {}%
9983 \glssetattribute{\the\glslabeltok}{regular}{false}%
```

```

9984      }%
9985      {}%
9986      }%
The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first
use switch off.
9987  \renewcommand*{\glsxtrsetupfulldefs}{%
9988      \let\glsxtrifwasfirstuse\@secondoftwo
9989  }%
9990 }%
9991 {}%
9992 \GlsXtrUseAbbrStyleFmts{short-sm-postfootnote}%
9993 }

```

### 1.7.5 Predefined Styles (Emphasized)

These styles use \emph for the short form.

```
\glsabbrvemfont
9994 \newcommand*{\glsabbrvemfont}[1]{\emph{#1}}%
irstabbrvemfont
9995 \newcommand*{\glsfirstabbrvemfont}[1]{\glsabbrvemfont{#1}}%
```

The default short form suffix:

```
\glsxtremsuffix
9996 \newcommand*{\glsxtremsuffix}{\glsxtrabbrvpluralsuffix}
firstlongemfont Only used by the “long-em” styles.
9997 \newcommand*{\glsfirstlongemfont}[1]{\glslongemfont{#1}}%
\glslongemfont Only used by the “long-em” styles.
9998 \newcommand*{\glslongemfont}[1]{\emph{#1}}%
```

long-short-em The long form is just set in the default long font.

```
9999 \newabbreviationstyle{long-short-em}{%
10000 {}%
Set accessibility attributes if enabled.
10001 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
Setup the default fields.
10002 \renewcommand*{\CustomAbbreviationFields}{%
10003     name={\glsxtrlongshortname},
10004     sort={\the\glsshorttok},
10005     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
10006     \protect\glsxtrfullsep{\the\glslabeltok}%
10007     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
10008     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
```

```

10009      \protect\glsxtrfullsep{\the\glslabeltok}%
10010      \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
10011      text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10012      plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
10013      description={\the\glslongtok}}%
10014  \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10015      \glshasattribute{\the\glslabeltok}{regular}%
10016      {%
10017          \glssetattribute{\the\glslabeltok}{regular}{false}%
10018      }%
10019      {}%
10020  }%
10021 }%
10022 {%
10023  \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10024  \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10025  \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%

```

Use the default long fonts.

```

10026  \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
10027  \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10028  \renewcommand*{\glsxtrfullformat}[2]{%
10029      \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10030      \ifglsxtrinsertinside\else##2\fi
10031      \glsxtrfullsep{##1}%
10032      \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10033  }%
10034  \renewcommand*{\glsxtrfullplformat}[2]{%
10035      \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10036      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10037      \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10038  }%
10039  \renewcommand*{\Glsxtrfullformat}[2]{%
10040      \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10041      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10042      \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10043  }%
10044  \renewcommand*{\Glsxtrfullplformat}[2]{%
10045      \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10046      \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10047      \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10048  }%
10049 }

```

g-short-em-desc

```

10050 \newabbreviationstyle{long-short-em-desc}%
10051 {%

```

Set accessibility attributes if enabled.

```
10052 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
10053 \renewcommand*\CustomAbbreviationFields{%
10054   name={\glsxtrlongshortdescname},
10055   sort={\glsxtrlongshortdescsort},%
10056   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
10057     \protect\glsxtrfullsep{\the\glslabeltok}%
10058     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
10059   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
10060     \protect\glsxtrfullsep{\the\glslabeltok}%
10061     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
10062   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10063   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
10064 }%
```

Unset the regular attribute if it has been set.

```
10065 \renewcommand*\GlsXtrPostNewAbbreviation{%
10066   \glshasattribute{\the\glslabeltok}{regular}%
10067   {%
10068     \glssetattribute{\the\glslabeltok}{regular}{false}%
10069   }%
10070   {}%
10071 }%
10072 }%
10073 {%
```

As long-short-em style:

```
10074 \GlsXtrUseAbbrStyleFmts{long-short-em}%
10075 }
```

long-em-short-em

```
10076 \newabbreviationstyle{long-em-short-em}%
10077 {%
```

Set accessibility attributes if enabled.

```
10078 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields. \glslongemfont is used in the description since \glsdesc doesn't set the style.

```
10079 \renewcommand*\CustomAbbreviationFields{%
10080   name={\glsxtrlongshortname},
10081   sort={\the\glsshorttok},
10082   first={\protect\glsfirstlongemfont{\the\glslongtok}%
10083     \protect\glsxtrfullsep{\the\glslabeltok}%
10084     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
10085   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
10086     \protect\glsxtrfullsep{\the\glslabeltok}%
10087     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
```

```

10088     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10089     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
10090     description={\protect\glslongemfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```

10091 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10092   \glshasattribute{\the\glslabeltok}{regular}%
10093   {%
10094     \glssetattribute{\the\glslabeltok}{regular}{false}%
10095   }%
10096   {}%
10097 }%
10098 }%
10099 {%

```

```

10100 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
10101 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
10102 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10103 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
10104 \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10105 \renewcommand*{\glsxtrfullformat}[2]{%
10106   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10107   \ifglsxtrinsertinside\else##2\fi
10108   \glsxtrfullsep{##1}%
10109   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10110 }%
10111 \renewcommand*{\glsxtrfullplformat}[2]{%
10112   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10113   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10114   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10115 }%
10116 \renewcommand*{\Glsxtrfullformat}[2]{%
10117   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10118   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10119   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10120 }%
10121 \renewcommand*{\Glsxtrfullplformat}[2]{%
10122   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10123   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10124   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10125 }%
10126 }%

```

#### m-short-em-desc

```

10127 \newabbreviationstyle{long-em-short-em-desc}%
10128 {%

```

Set accessibility attributes if enabled.

```

10129 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```
10130 \renewcommand*{\CustomAbbreviationFields}{%
10131   name={\glsxtrlongshortdescname},
10132   sort={\glsxtrlongshortdescsort},%
10133   first={\protect\glsfirstlongemfont{\the\glslongtok}%
10134     \protect\glsxtrfullsep{\the\glslabeltok}%
10135     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
10136   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
10137     \protect\glsxtrfullsep{\the\glslabeltok}%
10138     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
10139   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10140   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
10141 }%
```

Unset the regular attribute if it has been set.

```
10142 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10143   \glshasattribute{\the\glslabeltok}{regular}%
10144   {%
10145     \glssetattribute{\the\glslabeltok}{regular}{false}%
10146   }%
10147   {}%
10148 }%
10149 }%
10150 {%
10151 \GlsXtrUseAbbrStyleFmts{long-em-short-em}%
10152 }
```

short-em-long Now the short (long) version

```
10153 \newabbreviationstyle{short-em-long}%
10154 {%
```

Set accessibility attributes if enabled.

```
10155 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
10156 \renewcommand*{\CustomAbbreviationFields}{%
10157   name={\glsxtrshortlongname},
10158   sort={\the\glsshorttok},
10159   description={\the\glslongtok},%
10160   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10161     \protect\glsxtrfullsep{\the\glslabeltok}%
10162     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
10163   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10164     \protect\glsxtrfullsep{\the\glslabeltok}%
10165     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
10166   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10167   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
10168 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10169   \glshasattribute{\the\glslabeltok}{regular}%
```

```

10170     {%
10171         \glssetattribute{\the\glslabeltok}{regular}{false}%
10172     }%
10173     {}%
10174 }%
10175 }%
10176 {%

```

Mostly as short-long style:

```

10177 \renewcommand*\abrvpluralsuffix}{\glsxtremsuffix}%
10178 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10179 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
10180 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
10181 \renewcommand*\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10182 \renewcommand*\glsxtrfullformat}[2]{%
10183     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10184     \ifglsxtrinsertinside\else##2\fi
10185     \glsxtrfullsep{##1}%
10186     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10187 }%
10188 \renewcommand*\glsxtrfullplformat}[2]{%
10189     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10190     \ifglsxtrinsertinside\else##2\fi
10191     \glsxtrfullsep{##1}%
10192     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10193 }%
10194 \renewcommand*\Glsxtrfullformat}[2]{%
10195     \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10196     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10197     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10198 }%
10199 \renewcommand*\Glsxtrfullplformat}[2]{%
10200     \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10201     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10202     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10203 }%
10204 }

```

`rt-em-long-desc` As before but user provides description

```

10205 \newabbreviationstyle{short-em-long-desc}%
10206 {%

```

Set accessibility attributes if enabled.

```
10207 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

10208 \renewcommand*\CustomAbbreviationFields}{%
10209     name={\glsxtrshortlongdescname},
10210     sort={\glsxtrshortlongdescsort},

```

```

10211   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10212     \protect\glsxtrfullsep{\the\glslabeltok}%
10213     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
10214   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10215     \protect\glsxtrfullsep{\the\glslabeltok}%
10216     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
10217   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10218   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
10219 }%

```

Unset the regular attribute if it has been set.

```

10220 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10221   \glshasattribute{\the\glslabeltok}{regular}%
10222   {%
10223     \glssetattribute{\the\glslabeltok}{regular}{false}%
10224   }%
10225   {}%
10226 }%
10227 }%
10228 {%
10229 \GlsXtrUseAbbrStyleFmts{short-em-long}%
10230 }

```

hort-em-long-em

```

10231 \newabbreviationstyle{short-em-long-em}%
10232 {%

```

Set accessibility attributes if enabled.

```
10233 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields. `\glslongemfont` is used in the description since `\glsdesc` doesn't set the style.

```

10234 \renewcommand*\CustomAbbreviationFields}{%
10235   name={\glsxtrshortlongname},
10236   sort={\the\glsshorttok},
10237   description={\protect\glslongemfont{\the\glslongtok}},%
10238   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10239     \protect\glsxtrfullsep{\the\glslabeltok}%
10240     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
10241   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10242     \protect\glsxtrfullsep{\the\glslabeltok}%
10243     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
10244   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10245   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}}%

```

Unset the regular attribute if it has been set.

```

10246 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10247   \glshasattribute{\the\glslabeltok}{regular}%
10248   {%
10249     \glssetattribute{\the\glslabeltok}{regular}{false}%

```

```

10250      }%
10251      {}%
10252  }%
10253 }%
10254 {%

10255 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
10256 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
10257 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10258 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
10259 \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10260 \renewcommand*{\glsxtrfullformat}[2]{%
10261   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10262   \ifglsxtrinsertinside\else##2\fi
10263   \glsxtrfullsep{##1}%
10264   \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}%
10265 }%
10266 \renewcommand*{\glsxtrfullplformat}[2]{%
10267   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10268   \ifglsxtrinsertinside\else##2\fi
10269   \glsxtrfullsep{##1}%
10270   \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}%
10271 }%
10272 \renewcommand*{\Glsxtrfullformat}[2]{%
10273   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10274   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10275   \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}%
10276 }%
10277 \renewcommand*{\Glsxtrfullplformat}[2]{%
10278   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10279   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10280   \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}%
10281 }%
10282 }

```

#### em-long-em-desc

```

10283 \newabbreviationstyle{short-em-long-em-desc}%
10284 {%

```

Set accessibility attributes if enabled.

```
10285 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

10286 \renewcommand*{\CustomAbbreviationFields}{%
10287   name={\glsxtrshortlongdescname},%
10288   sort={\glsxtrshortlongdescsort},%
10289   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%
10290   \protect\glsxtrfullsep{\the\glslabeltok}%
10291   \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%

```

```

10292     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10293         \protect\glsxtrfullsep{\the\glslabeltok}%
10294         \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
10295     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10296     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
10297 }%

```

Unset the regular attribute if it has been set.

```

10298 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10299     \glshasattribute{\the\glslabeltok}{regular}%
10300     {%
10301         \glssetattribute{\the\glslabeltok}{regular}{false}%
10302     }%
10303     {}%
10304 }%
10305 }%
10306 {%
10307 \GlsXtrUseAbbrStyleFmts{short-em-long-em}%
10308 }%

```

`short-em`

```

10309 \newabbreviationstyle{short-em}%
10310 {%

```

Set accessibility attributes if enabled.

```
10311 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

10312 \renewcommand*\CustomAbbreviationFields}{%
10313     name={\glsxtrshortnolongname},
10314     sort={\the\glsshorttok},
10315     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
10316     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
10317     text={\protect\glsabbrvemfont{\the\glsshorttok}},
10318     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},
10319     description={\the\glslongtok}}%
10320 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10321     \glssetattribute{\the\glslabeltok}{regular}{true}%
10322 }%
10323 {%

```

```

10324 \renewcommand*\abrvpluralsuffix}{\glsxtremsuffix}%
10325 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
10326 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{\##1}}%
10327 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\##1}}%
10328 \renewcommand*\glslongfont[1]{\glslongdefaultfont{\##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

10329 \renewcommand*\glsxtrinlinefullformat[2]{%
10330     \protect\glsfirstabbrvemfont{\glsaccessshort{\##1}}%
10331     \ifglsxtrinsertinside{\##2}\fi}%

```

```

10332 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10333 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10334 }%
10335 \renewcommand*{\glsxtrinlinelinefullplformat}[2]{%
10336   \protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}%
10337   \ifglsxtrinsertinside##2\fi}%
10338 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10339 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10340 }%
10341 \renewcommand*{\Glsxtrinlinelinefullformat}[2]{%
10342   \protect\glsfirstabbrvemfont{\Glsaccessshort{##1}}%
10343   \ifglsxtrinsertinside##2\fi}%
10344 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10345 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
10346 }%
10347 \renewcommand*{\Glsxtrinlinelinefullplformat}[2]{%
10348   \protect\glsfirstabbrvemfont{\Glsaccessshortpl{##1}}%
10349   \ifglsxtrinsertinside##2\fi}%
10350 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10351 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
10352 }%

```

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.

```

10353 \renewcommand*{\glsxtrfullformat}[2]{%
10354   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10355   \ifglsxtrinsertinside\else##2\fi
10356 }%
10357 \renewcommand*{\glsxtrfullplformat}[2]{%
10358   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10359   \ifglsxtrinsertinside\else##2\fi
10360 }%
10361 \renewcommand*{\Glsxtrfullformat}[2]{%
10362   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10363   \ifglsxtrinsertinside\else##2\fi
10364 }%
10365 \renewcommand*{\Glsxtrfullplformat}[2]{%
10366   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10367   \ifglsxtrinsertinside\else##2\fi
10368 }%
10369 }

```

#### short-em-nolong

```
10370 \letabbreviationstyle{short-em-nolong}{short-em}
```

#### short-em-desc

```
10371 \newabbreviationstyle{short-em-desc}%
10372 {%
```

Set accessibility attributes if enabled. The default name includes the long form but \glsxtrshortdescname could be modified to omit the long form, so include the nameshortaccess attribute.

```
10373 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```
10374 \renewcommand*\CustomAbbreviationFields{%
10375   name={\glsxtrshortdescname},
10376   sort={\the\glsshorttok},
10377   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
10378   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
10379   text={\protect\glsabbrvemfont{\the\glsshorttok}},
10380   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
10381 \renewcommand*\GlsXtrPostNewAbbreviation{%
10382   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10383 }%
10384 {%
10385 \renewcommand*\abrvpluralsuffix{\glsxtremsuffix}%
10386 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
10387 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{\##1}}%
10388 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\##1}}%
10389 \renewcommand*\glslongfont[1]{\glslongdefaultfont{\##1}}%
```

The inline full form displays the short format followed by the long form in parentheses.

```
10390 \renewcommand*\glsxtrinlinefullformat[2]{%
10391   \glsfirstabbrvemfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2\fi}}%
10392   \ifglsxtrinsertinside\else{\##2\fi}\glsxtrfullsep{\##1}}%
10393 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}%
10394 }%
10395 \renewcommand*\glsxtrinlinefullplformat[2]{%
10396   \glsfirstabbrvemfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2\fi}}%
10397   \ifglsxtrinsertinside\else{\##2\fi}\glsxtrfullsep{\##1}}%
10398 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}%
10399 }%
10400 \renewcommand*\GlsXtrinlinefullformat[2]{%
10401   \glsfirstabbrvemfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside{\##2\fi}}%
10402   \ifglsxtrinsertinside\else{\##2\fi}\glsxtrfullsep{\##1}}%
10403 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}%
10404 }%
10405 \renewcommand*\GlsXtrinlinefullplformat[2]{%
10406   \glsfirstabbrvemfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside{\##2\fi}}%
10407   \ifglsxtrinsertinside\else{\##2\fi}\glsxtrfullsep{\##1}}%
10408 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}%
10409 }%
```

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.

```
10410 \renewcommand*\glsxtrfullformat[2]{%
10411   \glsfirstabbrvemfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2\fi}}%
10412   \ifglsxtrinsertinside\else{\##2\fi}
```

```

10413 }%
10414 \renewcommand*{\glsxtrfullplformat}[2]{%
10415   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10416   \ifglsxtrinsertinside\else##2\fi
10417 }%
10418 \renewcommand*{\Glsxtrfullformat}[2]{%
10419   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10420   \ifglsxtrinsertinside\else##2\fi
10421 }%
10422 \renewcommand*{\Glsxtrfullplformat}[2]{%
10423   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10424   \ifglsxtrinsertinside\else##2\fi
10425 }%
10426 }

```

#### -em-nolong-desc

```
10427 \letabbreviationstyle{short-em-nolong-desc}{short-em-desc}
```

#### nolong-short-em

```

10428 \newabbreviationstyle{nolong-short-em}%
10429 {%
10430   \GlsXtrUseAbbrStyleSetup{short-em-nolong}%
10431 }%
10432 {%
10433   \GlsXtrUseAbbrStyleFmts{short-em-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

10434 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10435   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}}%
10436   \ifglsxtrinsertinside##2\fi}%
10437 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10438 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10439 }%
10440 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10441   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}%
10442   \ifglsxtrinsertinside##2\fi}%
10443 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10444 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10445 }%
10446 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10447   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}}%
10448   \ifglsxtrinsertinside##2\fi}%
10449 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10450 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10451 }%
10452 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10453   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
10454   \ifglsxtrinsertinside##2\fi}%
10455 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10456 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%

```

```
10457 }%
10458 }
```

long-noshort-em The short form is explicitly invoked through commands like \glsshort.

```
10459 \newabbreviationstyle{long-noshort-em}%
10460 {%
```

Set accessibility attributes if enabled.

```
10461 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
```

Setup the default fields.

```
10462 \renewcommand*\{\CustomAbbreviationFields}{%
10463   name={\glsxtrlongnoshortname},
10464   sort={\the\glsshorttok},
10465   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
10466   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
10467   text={\protect\glslongdefaultfont{\the\glslongtok}},
10468   plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
10469   description={\the\glslongtok}%
10470 }%
10471 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
10472   \glssetattribute{\the\glslabeltok}{regular}{true}%
10473 }%
10474 {%

10475 \renewcommand*\{\abbrvpluralsuffix}{\glsxtremsuffix}%
10476 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10477 \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10478 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
10479 \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
10480 \renewcommand*\{\glsxtrsubsequentfmt}[2]{%
10481   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10482   \ifglsxtrinsertinside \else##2\fi
10483 }%
10484 \renewcommand*\{\glsxtrsubsequentplfmt}[2]{%
10485   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10486   \ifglsxtrinsertinside \else##2\fi
10487 }%
10488 \renewcommand*\{\GlsXtrsubsequentfmt}[2]{%
10489   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10490   \ifglsxtrinsertinside \else##2\fi
10491 }%
10492 \renewcommand*\{\GlsXtrsubsequentplfmt}[2]{%
10493   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10494   \ifglsxtrinsertinside \else##2\fi
10495 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
10496 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
```

```

10497 \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10498 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10499 \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10500 }%
10501 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10502 \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10503 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10504 \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10505 }%
10506 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10507 \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10508 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10509 \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10510 }%
10511 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10512 \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10513 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10514 \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10515 }%

```

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.

```

10516 \renewcommand*{\glsxtrfullformat}[2]{%
10517 \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10518 \ifglsxtrinsertinside\else##2\fi
10519 }%
10520 \renewcommand*{\glsxtrfullplformat}[2]{%
10521 \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10522 \ifglsxtrinsertinside\else##2\fi
10523 }%
10524 \renewcommand*{\Glsxtrfullformat}[2]{%
10525 \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10526 \ifglsxtrinsertinside\else##2\fi
10527 }%
10528 \renewcommand*{\Glsxtrfullplformat}[2]{%
10529 \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10530 \ifglsxtrinsertinside\else##2\fi
10531 }%
10532 }

```

**long-em** Backward compatibility:

```
10533 \glsxtr@deprecated@abbrstyle{long-em}{long-noshort-em}
```

**g-em-noshort-em** The short form is explicitly invoked through commands like `\glsshort`.

```
10534 \newabbreviationstyle{long-em-noshort-em}%
10535 {%
```

Set accessibility attributes if enabled.

```
10536 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
```

Setup the default fields.

```
10537 \renewcommand*\CustomAbbreviationFields}{%
10538   name={\glsxtrlongnoshortname},
10539   sort={\the\glsshorttok},
10540   first={\protect\glsfirstlongemfont{\the\glslongtok}},
10541   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
10542   text={\protect\glslongemfont{\the\glslongtok}},
10543   plural={\protect\glslongemfont{\the\glslongpltok}},%
10544   description={\protect\glslongemfont{\the\glslongtok}}%
10545 }%
10546 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10547   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10548 }%
10549 %

10550 \renewcommand*\abbrvpluralsuffix}{\glsxtremsuffix}%
10551 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10552 \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10553 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
10554 \renewcommand*\glslongfont}[1]{\glslongemfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
10555 \renewcommand*\glsxtrsubsequentfmt}[2]{%
10556   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10557   \ifglsxtrinsertinside \else##2\fi
10558 }%
10559 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
10560   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10561   \ifglsxtrinsertinside \else##2\fi
10562 }%
10563 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
10564   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10565   \ifglsxtrinsertinside \else##2\fi
10566 }%
10567 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
10568   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10569   \ifglsxtrinsertinside \else##2\fi
10570 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
10571 \renewcommand*\glsxtrinlinefullformat}[2]{%
10572   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10573   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
10574   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
10575 }%
10576 \renewcommand*\glsxtrinlinefullplformat}[2]{%
10577   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10578   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
10579   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
10580 }%
```

```

10581 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10582   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10583   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10584   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
10585 }%
10586 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10587   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10588   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10589   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
10590 }%

```

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.

```

10591 \renewcommand*{\glsxtrfullformat}[2]{%
10592   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10593   \ifglsxtrinsertinside\else##2\fi
10594 }%
10595 \renewcommand*{\glsxtrfullplformat}[2]{%
10596   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10597   \ifglsxtrinsertinside\else##2\fi
10598 }%
10599 \renewcommand*{\Glsxtrfullformat}[2]{%
10600   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10601   \ifglsxtrinsertinside\else##2\fi
10602 }%
10603 \renewcommand*{\Glsxtrfullplformat}[2]{%
10604   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10605   \ifglsxtrinsertinside\else##2\fi
10606 }%
10607 }

```

`oshort-em-noreg` Like `long-em-noshort-em` but doesn't set the regular attribute.

```

10608 \newabbreviationstyle{long-em-noshort-em-noreg}{%
10609 }%

```

Set accessibility attributes if enabled.

```
10610 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel
```

Setup the default fields.

```
10611 \GlsXtrUseAbbrStyleSetup{long-em-noshort-em}{}
```

Unset the regular attribute if it has been set.

```

10612 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10613   \glshasattribute{\the\glslabeltok}{regular}%
10614   {%
10615     \glssetattribute{\the\glslabeltok}{regular}{false}%
10616   }%
10617   {}%
10618 }%
10619 }%
10620 }%

```

```

10621 \GlsXtrUseAbbrStyleFmts{long-em-noshort-em}%
10622 }

```

**noshort-em-desc** The emphasized font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

10623 \newabbreviationstyle{long-noshort-em-desc}%
10624 {%
10625 \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
10626 }%
10627 {%
10628 \renewcommand*\{\abrvpluralsuffix\}{\glsxtremsuffix}%
10629 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\#\#1}}%
10630 \renewcommand*\{\glsfirstabbrvfont\}[1]{\glsfirstabbrvemfont{\#\#1}}%
10631 \renewcommand*\{\glsfirstlongfont\}[1]{\glsfirstlongdefaultfont{\#\#1}}%
10632 \renewcommand*\{\glslongfont\}[1]{\glslongdefaultfont{\#\#1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10633 \renewcommand*\{\glsxtrsubsequentfmt\}[2]{%
10634   \glslongdefaultfont{\glsaccesslong{\#\#1}\ifglsxtrinsertinside ##2\fi}%
10635   \ifglsxtrinsertinside \else##2\fi
10636 }%
10637 \renewcommand*\{\glsxtrsubsequentplfmt\}[2]{%
10638   \glslongdefaultfont{\glsaccesslongpl{\#\#1}\ifglsxtrinsertinside ##2\fi}%
10639   \ifglsxtrinsertinside \else##2\fi
10640 }%
10641 \renewcommand*\{\Glsxtrsubsequentfmt\}[2]{%
10642   \glslongdefaultfont{\Glsaccesslong{\#\#1}\ifglsxtrinsertinside ##2\fi}%
10643   \ifglsxtrinsertinside \else##2\fi
10644 }%
10645 \renewcommand*\{\Glsxtrsubsequentplfmt\}[2]{%
10646   \glslongdefaultfont{\Glsaccesslongpl{\#\#1}\ifglsxtrinsertinside ##2\fi}%
10647   \ifglsxtrinsertinside \else##2\fi
10648 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

10649 \renewcommand*\{\glsxtrinlinefullformat\}[2]{%
10650   \glsfirstlongdefaultfont{\glsaccesslong{\#\#1}\ifglsxtrinsertinside##2\fi}%
10651   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#\#1}%
10652   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{\#\#1}}}%
10653 }%
10654 \renewcommand*\{\glsxtrinlinefullplformat\}[2]{%
10655   \glsfirstlongdefaultfont{\glsaccesslongpl{\#\#1}\ifglsxtrinsertinside##2\fi}%
10656   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#\#1}%
10657   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{\#\#1}}}%
10658 }%
10659 \renewcommand*\{\Glsxtrinlinefullformat\}[2]{%
10660   \glsfirstlongdefaultfont{\Glsaccesslong{\#\#1}\ifglsxtrinsertinside##2\fi}%
10661   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#\#1}%
10662   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{\#\#1}}}%

```

```

10663 }%
10664 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10665   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10666   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10667   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
10668 }%

```

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.

```

10669 \renewcommand*{\glsxtrfullformat}[2]{%
10670   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10671   \ifglsxtrinsertinside\else##2\fi
10672 }%
10673 \renewcommand*{\glsxtrfullplformat}[2]{%
10674   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10675   \ifglsxtrinsertinside\else##2\fi
10676 }%
10677 \renewcommand*{\Glsxtrfullformat}[2]{%
10678   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10679   \ifglsxtrinsertinside\else##2\fi
10680 }%
10681 \renewcommand*{\Glsxtrfullplformat}[2]{%
10682   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10683   \ifglsxtrinsertinside\else##2\fi
10684 }%
10685 }

```

**long-desc-em** Backward compatibility:

```
10686 @glsxtr@deprecated@abbrstyle{long-desc-em}{long-noshort-em-desc}
```

**noshort-em-desc** The short form is explicitly invoked through commands like \glsxtrshort. The long form is emphasized. No accessibility attributes need to be set.

```

10687 \newabbreviationstyle{long-em-noshort-em-desc}%
10688 }%
10689 \renewcommand*{\CustomAbbreviationFields}{%
10690   name={\glsxtrlongnoshortdescname},
10691   sort={\the\glslongtok},
10692   first={\protect\glsfirstlongemfont{\the\glslongtok}},
10693   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
10694   text={\glslongemfont{\the\glslongtok}},
10695   plural={\glslongemfont{\the\glslongpltok}}%
10696 }%
10697 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10698   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10699 }%
10700 }%
10701 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
10702 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10703 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%

```

```

10704 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
10705 \renewcommand*\glslongfont}[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10706 \renewcommand*\glsxtrsubsequentfmt}[2]{%
10707   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10708   \ifglsxtrinsertinside \else##2\fi
10709 }%
10710 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
10711   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10712   \ifglsxtrinsertinside \else##2\fi
10713 }%
10714 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
10715   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10716   \ifglsxtrinsertinside \else##2\fi
10717 }%
10718 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
10719   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10720   \ifglsxtrinsertinside \else##2\fi
10721 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

10722 \renewcommand*\glsxtrinlinefullformat}[2]{%
10723   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10724   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
10725   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10726 }%
10727 \renewcommand*\glsxtrinlinefullplformat}[2]{%
10728   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10729   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
10730   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10731 }%
10732 \renewcommand*\Glsxtrinlinefullformat}[2]{%
10733   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10734   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
10735   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10736 }%
10737 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
10738   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10739   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
10740   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10741 }%

```

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.

```

10742 \renewcommand*\glsxtrfullformat}[2]{%
10743   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10744   \ifglsxtrinsertinside\else##2\fi
10745 }%
10746 \renewcommand*\glsxtrfullplformat}[2]{%

```

```

10747     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10748     \ifglsxtrinsertinside\else##2\fi
10749 }%
10750 \renewcommand*\{\Glsxtrfullformat}[2]{%
10751     \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10752     \ifglsxtrinsertinside\else##2\fi
10753 }%
10754 \renewcommand*\{\Glsxtrfullplformat}[2]{%
10755     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10756     \ifglsxtrinsertinside\else##2\fi
10757 }%
10758 }

```

t-em-desc-noreg Like long-em-noshort-em-desc but doesn't set the regular attribute.

```

10759 \newabbreviationstyle{long-em-noshort-em-desc-noreg}{%
10760 {%
10761     \GlsXtrUseAbbrStyleSetup{long-em-noshort-em-desc}%

```

Unset the regular attribute if it has been set.

```

10762 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
10763     \glshasattribute{\the\glslabeltok}{regular}%
10764     {%
10765         \glssetattribute{\the\glslabeltok}{regular}{false}%
10766     }%
10767     {}%
10768 }%
10769 }%
10770 {%
10771     \GlsXtrUseAbbrStyleFmts{long-em-noshort-em-desc}%
10772 }

```

ort-em-footnote

```

10773 \newabbreviationstyle{short-em-footnote}{%
10774 {%

```

Set accessibility attributes if enabled.

```
10775 \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
```

Setup the default fields.

```

10776 \renewcommand*\{\CustomAbbreviationFields}{%
10777     name={\glsxtrfootnotename},
10778     sort={\the\glsshorttok},
10779     description={\the\glslongtok},%
10780     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10781         \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10782             {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
10783     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10784         \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10785             {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
10786     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10787     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%

```

Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute if it has been set.

```

10788 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10789   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
10790   \glshasattribute{\the\glslabeltok}{regular}%
10791   {%
10792     \glssetattribute{\the\glslabeltok}{regular}{false}%
10793   }%
10794   {}%
10795 }%
10796 }%
10797 {%
10798 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
10799 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10800 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10801 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
10802 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

10803 \renewcommand*{\glsxtrfullformat}[2]{%
10804   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10805   \ifglsxtrinsertinside\else##2\fi
10806   \protect\glsxtrabrvfootnote{##1}%
10807   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10808 }%
10809 \renewcommand*{\glsxtrfullplformat}[2]{%
10810   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10811   \ifglsxtrinsertinside\else##2\fi
10812   \protect\glsxtrabrvfootnote{##1}%
10813   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10814 }%
10815 \renewcommand*{\Glsxtrfullformat}[2]{%
10816   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10817   \ifglsxtrinsertinside\else##2\fi
10818   \protect\glsxtrabrvfootnote{##1}%
10819   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10820 }%
10821 \renewcommand*{\Glsxtrfullplformat}[2]{%
10822   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10823   \ifglsxtrinsertinside\else##2\fi
10824   \protect\glsxtrabrvfootnote{##1}%
10825   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10826 }%

```

The first use full form and the inline full form use the short (long) style.

```

10827 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10828   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10829   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10830   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%

```

```

10831 }%
10832 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10833   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10834   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10835   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10836 }%
10837 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10838   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10839   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10840   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10841 }%
10842 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10843   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10844   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10845   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10846 }%
10847 }

```

#### `footnote-em` Backward compatibility:

```
10848 \@glsxtr@deprecated@abbrstyle{footnote-em}{short-em-footnote}
```

#### `m-footnote-desc` Like short-em-footnote but with user supplied description.

```
10849 \newabbreviationstyle{short-em-footnote-desc}%
10850 {%
```

Set accessibility attributes if enabled.

```
10851 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
10852 \renewcommand*{\CustomAbbreviationFields}{%
10853   name={\glsxtrfootnotedescname},%
10854   sort={\glsxtrfootnotedescsort},%
10855   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
10856     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10857     {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
10858   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
10859     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10860     {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
10861   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10862   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
```

Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute if it has been set.

```
10863 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10864   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
10865   \glshasattribute{\the\glslabeltok}{regular}%
10866   {%
10867     \glssetattribute{\the\glslabeltok}{regular}{false}%
10868   }%
10869 }
```

```

10870  }%
10871 }%
10872 {%
10873   \GlsXtrUseAbbrStyleFmts{short-em-footnote}%
10874 }

em-postfootnote
10875 \newabbreviationstyle{short-em-postfootnote}{%
10876 {%
  Set accessibility attributes if enabled.
10877   \glsxtrAccSuppAbbrSetNoLongAttrs\glscategorylabel
  Setup the default fields.
10878   \renewcommand*{\CustomAbbreviationFields}{%
10879     name={\glsxtrfootnotename},
10880     sort={\the\glsshorttok},
10881     description={\the\glslongtok},%
10882     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
10883     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
10884     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10885     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.
10886   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10887     \csdef{glsxtrpostlink\glscategorylabel}{%
10888       \glsxtrifwasfirstuse
10889     }%
  Needs the specific font command here as the style may have been lost by the time the foot-
  note occurs.
10890     \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
10891     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
10892   }%
10893   {}%
10894 }%
10895 \glshasattribute{\the\glslabeltok}{regular}%
10896 {}%
10897   \glssetattribute{\the\glslabeltok}{regular}{false}%
10898 }%
10899 {}%
10900 }%

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first
use switch off.
10901 \renewcommand*{\glsxtrsetupfulldefs}{%
10902   \let\glsxtrifwasfirstuse\@secondoftwo
10903 }%
10904 }%
10905 }%

```

```

10906 \renewcommand*{\abbrvpluralsuffix}{\glsxtremsuffix}%
10907 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
10908 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10909 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
10910 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

10911 \renewcommand*{\glsxtrfullformat}[2]{%
10912   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10913   \ifglsxtrinsertinside\else##2\fi
10914 }%
10915 \renewcommand*{\glsxtrfullplformat}[2]{%
10916   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10917   \ifglsxtrinsertinside\else##2\fi
10918 }%
10919 \renewcommand*{\Glsxtrfullformat}[2]{%
10920   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10921   \ifglsxtrinsertinside\else##2\fi
10922 }%
10923 \renewcommand*{\Glsxtrfullplformat}[2]{%
10924   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10925   \ifglsxtrinsertinside\else##2\fi
10926 }%

```

The first use full form and the inline full form use the short (long) style.

```

10927 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10928   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10929   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10930   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10931 }%
10932 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10933   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10934   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10935   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10936 }%
10937 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10938   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10939   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10940   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10941 }%
10942 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10943   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10944   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10945   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10946 }%
10947 }

```

postfootnote-em Backward compatibility:

```
10948 @glsxtr@deprecated@abbrstyle{postfootnote-em}{short-em-postfootnote}
```

stfootnote-desc Like short-em-postfootnote but with user supplied description.

```
10949 \newabbreviationstyle{short-em-postfootnote-desc}%
10950 {%
```

Set accessibility attributes if enabled.

```
10951 \glsxtrAccSuppAbbrSetNameLongAttrs\glscategorylabel
```

Setup the default fields.

```
10952 \renewcommand*{\CustomAbbreviationFields}{%
10953   name={\glsxtrfootnotedescname},
10954   sort={\glsxtrfootnotedescsort},
10955   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
10956   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
10957   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
10958   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.

```
10959 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10960   \csdef{glsxtrpostlink\glscategorylabel}{%
10961     \glsxtrifwasfirstuse
10962   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
10963   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
10964   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
10965   }%
10966   {}%
10967   }%
10968   \glshasattribute{\the\glslabeltok}{regular}%
10969   {}%
10970   \glssetattribute{\the\glslabeltok}{regular}{false}%
10971   {}%
10972   {}%
10973 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
10974 \renewcommand*{\glsxtrsetupfulldefs}{%
10975   \let\glsxtrifwasfirstuse\@secondoftwo
10976 }%
10977 }%
10978 {}%
10979 \GlsXtrUseAbbrStyleFmts{short-em-postfootnote}%
10980 }
```

## 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.

```
10981 \newcommand*{\glsxtruserfield}[1]{#1}
```

`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.

```
10982 \ifdef{\glscurrentfieldvalue}
10983 {
10984   \newcommand*{\glsxtruserparen}[2]{%
10985     \glsxtrfullsep{#2}%
10986     \glsxtrparen{%
10987       \ifglsishasfield{\glsxtruserfield}{#2}{\glscurrentfieldvalue}{}%
10988     }%
10989   }%
10990 {
10991   \newcommand*{\glsxtruserparen}[2]{%
10992     \glsxtrfullsep{#2}%
10993     \glsxtrparen{%
10994       \ifglsishasfield{\glsxtruserfield}{#2}{\@glo@thisvalue}{}%
10995     }%
10996 }
```

Font used for short form:

`lsabbrvuserfont`

```
10997 \newcommand*{\glsabbrvuserfont}[1]{\glsabbrvdefaultfont{#1}}
```

Font used for short form on first use:

`stabrvuserfont`

```
10998 \newcommand*{\glsfirststabrvuserfont}[1]{\glsabbrvuserfont{#1}}
```

Font used for long form:

`glslonguserfont`

```
10999 \newcommand*{\glslonguserfont}[1]{\glslongdefaultfont{#1}}
```

Font used for long form on first use:

`rstlonguserfont`

```
11000 \newcommand*{\glsfirstlonguserfont}[1]{\glslonguserfont{#1}}
```

The default short form suffix:

`lsxtrusersuffix`

```
11001 \newcommand*{\glsxtrusersuffix}{\glsxtrabbrypluralsuffix}
```

Description encapsulator.

`userdescription` The first argument is the description. The second argument is the label.

```
11002 \newcommand*{\glsuserdescription}[2]{\glslonguserfont{#1}}
```

```

long-short-user
11003 \newabbreviationstyle{long-short-user}%
11004 {%
  Set accessibility attributes if enabled.
11005 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
  Setup the default fields.
11006 \renewcommand*\CustomAbbreviationFields{%
11007   name={\glsxtrlongshortname},
11008   sort={\the\glsshorttok},
11009   first={\protect\glsfirstlonguserfont{\the\glslongtok}%
11010     \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%{\the\glslabeltok}},%
11011   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}%
11012     \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%
11013   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11014   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
11015   description={\protect\glsuserdescription{\the\glslongtok}%
11016     {\the\glslabeltok}}}%
11017   }%
11018 }

  Unset the regular attribute if it has been set.
11019 \renewcommand*\GlsXtrPostNewAbbreviation{%
11020   \glshasattribute{\the\glslabeltok}{regular}%
11021   {%
11022     \glssetattribute{\the\glslabeltok}{regular}{false}%
11023   }%
11024   {}%
11025 }%
11026 }%
11027 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11028 \renewcommand*\abbrvpluralsuffix{\glsxtrusersuffix}%
11029 \renewcommand*\glsabbrvfont[1]{\glsabbrvuserfont{##1}}%
11030 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvuserfont{##1}}%
11031 \renewcommand*\glsfirstlongfont[1]{\glsfirstlonguserfont{##1}}%
11032 \renewcommand*\glslongfont[1]{\glslonguserfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

11033 \renewcommand*\glsxtrfullformat[2]{%
11034   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11035   \ifglsxtrinsertinside\else##2\fi
11036   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}{##1}}%
11037 }%
11038 \renewcommand*\glsxtrfullplformat[2]{%
11039   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11040   \ifglsxtrinsertinside\else##2\fi
11041   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}{##1}}%

```

```

11042 }%
11043 \renewcommand*{\Glsxtrfullformat}[2]{%
11044     \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11045     \ifglsxtrinsertinside\else##2\fi
11046     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11047 }%
11048 \renewcommand*{\Glsxtrfullplformat}[2]{%
11049     \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11050     \ifglsxtrinsertinside\else##2\fi
11051     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11052 }%
11053 }

```

-postshort-user Like long-short-user but defers the parenthetical matter to after the link.

```

11054 \newabbreviationstyle{long-postshort-user}{%
11055 }%
    Set accessibility attributes if enabled.
11056 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
    Setup the default fields.
11057 \renewcommand*{\CustomAbbreviationFields}{%
11058     name={\glsxtrlongshortname},
11059     sort={\the\glsshorttok},
11060     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11061     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11062     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11063     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
11064     description={\protect\glsuserdescription{\the\glslongtok}%
11065     {\the\glslabeltok}}}%
11066 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11067     \csdef{glsxtrpostlink\glscategorylabel}{%
11068         \glsxtrifwasfirstuse
11069         {%
11070             \glsxtruserparen
11071             {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}}%
11072             {\glslabel}%
11073         }%
11074         {}%
11075     }%
11076     \glshasattribute{\the\glslabeltok}{regular}%
11077     {%
11078         \glssetattribute{\the\glslabeltok}{regular}{false}%
11079     }%
11080     {}%
11081 }%
11082 }%
11083 }%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11084 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
11085 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
11086 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
11087 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
11088 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

11089 \renewcommand*{\glsxtrfullformat}[2]{%
11090   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11091   \ifglsxtrinsertinside\else##2\fi
11092 }%
11093 \renewcommand*{\glsxtrfullplformat}[2]{%
11094   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11095   \ifglsxtrinsertinside\else##2\fi
11096 }%
11097 \renewcommand*{\Glsxtrfullformat}[2]{%
11098   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11099   \ifglsxtrinsertinside\else##2\fi
11100 }%
11101 \renewcommand*{\Glsxtrfullplformat}[2]{%
11102   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11103   \ifglsxtrinsertinside\else##2\fi
11104 }%

```

In-line format:

```

11105 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11106   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11107   \ifglsxtrinsertinside\else##2\fi
11108   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11109 }%
11110 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11111   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11112   \ifglsxtrinsertinside\else##2\fi
11113   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11114 }%
11115 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11116   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11117   \ifglsxtrinsertinside\else##2\fi
11118   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
11119 }%
11120 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11121   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11122   \ifglsxtrinsertinside\else##2\fi
11123   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
11124 }%
11125 }

```

ortuserdescname

```

11126 \newcommand*{\glsxtrlongshortuserdescname}{%
11127   \protect\glslonguserfont{\the\glslongtok}%

```

```
11128 \protect\glsxtruserparen
11129 {\protect\glsabbrvuserfont{\the\glsshorttok}{\the\glslabeltok}%
11130 }
```

short-user-desc Like long-postshort-user but the user supplies the description.

```
11131 \newabbreviationstyle{long-postshort-user-desc}%
11132 {%
```

Set accessibility attributes if enabled.

```
11133 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
11134 \renewcommand*\CustomAbbreviationFields{%
11135   name={\glsxtrlongshortuserdescname},
11136   sort={\the\glslongtok},
11137   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11138   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11139   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11140   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
11141 }%
11142 \renewcommand*\GlsXtrPostNewAbbreviation{%
11143   \csdef{glsxtrpostlink\glscategorylabel}{%
11144     \glsxtrifwasfirstuse
11145     {%
11146       \glsxtruserparen
11147         {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}%
11148         {\glslabel}%
11149     }%
11150     {}%
11151   }%
11152   \glshasattribute{\the\glslabeltok}{regular}%
11153   {%
11154     \glssetattribute{\the\glslabeltok}{regular}{false}%
11155   }%
11156   {}%
11157 }%
11158 }%
11159 {%
11160 \GlsXtrUseAbbrStyleFmts{long-postshort-user}%
11161 }
```

t-postlong-user Like short-long-user but defers the parenthetical matter to after the link.

```
11162 \newabbreviationstyle{short-postlong-user}%
11163 {%
```

Set accessibility attributes if enabled.

```
11164 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11165 \renewcommand*\CustomAbbreviationFields{%
```

```

11166     name={\glsxtrshortlongname},
11167     sort={\the\glsshorttok},
11168     first=\protect\glsfirstlonguserfont{\the\glslongtok},%
11169     firstplural=\protect\glsfirstlonguserfont{\the\glslongpltok},%
11170     text=\protect\glsabbrvuserfont{\the\glsshorttok},%
11171     plural=\protect\glsabbrvuserfont{\the\glsshortpltok},%
11172     description=\protect\glsuserdescription{\the\glslongtok}%
11173     {\the\glslabeltok}}}%
11174 \renewcommand*\GlsXtrPostNewAbbreviation{%
11175   \csdef{glsxtrpostlink}{\glscategorylabel}{%
11176     \glsxtrifwasfirstuse
11177     {%
11178       \glsxtruserparen
11179       {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}%
11180       {\glslabel}%
11181     }%
11182     {}%
11183   }%
11184   \glshasattribute{\the\glslabeltok}{regular}%
11185   {%
11186     \glssetattribute{\the\glslabeltok}{regular}{false}%
11187   }%
11188   {}%
11189 }%
11190 }%
11191 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11192 \renewcommand*\abrvpluralsuffix{\glsxtrusersuffix}%
11193 \renewcommand*\glsabbrvfont[1]{\glsabbrvuserfont{##1}}%
11194 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvuserfont{##1}}%
11195 \renewcommand*\glsfirstlongfont[1]{\glsfirstlonguserfont{##1}}%
11196 \renewcommand*\glslongfont[1]{\glslonguserfont{##1}}%

```

First use full form:

```

11197 \renewcommand*\glsxtrfullformat}[2]{%
11198   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11199   \ifglsxtrinsertinside\else##2\fi
11200 }%
11201 \renewcommand*\glsxtrfullplformat}[2]{%
11202   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11203   \ifglsxtrinsertinside\else##2\fi
11204 }%
11205 \renewcommand*\Glsxtrfullformat}[2]{%
11206   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11207   \ifglsxtrinsertinside\else##2\fi
11208 }%
11209 \renewcommand*\Glsxtrfullplformat}[2]{%
11210   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

11211     \ifglsxtrinsertinside\else##2\fi
11212 }%

```

In-line format:

```

11213 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11214   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11215   \ifglsxtrinsertinside\else##2\fi
11216   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11217 }%
11218 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11219   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11220   \ifglsxtrinsertinside\else##2\fi
11221   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11222 }%
11223 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11224   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11225   \ifglsxtrinsertinside\else##2\fi
11226   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11227 }%
11228 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11229   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11230   \ifglsxtrinsertinside\else##2\fi
11231   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11232 }%
11233 }%

```

#### onguserdescname

```

11234 \newcommand*{\glsxtrshortlonguserdescname}{%
11235   \protect\glsabbrvuserfont{\the\glsshorttok}%
11236   \protect\glsxtruserparen
11237   {\protect\glslonguserfont{\the\glslongtok}}%
11238   {\the\glslabeltok}%
11239 }%

```

**tlong-user-desc** Like short-postlong-user but leaves the user to specify the description.

```

11240 \newabbreviationstyle{short-postlong-user-desc}%
11241 {%

```

Set accessibility attributes if enabled.

```

11242 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11243 \renewcommand*{\CustomAbbreviationFields}{%
11244   name={\glsxtrshortlonguserdescname},
11245   sort={\the\glsshorttok},
11246   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
11247   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
11248   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11249   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
11250 }%

```

```

11251 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11252   \csdef{glsxtrpostlink\glscategorylabel}{%
11253     \glsxtrifwasfirstuse
11254     {%
11255       \glsxtruserparen
11256         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}}%
11257         {\glslabel}}%
11258     }%
11259     {}%
11260   }%
11261   \glshasattribute{\the\glslabeltok}{regular}%
11262   {%
11263     \glssetattribute{\the\glslabeltok}{regular}{false}%
11264   }%
11265   {}%
11266 }%
11267 }%
11268 {%
11269   \GlsXtrUseAbbrStyleFmts{short-postlong-user}%
11270 }

```

#### short-user-desc

```

11271 \newabbreviationstyle{long-short-user-desc}%
11272 {%

```

Set accessibility attributes if enabled.

```

11273 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11274 \renewcommand*{\CustomAbbreviationFields}{%
11275   name={\glsxtrlongshortuserdescname},
11276   sort={\glsxtrlongshortdescsort},%
11277   first={\protect\glsfirstlonguserfont{\the\glslongtok}}%
11278     \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
11279     {\the\glslabeltok},%
11280   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}}%
11281     \protect\glsxtruserparen
11282     {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok},%
11283   text={\protect\glsabbrvfont{\the\glsshorttok}},%
11284   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
11285 }%

```

Unset the regular attribute if it has been set.

```

11286 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11287   \glshasattribute{\the\glslabeltok}{regular}%
11288   {%
11289     \glssetattribute{\the\glslabeltok}{regular}{false}%
11290   }%
11291   {}%
11292 }%

```

```

11293 }%
11294 {%
11295   \GlsXtrUseAbbrStyleFmts{long-short-user}%
11296 }

short-long-user
11297 \newabbreviationstyle{short-long-user}%
11298 {%
  Set accessibility attributes if enabled.
11299   \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
  Setup the default fields.

  \glslonguserfont is used in the description since \glsdesc doesn't set the style. (Now in
  \glsuserdescription.)

11300   \renewcommand*{\CustomAbbreviationFields}{%
11301     name={\glsxtrshortlongname},
11302     sort={\the\glsshorttok},
11303     description={\protect\glsuserdescription{\the\glslongtok}%
11304       {\the\glslabeltok}},%
11305     first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
11306       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
11307       {\the\glslabeltok}},%
11308     firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
11309       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
11310       {\the\glslabeltok}},%
11311     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
11312     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}}%
}

  Unset the regular attribute if it has been set.

11313   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11314     \glshasattribute{\the\glslabeltok}{regular}%
11315     {%
11316       \glssetattribute{\the\glslabeltok}{regular}{false}%
11317     }%
11318     {}%
11319   }%
11320 }%
11321 {%

  In case the user wants to mix and match font styles, these are redefined here.

11322   \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
11323   \renewcommand*\glsabbrvfont[1]{\glsabbrvuserfont{\#1}}%
11324   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvuserfont{\#1}}%
11325   \renewcommand*\glsfirstlongfont[1]{\glsfirstlonguserfont{\#1}}%
11326   \renewcommand*\glslongfont[1]{\glslonguserfont{\#1}}%

  The first use full form and the inline full form are the same for this style.

11327   \renewcommand*{\glsxtrfullformat}[2]{%

```

```

11328   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11329   \ifglsxtrinsertinside\else##2\fi
11330   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11331 }%
11332 \renewcommand*\glsxtrfullplformat[2]{%
11333   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11334   \ifglsxtrinsertinside\else##2\fi
11335   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11336 }%
11337 \renewcommand*\Glsxtrfullformat[2]{%
11338   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
11339   \ifglsxtrinsertinside\else##2\fi
11340   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
11341 }%
11342 \renewcommand*\Glsxtrfullplformat[2]{%
11343   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
11344   \ifglsxtrinsertinside\else##2\fi
11345   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
11346 }%
11347 }

```

#### -long-user-desc

```

11348 \newabbreviationstyle{short-long-user-desc}%
11349 {%

```

Set accessibility attributes if enabled.

```

11350 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11351 \renewcommand*\CustomAbbreviationFields{%
11352   name={\glsxtrshortlonguserdescname},
11353   sort={\glsxtrshortlongdescsort},%
11354   first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
11355     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
11356     {\the\glslabeltok}},%
11357   firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
11358     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
11359     {\the\glslabeltok}},%
11360   text={\protect\glsabbrvfont{\the\glsshorttok}},%
11361   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
11362 }%

```

Unset the regular attribute if it has been set.

```

11363 \renewcommand*\GlsXtrPostNewAbbreviation{%
11364   \glshasattribute{\the\glslabeltok}{regular}%
11365   {%
11366     \glssetattribute{\the\glslabeltok}{regular}{false}%
11367   }%
11368   {}%
11369 }%

```

```

11370 }%
11371 {%
11372 \GlsXtrUseAbbrStyleFmts{short-long-user}%
11373 }

```

### 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.

```

11374 \newrobustcmd*{\glsxtrifhyphenstart}[3]{%
11375   \ifx\glsinsert#1\relax
11376     \expandafter@glsxtrifhyphenstart#1\relax\relax
11377     @end@glsxtrifhyphenstart{#2}{#3}%
11378   \else
11379     @glsxtrifhyphenstart#1\relax\relax@end@glsxtrifhyphenstart{#2}{#3}%
11380   \fi
11381 }

```

`trifhyphenstart`

```

11382 \def@\glsxtrifhyphenstart#1#2@end@glsxtrifhyphenstart#3#4{%
11383   \ifx-#1\relax#3\else #4\fi
11384 }

```

`longhyphenshort`

`\glsxtrlonghyphenshort{\label}{\long}{\short}{\insert}`

The `\long` and `\short` arguments may be the plural form. The `\long` argument may also be the first letter uppercase form.

```
11385 \newcommand*{\glsxtrlonghyphenshort}[4]{%
```

Grouping is needed to localise the redefinitions.

```
11386 {%
```

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.

```

11387   \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
11388   \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#4}\fi}%
11389   \ifglsxtrinsertinside\else{#4}\fi
11390   \glsxtrfullsep{#1}%
11391   \glsxtrparen{\glsfirstabbrvhyphenfont{#3\ifglsxtrinsertinside{#4}\fi}%

```

```

11392     \ifglsxtrinsertinside\else{#4}\fi}%
11393 }%
11394 }

abbrvhypenfont
11395 \newcommand*{\glsabbrvhypenfont}{\glsabbrvdefaultfont}%

abbrvhypenfont
11396 \newcommand*{\glsfirstabbrvhypenfont}{\glsabbrvhypenfont}%

slonghypenfont
11397 \newcommand*{\glslonghypenfont}{\glslongdefaultfont}%

tlonghypenfont
11398 \newcommand*{\glsfirstlonghypenfont}{\glslonghypenfont}%

```

The default short form suffix:

```
xtrhyphensuffix
11399 \newcommand*{\glsxtrhyphensuffix}{\glsxtrabbrvpluralsuffix}
```

en-short-hyphen Designed for use with the markwords attribute.

```
11400 \newabbreviationstyle{long-hyphen-short-hyphen}%
11401 {%
```

Set accessibility attributes if enabled.

```
11402 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11403 \renewcommand*{\CustomAbbreviationFields}{%
11404   name={\glsxtrlongshortname},
11405   sort={\the\glsshorttok},
11406   first={\protect\glsfirstlonghypenfont{\the\glslongtok}%
11407   \protect\glsxtrfullsep{\the\glslabeltok}%
11408   \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
11409   firstplural={\protect\glsfirstlonghypenfont{\the\glslongpltok}%
11410   \protect\glsxtrfullsep{\the\glslabeltok}%
11411   \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}}},%
11412   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11413   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
11414   description={\protect\glslonghypenfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
11415 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11416   \glshasattribute{\the\glslabeltok}{regular}%
11417   {%
11418     \glssetattribute{\the\glslabeltok}{regular}{false}%
11419   }%
11420   {}%
11421 }%
```

```

11422 }%
11423 {%
11424   \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
11425   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
11426   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
11427   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
11428   \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

11429   \renewcommand*{\glsxtrfullformat}[2]{%
11430     \glsxtrlonghypenshort{##1}{\glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
11431   }%
11432   \renewcommand*{\glsxtrfullplformat}[2]{%
11433     \glsxtrlonghypenshort{##1}{\glsaccesslongpl{##1}}%
11434     {\glsaccessshortpl{##1}}{##2}%
11435   }%
11436   \renewcommand*{\Glsxtrfullformat}[2]{%
11437     \glsxtrlonghypenshort{##1}{\Glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
11438   }%
11439   \renewcommand*{\Glsxtrfullplformat}[2]{%
11440     \glsxtrlonghypenshort{##1}{\Glsaccesslongpl{##1}}%
11441     {\glsaccessshortpl{##1}}{##2}%
11442   }%
11443 }

```

`ort-hyphen-desc` Like long-hyphen-short-hyphen but the description must be supplied by the user.

```

11444 \newabbreviationstyle{long-hyphen-short-hyphen-desc}%
11445 {%

```

Set accessibility attributes if enabled.

```
11446 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

11447   \renewcommand*{\CustomAbbreviationFields}{%
11448     name={\glsxtrlongshortdescname},%
11449     sort={\glsxtrlongshortdescsort},%
11450     first={\protect\glsfirstlonghypenfont{\the\glslongtok}%
11451       \protect\glsxtrfullsep{\the\glslabeltok}%
11452       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
11453     firstplural={\protect\glsfirstlonghypenfont{\the\glslongpltok}%
11454       \protect\glsxtrfullsep{\the\glslabeltok}%
11455       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}}},%
11456     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11457     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
11458   }%

```

Unset the regular attribute if it has been set.

```

11459   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11460     \glshasattribute{\the\glslabeltok}{regular}%
11461     {%
11462       \glssetattribute{\the\glslabeltok}{regular}{false}%

```

```

11463      }%
11464      {}%
11465      }%
11466 }%
11467 {%
11468   \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%
11469 }

```

nghyphennoshort

```
\glsxtrlonghyphennoshort{\label}{\long}{\insert}
```

```
11470 \newcommand*{\glsxtrlonghyphennoshort}[3]{%
```

Grouping is needed to localise the redefinitions.

```
11471 {%
```

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.

```

11472   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
11473   \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#3}\fi}%
11474   \ifglsxtrinsertinside\else{#3}\fi
11475 }%
11476 }

```

`hort-desc-noreg` This version doesn't show the short form (except explicitly with `\glsxtrshort`). Since `\glsxtrshort` doesn't support the hyphen switch, the short form just uses the default short-form font command. This style won't work with the regular as the regular form isn't flexible enough. No accessibility attributes need to be set.

```

11477 \newabbreviationstyle{long-hyphen-noshort-desc-noreg}{%
11478 {%
11479   \renewcommand*{\CustomAbbreviationFields}{%
11480     name={\glsxtrlongnoshortdescname},
11481     sort={\expandonce\glsxtrorglong},
11482     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
11483     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
11484     text={\protect\glslonghyphenfont{\the\glslongtok}},%
11485     plural={\protect\glslonghyphenfont{\the\glslongpltok}}%
11486   }%

```

Unset the regular attribute if it has been set.

```

11487 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11488   \glshasattribute{\the\glslabeltok}{regular}%
11489   {%
11490     \glssetattribute{\the\glslabeltok}{regular}{false}%
11491   }%
11492   {}%

```

```

11493  }%
11494 }%
11495 {%
11496 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11497 \renewcommand*\abrvpluralsuffix{\glsxtrabbrrvpluralsuffix}%
11498 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
11499 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
11500 \renewcommand*\glsfirstlongfont[1]{\glsfirstlonghyphenfont{##1}}%
11501 \renewcommand*\glslongfont[1]{\glslonghyphenfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

11502 \renewcommand*\glsxtrsubsequentfmt[2]{%
11503   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
11504 }%
11505 \renewcommand*\glsxtrsubsequentplfmt[2]{%
11506   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
11507 }%
11508 \renewcommand*\Glsxtrsubsequentfmt[2]{%
11509   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
11510 }%
11511 \renewcommand*\Glsxtrsubsequentplfmt[2]{%
11512   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
11513 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

11514 \renewcommand*\glsxtrinlinefullformat[2]{%
11515   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
11516   \glsxtrfullsep{##1}%
11517   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
11518 }%
11519 \renewcommand*\glsxtrinlinefullplformat[2]{%
11520   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
11521   \glsxtrfullsep{##1}%
11522   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
11523 }%
11524 \renewcommand*\Glsxtrinlinefullformat[2]{%
11525   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
11526   \glsxtrfullsep{##1}%
11527   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
11528 }%
11529 \renewcommand*\Glsxtrinlinefullplformat[2]{%
11530   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
11531   \glsxtrfullsep{##1}%
11532   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
11533 }%

```

The first use full form only displays the long form.

```

11534 \renewcommand*\glsxtrfullformat[2]{%
11535   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%

```

```

11536 }%
11537 \renewcommand*\glsxtrfullplformat}[2]{%
11538   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
11539 }%
11540 \renewcommand*\Glsxtrfullformat}[2]{%
11541   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
11542 }%
11543 \renewcommand*\Glsxtrfullplformat}[2]{%
11544   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
11545 }%
11546 }

```

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.

```

11547 \newabbreviationstyle{long-hyphen-noshort-noreg}%
11548 {%

```

Set accessibility attributes if enabled.

```

11549 \glsxtrAccSuppAbbrSetNameShortAttrs\glscategorylabel

```

Setup the default fields.

```

11550 \renewcommand*\CustomAbbreviationFields}{%
11551   name={\glsxtrlongnoshortname},
11552   sort={\the\glsshorttok},
11553   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
11554   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
11555   text={\protect\glslonghyphenfont{\the\glslongtok}},%
11556   plural={\protect\glslonghyphenfont{\the\glslongpltok}},%
11557   description={\the\glslongtok}%
11558 }%

```

Unset the regular attribute if it has been set.

```

11559 \renewcommand*\GlsXtrPostNewAbbreviation}{%
11560   \glshasattribute{\the\glslabeltok}{regular}%
11561   {%
11562     \glssetattribute{\the\glslabeltok}{regular}{false}%
11563   }%
11564   {}%
11565 }%
11566 }%
11567 {%
11568 \GlsXtrUseAbbrStyleFmts{long-hyphen-noshort-desc-noreg}%
11569 }

```

glsxtrlonghyphen

```
\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.

```
11570 \newcommand*\glsxtrlonghyphen}[3]{%
```

Grouping is needed to localise the redefinitions.

```
11571 {%
11572   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
11573   \glsfirstlonghyphenfont{#1}%
11574 }%
11575 }
```

posthyphenshort

```
\glsxtrposthyphenshort{<label>}{<insert>}
```

Used in the post-link hook for the long-hyphen-postshort-hyphen style. Much like \glsxtrlonghyphenshort but omits the *<long>* part. This always uses the singular short form.

```
11576 \newcommand*\glsxtrposthyphenshort}[2]{%
11577 {%
11578   \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
11579   \ifglsxtrinsertinside{\glsfirstlonghyphenfont{#2}}\else{#2}\fi
11580   \glsxtrfullsep{#1}%
11581   \glsxtrparen
11582   {\glsfirstabbrvhyphenfont{\glsentryshort{#1}\ifglsxtrinsertinside{#2}\fi}%
11583   \ifglsxtrinsertinside\else{#2}\fi
11584 }%
11585 }%
11586 }
```

yphensubsequent

```
\glsxtrposthyphensubsequent{<label>}{<insert>}
```

Format in the post-link hook for subsequent use. The label is ignored by default.

```
11587 \newcommand*\glsxtrposthyphensubsequent}[2]{%
11588   \glsabbrvfont{\ifglsxtrinsertinside {#2}\fi}%
11589   \ifglsxtrinsertinside \else{#2}\fi
11590 }
```

ostshort-hyphen Like long-hyphen-short-hyphen but shifts the insert and parenthetical material to the post-link hook.

```
11591 \newabbreviationstyle{long-hyphen-postshort-hyphen}%
11592 {%
```

Set accessibility attributes if enabled.

```
11593 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11594 \renewcommand*\CustomAbbreviationFields{%
11595   name={\glsxtrlongshortname},
11596   sort={\the\glsshorttok},
11597   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
11598   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
11599   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11600   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
11601   description={\protect\glslonghyphenfont{\the\glslongtok}}}%
11602 \renewcommand*\GlsXtrPostNewAbbreviation{%
11603   \csdef{glsxtrpostlink\glscategorylabel}{%
11604     \glsxtrifwasfirstuse
11605     {%
11606       \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
11607     }%
11608     {%
11609       \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11610     }%
11611     {%
11612       \glshasattribute{\the\glslabeltok}{regular}%
11613     {%
11614       \glssetattribute{\the\glslabeltok}{regular}{false}%
11615     }%
11616     {%
11617   }%
11618 }%
11619 {%
11620 }
```

Put the insertion into the post-link:

```
11609   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11610   }%
11611   {%
11612   \glshasattribute{\the\glslabeltok}{regular}%
11613   {%
11614     \glssetattribute{\the\glslabeltok}{regular}{false}%
11615   }%
11616   {%
11617 }%
11618 }%
11619 {%
11620 }
```

In case the user wants to mix and match font styles, these are redefined here.

```
11620 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
11621 \renewcommand*\glsabbrvfont[1]{\glsabbrvhypenfont{##1}}%
11622 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvhypenfont{##1}}%
11623 \renewcommand*\glsfirstlongfont[1]{\glsfirstlonghyphenfont{##1}}%
11624 \renewcommand*\glslongfont[1]{\glslonghyphenfont{##1}}%
```

Subsequent use needs to omit the insertion:

```
11625 \renewcommand*\glsxtrsubsequentfmt[2]{%
11626   \glsabbrvfont{\glsaccessshort{##1}}%
11627 }%
11628 \renewcommand*\glsxtrsubsequentplfmt[2]{%
11629   \glsabbrvfont{\glsaccessshortpl{##1}}%
11630 }%
11631 \renewcommand*\Glsxtrsubsequentfmt[2]{%
11632   \glsabbrvfont{\Glsaccessshort{##1}}%
11633 }%
11634 \renewcommand*\Glsxtrsubsequentplfmt[2]{%
```

```
11635     \glsabbrvfont{\Glsaccessshortpl{##1}}%
11636 }
```

First use full form:

```
11637 \renewcommand*{\glsxtrfullformat}[2]{%
11638     \glsxtrlonghyphen{\glsaccesslong{##1}{##1}{##2}}%
11639 }
11640 \renewcommand*{\glsxtrfullplformat}[2]{%
11641     \glsxtrlonghyphen{\glsaccesslongpl{##1}{##1}{##2}}%
11642 }
11643 \renewcommand*{\Glsxtrfullformat}[2]{%
11644     \glsxtrlonghyphen{\Glsaccesslong{##1}{##1}{##2}}%
11645 }
11646 \renewcommand*{\Glsxtrfullplformat}[2]{%
11647     \glsxtrlonghyphen{\Glsaccesslongpl{##1}{##1}{##2}}%
11648 }
```

In-line format.

```
11649 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11650     \glsfirstlonghyphenfont{\glsaccesslong{##1}}%
11651     \ifglsxtrinsertinside{##2}\fi}%
11652     \ifglsxtrinsertinside \else{##2}\fi
11653 }
11654 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11655     \glsfirstlonghyphenfont{\glsaccesslongpl{##1}}%
11656     \ifglsxtrinsertinside{##2}\fi}%
11657     \ifglsxtrinsertinside \else{##2}\fi
11658 }
11659 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11660     \glsfirstlonghyphenfont{\Glsaccesslong{##1}}%
11661     \ifglsxtrinsertinside{##2}\fi}%
11662     \ifglsxtrinsertinside \else{##2}\fi
11663 }
11664 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11665     \glsfirstlonghyphenfont{\Glsaccesslongpl{##1}}%
11666     \ifglsxtrinsertinside{##2}\fi}%
11667     \ifglsxtrinsertinside \else{##2}\fi
11668 }
11669 }
```

ort-hyphen-desc Like long-hyphen-postshort-hyphen but the description must be supplied by the user.

```
11670 \newabbreviationstyle{long-hyphen-postshort-hyphen-desc}%
11671 {%
```

Set accessibility attributes if enabled.

```
11672 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```
11673 \renewcommand*{\CustomAbbreviationFields}{%
11674     name={\glsxtrlongshortdescname},%
11675     sort={\glsxtrlongshortdescsort},%
```

```

11676     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
11677     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
11678     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11679     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}}%
11680 }%
11681 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11682   \csdef{glsxtrpostlink\glscategorylabel}{%
11683     \glsxtrifwasfirstuse
11684   }%
11685   \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
11686 }%
11687 }%

```

Put the insertion into the post-link:

```

11688   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11689 }%
11690 }%
11691 \glshasattribute{\the\glslabeltok}{regular}%
11692 {%
11693   \glssetattribute{\the\glslabeltok}{regular}{false}%
11694 }%
11695 {}%
11696 }%
11697 }%
11698 {%
11699 \GlsXtrUseAbbrStyleFmts{long-hyphen-postshort-hyphen}%
11700 }

```

shorthypenlong

```
\glsxtrshorthypenlong{\langle label \rangle}{\langle short \rangle}{\langle long \rangle}{\langle insert \rangle}
```

The *⟨long⟩* and *⟨short⟩* arguments may be the plural form. The *⟨long⟩* argument may also be the first letter uppercase form.

```
11701 \newcommand*{\glsxtrshorthypenlong}[4]{%
```

Grouping is needed to localise the redefinitions.

```
11702 {%
```

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.)

```

11703   \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
11704   \glsfirstabbrvhypenfont{#2\ifglsxtrinsertinside{#4}\fi}%
11705   \ifglsxtrinsertinside\else{#4}\fi
11706   \glsxtrfullsep{#1}%
11707   \glsxtrparen{\glsfirstlonghyphenfont{#3\ifglsxtrinsertinside{#4}\fi}%
11708   \ifglsxtrinsertinside\else{#4}\fi}%
11709 }%

```

```
11710 }
```

hen-long-hyphen Designed for use with the markwords attribute.

```
11711 \newabbreviationstyle{short-hyphen-long-hyphen}%
11712 {%
```

Set accessibility attributes if enabled.

```
11713 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```
11714 \renewcommand*\CustomAbbreviationFields{%
11715   name={\glsxtrshortlongname},
11716   sort={\the\glsshorttok},
11717   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
11718     \protect\glsxtrfullsep{\the\glslabeltok}%
11719     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
11720   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
11721     \protect\glsxtrfullsep{\the\glslabeltok}%
11722     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
11723   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11724   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
11725   description={\protect\glslonghypenfont{\the\glslongtok}}}
```

Unset the regular attribute if it has been set.

```
11726 \renewcommand*\GlsXtrPostNewAbbreviation{%
11727   \glshasattribute{\the\glslabeltok}{regular}%
11728   {%
11729     \glssetattribute{\the\glslabeltok}{regular}{false}%
11730   }%
11731   {}%
11732 }%
11733 }%
11734 {%
11735 \renewcommand*\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
11736 \renewcommand*\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
11737 \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
11738 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
11739 \renewcommand*\glslongfont}[1]{\glslonghypenfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
11740 \renewcommand*\glsxtrfullformat}[2]{%
11741   \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\glsaccesslong{##1}}{##2}%
11742 }%
11743 \renewcommand*\glsxtrfullplformat}[2]{%
11744   \glsxtrshorthypenlong{##1}%
11745   {\glsaccessshort{##1}}{\glsaccesslong{##1}}{##2}%
11746 }%
11747 \renewcommand*\Glsxtrfullformat}[2]{%
11748   \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\Glsaccesslong{##1}}{##2}%
11749 }%
11750 \renewcommand*\Glsxtrfullplformat}[2]{%
```

```

11751     \glsxtrshorthypenlong{##1}%
11752     {\glsaccessshortpl{##1}}{\Glsaccesslongpl{##1}}{##2}%
11753 }%
11754 }

```

`ong-hyphen-desc` Like short-hyphen-long-hyphen but the description must be supplied by the user.

```

11755 \newabbreviationstyle{short-hyphen-long-hyphen-desc}{%
11756 {%

```

Set accessibility attributes if enabled.

```
11757 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
```

Setup the default fields.

```

11758 \renewcommand*{\CustomAbbreviationFields}{%
11759   name={\glsxtrshortlongdescname},
11760   sort={\glsxtrshortlongdescsort},
11761   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
11762         \protect\glsxtrfullsep{\the\glslabeltok}%
11763         \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
11764   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
11765         \protect\glsxtrfullsep{\the\glslabeltok}%
11766         \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
11767   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11768   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
11769 }%

```

Unset the regular attribute if it has been set.

```

11770 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11771   \glshasattribute{\the\glslabeltok}{regular}%
11772   {%
11773     \glssetattribute{\the\glslabeltok}{regular}{false}%
11774   }%
11775   {}%
11776 }%
11777 }%
11778 {%
11779 \GlsXtrUseAbbrStyleFmts{short-hyphen-long-hyphen}%
11780 }

```

`sxtrshorthypen`

```
\glsxtrshorthypen{<short>}{{<label>}}{<insert>}
```

Used by short-hyphen-postlong-hyphen. The `<insert>` is checked to determine if it starts with a hyphen but isn't used here as it's moved to the post-link hook.

```
11781 \newcommand*{\glsxtrshorthypen}[3]{%
```

Grouping is needed to localise the redefinitions.

```
11782 {%
```

```

11783   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
11784   \glsfirstabbrvhypenfont{#1}%
11785 }%
11786 }

```

rposthyphenlong

```
\glsxtrposthyphenlong{\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.

```

11787 \newcommand*{\glsxtrposthyphenlong}[2]{%
11788 {%
11789   \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
11790   \ifglsxtrinsertinside{\glsfirstabbrvhypenfont{#2}}\else{#2}\fi
11791   \glsxtrfullsep{#1}%
11792   \glsxtrparen
11793   {\glsfirstlonghypenfont{\glsentrylong{#1}\ifglsxtrinsertinside{#2}\fi}%
11794   \ifglsxtrinsertinside\else{#2}\fi
11795 }%
11796 }%
11797 }

```

postlong-hyphen Like short-hyphen-long-hyphen but shifts the insert and parenthetical material to the post-link hook.

```

11798 \newabbreviationstyle{short-hyphen-postlong-hyphen}{%
11799 {%

```

Set accessibility attributes if enabled.

```
11800 \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```

11801 \renewcommand*{\CustomAbbreviationFields}{%
11802   name={\glsxtrshortlongname},
11803   sort={\the\glsshorttok},
11804   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
11805   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
11806   text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11807   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
11808   description={\protect\glslonghypenfont{\the\glslongtok}}}%
11809 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11810   \csdef{\glsxtrpostlink\glscategorylabel}{%
11811     \glsxtrifwasfirstuse
11812   {%
11813     \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
11814   }%
11815   {%

```

Put the insertion into the post-link:

```
11816      \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11817      }%
11818  }%
11819  \glshasattribute{\the\glslabeltok}{regular}%
11820  {%
11821    \glssetattribute{\the\glslabeltok}{regular}{false}%
11822  }%
11823  {}%
11824 }%
11825 }%
11826 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
11827 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
11828 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
11829 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
11830 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
11831 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%
```

Subsequent use needs to omit the insertion:

```
11832 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
11833   \glsabbrvfont{\glsaccessshort{##1}}%
11834 }%
11835 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
11836   \glsabbrvfont{\glsaccessshortpl{##1}}%
11837 }%
11838 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
11839   \glsabbrvfont{\Glsaccessshort{##1}}%
11840 }%
11841 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
11842   \glsabbrvfont{\Glsaccessshortpl{##1}}%
11843 }%
```

First use full form:

```
11844 \renewcommand*{\glsxtrfullformat}[2]{%
11845   \glsxtrshorthypen{\glsaccessshort{##1}{##1}{##2}}%
11846 }%
11847 \renewcommand*{\glsxtrfullplformat}[2]{%
11848   \glsxtrshorthypen{\glsaccessshortpl{##1}{##1}{##2}}%
11849 }%
11850 \renewcommand*{\Glsxtrfullformat}[2]{%
11851   \glsxtrshorthypen{\Glsaccessshort{##1}{##1}{##2}}%
11852 }%
11853 \renewcommand*{\Glsxtrfullplformat}[2]{%
11854   \glsxtrshorthypen{\Glsaccessshortpl{##1}{##1}{##2}}%
11855 }%
```

In-line format. Commands like \glsxtrfull set \glsinsert to empty. The entire link-text (provided by the following commands) is stored in \glscustomtext.

```
11856 \renewcommand*{\glsxtrinlinefullformat}[2]{%
```

```

11857   \glsfirstabbrvhyphenfont{\glsaccessshort{##1}%
11858     \ifglsxtrinsertinside{##2}\fi}%
11859     \ifglsxtrinsertinside \else{##2}\fi
11860   }%
11861 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11862   \glsfirstabbrvhyphenfont{\glsaccessshortpl{##1}%
11863     \ifglsxtrinsertinside{##2}\fi}%
11864     \ifglsxtrinsertinside \else{##2}\fi
11865   }%
11866 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11867   \glsfirstabbrvhyphenfont{\Glsaccessshort{##1}%
11868     \ifglsxtrinsertinside{##2}\fi}%
11869     \ifglsxtrinsertinside \else{##2}\fi
11870   }%
11871 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11872   \glsfirstabbrvhyphenfont{\Glsaccessshortpl{##1}%
11873     \ifglsxtrinsertinside{##2}\fi}%
11874     \ifglsxtrinsertinside \else{##2}\fi
11875   }%
11876 }

```

`ong-hyphen-desc` Like `short-hyphen-postlong-hyphen` but the description must be supplied by the user.

```

11877 \newabbreviationstyle{short-hyphen-postlong-hyphen-desc}{%
11878 }%

```

Set accessibility attributes if enabled.

```

11879 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel

```

Setup the default fields.

```

11880 \renewcommand*{\CustomAbbreviationFields}{%
11881   name={\glsxtrshortlongdescname},
11882   sort={\glsxtrshortlongdescsort},%
11883   first={\protect\glsfirstabbrvhyphenfont{\the\glsshorttok}},%
11884   firstplural={\protect\glsfirstabbrvhyphenfont{\the\glsshortpltok}},%
11885   text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
11886   plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}}%
11887 }%
11888 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11889   \csdef{glsxtrpostlink\glscategorylabel}{%
11890     \glsxtrifwasfirstuse
11891     {%
11892       \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
11893     }%
11894   }%

```

Put the insertion into the post-link:

```

11895   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11896   }%
11897 }%
11898 \glshasattribute{\the\glslabeltok}{regular}%

```

```

11899   {%
11900     \glssetattribute{\the\glslabeltok}{regular}{false}%
11901   }%
11902   {}%
11903 }%
11904 }%
11905 {%
11906   \GlsXtrUseAbbrStyleFmts{short-hyphen-postlong-hyphen}%
11907 }

```

### 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
11908 \newcommand*{\glsabbrvonlyfont}{\glsabbrvdefaultfont}%

stabbrvonlyfont
11909 \newcommand*{\glsfirstabbrvonlyfont}{\glsabbrvonlyfont}%

glslongonlyfont
11910 \newcommand*{\glslongonlyfont}{\glslongdefaultfont}%

rstlongonlyfont
11911 \newcommand*{\glsfirstlongonlyfont}{\glslongonlyfont}%

```

The default short form suffix:

```

lsxtronlysuffix
11912 \newcommand*{\glsxtronlysuffix}{\glsxtrabbrvpluralsuffix}%

\glsxtronlyname The default name format for this style.
11913 \newcommand*{\glsxtronlyname}{%
11914   \protect\glsabbrvonlyfont{\the\glsshorttok}%
11915 }

```

```

only-short-only
11916 \newabbreviationstyle{long-only-short-only}%
11917 {%

```

Set accessibility attributes if enabled.

```
11918   \glsxtrAccSuppAbbrSetFirstLongAttrs\glscategorylabel
```

Setup the default fields.

```

11919   \renewcommand*{\CustomAbbreviationFields}{%
11920     name={\glsxtronlyname},
11921     sort={\the\glsshorttok},
11922     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
11923     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%

```

```

11924     text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
11925     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}},%
11926     description={\protect\glslongonlyfont{\the\glslongtok}}}%
11927     \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11928         \glshasattribute{\the\glslabeltok}{regular}%
11929         {%
11930             \glssetattribute{\the\glslabeltok}{regular}{false}%
11931         }%
11932         {}%
11933     }%
11934 }%
11935 {%
11936     \renewcommand*{\abbrvpluralsuffix}{\glsxtronlysuffix}%
11937     \renewcommand*{\glsabbrvfont}[1]{\glsabbrvonlyfont{##1}}%
11938     \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvonlyfont{##1}}%
11939     \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongonlyfont{##1}}%
11940     \renewcommand*{\glslongfont}[1]{\glslongonlyfont{##1}}%

```

The first use full form doesn't show the short form.

```

11941     \renewcommand*{\glsxtrfullformat}[2]{%
11942         \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11943         \ifglsxtrinsertinside\else##2\fi
11944     }%
11945     \renewcommand*{\glsxtrfullplformat}[2]{%
11946         \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11947         \ifglsxtrinsertinside\else##2\fi
11948     }%
11949     \renewcommand*{\Glsxtrfullformat}[2]{%
11950         \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11951         \ifglsxtrinsertinside\else##2\fi
11952     }%
11953     \renewcommand*{\Glsxtrfullplformat}[2]{%
11954         \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11955         \ifglsxtrinsertinside\else##2\fi
11956     }%

```

The inline full form does show the short form.

```

11957     \renewcommand*{\glsxtrinlinefullformat}[2]{%
11958         \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11959         \ifglsxtrinsertinside\else##2\fi
11960         \glsxtrfullsep{##1}%
11961         \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshort{##1}}}%
11962     }%
11963     \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11964         \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11965         \ifglsxtrinsertinside\else##2\fi
11966         \glsxtrfullsep{##1}%
11967         \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%

```

```

11968 }%
11969 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11970   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11971   \ifglsxtrinsertinside\else##2\fi
11972   \glsxtrfullsep{##1}%
11973   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
11974 }%
11975 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11976   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11977   \ifglsxtrinsertinside\else##2\fi
11978   \glsxtrfullsep{##1}%
11979   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\Glsaccessshortpl{##1}}}%
11980 }%
11981 }

xtronlydescsort
11982 \newcommand*{\glsxtronlydescsort}{\the\glslongtok}

xtronlydescname
11983 \newcommand*{\glsxtronlydescname}{%
11984   \protect\glslongfont{\the\glslongtok}%
11985 }

short-only-desc
11986 \newabbreviationstyle{long-only-short-only-desc}{%
11987 }%
   Set accessibility attributes if enabled.
11988 \glsxtrAccSuppAbbrSetTextShortAttrs\glscategorylabel
   Setup the default fields.
11989 \renewcommand*{\CustomAbbreviationFields}{%
11990   name={\glsxtronlydescname},
11991   sort={\glsxtronlydescsort},%
11992   first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
11993   firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
11994   text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
11995   plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}}%
11996 }%
   Unset the regular attribute if it has been set.
11997 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11998   \glshasattribute{\the\glslabeltok}{regular}%
11999   }%
12000   \glssetattribute{\the\glslabeltok}{regular}{false}%
12001   }%
12002   {}%
12003 }%
12004 }%
12005 }%

```

```

12006 \GlsXtrUseAbbrStyleFmts{long-only-short-only}%
12007 }

```

## 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 `\markright` and `\markboth` 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:

```

12008 \let\@glsxtr@org@markright\markright
      Redefine (grouping not added in case it interferes with the original code):
12009 \renewcommand*{\markright}[1]{%
12010   \glsxtrmarkhook
12011   \@glsxtr@org@markright{\@glsxtrinmark#1@glsxtrnotinmark}%
12012   \glsxtrrestoremarkhook
12013 }

```

`\markboth` Save original definition:

```

12014 \let\@glsxtr@org@markboth\markboth
      Redefine (grouping not added in case it interferes with the original code):
12015 \renewcommand*{\markboth}[2]{%
12016   \glsxtrmarkhook
12017   \@glsxtr@org@markboth
12018   {\@glsxtrinmark#1@glsxtrnotinmark}%
12019   {\@glsxtrinmark#2@glsxtrnotinmark}%

```

```
12020 \glsxtrrestoremarkhook  
12021 }
```

Also do this for \starttoc

\starttoc Save original definition:

```
12022 \let\@glsxtr@org@\starttoc\@starttoc
```

Redefine:

```
12023 \renewcommand*\@starttoc}[1]{%  
12024 \glsxtrmarkhook  
12025 \@glsxtrinmark  
12026 \@glsxtr@org@@starttoc{#1}%  
12027 \@glsxtrnotinmark  
12028 \glsxtrrestoremarkhook  
12029 }
```

If this causes a problem provide a simple way of switching back to the original definitions:

sxtrRevertMarks

```
12030 \newcommand*\glsxtrRevertMarks}{%  
12031 \let\markright\glsxtr@org@markright  
12032 \let\markboth\glsxtr@org@markboth  
12033 \let\@starttoc\glsxtr@org@@starttoc  
12034 }
```

rRevertTocMarks Just restores \starttoc.

```
12035 \newcommand*\glsxtrRevertTocMarks}{%  
12036 \let\@starttoc\glsxtr@org@@starttoc  
12037 }
```

\glsxtrifinmark

```
12038 \newcommand*\glsxtrifinmark}[2]{#2}
```

\@glsxtrinmark

```
12039 \newrobustcmd*\@glsxtrinmark}{%  
12040 \let\glsxtrifinmark\@firstoftwo  
12041 }
```

glsxtrnotinmark

```
12042 \newrobustcmd*\@glsxtrnotinmark}{%  
12043 \let\glsxtrifinmark\@secondoftwo  
12044 }
```

eorpdforheading

```
12045 \ifdef\texorpdfstring  
12046 {  
12047 \newcommand*\glsxtrtitleorpdforheading}[3]{\texorpdfstring{#1}{#2}}  
12048 }
```

```

12049 {
12050   \newcommand*{\glsxtrtitleorpdforheading}[3]{#1}
12051 }

```

\glsxtrmarkhook Hook used in new definition of \markboth and \markright to make some changes to apply to the marks:

```
12052 \newcommand*{\glsxtrmarkhook}{%
```

Save current definitions:

```

12053 \let\@glsxtr@org@MakeUppercase\MakeUppercase
12054 \let\@glsxtr@org@glsxtrtitleorpdforheading\glsxtrtitleorpdforheading
12055 \let\@glsxtr@org@glsxtrtitleshort\glsxtrtitleshort
12056 \let\@glsxtr@org@glsxtrtitleshortpl\glsxtrtitleshortpl
12057 \let\@glsxtr@org@Glsxtrtitleshort\Glsxtrtitleshort
12058 \let\@glsxtr@org@Glsxtrtitleshortpl\Glsxtrtitleshortpl
12059 \let\@glsxtr@org@glsxtrtitlename\glsxtrtitlename
12060 \let\@glsxtr@org@Glsxtrtitlename\Glsxtrtitlename
12061 \let\@glsxtr@org@glsxtrtitletext\glsxtrtitletext
12062 \let\@glsxtr@org@Glsxtrtitletext\Glsxtrtitletext
12063 \let\@glsxtr@org@glsxtrtitleplural\glsxtrtitleplural
12064 \let\@glsxtr@org@Glsxtrtitleplural\Glsxtrtitleplural
12065 \let\@glsxtr@org@glsxtrtitlefirst\glsxtrtitlefirst
12066 \let\@glsxtr@org@Glsxtrtitlefirst\Glsxtrtitlefirst
12067 \let\@glsxtr@org@glsxtrtitlefirstplural\glsxtrtitlefirstplural
12068 \let\@glsxtr@org@Glsxtrtitlefirstplural\Glsxtrtitlefirstplural
12069 \let\@glsxtr@org@glsxtrtitlelong\glsxtrtitlelong
12070 \let\@glsxtr@org@glsxtrtitlelongpl\glsxtrtitlelongpl
12071 \let\@glsxtr@org@Glsxtrtitlelong\Glsxtrtitlelong
12072 \let\@glsxtr@org@Glsxtrtitlelongpl\Glsxtrtitlelongpl
12073 \let\@glsxtr@org@glsxtrtitlefull\glsxtrtitlefull
12074 \let\@glsxtr@org@glsxtrtitlefullpl\glsxtrtitlefullpl
12075 \let\@glsxtr@org@Glsxtrtitlefull\Glsxtrtitlefull
12076 \let\@glsxtr@org@Glsxtrtitlefullpl\Glsxtrtitlefullpl

```

New definitions

```

12077 \let\glsxtrifinmark@\firstoftwo
12078 \let\MakeUppercase\MakeTextUppercase
12079 \let\glsxtrtitleorpdforheading@\thirdofthree
12080 \let\glsxtrtitleshort\glsxtrheadshort
12081 \let\glsxtrtitleshortpl\glsxtrheadshortpl
12082 \let\Glsxtrtitleshort\Glsxtrheadshort
12083 \let\Glsxtrtitleshortpl\Glsxtrheadshortpl
12084 \let\glsxtrtitlename\glsxtrheadname
12085 \let\Glsxtrtitlename\Glsxtrheadname
12086 \let\glsxtrtitletext\glsxtrheadtext
12087 \let\Glsxtrtitletext\Glsxtrheadtext
12088 \let\glsxtrtitleplural\glsxtrheadplural
12089 \let\Glsxtrtitleplural\Glsxtrheadplural
12090 \let\glsxtrtitlefirst\glsxtrheadfirst
12091 \let\Glsxtrtitlefirst\Glsxtrheadfirst

```

```

12092 \let\glsxtrtitlefirstplural\glsxtrheadfirstplural
12093 \let\Glsxtrtitlefirstplural\Glsxtrheadfirstplural
12094 \let\glsxtrtitlelong\glsxtrheadlong
12095 \let\glsxtrtitlelongpl\glsxtrheadlongpl
12096 \let\Glsxtrtitlelong\Glsxtrheadlong
12097 \let\Glsxtrtitlelongpl\Glsxtrheadlongpl
12098 \let\glsxtrtitlefull\glsxtrheadfull
12099 \let\glsxtrtitlefullpl\glsxtrheadfullpl
12100 \let\Glsxtrtitlefull\Glsxtrheadfull
12101 \let\Glsxtrtitlefullpl\Glsxtrheadfullpl
12102 }

```

`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.)

```

12103 \newcommand*\glsxtrrestoremarkhook}{%
12104 \let\glsxtrifinmark\@secondoftwo
12105 \let\MakeUppercase\@glsxtr@org@MakeUppercase
12106 \let\glsxtrtitleorpdforheading\@glsxtr@org@glsxtrtitleorpdforheading
12107 \let\glsxtrtitleshort\@glsxtr@org@glsxtrtitleshort
12108 \let\glsxtrtitleshortpl\@glsxtr@org@glsxtrtitleshortpl
12109 \let\Glsxtrtitleshort\@glsxtr@org@Glsxtrtitleshort
12110 \let\Glsxtrtitleshortpl\@glsxtr@org@Glsxtrtitleshortpl
12111 \let\glsxtrtitlename\@glsxtr@org@glsxtrtitlename
12112 \let\Glsxtrtitlename\@glsxtr@org@glsxtrtitlename
12113 \let\glsxtrtitletext\@glsxtr@org@glsxtrtitletext
12114 \let\Glsxtrtitletext\@glsxtr@org@Glsxtrtitletext
12115 \let\glsxtrtitleplural\@glsxtr@org@glsxtrtitleplural
12116 \let\Glsxtrtitleplural\@glsxtr@org@Glsxtrtitleplural
12117 \let\glsxtrtitlefirst\@glsxtr@org@glsxtrtitlefirst
12118 \let\Glsxtrtitlefirst\@glsxtr@org@Glsxtrtitlefirst
12119 \let\glsxtrtitlefirstplural\@glsxtr@org@glsxtrtitlefirstplural
12120 \let\Glsxtrtitlefirstplural\@glsxtr@org@Glsxtrtitlefirstplural
12121 \let\glsxtrtitlelong\@glsxtr@org@glsxtrtitlelong
12122 \let\glsxtrtitlelongpl\@glsxtr@org@glsxtrtitlelongpl
12123 \let\Glsxtrtitlelong\@glsxtr@org@Glsxtrtitlelong
12124 \let\Glsxtrtitlelongpl\@glsxtr@org@Glsxtrtitlelongpl
12125 \let\glsxtrtitlefull\@glsxtr@org@glsxtrtitlefull
12126 \let\glsxtrtitlefullpl\@glsxtr@org@glsxtrtitlefullpl
12127 \let\Glsxtrtitlefull\@glsxtr@org@Glsxtrtitlefull
12128 \let\Glsxtrtitlefullpl\@glsxtr@org@Glsxtrtitlefullpl
12129 }

```

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.

```
12130 \newcommand*\glsxtrheadshort}[1]{%
```

```

12131 \protect\NoCaseChange
12132 {%
12133   \glsifattribute{#1}{headuc}{true}%
12134   {%
12135     \GLSxtrshort [noindex,hyper=false]{#1}[]%
12136   }%
12137   {%
12138     \glsxtrshort [noindex,hyper=false]{#1}[]%
12139   }%
12140 }%
12141 }

```

**lsxtrtitleshort** Command to display short form of abbreviation in section title and table of contents.

```

12142 \newrobustcmd*\{\glsxtrtitleshort}{1}{%
12143   \glsxtrshort [noindex,hyper=false]{#1}[]%
12144 }

```

**xtrheadshortpl** 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.

```

12145 \newcommand*\{\glsxtrheadshortpl}{1}{%
12146   \protect\NoCaseChange
12147 {%
12148   \glsifattribute{#1}{headuc}{true}%
12149   {%
12150     \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
12151   }%
12152   {%
12153     \glsxtrshortpl [noindex,hyper=false]{#1}[]%
12154   }%
12155 }%
12156 }

```

**xtrtitleshortpl** Command to display plural short form of abbreviation in section title and table of contents.

```

12157 \newrobustcmd*\{\glsxtrtitleshortpl}{1}{%
12158   \glsxtrshortpl [noindex,hyper=false]{#1}[]%
12159 }

```

**Glsxtrheadshort** Command used to display short form in the page header with the first letter converted to upper case.

```

12160 \newcommand*\{\Glsxtrheadshort}{1}{%
12161   \protect\NoCaseChange
12162 {%
12163   \glsifattribute{#1}{headuc}{true}%
12164   {%
12165     \GLSxtrshort [noindex,hyper=false]{#1}[]%
12166   }%
12167   {%

```

```

12168      \Glsxtrshort [noindex,hyper=false]{#1}[]%
12169    }%
12170 }%
12171 }

lsxtrtitleshort Command to display short form of abbreviation in section title and table of contents with the
first letter converted to upper case.
12172 \newrobustcmd*\{\Glsxtrtitleshort\}[1]{%
12173   \Glsxtrshort [noindex,hyper=false]{#1}[]%
12174 }

LSxtrtitleshort Command to display short form of abbreviation in section title and table of contents in all
upper case.
12175 \newrobustcmd*\{\GLSxtrtitleshort\}[1]{%
12176   \GLSxtrshort [noindex,hyper=false]{#1}[]%
12177 }

sxtrheadshortpl Command used to display plural short form in the page header with the first letter converted
to upper case.
12178 \newcommand*\{\Glsxtrheadshortpl\}[1]{%
12179   \protect\NoCaseChange
12180   {%
12181     \glsifattribute{#1}{headuc}{true}%
12182     {%
12183       \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
12184     }%
12185     {%
12186       \Glsxtrshortpl [noindex,hyper=false]{#1}[]%
12187     }%
12188   }%
12189 }

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents
with the first letter converted to upper case.
12190 \newrobustcmd*\{\Glsxtrtitleshortpl\}[1]{%
12191   \Glsxtrshortpl [noindex,hyper=false]{#1}[]%
12192 }

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents
in all upper case.
12193 \newrobustcmd*\{\GLSxtrtitleshortpl\}[1]{%
12194   \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
12195 }

\glsxtrheadname As above but for the name value.
12196 \newcommand*\{\glsxtrheadname\}[1]{%
12197   \protect\NoCaseChange
12198   {%

```

```

12199 \glsifattribute{#1}{headuc}{true}%
12200 {%
12201 \GLSname[noindex,hyper=false]{#1}[]%
12202 }%
12203 {%
12204 \glsname[noindex,hyper=false]{#1}[]%
12205 }%
12206 }%
12207 }

```

`glsxtrtitlename` Command to display name value in section title and table of contents.

```

12208 \newrobustcmd*\{\glsxtrtitlename\}[1]{%
12209 \glsname[noindex,hyper=false]{#1}[]%
12210 }

```

`\Glsxtrheadname` First letter converted to upper case

```

12211 \newcommand*\{\Glsxtrheadname\}[1]{%
12212 \protect\NoCaseChange
12213 {%
12214 \glsifattribute{#1}{headuc}{true}%
12215 }%
12216 \GLSname[noindex,hyper=false]{#1}[]%
12217 }%
12218 {%
12219 \Glsname[noindex,hyper=false]{#1}[]%
12220 }%
12221 }%
12222 }

```

`Glsxtrtitlename` Command to display name value in section title and table of contents with the first letter changed to upper case.

```

12223 \newrobustcmd*\{\Glsxtrtitlename\}[1]{%
12224 \Glsname[noindex,hyper=false]{#1}[]%
12225 }

```

`GLSxtrtitlename` Command to display name value in section title and table of contents in all upper case.

```

12226 \newrobustcmd*\{\GLSxtrtitlename\}[1]{%
12227 \GLSname[noindex,hyper=false]{#1}[]%
12228 }

```

`\glsxtrheadtext` As above but for the text value.

```

12229 \newcommand*\{\glsxtrheadtext\}[1]{%
12230 \protect\NoCaseChange
12231 {%
12232 \glsifattribute{#1}{headuc}{true}%
12233 }%
12234 \GLStext[noindex,hyper=false]{#1}[]%
12235 }%

```

```
12236  {%
12237    \glstext[noindex,hyper=false]{#1}[]%
12238  }%
12239 }%
12240 }
```

`\glsxtrtitletext` Command to display text value in section title and table of contents.

```
12241 \newrobustcmd*\{\glsxtrtitletext\}[1]{%
12242   \glstext[noindex,hyper=false]{#1}[]%
12243 }
```

`\Glsxtrheadtext` First letter converted to upper case

```
12244 \newcommand*\{\Glsxtrheadtext\}[1]{%
12245   \protect\NoCaseChange
12246  {%
12247    \glsifattribute{#1}{headuc}{true}%
12248    {%
12249      \GLStext[noindex,hyper=false]{#1}[]%
12250    }%
12251    {%
12252      \Glstext[noindex,hyper=false]{#1}[]%
12253    }%
12254  }%
12255 }
```

`\Glsxtrtitletext` Command to display text value in section title and table of contents with the first letter changed to upper case.

```
12256 \newrobustcmd*\{\Glsxtrtitletext\}[1]{%
12257   \Glstext[noindex,hyper=false]{#1}[]%
12258 }
```

`\GLSxtrtitletext` Command to display text value in section title and table of contents in all upper case.

```
12259 \newrobustcmd*\{\GLSxtrtitletext\}[1]{%
12260   \GLStext[noindex,hyper=false]{#1}[]%
12261 }
```

`\lsxtrheadplural` As above but for the plural value.

```
12262 \newcommand*\{\glsxtrheadplural\}[1]{%
12263   \protect\NoCaseChange
12264  {%
12265    \glsifattribute{#1}{headuc}{true}%
12266    {%
12267      \GLSplural[noindex,hyper=false]{#1}[]%
12268    }%
12269    {%
12270      \glsplural[noindex,hyper=false]{#1}[]%
12271    }%
12272  }%
12273 }
```

`sxtrtitleplural` Command to display plural value in section title and table of contents.

```
12274 \newrobustcmd*\{\glsxtrtitleplural\}[1]{%
12275   \glsplural[noindex,hyper=false]{#1}[]%
12276 }
```

`lsxtrheadplural` Convert first letter to upper case.

```
12277 \newcommand*\{\Glsxtrheadplural\}[1]{%
12278   \protect\NoCaseChange
12279   {%
12280     \glsifattribute{#1}{headuc}{true}%
12281     {%
12282       \GLSplural[noindex,hyper=false]{#1}[]%
12283     }%
12284     {%
12285       \Glsplural[noindex,hyper=false]{#1}[]%
12286     }%
12287   }%
12288 }
```

`sxtrtitleplural` Command to display plural value in section title and table of contents with the first letter changed to upper case.

```
12289 \newrobustcmd*\{\Glsxtrtitleplural\}[1]{%
12290   \Glsplural[noindex,hyper=false]{#1}[]%
12291 }
```

`Sxtrtitleplural` Command to display plural value in section title and table of contents in all upper case.

```
12292 \newrobustcmd*\{\GLSxtrtitleplural\}[1]{%
12293   \GLSplural[noindex,hyper=false]{#1}[]%
12294 }
```

`glsxtrheadfirst` As above but for the first value.

```
12295 \newcommand*\{\glsxtrheadfirst\}[1]{%
12296   \protect\NoCaseChange
12297   {%
12298     \glsifattribute{#1}{headuc}{true}%
12299     {%
12300       \GLSfirst[noindex,hyper=false]{#1}[]%
12301     }%
12302     {%
12303       \glsfirst[noindex,hyper=false]{#1}[]%
12304     }%
12305   }%
12306 }
```

`lsxtrtitlefirst` Command to display first value in section title and table of contents.

```
12307 \newrobustcmd*\{\glsxtrtitlefirst\}[1]{%
12308   \glsfirst[noindex,hyper=false]{#1}[]%
12309 }
```

```

Glsxtrheadfirst First letter converted to upper case
12310 \newcommand*{\Glsxtrheadfirst}[1]{%
12311   \protect\NoCaseChange
12312 {%
12313   \glsifattribute{#1}{headuc}{true}%
12314   {%
12315     \GLSfirst[noindex,hyper=false]{#1}[]%
12316   }%
12317 {%
12318   \Glsfirst[noindex,hyper=false]{#1}[]%
12319 }%
12320 }%
12321 }

lsxrttitlefirst Command to display first value in section title and table of contents with the first letter
changed to upper case.
12322 \newrobustcmd*{\Glsxrttitlefirst}[1]{%
12323   \Glsfirst[noindex,hyper=false]{#1}[]%
12324 }

LSxrttitlefirst Command to display first value in section title and table of contents in all upper case.
12325 \newrobustcmd*{\GLSxrttitlefirst}[1]{%
12326   \GLSfirst[noindex,hyper=false]{#1}[]%
12327 }

headfirstplural As above but for the firstplural value.
12328 \newcommand*{\glsxtrheadfirstplural}[1]{%
12329   \protect\NoCaseChange
12330 {%
12331   \glsifattribute{#1}{headuc}{true}%
12332   {%
12333     \GLSfirstplural[noindex,hyper=false]{#1}[]%
12334   }%
12335 {%
12336   \glsfirstplural[noindex,hyper=false]{#1}[]%
12337 }%
12338 }%
12339 }

titlefirstplural Command to display firstplural value in section title and table of contents.
12340 \newrobustcmd*{\glsxrttitlefirstplural}[1]{%
12341   \glsfirstplural[noindex,hyper=false]{#1}[]%
12342 }

headfirstplural First letter converted to upper case
12343 \newcommand*{\Glsxtrheadfirstplural}[1]{%
12344   \protect\NoCaseChange
12345 {%

```

```

12346 \glsifattribute{#1}{headuc}{true}%
12347 {%
12348   \GLSfirstplural[noindex,hyper=false]{#1}[]%
12349 }%
12350 {%
12351   \Glsfirstplural[noindex,hyper=false]{#1}[]%
12352 }%
12353 }%
12354 }

```

`titlefirstplural` Command to display first value in section title and table of contents with the first letter changed to upper case.

```

12355 \newrobustcmd*\{\Glsxrttitlefirstplural\}[1]{%
12356   \Glsfirstplural[noindex,hyper=false]{#1}[]%
12357 }

```

`titlefirstplural` Command to display first value in section title and table of contents in all upper case.

```

12358 \newrobustcmd*\{\GLSxrttitlefirstplural\}[1]{%
12359   \GLSfirstplural[noindex,hyper=false]{#1}[]%
12360 }

```

`\glsxtrheadlong` Command used to display long form in the page header.

```

12361 \newcommand*\{\glsxtrheadlong\}[1]{%
12362   \protect\NoCaseChange
12363 {%
12364   \glsifattribute{#1}{headuc}{true}%
12365   {%
12366     \GLSxtrlong[noindex,hyper=false]{#1}[]%
12367   }%
12368   {%
12369     \glsxtrlong[noindex,hyper=false]{#1}[]%
12370   }%
12371 }%
12372 }

```

`glsxrttitlelong` Command to display long form of abbreviation in section title and table of contents.

```

12373 \newrobustcmd*\{\glsxrttitlelong\}[1]{%
12374   \glsxtrlong[noindex,hyper=false]{#1}[]%
12375 }

```

`\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.

```

12376 \newcommand*\{\glsxtrheadlongpl\}[1]{%
12377   \protect\NoCaseChange
12378 {%
12379   \glsifattribute{#1}{headuc}{true}%
12380   {%

```

```

12381     \GLSxtrlongpl [noindex,hyper=false]{#1}[]%
12382   }%
12383   {%
12384     \glsxtrlongpl [noindex,hyper=false]{#1}[]%
12385   }%
12386 }%
12387 }

```

`sxttitlelongpl` Command to display plural long form of abbreviation in section title and table of contents.

```

12388 \newrobustcmd*\{\glsxtrtitlelongpl\}[1]{%
12389   \glsxtrlongpl [noindex,hyper=false]{#1}[]%
12390 }

```

`\Glsxtrheadlong` Command used to display long form in the page header with the first letter converted to upper case.

```

12391 \newcommand*\{\Glsxtrheadlong\}[1]{%
12392   \protect\NoCaseChange
12393   {%
12394     \glsifattribute{#1}{headuc}{true}%
12395   }%
12396     \GLSxtrlong [noindex,hyper=false]{#1}[]%
12397   }%
12398   {%
12399     \Glsxtrlong [noindex,hyper=false]{#1}[]%
12400   }%
12401 }%
12402 }

```

`Glsxtrtitlelong` Command to display long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

12403 \newrobustcmd*\{\Glsxtrtitlelong\}[1]{%
12404   \Glsxtrlong [noindex,hyper=false]{#1}[]%
12405 }

```

`GLSxtrtitlelong` Command to display long form of abbreviation in section title and table of contents in all upper case.

```

12406 \newrobustcmd*\{\GLSxtrtitlelong\}[1]{%
12407   \GLSxtrlong [noindex,hyper=false]{#1}[]%
12408 }

```

`lsxtrheadlongpl` Command used to display plural long form in the page header with the first letter converted to upper case.

```

12409 \newcommand*\{\Glsxtrheadlongpl\}[1]{%
12410   \protect\NoCaseChange
12411   {%
12412     \glsifattribute{#1}{headuc}{true}%
12413   }%
12414     \GLSxtrlongpl [noindex,hyper=false]{#1}[]

```

```
12415 }%
12416 {%
12417 \Glsxtrlongpl [noindex,hyper=false]{#1}[]%
12418 }%
12419 }%
12420 }
```

`sxtrtitlelongpl` Command to display plural long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
12421 \newrobustcmd*\{\Glsxtrtitlelongpl\}[1]{%
12422 \Glsxtrlongpl [noindex,hyper=false]{#1}[]%
12423 }
```

`Sxtrtitlelongpl` Command to display plural long form of abbreviation in section title and table of contents in all upper case.

```
12424 \newrobustcmd*\{\GLSxtrtitlelongpl\}[1]{%
12425 \GLSxtrlongpl [noindex,hyper=false]{#1}[]%
12426 }
```

`\glsxtrheadfull` Command used to display full form in the page header.

```
12427 \newcommand*\{\glsxtrheadfull\}[1]{%
12428 \protect\NoCaseChange
12429 {%
12430 \glsifattribute{#1}{headuc}{true}%
12431 {%
12432 \GLSxtrfull [noindex,hyper=false]{#1}[]%
12433 }%
12434 {%
12435 \glsxtrfull [noindex,hyper=false]{#1}[]%
12436 }%
12437 }%
12438 }
```

`glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents.

```
12439 \newrobustcmd*\{\glsxtrtitlefull\}[1]{%
12440 \glsxtrfull [noindex,hyper=false]{#1}[]%
12441 }
```

`lsxtrheadfullpl` Command used to display plural full form in the page header. If you want the text converted to upper case, this needs to be redefined to use `\GLSxtrfullpl` instead. If you are using a `smallcaps` style, the default fonts don't provide italic smallcaps.

```
12442 \newcommand*\{\glsxtrheadfullpl\}[1]{%
12443 \protect\NoCaseChange
12444 {%
12445 \glsifattribute{#1}{headuc}{true}%
12446 {%
12447 \GLSxtrfullpl [noindex,hyper=false]{#1}[]%
12448 }%
```

```
12449     {%
12450         \glsxtrfullpl [noindex,hyper=false]{#1}[]%
12451     }%
12452 }%
12453 }
```

**sxttitlefullpl** Command to display plural full form of abbreviation in section title and table of contents.

```
12454 \newrobustcmd*{\glsxtrtitlefullpl}[1]{%
12455     \glsxtrfullpl [noindex,hyper=false]{#1}[]%
12456 }
```

**\Glsxtrheadfull** Command used to display full form in the page header with the first letter converted to upper case.

```
12457 \newcommand*{\Glsxtrheadfull}[1]{%
12458     \protect\NoCaseChange
12459     {%
12460         \glsifattribute{#1}{headuc}{true}%
12461     }%
12462         \GLSxtrfull [noindex,hyper=false]{#1}[]%
12463     }%
12464     {%
12465         \Glsxtrfull [noindex,hyper=false]{#1}[]%
12466     }%
12467 }%
12468 }
```

**Glsxtrtitlefull** Command to display full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
12469 \newrobustcmd*{\Glsxtrtitlefull}[1]{%
12470     \Glsxtrfull [noindex,hyper=false]{#1}[]%
12471 }
```

**GLSxtrtitlefull** Command to display full form of abbreviation in section title and table of contents in all upper case.

```
12472 \newrobustcmd*{\GLSxtrtitlefull}[1]{%
12473     \GLSxtrfull [noindex,hyper=false]{#1}[]%
12474 }
```

**lsxtrheadfullpl** Command used to display plural full form in the page header with the first letter converted to upper case.

```
12475 \newcommand*{\Glsxtrheadfullpl}[1]{%
12476     \protect\NoCaseChange
12477     {%
12478         \glsifattribute{#1}{headuc}{true}%
12479     }%
12480         \GLSxtrfullpl [noindex,hyper=false]{#1}[]%
12481     }%
12482     {%
```

```
12483     \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
12484   }%
12485 }%
12486 }
```

`sxtrtitlefullpl` Command to display plural full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
12487 \newrobustcmd*{\Glsxtrtitlefullpl}[1]{%
12488   \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
12489 }
```

`Sxtrtitlefullpl` Command to display plural full form of abbreviation in section title and table of contents in all upper case.

```
12490 \newrobustcmd*{\GLSxtrtitlefullpl}[1]{%
12491   \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
12492 }
```

`\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.

```
12493 \ifdef\texorpdfstring
12494 {
12495   \newcommand*{\glsfmtshort}[1]{%
12496     \texorpdfstring
12497       {\glsxtrtitleshort{#1}}%
12498       {\glsentryshort{#1}}%
12499   }
12500 }
12501 {
12502   \newcommand*{\glsfmtshort}[1]{%
12503     \glsxtrtitleshort{#1}%
12504 }
```

Similarly for the plural version.

```
\glsfmtshortpl
12505 \ifdef\texorpdfstring
12506 {
12507   \newcommand*{\glsfmtshortpl}[1]{%
12508     \texorpdfstring
12509       {\glsxtrtitleshortpl{#1}}%
12510       {\glsentryshortpl{#1}}%
12511   }
12512 }
12513 {
12514   \newcommand*{\glsfmtshortpl}[1]{%
12515     \glsxtrtitleshortpl{#1}%
12516 }
```

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).

```
12517 \ifdef\textorpdfstring
12518 {
12519   \newcommand*\{\Glsfmtshort}[1]{%
12520     \textorpdfstring
12521       {\Glsxrttitleshort{\#1}}%
12522       {\glsentryshort{\#1}}%
12523   }
12524 }
12525 {
12526   \newcommand*\{\Glsfmtshort}[1]{%
12527     \Glsxrttitleshort{\#1}%
12528 }
```

\Glsfmtshortpl Plural form (first letter uppercase).

```
12529 \ifdef\textorpdfstring
12530 {
12531   \newcommand*\{\Glsfmtshortpl}[1]{%
12532     \textorpdfstring
12533       {\Glsxrttitleshortpl{\#1}}%
12534       {\glsentryshortpl{\#1}}%
12535   }
12536 }
12537 {
12538   \newcommand*\{\Glsfmtshortpl}[1]{%
12539     \Glsxrttitleshortpl{\#1}%
12540 }
```

\glsfmtname As above but for the name value.

```
12541 \ifdef\textorpdfstring
12542 {
12543   \newcommand*\{\glsfmtname}[1]{%
12544     \textorpdfstring
12545       {\glsxrttitlename{\#1}}%
12546       {\glsentryname{\#1}}%
12547   }
12548 }
12549 {
12550   \newcommand*\{\glsfmtname}[1]{%
12551     \glsxrttitlename{\#1}%
12552 }
```

\Glsfmtname First letter converted to upper case.

```
12553 \ifdef\textorpdfstring
12554 {
12555   \newcommand*\{\Glsfmtname}[1]{%
12556     \textorpdfstring
12557       {\Glsxrttitlename{\#1}}%
12558       {\glsentryname{\#1}}%
```

```
12559 }
12560 }
12561 {
12562   \newcommand*{\Glsfmtname}[1]{%
12563     \Glsxtrtitlename{#1}}
12564 }
```

\GLSfmtname All upper case.

```
12565 \ifdef\textorpdfstring
12566 {
12567   \newcommand*{\GLSfmtname}[1]{%
12568     \textorpdfstring
12569       {\GLSxtrtitlename{#1}}%
12570       {\glsentryname{#1}}%
12571   }
12572 }
12573 {
12574   \newcommand*{\GLSfmtname}[1]{%
12575     \GLSxtrtitlename{#1}}
12576 }
```

\glsfmttext As above but for the text value.

```
12577 \ifdef\textorpdfstring
12578 {
12579   \newcommand*{\glsfmttext}[1]{%
12580     \textorpdfstring
12581       {\glsxtrtitletext{#1}}%
12582       {\glsentrytext{#1}}%
12583   }
12584 }
12585 {
12586   \newcommand*{\glsfmttext}[1]{%
12587     \glsxtrtitletext{#1}}
12588 }
```

\Glsfmttext First letter converted to upper case.

```
12589 \ifdef\textorpdfstring
12590 {
12591   \newcommand*{\Glsfmttext}[1]{%
12592     \textorpdfstring
12593       {\Glsxtrtitletext{#1}}%
12594       {\glsentrytext{#1}}%
12595   }
12596 }
12597 {
12598   \newcommand*{\Glsfmttext}[1]{%
12599     \Glsxtrtitletext{#1}}
12600 }
```

\GLSfmttext All upper case.

```
12601 \ifdef\textorpdfstring
12602 {
12603   \newcommand*\{\GLSfmttext}[1]{%
12604     \textorpdfstring
12605     {\GLSxrttitletext{\#1}}%
12606     {\glsentrytext{\#1}}%
12607   }
12608 }
12609 {
12610   \newcommand*\{\GLSfmttext}[1]{%
12611     \GLSxrttitletext{\#1}}
12612 }
```

\glsfmtplural As above but for the plural value.

```
12613 \ifdef\textorpdfstring
12614 {
12615   \newcommand*\{\glsfmtplural}[1]{%
12616     \textorpdfstring
12617     {\glsxrttitleplural{\#1}}%
12618     {\glsentryplural{\#1}}%
12619   }
12620 }
12621 {
12622   \newcommand*\{\glsfmtplural}[1]{%
12623     \glsxrttitleplural{\#1}}
12624 }
```

\Glsfmtplural First letter converted to upper case.

```
12625 \ifdef\textorpdfstring
12626 {
12627   \newcommand*\{\Glsfmtplural}[1]{%
12628     \textorpdfstring
12629     {\Glsxrttitleplural{\#1}}%
12630     {\glsentryplural{\#1}}%
12631   }
12632 }
12633 {
12634   \newcommand*\{\Glsfmtplural}[1]{%
12635     \Glsxrttitleplural{\#1}}
12636 }
```

\GLSfmtplural All upper case.

```
12637 \ifdef\textorpdfstring
12638 {
12639   \newcommand*\{\GLSfmtplural}[1]{%
12640     \textorpdfstring
12641     {\GLSxrttitleplural{\#1}}%
12642     {\glsentryplural{\#1}}%
```

```

12643 }
12644 }
12645 {
12646 \newcommand*{\GLSfmtplural}[1]{%
12647   \GLSxrttitleplural{#1}}
12648 }

```

\glsfmtfirst As above but for the first value.

```

12649 \ifdef\textorpdfstring
12650 {
12651   \newcommand*{\glsfmtfirst}[1]{%
12652     \textorpdfstring
12653       {\glsxrttitlefirst{#1}}%
12654       {\glsentryfirst{#1}}%
12655   }
12656 }
12657 {
12658   \newcommand*{\glsfmtfirst}[1]{%
12659     \glsxrttitlefirst{#1}}
12660 }

```

\Glsfmtfirst First letter converted to upper case.

```

12661 \ifdef\textorpdfstring
12662 {
12663   \newcommand*{\Glsfmtfirst}[1]{%
12664     \textorpdfstring
12665       {\Glsxrttitlefirst{#1}}%
12666       {\glsentryfirst{#1}}%
12667   }
12668 }
12669 {
12670   \newcommand*{\Glsfmtfirst}[1]{%
12671     \Glsxrttitlefirst{#1}}
12672 }

```

\GLSfmtfirst All upper case.

```

12673 \ifdef\textorpdfstring
12674 {
12675   \newcommand*{\GLSfmtfirst}[1]{%
12676     \textorpdfstring
12677       {\GLSxrttitlefirst{#1}}%
12678       {\glsentryfirst{#1}}%
12679   }
12680 }
12681 {
12682   \newcommand*{\GLSfmtfirst}[1]{%
12683     \Glsxrttitlefirst{#1}}
12684 }

```

\glsfmtfirstpl As above but for the firstplural value.

```
12685 \ifdef\textorpdfstring
12686 {
12687   \newcommand*\{\glsfmtfirstpl}[1]{%
12688     \textorpdfstring
12689     {\glsxtrtitlefirstplural{\#1}}%
12690     {\glsentryfirstplural{\#1}}%
12691   }
12692 }
12693 {
12694   \newcommand*\{\glsfmtfirstpl}[1]{%
12695     \glsxtrtitlefirstplural{\#1}}
12696 }
```

\Glsfmtfirstpl First letter converted to upper case.

```
12697 \ifdef\textorpdfstring
12698 {
12699   \newcommand*\{\Glsfmtfirstpl}[1]{%
12700     \textorpdfstring
12701     {\Glsxtrtitlefirstplural{\#1}}%
12702     {\glsentryfirstplural{\#1}}%
12703   }
12704 }
12705 {
12706   \newcommand*\{\Glsfmtfirstpl}[1]{%
12707     \Glsxtrtitlefirstplural{\#1}}
12708 }
```

\GLSfmtfirstpl All upper case.

```
12709 \ifdef\textorpdfstring
12710 {
12711   \newcommand*\{\GLSfmtfirstpl}[1]{%
12712     \textorpdfstring
12713     {\GLSxtrtitlefirstplural{\#1}}%
12714     {\glsentryfirstplural{\#1}}%
12715   }
12716 }
12717 {
12718   \newcommand*\{\GLSfmtfirstpl}[1]{%
12719     \GLSxtrtitlefirstplural{\#1}}
12720 }
```

\glsfmtlong As above but for the long value.

```
12721 \ifdef\textorpdfstring
12722 {
12723   \newcommand*\{\glsfmtlong}[1]{%
12724     \textorpdfstring
12725     {\glsxtrtitlelong{\#1}}%
12726     {\glsentrylong{\#1}}%
```

```

12727 }
12728 }
12729 {
12730   \newcommand*{\glsfmtlong}[1]{%
12731     \glsxtrtitlelong{#1}}
12732 }

```

\Glsfmtlong First letter converted to upper case.

```

12733 \ifdef\textorpdfstring
12734 {
12735   \newcommand*{\Glsfmtlong}[1]{%
12736     \textorpdfstring
12737       {\Glsxtrtitlelong{#1}}%
12738       {\glsentrylong{#1}}%
12739   }
12740 }
12741 {
12742   \newcommand*{\Glsfmtlong}[1]{%
12743     \Glsxtrtitlelong{#1}}
12744 }

```

\GLSfmtlong All upper case.

```

12745 \ifdef\textorpdfstring
12746 {
12747   \newcommand*{\GLSfmtlong}[1]{%
12748     \textorpdfstring
12749       {\GLSxtrtitlelong{#1}}%
12750       {\glsentrylong{#1}}%
12751   }
12752 }
12753 {
12754   \newcommand*{\GLSfmtlong}[1]{%
12755     \GLSxtrtitlelong{#1}}
12756 }

```

\glsfmtlongpl As above but for the longplural value.

```

12757 \ifdef\textorpdfstring
12758 {
12759   \newcommand*{\glsfmtlongpl}[1]{%
12760     \textorpdfstring
12761       {\glsxtrtitlelongpl{#1}}%
12762       {\glsentrylongpl{#1}}%
12763   }
12764 }
12765 {
12766   \newcommand*{\glsfmtlongpl}[1]{%
12767     \glsxtrtitlelongpl{#1}}
12768 }

```

\Glsfmtlongpl First letter converted to upper case.

```
12769 \ifdef\textorpdfstring
12770 {
12771   \newcommand*\{\Glsfmtlongpl}[1]{%
12772     \textorpdfstring
12773     {\Glsxtrtitlelongpl{\#1}}%
12774     {\glsentrylongpl{\#1}}%
12775   }
12776 }
12777 {
12778   \newcommand*\{\Glsfmtlongpl}[1]{%
12779     \Glsxtrtitlelongpl{\#1}}
12780 }
```

\GLSfmtlongpl All upper case.

```
12781 \ifdef\textorpdfstring
12782 {
12783   \newcommand*\{\GLSfmtlongpl}[1]{%
12784     \textorpdfstring
12785     {\GLSxtrtitlelongpl{\#1}}%
12786     {\glsentrylongpl{\#1}}%
12787   }
12788 }
12789 {
12790   \newcommand*\{\GLSfmtlongpl}[1]{%
12791     \GLSxtrtitlelongpl{\#1}}
12792 }
```

\glspdffmtfull Can't use \glsxtrinlinefullformat in PDF bookmarks as it's not fully expandable. This command is for the PDF part of \textorpdfstring for the full form.

```
12793 \newcommand*\{\glspdffmtfull}[1]{\glsentrylong{\#1} (\glsentryshort{\#1})}%
```

\glspdffmtfullpl Likewise for plural.

```
12794 \newcommand*\{\glspdffmtfullpl}[1]{\glsentrylongpl{\#1} (\glsentryshortpl{\#1})}%
```

\glsfmtfull In-line full format.

```
12795 \ifdef\textorpdfstring
12796 {
12797   \newcommand*\{\glsfmtfull}[1]{%
12798     \textorpdfstring
12799     {\glsxtrtitlefull{\#1}}%
12800     {\glspdffmtfull{\#1}}%
12801   }
12802 }
12803 {
12804   \newcommand*\{\glsfmtfull}[1]{%
12805     \glsxtrtitlefull{\#1}}
12806 }
```

\Glsfmtfull First letter converted to upper case.

```
12807 \ifdef\textorpdfstring
12808 {
12809   \newcommand*\{\Glsfmtfull}[1]{%
12810     \textorpdfstring
12811     {\Glsxrttitlefull{\#1}}%
12812     {\glspdffmtfull{\#1}{}}%
12813   }
12814 }
12815 {
12816   \newcommand*\{\Glsfmtfull}[1]{%
12817     \Glsxrttitlefull{\#1}}
12818 }
```

\GLSfmtfull All upper case.

```
12819 \ifdef\textorpdfstring
12820 {
12821   \newcommand*\{\GLSfmtfull}[1]{%
12822     \textorpdfstring
12823     {\GLSxrttitlefull{\#1}}%
12824     {\glspdffmtfull{\#1}}%
12825   }
12826 }
12827 {
12828   \newcommand*\{\GLSfmtfull}[1]{%
12829     \GLSxrttitlefull{\#1}}
12830 }
```

\glsfmtfullpl In-line full plural format.

```
12831 \ifdef\textorpdfstring
12832 {
12833   \newcommand*\{\glsfmtfullpl}[1]{%
12834     \textorpdfstring
12835     {\glsxrttitlefullpl{\#1}}%
12836     {\glspdffmtfullpl{\#1}}%
12837   }
12838 }
12839 {
12840   \newcommand*\{\glsfmtfullpl}[1]{%
12841     \glsxrttitlefullpl{\#1}}
12842 }
```

\Glsfmtfullpl First letter converted to upper case.

```
12843 \ifdef\textorpdfstring
12844 {
12845   \newcommand*\{\Glsfmtfullpl}[1]{%
12846     \textorpdfstring
12847     {\Glsxrttitlefullpl{\#1}}%
12848     {\glspdffmtfullpl{\#1}{}}%
```

```

12849 }
12850 }
12851 {
12852 \newcommand*{\Glsfmtfullpl}[1]{%
12853   \Glsxrttitlefullpl{#1}}
12854 }

```

\GLSfmtfullpl All upper case.

```

12855 \ifdef\textorpdfstring
12856 {
12857   \newcommand*{\GLSfmtfullpl}[1]{%
12858     \textorpdfstring
12859     {\GLSxrttitlefullpl{#1}}%
12860     {\glspdffmtfullpl{#1}{}}%
12861   }
12862 }
12863 {
12864   \newcommand*{\GLSfmtfullpl}[1]{%
12865     \GLSxrttitlefullpl{#1}}
12866 }

```

## 1.9 Multi-Lingual Support

Add the facility to load language modules, if they are installed, but none are provided with this package.

sariesExtraLang

```

12867 \newcommand*{\RequireGlossariesExtraLang}[1]{%
12868   \@ifundefined{ver@glossariesxtr-#1.ldf}{\input{glossariesxtr-#1.ldf}}{}%
12869 }

```

sariesExtraLang

```

12870 \newcommand*{\ProvidesGlossariesExtraLang}[1]{%
12871   \ProvidesFile{glossariesxtr-#1.ldf}%
12872 }

```

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.

```

12873 \newcommand{\glsxtr@loaddialect}{%
12874   \IfTrackedLanguageFileExists{\this@dialect}%
12875   {glossariesxtr-}%
12876   {.ldf}%
12877   {%

```

```
12878     \RequireGlossariesExtraLang{\CurrentTrackedTag}%
12879     }%
12880     {}% not found
```

If `glossaries-extra-bib2gls` has been loaded, `\@glsxtrdialecthook` will check for the associated script, otherwise it will do nothing.

```
12881     \@glsxtrdialecthook
12882 }

12883 \@ifpackageloaded{tracklang}
12884 {%
12885     \AnyTrackedLanguages
12886     {%
12887         \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
12888     }%
12889     {}%
12890 }
12891 {}
```

Load `glossaries-extra-stylemods` if required.

```
12892 \@glsxtr@redefstyles
```

and set the style:

```
12893 \@glsxtr@do@style
```

## 1.10 glossaries-extra-bib2gls.sty

This package provides additional support for `bib2gls` and is automatically loaded by the `record` option.

```
12894 \NeedsTeXFormat{LaTeX2e}
12895 \ProvidesPackage{glossaries-extra-bib2gls}[2020/02/13 v1.42 (NLCT)]
```

Provide convenient shortcut commands for predefined glossary types.

`ntunsrtacronyms`

```
12896 \ifglsacronym
12897     \providecommand*{\printunsrtacronyms}[1][]{%
12898         \printunsrtglossary[type=\acronymtype,#1]}%
12899 \fi
```

`printunsrtindex`

```
12900 \ifglossaryexists{index}
12901 {
12902     \providecommand*{\printunsrtindex}[1][]{%
12903         \printunsrtglossary[type=index,#1]}%
12904 }
```

`intunsrtsymbols`

```
12905 \ifglossaryexists{symbols}
```

```

12906 {
12907   \providecommand*\printunsrtsymbols}[1] []{%
12908   \printunsrtglossary[type=symbols,#1]}%
12909 }{}

intunsrtnumbers
12910 \ifglossaryexists{numbers}
12911 {
12912   \providecommand*\printunsrtnumbers}[1] []{%
12913   \printunsrtglossary[type=numbers,#1]}%
12914 }{}

rtabbreviations
12915 \ifglossaryexists{abbreviations}
12916 {
12917   \providecommand*\printunsrtabbreviations}[1] []{%
12918   \printunsrtglossary[type=abbreviations,#1]}%
12919 }{}

splaynumberlist Allow \glsdisplaynumberlist and make it robust.
12920 \renewcommand*\glsdisplaynumberlist}[1]{%
12921   \glsdoifexists{#1}{%
12922   {%
12923     \let\bibglsdelimN\glsnumlistsep
12924     \let\bibglslastDelimN\glsnumlistlastsep
12925     \glsxtrusefield{#1}{location}}%
12926   }{%
12927   }{%
12928 }{%
12929 \robustify\glsdisplaynumberlist

entrynumberlist
12930 \renewcommand*\glsentrynumberlist}[1]{\glsxtrusefield{#1}{location} }

These are some convenient macros for use with custom rules.

\glshex
12931 \newcommand*\glshex}{\string\u}

lscapturedgroup
12932 \newcommand*\glscapturedgroup}{\string\$}

nZeroChildCount For use with bib2gls's save-child-count resource option.
12933 \newcommand*\GlsXtrIfHasNonZeroChildCount}[3]{%
12934   \GlsXtrIfFieldNonZero{childcount}{#1}{#2}{#3}}%
12935 }

```

rprovidecommand For use in @preamble, this behaves like \providecommand in the document but like \renewcommand in bib2gls.

```
12936 \newcommand*\glsxtrprovidecommand{\providecommand}
```

glsrenewcommand Like \renewcommand but only generates a warning rather than an error if the command isn't defined.

```
12937 \newcommand*\glsrenewcommand{@star@or@long\glsxtr@renewcommand}
```

tr@renewcommand

```
12938 \newcommand*\glsxtr@renewcommand[1]{%
12939   \begingroup \escapechar`m@ne\xdef\gtempa{{\string#1}}\endgroup
12940   \expandafter\ifundefined\gtempa
12941   {%
12942     \GlossariesExtraWarning{can't redefine \noexpand#1(not already defined)}%
12943   }%
12944   \relax
12945   \relax
12946   \let\@ifdefinable\@rc@ifdefinable
12947   \new@command#1%
12948 }
```

lossarylocation For use with indexcounter and bib2gls.

```
12949 \newcommand*\glsxtr@wrglossarylocation[2]{#1}
```

indexCounterLink

```
\GlsXtrIndexCounterLink{\text}{\label}
```

For use with indexcounter and bib2gls.

```
12950 \ifdef\hyperref
12951 {%
12952   \newcommand*\GlsXtrIndexCounterLink[2]{%
12953     \glsxtrifhasfield{indexcounter}{#2}%
12954     {\hyperref[wrglossary.\glscurrentfieldvalue]{#1}}%
12955     {#1}%
12956   }
12957 }
12958 {
12959   \newcommand*\GlsXtrIndexCounterLink[2]{#1}
12960 }
```

GlsXtrDualField

```
\GlsXtrDualField
```

The internal field used to store the dual label. The dual-field defaults to dual if no value is supplied so that's used as the default.

```
12961 \newcommand*{\GlsXtrDualField}{dual}
```

XtrDualBackLink

```
\GlsXtrDualBackLink{\text}{\label}
```

Adds a hyperlink to the dual entry.

```
12962 \newcommand*{\GlsXtrDualBackLink}[2]{%
12963   \glsxtrifhasfield{\GlsXtrDualField}{#2}%
12964   {\glshyperlink[#1]{\glscurrentfieldvalue}}%
12965   {#2}%
12966 }
```

TeXEntryAliases Convenient shortcut for use with entry-type-aliases to alias standard BIB<sub>T</sub>E<sub>X</sub> entry types to @bibtexentry.

```
12967 \newcommand*{\GlsXtrBibTeXEntryAliases}{%
12968   article=bibtexentry,
12969   book=bibtexentry,
12970   booklet=bibtexentry,
12971   conference=bibtexentry,
12972   inbook=bibtexentry,
12973   incollection=bibtexentry,
12974   inproceedings=bibtexentry,
12975   manual=bibtexentry,
12976   mastersthesis=bibtexentry,
12977   misc=bibtexentry,
12978   phdthesis=bibtexentry,
12979   proceedings=bibtexentry,
12980   techreport=bibtexentry,
12981   unpublished=bibtexentry
12982 }
```

ideBibTeXFields Convenient shortcut to define the standard BIB<sub>T</sub>E<sub>X</sub> fields.

```
12983 \newcommand*{\GlsXtrProvideBibTeXFields}{%
12984   \glsaddstoragekey{address}{}{\glsxtrbibaddress}%
12985   \glsaddstoragekey{author}{}{\glsxtrbibauthor}%
12986   \glsaddstoragekey{booktitle}{}{\glsxtrbibbooktitle}%
12987   \glsaddstoragekey{chapter}{}{\glsxtrbibchapter}%
12988   \glsaddstoragekey{edition}{}{\glsxtrbibedition}%
12989   \glsaddstoragekey{howpublished}{}{\glsxtrbibhowpublished}%
12990   \glsaddstoragekey{institution}{}{\glsxtrbibinstitution}%
12991   \glsaddstoragekey{journal}{}{\glsxtrbibjournal}%
12992   \glsaddstoragekey{month}{}{\glsxtrbibmonth}%
12993   \glsaddstoragekey{note}{}{\glsxtrbibnote}%
12994   \glsaddstoragekey{number}{}{\glsxtrbibnumber}%
12995   \glsaddstoragekey{organization}{}{\glsxtrbiborganization}%
12996   \glsaddstoragekey{pages}{}{\glsxtrbibpages}%
12997 }
```

```

12997 \glsaddstoragekey{publisher}{}{\glsxtrbibpublisher}%
12998 \glsaddstoragekey{school}{}{\glsxtrbibschool}%
12999 \glsaddstoragekey{series}{}{\glsxtrbibseries}%
13000 \glsaddstoragekey{title}{}{\glsxtrbibtitle}%
13001 \glsaddstoragekey{bibtexttype}{}{\glsxtrbibtype}%
13002 \glsaddstoragekey{volume}{}{\glsxtrbibvolume}%
13003 }

```

Multiple supplementary references are only supported with `bib2gls`.

`ltisuplocation` This is like `\glsxtrsuphypernumber` but the second argument is the external file name (which isn't obtained from the `externallocation` attribute). The third argument is the formatting (encap) control sequence *name*. This is ignored by default, but is set by `bib2gls` to the original encapsulation in case it's required.

```

13004 \newcommand*\glsxtrmultisuplocation[3]{%
13005 {%
13006   \def\glsxtrsuplocationurl{#2}%
13007   \glshypernumber{#1}%
13008 }%
13009 }

```

`rdisplaysupploc`

`\glsxtrdisplaysupploc{<prefix>}{<counter>}{<format>}{<src>}{<location>}`

This is like `\glsnoidxdisplayloc` but is used for supplementary locations and so requires an extra argument.

```

13010 \newcommand*\glsxtrdisplaysupploc[5]{%
13011   \setentrycounter[#1]{#2}%
13012   \glsxtrmultisuplocation{#5}{#4}{#3}%
13013 }

```

`splaylocnameref` `\glsxtrdisplaylocnameref{<prefix>}{<counter>}{<format>}{<location>}{<name>}{<href>}{<hcounter>}{<external file>}` Used with the [nameref] record package option. The *href* argument was obtained from `\@currentHref` and the *hcounter* argument was obtained from `\theHentrycounter`, which is more reliable. If `hyperref` hasn't been loaded, this just behaves like `\glsnoidxdisplayloc`.

```

13014 \ifundefined\hyperlink
13015 {%
13016   \newcommand*\glsxtrdisplaylocnameref[8]{%
13017     \glsnoidxdisplayloc{#1}{#2}{#3}{#4}%
13018   }%
13019 }%
13020 {

```

Default action uses *hcounter*. Equations and pages typically don't have a title, so check the counter name (otherwise the title may be section or chapter title, which may be confusing). As from v1.42, this now checks if the control sequence `\glsxtr<counter>locfmt` is defined.

```

13021 \newcommand*{\glsxtrdisplaylocnameref}[8]{%
13022   \ifcsdef{glsxtr#2locfmt}{%
13023     {\glsxtrnamereflink{#3}{\csuse{glsxtr#2locfmt}{#4}{#5}}{#2.#7}{#8}}{%
13024     {}%
13025     \ifstrempty{#5}{%
13026       {}%

```

No title, so just use the location as the link text.

```

13027   \glsxtrnamereflink{#3}{#4}{#2.#7}{#8}{%
13028   }{%
13029   {}%
13030   \ifstrequal{#2}{page}{%
13031     {\glsxtrnamereflink{#3}{#4}{#2.#7}{#8}}{%
13032     {\glsxtrnamereflink{#3}{#5}{#2.#7}{#8}}{%
13033     }{%
13034   }{%
13035 }{%
13036 }

```

requestionlocfmt

`\glsxtrequestionlocfmt{\langle location \rangle}{\langle title \rangle}`

```
13037 \newcommand*{\glsxtrequestionlocfmt}[2]{(#1)}
```

sxtrnamereflink

`\glsxtrfmtnamereflink{\langle format \rangle}{\langle title \rangle}{\langle href \rangle}{\langle external file \rangle}`

```
13038 \newcommand*{\glsxtrnamereflink}[4]{%
```

Locally change `\glshypernumber` to `\@firstofone` to remove the normal location hyperlink.

```

13039 \begingroup
13040   \let\glshypernumber\@firstofone

```

If the `\langle external file \rangle` argument is empty, an internal link is used, otherwise an external one is needed.

```

13041   \ifstrempty{#4}{%
13042     {\glsxtrfmtinternalnameref{#3}{#1}{#2}}{%
13043     {\glsxtrfmetalnameref{#3}{#1}{#2}{#4}}{%
13044   \endgroup
13045 }

```

sxtrnameloclink

```
\glsxtrnamerefloalink{\prefix}{\counter}{\format}{\location}{\text}
{\external file}
```

Like `\@gls@numberlink`, this creates a hyperlink to the target obtained from the prefix, counter and location but uses `\text` as the hyperlink text. As with regular indexing, this will fail if the target name can't be formed by prefixing the location value.

```
13046 \newcommand{\glsxtrnameloclink}[6]{%
13047   \begingroup
13048   \setentrycounter[#1]{#2}%
13049   \def\glsxtr@locationhypertext{#5}%
13050   \let\glshypernumber\@firstofone
13051   \def\@glsnumberformat{#3}%
13052   \def\glsxtrs@locationurl{#6}%
13053   \toks@={}%
13054   \@glsxtr@bibgls@removespaces#4 \@nil
13055   \endgroup
13056 }

ls@removespaces
13057 \def\@glsxtr@bibgls@removespaces#1 #2@nil{%
13058   \toks@=\expandafter{\the\toks@#1}%
13059   \ifx\#2\%
13060     \edef\x{\the\toks@}%
13061     \ifx\x\empty
13062       \else
13063         \protected@edef\x{\glsentrycounter@\glo@counterprefix\the\toks@}%
13064         \ifdefvoid\glsxtrs@locationurl
13065           {%
13066             \expandafter\glsxtrfmtinternalnameref\expandafter{\x}%
13067             {\@glsnumberformat}{\glsxtr@locationhypertext}%
13068           }%
13069           {%
13070             \expandafter\glsxtrfmtexternalnameref\expandafter{\x}%
13071             {\@glsnumberformat}{\glsxtr@locationhypertext}{\glsxtrs@locationurl}%
13072           }%
13073         \fi
13074       \else
13075         \@gls@ReturnAfterFi{%
13076           \@glsxtr@bibgls@removespaces#2@nil
13077         }%
13078       \fi
13079 }
```

internalnameref

```
\glsxtrfmtinternalnameloc{\target}{\format}{\title}
```

```
13080 \newcommand*{\glsxtrfmtinternalnameref}[3]{%
13081   \csuse{#2}{\glsdohyperlink{#1}{#3}}%
13082 }
```

externalnameref

```
\glsxtrfmtexternalnameloc{\langle target \rangle}{\langle format \rangle}{\langle title \rangle}{\langle file \rangle}
```

```
13083 \newcommand*{\glsxtrfmtexternalnameref}[4]{%
13084   \csuse{#2}{\hyperref[#4]{\#1}{\#3}}%
13085 }
```

glsxtrSetWidest

```
\glsxtrSetWidest{\langle type \rangle}{\langle level \rangle}{\langle text \rangle}
```

As from **bib2gls** v1.8, this is used by the `set-widest` resource option for the `alttree` and the styles provided by the `glossary-longextra` package.

```
13086 \newcommand*{\glsxtrSetWidest}[3]{%
```

Check which style options have been provided. (The style packages may not have been loaded.)

```
13087 \ifdef\glsupdatewidest
13088 {%
13089   \ifdef\glslongextraUpdateWidest
13090     {%
```

Relevant style packages all loaded. If the `\langle type \rangle` has been given, append to glossary preamble.

```
13091   \ifstrempty{#1}
13092     {%
13093       \glsupdatewidest[#2]{#3}%
13094       \ifnum#2=0\relax
13095         \glslongextraUpdateWidest[#3]%
13096       \else
13097         \glslongextraUpdateWidestChild[#2]{#3}%
13098       \fi
13099     }%
13100   {%
13101     \apptoglossarypreamble[#1]{\glsupdatewidest[#2]{#3}}%
13102     \ifnum#2=0\relax
13103       \apptoglossarypreamble[#1]{\glslongextraUpdateWidest[#3]}%
13104     \else
13105       \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild[#2]{#3}}%
13106     \fi
13107   }%
13108 }%
13109 {%
```

Only alttree.

```
13110      \ifstrempty{#1}
13111      {%
13112          \glsupdatewidest[#2]{#3}%
13113      }%
13114      {%
13115          \apptoglossarypreamble[#1]{\glsupdatewidest[#2]{#3}}%
13116      }%
13117      }%
13118  }%
13119  {%
```

\glsupdatewidest hasn't been defined. This could just mean that the glossaries-extra-stylemods package hasn't been loaded.

```
13120      \ifdef\glssetwidest
13121      {%
13122          \ifdef\glslongextraUpdateWidest
13123          {%
```

Relevant glossary-tree and glossary-longextra have been loaded. If the *<type>* has been given, append to glossary preamble.

```
13124      \ifstrempty{#1}
13125      {%
13126          \glssetwidest[#2]{#3}%
13127          \ifnum#2=0\relax
13128              \glslongextraUpdateWidest{#3}%
13129          \else
13130              \glslongextraUpdateWidestChild[#2]{#3}%
13131          \fi
13132      }%
13133      {%
13134          \apptoglossarypreamble[#1]{\glssetwidest[#2]{#3}}%
13135          \ifnum#2=0\relax
13136              \apptoglossarypreamble[#1]{\glslongextraUpdateWidest{#3}}%
13137          \else
13138              \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild[#2]{#3}}%
13139          \fi
13140      }%
13141  }%
13142  {%
```

Only alttree.

```
13143      \ifstrempty{#1}
13144      {%
13145          \glssetwidest[#2]{#3}%
13146      }%
13147      {%
13148          \apptoglossarypreamble[#1]{\glssetwidest[#2]{#3}}%
13149      }%
13150  }%
```

```

13151    }%
13152    {%
13153        \ifdef\glslongextraUpdateWidest
13154        {%
13155            glossary-longextra has been loaded.
13156            \ifstrempty{#1}
13157            {%
13158                \ifnum#2=0\relax
13159                    \glslongextraUpdateWidest{#3}%
13160                \else
13161                    \glslongextraUpdateWidestChild{#2}{#3}%
13162                \fi
13163            }%
13164            \ifnum#2=0\relax
13165                \apptoglossarypreamble[#1]{\glslongextraUpdateWidest{#3}}%
13166            \else
13167                \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild{#2}{#3}}%
13168            \fi
13169        }%
13170    }%

```

Neither glossary-tree nor glossary-longextra have been loaded. Do nothing.

```

13171    {}%
13172    }%
13173 }%
13174 }

```

tWidestFallback

`\glsxtrSetWidestFallback{\langle max depth\rangle}{\langle list\rangle}`

Used when **bib2gls** can't determine the widest name. The *⟨list⟩* argument is a comma-separated list of glossary labels. The *⟨max depth⟩* refers to the maximum hierarchical depth. This will either be 0 (only top-level entries) or 2 (up to two child-levels).

```

13175 \newcommand*{\glsxtrSetWidestFallback}[2]{%
13176     \ifnum#1=0\relax
13177         \ifdef\glsFindWidestTopLevelName
13178         {%
13179             \glsFindWidestTopLevelName[#2]%
13180         }%
13181     {%
13182         \GlossariesExtraWarning{You need stylemods={tree} to
13183             provide a fallback for set-widest}%
13184     }%
13185     \else
13186         \ifdef\glsFindWidestLevelTwo

```

```

13187  {%
13188    \glsFindWidestLevelTwo[#2]%
13189    \ifdef\glslongextraUpdateWidestChild
13190    {%
13191      \glslongextraUpdateWidestChild{#1}{\csuse{@glswidestnamei}}%
13192      \glslongextraUpdateWidestChild{#1}{\csuse{@glswidestnameii}}%
13193    }%
13194    {}%
13195  }%
13196  {%
13197    \GlossariesExtraWarning{You need stylemods={tree} to
13198      provide a fallback for set-widest}%
13199  }%
13200 \fi
13201 }

```

`r@labelprefixes` List of label prefixes.

```
13202 \newcommand*{\glsxtr@labelprefixes}{}%
```

`a@labelprefixes` List of label prefixes.

```

13203 \newcommand*{\glsxtrc@labelprefixes}{}%
13204   \renewcommand*{\glsxtr@labelprefixes}{}%
13205 }
```

`r@addlabelprefix` Add prefix to the list. These should be added in the order of precedence with the last one as a fallback. This doesn't check against duplicates as it may be useful to replicate a prefix at the end as the fallback.

```

13206 \newcommand*{\glsxtr@addlabelprefix}[1]{%
13207   \ifstrempty{#1}%
13208     {\glsxtr@addlabelprefix{\empty}}%
13209   {%
13210     \ifdefempty\glsxtr@labelprefixes
13211       {\def\glsxtr@labelprefixes{#1}}%
13212       {\appto\glsxtr@labelprefixes{,#1}}%
13213   }%
13214 }
```

`p@addlabelprefix` Inserts at the start of the list.

```

13215 \newcommand*{\glsxtr@prependlabelprefix}[1]{%
13216   \ifstrempty{#1}%
13217     {\glsxtr@prependlabelprefix{\empty}}%
13218   {%
13219     \ifdefempty\glsxtr@labelprefixes
13220       {\def\glsxtr@labelprefixes{#1}}%
13221       {\preto\glsxtr@labelprefixes{#1,}}%
13222   }%
13223 }
```

labelprefixlist

```
\glsxtrifinlabelprefixlist{<prefix>}{{<true>}}{{<false>}}
```

Test if the given prefix is in the list.

```
13224 \newcommand*{\glsxtrifinlabelprefixlist}[3]{%
13225   \ifstrempty{#1}%
13226   { \glsxtrifinlabelprefixlist{\emptyset}{#2}{#3} }%
13227   {%
13228     \DTLifinlist{#1}{\glsxtr@labelprefixes}{#2}{#3}%
13229   }%
13230 }
```

prefixlabellist This is provided for the benefit of `bib2gls`. It's possible that the user may add more prefixes after the start of the document, but that can lead to inconsistencies. The final element of the list (the fallback) is the only prefix of interest for `bib2gls`.

```
13231 \AtBeginDocument{%
13232   \protected@write\@auxout{}{\string\providecommand{\string\glsxtr@prefixlabellist}[1]{}{}}%
13233   \protected@write\@auxout{}{\string\glsxtr@prefixlabellist{\glsxtr@labelprefixes}}%
13234 }
```

t@prefixedlabel Iterate through all the prefixes and find the first prefix and label combination that exists. If none found, this could mean that it's the first L<sup>A</sup>T<sub>E</sub>X run, so the last prefix in the list needs to be the fallback one. Grouping is used in case of a nested for loop.

```
13235 \newcommand*{\glsxtr@get@prefixedlabel}[1]{%
13236   \begin{group}
```

Initialise to the unprefixed label in the event that the list is empty.

```
13237 \edef\gls@thislabel{#1}%
13238 \for\glsxtr@prefix:=\glsxtr@labelprefixes\do
13239 {%
13240   \edef\gls@thislabel{\glsxtr@prefix#1}%
13241   \ifglsentryexists{\gls@thislabel}{\endfor}{}
13242 }%
13243 \edef\x{\endgroup\noexpand\def\noexpand@gls@thislabel{\gls@thislabel}}\x
13244 }
```

\dgls Like `\gls` but tries the prefixes. (Can't use `\pgls` as that's provided by `glossaries-prefix`.) Since this command is designed for `bib2gls`'s dual entry system, the "d" stands for "dual".

```
13245 \newrobustcmd*{\dgls}{\gls@hyp@opt\gls}
```

\@dgls

```
13246 \newcommand*{\@dgls}[2][]{%
13247   \glsxtr@get@prefixedlabel{#2}%
13248   \new@ifnextchar[\gls@#1\gls@thislabel]{\gls@#1\gls@thislabel}[]%
13249 }
```

```

\@dglspl
13250 \newrobustcmd*\{dglspl\}{\gls@hyp@opt\@dglspl}

\@dglspl
13251 \newcommand*\{@dglspl}[2] []{%
13252   \glsxtr@get@prefixedlabel{#2}%
13253   \new@ifnextchar[{\@glspl@{#1}{\gls@thislabel}}{\@glspl@{#1}{\gls@thislabel}[]}{%
13254 }

\dGls
13255 \newrobustcmd*\{dGls\}{\gls@hyp@opt\@dGls}

@dGls
13256 \newcommand*\{@dGls}[2] []{%
13257   \glsxtr@get@prefixedlabel{#2}%
13258   \new@ifnextchar[{\@Gls@{#1}{\gls@thislabel}}{\@Gls@{#1}{\gls@thislabel}[]}{%
13259 }

\dGlspl
13260 \newrobustcmd*\{dGlspl\}{\gls@hyp@opt\@dGlspl}

@dGlspl
13261 \newcommand*\{@dGlspl}[2] []{%
13262   \glsxtr@get@prefixedlabel{#2}%
13263   \new@ifnextchar[{\@Glspl@{#1}{\gls@thislabel}}{\@Glspl@{#1}{\gls@thislabel}[]}{%
13264 }

\dGLS
13265 \newrobustcmd*\{dGLS\}{\gls@hyp@opt\@dGLS}

@dGLS
13266 \newcommand*\{@dGLS}[2] []{%
13267   \glsxtr@get@prefixedlabel{#2}%
13268   \new@ifnextchar[{\@GLS@{#1}{\gls@thislabel}}{\@GLS@{#1}{\gls@thislabel}[]}{%
13269 }

\dGLSpl
13270 \newrobustcmd*\{dGLSpl\}{\gls@hyp@opt\@dGLSpl}

@dGLSpl
13271 \newcommand*\{@dGLSpl}[2] []{%
13272   \glsxtr@get@prefixedlabel{#2}%
13273   \new@ifnextchar[{\@GLSpl@{#1}{\gls@thislabel}}{\@GLSpl@{#1}{\gls@thislabel}[]}{%
13274 }

```

```
\dglsslink Like \glslink but tries the prefixes.
13275 \newrobustcmd*\{\dglsslink\}[3][]{%
13276   \glsxtr@get@prefixedlabel{#2}%
13277   \glslink[#1]{\gls@thislabel}{#3}%
13278 }
```

\dglssdisp Like \glsdisp but tries the prefixes.

```
13279 \newrobustcmd*\{\dglssdisp\}[3][]{%
13280   \glsxtr@get@prefixedlabel{#2}%
13281   \glsdisp[#1]{\gls@thislabel}{#3}%
13282 }
```

Provide missing Greek letters for use in maths mode. These commands are recognised by bib2gls and will be mapped to the Mathematical Greek Italic letters. This ensures that the Greek letters that have the same shape as Latin letters are kept with the other mathematical Greek letters for sorting purposes. The L<sup>A</sup>T<sub>E</sub>X version of these commands (provided here) use an upright font for capitals and italic for lower case to provide a better match with the other Greek symbols provided by the kernel.

\Alpha

```
13283 \providecommand*\{\Alpha\}{\mathrm{A}}
```

\Beta

```
13284 \providecommand*\{\Beta\}{\mathrm{B}}
```

\Epsilon

```
13285 \providecommand*\{\Epsilon\}{\mathrm{E}}
```

\Zeta

```
13286 \providecommand*\{\Zeta\}{\mathrm{Z}}
```

\Eta

```
13287 \providecommand*\{\Eta\}{\mathrm{H}}
```

\Iota

```
13288 \providecommand*\{\Iota\}{\mathrm{I}}
```

\Kappa

```
13289 \providecommand*\{\Kappa\}{\mathrm{K}}
```

\Mu

```
13290 \providecommand*\{\Mu\}{\mathrm{M}}
```

\Nu

```
13291 \providecommand*\{\Nu\}{\mathrm{N}}
```

```

\Omicron
13292 \providecommand*\Omicron{\mathrm{O}}
```

```

\Rho
13293 \providecommand*\Rho{\mathrm{P}}
```

```

\Tau
13294 \providecommand*\Tau{\mathrm{T}}
```

```

\Chi
13295 \providecommand*\Chi{\mathrm{X}}
```

```

\Digamma
13296 \providecommand*\Digamma{\mathrm{F}}
```

```

\omicron
13297 \providecommand*\omicron{\mathit{o}}
```

Provide corresponding upright characters if upgreek has been loaded. (The upper case characters are the same as above.)

```

13298 @ifpackageloaded{upgreek}%
13299 {
```

```

\Upsilon
13300 \providecommand*\Upsilon{\mathrm{A}}
```

```

\Upbeta
13301 \providecommand*\Upbeta{\mathrm{B}}
```

```

\Upsilon
13302 \providecommand*\Upsilon{\mathrm{E}}
```

```

\Upzeta
13303 \providecommand*\Upzeta{\mathrm{Z}}
```

```

\Upeta
13304 \providecommand*\Upeta{\mathrm{H}}
```

```

\Upiota
13305 \providecommand*\Upiota{\mathrm{I}}
```

```

\Upkappa
13306 \providecommand*\Upkappa{\mathrm{K}}
```

```

\Upmu
13307 \providecommand*\Upmu{\mathrm{M}}
```

```

\Upnu
13308 \providecommand*\Upnu{\mathrm{N}}
\Upomicron
13309 \providecommand*\Upomicron{\mathrm{O}}
\Uprho
13310 \providecommand*\Uprho{\mathrm{P}}
\Uptau
13311 \providecommand*\Uptau{\mathrm{T}}
\Upchi
13312 \providecommand*\Upchi{\mathrm{X}}
\upomicron
13313 \providecommand*\upomicron{\mathrm{o}}
13314 }%
13315 {}% upgreek.sty not loaded

```

This package provides some basic rules, but it's not intended for complete coverage of all locales. The CLDR should provide the appropriate locale-sensitive rules. These macros are primarily to help construct custom rules to include, for example, Greek maths symbols mixed with Latin. For the full rule syntax, see the Java API for [RuleBaseCollator](#)

If you want to provide a rule-block for a particular locale to allow for customization within that locale, create a file called `glossariesxtr-<tag>.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 or ISO code. The file will then be automatically loaded by `glossaries-extra` if the document has support for that language.

When combining these blocks of rules, remember to separate them with the appropriate character. For example:

```

sort-rule={\glsxtrcontrolrules
;\glsxtrspacerules
;\glsxtrnonprintablerules
;\glsxtrcombiningdiacriticrules
,\glsxtrhyphenrules
<\glsxtrgeneralpuncrules
<\glsxtrdigitrules
<\glsxtrfractionrules
<\glsxtrGeneralLatinIVrules
<\glsxtrMathItalicGreekIRules
}

```

xtrcontrolrules These are control characters that are usually placed at the start of a rule in the ‘ignored characters’ section. These control characters are unlikely to appear in any entry fields but are provided for completeness. \string is used for punctuation characters in case they’ve been made active.

```
13316 \newcommand*{\glsxtrcontrolrules}{%
13317 \string'\glshex 200B\string'\string=\glshex 200C\string=\glshex 200D
13318 \string=\glshex 200E\string=\glshex 200F\string=\glshex 0000\string=\glshex 0001
13319 \string=\glshex 0002\string=\glshex 0003\string=\glshex 0004\string=\glshex 0005
13320 \string=\glshex 0006\string=\glshex 0007\string=\glshex 0008
13321 \string=\string'\glshex 0009\string'\string=\string'\glshex 000B\string',
13322 \string=\glshex 000E\string=\glshex 000F\string=\string'\glshex
13323 0010\string'\string=\glshex 0011
13324 \string=\glshex 0012\string=\glshex 0013\string=\glshex 0014\string=\glshex 0015
13325 \string=\glshex 0016\string=\glshex 0017\string=\glshex 0018\string=\glshex 0019
13326 \string=\glshex 001A\string=\glshex 001B\string=\glshex 001C\string=\glshex 001D
13327 \string=\glshex 001E\string=\glshex 001F\string=\glshex 007F\string=\glshex 0080
13328 \string=\glshex 0081\string=\glshex 0082\string=\glshex 0083\string=\glshex 0084
13329 \string=\glshex 0085\string=\glshex 0086\string=\glshex 0087\string=\glshex 0088
13330 \string=\glshex 0089\string=\glshex 008A\string=\glshex 008B\string=\glshex 008C
13331 \string=\glshex 008D\string=\glshex 008E\string=\glshex 008F\string=\glshex 0090
13332 \string=\glshex 0091\string=\glshex 0092\string=\glshex 0093\string=\glshex 0094
13333 \string=\glshex 0095\string=\glshex 0096\string=\glshex 0097\string=\glshex 0098
13334 \string=\glshex 0099\string=\glshex 009A\string=\glshex 009B\string=\glshex 009C
13335 \string=\glshex 009D\string=\glshex 009E\string=\glshex 009F
13336 }
```

lsxtrspacerules These are space characters.

```
13337 \newcommand*{\glsxtrspacerules}{%
13338 \string' \string'\string;
13339 \string'\glshex 00A0\string'\string;
13340 \string'\glshex 2000\string'\string;
13341 \string'\glshex 2001\string'\string;
13342 \string'\glshex 2002\string'\string;
13343 \string'\glshex 2003\string'\string;
13344 \string'\glshex 2004\string'\string;
13345 \string'\glshex 2005\string'\string;
13346 \string'\glshex 2006\string'\string;
13347 \string'\glshex 2007\string'\string;
13348 \string'\glshex 2008\string'\string;
13349 \string'\glshex 2009\string'\string;
13350 \string'\glshex 200A\string'\string;
13351 \string'\glshex 3000\string'
13352 }
```

nprintablerules These are non-printable characters (BOM, tabs, line feed and carriage return).

```
13353 \newcommand*{\glsxtrnonprintablerules}{%
13354 \string'\glshex FFFF\string'\string;
13355 \string'\glshex 000A\string'\string;
13356 \string'\glshex 0009\string'\string;
```

```
13357 \string'\glshex 000C\string'\string;
13358 \string'\glshex 000B\string'
13359 }
```

gdiacriticrules Combining diacritic marks. This is split into multiple macros.

```
13360 \newcommand*\glsxtrcombiningdiacriticrules}{%
13361 \glsxtrcombiningdiacriticIrules\string;
13362 \glsxtrcombiningdiacriticIIrules\string;
13363 \glsxtrcombiningdiacriticIIIrules\string;
13364 \glsxtrcombiningdiacriticIVrules
13365 }
```

diacriticIrules First set of combining diacritic marks.

```
13366 \newcommand*\glsxtrcombiningdiacriticIrules}{%
13367 \glshex 0301\string;% combining acute
13368 \glshex 0300\string;% combining grave
13369 \glshex 0306\string;% combining breve
13370 \glshex 0302\string;% combining circumflex
13371 \glshex 030C\string;% combining caron
13372 \glshex 030A\string;% combining ring
13373 \glshex 030D\string;% combining vertical line above
13374 \glshex 0308\string;% combining diaeresis
13375 \glshex 030B\string;% combining double acute
13376 \glshex 0303\string;% combining tilde
13377 \glshex 0307\string;% combining dot above
13378 \glshex 0304% combining macron
13379 }
```

diacriticIIrules Second set of combining diacritic marks.

```
13380 \newcommand*\glsxtrcombiningdiacriticIIrules}{%
13381 \glshex 0337\string;% combining short solidus overlay
13382 \glshex 0327\string;% combining cedilla
13383 \glshex 0328\string;% combining ogonek
13384 \glshex 0323\string;% combining dot below
13385 \glshex 0332\string;% combining low line
13386 \glshex 0305\string;% combining overline
13387 \glshex 0309\string;% combining hook above
13388 \glshex 030E\string;% combining double vertical line above
13389 \glshex 030F\string;% combining double grave accent
13390 \glshex 0310\string;% combining candrabindu
13391 \glshex 0311\string;% combining inverted breve
13392 \glshex 0312\string;% combining turned comma above
13393 \glshex 0313\string;% combining comma above
13394 \glshex 0314\string;% combining reversed comma above
13395 \glshex 0315\string;% combining comma above right
13396 \glshex 0316\string;% combining grave accent below
13397 \glshex 0317% combining acute accent below
13398 }
```

acriticIIIrules Third set of combining diacritic marks.

```
13399 \newcommand{\glsxtrcombiningdiacriticIIIrules}{%
13400 \glshex{0318}{string};% combining left tack below
13401 \glshex{0319}{string};% combining right tack below
13402 \glshex{031A}{string};% combining left angle above
13403 \glshex{031B}{string};% combining horn
13404 \glshex{031C}{string};% combining left half ring below
13405 \glshex{031D}{string};% combining up tack below
13406 \glshex{031E}{string};% combining down tack below
13407 \glshex{031F}{string};% combining plus sign below
13408 \glshex{0320}{string};% combining minus sign below
13409 \glshex{0321}{string};% combining palatalized hook below
13410 \glshex{0322}{string};% combining retroflex hook below
13411 \glshex{0324}{string};% combining diaresis below
13412 \glshex{0325}{string};% combining ring below
13413 \glshex{0326}{string};% combining comma below
13414 \glshex{0329}{string};% combining vertical line below
13415 \glshex{032A}{string};% combining bridge below
13416 \glshex{032B}{string};% combining inverted double arch below
13417 \glshex{032C}{string};% combining caron below
13418 \glshex{032D}{string};% combining circumflex accent below
13419 \glshex{032E}{string};% combining breve below
13420 \glshex{032F}{string};% combining inverted breve below
13421 \glshex{0330}{string};% combining tilde below
13422 \glshex{0331}{string};% combining macron below
13423 \glshex{0333}{string};% combining double low line
13424 \glshex{0334}{string};% combining tilde overlay
13425 \glshex{0335}{string};% combining short stroke overlay
13426 \glshex{0336}{string};% combining long stroke overlay
13427 \glshex{0338}{string};% combining long solidus overlay
13428 \glshex{0339}{string};% combining combining right half ring below
13429 \glshex{033A}{string};% combining inverted bridge below
13430 \glshex{033B}{string};% combining square below
13431 \glshex{033C}{string};% combining seagull below
13432 \glshex{033D}{string};% combining x above
13433 \glshex{033E}{string};% combining vertical tilde
13434 \glshex{033F}{string};% combining double overline
13435 \glshex{0342}{string};% combining Greek perispomeni
13436 \glshex{0344}{string};% combining Greek dialytika tonos
13437 \glshex{0345}{string};% combining Greek ypogegrammeni
13438 \glshex{0360}{string};% combining double tilde
13439 \glshex{0361}{string};% combining double inverted breve
13440 \glshex{0483}{string};% combining Cyrillic titlo
13441 \glshex{0484}{string};% combining Cyrillic palatalization
13442 \glshex{0485}{string};% combining Cyrillic dasia pneumata
13443 \glshex{0486}{string};% combining Cyrillic psili pneumata
13444 }
```

iacriticIVrules Fourth set of combining diacritic marks.

```

13445 \newcommand*{\glsxtrcombiningdiacriticIVrules}{%
13446  \glshex 20D0\string;% combining left harpoon above
13447  \glshex 20D1\string;% combining right harpoon above
13448  \glshex 20D2\string;% combining long vertical line overlay
13449  \glshex 20D3\string;% combining short vertical line overlay
13450  \glshex 20D4\string;% combining anticlockwise arrow above
13451  \glshex 20D5\string;% combining clockwise arrow above
13452  \glshex 20D6\string;% combining left arrow above
13453  \glshex 20D7\string;% combining right arrow above
13454  \glshex 20D8\string;% combining ring overlay
13455  \glshex 20D9\string;% combining clockwise ring overlay
13456  \glshex 20DA\string;% combining anticlockwise ring overlay
13457  \glshex 20DB\string;% combining three dots above
13458  \glshex 20DC\string;% combining four dots above
13459  \glshex 20DD\string;% combining enclosing circle
13460  \glshex 20DE\string;% combining enclosing square
13461  \glshex 20DF\string;% combining enclosing diamond
13462  \glshex 20E0\string;% combining enclosing circle backslash
13463  \glshex 20E1% combining left right arrow above
13464 }

```

#### sxtrhyphenrules Hyphens.

```

13465 \newcommand*{\glsxtrhyphenrules}{%
13466  \string'\string-\string'\string%; ASCII hyphen
13467  \glshex 00AD\string;% soft hyphen
13468  \glshex 2010\string;% hyphen
13469  \glshex 2011\string;% non-breaking hyphen
13470  \glshex 2012\string;% figure dash
13471  \glshex 2013\string;% en dash
13472  \glshex 2014\string;% em dash
13473  \glshex 2015\string;% horizontal bar
13474  \glshex 2212\string=\glshex 207B\string=\glshex 208B% minus sign
13475 }

```

#### eneralpuncrules General punctuation.

```

13476 \newcommand*{\glsxtrgeneralpuncrules}{%
13477  \glsxtrgeneralpuncIrules
13478  \string<\glsxtrcurrencyrules
13479  \string<\glsxtrgeneralpuncIIrules
13480 }

```

#### eralpuncIrules First set of general punctuation.

```

13481 \newcommand*{\glsxtrgeneralpuncIrules}{%
13482  \string'\glshex 005F\string'% underscore
13483  \string<\glshex 00AF% macron
13484  \string<\string'\glshex 002C\string'% comma
13485  \string<\string'\glshex 003B\string'% semi-colon
13486  \string<\string'\glshex 003A\string'% colon
13487  \string<\string'\glshex 0021\string'% exclamation mark

```

```

13488 \string<\glshex 00A1% inverted exclamation mark
13489 \string<\string'\glshex 003F\string'% question mark
13490 \string<\glshex 00BF% inverted question mark
13491 \string<\string'\glshex 002F\string'% solidus
13492 \string<\string'\glshex 002E\string'% full stop
13493 \string<\glshex 00B4% acute accent
13494 \string<\string'\glshex 0060\string'% grave accent
13495 \string<\string'\glshex 005E\string'% circumflex accent
13496 \string<\glshex 00A8% diaersis
13497 \string<\string'\glshex 007E\string'% tilde
13498 \string<\glshex 00B7% middle dot
13499 \string<\glshex 00B8% cedilla
13500 \string<\string'\glshex 0027\string'% straight apostrophe
13501 \string<\string'\glshex 0022\string'% straight double quote
13502 \string<\glshex 00AB% left guillemet
13503 \string<\glshex 00BB% right guillemet
13504 \string<\string'\glshex 0028\string'% left parenthesis
13505 \string=\glshex 207D\string=\glshex 208D% super/subscript left parenthesis
13506 \string<\string'\glshex 0029\string'% right parenthesis
13507 \string=\glshex 207E\string=\glshex 208E% super/subscript right parenthesis
13508 \string<\string'\glshex 005B\string'% left square bracket
13509 \string<\string'\glshex 005D\string'% right square bracket
13510 \string<\string'\glshex 007B\string'% left curly bracket
13511 \string<\string'\glshex 007D\string'% right curly bracket
13512 \string<\glshex 00A7% section sign
13513 \string<\glshex 00B6% pilcrow sign
13514 \string<\glshex 00A9% copyright sign
13515 \string<\glshex 00AE% registered sign
13516 \string<\string'\glshex 0040\string'% at sign
13517 }

```

#### trcurrencyrules General punctuation.

```

13518 \newcommand*\{ \glsxtrcurrencyrules}{%
13519 \glshex 00A4% currency sign
13520 \string<\glshex 0E3F% Thai currency symbol baht
13521 \string<\glshex 00A2% cent sign
13522 \string<\glshex 20A1% colon sign
13523 \string<\glshex 20A2% cruzeiro sign
13524 \string<\string'\glshex 0024\string'% dollar sign
13525 \string<\glshex 20AB% dong sign
13526 \string<\glshex 20AC% euro sign
13527 \string<\glshex 20A3% French franc sign
13528 \string<\glshex 20A4% lira sign
13529 \string<\glshex 20A5% mill sign
13530 \string<\glshex 20A6% naira sign
13531 \string<\glshex 20A7% peseta sign
13532 \string<\glshex 00A3% pound sign
13533 \string<\glshex 20A8% rupee sign
13534 \string<\glshex 20AA% new sheqel sign

```

```
13535 \string<\glshex 20A9% won sign
13536 \string<\glshex 00A5% yen sign
13537 }
```

eralpuncIIrules Second set of general punctuation.

```
13538 \newcommand*{\glsxtrgeneralpuncIIrules}{%
13539 \string'\glshex 002A\string'% asterisk
13540 \string<\string'\glshex 005C\string'% backslash
13541 \string<\string'\glshex 0026\string'% ampersand
13542 \string<\string'\glshex 0023\string'% hash sign
13543 \string<\string'\glshex 0025\string'% percent sign
13544 \string<\string'\glshex 002B\string'% plus sign
13545 \string=\glshex 207A\string=\glshex 208A% super/subscript plus sign
13546 \string<\glshex 00B1% plus-minus sign
13547 \string<\glshex 00F7% division sign
13548 \string<\glshex 00D7% multiplication sign
13549 \string<\string'\glshex 003C\string'% less-than sign
13550 \string<\string'\glshex 003D\string'% equals sign
13551 \string<\string'\glshex 003E\string'% greater-than sign
13552 \string<\glshex 00AC% not sign
13553 \string<\string'\glshex 007C\string'% vertical bar (pipe)
13554 \string<\glshex 00A6% broken bar
13555 \string<\glshex 00B0% degree sign
13556 \string<\glshex 00B5% micron sign
13557 }
```

eralLatinIrules Basic Latin alphabet.

```
13558 \newcommand*{\glsxtrGeneralLatinIrules}{%
13559 \glsxtrLatinA
13560 \string< b,B%
13561 \string< c,C%
13562 \string< d,D%
13563 \string<\glsxtrLatinE
13564 \string< f,F%
13565 \string< g,G%
13566 \string<\glsxtrLatinH
13567 \string<\glsxtrLatinI
13568 \string< j,J%
13569 \string<\glsxtrLatinK
13570 \string<\glsxtrLatinL
13571 \string<\glsxtrLatinM
13572 \string<\glsxtrLatinN
13573 \string<\glsxtrLatinO
13574 \string<\glsxtrLatinP
13575 \string< q,Q%
13576 \string< r,R%
13577 \string<\glsxtrLatinS
13578 \string<\glsxtrLatinT
13579 \string< u,U%
```

```

13580 \string<v,V%
13581 \string<w,W%
13582 \string<\glsxtrLatinX
13583 \string<y,Y%
13584 \string<z,Z
13585 }

```

`ralLatinIIrules` General Latin alphabet (eth between D and E, ß treated as SS).

```

13586 \newcommand*{\glsxtrGeneralLatinIIrules}{%
13587 \glsxtrLatinA
13588 \string<b,B%
13589 \string<c,C%
13590 \string<d,D%
13591 \string<\glsxtrLatinEth
13592 \string<\glsxtrLatinE
13593 \string<f,F%
13594 \string<g,G%
13595 \string<\glsxtrLatinH
13596 \string<\glsxtrLatinI
13597 \string<j,J%
13598 \string<\glsxtrLatinK
13599 \string<\glsxtrLatinL
13600 \string<\glsxtrLatinM
13601 \string<\glsxtrLatinN
13602 \string<\glsxtrLatinO
13603 \string<\glsxtrLatinP
13604 \string<q,Q%
13605 \string<r,R%
13606 \string<\glsxtrLatinS
13607 \string& SS \string, \glsxtrLatinEszettSs
13608 \string<\glsxtrLatinT
13609 \string<u,U%
13610 \string<v,V%
13611 \string<w,W%
13612 \string<\glsxtrLatinX
13613 \string<y,Y%
13614 \string<z,Z%
13615 }

```

`allLatinIIIrules` General Latin alphabet (eth between D and E, ß treated as SZ).

```

13616 \newcommand*{\glsxtrGeneralLatinIIIrules}{%
13617 \glsxtrLatinA
13618 \string<b,B%
13619 \string<c,C%
13620 \string<d,D%
13621 \string<\glsxtrLatinEth
13622 \string<\glsxtrLatinE
13623 \string<f,F%
13624 \string<g,G%

```

```

13625 \string<\glsxtrLatinH
13626 \string<\glsxtrLatinI
13627 \string<j,J%
13628 \string<\glsxtrLatinK
13629 \string<\glsxtrLatinL
13630 \string<\glsxtrLatinM
13631 \string<\glsxtrLatinN
13632 \string<\glsxtrLatinO
13633 \string<\glsxtrLatinP
13634 \string<q,Q%
13635 \string<r,R%
13636 \string<\glsxtrLatinS
13637 \string& SZ, \glsxtrLatinEszettSz
13638 \string<\glsxtrLatinT
13639 \string<u,U%
13640 \string<v,V%
13641 \string<w,W%
13642 \string<\glsxtrLatinX
13643 \string<y,Y%
13644 \string<z,Z%
13645 }

```

**General Latin IV rules** General Latin alphabet (Æ treated as AE and œ treated as OE, Þ treated as TH, ß treated as SS, eth between D and E).

```

13646 \newcommand*{\glsxtrGeneralLatinIVrules}{%
13647 \glsxtrLatinA
13648 \string& AE , \glsxtrLatinAEligature
13649 \string<b,B%
13650 \string<c,C%
13651 \string<d,D%
13652 \string<\glsxtrLatinEth
13653 \string<\glsxtrLatinE
13654 \string<f,F%
13655 \string<g,G%
13656 \string<\glsxtrLatinH
13657 \string<\glsxtrLatinI
13658 \string<j,J%
13659 \string<\glsxtrLatinK
13660 \string<\glsxtrLatinL
13661 \string<\glsxtrLatinM
13662 \string<\glsxtrLatinN
13663 \string<\glsxtrLatinO
13664 \string& OE , \glsxtrLatinOEligature
13665 \string<\glsxtrLatinP
13666 \string<q,Q%
13667 \string<r,R%
13668 \string<\glsxtrLatinS
13669 \string& SS , \glsxtrLatinEszettSs
13670 \string<\glsxtrLatinT

```

```

13671 \string& th =\glshex 00DE
13672 \string& TH =\glshex 00FE
13673 \string<u,U%
13674 \string<v,V%
13675 \string<w,W%
13676 \string<\glsxtrLatinX
13677 \string<y,Y%
13678 \string<z,Z%
13679 }

```

eralLatinVrules General Latin alphabet (eth between D and E, ß treated as SS, Þ treated as TH).

```

13680 \newcommand*\glsxtrGeneralLatinVrules}{%
13681 \glsxtrLatinA
13682 \string<b,B%
13683 \string<c,C%
13684 \string<d,D%
13685 \string<\glsxtrLatinEth
13686 \string<\glsxtrLatinE
13687 \string<f,F%
13688 \string<g,G%
13689 \string<\glsxtrLatinH
13690 \string<\glsxtrLatinI
13691 \string<j,J%
13692 \string<\glsxtrLatinK
13693 \string<\glsxtrLatinL
13694 \string<\glsxtrLatinM
13695 \string<\glsxtrLatinN
13696 \string<\glsxtrLatinO
13697 \string<\glsxtrLatinP
13698 \string<q,Q%
13699 \string<r,R%
13700 \string<\glsxtrLatinS
13701 \string& SS , \glsxtrLatinEszettSs
13702 \string<\glsxtrLatinT
13703 \string& th =\glshex 00DE
13704 \string& TH =\glshex 00FE
13705 \string<u,U%
13706 \string<v,V%
13707 \string<w,W%
13708 \string<\glsxtrLatinX
13709 \string<y,Y%
13710 \string<z,Z%
13711 }

```

ralLatinVIrules General Latin alphabet (eth between D and E, ß treated as SZ, Þ treated as TH).

```

13712 \newcommand*\glsxtrGeneralLatinVIrules}{%
13713 \glsxtrLatinA
13714 \string<b,B%
13715 \string<c,C%

```

```

13716 \string<d,D%
13717 \string<\glsxtrLatinEth
13718 \string<\glsxtrLatinE
13719 \string<f,F%
13720 \string<g,G%
13721 \string<\glsxtrLatinH
13722 \string<\glsxtrLatinI
13723 \string<j,J%
13724 \string<\glsxtrLatinK
13725 \string<\glsxtrLatinL
13726 \string<\glsxtrLatinM
13727 \string<\glsxtrLatinN
13728 \string<\glsxtrLatinO
13729 \string<\glsxtrLatinP
13730 \string<q,Q%
13731 \string<r,R%
13732 \string<\glsxtrLatinS
13733 \string& SZ , \glsxtrLatinEszettSz
13734 \string<\glsxtrLatinT
13735 \string& th =\glshex 0ODE
13736 \string& TH =\glshex 0OFE
13737 \string<u,U%
13738 \string<v,V%
13739 \string<w,W%
13740 \string<\glsxtrLatinX
13741 \string<y,Y%
13742 \string<z,Z%
13743 }

```

`allLatinVIIrules` General Latin alphabet ( $\text{\textAE}$  between A and B, eth between D and E, insular G as G,  $\text{\textCE}$  between O and P, long S equivalent to S,  $\text{\textP}$  between T and U and wynn as W).

```

13744 \newcommand*\glsxtrGeneralLatinVIIrules}{%
13745 \glsxtrLatinA
13746 \string<\glsxtrLatinAEligature
13747 \string<b,B%
13748 \string<c,C%
13749 \string<d,D%
13750 \string<\glsxtrLatinEth
13751 \string<\glsxtrLatinE
13752 \string<f,F%
13753 \string<\glsxtrLatinInsularG
13754 \string<\glsxtrLatinH
13755 \string<\glsxtrLatinI
13756 \string<j,J%
13757 \string<\glsxtrLatinK
13758 \string<\glsxtrLatinL
13759 \string<\glsxtrLatinM
13760 \string<\glsxtrLatinN
13761 \string<\glsxtrLatinO

```

```

13762 \string<\glsxtrLatinOELigature
13763 \string<\glsxtrLatinP
13764 \string<q,Q%
13765 \string<r,R%
13766 \string<\glshex 017F=\glsxtrLatinS % s and long s
13767 \string<\glsxtrLatinT
13768 \string<\glsxtrLatinThorn
13769 \string<u,U%
13770 \string<v,V%
13771 \string< w\string=\glshex 01BF, W\string=\glshex 01F7
13772 \string<\glsxtrLatinX
13773 \string<y,Y%
13774 \string<z,Z%
13775 }

```

**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).

```

13776 \newcommand*\glsxtrGeneralLatinVIIIRules}{%
13777 \glsxtrLatinA
13778 \string& AE , \glsxtrLatinAELigature
13779 \string<b,B%
13780 \string<c,C%
13781 \string<\glshex 00F0\string;d,\glshex 00D0\string;D% D and eth
13782 \string<\glsxtrLatinE
13783 \string<f,F%
13784 \string<g,G%
13785 \string<\glsxtrLatinH
13786 \string<\glsxtrLatinI
13787 \string<j,J%
13788 \string<\glsxtrLatinK
13789 \string<\glshex 0142\string=\glsxtrLatinL\string=\glshex 0141% L and \L
13790 \string<\glsxtrLatinM
13791 \string<\glsxtrLatinN
13792 \string<\glshex 00F8\string=\glsxtrLatinO\string=\glshex 00D8% O and \O
13793 \string& OE , \glsxtrLatinOELigature
13794 \string<\glsxtrLatinP
13795 \string<q,Q%
13796 \string<r,R%
13797 \string<\glsxtrLatinS
13798 \string& SS , \glsxtrLatinEszettSs
13799 \string<\glsxtrLatinT
13800 \string& th =\glshex 00DE
13801 \string& TH =\glshex 00FE
13802 \string<u,U%
13803 \string<v,V%
13804 \string<w,W%
13805 \string<\glsxtrLatinX
13806 \string<y,Y%
13807 \string<z,Z%

```

```

13808 }

\glsxtrLatinA
13809 \newcommand*{\glsxtrLatinA}{%
13810   a\string=\glshex 00AA\string=\glshex 2090,A
13811 }

\glsxtrLatinE
13812 \newcommand*{\glsxtrLatinE}{%
13813   e\string=\glshex 2091,E
13814 }

\glsxtrLatinH
13815 \newcommand*{\glsxtrLatinH}{%
13816   h\string=\glshex 2095,H
13817 }

\glsxtrLatinI
13818 \newcommand*{\glsxtrLatinI}{%
13819   i\string=\glshex 2071,I
13820 }

\glsxtrLatinK
13821 \newcommand*{\glsxtrLatinK}{%
13822   k\string=\glshex 2096,K
13823 }

\glsxtrLatinL
13824 \newcommand*{\glsxtrLatinL}{%
13825   l\string=\glshex 2097,L
13826 }

\glsxtrLatinM
13827 \newcommand*{\glsxtrLatinM}{%
13828   m\string=\glshex 2098,M
13829 }

\glsxtrLatinN
13830 \newcommand*{\glsxtrLatinN}{%
13831   n\string=\glshex 207F\string=\glshex 2099,N
13832 }

\glsxtrLatinO
13833 \newcommand*{\glsxtrLatinO}{%
13834   o\string=\glshex 00BA\string=\glshex 2092,O
13835 }

```

```

\glsxtrLatinP
13836 \newcommand*{\glsxtrLatinP}{%
13837   p\string=\glshex{209A,P}
13838 }

\glsxtrLatinS
13839 \newcommand*{\glsxtrLatinS}{%
13840   s\string=\glshex{209B,S}
13841 }

\glsxtrLatinT
13842 \newcommand*{\glsxtrLatinT}{%
13843   t\string=\glshex{209C,T}
13844 }

\glsxtrLatinX
13845 \newcommand*{\glsxtrLatinX}{%
13846   x\string=\glshex{2093,X}
13847 }

lsxtrLatinSchwa Latin schwa (lower case, subscript and upper case).
13848 \newcommand*{\glsxtrLatinSchwa}{%
13849   \glshex{0259}\string=\glshex{2094},\glshex{018F}
13850 }

trLatinEszettSs
13851 \newcommand*{\glsxtrLatinEszettSs}{%
13852   \glshex{00DF}\% eszett
13853   \string=\glshex{017Fs} % long S s
13854 }

trLatinEszettSz
13855 \newcommand*{\glsxtrLatinEszettSz}{%
13856   \glshex{00DF}\% eszett
13857   \string=\glshex{017Fz} % long S z
13858 }

\glsxtrLatinEth
13859 \newcommand*{\glsxtrLatinEth}{%
13860   \glshex{00F0},\glshex{00D0}\% eth
13861 }

lsxtrLatinThorn
13862 \newcommand*{\glsxtrLatinThorn}{%
13863   \glshex{00FE},\glshex{00DE}\% thorn
13864 }

```

```

LatinAELigature
13865 \newcommand{\glsxtrLatinAELigature}{%
13866 \glshex{00E6},\glshex{00C6} AE-ligature
13867 }

LatinOELigature
13868 \newcommand{\glsxtrLatinOELigature}{%
13869 \glshex{0153},\glshex{0152} OE-ligature
13870 }

\glsxtrLatinAA
13871 \newcommand{\glsxtrLatinAA}{%
13872 \glshex{00E5}=a\glshex{030A},% \aa
13873 \glshex{00C5}=A\glshex{030A}% \AA
13874 }

glsxtrLatinWynn
13875 \newcommand{\glsxtrLatinWynn}{%
13876 \glshex{01BF},\glshex{01F7} wynn
13877 }

trLatinInsularG
13878 \newcommand{\glsxtrLatinInsularG}{%
13879 \glshex{1D79},\glshex{A77D} insular G
13880 \string; g, G
13881 }

sxtrLatinOslash
13882 \newcommand{\glsxtrLatinOslash}{%
13883 \glshex{00F8},\glshex{00D8} \o, \O
13884 }

sxtrLatinLslash
13885 \newcommand{\glsxtrLatinLslash}{%
13886 \glshex{0142},\glshex{0141} \l, \L
13887 }

thUpGreekIrules Includes digamma between epsilon and zeta.
13888 \newcommand{\glsxtrMathUpGreekIrules}{%
13889 \glsxtrUpAlpha
13890 \string<\glsxtrUpBeta
13891 \string<\glsxtrUpGamma
13892 \string<\glsxtrUpDelta
13893 \string<\glsxtrUpEpsilon
13894 \string<\glsxtrUpDigamma
13895 \string<\glsxtrUpZeta
13896 \string<\glsxtrUpEta
13897 \string<\glsxtrUpTheta

```

```

13898 \string<\glsxtrUpIota
13899 \string<\glsxtrUpKappa
13900 \string<\glsxtrUpLambda
13901 \string<\glsxtrUpMu
13902 \string<\glsxtrUpNu
13903 \string<\glsxtrUpXi
13904 \string<\glsxtrUpOmicron
13905 \string<\glsxtrUpPi
13906 \string<\glsxtrUpRho
13907 \string<\glsxtrUpSigma
13908 \string<\glsxtrUpTau
13909 \string<\glsxtrUpUpsilon
13910 \string<\glsxtrUpPhi
13911 \string<\glsxtrUpChi
13912 \string<\glsxtrUpPsi
13913 \string<\glsxtrUpOmega
13914 }

```

`hUpGreekIIrules` Doesn't include digamma.

```

13915 \newcommand*{\glsxtrMathUpGreekIIrules}{%
13916 \glsxtrUpAlpha
13917 \string<\glsxtrUpBeta
13918 \string<\glsxtrUpGamma
13919 \string<\glsxtrUpDelta
13920 \string<\glsxtrUpEpsilon
13921 \string<\glsxtrUpZeta
13922 \string<\glsxtrUpEta
13923 \string<\glsxtrUpTheta
13924 \string<\glsxtrUpIota
13925 \string<\glsxtrUpKappa
13926 \string<\glsxtrUpLambda
13927 \string<\glsxtrUpMu
13928 \string<\glsxtrUpNu
13929 \string<\glsxtrUpXi
13930 \string<\glsxtrUpOmicron
13931 \string<\glsxtrUpPi
13932 \string<\glsxtrUpRho
13933 \string<\glsxtrUpSigma
13934 \string<\glsxtrUpTau
13935 \string<\glsxtrUpUpsilon
13936 \string<\glsxtrUpPhi
13937 \string<\glsxtrUpChi
13938 \string<\glsxtrUpPsi
13939 \string<\glsxtrUpOmega
13940 }

```

`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.

```
13941 \newcommand*{\glsxtrMathItalicGreekIrules}{%
```

```

13942 \glsxtrMathItalicAlpha
13943 \string<\glsxtrMathItalicBeta
13944 \string<\glsxtrMathItalicGamma
13945 \string<\glsxtrMathItalicDelta
13946 \string<\glsxtrMathItalicEpsilon
13947 \string<\glsxtrUpDigamma
13948 \string<\glsxtrMathItalicZeta
13949 \string<\glsxtrMathItalicEta
13950 \string<\glsxtrMathItalicTheta
13951 \string<\glsxtrMathItalicIota
13952 \string<\glsxtrMathItalicKappa
13953 \string<\glsxtrMathItalicLambda
13954 \string<\glsxtrMathItalicMu
13955 \string<\glsxtrMathItalicNu
13956 \string<\glsxtrMathItalicXi
13957 \string<\glsxtrMathItalicOmicron
13958 \string<\glsxtrMathItalicPi
13959 \string<\glsxtrMathItalicRho
13960 \string<\glsxtrMathItalicSigma
13961 \string<\glsxtrMathItalicTau
13962 \string<\glsxtrMathItalicUpsilon
13963 \string<\glsxtrMathItalicPhi
13964 \string<\glsxtrMathItalicChi
13965 \string<\glsxtrMathItalicPsi
13966 \string<\glsxtrMathItalicOmega
13967 }

```

licGreekIIrules Doesn't include digamma.

```

13968 \newcommand*\glsxtrMathItalicGreekIIrules}{%
13969 \glsxtrMathItalicAlpha
13970 \string<\glsxtrMathItalicBeta
13971 \string<\glsxtrMathItalicGamma
13972 \string<\glsxtrMathItalicDelta
13973 \string<\glsxtrMathItalicEpsilon
13974 \string<\glsxtrMathItalicZeta
13975 \string<\glsxtrMathItalicEta
13976 \string<\glsxtrMathItalicTheta
13977 \string<\glsxtrMathItalicIota
13978 \string<\glsxtrMathItalicKappa
13979 \string<\glsxtrMathItalicLambda
13980 \string<\glsxtrMathItalicMu
13981 \string<\glsxtrMathItalicNu
13982 \string<\glsxtrMathItalicXi
13983 \string<\glsxtrMathItalicOmicron
13984 \string<\glsxtrMathItalicPi
13985 \string<\glsxtrMathItalicRho
13986 \string<\glsxtrMathItalicSigma
13987 \string<\glsxtrMathItalicTau
13988 \string<\glsxtrMathItalicUpsilon

```

```

13989 \string<\glsxtrMathItalicPhi
13990 \string<\glsxtrMathItalicChi
13991 \string<\glsxtrMathItalicPsi
13992 \string<\glsxtrMathItalicOmega
13993 }

```

`upperGreekIrules` Upper case only (includes upright digamma).

```

13994 \newcommand*{\glsxtrMathItalicUpperGreekIrules}{%
13995 \glshex 1D6E2% upper case alpha (maths italic)
13996 \string<\glshex 1D6E3% upper case beta (maths italic)
13997 \string<\glshex 1D6E4% upper case gamma (maths italic)
13998 \string<\glshex 1D6E5% upper case delta (maths italic)
13999 \string<\glshex 1D6E6% upper case epsilon (maths italic)
14000 \string<\glshex 03DC% upper case digamma
14001 \string<\glshex 1D6E7% upper case zeta (maths italic)
14002 \string<\glshex 1D6E8% upper case eta (maths italic)
14003 \string<\glshex 1D6E9% upper case theta (maths italic)
14004 \string=\glshex 1D6F3% upper case theta variant (maths italic)
14005 \string<\glshex 1D6EA% upper case iota (maths italic)
14006 \string<\glshex 1D6EB% upper case kappa (maths italic)
14007 \string<\glshex 1D6EC% upper case lambda (maths italic)
14008 \string<\glshex 1D6ED% upper case mu (maths italic)
14009 \string<\glshex 1D6EE% upper case nu (maths italic)
14010 \string<\glshex 1D6EF% upper case xi (maths italic)
14011 \string<\glshex 1D6F0% upper case omicron (maths italic)
14012 \string<\glshex 1D6F1% upper case pi (maths italic)
14013 \string<\glshex 1D6F2% upper case rho (maths italic)
14014 \string<\glshex 1D6F4% upper case sigma (maths italic)
14015 \string<\glshex 1D6F5% upper case tau (maths italic)
14016 \string<\glshex 1D6F6% upper case upsilon (maths italic)
14017 \string<\glshex 1D6F7% upper case phi (maths italic)
14018 \string<\glshex 1D6F8% upper case chi (maths italic)
14019 \string<\glshex 1D6F9% upper case psi (maths italic)
14020 \string<\glshex 1D6FA% upper case omega (maths italic)
14021 }

```

`perGreekIIrules` Upper case only (doesn't include upright digamma).

```

14022 \newcommand*{\glsxtrMathItalicUpperGreekIIrules}{%
14023 \glshex 1D6E2% upper case alpha (maths italic)
14024 \string<\glshex 1D6E3% upper case beta (maths italic)
14025 \string<\glshex 1D6E4% upper case gamma (maths italic)
14026 \string<\glshex 1D6E5% upper case delta (maths italic)
14027 \string<\glshex 1D6E6% upper case epsilon (maths italic)
14028 \string<\glshex 1D6E7% upper case zeta (maths italic)
14029 \string<\glshex 1D6E8% upper case eta (maths italic)
14030 \string<\glshex 1D6E9% upper case theta (maths italic)
14031 \string=\glshex 1D6F3% upper case theta variant (maths italic)
14032 \string<\glshex 1D6EA% upper case iota (maths italic)
14033 \string<\glshex 1D6EB% upper case kappa (maths italic)

```

```

14034 \string<\glshex 1D6EC% upper case lambda (maths italic)
14035 \string<\glshex 1D6ED% upper case mu (maths italic)
14036 \string<\glshex 1D6EE% upper case nu (maths italic)
14037 \string<\glshex 1D6EF% upper case xi (maths italic)
14038 \string<\glshex 1D6F0% upper case omicron (maths italic)
14039 \string<\glshex 1D6F1% upper case pi (maths italic)
14040 \string<\glshex 1D6F2% upper case rho (maths italic)
14041 \string<\glshex 1D6F4% upper case sigma (maths italic)
14042 \string<\glshex 1D6F5% upper case tau (maths italic)
14043 \string<\glshex 1D6F6% upper case upsilon (maths italic)
14044 \string<\glshex 1D6F7% upper case phi (maths italic)
14045 \string<\glshex 1D6F8% upper case chi (maths italic)
14046 \string<\glshex 1D6F9% upper case psi (maths italic)
14047 \string<\glshex 1D6FA% upper case omega (maths italic)
14048 }

```

`lowerGreekIrules` Lower case only (includes upright digamma).

```

14049 \newcommand*\{ \glsxtrMathItalicLowerGreekIrules\}{%
14050 \glshex 1D6FC% lower case alpha (maths italic)
14051 \string<\glshex 1D6FD% lower case beta (maths italic)
14052 \string<\glshex 1D6FE% lower case gamma (maths italic)
14053 \string<\glshex 1D6FF% lower case delta (maths italic)
14054 \string<\glshex 1D700% lower case epsilon (maths italic)
14055 \string=\glshex 1D716% lower case epsilon variant (maths italic)
14056 \string<\glshex 03DD% lower case digamma
14057 \string<\glshex 1D701% lower case zeta (maths italic)
14058 \string<\glshex 1D702% lower case eta (maths italic)
14059 \string<\glshex 1D703% lower case theta (maths italic)
14060 \string=\glshex 1D717% lower case theta variant (maths italic)
14061 \string<\glshex 1D704% lower case iota (maths italic)
14062 \string<\glshex 1D705% lower case kappa (maths italic)
14063 \string=\glshex 1D718% lower case kappa variant (maths italic)
14064 \string<\glshex 1D706% lower case lambda (maths italic)
14065 \string<\glshex 1D707% lower case mu (maths italic)
14066 \string<\glshex 1D708% lower case nu (maths italic)
14067 \string<\glshex 1D709% lower case xi (maths italic)
14068 \string<\glshex 1D70A% lower case omicron (maths italic)
14069 \string<\glshex 1D70B% lower case pi (maths italic)
14070 \string=\glshex 1D71B% lower case pi variant (maths italic)
14071 \string<\glshex 1D70C% lower case rho (maths italic)
14072 \string=\glshex 1D71A% lower case rho variant (maths italic)
14073 \string<\glshex 1D70D% lower case final sigma (maths italic)
14074 \string=\glshex 1D70E% lower case sigma (maths italic)
14075 \string<\glshex 1D70F% lower case tau (maths italic)
14076 \string<\glshex 1D710% lower case upsilon (maths italic)
14077 \string<\glshex 1D711% lower case phi (maths italic)
14078 \string=\glshex 1D719% lower case phi variant (maths italic)
14079 \string<\glshex 1D712% lower case chi (maths italic)
14080 \string<\glshex 1D713% lower case psi (maths italic)

```

```
14081 \string<\glshex 1D714% lower case omega (maths italic)
14082 }
```

werGreekIIrules Lower case only (doesn't includes upright digamma).

```
14083 \newcommand*\glsxtrMathItalicLowerGreekIIrules}{%
14084 \glshex 1D6FC% lower case alpha (maths italic)
14085 \string<\glshex 1D6FD% lower case beta (maths italic)
14086 \string<\glshex 1D6FE% lower case gamma (maths italic)
14087 \string<\glshex 1D6FF% lower case delta (maths italic)
14088 \string<\glshex 1D700% lower case epsilon (maths italic)
14089 \string=\glshex 1D716% lower case epsilon variant (maths italic)
14090 \string<\glshex 1D701% lower case zeta (maths italic)
14091 \string<\glshex 1D702% lower case eta (maths italic)
14092 \string<\glshex 1D703% lower case theta (maths italic)
14093 \string=\glshex 1D717% lower case theta variant (maths italic)
14094 \string<\glshex 1D704% lower case iota (maths italic)
14095 \string<\glshex 1D705% lower case kappa (maths italic)
14096 \string=\glshex 1D718% lower case kappa variant (maths italic)
14097 \string<\glshex 1D706% lower case lambda (maths italic)
14098 \string<\glshex 1D707% lower case mu (maths italic)
14099 \string<\glshex 1D708% lower case nu (maths italic)
14100 \string<\glshex 1D709% lower case xi (maths italic)
14101 \string<\glshex 1D70A% lower case omicron (maths italic)
14102 \string<\glshex 1D70B% lower case pi (maths italic)
14103 \string=\glshex 1D71B% lower case pi variant (maths italic)
14104 \string<\glshex 1D70C% lower case rho (maths italic)
14105 \string=\glshex 1D71A% lower case rho variant (maths italic)
14106 \string<\glshex 1D70D% lower case final sigma (maths italic)
14107 \string=\glshex 1D70E% lower case sigma (maths italic)
14108 \string<\glshex 1D70F% lower case tau (maths italic)
14109 \string<\glshex 1D710% lower case upsilon (maths italic)
14110 \string<\glshex 1D711% lower case phi (maths italic)
14111 \string=\glshex 1D719% lower case phi variant (maths italic)
14112 \string<\glshex 1D712% lower case chi (maths italic)
14113 \string<\glshex 1D713% lower case psi (maths italic)
14114 \string<\glshex 1D714% lower case omega (maths italic)
14115 }
```

MathGreekIrules Includes both upright and italic with digamma between epsilon and zeta.

```
14116 \newcommand*\glsxtrMathGreekIrules}{%
14117 \glsxtrMathItalicAlpha
14118 \string;\glsxtrUpAlpha
14119 \string<\glsxtrMathItalicBeta
14120 \string;\glsxtrUpBeta
14121 \string<\glsxtrMathItalicGamma
14122 \string;\glsxtrUpGamma
14123 \string<\glsxtrMathItalicDelta
14124 \string;\glsxtrUpDelta
14125 \string<\glsxtrMathItalicEpsilon
```

```

14126 \string;\glsxtrUpEpsilon
14127 \string<\glsxtrUpDigamma
14128 \string<\glsxtrMathItalicZeta
14129 \string;\glsxtrUpZeta
14130 \string<\glsxtrMathItalicEta
14131 \string;\glsxtrUpEta
14132 \string<\glsxtrMathItalicTheta
14133 \string;\glsxtrUpTheta
14134 \string<\glsxtrMathItalicIota
14135 \string;\glsxtrUpIota
14136 \string<\glsxtrMathItalicKappa
14137 \string;\glsxtrUpKappa
14138 \string<\glsxtrMathItalicLambda
14139 \string;\glsxtrUpLambda
14140 \string<\glsxtrMathItalicMu
14141 \string;\glsxtrUpMu
14142 \string<\glsxtrMathItalicNu
14143 \string;\glsxtrUpNu
14144 \string<\glsxtrMathItalicXi
14145 \string;\glsxtrUpXi
14146 \string<\glsxtrMathItalicOmicron
14147 \string;\glsxtrUpOmicron
14148 \string<\glsxtrMathItalicPi
14149 \string;\glsxtrUpPi
14150 \string<\glsxtrMathItalicRho
14151 \string;\glsxtrUpRho
14152 \string<\glsxtrMathItalicSigma
14153 \string;\glsxtrUpSigma
14154 \string<\glsxtrMathItalicTau
14155 \string;\glsxtrUpTau
14156 \string<\glsxtrMathItalicUpsilon
14157 \string;\glsxtrUpUpsilon
14158 \string<\glsxtrMathItalicPhi
14159 \string;\glsxtrUpPhi
14160 \string<\glsxtrMathItalicChi
14161 \string;\glsxtrUpChi
14162 \string<\glsxtrMathItalicPsi
14163 \string;\glsxtrUpPsi
14164 \string<\glsxtrMathItalicOmega
14165 \string;\glsxtrUpOmega
14166 }

```

`athGreekIIrules` Includes both upright and italic (digamma not included).

```

14167 \newcommand*\glsxtrMathGreekIIrules{\%
14168 \glsxtrMathItalicAlpha
14169 \string;\glsxtrUpAlpha
14170 \string<\glsxtrMathItalicBeta
14171 \string;\glsxtrUpBeta
14172 \string<\glsxtrMathItalicGamma

```

```

14173 \string;\glsxtrUpGamma
14174 \string<\glsxtrMathItalicDelta
14175 \string;\glsxtrUpDelta
14176 \string<\glsxtrMathItalicEpsilon
14177 \string;\glsxtrUpEpsilon
14178 \string<\glsxtrMathItalicZeta
14179 \string;\glsxtrUpZeta
14180 \string<\glsxtrMathItalicEta
14181 \string;\glsxtrUpEta
14182 \string<\glsxtrMathItalicTheta
14183 \string;\glsxtrUpTheta
14184 \string<\glsxtrMathItalicIota
14185 \string;\glsxtrUpIota
14186 \string<\glsxtrMathItalicKappa
14187 \string;\glsxtrUpKappa
14188 \string<\glsxtrMathItalicLambda
14189 \string;\glsxtrUpLambda
14190 \string<\glsxtrMathItalicMu
14191 \string;\glsxtrUpMu
14192 \string<\glsxtrMathItalicNu
14193 \string;\glsxtrUpNu
14194 \string<\glsxtrMathItalicXi
14195 \string;\glsxtrUpXi
14196 \string<\glsxtrMathItalicOmicron
14197 \string;\glsxtrUpOmicron
14198 \string<\glsxtrMathItalicPi
14199 \string;\glsxtrUpPi
14200 \string<\glsxtrMathItalicRho
14201 \string;\glsxtrUpRho
14202 \string<\glsxtrMathItalicSigma
14203 \string;\glsxtrUpSigma
14204 \string<\glsxtrMathItalicTau
14205 \string;\glsxtrUpTau
14206 \string<\glsxtrMathItalicUpsilon
14207 \string;\glsxtrUpUpsilon
14208 \string<\glsxtrMathItalicPhi
14209 \string;\glsxtrUpPhi
14210 \string<\glsxtrMathItalicChi
14211 \string;\glsxtrUpChi
14212 \string<\glsxtrMathItalicPsi
14213 \string;\glsxtrUpPsi
14214 \string<\glsxtrMathItalicOmega
14215 \string;\glsxtrUpOmega
14216 }

```

\glsxtrUpAlpha

```

14217 \newcommand*\glsxtrUpAlpha}{%
14218 \glshex 03B1,% lower case alpha
14219 \glshex 0391% upper case alpha

```

```

14220 }

\glsxtrUpBeta
14221 \newcommand*{\glsxtrUpBeta}{%
14222 \glshex{03B2},% lower case beta
14223 \glshex{0392}% upper case beta
14224 }

\glsxtrUpGamma
14225 \newcommand*{\glsxtrUpGamma}{%
14226 \glshex{03B3},% lower case gamma
14227 \glshex{0393}% upper case gamma
14228 }

\glsxtrUpDelta
14229 \newcommand*{\glsxtrUpDelta}{%
14230 \glshex{03B4},% lower case delta
14231 \glshex{0394}% upper case delta
14232 }

glsxtrUpEpsilon
14233 \newcommand*{\glsxtrUpEpsilon}{%
14234 \glshex{03B5},% lower case epsilon
14235 \string=\glshex{03F5},% lower case epsilon variant
14236 \glshex{0395}% upper case epsilon
14237 }

glsxtrUpDigamma
14238 \newcommand*{\glsxtrUpDigamma}{%
14239 \glshex{03DD},% lower case digamma
14240 \glshex{03DC}% upper case digamma
14241 }

\glsxtrUpZeta
14242 \newcommand*{\glsxtrUpZeta}{%
14243 \glshex{03B6},% lower case zeta
14244 \glshex{0396}% upper case zeta
14245 }

\glsxtrUpEta
14246 \newcommand*{\glsxtrUpEta}{%
14247 \glshex{03B7},% lower case eta
14248 \glshex{0397}% upper case eta
14249 }

\glsxtrUpTheta
14250 \newcommand*{\glsxtrUpTheta}{%
14251 \glshex{03B8}% lower case theta

```

```

14252 \string=\glshex 03D1,% lower case theta variant
14253 \glshex 0398% upper case theta
14254 }

\glsxtrUpIota
14255 \newcommand*\glsxtrUpIota{%
14256 \glshex 03B9,% lower case iota
14257 \glshex 0399% upper case iota
14258 }

\glsxtrUpKappa
14259 \newcommand*\glsxtrUpKappa{%
14260 \glshex 03BA% lower case kappa
14261 \string=\glshex 03F0,% lower case kappa variant
14262 \glshex 039A% upper case kappa
14263 }

\glsxtrUpLambda
14264 \newcommand*\glsxtrUpLambda{%
14265 \glshex 03BB,% lower lambda
14266 \glshex 039B% upper case lambda
14267 }

\glsxtrUpMu
14268 \newcommand*\glsxtrUpMu{%
14269 \glshex 03BC,% lower case mu
14270 \glshex 039C% upper case mu
14271 }

\glsxtrUpNu
14272 \newcommand*\glsxtrUpNu{%
14273 \glshex 03BD,% lower case nu
14274 \glshex 039D% upper case nu
14275 }

\glsxtrUpXi
14276 \newcommand*\glsxtrUpXi{%
14277 \glshex 03BE,% lower case xi
14278 \glshex 039E% upper case xi
14279 }

glsxtrUpOmicron
14280 \newcommand*\glsxtrUpOmicron{%
14281 \glshex 03BF,% lower case omicron
14282 \glshex 039F% upper case omicron
14283 }

```

```

\glsxtrUpPi
14284 \newcommand*{\glsxtrUpPi}{%
14285  \glshex 03C0% lower case pi
14286  \string=\glshex 03D6,% lower case pi variant
14287  \glshex 03A0% upper case pi
14288 }

\glsxtrUpRho
14289 \newcommand*{\glsxtrUpRho}{%
14290  \glshex 03C1% lower case rho
14291  \string=\glshex 03F1,% lower case rho variant
14292  \glshex 03A1% upper case rho
14293 }

\glsxtrUpSigma
14294 \newcommand*{\glsxtrUpSigma}{%
14295  \glshex 03C2% lower case sigma
14296  \string=\glshex 03C3,% lower case sigma
14297  \glshex 03A3% upper case sigma
14298 }

\glsxtrUpTau
14299 \newcommand*{\glsxtrUpTau}{%
14300  \glshex 03C4,% lower case tau
14301  \glshex 03A4% upper case tau
14302 }

glsxtrUpUpsilon
14303 \newcommand*{\glsxtrUpUpsilon}{%
14304  \glshex 03C5,% lower case epsilon
14305  \glshex 03A5% upper case epsilon
14306 }

\glsxtrUpPhi
14307 \newcommand*{\glsxtrUpPhi}{%
14308  \glshex 03C6% lower case phi
14309  \string=\glshex 03D5,% lower case phi variant
14310  \glshex 03A6% upper case phi
14311 }

\glsxtrUpChi
14312 \newcommand*{\glsxtrUpChi}{%
14313  \glshex 03C7,% lower case chi
14314  \glshex 03A7% upper case chi
14315 }

\glsxtrUpPsi
14316 \newcommand*{\glsxtrUpPsi}{%

```

```

14317 \glshex 03C8,% lower case psi
14318 \glshex 03A8% upper case psi
14319 }

\glsxtrUpOmega
14320 \newcommand*\glsxtrUpOmega{%
14321 \glshex 03C9,% lower case omega
14322 \glshex 03A9% upper case omega
14323 }

MathItalicAlpha
14324 \newcommand*\glsxtrMathItalicAlpha{%
14325 \glshex 1D6FC,% lower case alpha (maths italic)
14326 \glshex 1D6E2% upper case alpha (maths italic)
14327 }

rMathItalicBeta
14328 \newcommand*\glsxtrMathItalicBeta{%
14329 \glshex 1D6FD,% lower case beta (maths italic)
14330 \glshex 1D6E3% upper case beta (maths italic)
14331 }

MathItalicGamma
14332 \newcommand*\glsxtrMathItalicGamma{%
14333 \glshex 1D6FE,% lower case gamma (maths italic)
14334 \glshex 1D6E4% upper case gamma (maths italic)
14335 }

MathItalicDelta
14336 \newcommand*\glsxtrMathItalicDelta{%
14337 \glshex 1D6FF,% lower case delta (maths italic)
14338 \glshex 1D6E5% upper case delta (maths italic)
14339 }

thItalicEpsilon
14340 \newcommand*\glsxtrMathItalicEpsilon{%
14341 \glshex 1D700% lower case epsilon (maths italic)
14342 \string=\glshex 1D716,% lower case epsilon variant (maths italic)
14343 \glshex 1D6E6% upper case epsilon (maths italic)
14344 }

rMathItalicZeta
14345 \newcommand*\glsxtrMathItalicZeta{%
14346 \glshex 1D701,% lower case zeta (maths italic)
14347 \glshex 1D6E7% upper case zeta (maths italic)
14348 }

```

trMathItalicEta

```
14349 \newcommand*{\glsxtrMathItalicEta}{%
14350  \glshex 1D702,% lower case eta (maths italic)
14351  \glshex 1D6E8% upper case eta (maths italic)
14352 }
```

MathItalicTheta

```
14353 \newcommand*{\glsxtrMathItalicTheta}{%
14354  \glshex 1D703% lower case theta (maths italic)
14355  \string=\glshex 1D717,% lower case theta variant (maths italic)
14356  \glshex 1D6E9% upper case theta (maths italic)
14357  \string=\glshex 1D6F3% upper case theta variant (maths italic)
14358 }
```

rMathItalicIota

```
14359 \newcommand*{\glsxtrMathItalicIota}{%
14360  \glshex 1D704,% lower case iota (maths italic)
14361  \glshex 1D6EA% upper case iota (maths italic)
14362 }
```

MathItalicKappa

```
14363 \newcommand*{\glsxtrMathItalicKappa}{%
14364  \glshex 1D705% lower case kappa (maths italic)
14365  \string=\glshex 1D718,% lower case kappa variant (maths italic)
14366  \glshex 1D6EB% upper case kappa (maths italic)
14367 }
```

athItalicLambda

```
14368 \newcommand*{\glsxtrMathItalicLambda}{%
14369  \glshex 1D706,% lower case lambda (maths italic)
14370  \glshex 1D6EC% upper case lambda (maths italic)
14371 }
```

xtrMathItalicMu

```
14372 \newcommand*{\glsxtrMathItalicMu}{%
14373  \glshex 1D707,% lower case mu (maths italic)
14374  \glshex 1D6ED% upper case mu (maths italic)
14375 }
```

xtrMathItalicNu

```
14376 \newcommand*{\glsxtrMathItalicNu}{%
14377  \glshex 1D708,% lower case nu (maths italic)
14378  \glshex 1D6EE% upper case nu (maths italic)
14379 }
```

xtrMathItalicXi

```
14380 \newcommand*{\glsxtrMathItalicXi}{%
14381  \glshex 1D709,% lower case xi (maths italic)
```

```

14382 \glshex 1D6EF% upper case xi (maths italic)
14383 }

thItalicOmicron
14384 \newcommand*\glsxtrMathItalicOmicron}{%
14385 \glshex 1D70A,% lower case omicron (maths italic)
14386 \glshex 1D6F0% upper case omicron (maths italic)
14387 }

xtrMathItalicPi
14388 \newcommand*\glsxtrMathItalicPi}{%
14389 \glshex 1D70B% lower case pi (maths italic)
14390 \string=\glshex 1D71B,% lower case pi variant (maths italic)
14391 \glshex 1D6F1% upper case pi (maths italic)
14392 }

trMathItalicRho
14393 \newcommand*\glsxtrMathItalicRho}{%
14394 \glshex 1D70C% lower case rho (maths italic)
14395 \string=\glshex 1D71A,% lower case rho variant (maths italic)
14396 \glshex 1D6F2% upper case rho (maths italic)
14397 }

MathItalicSigma
14398 \newcommand*\glsxtrMathItalicSigma}{%
14399 \glshex 1D70D% lower case final sigma (maths italic)
14400 \string=\glshex 1D70E,% lower case sigma (maths italic)
14401 \glshex 1D6F4% upper case sigma (maths italic)
14402 }

trMathItalicTau
14403 \newcommand*\glsxtrMathItalicTau}{%
14404 \glshex 1D70F,% lower case tau (maths italic)
14405 \glshex 1D6F5% upper case tau (maths italic)
14406 }

thItalicUpsilon
14407 \newcommand*\glsxtrMathItalicUpsilon}{%
14408 \glshex 1D710,% lower case upsilon (maths italic)
14409 \glshex 1D6F6% upper case upsilon (maths italic)
14410 }

trMathItalicPhi
14411 \newcommand*\glsxtrMathItalicPhi}{%
14412 \glshex 1D711% lower case phi (maths italic)
14413 \string=\glshex 1D719,% lower case phi variant (maths italic)
14414 \glshex 1D6F7% upper case phi (maths italic)
14415 }

```

```
trMathItalicChi
14416 \newcommand{\glsxtrMathItalicChi}{%
14417 \glshex{1D712},% lower case chi (maths italic)
14418 \glshex{1D6F8}% upper case chi (maths italic)
14419 }
```

```
trMathItalicPsi
14420 \newcommand{\glsxtrMathItalicPsi}{%
14421 \glshex{1D713},% lower case psi (maths italic)
14422 \glshex{1D6F9}% upper case psi (maths italic)
14423 }
```

```
MathItalicOmega
14424 \newcommand{\glsxtrMathItalicOmega}{%
14425 \glshex{1D714},% lower case omega (maths italic)
14426 \glshex{1D6FA}% upper case omega (maths italic)
14427 }
```

```
thItalicPartial
14428 \newcommand{\glsxtrMathItalicPartial}{%
14429 \glshex{1D715}% partial differential (maths italic)
14430 }
```

```
MathItalicNabla
14431 \newcommand{\glsxtrMathItalicNabla}{%
14432 \glshex{1D6FB}% nabla (maths italic)
14433 }
```

lsxtrdigirules Digits from the Basic Latin set and subscript and superscript digit rules.

```
14434 \newcommand{\glsxtrdigirules}{%
14435 0\string=\glshex{2080}\string=\glshex{2070}
14436 \string<1\string=\glshex{2081}\string=\glshex{00B9}
14437 \string<2\string=\glshex{2082}\string=\glshex{00B2}
14438 \string<3\string=\glshex{2083}\string=\glshex{00B3}
14439 \string<4\string=\glshex{2084}\string=\glshex{2074}
14440 \string<5\string=\glshex{2085}\string=\glshex{2075}
14441 \string<6\string=\glshex{2086}\string=\glshex{2076}
14442 \string<7\string=\glshex{2087}\string=\glshex{2077}
14443 \string<8\string=\glshex{2088}\string=\glshex{2078}
14444 \string<9\string=\glshex{2089}\string=\glshex{2079}
14445 }
```

BasicDigirules Digits from the Basic Latin set.

```
14446 \newcommand{\glsxtrBasicDigirules}{%
14447 0\string<1\string<2\string<3\string<4%
14448 \string<5\string<6\string<7\string<8\string<9%
14449 }
```

criptDigitrules Subscript digits.

```
14450 \newcommand{\glsxtrSubScriptDigitrules}{%
14451 \glshex 2080% subscript 0
14452 \string<\glshex 2081% subscript 1
14453 \string<\glshex 2082% subscript 2
14454 \string<\glshex 2083% subscript 3
14455 \string<\glshex 2084% subscript 4
14456 \string<\glshex 2085% subscript 5
14457 \string<\glshex 2086% subscript 6
14458 \string<\glshex 2087% subscript 7
14459 \string<\glshex 2088% subscript 8
14460 \string<\glshex 2089% subscript 9
14461 }
```

criptDigitrules Superscript digits.

```
14462 \newcommand{\glsxtrSuperScriptDigitrules}{%
14463 \glshex 2070% superscript 0
14464 \string<\glshex 00B9% superscript 1
14465 \string<\glshex 00B2% superscript 2
14466 \string<\glshex 00B3% superscript 3
14467 \string<\glshex 2074% superscript 4
14468 \string<\glshex 2075% superscript 5
14469 \string<\glshex 2076% superscript 6
14470 \string<\glshex 2077% superscript 7
14471 \string<\glshex 2078% superscript 8
14472 \string<\glshex 2079% superscript 9
14473 }
```

trfractionrules Vulgar fractions.

```
14474 \newcommand{\glsxtrfractionrules}{%
14475 \glshex 215F% fraction numerator one (1/)
14476 \string<\glshex 2189% zero thirds (0/3 = 0)
14477 \string<\glshex 2152% one tenth (1/10 = 0.1)
14478 \string<\glshex 2151% one ninth (1/9 ~ 0.111)
14479 \string<\glshex 215B% one eighth (1/8 = 0.125)
14480 \string<\glshex 2150% one seventh (1/7 ~ 0.143)
14481 \string<\glshex 2159% one sixth (1/6 ~ 0.167)
14482 \string<\glshex 2155% one fifth (1/5 = 0.2)
14483 \string<\glshex 00BC% one quarter (1/4 = 0.25)
14484 \string<\glshex 2153% one third (1/3 ~ 0.333)
14485 \string<\glshex 215C% three eighths (3/8 = 0.375)
14486 \string<\glshex 2156% two fifths (2/5 = 0.4)
14487 \string<\glshex 00BD% one half (1/2 = 0.5)
14488 \string<\glshex 2157% three fifths (3/5 = 0.6)
14489 \string<\glshex 215D% five eighths (5/8 = 0.625)
14490 \string<\glshex 2154% two thirds (2/3 ~ 0.667)
14491 \string<\glshex 00BE% three quarters (3/4 = 0.75)
14492 \string<\glshex 2158% four fifths (4/5 = 0.8)
14493 \string<\glshex 215A% five sixths (5/6 ~ 0.833)
```

```
14494 \string<\glshex 215E% seven eighths (7/8 = 0.875)
14495 }
```

sxtrdialecthook Check for scripts associated with the document dialects.

```
14496 \renewcommand{\@glsxtrdialecthook}{%
14497   \ifundef\CurrentTrackedScript
14498   {%
14499     \TrackLangIfHasDefaultScript{\CurrentTrackedLanguage}%
14500     {%
14501       \edef\CurrentTrackedScript{%
14502         \TrackLangGetDefaultScript\CurrentTrackedLanguage}%
14503     }%
14504   {%
14505   }%
14506   {}%
14507 \ifdef\CurrentTrackedScript
14508 {%
14509   \let\gls@orgTrackLangRequireDialectPrefix\TrackLangRequireDialectPrefix
14510   \def\TrackLangRequireDialectPrefix{glossariesxtr-}%
14511   \let\CurrentTrackedTag\CurrentTrackedScript
14512   \IfExists{\TrackLangRequireDialectPrefix\CurrentTrackedTag.1df}%
14513   {\RequireGlossariesExtraLang{\CurrentTrackedTag}}%
14514   {}%
14515   \let\TrackLangRequireDialectPrefix\gls@orgTrackLangRequireDialectPrefix
14516 }%
14517 {}%
14518 }
```

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.

```
14519 \ifdef\glsxtr@loaddialect
14520 {%
14521   \@ifpackageloaded{tracklang}
14522   {%
14523     \AnyTrackedLanguages
14524     {%
14525       \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
14526     }%
14527   {%
14528   }%
14529   {}%
14530 }
14531 {}
```

## 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:

```
14532 \NeedsTeXFormat{LaTeX2e}
14533 \ProvidesPackage{glossaries-extra-stylemods}[2020/02/13 v1.42 (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
14534 \newcommand*\{@glsxtr@loadstyles}{}%
```

all Provide all known styles.

```
14535 \DeclareOption{all}{%
14536   \appto\@glsxtr@loadstyles{%
14537     \RequirePackage{glossary-inline}%
14538     \RequirePackage{glossary-list}%
14539     \RequirePackage{glossary-tree}%
14540     \RequirePackage{glossary-mcols}%
14541     \RequirePackage{glossary-long}%
14542     \RequirePackage{glossary-longragged}%
14543     \RequirePackage{glossary-longbooktabs}%
14544     \RequirePackage{glossary-super}%
14545     \RequirePackage{glossary-superragged}%
14546     \RequirePackage{glossary-bookindex}%
14547     \RequirePackage{glossary-longextra}%
14548     \RequirePackage{glossary-topic}%
14549 }
14550 }

14551 \DeclareOption*{%
14552   \IfFileExists{glossary-\CurrentOption.sty}%
14553   {\appto\@glsxtr@loadstyles{%
14554     \noexpand\RequirePackage{glossary-\CurrentOption}}%
14555   }%
```

```

14556     {%
14557         \PackageError{glossaries-extra-styles}{%
14558             {Unknown option '\CurrentOption'}{}%
14559         }%
14560     }

```

Process the package options:

```
14561 \ProcessOptions
```

Load the required packages:

```
14562 \@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`.

```
14563 \providecommand*\@glsxtrprelocation{\space}
```

In case we have an old version of `glossaries`:

`ewglossarystyle`

```

14564 \providecommand{\renewglossarystyle}[2]{%
14565     \ifcsundef{@glsstyle@#1}{%
14566         {%
14567             \PackageError{glossaries-extra}{Glossary style '#1' isn't already defined}{}%
14568         }%
14569         {%
14570             \csdef{@glsstyle@#1}{#2}%
14571         }%
14572     }

```

## 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.

```

14573 \ifdef{\@glsstyle@listdotted}{%
14574     {%
14575         \renewglossarystyle{listdotted}{%
14576             \setglossarystyle{list}{%
14577                 \renewcommand*\@glossentry}[2]{%
14578                     \item[]\makebox[\glslistdottedwidth][l]{%
14579                         \glsentryitem{##1}{%
14580                             \glstarget{##1}{\glossentryname{##1}}{%
14581                                 \unskip\leaders\hbox to 2.9mm{\hss}\hfill\strut}%
14582                             \glossentrydesc{##1}\glspostdescription}%
14583                     \renewcommand*\@subglossentry}[3]{%
14584                         \item[]\makebox[\glslistdottedwidth][l]{%
14585                             \glssubentryitem{##2}{%
14586                                 \glstarget{##2}{\glossentryname{##2}}{%
14587                                     \unskip\leaders\hbox to 2.9mm{\hss}\hfill\strut}%

```

```
14588     \glossentrydesc{##2}\glspostdescription}%
14589 }
14590 }
14591 {%
```

Assume the style isn't required if it hasn't already been defined.

```
14592 }
```

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.

```
14593 \ifdef{\@glsstyle@list}
14594 {%
```

listprelocation Space before number list for top-level entries.

```
14595 \newcommand{\glslistprelocation}{\glsxtrprelocation}
```

childprelocation Space before number list for child entries.

```
14596 \newcommand{\glslistchildprelocation}{\glslistprelocation}
```

childpostlocation Full stop after number list.

```
14597 \newcommand{\glslistchildpostlocation}{.}
```

\glslistdesc

```
14598 \newcommand{\glslistdesc}[1]{\glossentrydesc{#1}\glspostdescription}
```

listgroupskip

```
14599 \newcommand{\glslistgroupskip}{\nobreak\indexspace\nobreak}
```

Redefine list to use these commands.

```
14600 \renewglossarystyle{list}{%
14601     \renewenvironment{theglossary}{%
14602         {\begin{description}}{\end{description}}%
14603         \renewcommand*{\glossaryheader}{\%}%
14604         \renewcommand*{\glsgroupheading}[1]{\%}%
14605         \renewcommand*{\glossentry}[2]{\%
14606             \item[\glsentryitem{##1}\%
14607                 \glstarget{##1}{\glossentryname{##1}}]%
14608                 \glslistdesc{##1}\glslistprelocation ##2\%}%
14609             \renewcommand*{\subglossentry}[3]{\%
14610                 \glssubentryitem{##2}\%
14611                 \glstarget{##2}{\strut}\space
14612                 \glslistdesc{##2}\%
14613                 \glslistchildprelocation ##3\glslistchildpostlocation\%}%
14614             \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glslistgroupskip\fi}\%
14615     }%
14616 }%
14617 {}}
```

Similarly for altlist. Since it requires list, the new commands should have been defined above.

```
14618 \ifdef{@glsstyle@altlist}
14619 {%
14620   \renewglossarystyle{altlist}{%
14621     \setglossarystyle{list}%
14622     \renewcommand*\glossentry[2]{%
14623       \item[\glsentryitem{##1}%
14624         \glstarget{##1}{\glossentryname{##1}}]%
14625         \mbox{}\par\nobreak\@afterheading
14626         \glslistdesc{##1}\glslistprelocation ##2}%
14627       \renewcommand*\subglossentry[3]{%
14628         \par
14629         \glssubentryitem{##2}%
14630         \glstarget{##2}{\strut}\glslistdesc{##2}%
14631         \glslistchildprelocation ##3}%
14632   }%
14633 }%
14634 {}
```

Redefine listgroup so that it discourages a break after group headings.

```
14635 \ifdef{@glsstyle@listgroup}
14636 {%
14637   \renewglossarystyle{listgroup}{%
14638     \setglossarystyle{list}%
14639     \renewcommand*\glsgroupheading[1]{%
14640       \item[\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}]%
14641         \mbox{}\par\nobreak\@afterheading
14642     }%
14643   }%
14644 }%
14645 {}
```

Similarly for listhypergroup.

```
14646 \ifdef{@glsstyle@listhypergroup}
14647 {%
14648   \renewglossarystyle{listhypergroup}{%
14649     \setglossarystyle{list}%
14650     \renewcommand*\glossaryheader{%
14651       \glslistnavigationitem{\glsnavigation}}%
14652     \renewcommand*\glsgroupheading[1]{%
14653       \item[\glslistgroupheaderfmt
14654         {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}]%
14655         \mbox{}\par\nobreak\@afterheading
14656     }%
14657   }%
14658 }%
14659 {}
```

Similarly for altlistgroup.

```
14660 \ifdef{@glsstyle@altlistgroup}
```

```

14661 {%
14662   \renewglossarystyle{altlistgroup}{%
14663     \setglossarystyle{altlist}%
14664     \renewcommand*{\glsgroupheading}[1]{%
14665       \item[\glsgroupheaderfmt{\glsgetgrouptitle{##1}}]%
14666       \mbox{}\par\nobreak\@afterheading
14667     }%
14668   }
14669 }
14670 {}
```

Similarly for `altlisthypergroup`.

```

14671 \ifdef{@glsstyle@altlisthypergroup}
14672 {%
14673   \renewglossarystyle{altlisthypergroup}{%
14674     \setglossarystyle{altlist}%
14675     \renewcommand*{\glossaryheader}{%
14676       \glstlistnavigationitem{\glsnavigation}%
14677     \renewcommand*{\glsgroupheading}[1]{%
14678       \item[\glsgroupheaderfmt
14679         {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}]%
14680       \mbox{}\par\nobreak\@afterheading
14681     }%
14682   }
14683 }
14684 {}
```

## 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`.

```

14685 \ifcsdef@glsstyle@long}
14686 {%
14687   \renewglossarystyle{long}{%
14688     \renewenvironment{theglossary}%
14689       {\begin{longtable}{lp{\glsdescwidth}}}%
14690       {\end{longtable}}%
14691     \renewcommand*{\glossaryheader}{}%
14692     \renewcommand*{\glsgroupheading}[1]{}%
14693     \renewcommand{\glossentry}[2]{%
14694       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14695       \glossentrydesc{##1}\glspostdescription
14696       \glsxtrprelocation ##2\tabularnewline
14697     }%
14698     \renewcommand{\subglossentry}[3]{%
14699       &
14700       \glssubentryitem{##2}%
14701       \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
14702 }
```

```

14702     \glsxtrprelocation ##3\tabularnewline
14703     }%
14704     \ifglsnogroupskip
14705         \renewcommand*\glsgroupskip{}%
14706     \else
14707         \renewcommand*\glsgroupskip{\& \tabularnewline}%
14708     \fi
14709 }
14710 }
14711 {}
```

Three column style:

```

14712 \ifcsdef{@glsstyle@long3col}
14713 {%
14714     \renewglossarystyle{long3col}{%
14715         \renewenvironment{theglossary}{%
14716             {\begin{longtable}{lp{\glsdescwidth}p{\glspagelistwidth}}}%
14717             {\end{longtable}}{%
14718                 \renewcommand*\glossaryheader{}{%
14719                     \renewcommand*\glsgroupheading}[1]{%}
14720                     \renewcommand*\glossentry}[2]{%
14721                         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14722                         \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
14723                 }%
14724                 \renewcommand*\subglossentry}[3]{%
14725                     &
14726                     \glssubentryitem{##2}{%
14727                         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
14728                         ##3\tabularnewline
14729                 }%
```

Conditional needs to be outside of \glsgroupskip otherwise it can cause “Incomplete \iftrue” errors.

```

14730     \ifglsnogroupskip
14731         \renewcommand*\glsgroupskip{}%
14732     \else
14733         \renewcommand*\glsgroupskip{\& \tabularnewline}%
14734     \fi
14735 }
14736 }
14737 {}
```

Four column style:

```

14738 \ifcsdef{@glsstyle@long4col}
14739 {%
14740     \renewglossarystyle{long4col}{%
14741         \renewenvironment{theglossary}{%
14742             {\begin{longtable}{llll}}{%
14743             {\end{longtable}}{%
14744                 \renewcommand*\glossaryheader{}{%
14745                     \renewcommand*\glsgroupheading}[1]{%}
```

```

14746 \renewcommand{\glossentry}[2]{%
14747   \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14748   \glossentrydesc{##1}\glspostdescription &
14749   \glossentrysymbol{##1} &
14750   ##2\tabularnewline
14751 }%
14752 \renewcommand{\subglossentry}[3]{%
14753   &
14754   \glssubentryitem{##2}%
14755   \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
14756   \glossentrysymbol{##2} & ##3\tabularnewline
14757 }%
14758 \ifglsnogroupskip
14759   \renewcommand*\glsgroupskip{}%
14760 \else
14761   \renewcommand*\glsgroupskip{& & &\tabularnewline}%
14762 \fi
14763 }
14764 }
14765 {}
```

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`.

```

14766 \ifcsdef@glsstyle@longragged}%
14767 }%
14768 \renewglossarystyle{longragged}{%
14769   \renewenvironment{theglossary}%
14770     {\begin{longtable}{l>\raggedright p{\glsdescwidth}}}%
14771     {\end{longtable}}%
14772   \renewcommand*\glossaryheader{}%
14773   \renewcommand*\glsgroupheading[1]{}%
14774   \renewcommand{\glossentry}[2]{%
14775     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14776     \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
14777     \tabularnewline
14778 }%
14779 \renewcommand{\subglossentry}[3]{%
14780   &
14781   \glssubentryitem{##2}%
14782   \glstarget{##2}{\strut}\glossentrydesc{##2}%
14783   \glspostdescription\glsxtrprelocation ##3%
14784   \tabularnewline
```

```

14785     }%
14786     \ifglsnogroupskip
14787         \renewcommand*\glsgroupskip{}%
14788     \else
14789         \renewcommand*\glsgroupskip{\& \tabularnewline}%
14790     \fi
14791 }
14792 }
14793 {}

```

Three and four column styles don't use \glsxtrprelocation since the number list is in its own column.

```

14794 \ifcsdef{@glsstyle@longragged3col}
14795 {%
14796     \renewglossarystyle{longragged3col}{%
14797         \renewenvironment{theglossary}{%
14798             {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}{%
14799                 >{\raggedright}p{\glspagelistwidth}}}%
14800             {\end{longtable}}{%
14801                 \renewcommand*\glossaryheader{}{%
14802                     \renewcommand*\glsgroupheading[1]{%
14803                         \renewcommand{\glossentry}[2]{%
14804                             \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14805                             \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
14806                         }%
14807                         \renewcommand{\subglossentry}[3]{%
14808                             &
14809                             \glssubentryitem{##2}%
14810                             \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
14811                             ##3\tabularnewline
14812                         }%
14813                     \ifglsnogroupskip
14814                         \renewcommand*\glsgroupskip{}{%
14815                     \else
14816                         \renewcommand*\glsgroupskip{\& \tabularnewline}%
14817                     \fi
14818     }%
14819 }
14820 {}}

```

Four column style:

```

14821 \ifcsdef{@glsstyle@altlongragged4col}
14822 {%
14823     \renewglossarystyle{altlongragged4col}{%
14824         \renewenvironment{theglossary}{%
14825             {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}}{%
14826                 >{\raggedright}p{\glspagelistwidth}}}%
14827             {\end{longtable}}{%
14828                 \renewcommand*\glossaryheader{}{%

```

```

14829 \renewcommand*\glsgroupheading}[1]{%
14830 \renewcommand{\glossentry}[2]{%
14831   \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14832   \glossentrydesc{##1}\glspostdescription & \glossentrysymbol{##1} &
14833   ##2\tabularnewline
14834 }%
14835 \renewcommand{\subglossentry}[3]{%
14836   &
14837   \glssubentryitem{##2}%
14838   \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
14839   \glossentrysymbol{##2} & ##3\tabularnewline
14840 }%
14841 \ifglsnogroupskip
14842   \renewcommand*\glsgroupskip}{}%
14843 \else
14844   \renewcommand*\glsgroupskip}{\& \& \tabularnewline}%
14845 \fi
14846 }
14847 }
14848 {}

```

## 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`.

```

14849 \ifcsdef{glsstyle@super}%
14850 {%
14851   \renewglossarystyle{super}{%
14852     \renewenvironment{theglossary}%
14853       {\tablehead{}\tabletail{}%
14854         \begin{supertabular}{lp{\glsdescwidth}}%
14855         \end{supertabular}}%
14856       \renewcommand*\glossaryheader}{}%
14857       \renewcommand*\glsgroupheading}[1]{%
14858       \renewcommand{\glossentry}[2]{%
14859         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14860         \glossentrydesc{##1}\glspostdescription
14861         \glsxtrprelocation ##2\tabularnewline
14862 }%
14863       \renewcommand{\subglossentry}[3]{%
14864         &
14865         \glssubentryitem{##2}%
14866         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
14867         \glsxtrprelocation ##3\tabularnewline
14868 }%
14869   \ifglsnogroupskip
14870     \renewcommand*\glsgroupskip}{}%

```

```

14871     \else
14872         \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
14873     \fi
14874 }
14875 }
14876 {}

```

Three column style:

```

14877 \ifcsdef{@glsstyle@super3col}%
14878 {%
14879     \renewglossarystyle{super3col}{%
14880         \renewenvironment{theglossary}{%
14881             {\tablehead{}\tabletail{}}%
14882             \begin{supertabular}{lp{\glsdescwidth}p{\glspagelistwidth}}}%
14883             \end{supertabular}}%
14884         \renewcommand*{\glossaryheader}{\%}
14885         \renewcommand*{\glsgroupheading}[1]{\%}
14886         \renewcommand{\glossentry}[2]{\%
14887             \glsentryitem{\#1}\glstarget{\#1}{\glossentryname{\#1}} &
14888             \glossentrydesc{\#1}\glspostdescription \& \#2\tabularnewline
14889         }%
14890         \renewcommand{\subglossentry}[3]{\%
14891             \&
14892             \glssubentryitem{\#2}%
14893             \glstarget{\#2}{\strut}\glossentrydesc{\#2}\glspostdescription \&
14894             \#3\tabularnewline
14895         }%
14896         \ifglsnogroupskip
14897             \renewcommand*{\glsgroupskip}{\%}%
14898         \else
14899             \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
14900         \fi
14901     }%
14902 }
14903 {}

```

Four column styles:

```

14904 \ifcsdef{@glsstyle@super4col}%
14905 {%
14906     \renewglossarystyle{super4col}{%
14907         \renewenvironment{theglossary}{%
14908             {\tablehead{}\tabletail{}}%
14909             \begin{supertabular}{llll}\%}
14910             \end{supertabular}}%
14911         \renewcommand*{\glossaryheader}{\%}
14912         \renewcommand*{\glsgroupheading}[1]{\%}
14913         \renewcommand{\glossentry}[2]{\%
14914             \glsentryitem{\#1}\glstarget{\#1}{\glossentryname{\#1}} &
14915             \glossentrydesc{\#1}\glspostdescription \&

```

```

14916     \glossentrysymbol{##1} & ##2\tabularnewline
14917 }%
14918 \renewcommand{\subglossentry}[3]{%
14919     &
14920     \glssubentryitem{##2}%
14921     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
14922     \glossentrysymbol{##2} & ##3\tabularnewline
14923 }%
14924 \ifglsnogroupskip
14925     \renewcommand*\glsgroupskip{}%
14926 \else
14927     \renewcommand*\glsgroupskip{\& \&\tabularnewline}%
14928 \fi
14929 }
14930 }
14931 {}
```

## 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`.

```

14932 \ifcsdef{@glsstyle@superragged}
14933 }%
14934 \renewglossarystyle{superragged}{%
14935     \renewenvironment{theglossary}{%
14936         {\tablehead{}\tabletail{}%
14937         \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}}{}}%
14938         \end{supertabular}}%
14939     \renewcommand*\glossaryheader{}%
14940     \renewcommand*\glsgroupheading[1]{}%
14941     \renewcommand{\glossentry}[2]{%
14942         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14943         \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
14944         \tabularnewline
14945     }%
14946     \renewcommand{\subglossentry}[3]{%
14947         &
14948         \glssubentryitem{##2}%
14949         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
14950         \glsxtrprelocation ##3%
14951         \tabularnewline
14952     }%
14953 \ifglsnogroupskip
14954     \renewcommand*\glsgroupskip{}%
14955 \else
14956     \renewcommand*\glsgroupskip{\& \tabularnewline}%
```

```

14957     \fi
14958 }
14959 }
14960 {}

```

Three column style:

```

14961 \ifcsdef{@glsstyle@superragged3col}{%
14962 }{%
14963   \renewglossarystyle{superragged3col}{%
14964     \renewenvironment{theglossary}{%
14965       {\tablehead{}\tabletail{}{%
14966         \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}%
14967           >{\raggedright}p{\glspagelistwidth}}}}{%
14968       \end{supertabular}}{%
14969         \renewcommand*\glossaryheader{}{%
14970           \renewcommand*\glsgroupheading}[1]{%
14971             \renewcommand{\glossentry}[2]{%
14972               \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14973                 \glossentrydesc{##1}\glspostdescription &
14974                   ##2\tabularnewline
14975             }{%
14976               \renewcommand{\subglossentry}[3]{%
14977                 &
14978                   \glssubentryitem{##2}{%
14979                     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
14980                       ##3\tabularnewline
14981             }{%
14982               \ifglsnogroupskip
14983                 \renewcommand*\glsgroupskip{}{%
14984               \else
14985                 \renewcommand*\glsgroupskip{ & &\tabularnewline}{%
14986               \fi
14987             }{%
14988           }{%
14989         }{%

```

Four columns:

```

14990 \ifcsdef{@glsstyle@altsuperragged4col}{%
14991 }{%
14992   \renewglossarystyle{altsuperragged4col}{%
14993     \renewenvironment{theglossary}{%
14994       {\tablehead{}\tabletail{}{%
14995         \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}}}}{%
14996       \end{supertabular}}{%
14997         \renewcommand*\glossaryheader{}{%
14998           \renewcommand{\glossentry}[2]{%
14999             \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
15000               \glossentrydesc{##1}\glspostdescription &
```

```

15002     \glossentrysymbol{##1} & ##2\tabularnewline
15003 }%
15004 \renewcommand{\subglossentry}[3]{%
15005     &
15006     \glssubentryitem{##2}%
15007     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
15008     \glossentrysymbol{##2} & ##3\tabularnewline
15009 }%
15010 \ifglsnogroupskip
15011     \renewcommand*{\glsgroupskip}{}%
15012 \else
15013     \renewcommand*{\glsgroupskip}{\&\&\&\tabularnewline}%
15014 \fi
15015 }
15016 }
15017 {}
```

## 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`.

```

15018 \ifdef{@glsstyle@inline}
15019 {%
15020     \renewcommand*{\glspostinline}{.\spacefactor\sfcodespace}%
Just use \glsxtrpostdescription instead of \glspostdescription.
15021     \renewcommand*{\glsinlinedescformat}[3]{%
15022         \space#1\glsxtrpostdescription}%
15023     \renewcommand*{\glsinlinesubdescformat}[3]{%
15024         #1\glsxtrpostdescription}
```

The default settings don't show the location lists, so there's no adjustment for `\glsxtrprelocation`.

```

15025 }
15026 {}
```

## 2.8 Tree Styles

Redefine both `\glstreenamefmt` and `\glstreegroupheaderfmt` in terms of `\glstreedefaultnamefmt` to make it easier to change both at the same time or only change one without affecting the other.

```

15027 \ifdef{\glstreenamefmt}
15028 {%
defaultnamefmt
15029     \newcommand{\glstreedefaultnamefmt}[1]{\textbf{#1}}
```

```
\glstreenamefmt
15030 \renewcommand{\glstreenamefmt}[1]{\glstreedefaultnamefmt{#1}}


\groupheaderfmt This command was only introduced to glossary-tree v4.22, so it may not be defined.
15031 \def\glstreegroupheaderfmt#1{\glstreedefaultnamefmt{#1}}


\enavigationfmt This command was only introduced to glossary-tree v4.22, so it may not be defined.
15032 \def\glstreenavigationfmt#1{\glstreedefaultnamefmt{#1}}


\lstreePreHeader Takes the label as the first argument and title as the second argument so this can be modified to add a bookmark.
15033 \newcommand{\glstreePreHeader}[2]{}

15034 }
15035 {}

The index style is redefined so that the space before the number list isn't hard coded.
15036 \ifdef{\@glsstyle@index}
15037 {


\treeprelocation The space before the number list for top-level entries. This is shared by the other tree styles.
15038 \newcommand*{\glstreeprelocation}{\glsxtrprelocation}

\childprelocation The space before the number list for child entries. This is shared by the other tree styles.
15039 \newcommand*{\glstreechildprelocation}{\glstreeprelocation}

Don't prohibit a page break at the start of a new group if there's no header.

\lstreegroupskip
15040 \newcommand{\glstreegroupskip}{\indexspace}

\groupheaderskip This doesn't include \afterheading as it can cause interference with some styles.
15041 \newcommand{\glstreegroupheaderskip}{\nopagebreak\glstreegroupskip\nobreak}

Modify the index style.
15042 \renewglossarystyle{index}{%
15043   \renewenvironment{theglossary}{%
15044     {\setlength{\parindent}{0pt}}%
15045     {\setlength{\parskip}{0pt plus 0.3pt}}%
15046     \let\item\glstreeitem
15047     \let\subitem\glstreesubitem
15048     \let\subsubitem\glstreesubsubitem
15049   }%
15050   {\par}%
15051   \renewcommand*{\glossaryheader}{%
15052     \renewcommand*{\glsgroupheading}[1]{%
15053       \renewcommand*{\glossentry}[2]{%
15054         \item\glsentryitem{##1}}%
```

```

15055     \glstreeentryfmt{\glstarget{##1}{\glossentryname{##1}}}{%
15056     \glstreesymbol{##1}%
15057     \glstreeDescLoc{##1}{##2}%
15058 }%
15059 \renewcommand{\subglossentry}[3]{%
15060     \ifcase##1\relax
15061         \item
15062     \or
15063         \subitem
15064         \glssubentryitem{##2}%
15065     \else
15066         \subsubitem
15067     \fi
15068     \glstreeentryfmt{\glstarget{##2}{\glossentryname{##2}}}{%
15069     \glstreechildsymbol{##2}%
15070     \glstreeChildDescLoc{##2}{##3}%
15071 }%
15072 \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glstreegroupskip\fi}%
15073 }
15074 }
15075 {}

```

The `indexgroup` style is redefined to discourage a page break after the heading.

```

15076 \ifdef{\@glsstyle@indexgroup}
15077 {%
15078     \renewglossarystyle{indexgroup}{%
15079         \setglossarystyle{index}%
15080         \renewcommand*{\glsgroupheading}[1]{%
15081             \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
15082             \glstreePreHeader{##1}{\glsxtr@grptitle}%
15083             \item\glstreegroupheaderfmt{\glsxtr@grptitle}%
15084             \glstreegroupheaderskip\@afterheading
15085         }%
15086     }
15087 }
15088 {}

```

Similarly for `indexhypergroup`.

```

15089 \ifdef{\@glsstyle@indexhypergroup}
15090 {%
15091     \renewglossarystyle{indexhypergroup}{%
15092         \setglossarystyle{index}%
15093         \renewcommand*{\glossaryheader}{%
15094             \item\glstreenavigationfmt{\glsnavigation}%
15095             \glstreegroupheaderskip\@afterheading}%
15096         \renewcommand*{\glsgroupheading}[1]{%
15097             \glsxtrgetgrouptitle{##1}{\glsxtr@grptitle}%
15098             \glstreePreHeader{##1}{\glsxtr@grptitle}%
15099             \item\glstreegroupheaderfmt
15100             {\glsnavhypertarget{##1}{\glsxtr@grptitle}}%

```

```
15101      \glstreegroupheaderskip{@afterheading}%
15102  }%
15103 }%
15104 {}
```

Adjust tree style to remove hard coded space before number list.

```
15105 \ifdef{\@glsstyle@tree}%
15106 {%
```

Provide a command for use with the tree styles that displays the pre-description separator, the description and post-description hook.

```
\glstreedesc
```

```
15107 \newcommand{\glstreedesc}[1]{%
15108   \glstreepredesc\glossentrydesc{#1}\glspostdescription
15109 }
```

```
\glstreeDescLoc
```

```
\glstreeDescLoc{\label}{\location}
```

This checks for the description and symbol. If both are missing, a different separator may be required. For example, a comma and space if there's no description or symbol but just a space if either of those fields are present.

```
15110 \newcommand{\glstreeDescLoc}[2]{%
15111   \ifglshasdesc{#1}%
15112     {\glstreedesc{#1}\glstreeprelocation}%
15113     {\ifglshassymbol{#1}{\glstreeprelocation}{\glstreeNoDescSymbolPreLocation}}%
15114     #2%
15115 }
```

```
mbolPreLocation
```

```
\glstreeNoDescSymbolPreLocation
```

```
15116 \newcommand{\glstreeNoDescSymbolPreLocation}{\space}
```

Similarly for the symbol.

```
\glstreesymbol
```

```
15117 \newcommand{\glstreesymbol}[1]{%
15118   \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{}%
15119 }
```

And for the child entries:

```

lstreechilddesc
15120 \newcommand{\glstreechilddesc}[1]{%
15121   \glstreechildpredesc\glossentrydesc{#1}\glspostdescription
15122 }%

```

```

reeChildDescLoc
15123 \newcommand{\glstreeChildDescLoc}[2]{%
15124   \ifglshasdesc{#1}%
15125     {\glstreechilddesc{#1}\glstreechildprelocation}%
15126     {\ifglshassymbol{#1}{\glstreechildprelocation}%
15127       {\glstreeNoDescSymbolPreLocation}%
15128     }%
15129     #2%
15130 }%

```

treechildsymbol This just behaves in the same way as the top-level.

```

15131 \newcommand{\glstreechildsymbol}[1]{%
15132   \glstreesymbol{#1}%
15133 }%
15134 \renewglossarystyle{tree}{%
15135   \renewenvironment{theglossary}%
15136     {\setlength{\parindent}{0pt}%
15137      \setlength{\parskip}{0pt plus 0.3pt}}%
15138   {}%
15139   \renewcommand*\glossaryheader{}%
15140   \renewcommand*\glsgroupheading[1]{}%
15141   \renewcommand{\glossentry}[2]{%
15142     \hangindent0pt\relax
15143     \parindent0pt\relax
15144     \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
15145     \glstreesymbol{##1}%
15146     \glstreeDescLoc{##1}{##2}\par
15147   }%
15148   \renewcommand{\subglossentry}[3]{%
15149     \hangindent##1\glstreeindent\relax
15150     \parindent##1\glstreeindent\relax
15151     \ifnum##1=1\relax
15152       \glssubentryitem{##2}%
15153     \fi
15154     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
15155     \glstreechildsymbol{##2}%
15156     \glstreeChildDescLoc{##2}{##3}\par
15157   }%
15158   \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\glstreegroupskip\fi}%
15159 }%
15160 }%
15161 {}%

```

The treegroup style is redefined to discourage a page break after the heading.

```
15162 \ifdef{@glsstyle@treegroup}{%
15163 {%
15164   \renewglossarystyle{treegroup}{%
15165     \setglossarystyle{tree}{%
15166       \renewcommand{\glsgroupheading}[1]{%
15167         \glsxtrgetgroup{##1}{\glsxtr@grptitle}{%
15168           \glstreePreHeader{##1}{\glsxtr@grptitle}{%
15169             \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}{%
15170               \glstreegroupheaderskip\@afterheading}{%
15171             }%
15172           }%
15173         }%
15174 }
```

Similarly for treehypergroup

```
15174 \ifdef{@glsstyle@treehypergroup}{%
15175 {%
15176   \renewglossarystyle{treehypergroup}{%
15177     \setglossarystyle{tree}{%
15178       \renewcommand*\glossaryheader{%
15179         \par\noindent\glstreenavigationfmt{\glsnavigation}{%
15180           \glstreegroupheaderskip\@afterheading}{%
15181         \renewcommand*\glsgroupheading[1]{%
15182           \glsxtrgetgroup{##1}{\glsxtr@grptitle}{%
15183             \glstreePreHeader{##1}{\glsxtr@grptitle}{%
15184               \par\noindent
15185               \glstreegroupheaderfmt
15186                 {\glsnavhypertarget{##1}{\glsxtr@grptitle}}{%
15187                   \glstreegroupheaderskip\@afterheading}{%
15188             }%
15189           }%
15190         }%
15191 }
```

Adjust treenoname style to remove hard coded space before number list.

```
15191 \ifdef{@glsstyle@treenoname}{%
15192 {%
```

Provide a command for use with the treenoname styles that displays the pre-description separator, the description and post-description hook.

streenonamedesc

```
15193 \newcommand{\glstreenonamedesc}[1]{%
15194   \glstreepredesc\glossentrydesc{#1}\glspostdescription
15195 }%
```

Similarly for the symbol.

reenonamesymbol

```
15196 \newcommand{\glstreenonamesymbol}[1]{%
15197   \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{%
15198 }%
```

nonamechilddesc The child entry doesn't have the pre-description separator as the name isn't displayed.

```
15199 \newcommand{\glstreenonamechilddesc}[1]{%
15200   \glossentrydesc{#1}\glspostdescription
15201 }%
15202 \renewglossarystyle{treenoname}{%
15203   \renewenvironment{theglossary}{%
15204     {\setlength{\parindent}{0pt}%
15205       \setlength{\parskip}{0pt plus 0.3pt}}%
15206     {}%
15207   \renewcommand*\glossaryheader{}%
15208   \renewcommand*\glsgroupheading[1]{}%
15209   \renewcommand{\glossentry}[2]{%
15210     \hangindent0pt\relax
15211     \parindent0pt\relax
15212     \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
15213     \glstreenamesymbol{##1}%
15214     \glstreenonamedesc{##1}%
15215     \glstreeDescLoc{##1}{##2}\par
15216   }%
15217   \renewcommand{\subglossentry}[3]{%
15218     \hangindent##1\glstreeindent\relax
15219     \parindent##1\glstreeindent\relax
15220     \ifnum##1=1\relax
15221       \glssubentryitem{##2}%
15222     \fi
15223     \glstarget{##2}{\strut}%
15224     \glstreenonamechilddesc{##2}%
15225     \glstreechildprelocation##3\par
15226   }%
15227   \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\glstreegroupskip\fi}%
15228 }
15229 }
15230 {}
```

The treenonamegroup style is redefined to discourage a page break after the heading.

```
15231 \ifdef{@glsstyle@treenonamegroup}
15232 {%
15233   \renewglossarystyle{treenonamegroup}{%
15234     \setglossarystyle{treenoname}%
15235     \renewcommand{\glsgroupheading}[1]{%
15236       \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15237       \glstreePreHeader{##1}{\glsxtr@grptitle}%
15238       \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}%
15239       \glstreegroupheaderskip@\afterheading
15240     }%
15241   }
15242 }
15243 {}
```

Similarly for treenonamehypergroup

```
15244 \ifdef{@glsstyle@treenonamehypergroup}
15245 {%
15246   \renewglossarystyle{treenonamehypergroup}{%
15247     \setglossarystyle{treenoname}{%
15248     \renewcommand*\glossaryheader{%
15249       \par\noindent\glstreenavigationfmt{\glsnavigation}{%
15250         \glstreegroupheaderskip@\afterheading}{%
15251       \renewcommand*\glsgroupheading}[1]{%
15252         \glsxtrgetgroup{##1}{\glsxtr@grptitle}{%
15253           \glstreePreHeader{##1}{\glsxtr@grptitle}{%
15254             \par\noindent
15255             \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}{%
15256               \glstreegroupheaderskip@\afterheading}{%
15257             }%
15258           }%
15259         }}}}
```

The alttree style is redefined to make it easier to made minor adjustments.

```
15260 \ifdef{@glsstyle@alttree}
15261 {%
```

Only redefine this style if it's already been defined.

boldDescLocation

```
\glsxtralttreeSymbolDescLocation{label}{{location list}}
```

Layout the symbol, description and location for top-level entries.

```
15262 \newcommand{\glsxtralttreeSymbolDescLocation}[2]{%
15263 {%
15264   \let\par\glsxtrAlttreePar
15265   \ifglshassymbol{#1}{(\glossentrysymbol{#1})\space}{%
15266     \ifglshasdesc{#1}{\glossentrydesc{#1}\glspostdescription}{%
15267       \glstreeDescLoc{#1}{#2}\par
15268     }%
15269   }}
```

trAltTreeIndent Paragraph indent for subsequent paragraphs in multi-paragraph descriptions.

```
15270 \newlength\glsxtrAlttreeIndent
```

lsxtrAlttreePar Multi-paragraph descriptions need to keep the hanging indent.

```
15271 \newcommand{\glsxtrAlttreePar}{%
15272   @@par
15273   \glsxtrAlttreeSetHangIndent
15274   \setlength{\parindent}{\dimexpr\hangindent+\glsxtrAlttreeIndent}%
15275 }
```

bolDescLocation

```
\glsxtralttreeSubSymbolDescLocation{\langle level \rangle}{\langle label \rangle}{\langle location list \rangle}
```

Layout the symbol, description and location for sub-entries. Defaults to the same as the top-level.

```
15276 \newcommand{\glsxtralttreeSubSymbolDescLocation}[3]{%
15277   \glsxtralttreeSymbolDescLocation{#2}{#3}%
15278 }
```

trtreeTopindent The original style has to keep computing the width of the name at each entry. This register allows the style to compute it once for the top-level at the start of the glossary.

```
15279 \newlength\glsxtrtreeTopindent
```

sxtralttreeInit User-level initialisation for the alttree style.

```
15280 \newcommand*{\glsxtralttreeInit}{%
15281   \settowidth{\glsxtrtreeTopindent}{\glstreenamefmt{\glsgetwidestname\space}}%
15282   \glsxtrAltTreeIndent=\parindent
15283 }
```

\glssetwidest The original \glssetwidest only uses \def. This uses \gdef.

```
15284 \newcommand*{\glssetwidest}[2][0]{%
15285   \csgdef{@glswidestname\romannumerals#1}{#2}%
15286 }
```

\eglssetwidest The original \glssetwidest only uses \def. This uses \protected@csedef.

```
15287 \newcommand*{\eglssetwidest}[2][0]{%
15288   \protected@csedef{@glswidestname\romannumerals#1}{#2}%
15289 }
```

\xglssetwidest Like the above but uses \protected@csxdef.

```
15290 \newcommand*{\xglssetwidest}[2][0]{%
15291   \protected@csxdef{@glswidestname\romannumerals#1}{#2}%
15292 }
```

glsupdatewidest Only sets if new value is wider than old value.

```
15293 \newcommand*{\glsupdatewidest}[2][0]{%
15294   \ifcsundef{@glswidestname\romannumerals#1}%
15295     {\csdef{@glswidestname\romannumerals#1}{#2}}%
15296   {%
15297     \settowidth{\dimen@}{\csuse{@glswidestname\romannumerals#1}}%
15298     \settowidth{\dimen@ii}{#2}%
15299     \ifdim\dimen@ii>\dimen@
15300       \csdef{@glswidestname\romannumerals#1}{#2}%
15301     \fi
15302   }%
15303 }
```

`glsupdatewidest` As above but global definition.

```
15304 \newcommand*{\gglswidest}[2][0]{%
15305   \ifcsundef{@glswidestname\romannumeral#1}%
15306   {\csgdef{@glswidestname\romannumeral#1}{#2}}%
15307   {%
15308     \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
15309     \settowidth{\dimen@ii}{#2}%
15310     \ifdim\dimen@ii>\dimen@
15311       \csgdef{@glswidestname\romannumeral#1}{#2}%
15312     \fi
15313   }%
15314 }
```

`glsupdatewidest` As `\glsupdatewidest` but expands value.

```
15315 \newcommand*{\eglsupdatewidest}[2][0]{%
15316   \ifcsundef{@glswidestname\romannumeral#1}%
15317   {\protected@csedef{@glswidestname\romannumeral#1}{#2}}%
15318   {%
15319     \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
15320     \settowidth{\dimen@ii}{#2}%
15321     \ifdim\dimen@ii>\dimen@
15322       \protected@csedef{@glswidestname\romannumeral#1}{#2}%
15323     \fi
15324   }%
15325 }
```

`glsupdatewidest` As above but global.

```
15326 \newcommand*{\xglsupdatewidest}[2][0]{%
15327   \ifcsundef{@glswidestname\romannumeral#1}%
15328   {\protected@csxdef{@glswidestname\romannumeral#1}{#2}}%
15329   {%
15330     \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
15331     \settowidth{\dimen@ii}{#2}%
15332     \ifdim\dimen@ii>\dimen@
15333       \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
15334     \fi
15335   }%
15336 }
```

`lsgetwidestname` Provide a user-level macro to obtain the widest top-level name.

```
15337 \newcommand*{\glsgetwidestname}{\@glswidestname}
```

`etwidestsubname` Provide a user-level macro to obtain the widest sub-entry name.

```
15338 \newcommand*{\glsgetwidestsubname}[1]{%
15339   \ifcsundef{@glswidestname\romannumeral#1}%
15340   {\@glswidestname}%
15341   {\csuse{@glswidestname\romannumeral#1}}%
15342 }
```

estTopLevelName CamelCase is easier for long command names. Provide a CamelCase synonym of \glsfindwidesttoplevelname  
15343 \let\glsFindWidestTopLevelName\glsfindwidesttoplevelname

`\glsusedTopLevelName` 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.

```

15344 \newrobustcmd*\{\glsFindWidestUsedTopLevelName\}[1][\@glo@types]{%
15345   \dimen0=0pt\relax
15346   \gls@tmpplen=0pt\relax
15347   \forallglossaries[#1]{\gls@type}%
15348 {%
15349   \forglsentries[\gls@type]{\glo@label}%
15350   {%
15351     \ifglsused{\glo@label}%
15352     {%
15353       \ifglshasparent{\glo@label}%
15354       {%
15355         \settowidth{\dimen0}%
15356         {\glsentryname{\glo@label}}%
15357         \ifdim\dimen0>\gls@tmpplen
15358           \gls@tmpplen=\dimen0
15359           \eglssetwidest{\glsentryname{\glo@label}}%
15360           \fi
15361         }%
15362       }%
15363     }%
15364     {}%
15365   }%
15366 }%
15367 }

```

`destUsedAnyName` Like the above but doesn't check the parent key. Useful if all levels should have the same width for the name.

```
15368 \newrobustcmd*{\glsFindWidestUsedAnyName}[1][\@glo@types]{%
15369     \dimen@=0pt\relax
15370     \gls@tmpplen=0pt\relax
15371     \forallglossaries[#1]{\gls@type}%
15372     {%
15373         \forglsentries[\gls@type]{\glo@label}%
15374         {%
15375             \ifglsused{\glo@label}%
15376             {%
15377                 \settowidth{\dimen@}%
15378                 {\glstrenamefmt{\glsentryname{\glo@label}}}%
15379                 \ifdim\dimen@>\gls@tmpplen
15380                     \gls@tmpplen=\dimen@
15381                     \eglssetwidest{\glsentryname{\glo@label}}%
```

```

15382         \fi
15383     }%
15384     {}%
15385     }%
15386     {}%
15387 }

```

`ndWidestAnyName` Like the above but doesn't check if the entry has been used.

```

15388 \newrobustcmd*{\glsFindWidestAnyName}[1][\@glo@types]{%
15389   \dimen@=0pt\relax
15390   \gls@tmp@len=0pt\relax
15391   \forallglossaries[#1]{\@gls@type}{%
15392     {%
15393       \forglsentries[\@gls@type]{\@glo@label}{%
15394         {%
15395           \settowidth{\dimen@}{%
15396             {\glstreenamefmt{\glsentryname{\@glo@label}}}}{%
15397             \ifdim\dimen@>\gls@tmp@len
15398               \gls@tmp@len=\dimen@
15399               \glssetwidest{\glsentryname{\@glo@label}}{%
15400                 \fi
15401               }%
15402             }%
15403           }%

```

`estUsedLevelTwo` This is like `\glsFindWidestUsedTopLevelName` but also sets the first two sub-levels as well.

Any entry that has a great-grandparent is ignored.

```

15404 \newrobustcmd*{\glsFindWidestUsedLevelTwo}[1][\@glo@types]{%
15405   \dimen@=0pt\relax
15406   \dimen@i=0pt\relax
15407   \dimen@ii=0pt\relax
15408   \forallglossaries[#1]{\@gls@type}{%
15409     {%
15410       \forglsentries[\@gls@type]{\@glo@label}{%
15411         {%
15412           \ifglsused{\@glo@label}{%
15413             {%
15414               \ifglshasparent{\@glo@label}{%
15415                 {%
15416                   \edef\@glo@parent{\csuse{\glo@glsdetoklabel{\@glo@label}}{\parent}}{%
15417                     \ifglshasparent{\@glo@parent}{%
15418                       {%
15419                         \edef\@glo@parent{\csuse{\glo@glsdetoklabel{\@glo@parent}}{\parent}}{%
15420                           \ifglshasparent{\@glo@parent}{%
15421                             {%
15422                               {%
15423                                 \settowidth{\gls@tmp@len}{%
15424                                   {\glstreenamefmt{\glsentryname{\@glo@label}}}}{%
15425                                     \ifdim\gls@tmp@len>\dimen@ii

```

```

15426          \dimen@ii=\gls@tmpplen
15427          \eglssetwidest[2]{\glsentryname{\@glo@label}}%
15428          \fi
15429      }%
15430  }%
15431  {%
15432      \settowidth{\gls@tmpplen}%
15433          {\glstreenamefmt{\glsentryname{\@glo@label}}}%
15434      \ifdim\gls@tmpplen>\dimen@i
15435          \dimen@i=\gls@tmpplen
15436          \eglssetwidest[1]{\glsentryname{\@glo@label}}%
15437          \fi
15438      }%
15439  }%
15440  {%
15441      \settowidth{\gls@tmpplen}%
15442          {\glstreenamefmt{\glsentryname{\@glo@label}}}%
15443      \ifdim\gls@tmpplen>\dimen@i
15444          \dimen@=\gls@tmpplen
15445          \eglssetwidest{\glsentryname{\@glo@label}}%
15446          \fi
15447      }%
15448  }%
15449  {}%
15450  }%
15451  }%
15452 }

```

`dWidestLevelTwo` This is like `\glsFindWidestUsedLevelTwo` but doesn't check if the entry has been used.

```

15453 \newrobustcmd*\glsFindWidestLevelTwo[1][\@glo@types]{%
15454     \dimen@=0pt\relax
15455     \dimen@i=0pt\relax
15456     \dimen@ii=0pt\relax
15457     \forallglossaries[#1]{\gls@type}%
15458     {%
15459         \forglsentries[\gls@type]{\glo@label}%
15460     }%
15461         \ifglshasparent{\glo@label}%
15462             \def\glo@parent{\csuse{\glo@\glsdetoklabel{\glo@label}}{\parent}}%
15463             \edef\glo@parent{\csuse{\glo@\glsdetoklabel{\glo@parent}}{\parent}}%
15464             \ifglshasparent{\glo@parent}%
15465                 \def\glo@parent{\csuse{\glo@\glsdetoklabel{\glo@parent}}{\parent}}%
15466                 \ifglshasparent{\glo@parent}%
15467                     \def\glo@parent{\glo@parent}%
15468                 {}%
15469             {}%
15470             \settowidth{\gls@tmpplen}%
15471                 {\glstreenamefmt{\glsentryname{\glo@label}}}%
15472             \ifdim\gls@tmpplen>\dimen@ii

```

```

15473           \dimen@ii=\gls@tmpplen
15474           \eglssetwidest[2]{\glsentryname{\@glo@label}}%
15475           \fi
15476       }%
15477   }%
15478   {%
15479       \settowidth{\gls@tmpplen}%
15480           {\glstreenamefmt{\glsentryname{\@glo@label}}}%
15481       \ifdim\gls@tmpplen>\dimen@i
15482           \dimen@i=\gls@tmpplen
15483           \eglssetwidest[1]{\glsentryname{\@glo@label}}%
15484           \fi
15485       }%
15486   }%
15487   {%
15488       \settowidth{\gls@tmpplen}%
15489           {\glstreenamefmt{\glsentryname{\@glo@label}}}%
15490       \ifdim\gls@tmpplen>\dimen@
15491           \dimen@=\gls@tmpplen
15492           \eglssetwidest{\glsentryname{\@glo@label}}%
15493           \fi
15494       }%
15495   }%
15496   }%
15497 }

```

`\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.

```

15498 \newrobustcmd*{\glsFindWidestUsedAnyNameSymbol}[2][\@glo@types]{%
15499     \dimen@=0pt\relax
15500     \gls@tmpplen=0pt\relax
15501     #2=0pt\relax
15502     \forallglossaries[#1]{\gls@type}%
15503     {%
15504         \forglsentries[\gls@type]{\glo@label}%
15505     }%
15506         \ifglsused{\glo@label}%
15507     {%
15508         \settowidth{\dimen@}%
15509             {\glstreenamefmt{\glsentryname{\glo@label}}}%
15510         \ifdim\dimen@>\gls@tmpplen
15511             \gls@tmpplen=\dimen@
15512             \eglssetwidest{\glsentryname{\glo@label}}%
15513             \fi
15514             \settowidth{\dimen@}%
15515                 {\glsentrysymbol{\glo@label}}%
15516             \ifdim\dimen@>#2\relax
15517                 #2=\dimen@
15518             \fi

```

```

15519      }%
15520      {}%
15521      }%
15522      }%
15523 }

```

`\stAnyNameSymbol` Like the above but doesn't check if the entry has been used.

```

15524 \newrobustcmd*{\glsFindWidestAnyNameSymbol}[2][\@glo@types]{%
15525   \dimen@=0pt\relax
15526   \gls@tmp@len=0pt\relax
15527   #2=0pt\relax
15528   \forallglossaries[#1]{\gls@type}%
15529   {%
15530     \forglsentries[\gls@type]{\glo@label}%
15531     {%
15532       \settowidth{\dimen@}%
15533       {\glstreenamefmt{\glsentryname{\glo@label}}}}%
15534       \ifdim\dimen@>\gls@tmp@len
15535         \gls@tmp@len=\dimen@
15536         \eglssetwidest{\glsentryname{\glo@label}}%
15537       \fi
15538       \settowidth{\dimen@}%
15539       {\glsentrysymbol{\glo@label}}%
15540       \ifdim\dimen@>#2\relax
15541         #2=\dimen@
15542       \fi
15543     }%
15544   }%
15545 }

```

`\eSymbolLocation` 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.

```

15546 \newrobustcmd*{\glsFindWidestUsedAnyNameSymbolLocation}[3][\@glo@types]{%
15547   \dimen@=0pt\relax
15548   \gls@tmp@len=0pt\relax
15549   #2=0pt\relax
15550   #3=0pt\relax
15551   \forallglossaries[#1]{\gls@type}%
15552   {%
15553     \forglsentries[\gls@type]{\glo@label}%
15554     {%
15555       \ifglsused{\glo@label}%
15556       {%
15557         \settowidth{\dimen@}%
15558         {\glstreenamefmt{\glsentryname{\glo@label}}}}%
15559         \ifdim\dimen@>\gls@tmp@len
15560           \gls@tmp@len=\dimen@

```

```

15561         \eglssetwidest{\glsentryname{\@glo@label}}%
15562         \fi
15563         \settowidth{\dimen@}%
15564             {\glsentrysymbol{\@glo@label}}%
15565         \ifdim\dimen@>\relax
15566             #2=\dimen@
15567         \fi
15568         \settowidth{\dimen@}%
15569             {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}%
15570         \ifdim\dimen@>\relax
15571             #3=\dimen@
15572         \fi
15573     }%
15574     {}%
15575 }%
15576 }%
15577 }

```

`eSymbolLocation` Like the `\glsFindWidestUsedAnyNameSymbol` but doesn't check if the entry has been used.

```

15578 \newrobustcmd*{\glsFindWidestAnyNameSymbolLocation}[3][\@glo@types]{%
15579     \dimen@=0pt\relax
15580     \gls@tmplen=0pt\relax
15581     #2=0pt\relax
15582     #3=0pt\relax
15583     \forallglossaries[#1]{\gls@type}%
15584     {%
15585         \forglsentries[\gls@type]{\glo@label}%
15586     }%
15587         \settowidth{\dimen@}%
15588             {\glsnamefmt{\glsentryname{\@glo@label}}}%
15589         \ifdim\dimen@>\gls@tmplen
15590             \gls@tmplen=\dimen@
15591             \eglssetwidest{\glsentryname{\@glo@label}}%
15592         \fi
15593         \settowidth{\dimen@}%
15594             {\glsentrysymbol{\@glo@label}}%
15595         \ifdim\dimen@>\relax
15596             #2=\dimen@
15597         \fi
15598         \settowidth{\dimen@}%
15599             {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}%
15600         \ifdim\dimen@>\relax
15601             #3=\dimen@
15602         \fi
15603     }%
15604 }%
15605 }

```

`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.

```
15606 \newrobustcmd*\{\glsFindWidestUsedAnyNameLocation\}[2] [\@glo@types]{%
15607   \dimen@=0pt\relax
15608   \gls@tmp@len=0pt\relax
15609   #2=0pt\relax
15610   \forallglossaries[#1]{\gls@type}{%
15611     {%
15612       \forglsentries[\gls@type]{\glo@label}{%
15613         {%
15614           \ifglsused{\glo@label}{%
15615             {%
15616               \settowidth{\dimen@}{%
15617                 {\glstreenamefmt{\glsentryname{\glo@label}}}}%
15618               \ifdim\dimen@>\gls@tmp@len
15619                 \gls@tmp@len=\dimen@
15620                 \eglssetwidest{\glsentryname{\glo@label}}{%
15621                   \fi
15622                   \settowidth{\dimen@}{%
15623                     {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}}%
15624                   \ifdim\dimen@>#2\relax
15625                     #2=\dimen@
15626                   \fi
15627                 }%
15628               {%
15629                 }%
15630               }%
15631             }%
```

AnyNameLocation Like the \glsFindWidestAnyNameLocation but doesn't check the **first use** flag.

```
15632 \newrobustcmd*\{\glsFindWidestAnyNameLocation\}[2] [\@glo@types]{%
15633   \dimen@=0pt\relax
15634   \gls@tmp@len=0pt\relax
15635   #2=0pt\relax
15636   \forallglossaries[#1]{\gls@type}{%
15637     {%
15638       \forglsentries[\gls@type]{\glo@label}{%
15639         {%
15640           \settowidth{\dimen@}{%
15641             {\glstreenamefmt{\glsentryname{\glo@label}}}}%
15642             \ifdim\dimen@>\gls@tmp@len
15643               \gls@tmp@len=\dimen@
15644               \eglssetwidest{\glsentryname{\glo@label}}{%
15645                 \fi
15646                 \settowidth{\dimen@}{%
15647                   {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}}%
15648                   \ifdim\dimen@>#2\relax
15649                     #2=\dimen@
15650                   \fi
15651                 }%
```

```
15651      }%
15652      }%
15653 }
```

mputeTreeIndent Compute the value of \glstreeindent. Argument is the entry label. (Ignored in default definition, but this command may be redefined to take the particular entry into account.) Note that the sub-levels modify \glstreeindent.

```
15654 \newcommand*{\glsxtrComputeTreeIndent}[1]{%
15655   \glstreeindent=\glsxtrtreetopindent\relax
15656 }
```

teTreeSubIndent

```
\glsxtrComputeTreeSubIndent{\<level>}{\<label>}{\<register>}
```

Compute the indent for the sub-entries. The first argument is the level, the second argument is the entry label and the third argument is the length register used to store the computed indent.

```
15657 \newcommand*{\glsxtrComputeTreeSubIndent}[3]{%
15658   \ifcsundef{@glswidestname\romannumeral#1}{%
15659     {%
15660       \settowidth{\#3}{\glstreenamefmt{\@glswidestname\space}}{%
15661     }%
15662     {%
15663       \settowidth{\#3}{\glstreenamefmt{%
15664         \csname @glswidestname\romannumeral#1\endcsname\space}}{%
15665     }%
15666   }}
```

eeSetHangIndent Set \hangindent for top-level entries:

```
15667 \newcommand*{\glsxtrAltTreeSetHangIndent}{\hangindent\glstreeindent}
```

etSubHangIndent Set \hangindent for sub-entries:

```
15668 \newcommand*{\glsxtrAltTreeSetSubHangIndent}[1]{\hangindent\glstreeindent}
```

Redefine alttree:

```
15669 \renewglossarystyle{alttree}{%
15670   \renewenvironment{theglossary}{%
15671     {%
15672       \glsxtralttreeInit
15673       \def\@gls@prevlevel{-1}%
15674       \mbox{}\par}%
15675     \par}%
15676   \renewcommand*{\glossaryheader}{}{%
15677   \renewcommand*{\glsgroupheading}[1]{}{%
15678   \renewcommand{\glossentry}[2]{%
15679     \ifnum\@gls@prevlevel=0\relax
```

```

15680     \else
15681         \glsxtrComputeTreeIndent{##1}%
15682     \fi
15683     \parindent\glstreeindent
15684     \glsxtrAltTreeSetHangIndent
15685     \makebox[0pt][r]%
15686     {%
15687         \glstreenamebox{\glstreeindent}%
15688     {%
15689         \glsentryitem{##1}%
15690         \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
15691     }%
15692     }%
15693     \glsxtralttreeSymbolDescLocation{##1}{##2}%
15694     \def\@gls@prevlevel{0}%
15695 }
15696 \renewcommand{\subglossentry}[3]{%
15697     \ifnum##1=1\relax
15698         \glssubentryitem{##2}%
15699     \fi
15700     \ifnum\@gls@prevlevel=##1\relax
15701     \else
15702         \glsxtrComputeTreeSubIndent{##1}{##2}{\gls@tmpplen}%
15703         \ifnum\@gls@prevlevel<##1\relax
15704             \setlength\glstreeindent\gls@tmpplen
15705             \addtolength\glstreeindent\parindent
15706             \parindent\glstreeindent
15707         \else
15708             \ifnum\@gls@prevlevel=0\relax
15709                 \glsxtrComputeTreeIndent{##2}%
15710             \else
15711                 \glsxtrComputeTreeSubIndent{\@gls@prevlevel}{##2}{\glstreeindent}%
15712             \fi
15713             \addtolength\parindent{-\glstreeindent}%
15714             \setlength\glstreeindent\parindent
15715         \fi
15716     \fi
15717     \glsxtrAltTreeSetSubHangIndent{##1}%
15718     \makebox[0pt][r]{\glstreenamebox{\gls@tmpplen}{%
15719         \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}}}%
15720     \glsxtralttreeSubSymbolDescLocation{##1}{##2}{##3}%
15721     \def\@gls@prevlevel{##1}%
15722 }
15723 \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\glstreegroupskip\fi}%
15724 }
15725 }%
15726 {%
15727 }

```

Redefine alttreegroup so that it discourages a break after group headings.

```

15728 \ifdef{@glsstyle@alttreegroup}
15729 {%
15730   \renewglossarystyle{alttreegroup}{%
15731     \setglossarystyle{alttree}{%
15732       \renewcommand{\glsgroupheading}[1]{\par
15733         \def@gls@prevlevel{-1}%
15734         \hangindent0pt\relax
15735         \parindent0pt\relax
15736         \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15737         \glstreePreHeader{##1}{\glsxtr@grptitle}%
15738         \glstreegroupheaderfmt{\glsxtr@grptitle}%

```

Can't use \@afterheading here as it messes with the first item of the group.

```

15739   \glstreegroupheaderskip
15740   }%
15741 }%
15742 }%
15743 {%
15744 }

```

Similarly for alttreehypergroup.

```

15745 \ifdef{@glsstyle@alttreehypergroup}
15746 {%
15747   \renewglossarystyle{alttreehypergroup}{%
15748     \setglossarystyle{alttree}{%
15749       \renewcommand*{\glossaryheader}{%
15750         \par
15751         \def@gls@prevlevel{-1}%
15752         \hangindent0pt\relax
15753         \parindent0pt\relax
15754         \glstreenavigationfmt{\glsnavigation}%

```

Can't use \@afterheading here as it messes with the first item of the group.

```

15755   \glstreegroupheaderskip
15756   }%
15757   \renewcommand*{\glsgroupheading}[1]{%
15758     \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15759     \glstreePreHeader{##1}{\glsxtr@grptitle}%
15760     \par
15761     \def@gls@prevlevel{-1}%
15762     \hangindent0pt\relax
15763     \parindent0pt\relax
15764     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%

```

Can't use \@afterheading here as it messes with the first item of the group.

```

15765   \glstreegroupheaderskip
15766   }%
15767 }
15768 }%
15769 {%
15770 }

```

## 2.9 Multicolumn Styles

Adjust mcolindexgroup to discourage page breaks after the group headings.

```
15771 \ifdef{@glsstyle@mcolindexgroup}
15772 {%
15773   \renewglossarystyle{mcolindexgroup}{%
15774     \setglossarystyle{mcolindex}{%
15775       \renewcommand*\glsgroupheading[1]{%
15776         \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15777         \glstreePreHeader{##1}{\glsxtr@grptitle}%
15778         \item\glstreegroupheaderfmt{\glsxtr@grptitle}%
15779         \glstreegroupheaderskip@afterheading
15780       }%
15781   }
15782 }%
15783 {%
15784 }
```

Similarly for mcolindexhypergroup.

```
15785 \ifdef{@glsstyle@mcolindexhypergroup}
15786 {%
15787   \renewglossarystyle{mcolindexhypergroup}{%
15788     \setglossarystyle{mcolindex}{%
15789       \renewcommand*\glossaryheader{%
15790         \item\glstreenavigationfmt{\glsnavigation}%
15791         \glstreegroupheaderskip@afterheading
15792       }%
15793       \renewcommand*\glsgroupheading[1]{%
15794         \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15795         \glstreePreHeader{##1}{\glsxtr@grptitle}%
15796         \item\glstreegroupheaderfmt
15797         {\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
15798         \glstreegroupheaderskip@afterheading
15799       }%
15800   }
15801 }%
15802 {%
15803 }
```

Similarly for mcolindexspannav.

```
15804 \ifdef{@glsstyle@mcolindexspannav}
15805 {%
15806   \renewglossarystyle{mcolindexspannav}{%
15807     \setglossarystyle{index}{%
15808       \renewenvironment{theglossary}{%
15809         {%
15810           \begin{multicols}{\glsmcols}[\noindent\glstreenavigationfmt{\glsnavigation}]%
15811           \setlength{\parindent}{0pt}%
15812           \setlength{\parskip}{0pt plus 0.3pt}%
15813         }%
15814       }%
15815     }%
15816   }%
15817 }
```

```

15813     \let\item\glstreeitem}%
15814     {\end{multicols}}%
15815     \renewcommand*{\glsgroupheading}[1]{%
15816         \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15817         \glstreePreHeader{##1}{\glsxtr@grptitle}%
15818         \item\glstreegroupheaderfmt
15819             {\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
15820         \glstreegroupheaderskip\@afterheading
15821     }%
15822 }
15823 }%
15824 {%
15825 }

```

Similarly for mcoltreegroup.

```

15826 \ifdef{\glsstyle@mcoltreegroup}
15827 {%
15828     \renewglossarystyle{mcoltreegroup}{%
15829         \setglossarystyle{mcoltree}%
15830         \renewcommand{\glsgroupheading}[1]{%
15831             \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15832             \glstreePreHeader{##1}{\glsxtr@grptitle}%
15833             \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}%
15834             \glstreegroupheaderskip\@afterheading
15835     }%
15836 }
15837 }%
15838 {%
15839 }

```

Similarly for mcoltreehypergroup.

```

15840 \ifdef{\glsstyle@mcoltreehypergroup}
15841 {%
15842     \renewglossarystyle{mcoltreehypergroup}{%
15843         \setglossarystyle{mcoltree}%
15844         \renewcommand*{\glossaryheader}{%
15845             \par\noindent\glstreenavigationfmt{\glsnavigation}%
15846             \glstreegroupheaderskip
15847     }%
15848     \renewcommand*{\glsgroupheading}[1]{%
15849         \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15850         \glstreePreHeader{##1}{\glsxtr@grptitle}%
15851         \par\noindent
15852         \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
15853         \glstreegroupheaderskip\@afterheading
15854     }%
15855 }
15856 }%
15857 {%
15858 }

```

Similarly for mcoltreeespannav.

```
15859 \ifdef{@glsstyle@mcoltreeespannav}
15860 {%
15861   \renewglossarystyle{mcoltreeespannav}{%
15862     \setglossarystyle{tree}{%
15863       \renewenvironment{theglossary}{%
15864         {%
15865           \begin{multicols}{\glsmcols}{%
15866             [\noindent\glstreenavigationfmt{\glsnavigation}]{%
15867               \setlength{\parindent}{0pt}{%
15868                 \setlength{\parskip}{0pt plus 0.3pt}{%
15869               }{%
15870             }{%
15871             \renewcommand*\glsgroupheading[1]{%
15872               \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}{%
15873                 \glstreePreHeader{##1}{\glsxtr@grptitle}{%
15874                   \par\noindent{%
15875                     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}{%
15876                     \glstreegroupheaderskip@afterheading{%
15877                   }{%
15878                 }{%
15879               }{%
15880             }{%
15881           }{%

```

Similarly for mcoltreeonamegroup.

```
15882 \ifdef{@glsstyle@mcoltreeonamegroup}
15883 {%
15884   \renewglossarystyle{mcoltreeonamegroup}{%
15885     \setglossarystyle{mcoltreeoname}{%
15886     \renewcommand{\glsgroupheading}[1]{%
15887       \glsxtrgetgroupitle{##1}{\glsxtr@grptitle}{%
15888         \glstreePreHeader{##1}{\glsxtr@grptitle}{%
15889           \par\noindent\glstreegroupheaderfmt{\glsxtr@grptitle}{%
15890           \glstreegroupheaderskip@afterheading{%
15891         }{%
15892       }{%
15893     }{%
15894   }{%
15895 }
```

Similarly for mcoltreeonamehypergroup.

```
15896 \ifdef{@glsstyle@mcoltreeonamehypergroup}
15897 {%
15898   \renewglossarystyle{mcoltreeonamehypergroup}{%
15899     \setglossarystyle{mcoltreeoname}{%
15900     \renewcommand*\glossaryheader{%
15901       \par\noindent\glstreenavigationfmt{\glsnavigation}{%
15902         \glstreegroupheaderskip{%
15903       }{%

```

```

15904 \renewcommand*\glsgroupheading}[1]{%
15905   \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15906   \glstreePreHeader{##1}{\glsxtr@grptitle}%
15907   \par\noindent
15908   \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
15909   \glstreegroupheaderskip@\afterheading}%
15910 }%
15911 }%
15912 {%
15913 }

```

Similarly for mcoltreenonamespannav.

```

15914 \ifdef{@glsstyle@mcoltreenonamespannav}%
15915 {%
15916   \renewglossarystyle{mcoltreenonamespannav}{%
15917     \setglossarystyle{treenoname}%
15918     \renewenvironment{theglossary}%
15919     {%
15920       \begin{multicols}{\glsmcols}%
15921         [\noindent\glstreenavigationfmt{\glsnavigation}]%
15922         \setlength{\parindent}{0pt}%
15923         \setlength{\parskip}{0pt plus 0.3pt}%
15924     }%
15925   {\end{multicols}}%
15926   \renewcommand*\glsgroupheading}[1]{%
15927     \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15928     \glstreePreHeader{##1}{\glsxtr@grptitle}%
15929     \par\noindent
15930     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
15931     \glstreegroupheaderskip@\afterheading}%
15932 }%
15933 }%
15934 {%
15935 }

```

mcolaltree needs adjusting so that it uses \glsxtralttreeInit This doesn't use \mbox{} \par which would unbalance the top of the columns.

```

15936 \ifdef{@glsstyle@mcolaltree}%
15937 {%
15938   \renewglossarystyle{mcolaltree}{%
15939     \setglossarystyle{alttree}%
15940     \renewenvironment{theglossary}%
15941     {%
15942       \glsxtralttreeInit
15943       \def\@gls@prevlevel{-1}%
15944       \begin{multicols}{\glsmcols}%
15945     }%
15946   {\par\end{multicols}}%
15947 }%
15948 }%

```

```

15949 {%
15950 }

    Redefine mcolalttreegroup to discourage page breaks after the group headings.

15951 \ifdef{\glsstyle@mcolalttreegroup}
15952 {%
15953   \renewglossarystyle{mcolalttreegroup}{%
15954     \setglossarystyle{mcolalttree}{%
15955       \renewcommand{\glsgroupheading}[1]{%
15956         \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15957         \glstreePreHeader{##1}{\glsxtr@grptitle}%
15958         \par
15959         \def\gls@prevlevel{-1}%
15960         \hangindent0pt\relax
15961         \parindent0pt\relax
15962         \glstreegroupheaderfmt{\glsxtr@grptitle}%
15963         \glstreegroupheaderskip
15964       }%
15965     }%
15966   }%
15967 {%
15968 }

```

Similarly for mcolalttreehypergroup.

```

15969 \ifdef{\glsstyle@mcolalttreehypergroup}
15970 {%
15971   \renewglossarystyle{mcolalttreehypergroup}{%
15972     \setglossarystyle{mcolalttree}{%
15973       \renewcommand*\glossaryheader{%
15974         \par
15975         \def\gls@prevlevel{-1}%
15976         \hangindent0pt\relax
15977         \parindent0pt\relax
15978         \glstreenavigationfmt{\glsnavigation}%
15979         \glstreegroupheaderskip
15980       }%
15981       \renewcommand*\glsgroupheading[1]{%
15982         \glsxtrgetgroup{##1}{\glsxtr@grptitle}%
15983         \glstreePreHeader{##1}{\glsxtr@grptitle}%
15984         \par
15985         \def\gls@prevlevel{-1}%
15986         \hangindent0pt\relax
15987         \parindent0pt\relax
15988         \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsxtr@grptitle}}%
15989         \glstreegroupheaderskip
15990       }%
15991     }%
15992   }%
15993 {%
15994 }

```

Similarly for `mcolalttreespannav`.

```
15995 \ifdef{\glsstyle@mcolalttreespannav}
15996 {%
15997   \renewglossarystyle{mcolalttreespannav}{%
15998     \setglossarystyle{alttree}%
15999     \renewenvironment{theglossary}%
16000   {%
16001     \glsxtralttreeInit
16002     \def\@gls@prevlevel{-1}%
16003     \begin{multicols}{\glsmcols}%
16004       [\noindent\glstreenavigationfmt{\glsnavigation}]%
16005     }%
16006     {\end{multicols}}%
16007     \renewcommand*\glsgroupheading[1]{%
16008       \glsxtrgetgroup title{\##1}{\glsxtr@grptitle}%
16009       \glstreePreHeader{\##1}{\glsxtr@grptitle}%
16010       \par
16011       \def\@gls@prevlevel{-1}%
16012       \hangindent0pt\relax
16013       \parindent0pt\relax
16014       \glstreegroupheaderfmt{\glsnavhypertarget{\##1}{\glsxtr@grptitle}}%
16015       \glstreegroupheaderskip
16016     }%
16017   }%
16018 }%
16019 {%
16020 }
```

Reset the default style

```
16021 \ifx\glossary@default@style\relax
16022 \else
16023   \setglossarystyle{\glsxtr@current@style}
16024 \fi
```

## 3 bookindex style (glossary-bookindex.sty)

### 3.1 Package Initialisation and Options

```
16025 \NeedsTeXFormat{LaTeX2e}
16026 \ProvidesPackage{glossary-bookindex}[2020/02/13 v1.42 (NLCT)]
Load required packages.
16027 \RequirePackage{multicol}
16028 \RequirePackage{glossary-tree}

trbookindexcols Number of columns.
16029 \newcommand{\glsxtrbookindexcols}{2}

trbookindexname Format used for top-level entries. (Argument is the label.)
16030 \newcommand*{\glsxtrbookindexname}[1]{\glossentryname{\#1}}

bookindexsubname Format used for sub entries.
16031 \newcommand*{\glsxtrbookindexsubname}[1]{\glsxtrbookindexname{\#1}>

sxtrprelocation Provide in case glossaries-stylemods isn't loaded.
16032 \providecommand*{\glsxtrprelocation}{\space}

ndxprelocation Separator used before location list for top-level entries. Version 1.22 has removed the
\ifglsnopostrdot check since this style doesn't display the description.
16033 \newcommand*{\glsxtrbookindexprelocation}[1]{%
16034   \glsxtrifhasfield{location}{\#1}%
16035   {,\glsxtrprelocation}%
16036   {\glsxtrprelocation}%
16037 }

xsubprelocation Separator used before location list for sub-entries.
16038 \newcommand*{\glsxtrbookindexsubprelocation}[1]{%
16039   \glsxtrbookindexprelocation{\#1}%
16040 }

okindexlocation


\glsxtrbookindexlocation{\label}{\location}


Displays the location.
16041 \newcommand*{\glsxtrbookindexlocation}[2]{#2}
```

ndexsublocation

```
\glsxtrbookindexlocation{\label}{\location}
```

Displays the location for sub-entries.

```
16042 \newcommand*{\glsxtrbookindexsublocation}{\glsxtrbookindexlocation}
```

xparentchildsep Separator used between top-level parent and child entry.

```
16043 \newcommand{\glsxtrbookindexparentchildsep}{\nopagebreak}
```

rentsubchildsep Separator used between sub-level parent and child entry.

```
16044 \newcommand{\glsxtrbookindexparentsubchildsep}{\glsxtrbookindexparentchildsep}
```

ookindexbetween Between two top-level entries identified by the labels in the arguments.

```
16045 \newcommand{\glsxtrbookindexbetween}[2]{}
```

indexsubbetween Between two level 1 entries identified by the labels in the arguments.

```
16046 \newcommand{\glsxtrbookindexsubbetween}[2]{}
```

exsubsubbetween Between two level 2 entries identified by the labels in the arguments.

```
16047 \newcommand{\glsxtrbookindexsubsubbetween}[2]{}
```

indexatendgroup At the end of a letter group. The argument is the index of the last top-level entry.

```
16048 \newcommand{\glsxtrbookindexatendgroup}[1]{}
```

exsubatendgroup At the end of a letter group. The argument is the index of the last level 1 entry.

```
16049 \newcommand{\glsxtrbookindexsubatendgroup}[1]{}
```

ubsubatendgroup At the end of a letter group. The argument is the index of the last level 2 entry.

```
16050 \newcommand{\glsxtrbookindexsubsubatendgroup}[1]{}
```

kindexgroupskip Group separator.

```
16051 \newcommand{\glsxtrbookindexgroupskip}{\ifglsnogroupskip\else\indexspace\fi}
```

Format group title.

dexformatheader Group separator.

```
16052 \newcommand*{\glsxtrbookindexformatheader}[1]{%
16053   \par{\centering\glstreegroupheaderfmt{\#1}\par}%
16054 }
```

okindexbookmark Book mark group heading if supported.

```
16055 \ifdef\pdfbookmark
16056 {%
16057   \newcommand*{\glsxtrbookindexbookmark}[2]{%
16058     \ifdefstring{\@glossarysec}{chapter}%
16059       {\pdfbookmark[1]{\#1}{\#2}}%
```

```

16060     {\pdfbookmark[2]{#1}{#2}}%
16061 }
16062 }
16063 {%
16064 \newcommand*{\glsxtrbookindexbookmark}[2]{}
16065 }

```

xbookmarkprefix Make the bookmark label prefix used for letter groups depend on the glossary label (instead of original hardcoded “index.”).

```
16066 \newcommand*{\glsxtrbookindexbookmarkprefix}{\currentglossary.}
```

kindexcolspread

```
16067 \newcommand*{\glsxtrbookindexcolspread}{}%
```

dexmulticolsenv

```
16068 \newcommand*{\glsxtrbookindexmulticolsenv}{multicols}
```

Define the style.

```

16069 \newglossarystyle{bookindex}{%
16070   \setglossarystyle{index}%
16071   \renewenvironment{theglossary}{%
16072     {%
16073       \ifnum\glsxtrbookindexcols>1\relax
16074         \ifempty{\glsxtrbookindexcolspread}%
16075           {%
16076             \edef\glsxtr@beginbookindex{%
16077               \noexpand\begin{\glsxtrbookindexmulticolsenv}%
16078                 {\glsxtrbookindexcols}%
16079             }%
16080           }%
16081           {%
16082             \edef\glsxtr@beginbookindex{%
16083               \noexpand\begin{\glsxtrbookindexmulticolsenv}%
16084                 {\glsxtrbookindexcols}[\glsxtrbookindexcolspread]%
16085             }%
16086           }%
16087         \else
16088           \def\glsxtr@beginbookindex{}%
16089         \fi
16090       \glsxtr@beginbookindex
16091       \setlength{\parindent}{0pt}%
16092       \setlength{\parskip}{0pt plus 0.3pt}%
16093       \let@\glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
16094       \let@\glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
16095       \let@\glsxtr@bookindex@between@gobble
16096       \let@\glsxtr@bookindex@subbetween@gobble
16097       \let@\glsxtr@bookindex@subsubbetween@gobble
16098       \let@\glsxtr@bookindex@atendgroup\relax
16099       \let@\glsxtr@bookindex@subatendgroup\relax

```

```

16100      \let\@glsxtr@bookindex@subsubatendgroup\relax
16101      \let\@glsxtr@bookindexgroupskip\relax
16102  }%
16103 {%
    Do end group hooks.
16104      \@glsxtr@bookindex@subsubatendgroup
16105      \@glsxtr@bookindex@subatendgroup
16106      \@glsxtr@bookindex@atendgroup
    End multicols environment.
16107      \ifnum\glsxtrbookindexcols>1\relax
16108          \edef\glsxtr@endbookindex{%
16109              \noexpand\end{\glsxtrbookindexmulticolsenv}%
16110          }%
16111      \else
16112          \def\glsxtr@endbookindex{}%
16113      \fi
16114      \glsxtr@endbookindex
16115  }%
    Use ragged right as columns are likely to be narrow and indexes tend not to be fully justified.
16116  \renewcommand*\glossaryheader{\raggedright}%
    Top level entry format.
16117  \renewcommand*\glossentry}[2]{%
    Do separator.
16118  \glsxtr@bookindex@between##1}%
    Update separators.
16119  \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
16120  \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentschildsep
16121  \let\@glsxtr@bookindex@subbetween\@gobble
16122  \let\@glsxtr@bookindex@subsubbetween\@gobble
16123  \edef\@glsxtr@bookindex@between{%
16124      \noexpand\glsxtrbookindexbetween##1}%
16125  }%
16126  \edef\@glsxtr@bookindex@atendgroup{%
16127      \noexpand\glsxtrbookindexatendgroup##1}%
16128  }%
16129  \let\@glsxtr@bookindex@subatendgroup\relax
16130  \let\@glsxtr@bookindex@subsubatendgroup\relax
    Format entry.
16131  \glstreeitem
16132  \glsentryitem##1}%
16133  \glstarget##1{\glsxtrbookindexname##1}%
16134  \glsxtrbookindexprelocation##1}%
16135  \glsxtrbookindexlocation##1##2}%
16136 }%
16137 \renewcommand*\subglossentry}[3]{%
16138  \ifcase##1\relax

```

Level 0 (shouldn't happen as that's formatted with \glossentry).

```
16139      \glstreeitem
16140      \or
    Level 1.
16141      \@glsxtr@bookindex@sep
16142      \@glsxtr@bookindex@subbetween{##2}%
16143      \let\@glsxtr@bookindex@sep\relax
```

Update separators.

```
16144      \let\@glsxtr@bookindex@subsubbetween\@obble
16145      \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
16146      \edef\@glsxtr@bookindex@subbetween{%
16147          \noexpand\glsxtrbookindexsubbetween{##2}%
16148      }%
16149      \edef\@glsxtr@bookindex@atsubendgroup{%
16150          \noexpand\glsxtrbookindexatsubendgroup{##1}%
16151      }%
```

Start sub-item.

```
16152      \glstreesubitem
16153      \glssubentryitem{##2}%
16154      \else
```

All other levels.

```
16155      \@glsxtr@bookindex@subsep
16156      \@glsxtr@bookindex@subsubbetween{##2}%
```

Update separators.

```
16157      \let\@glsxtr@bookindex@subsep\relax
16158      \edef\@glsxtr@bookindex@subsubbetween{%
16159          \noexpand\glsxtrbookindexsubsubbetween{##2}%
16160      }%
16161      \edef\@glsxtr@bookindex@atsubsubendgroup{%
16162          \noexpand\glsxtrbookindexatsubsubendgroup{##1}%
16163      }%
```

Start sub-sub-item.

```
16164      \glstreesubsubitem
16165      \fi
```

Format entry.

```
16166      \glstarget{##2}{\glsxtrbookindexsubname{##2}}%
16167      \glsxtrbookindexsubprelocation{##2}%
16168      \glsxtrbookindexsublocation{##2}{##3}%
16169  }%
```

The group skip is moved to the group heading to avoid interfering with the end letter group hooks.

```
16170  \renewcommand*\glsgroupskip{}%
```

Group heading format.

```
16171  \renewcommand*\glsgroupheading[1]{%
```

Do end group hooks.

```
16172  \glsxtr@bookindex@subsubatendgroup
16173  \glsxtr@bookindex@subatendgroup
16174  \glsxtr@bookindex@atendgroup
16175  \glsxtr@bookindexgroupskip
```

Update separators.

```
16176  \let\glsxtr@bookindexgroupskip\glsxtrbookindexgroupskip
16177  \let\glsxtr@bookindex@between\gobble
16178  \let\glsxtr@bookindex@atendgroup\relax
16179  \let\glsxtr@bookindex@subatendgroup\relax
16180  \let\glsxtr@bookindex@subsubatendgroup\relax
```

Fetch the group title from the label supplied in #1.

```
16181  \glsxtrgetgroup{##1}{\glsxtrcurrentgrptitle}%
```

Do the PDF bookmark if supported.

```
16182  \glsxtrbookindexbookmark{\glsxtrcurrentgrptitle}{\glsxtrbookindexbookmarkprefix##1}%
```

Format the group title.

```
16183  \glsxtrbookindexformatheader{\glsxtrcurrentgrptitle}%
16184  \nopagebreak\indexspace\nopagebreak\@afterheading
16185 }%
16186 }
```

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.

```
16187 \newcommand{\glsxtrbookindexthepage}{%
16188 \ifdef{\currentglossary}{\currentglossary.\arabic{page}}{\arabic{page}}%
16189 }
```

`\bookindexmarkentry` Writes entry information to the .aux file. The argument is the entry label.

```
16190 \newcommand*\glsxtrbookindexmarkentry[1]{%
16191 \protected@write\auxout
16192 {\let\glsxtrbookindexthepage\relax}%
16193 {\string\glsxtr@setbookindexmark{\glsxtrbookindexthepage}{#1}}%
16194 }
```

`\etbookindexmark`

```
16195 \newcommand*\glsxtr@setbookindexmark[2]{%
16196 \ifcsundef{\glsxtr@idxfirstmark@#1}%
16197 {\csgdef{\glsxtr@idxfirstmark@#1}{#2}}%
16198 {}%
16199 \csgdef{\glsxtr@idxlastmark@#1}{#2}%
16200 }
```

```

dexfirstmarkfmt
16201 \newcommand*{\glsxtrbookindexfirstmarkfmt}[1]{%
16202   \glsentryname{#1}%
16203 }

kindexfirstmark
16204 \newcommand*{\glsxtrbookindexfirstmark}{%
16205   \letcs{\glsxtr@label}{\glsxtr@idxfirstmark@\glsxtrbookindexthepage}%
16206   \ifdef{\glsxtr@label}%
16207     {\glsxtrbookindexfirstmarkfmt{\glsxtr@label}}%
16208   {}%
16209 }

ndexlastmarkfmt
16210 \newcommand*{\glsxtrbookindexlastmarkfmt}[1]{%
16211   \glsentryname{#1}%
16212 }

okindexlastmark
16213 \newcommand*{\glsxtrbookindexlastmark}{%
16214   \letcs{\glsxtr@label}{\glsxtr@idxlastmark@\glsxtrbookindexthepage}%
16215   \ifdef{\glsxtr@label}%
16216     {\glsxtrbookindexlastmarkfmt{\glsxtr@label}}%
16217   {}%
16218 }

```

## 4 longextra styles (glossary-longextra.sty)

### 4.1 Package Initialisation and Options

Provides additional long styles.

```
16219 \NeedsTeXFormat{LaTeX2e}
16220 \ProvidesPackage{glossary-longextra}[2020/02/13 v1.42 (NLCT)]
Load required packages.
16221 \RequirePackage{glossary-longbooktabs}
```

ongextraNameFmt

```
\glslongextraNameFmt{\label}
```

Governs the way the name is displayed.

```
16222 \newcommand{\glslongextraNameFmt}[1]{%
16223   \glsentryitem{\#1}\glstarget{\#1}{\glossentryname{\#1}}%
16224 }
```

ongextraDescFmt

```
\glslongextraDescFmt{\label}
```

Governs the way the description is displayed.

```
16225 \newcommand{\glslongextraDescFmt}[1]{%
16226   \glossentrydesc{\#1}\glspostdescription
16227 }
```

gextraSymbolFmt

```
\glslongextraSymbolFmt{\label}
```

Governs the way the symbol is displayed.

```
16228 \newcommand{\glslongextraSymbolFmt}[1]{\glossentrysymbol{\#1}}
```

xtraLocationFmt

```
\glslongextraLocationFmt{\label}{\location list}
```

Governs the way the location is displayed.

```
16229 \newcommand{\glslongextraLocationFmt}[2]{#2}
```

extraSubNameFmt

```
\glslongextraSubNameFmt{\level}{\label}
```

Governs the way the child name is displayed. Just does the sub-entry counter, if enabled, and the target.

```
16230 \newcommand{\glslongextraSubNameFmt}[2]{%
16231   \glssubentryitem{#2}\glstarget{#2}{\strut}%
16232 }
```

extraSubDescFmt

```
\glslongextraSubDescFmt{\level}{\label}
```

Governs the way the child description is displayed.

```
16233 \newcommand{\glslongextraSubDescFmt}[2]{%
16234   \glslongextraDescFmt{#2}%
16235 }
```

traSubSymbolFmt

```
\glslongextraSubSymbolFmt{\level}{\label}
```

Governs the way the child symbol is displayed.

```
16236 \newcommand{\glslongextraSubSymbolFmt}[2]{%
16237   \glslongextraSymbolFmt{#2}%
16238 }
```

aSubLocationFmt

```
\glslongextraSubLocationFmt{\level}{\label}{\location list}
```

Governs the way the child location list is displayed.

```
16239 \newcommand{\glslongextraSubLocationFmt}[3]{#3}
```

```

gextraNameAlign Alignment for the name column.
16240 \newcommand{\glslongextraNameAlign}{l}

gextraDescAlign Alignment for the description column.
16241 \newcommand{\glslongextraDescAlign}{>{\raggedright}p{\glsdescwidth} }

gextraSymbolAlign Alignment for the symbol column.
16242 \newcommand{\glslongextraSymbolAlign}{c}

gextraLocationAlign Alignment for the location column.
16243 \newcommand{\glslongextraLocationAlign}{>{\raggedright}p{\glspagelistwidth} }

gextraGroupHeading Used to format the letter group headings. The first argument is the number of columns in the
table. The second is the group label (not the title).
16244 \newcommand{\glslongextraGroupHeading}[2]{}

gextraHeaderFormat Format for the column headers.
16245 \newcommand{\glslongextraHeaderFmt}[1]{\textbf{#1} }

gextraNameDescHeader
16246 \newcommand{\glslongextraNameDescHeader}{%
16247 \glslongextraNameDescTabularHeader\endhead
16248 \glslongextraNameDescTabularFooter\endfoot
16249 }

gextraTabularHeader
16250 \newcommand{\glslongextraNameDescTabularHeader}{%
16251 \toprule
16252 \glslongextraHeaderFmt\entryname &
16253 \glslongextraHeaderFmt\descriptionname\tabularnewline
16254 \midrule
16255 }

gextraTabularFooter
16256 \newcommand{\glslongextraNameDescTabularFooter}{%
16257 \bottomrule
16258 }

    Unlike the altree style, there aren't different widths for the hierarchical levels.

gextraSetWidest Provide in case the tree styles haven't been loaded.
16259 \newcommand*{\glslongextraSetWidest}[1]{%
16260 \def\@glslongextrawidestname{#1}%
16261 }

gextrawidestname Pick up the widest name from the altree style if it has been set. (Will expand to nothing
otherwise.)
16262 \newcommand*{\@glslongextrawidestname}{\csuse{@glswidestname}}

```

traUpdateWidest

```
16263 \newcommand*{\glslongextraUpdateWidest}[1]{%
16264   \ifundef\@glslongextrawidestname
16265   {\def\@glslongextrawidestname{\#1}}%
16266   {%
16267     \settowidth{\dimen@}{\@glslongextrawidestname}%
16268     \settowidth{\dimen@ii}{\#1}%
16269     \ifdim\dimen@ii>\dimen@
16270       \def\@glslongextrawidestname{\#1}%
16271     \fi
16272   }%
16273 }
```

dateWidestChild

```
\glslongextraUpdateWidestChild{<level>}{<text>}
```

Used by \glsxtrSetWidest in glossaries-extra-bib2gls. Does nothing by default, since the default action in these styles is to omit the child name. If the child name should be displayed, then this needs to be redefined to use \glslongextraUpdateWidest.

```
16274 \newcommand*{\glslongextraUpdateWidestChild}[2]{}
```

traSetDescWidth Computes the value of \glsdescwidth for the styles that only have name and description columns.

```
16275 \newcommand{\glslongextraSetDescWidth}{%
16276   \settowidth{\gls@tmp@len}{\glslongextraHeaderFmt\entryname}%

```

Has the widest name been set.

```
16277   \settowidth{\dimen@}{\glsnamefont{\@glslongextrawidestname}}%
16278   \ifdim\dimen@>\gls@tmp@len
16279     \gls@tmp@len=\dimen@
16280   \fi
```

Description width is \linewidth less 4\tabcolsep less the width of the name column.

```
16281   \setlength{\glsdescwidth}{\dimexpr\linewidth-4\tabcolsep-\gls@tmp@len}%
16282 }
```

SymSetDescWidth Computes the value of \glsdescwidth for the styles that only have name, symbol and description columns.

```
16283 \newcommand{\glslongextraSymSetDescWidth}{%
```

Work out the size for just the name and description style.

```
16284   \glslongextraSetDescWidth
```

Now work out the symbol column width. This is assuming that the column title will be the widest text in the column.

```
16285   \settowidth{\gls@tmp@len}{\glslongextraHeaderFmt\symbolname}%
```

Subtract 2\tabcolsep and the symbol header width.

```
16286 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\gls@tmp{len}}%
16287 }
```

**LocSetDescWidth** Computes the value of \glsdescwidth for the styles that only have name, location and description columns.

```
16288 \newcommand{\glslongextraLocSetDescWidth}{%
```

Work out the size for just the name and description style.

```
16289 \glslongextraSetDescWidth
```

Subtract 2\tabcolsep and the location list column width.

```
16290 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\glspagelistwidth}%
16291 }
```

**LocSetDescWidth** Computes the value of \glsdescwidth for the styles that have name, symbol, location and description columns.

```
16292 \newcommand{\glslongextraSymLocSetDescWidth}{%
```

Work out the size for just the name, symbol and description style.

```
16293 \glslongextraSymSetDescWidth
```

Subtract 2\tabcolsep and the location list column width.

```
16294 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\glspagelistwidth}%
16295 }
```

**ExtraUseTabular** If true use tabular instead of longtable. Obviously only intended for short glossaries that can fit into a single page.

```
16296 \newif\ifGlsLongExtraUseTabular
16297 \GlsLongExtraUseTabularfalse
```

**raTabularVAlign** Only used with the tabular setting.

```
16298 \newcommand*\glslongextraTabularVAlign[c]
```

**long-name-desc** Two column style with multi-lined descriptions and header. This is similar to the longragged-booktabs style.

```
16299 \newglossarystyle[long-name-desc]{%
16300 }%
16301 \ifGlsLongExtraUseTabular
16302 \renewenvironment{theglossary}{%
16303 }%
16304 \glslongextraSetDescWidth
16305 \edef\@glslongextra@begintab{%
16306 \noexpand\begin{tabular}[t]{l}
16307 \expandonce\glslongextraNameAlign
16308 \expandonce\glslongextraDescAlign}%
16309 \glslongextra@begintab
16310 }%
16311 }%
```

```

16312     \glslongextraNameDescTabularFooter
16313     \end{tabular}%
16314   }%
16315   \renewcommand*{\glossaryheader}{\glslongextraNameDescTabularHeader}%
16316 \else
16317   \renewenvironment{theglossary}%
16318   {%
16319     \glspatchLToutput
16320     \glslongextraSetDescWidth
16321     \edef\@glslongextra@begintab{%
16322       \noexpand\begin{longtable}{%
16323         \expandonce\glslongextraNameAlign
16324         \expandonce\glslongextraDescAlign}}%
16325     \glslongextra@begintab
16326   }%
16327   {\end{longtable}}%
16328   \renewcommand*{\glossaryheader}{\glslongextraNameDescHeader}%
16329 \fi
16330 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{2}{##1}}%
16331 \renewcommand{\glossentry}[2]{%
16332   \glslongextraNameFmt{##1} %
16333   \glslongextraDescFmt{##1}\tabularnewline
16334 }%
16335 \renewcommand{\subglossentry}[3]{%
16336   \glslongextraSubNameFmt{##1}{##2}%
16337   &
16338   \glslongextraSubDescFmt{##1}{##2}%
16339   \tabularnewline
16340 }%
16341 \ifglsnogroupskip
16342   \renewcommand*{\glsgroupskip}{}%
16343 \else
16344   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16345 \fi
16346 }

```

#### cLocationHeader

```

16347 \newcommand{\glslongextraNameDescLocationHeader}{%
16348   \glslongextraNameDescLocationTabularHeader\endhead
16349   \glslongextraNameDescLocationTabularFooter\endfoot
16350 }

```

#### onTabularHeader

```

16351 \newcommand{\glslongextraNameDescLocationTabularHeader}{%
16352   \toprule
16353   \glslongextraHeaderFmt\entryname %
16354   \glslongextraHeaderFmt\descriptionname %
16355   \glslongextraHeaderFmt\pagelistname\tabularnewline
16356   \midrule

```

```

16357 }

onTabularFooter
16358 \newcommand{\glslongextraNameDescLocationTabularFooter}{%
16359   \bottomrule
16360 }

g-name-desc-loc Three columns: name, description and location list.
16361 \newglossarystyle{long-name-desc-loc}{%
16362 {%
16363   \ifGlsLongExtraUseTabular
16364     \renewenvironment{theglossary}{%
16365       {%
16366         \glslongextraLocSetDescWidth
16367         \edef\@glslongextra@begintab{%
16368           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16369             \expandonce\glslongextraNameAlign
16370             \expandonce\glslongextraDescAlign
16371             \expandonce\glslongextraLocationAlign
16372           }{}}%
16373         \@glslongextra@begintab
16374       }%
16375       {%
16376         \glslongextraNameDescLocationTabularFooter
16377         \end{tabular}%
16378       }%
16379     \renewcommand*\glossaryheader{\glslongextraNameDescLocationTabularHeader}%
16380   \else
16381     \renewenvironment{theglossary}{%
16382       {%
16383         \glspatchLToutput
16384         \glslongextraLocSetDescWidth
16385         \edef\@glslongextra@begintab{%
16386           \noexpand\begin{longtable}{%
16387             \expandonce\glslongextraNameAlign
16388             \expandonce\glslongextraDescAlign
16389             \expandonce\glslongextraLocationAlign
16390           }{}}%
16391         \@glslongextra@begintab
16392       }%
16393       {\end{longtable}}%
16394     \renewcommand*\glossaryheader{\glslongextraNameDescLocationHeader}%
16395   \fi
16396 \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}%
16397 \renewcommand{\glossentry}[2]{%
16398   \glslongextraNameFmt{##1} &
16399   \glslongextraDescFmt{##1} &
16400   \glslongextraLocationFmt{##1}{##2}\tabularnewline
16401 }%

```

```

16402 \renewcommand{\subglossentry}[3]{%
16403   \glslongextraSubNameFmt{##1}{##2}&
16404   \glslongextraSubDescFmt{##1}{##2}&
16405   \glslongextraSubLocationFmt{##1}{##2}{##3}%
16406   \tabularnewline
16407 }%
16408 \ifglsnogroupskip
16409   \renewcommand*{\glsgroupskip}{}%
16410 \else
16411   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16412 \fi
16413 }

aDescNameHeader
16414 \newcommand{\glslongextraDescNameHeader}{%
16415   \glslongextraDescNameTabularHeader\endhead
16416   \glslongextraDescNameTabularFooter\endfoot
16417 }

meTabularHeader
16418 \newcommand{\glslongextraDescNameTabularHeader}{%
16419   \toprule
16420   \glslongextraHeaderFmt\descriptionname&
16421   \glslongextraHeaderFmt\entryname \tabularnewline
16422   \midrule
16423 }

meTabularFooter
16424 \newcommand{\glslongextraDescNameTabularFooter}{%
16425   \bottomrule
16426 }

long-desc-name Like name-desc but swaps the columns.

```

```

16427 \newglossarystyle{long-desc-name}{%
16428 }%
16429 \ifGlsLongExtraUseTabular
16430 \renewenvironment{theglossary}{%
16431 }%
16432   \glslongextraSetDescWidth
16433   \edef\@glslongextra@begintab{%
16434     \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16435       \expandonce\glslongextraDescAlign
16436       \expandonce\glslongextraNameAlign}}%
16437   \glslongextra@begintab
16438 }%
16439 }%
16440   \glslongextraDescNameTabularFooter
16441   \end{tabular}%
16442 }%

```

```

16443 \renewcommand*{\glossaryheader}{\glslongextraDescNameTabularHeader}%
16444 \else
16445 \renewenvironment{theglossary}%
16446 {%
16447 \glspatchLToutput
16448 \glslongextraSetDescWidth
16449 \edef\@glslongextra@begintab{%
16450 \noexpand\begin{longtable}{%
16451 \expandonce\glslongextraDescAlign
16452 \expandonce\glslongextraNameAlign}}%
16453 \@glslongextra@begintab
16454 }%
16455 {\end{longtable}}%
16456 \renewcommand*{\glossaryheader}{\glslongextraDescNameHeader}%
16457 \fi
16458 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{2}{##1}}%
16459 \renewcommand{\glossentry}[2]{%
16460 \glslongextraDescFmt{##1} &
16461 \glslongextraNameFmt{##1}\tabularnewline
16462 }%
16463 \renewcommand{\subglossentry}[3]{%
16464 \glslongextraSubDescFmt{##1}{##2} &
16465 \glslongextraSubNameFmt{##1}{##2}\tabularnewline
16466 }%
16467 \ifglsnogroupskip
16468 \renewcommand*{\glsgroupskip}{}%
16469 \else
16470 \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16471 \fi
16472 }

```

nDescNameHeader

```

16473 \newcommand{\glslongextraLocationDescNameHeader}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
16474 \glslongextraLocationDescNameTabularHeader\endhead
16475 \glslongextraLocationDescNameTabularFooter\endfoot
16476 }

```

meTabularHeader

```

16477 \newcommand{\glslongextraLocationDescNameTabularHeader}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
16478 \toprule
16479 \glslongextraHeaderFmt\pagelistname&
16480 \glslongextraHeaderFmt\descriptionname&
16481 \glslongextraHeaderFmt\entryname \tabularnewline
16482 \midrule
16483 }

```

meTabularFooter

```

16484 \newcommand{\glslongextraLocationDescNameTabularFooter}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
16485 \bottomrule

```

```

16486 }

g-loc-desc-name Three columns: location, description and name.
16487 \newglossarystyle{long-loc-desc-name}{%
16488 {%
16489   \ifGlsLongExtraUseTabular
16490   {%
16491     \glslongextraLocSetDescWidth
16492     \edef\@glslongextra@begintab{%
16493       \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16494         \expandonce\glslongextraLocationAlign
16495         \expandonce\glslongextraDescAlign
16496         \expandonce\glslongextraNameAlign}}%
16497     \@glslongextra@begintab
16498   }%
16499   {%
16500     \glslongextraLocationDescNameTabularFooter
16501     \end{tabular}%
16502   }%
16503   \renewcommand*{\glossaryheader}{\glslongextraLocationDescNameTabularHeader}%
16504 \else
16505 \renewenvironment{theglossary}{%
16506   {%
16507     \glspatchLToutput
16508     \glslongextraLocSetDescWidth
16509     \edef\@glslongextra@begintab{%
16510       \noexpand\begin{longtable}{%
16511         \expandonce\glslongextraLocationAlign
16512         \expandonce\glslongextraDescAlign
16513         \expandonce\glslongextraNameAlign}}%
16514     \@glslongextra@begintab
16515   }%
16516   {\end{longtable}}%
16517   \renewcommand*{\glossaryheader}{\glslongextraLocationDescNameHeader}%
16518 \fi
16519 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}}%
16520 \renewcommand{\glossentry}[2]{%
16521   \glslongextraLocationFmt{##1}{##2} &
16522   \glslongextraDescFmt{##1} &
16523   \glslongextraNameFmt{##1}\tabularnewline
16524 }%
16525 \renewcommand{\subglossentry}[3]{%
16526   \glslongextraSubLocationFmt{##1}{##2}{##3} &
16527   \glslongextraSubDescFmt{##1}{##2} &
16528   \glslongextraSubNameFmt{##1}{##2}\tabularnewline
16529 }%
16530 \ifglsnogroupskip
16531   \renewcommand*{\glsgroupskip}{}%
16532 \else

```

```

16533     \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16534     \fi
16535 }

meDescSymHeader
16536 \newcommand{\glslongextraNameDescSymHeader}{%
16537   \glslongextraNameDescSymTabularHeader\endhead
16538   \glslongextraNameDescSymTabularFooter\endfoot
16539 }

ymTabularHeader
16540 \newcommand{\glslongextraNameDescSymTabularHeader}{%
16541   \toprule
16542   \glslongextraHeaderFmt\entryname &
16543   \glslongextraHeaderFmt\descriptionname &
16544   \glslongextraHeaderFmt\symbolname\tabularnewline
16545   \midrule
16546 }

ymTabularFooter
16547 \newcommand{\glslongextraNameDescSymTabularFooter}{%
16548   \bottomrule
16549 }

```

g-name-desc-sym Three column style with symbol in the third column.

```

16550 \newglossarystyle{long-name-desc-sym}{%
16551 {%
16552   \ifGlsLongExtraUseTabular
16553     \renewenvironment{theglossary}{%
16554       {%
16555         \glslongextraSymSetDescWidth
16556         \edef\@glslongextra@begintab{%
16557           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16558             \expandonce\glslongextraNameAlign
16559             \expandonce\glslongextraDescAlign
16560             \expandonce\glslongextraSymbolAlign
16561           }{}}%
16562         \@glslongextra@begintab
16563       }%
16564     {%
16565       \glslongextraNameDescSymTabularFooter
16566       \end{tabular}%
16567     }%
16568     \renewcommand*{\glossaryheader}{\glslongextraNameDescSymTabularHeader}%
16569   \else
16570     \renewenvironment{theglossary}{%
16571       {%
16572         \glspatchLToutput
16573         \glslongextraSymSetDescWidth

```

```

16574 \edef\@glslongextra@begintab{%
16575   \noexpand\begin{longtable}{%
16576     \expandonce\glslongextraNameAlign
16577     \expandonce\glslongextraDescAlign
16578     \expandonce\glslongextraSymbolAlign
16579   }{}}%
16580 \@glslongextra@begintab
16581 }%
16582 {\end{longtable}}%
16583 \renewcommand*{\glossaryheader}{\glslongextraNameDescSymHeader}%
16584 \fi
16585 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}}%
16586 \renewcommand{\glossentry}[2]{%
16587   \glslongextraNameFmt{##1} &
16588   \glslongextraDescFmt{##1} &
16589   \glslongextraSymbolFmt{##1}\tabularnewline
16590 }%
16591 \renewcommand{\subglossentry}[3]{%
16592   \glslongextraSubNameFmt{##1}{##2} &
16593   \glslongextraSubDescFmt{##1}{##2} &
16594   \glslongextraSubSymbolFmt{##1}{##2}%
16595   \tabularnewline
16596 }%
16597 \ifglsnogroupskip
16598   \renewcommand*{\glsgroupskip}{}%
16599 \else
16600   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16601 \fi
16602 }

```

#### mLocationHeader

```

16603 \newcommand{\glslongextraNameDescSymLocationHeader}{%
16604   \glslongextraNameDescSymLocationTabularHeader\endhead
16605   \glslongextraNameDescSymLocationTabularFooter\endfoot
16606 }

```

#### onTabularHeader

```

16607 \newcommand{\glslongextraNameDescSymLocationTabularHeader}{%
16608   \toprule
16609   \glslongextraHeaderFmt\entryname &
16610   \glslongextraHeaderFmt\descriptionname &
16611   \glslongextraHeaderFmt\symbolname &
16612   \glslongextraHeaderFmt\pagelistname\tabularnewline
16613   \midrule
16614 }

```

#### onTabularFooter

```

16615 \newcommand{\glslongextraNameDescSymLocationTabularFooter}{%
16616   \bottomrule

```

```

16617 }

me-desc-sym-loc Four columns: name, description and location
16618 \newglossarystyle{long-name-desc-sym-loc}%
16619 {%
16620   \ifGlsLongExtraUseTabular
16621     \renewenvironment{theglossary}%
16622     {%
16623       \glslongextraSymLocSetDescWidth
16624       \edef\@glslongextra@begintab{%
16625         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16626           \expandonce\glslongextraNameAlign
16627           \expandonce\glslongextraDescAlign
16628           \expandonce\glslongextraSymbolAlign
16629           \expandonce\glslongextraLocationAlign
16630         }{}}%
16631       \@glslongextra@begintab
16632     }%
16633     {%
16634       \glslongextraNameDescSymLocationTabularFooter
16635       \end{tabular}%
16636     }%
16637     \renewcommand*\{\glossaryheader}{\glslongextraNameDescSymLocationTabularHeader}%
16638   \else
16639     \renewenvironment{theglossary}%
16640     {%
16641       \glspatchLToutput
16642       \glslongextraSymLocSetDescWidth
16643       \edef\@glslongextra@begintab{%
16644         \noexpand\begin{longtable}{%
16645           \expandonce\glslongextraNameAlign
16646           \expandonce\glslongextraDescAlign
16647           \expandonce\glslongextraSymbolAlign
16648           \expandonce\glslongextraLocationAlign
16649         }{}}%
16650       \@glslongextra@begintab
16651     }%
16652     {\end{longtable}}%
16653     \renewcommand*\{\glossaryheader}{\glslongextraNameDescSymLocationHeader}%
16654   \fi
16655   \renewcommand*\{\glsgroupheading}[1]{\glslongextraGroupHeading{4}{##1}}%
16656   \renewcommand{\glossentry}[2]{%
16657     \glslongextraNameFmt{##1} &
16658     \glslongextraDescFmt{##1} &
16659     \glslongextraSymbolFmt{##1}&
16660     \glslongextraLocationFmt{##1}{##2}\tabularnewline
16661   }%
16662   \renewcommand{\subglossentry}[3]{%
16663     \glslongextraSubNameFmt{##1}{##2} &

```

```

16664     \glslongextraSubDescFmt{##1}{##2} &
16665     \glslongextraSubSymbolFmt{##1}{##2}&
16666     \glslongextraSubLocationFmt{##1}{##2}{##3}%
16667     \tabularnewline
16668 }%
16669 \ifglsnogroupskip
16670   \renewcommand*\glsgroupskip{}%
16671 \else
16672   \renewcommand*\glsgroupskip{\glspenaltygroupskip}%
16673 \fi
16674 }

meSymDescHeader
16675 \newcommand{\glslongextraNameSymDescHeader}{%
16676   \glslongextraNameSymDescTabularHeader\endhead
16677   \glslongextraNameSymDescTabularFooter\endfoot
16678 }

scTabularHeader
16679 \newcommand{\glslongextraNameSymDescTabularHeader}{%
16680   \toprule
16681   \glslongextraHeaderFmt\entryname &
16682   \glslongextraHeaderFmt\symbolname &
16683   \glslongextraHeaderFmt\descriptionname\tabularnewline
16684   \midrule
16685 }

scTabularFooter
16686 \newcommand{\glslongextraNameSymDescTabularFooter}{%
16687   \bottomrule
16688 }

g-name-sym-desc Three column style with symbol in the second column.
16689 \newglossarystyle{long-name-sym-desc}{%
16690 }%
16691 \ifGlsLongExtraUseTabular
16692 \renewenvironment{theglossary}{%
16693 }%
16694   \glslongextraSymSetDescWidth
16695   \edef\@glslongextra@begintab{%
16696     \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16697       \expandonce\glslongextraNameAlign
16698       \expandonce\glslongextraSymbolAlign
16699       \expandonce\glslongextraDescAlign
16700     }%
16701     \glslongextra@begintab
16702   }%
16703 }%
16704   \glslongextraNameSymDescTabularFooter

```

```

16705      \end{tabular}%
16706  }%
16707  \renewcommand*{\glossaryheader}{\glslongextraNameSymDescTabularHeader}%
16708 \else
16709 \renewenvironment{theglossary}%
16710 {%
16711   \glspatchLToutput
16712   \glslongextraSymSetDescWidth
16713   \edef\@glslongextra@begintab{%
16714     \noexpand\begin{longtable}{%
16715       \expandonce\glslongextraNameAlign
16716       \expandonce\glslongextraSymbolAlign
16717       \expandonce\glslongextraDescAlign
16718     }}%
16719   \glslongextra@begintab
16720 }%
16721 { \end{longtable} }%
16722 \renewcommand*{\glossaryheader}{\glslongextraNameSymDescHeader}%
16723 \fi
16724 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}}%
16725 \renewcommand{\glossentry}[2]{%
16726   \glslongextraNameFmt{##1} &
16727   \glslongextraSymbolFmt{##1} &
16728   \glslongextraDescFmt{##1}\tabularnewline
16729 }%
16730 \renewcommand{\subglossentry}[3]{%
16731   \glslongextraSubNameFmt{##1}{##2} &
16732   \glslongextraSubSymbolFmt{##1}{##2} &
16733   \glslongextraSubDescFmt{##1}{##2}\tabularnewline
16734 }%
16735 \ifglsnogroupskip
16736   \renewcommand*{\glsgroupskip}{}%
16737 \else
16738   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16739 \fi
16740 }

```

#### cLocationHeader

```

16741 \newcommand{\glslongextraNameSymDescLocationHeader}{%
16742   \glslongextraNameSymDescLocationTabularHeader\endhead
16743   \glslongextraNameSymDescLocationTabularFooter\endfoot
16744 }

```

#### onTabularHeader

```

16745 \newcommand{\glslongextraNameSymDescLocationTabularHeader}{%
16746   \toprule
16747   \glslongextraHeaderFmt\entryname &
16748   \glslongextraHeaderFmt\symbolname &
16749   \glslongextraHeaderFmt\descriptionname &

```

```

16750 \glslongextraHeaderFmt\pagelistname\tabularnewline
16751 \midrule
16752 }

onTabularFooter
16753 \newcommand{\glslongextraNameSymDescLocationTabularFooter}{%
16754 \bottomrule
16755 }

```

me-sym-desc-loc Four column style with symbol in the second column.

```

16756 \newglossarystyle{long-name-sym-desc-loc}%
16757 {%
16758   \ifGlsLongExtraUseTabular
16759     \renewenvironment{theglossary}%
16760     {%
16761       \glslongextraSymLocSetDescWidth
16762       \edef\@glslongextra@begintab{%
16763         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16764           \expandonce\glslongextraNameAlign
16765           \expandonce\glslongextraSymbolAlign
16766           \expandonce\glslongextraDescAlign
16767           \expandonce\glslongextraLocationAlign
16768         }{}}%
16769       \@glslongextra@begintab
16770     }%
16771     {%
16772       \glslongextraNameSymDescLocationTabularFooter
16773       \end{tabular}%
16774     }%
16775     \renewcommand*\glossaryheader{\glslongextraNameSymDescLocationTabularHeader}%
16776   \else
16777     \renewenvironment{theglossary}%
16778     {%
16779       \glspatchLToutput
16780       \glslongextraSymLocSetDescWidth
16781       \edef\@glslongextra@begintab{%
16782         \noexpand\begin{longtable}[%}
16783           \expandonce\glslongextraNameAlign
16784           \expandonce\glslongextraSymbolAlign
16785           \expandonce\glslongextraDescAlign
16786           \expandonce\glslongextraLocationAlign
16787         }{}}%
16788       \@glslongextra@begintab
16789     }%
16790     {\end{longtable}}%
16791     \renewcommand*\glossaryheader{\glslongextraNameSymDescLocationHeader}%
16792   \fi
16793   \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{4}{##1}}%
16794   \renewcommand{\glossentry}[2]{%

```

```

16795     \glslongextraNameFmt{##1} &
16796     \glslongextraSymbolFmt{##1} &
16797     \glslongextraDescFmt{##1} &
16798     \glslongextraLocationFmt{##1}{##2}\tabularnewline
16799 }%
16800 \renewcommand{\subglossentry}[3]{%
16801     \glslongextraSubNameFmt{##1}{##2} &
16802     \glslongextraSubSymbolFmt{##1}{##2} &
16803     \glslongextraSubDescFmt{##1}{##2} &
16804     \glslongextraSubLocationFmt{##1}{##2}{##3}\tabularnewline
16805 }%
16806 \ifglsnogroupskip
16807     \renewcommand*{\glsgroupskip}{}%
16808 \else
16809     \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16810 \fi
16811 }

```

#### mDescNameHeader

```

16812 \newcommand{\glslongextraSymDescNameHeader}{%
16813 \glslongextraSymDescNameTabularHeader\endhead
16814 \glslongextraSymDescNameTabularFooter\endfoot
16815 }

```

#### meTabularHeader

```

16816 \newcommand{\glslongextraSymDescNameTabularHeader}{%
16817 \toprule
16818 \glslongextraHeaderFmt\symbolname &
16819 \glslongextraHeaderFmt\descriptionname &
16820 \glslongextraHeaderFmt\entryname\tabularnewline
16821 \midrule
16822 }

```

#### meTabularFooter

```

16823 \newcommand{\glslongextraSymDescNameTabularFooter}{%
16824 \bottomrule
16825 }

```

g-sym-desc-name Three column style with symbol in the first column, description in the second and name in the third.

```

16826 \newglossarystyle{long-sym-desc-name}{%
16827 }%
16828 \ifGlsLongExtraUseTabular
16829 \renewenvironment{theglossary}{%
16830 }%
16831 \glslongextraSymSetDescWidth
16832 \edef\@glslongextra@begintab{%
16833 \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16834 \expandonce\glslongextraSymbolAlign

```

```

16835      \expandonce\glslongextraDescAlign
16836      \expandonce\glslongextraNameAlign
16837  } } %
16838  \glslongextra@begintab
16839 } %
16840 { %
16841  \glslongextraSymDescNameTabularFooter
16842  \end{tabular} %
16843 } %
16844 \renewcommand*{\glossaryheader}{\glslongextraSymDescNameTabularHeader}%
16845 \else
16846 \renewenvironment{theglossary}%
16847 { %
16848  \glspatchLToutput
16849  \glslongextraSymSetDescWidth
16850  \edef\@glslongextra@begintab{%
16851   \noexpand\begin{longtable}{%
16852     \expandonce\glslongextraSymbolAlign
16853     \expandonce\glslongextraDescAlign
16854     \expandonce\glslongextraNameAlign
16855   } } %
16856   \glslongextra@begintab
16857 } %
16858 { \end{longtable} } %
16859 \renewcommand*{\glossaryheader}{\glslongextraSymDescNameHeader}%
16860 \fi
16861 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}}%
16862 \renewcommand{\glossentry}[2]{%
16863   \glslongextraSymbolFmt{##1} &
16864   \glslongextraDescFmt{##1} &
16865   \glslongextraNameFmt{##1}\tabularnewline
16866 } %
16867 \renewcommand{\subglossentry}[3]{%
16868   \glslongextraSubSymbolFmt{##1}{##2} &
16869   \glslongextraSubDescFmt{##1}{##2} &
16870   \glslongextraSubNameFmt{##1}{##2}\tabularnewline
16871 } %
16872 \ifglsnogroupskip
16873   \renewcommand*{\glsgroupskip}{}%
16874 \else
16875   \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16876 \fi
16877 }

mDescNameHeader
16878 \newcommand{\glslongextraLocationSymDescNameHeader}{%
16879  \glslongextraLocationSymDescNameTabularHeader\endhead
16880  \glslongextraLocationSymDescNameTabularFooter\endfoot
16881 }

```

```

meTabularHeader
16882 \newcommand{\glslongextraLocationSymDescNameTabularHeader}{%
16883   \toprule
16884   \glslongextraHeaderFmt\pagelistname &
16885   \glslongextraHeaderFmt\symbolname &
16886   \glslongextraHeaderFmt\descriptionname &
16887   \glslongextraHeaderFmt\entryname\tabularnewline
16888   \midrule
16889 }

meTabularFooter
16890 \newcommand{\glslongextraLocationSymDescNameTabularFooter}{%
16891   \bottomrule
16892 }

c-sym-desc-name Four column style with location list, symbol, description and name.
16893 \newglossarystyle{long-loc-sym-desc-name}{%
16894 {%
16895   \ifGlsLongExtraUseTabular
16896     \renewenvironment{theglossary}{%
16897       {%
16898         \glslongextraSymLocSetDescWidth
16899         \edef\@glslongextra@begintab{%
16900           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16901             \expandonce\glslongextraLocationAlign
16902             \expandonce\glslongextraSymbolAlign
16903             \expandonce\glslongextraDescAlign
16904             \expandonce\glslongextraNameAlign
16905           }{}}%
16906         \@glslongextra@begintab
16907       }{%
16908       {%
16909         \glslongextraLocationSymDescNameTabularFooter
16910         \end{tabular}{}}%
16911       }{%
16912       \renewcommand*\glossaryheader{\glslongextraLocationSymDescNameTabularHeader}{%
16913     \else
16914       \renewenvironment{theglossary}{%
16915         {%
16916           \glspatchLToutput
16917           \glslongextraSymLocSetDescWidth
16918           \edef\@glslongextra@begintab{%
16919             \noexpand\begin{longtable}{%
16920               \expandonce\glslongextraLocationAlign
16921               \expandonce\glslongextraSymbolAlign
16922               \expandonce\glslongextraDescAlign
16923               \expandonce\glslongextraNameAlign
16924             }{}}%
16925           \@glslongextra@begintab

```

```

16926    }%
16927    {\end{longtable}}%
16928    \renewcommand*{\glossaryheader}{\glslongextraLocationSymDescNameHeader}%
16929    \fi
16930    \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{4}{##1}}%
16931    \renewcommand{\glossentry}[2]{%
16932        \glslongextraLocationFmt{##1}{##2} &
16933        \glslongextraSymbolFmt{##1} &
16934        \glslongextraDescFmt{##1} &
16935        \glslongextraNameFmt{##1}\tabularnewline
16936    }%
16937    \renewcommand{\subglossentry}[3]{%
16938        \glslongextraSubLocationFmt{##1}{##2}{##3} &
16939        \glslongextraSubSymbolFmt{##1}{##2} &
16940        \glslongextraSubDescFmt{##1}{##2} &
16941        \glslongextraSubNameFmt{##1}{##2}\tabularnewline
16942    }%
16943    \ifglsnogroupskip
16944        \renewcommand*{\glsgroupskip}{}%
16945    \else
16946        \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
16947    \fi
16948 }

```

#### scSymNameHeader

```

16949 \newcommand{\glslongextraDescSymNameHeader}{%
16950 \glslongextraDescSymNameTabularHeader\endhead
16951 \glslongextraDescSymNameTabularFooter\endfoot
16952 }

```

#### meTabularHeader

```

16953 \newcommand{\glslongextraDescSymNameTabularHeader}{%
16954 \toprule
16955 \glslongextraHeaderFmt\descriptionname &
16956 \glslongextraHeaderFmt\symbolname &
16957 \glslongextraHeaderFmt\entryname\tabularnewline
16958 \midrule
16959 }

```

#### meTabularFooter

```

16960 \newcommand{\glslongextraDescSymNameTabularFooter}{%
16961 \bottomrule
16962 }

```

**g-desc-sym-name** Three column style with description in the first column, symbol in the second and name in the third.

```

16963 \newglossarystyle{long-desc-sym-name}{%
16964 {%
16965 \ifGlsLongExtraUseTabular

```

```

16966 \renewenvironment{theglossary}%
16967 {%
16968   \glslongextraSymSetDescWidth
16969   \edef\@glslongextra@begintab{%
16970     \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16971       \expandonce\glslongextraDescAlign
16972       \expandonce\glslongextraSymbolAlign
16973       \expandonce\glslongextraNameAlign
16974     }{}}%
16975   \glslongextra@begintab
16976 {%
16977 {%
16978   \glslongextraDescSymNameTabularFooter
16979   \end{tabular}%
16980 }%
16981 \renewcommand*\glossaryheader{\glslongextraDescSymNameTabularHeader}%
16982 \else
16983 \renewenvironment{theglossary}%
16984 {%
16985   \glspatchLToutput
16986   \glslongextraSymSetDescWidth
16987   \edef\@glslongextra@begintab{%
16988     \noexpand\begin{longtable}{%
16989       \expandonce\glslongextraDescAlign
16990       \expandonce\glslongextraSymbolAlign
16991       \expandonce\glslongextraNameAlign
16992     }{}}%
16993   \glslongextra@begintab
16994 }%
16995 {\end{longtable}}%
16996 \renewcommand*\glossaryheader{\glslongextraDescSymNameHeader}%
16997 \fi
16998 \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}%
16999 \renewcommand{\glossentry}[2]{%
17000   \glslongextraDescFmt{##1} &
17001   \glslongextraSymbolFmt{##1} &
17002   \glslongextraNameFmt{##1}\tabularnewline
17003 }%
17004 \renewcommand{\subglossentry}[3]{%
17005   \glslongextraSubDescFmt{##1}{##2} &
17006   \glslongextraSubSymbolFmt{##1}{##2} &
17007   \glslongextraSubNameFmt{##1}{##2}\tabularnewline
17008 }%
17009 \ifglsnogroupskip
17010   \renewcommand*\glsgroupskip{}%
17011 \else
17012   \renewcommand*\glsgroupskip{\glspenaltygroupskip}%
17013 \fi
17014 }

```

```

scSymNameHeader
17015 \newcommand{\glslongextraLocationDescSymNameHeader}{%
17016   \glslongextraLocationDescSymNameTabularHeader\endhead
17017   \glslongextraLocationDescSymNameTabularFooter\endfoot
17018 }

meTabularHeader
17019 \newcommand{\glslongextraLocationDescSymNameTabularHeader}{%
17020   \toprule
17021   \glslongextraHeaderFmt\pagelistname &
17022   \glslongextraHeaderFmt\descriptionname &
17023   \glslongextraHeaderFmt\symbolname &
17024   \glslongextraHeaderFmt\entryname\tabularnewline
17025   \midrule
17026 }

meTabularFooter
17027 \newcommand{\glslongextraLocationDescSymNameTabularFooter}{%
17028   \bottomrule
17029 }

c-desc-sym-name Four column style with location list, description, symbol and name.
17030 \newglossarystyle{long-loc-desc-sym-name}%
17031 {%
17032   \ifGlsLongExtraUseTabular
17033     \renewenvironment{theglossary}%
17034     {%
17035       \glslongextraSymLocSetDescWidth
17036       \edef\@glslongextra@begintab{%
17037         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
17038           \expandonce\glslongextraLocationAlign
17039           \expandonce\glslongextraDescAlign
17040           \expandonce\glslongextraSymbolAlign
17041           \expandonce\glslongextraNameAlign
17042         }{}}%
17043       \@glslongextra@begintab
17044     }%
17045     {%
17046       \glslongextraLocationDescSymNameTabularFooter
17047       \end{tabular}%
17048     }%
17049     \renewcommand*\glossaryheader{\glslongextraLocationDescSymNameTabularHeader}%
17050   \else
17051     \renewenvironment{theglossary}%
17052     {%
17053       \glspatchLToutput
17054       \glslongextraSymLocSetDescWidth
17055       \edef\@glslongextra@begintab{%
17056         \noexpand\begin{longtable}{%
```

```

17057      \expandonce\glslongextraLocationAlign
17058      \expandonce\glslongextraDescAlign
17059      \expandonce\glslongextraSymbolAlign
17060      \expandonce\glslongextraNameAlign
17061      } } %
17062      \glslongextra@begintab
17063      } %
17064      {\end{longtable}} %
17065      \renewcommand*{\glossaryheader}{\glslongextraLocationDescSymNameHeader}%
17066      \fi
17067      \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{4}{##1}}%
17068      \renewcommand{\glossentry}[2]{%
17069          \glslongextraLocationFmt{##1}{##2} &
17070          \glslongextraDescFmt{##1} &
17071          \glslongextraSymbolFmt{##1} &
17072          \glslongextraNameFmt{##1}\tabularnewline
17073      } %
17074      \renewcommand{\subglossentry}[3]{%
17075          \glslongextraSubLocationFmt{##1}{##2}{##3} &
17076          \glslongextraSubDescFmt{##1}{##2} &
17077          \glslongextraSubSymbolFmt{##1}{##2} &
17078          \glslongextraSubNameFmt{##1}{##2}\tabularnewline
17079      } %
17080      \ifglsnogroupskip
17081          \renewcommand*{\glsgroupskip}{}%
17082      \else
17083          \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
17084      \fi
17085 }

```

# 5 topic styles (glossary-topic.sty)

## 5.1 Package Initialisation and Options

Provides “topic” styles where top-level entries are considered a topic.

```
17086 \NeedsTeXFormat{LaTeX2e}
17087 \ProvidesPackage{glossary-topic}[2020/02/13 v1.42 (NLCT)]
```

Load required package.

```
17088 \RequirePackage{multicol}
```

The top-level entries act like headers. If the top-level entry has a description it's placed below the name.

topic

```
17089 \newglossarystyle{topic}{%
17090   \renewenvironment{theglossary}{%
17091     {%
17092       \glstopicInit
17093       \def\glstopic@prechildren{}%
17094       \def\glstopic@prevlevel{-1}%
17095     }%
17096     {\par}%
17097     \renewcommand*\glossaryheader{}%
17098     \renewcommand*\glsgroupheading[1]{%
17099       \def\glstopic@prevlevel{-1}%
17100       \glstopicGroupHeading{\#\#1}%
17101     }%
17102     \renewcommand*\glossentry[2]{%
17103       \hangindent0pt\relax
17104       \parindent\glstopicParIndent\relax
17105       \glstopicItem{\#\#1}{\#\#2}}%
```

If there isn't a description, penalise a page break.

```
17106   \ifglsdesc{\#\#1}%
17107     {%
17108       \def\glstopic@prechildren{}%
17109     }%
17110     {%
17111       \def\glstopic@prechildren{\nopagebreak}%
17112     }%
17113   }%
17114   \renewcommand*\subglossentry[3]{%
17115     \ifnum\glstopic@prevlevel=0\relax\glstopic@prechildren\fi
```

```

17116     \def\glstopic@prevlevel{##1}%
17117     \glstopicAssignSubIndent{##1}%
17118     \glstopicSubItem{##1}{##2}{##3}%
17119   }%
17120   \renewcommand*\glsgroupskip{}%
17121 }
```

`\picGroupHeading`

`\glstopicGroupHeading{\(group label)}`

May be redefined if letter group headings are required. For example:

```

\renewcommand*\glstopicGroupHeading[1]{%
  \glsxtrgetgroup{#1}{\thisgrp{}}%
  \section*\thisgrp{}%
}

17122 \newcommand*\glstopicGroupHeading[1]{}
```

`\glstopicItem`

`\glstopicItem{\(label)}{\(location list)}`

```

17123 \newcommand*\glstopicItem[2]{%
17124   \glspar\glstopicPreSkip\glspar\noindent
17125   \glstopicMarker{#1}%
17126   \glstopicTitleFont
17127   {%
17128     \glsentryitem{#1}\glstarget{#1}{\glstopicTitle{#1}}%
17129   }%
17130   \ifglshassdesc{#1}%
17131   {\glspar\nobreak\glstopicMidSkip\glspar\nobreak
17132     @afterheading\glstopicDesc{#1}\glspar\glstopicPostSkip}%
17133   {\glspar\nobreak\glstopicPostSkip}%
17134   \glstopicLoc{#1}{#2}%
17135 }
```

`\glstopicMarker` May be used to insert a bookmark etc if required.

```
17136 \newcommand*\glstopicMarker[1]{}
```

`\glstopicName`

```

17137 \newcommand*\glstopicTitle[1]{\Glossentryname{#1}%
17138   \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{}%
17139 }
```

`\topicTitleFont`

```
17140 \newcommand*\glstopicTitleFont[1]{\textbf{\large #1}}
```

```

\glstopicDesc
 17141 \newcommand*{\glstopicDesc}[1]{\Glossentrydesc{#1}\glspostdescription}

\glstopicLoc
 17142 \newcommand*{\glstopicLoc}[2]{}

topicParIndent
 17143 \newlength\glstopicParIndent
 17144 \setlength\glstopicParIndent{20pt}

topicSubIndent
 17145 \newlength\glstopicSubIndent
 17146 \setlength\glstopicSubIndent{20pt}

\glstopicInit
 17147 \newcommand{\glstopicInit}{} 

```

#### AssignSubIndent

`\glstopicAssignSubIndent{\<level>}`

Used to set the indentation for sub-levels.

```

17148 \newcommand*{\glstopicAssignSubIndent}[1]{%
 17149   \par
 17150   \parindent\dimexpr#1\glstopicSubIndent-\glstopicSubIndent\relax
 17151   \glstopicAssignWidest{#1}%
 17152   \hangindent\dimexpr\parindent+\glstopicwidest\relax
 17153 } 

```

#### glstopicwidest

```
17154 \newlength\glstopicwidest
```

#### picAssignWidest

`\glstopicAssignWidest{\<level>}`

Used in the definition of \glstopicAssignSubIndent to set the indentation from the widest name for the given level. This will require glossary-tree to set the values.

```

17155 \newcommand*{\glstopicAssignWidest}[1]{%
 17156   \ifcsundef{@glswidestlength\romannumeral#1}%
 17157   {%
 17158     \ifcsdef{@glswidestname\romannumeral#1}%
 17159     {%
 17160       \settowidth{\glstopicwidest}{%

```

```

17161     \glstopicSubNameFont{\csuse{@glswidestname\romannumeral#1}}%
17162     \glstopicSubItemSep
17163   }%
17164 }%
17165 {\setlength{\glstopicwidest}{0pt}}%
Save the value so that it doesn't have to keep being recalculated.
17166   \csedef{@glswidestlength\romannumeral#1}{\the\glstopicwidest}%
17167 }%
17168 {\setlength{\glstopicwidest}{\csuse{@glswidestlength\romannumeral#1}}}%
17169 }

glstopicPreSkip
17170 \newcommand*{\glstopicPreSkip}{\medskip}

glstopicMidSkip
17171 \newcommand*{\glstopicMidSkip}{\smallskip}

lstopicPostSkip
17172 \newcommand*{\glstopicPostSkip}{\smallskip}

glstopicSubItem


\glstopicSubItem{\langle level \rangle}{\langle label \rangle}{\langle location list \rangle}


17173 \newcommand*{\glstopicSubItem}[3]{%
17174   \glstopicSubItemBox{#1}{\glstopicSubNameFont{\glsentryitem{#2}}%
17175     \glstarget{#2}{\glossentryname{#2}}}}%
17176   \glstopicSubItemSep
17177 }%
17178 \ifglsassymbol{#2}{(\glossentrysymbol{#2})\space}{}%

17179 \ifglsdesc{#2}{%
17180   {\glossentrydesc{#2}\glspostdescription\glstopicSubPreLocSep}{}%
17181 \glstopicSubLoc{#2}{#3}}%
17182 }

topicSubItemSep
17183 \newcommand*{\glstopicSubItemSep}{\quad}

topicSubItemBox


\glstopicSubItemBox{\langle level \rangle}{\langle text \rangle}


17184 \newcommand*{\glstopicSubItemBox}[2]{%
17185   \ifdim\glstopicwidest>0pt\relax\makebox[\glstopicwidest][1]{#2}\else#2\fi
17186 }

```

```

topicSubNameFont
17187 \newcommand*{\glstopicSubNameFont}[1]{\textbf{#1}}


picSubPreLocSep
17188 \newcommand*{\glstopicSubPreLocSep}{\space}

\glstopicSubLoc
17189 \newcommand*{\glstopicSubLoc}[2]{#2}

\glstopicCols
17190 \newcommand*{\glstopicCols}{2}

glstopicColsEnv
17191 \newcommand*{\glstopicColsEnv}{multicols}

topicmccols
17192 \newglossarystyle{topicmccols}{%
17193   \renewenvironment{theglossary}{%
17194     {%
17195       \glstopicInit
17196       \def\glstopic@prechildren{}%
17197       \def\glstopic@postchildren{}%
17198       \def\glstopic@prevlevel{-1}%
17199     }%
17200     {%
17201       \ifnum\glstopic@prevlevel>0\relax\glstopic@postchildren\fi
17202       \par
17203     }%
17204   \renewcommand*{\glossaryheader}{%
17205     \renewcommand*{\glsgroupheading}[1]{%
17206       \ifnum\glstopic@prevlevel>0\relax\glstopic@postchildren\fi
17207       \def\glstopic@prevlevel{-1}%
17208       \glstopicGroupHeading{##1}%
17209     }%
17210   \renewcommand{\glossentry}[2]{%
17211     \ifnum\glstopic@prevlevel>0\relax\glstopic@postchildren\fi
17212     \def\glstopic@prevlevel{0}%
17213     \hangindent0pt\relax
17214     \parindent\glstopicParIndent\relax
17215     \glstopicItem{##1}{##2}%
17216     \ifnum\glstopicCols>1\relax

```

If there isn't a description, penalise a page break.

```

17217   \ifglshasdesc{##1}%
17218   {%
17219     \edef\glstopic@prechildren{%
17220       \noexpand\begin{\glstopicColsEnv}{\glstopicCols}}%
17221   }%
17222   {%

```

```
17223     \edef\glstopic@prechildren{%
17224         \noexpand\nopagebreak
17225         \noexpand\begin{\glstopicColsEnv}{\glstopicCols}}%
17226     }%
17227     \edef\glstopic@postchildren{\noexpand\end{\glstopicColsEnv}}%
17228     \fi
17229 }%
17230 \renewcommand{\subglossentry}[3]{%
17231     \ifnum\glstopic@prevlevel=0\relax\glstopic@prechildren\fi
17232     \def\glstopic@prevlevel{##1}%
17233     \glstopicAssignSubIndent{##1}%
17234     \glstopicSubItem{##1}{##2}{##3}%
17235 }%
17236 \renewcommand*{\glsgroupskip}{}%
17237 }
```

# Glossary

**bib2gls** A command line Java application that selects entries from a .bib file and converts them to glossary definitions (like `bibtex` but also performs hierarchical sorting and collation, thus omitting the need for `xindy` or `makeindex`). Further details at: [http://www.dickimaw-books.com/software/bib2gls/..](http://www.dickimaw-books.com/software/bib2gls/)

**First use** The first time a glossary entry is used (from the start of the document or after a reset) with one of the following commands: `\gls`, `\Gls`, `\GLS`, `\glspl`, `\Glspl`, `\GLSpl` or `\glsdisp`. *see* **First use flag** & **First use text**

**First use flag** A conditional that determines whether or not the entry has been used according to the rules of **first use**.

**First use text** The text that is displayed on **first use**, which is governed by the first and first-plural keys of `\newglossaryentry`. (May be overridden by `\glsdisp`.)

**makeindex** An indexing application.

**xindy** An flexible indexing application with multilingual support written in Perl.

# Change History

0.1 (2015-11-22)

General: Initial experimental release ..... 5

0.2 (2015-11-30)

\Glsfmtshort: new ..... 361  
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0.3 (2015-12-02)

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