

glossaries-extra.sty v1.38: documented code

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Abstract

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

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

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

1.1 Package Initialisation and Options

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{glossaries-extra}[2018/12/01 1.38 (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^AT_EX run the entries aren't defined. This isn't as straight-forward as commands like \cite since attributes associated with the entry's category may switch off the indexing or the entry's glossary type might require a particular counter. This kind of information can't be determined until the entry has been defined. So there are two different commands here. One that's used if the entry hasn't been defined, which tries to use sensible defaults, and one which is used when the entry has been defined.

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

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

Increment associated counter.

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

Save the label in case it's needed.

```
125   \edef\@gls@label{\glsdetoklabel{#2}}
126   \let\glslabel\@gls@label
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
151     Save the entry counter.
152         \glsxtr@saveentrycounter
153 Temporarily redefine \@@do@wrglossary for use with \glsxtr@@do@wrglossary.
154         \let\@@do@wrglossary\glsxtr@dorecord
155     }%
156     {%
157 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.)
158         \let\theglsentrycounter\glsxtr@thevalue
159         \let\theHglsentrycounter\glsxtr@theHvalue
160         \let\@@do@wrglossary\glsxtr@dorecordnodefer
161     }%
162         \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
163             \glsxtr@@do@wrglossary{#2}%
164         \else
165     No need to escape special characters.
166         \@@do@wrglossary
167     }%
168 \endgroup
169 }%
170 }%
171 \newcommand{\glsxtr@glslink@prekeys}{\glslinkpresetkeys}
172 \newcommand{\glsxtr@glslink@postkeys}{\glslinkpostsetkeys}
173 \newcommand*{\glsxtr@dorecord}{%
174     \global\let\glsrecordlocref\theglsentrycounter
175     \let\glsxtr@orgprefix\glo@counterprefix
176     \ifx\theglsentrycounter\theHglsentrycounter
177         \def\glo@counterprefix{}%

```

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\theglsentrycounter
- 175 \let\glsxtr@orgprefix\glo@counterprefix
- 176 \ifx\theglsentrycounter\theHglsentrycounter
- 177 \def\glo@counterprefix{}%

```

178 \else
179   \edef\@do@gls@getcounterprefix{\noexpand\@gls@getcounterprefix
180     {\the\glstentrycounter}{\the\Hglstentrycounter}%
181   }%
182   \@do@gls@getcounterprefix
183 \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.

```

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

```

`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.

```

196 \newcommand*\@glsxtr@dorecordnodefer{%
197   \ifx\the\glstentrycounter\the\Hglstentrycounter
198     \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
199       \@glsxtr@do@nameref@record
200       {\@gls@label}{}{\@gls@counter}{\@glsnumberformat}%
201       {\the\glstentrycounter}%
202     \else
203       \protected@write\@auxout{}{\string\glsxtr@record
204         {\@gls@label}{}{\@gls@counter}{\@glsnumberformat}%
205         {\the\glstentrycounter}}%
206     \fi
207   \else
208     \edef\@do@gls@getcounterprefix{\noexpand\@gls@getcounterprefix
209       {\the\glstentrycounter}{\the\Hglstentrycounter}%
210     }%
211     \@do@gls@getcounterprefix
212     \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
213       \@glsxtr@do@nameref@record
214       {\@gls@label}{\@glo@counterprefix}{\@gls@counter}%
215       {\@glsnumberformat}{\the\glstentrycounter}%
216     \else
217       \protected@write\@auxout{}{\string\glsxtr@record
218         {\@gls@label}{\@glo@counterprefix}{\@gls@counter}{\@glsnumberformat}%

```

```

219     {\theglsentrycounter}%
220     \fi
221     \fi
222     \glsxstr@counterrecordhook
223 }

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.
224 \newcommand{\glsxtr@ifnum@mmode}[2]{%
225   \ifmmode
226     \ifst@rred
227       #2%
228     \else
229       \if@display #1\else #2\fi
230     \fi
231   \else
232     #2%
233   \fi
234 }

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.

@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.
235 \newcommand*{\glsxtr@do@nameref@record}[5]{%
236   \gls@ifnotmeasuring
237   {%
238     \protected@write\auxout{}{\string\glsxtr@record@nameref
239     {#1}{#2}{#3}{#4}{#5}%
240     {\csuse{@currentlabelname}}{\csuse{@currentHref}}%
241     {\theHglsentrycounter}}%
242   }%
243 }

r@recordcounter
244 \newcommand*{\glsxtr@recordcounter}{%
245   \glsxtr@noop@recordcounter
246 }

p@recordcounter

```

```

247 \newcommand*{\@glsxtr@noop@recordcounter}[1]{%
248   \PackageError{glossaries-extra}{\string\GlsXtrRecordCounter\space
249     requires record=only or record=alsoindex package option}{}}%
250 }

p@recordcounter

251 \newcommand*{\@glsxtr@op@recordcounter}[1]{%
252   \appto{\glsxtr@counterrecordhook}{\noexpand@glsxtr@docounterrecord{#1}}{}%
253 }

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

srtglossaryunit
260 \newcommand{\printunsrtglossaryunit}{%
261   \print@noop@unsrtglossaryunit
262 }

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

aveentrycounter Only store the entry counter information if the indexing is on.
264 \newcommand*{\glsxtr@indexonly@saveentrycounter}{%
265   \ifKV@glslink@noindex
266   \else
267     \glsxtr@saveentrycounter
268   \fi
269 }

addloclistfield
270 \newcommand*{\glsxtr@addloclistfield}{%
271   \key@ifundefined{glossentry}{loclist}{%
272     %
273     \define@key{glossentry}{loclist}{\def@glo@loclist{##1}}%
274     \appto{\gls@keymap}{, {loclist}{loclist}}%
275     \appto{\newglossaryentryprehook}{\def@glo@loclist{}}%
276     \appto{\newglossaryentryposthook}{%
277       \gls@assign@field{}{@glo@label}{loclist}{@glo@loclist}}%
278     %
279     \glssetnoexpandfield{loclist}%
280   }%
281 }

```

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

```
282 \key@ifundefined{glossentry}{location}%
283 {%
284 \define@key{glossentry}{location}{\def\@glo@location{\#1}}%
285 \appto\@gls@keymap{, {location}{location}}%
286 \appto\@newglossaryentryprehook{\def\@glo@location{} }%
287 \appto\@newglossaryentryposthook{%
288 \gls@assign@field{}{\@glo@label}{location}{\@glo@location}}%
289 }%
290 \glssetnoexpandfield{location}%
291 }%
292 {}%
```

Add a key to store the group heading.

```
293 \key@ifundefined{glossentry}{group}%
294 {%
295 \define@key{glossentry}{group}{\def\@glo@group{\#1}}%
296 \appto\@gls@keymap{, {group}{group}}%
297 \appto\@newglossaryentryprehook{\def\@glo@group{} }%
298 \appto\@newglossaryentryposthook{%
299 \gls@assign@field{}{\@glo@label}{group}{\@glo@group}}%
300 }%
301 \glssetnoexpandfield{group}%
302 }%
303 {}%
304 }
```

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

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

`tting@alsoindex`

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

`rd@setting@only`

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

`setting@nameref`

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

`@if@record@only`

```
309 \newcommand*{\@glsxtr@if@record@only}[2]{%
310 \ifx\@glsxtr@record@setting\@glsxtr@record@setting@only
311 #1%
312 \else
313 \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
314 #1%
315 \else
316 #2%
317 \fi
318 }
```

```

318 \fi
319 }

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

cord@only@setup Initialisation code for record=only and record=nameref
321 \newcommand*{\@glsxtr@record@only@setup}{%
322 \def\glsxtr@setup@record{%
323 \@glsxtr@autoseeindexfalse
324 \let\@do@seeglossary\@glsxtr@recordsee
325 \let\@glsxtr@record\@glsxtr@record
326 \let\@do@wrglossary\@glsxtr@do@record@wrglossary
327 \let\@gls@saveentrycounter\relax
328 \let\glsxtrundefaction\@glsxtr@warn@undefaction
329 \let\glsxtr@warnonexistsordo\@glsxtr@warn@onexistsordo
330 \glsxtr@addloclistfield
331 \renewcommand*{\@glsxtr@autoindexcrossrefs}{}%
332 \let\@glsxtr@recordcounter\glsxtr@op@recordcounter
333 \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}%

Switch off the index suppression for aliased entries. (bib2gls will deal with them.)
334 \def\glsxtrsetaliasnoindex{}%
`@gls@setupsort@none was only introduced to glossaries v4.30, so it may not be available.
If it's defined, use it to remove the unnecessary overhead of escaping and sanitizing the sort
value.

335 \ifdef\gls@setupsort@none{\gls@setupsort@none}{}%
Warn about using \printglossary:
336 \def\glsxtrNoGlossaryWarning{\glsxtr@record@noglossarywarning}%
Load glossaries-extra-bib2gls:
337 \RequirePackage{glossaries-extra-bib2gls}%
338 }%
339 }

record Now define the record package option.
340 \define@choicekey{glossaries-extra.sty}{record}
341 [\@glsxtr@record@setting\glsxtr@record@nr]%
342 {off,only,alsoindex,nameref}%
343 [only]%
344 {%
345 \ifcase\glsxtr@record@nr\relax

Don't record.
346 \def\glsxtr@setup@record{%
347 \renewcommand*{\@do@seeglossary}{\glsxtr@doseeglossary}%
348 \renewcommand*{\@glsxtr@record}[3]{}%
349 \let\@do@wrglossary\glsxtr@do@wrglossary
350 \let\@gls@saveentrycounter\glsxtr@indexonly@saveentrycounter

```

```

351      \let\glsxtrundefaction@\glsxtr@err@undefaction
352      \let\glsxtr@warnnonexistsordo@\gobble
353      \let@@glsxtr@recordcounter@\glsxtr@noop@recordcounter
354      \def\printunsrtglossaryunit{\print@noop@unsrtglossaryunit}%
355      \undef\glsxtrsetaliasnoindex
356  }%
357 \or
Only record (don't index).
358     \@glsxtr@record@only@setup
359 \or
Record and index. This option doesn't load glossaries-extra-bib2gls as the sorting is performed
by xindy or makeindex.
360     \def\glsxtr@setup@record{%
361         \renewcommand*{\do@seeglossary}{\glsxtr@dosee@alsoindex@glossary}%
362         \let\glsxtr@record\@glsxtr@record
363         \let@@do@wrglossary\glsxtr@do@alsoindex@wrglossary
364         \let@gls@saveentrycounter\glsxtr@indexonly@saveentrycounter
365         \let\glsxtrundefaction@\glsxtr@warn@undefaction
366         \let\glsxtr@warnnonexistsordo@\glsxtr@warn@onexistsordo
367         \glsxtr@addloclistfield
368         \let\glsxtr@recordcounter\glsxtr@op@recordcounter
369         \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}%
370         \undef\glsxtrsetaliasnoindex
371     }%
372 \or
Only record (don't index) but also include nameref information.
373     \@glsxtr@record@only@setup
374     \ifundef\hyperlink
375     {\GlossariesExtraWarning{You have requested record=nameref but
376       the document doesn't support hyperlinks}}%
377     {}%
378   \fi
379 }

```

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.

`glsxtr@docdefval` The docdef value is stored as an integer: 0 (false), 1 (true) and 2 (restricted).

```
380 \newcommand*{\glsxtr@docdefval}{0}
```

Need to provide conditional commands that are backward compatible:

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

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

```
sxtrdocfalse
383 \newcommand*{\@glsxtrdocfalse}{\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.
384 \define@choicekey{glossaries-extra.sty}{docdef}
385 [\@glsxtr@docdefsetting\@glsxtr@docdefval]%
386 {false,true,restricted,atom}[true]%
387 {%
388 \ifnum\@glsxtr@docdefval>1\relax
389 \renewcommand*{\@glsdoifexistsorwarn}{\glsdoifexists}%
390 \else
391 \renewcommand*{\@glsdoifexistsorwarn}{\glsdoifexistsorwarn}%
392 \fi
393 }

ocdefrestricted
394 \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).
395 \newcommand*{\@glsdoifexistsorwarn}{\glsdoifexistsorwarn}

indexcrossrefs Automatically index cross references at the end of the document
396 \define@boolkey{glossaries-extra.sty}[@glsxtr]{indexcrossrefs}[true]{%
397 \if@glsxtrindexcrossrefs
398 \else
399 \renewcommand*{\@glsxtr@autoindexcrossrefs}{}%
400 \fi
401 }

Switch off since this can increase the build time.
402 \@glsxtrindexcrossrefsfalse

But allow see key to switch it on automatically.

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

autoseeindex Provide a boolean option to allow the user to prevent the automatic indexing of the cross-referencing keys see, seealso and alias.
404 \define@boolkey{glossaries-extra.sty}[@glsxtr@]{autoseeindex}[true]{%
405 }
406 \@glsxtr@autoseeindextrue
```

```

equations  Provide a boolean option to automatically switch to the equation counter when in a numbered maths environment.
407 \define@boolkey{glossaries-extra.sty}[@glsxtr@]{equations}[true]{%
408 }
409 @glsxtr@equationsfalse

\glsxtr@float
410 \let\glsxtr@float\@float

glsxtr@dblfloat
411 \let\glsxtr@dblfloat\@dblfloat

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

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


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

425 @glsxtr@declareoption{nowarn}{%
426   \let\GlossariesExtraWarning\@gobble
427   \let\GlossariesExtraWarningNoLine\@gobble
428   \glsxtr@dooption{nowarn}%
429 }

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


postdot  Shortcut for nopostdot=false
431 @glsxtr@declareoption{postdot}{%
432   \glsxtr@dooption{nopostdot=false}%
433   \renewcommand*{\@glsxtr@defpostpunc}{%
434     \renewcommand*{\glspostdescription}{%
435       \ifglsnopostdot\else.\spacefactor\sfcode`\!. \fi}%

```

```
436  }%
437 }
```

nopostdot Needs to redefine \glsxtr@defpostpunc

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

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

```
445 \define@key{glossaries-extra.sty}{postpunc}{%
446   \glsxtr@dooption{nopostdot=false}%
447   \ifstrequal{#1}{dot}%
448   {%
449     \renewcommand*{\glsxtr@defpostpunc}{%
450       \renewcommand*{\glspostdescription}{.\spacefactor\sfcodespace}%
451     }%
452   }%
453   {%
454     \ifstrequal{#1}{comma}%
455     {%
456       \renewcommand*{\glsxtr@defpostpunc}{%
457         \renewcommand*{\glspostdescription}{,}%
458       }%
459     }%
460     {%
461       \ifstrequal{#1}{none}%
462       {%
463         \glsxtr@dooption{nopostdot=true}%
464         \renewcommand*{\glsxtr@defpostpunc}{%
465           \renewcommand*{\glspostdescription}{}}%
466       }%
467     }%
468     {%
469       \renewcommand*{\glsxtr@defpostpunc}{%
470         \renewcommand*{\glspostdescription}{#1}%
471       }%
472     }%
473   }%
474 }%
475 }
```

glsxtrabbrvtype Glossary type for abbreviations.

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

bbrevisionsdef Set by abbreviations option.

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

bbrevisionsdef

```
478 \newcommand*{\@glsxtr@doabbreviationsdef}{}%
479   \@ifpackageloaded{babel}%
480   {\providecommand{\abbreviationsname}{\acronymname}}%
481   {\providecommand{\abbreviationsname}{Abbreviations}}%
482   \newglossary[glg-abr]{abbreviations}{gls-abr}{glo-abr}{\abbreviationsname}%
483   \renewcommand*{\glsxtrabbrvtype}{abbreviations}%
484   \newcommand*{\printabbreviations}[1][]{%
485     \printglossary[type=\glsxtrabbrvtype,##1]%
486   }%
487   \DisableAtkeys{glossaries-extra.sty}{abbreviations}%

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

488 \ifglsacronym
489 \else
490   \renewcommand*{\acronymtype}{\glsxtrabbrvtype}%
491 \fi
492 }%
```

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

```
493 \@glsxtr@declareoption{abbreviations}{}%
494   \let\@glsxtr@abbreviationsdef\@glsxtr@doabbreviationsdef
495 }
```

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).

```
496 \newcommand*{\GlsXtrDefineAbbreviationShortcuts}{}%
497   \newcommand*{\ab}{\c{gls}}%
498   \newcommand*{\abp}{\c{glspl}}%
499   \newcommand*{\as}{\glsxtrshort}%
500   \newcommand*{\asp}{\glsxtrshortpl}%
501   \newcommand*{\al}{\glsxtrlong}%
502   \newcommand*{\alp}{\glsxtrlongpl}%
503   \newcommand*{\af}{\glsxtrfull}%
504   \newcommand*{\afp}{\glsxtrfullpl}%
505   \newcommand*{\Ab}{\c{Gls}}%
506   \newcommand*{\Afp}{\c{Glspl}}%
507   \newcommand*{\As}{\Glsxtrshort}%
508   \newcommand*{\Afp}{\Glsxtrshortpl}%
509   \newcommand*{\Al}{\Glsxtrlong}%
510   \newcommand*{\Alp}{\Glsxtrlongpl}%
511   \newcommand*{\Af}{\Glsxtrfull}%
512   \newcommand*{\Afp}{\Glsxtrfullpl}%
513   \newcommand*{\AB}{\c{GLS}}%
514   \newcommand*{\ABP}{\c{GLSpl}}%
```

```

515 \newcommand*{\AS}{\GLSxtrshort}%
516 \newcommand*{\ASP}{\GLSxtrshortpl}%
517 \newcommand*{\AL}{\GLSxtrlong}%
518 \newcommand*{\ALP}{\GLSxtrlongpl}%
519 \newcommand*{\AF}{\GLSxtrfull}%
520 \newcommand*{\AFP}{\GLSxtrfullpl}%

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

```

Disable this command after it's been used.

```

522 \let\GlsXtrDefineAbbreviationShortcuts\relax
523 }

```

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

```

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

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

```

Disable this command after it's been used.

```

550 \let\GlsXtrDefineAcShortcuts\relax
551 }

```

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

```

552 \newcommand*{\GlsXtrDefineOtherShortcuts}{%

```

```

553 \newcommand*{\newentry}{\newglossaryentry}%
554 \ifdef\printsymbols
555 {%
556   \newcommand*{\newsym}{\glsxtrnewsymbol}%
557 }{%
558 \ifdef\printnumbers
559 {%
560   \newcommand*{\newnum}{\glsxtrnewnumber}%
561 }{%
562 \let\GlsXtrDefineOtherShortcuts\relax
563 }

```

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.

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

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

```
565 \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`).

```

566 \define@choicekey{glossaries-extra.sty}{shortcuts}%
567 [ \@glsxtr@shortcutsval \@glsxtr@shortcutsnr ] %
568 {acronyms,acro,abbreviations,abbr,other,all,true,ac,none,false}[true]{%
569   \ifcase \@glsxtr@shortcutsnr \relax % acronyms
570     \renewcommand*{\@glsxtr@setupshortcuts}{}%
571     \glsacrshortcutstrue
572     \DefineAcronymSynonyms
573   }%
574   \or % acro
575     \renewcommand*{\@glsxtr@setupshortcuts}{}%
576     \glsacrshortcutstrue
577     \DefineAcronymSynonyms
578   }%
579   \or % abbreviations
580     \renewcommand*{\@glsxtr@setupshortcuts}{}%
581     \GlsXtrDefineAbbreviationShortcuts
582   }%
583   \or % abbr
584     \renewcommand*{\@glsxtr@setupshortcuts}{}%
585     \GlsXtrDefineAbbreviationShortcuts
586   }%
587   \or % other

```

```

588     \renewcommand*{\@glsxtr@setupshortcuts}{%
589         \GlsXtrDefineOtherShortcuts
590     }%
591     \or % all
592     \renewcommand*{\@glsxtr@setupshortcuts}{%
593         \glsacrshortcutstrue
594         \GlsXtrDefineAcShortcuts
595         \GlsXtrDefineAbbreviationShortcuts
596         \GlsXtrDefineOtherShortcuts
597     }%
598     \or % true
599     \renewcommand*{\@glsxtr@setupshortcuts}{%
600         \glsacrshortcutstrue
601         \GlsXtrDefineAcShortcuts
602         \GlsXtrDefineAbbreviationShortcuts
603         \GlsXtrDefineOtherShortcuts
604     }%
605     \or % ac
606     \renewcommand*{\@glsxtr@setupshortcuts}{%
607         \glsacrshortcutstrue
608         \GlsXtrDefineAcShortcuts
609     }%

```

Leave none and false as last option.

```

610     \else % none, false
611     \renewcommand*{\@glsxtr@setupshortcuts}{}%
612     \fi
613 }

```

lsxtr@doaccsupp

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

accsupp If accsupp, load glossaries-accsupp package.

```
615 \@glsxtr@declareoption{accsupp}{%
616   \renewcommand*{\@glsxtr@doaccsupp}{\RequirePackage{glossaries-accsupp}}}
```

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

```
617 \newcommand{\glsxtrNoGlossaryWarning}[1]{%
618   \GlossariesExtraWarning{Glossary '#1' is missing}%
619   \glsxtr@defaultnoglossarywarning{#1}%
620 }
```

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

```
621 \define@choicekey{glossaries-extra.sty}{nomissingglstext}
622   [ \glsxtr@nomissingglstextval \glsxtr@nomissingglstextnr ]%
```

```

623 {true,false}[true]{%
624   \ifcase\@glsxtr@nomissingglstextnr\relax % true
625     \renewcommand{\glsxtrNoGlossaryWarning}[1]{\null}%
626   \else % false
627     \renewcommand{\glsxtrNoGlossaryWarning}[1]{%
628       \@glsxtr@defaultnoglossarywarning{#1}%
629     }%
630   \fi
631 }

```

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

xtr@redefstyles

```

632 \newcommand*{\@glsxtr@redefstyles}{}}

stylemods
633 \define@key{glossaries-extra.sty}{stylemods}[default]{%
634   \ifstreq{\#1}{default}%
635   {%
636     \renewcommand*{\@glsxtr@redefstyles}{%
637       \RequirePackage{glossaries-extra-stylemods}}%
638   }%
639   {%
640     \ifstreq{\#1}{all}%
641     {%
642       \renewcommand*{\@glsxtr@redefstyles}{%
643         \PassOptionsToPackage{all}{glossaries-extra-stylemods}}%
644       \RequirePackage{glossaries-extra-stylemods}%
645     }%
646   }%
647   {%
648     \renewcommand*{\@glsxtr@redefstyles}{}%
649     \@for\@glsxtr@tmp:=\do{%
650       \IfFileExists{glossary-\@glsxtr@tmp.sty}%
651       {%
652         \eappto\@glsxtr@redefstyles{%
653           \noexpand\RequirePackage{glossary-\@glsxtr@tmp}}%
654       }%
655       {%
656         \PackageError{glossaries-extra}%
657           {Glossaries style package ‘glossary-\@glsxtr@tmp.sty’
658            doesn’t exist (did you mean to use the ‘style’ key?)}%
659         {The list of values (#1) in the ‘stylemods’ key should
660          match the glossary-xxx.sty files provided with
661          glossaries.sty}%
662       }%
663     }%
664     \appto\@glsxtr@redefstyles{\RequirePackage{glossaries-extra-stylemods}}%
665   }

```

```

666  }%
667 }

glsxtr@do@style
668 \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.
669 \define@key{glossaries-extra.sty}{style}{}{%
  Defer actual style change:
670 \renewcommand*{\@glsxtr@do@style}{}{%
  Set this as the default style:
671 \setkeys{glossaries.sty}{style={#1}}{%
  Set this style:
672 \setglossarystyle{#1}{%
673 }%
674 }

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.
675 \newcommand*{\glsxtr@inc@wrglossaryctr}[1]{}

```

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

The first two arguments are always control sequences.

```

676 \newcommand*{\GlsXtrInternalLocationHyperlink}[3]{%
677   \glsxtrhyperlink{#1#2#3}{#3}{%
678 }

```

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

```

679 \newcommand*{\@glsxtr@wrglossary@locationhyperlink}[3]{%
680   \pageref{wrglossary.#3}{%
681 }

```

`\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.

```

682 \@glsxtr@declareoption{indexcounter}{%

```

```

683 \glsxtr@dooption{counter=wrglossary}%
684 \ifundef\c@wrglossary
685 {%
686   \newcounter{wrglossary}%
687   \renewcommand{\thewrglossary}{\arabic{wrglossary}}%
688 }%
689 {}%
690 \renewcommand*{\glsxtr@inc@wrglossaryctr}[1]{%

```

Only increment if the current counter is wrglossary.

```

691 \ifdefstring@gls@counter{wrglossary}%
692 {%
693   \refstepcounter{wrglossary}%
694   \label{wrglossary}.\thewrglossary}%
695 }%
696 {}%
697 }%
698 \renewcommand*{\GlsXtrInternalLocationHyperlink}[3]{%
699 \ifdefstring\glsentrycounter{wrglossary}%
700 {%
701   @glsxtr@wrglossary@locationhyperlink{##1}{##2}{##3}%
702 }%
703 {\glsxtrhyperlink{##1##2##3}{##3}}%
704 }%
705 }

```

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

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

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

```
707 \newcommand*{@glsxtrwrglossmark}{}%
708 \AtBeginDocument{\renewcommand*{@glsxtrwrglossmark}{@glsxtrwrglossmark}}
```

sxtrwrglossmark Does nothing by default.

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

debug Provide extra debug options.

```

710 \define@choicekey{glossaries-extra.sty}{debug}%
711 [\@glsxtr@debugval\@glsxtr@debugnr]%
712 {true,false,showtargets,showwrgloss,all}[true]{%
713   \ifcase\@glsxtr@debugnr\relax % true
714     \glsxtr@dooption{debug=true}%
715     \renewcommand*{@glsxtrwrglossmark}{}%
716   \or % false
717     \glsxtr@dooption{debug=false}%
718     \renewcommand*{@glsxtrwrglossmark}{}%
719   \or % showtargets
720     \glsxtr@dooption{debug=showtargets}%

```

```

721   \or % showwrgloss
722     \glsxstr@dooption{debug=true}%
723     \renewcommand*\{@glsxtrwrglossmark}{\glsxtrwrglossmark}%
724   \or % all
725     \glsxstr@dooption{debug=showtargets}%
726     \renewcommand*\{@glsxtrwrglossmark}{\glsxtrwrglossmark}%
727   \fi
728 }

```

Pass all other options to glossaries.

```

729 \DeclareOptionX*{%
730   \expandafter\glsxstr@dooption\expandafter{\CurrentOption}}

```

Process options.

```
731 \ProcessOptionsX
```

Load glossaries if not already loaded.

```
732 \RequirePackage{glossaries}
```

Load the glossaries-accsupp package if required.

```
733 \@glsxstr@doaccsupp
```

Redefine \glspostdescription if required.

```
734 \@glsxstr@defpostpunc
```

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

```

735 \def\glsshowtarget#1{%
736   \glsxrttitleorpdforheading
737   {%
738     \ifmmode
739       \texttt{\small [#1]}%
740     \else
741       \ifinner
742         \texttt{\small [#1]}%
743       \else
744         \marginpar{\texttt{\small #1}}%
745       \fi
746     \fi
747   }%
748   {[#1]}%
749   {\texttt{\small [#1]}}%
750 }

```

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

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

```

752 \newcommand*{\@glsxtr@doseeglossary}[2]{%
753   \glsdoifexists{#1}%

```

```

754  {%
755   \@@glsxtrwrglossmark
756   \glsxtr@org@doseeglossary{#1}{#2}%
757 }%
758 }

oindex@glossary
759 \newcommand*{\glsxtr@dosee@alsoindex@glossary}[2]{%
760   \glsxtr@recordsee{#1}{#2}%
761   \glsxtr@doseeglossary{#1}{#2}%
762 }

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

    Check if user tried autoseeindex=false when it can't be supported.
764 \if@glsxtr@autoseeindex
765 \else
766   \ifdef\glsxtr@org@gloautosee
767   {}%
768   {\PackageError{glossaries-extra}{`autoseeindex=false' package
769     option requires at least v4.30 of glossaries.sty}%
770   {You need to update the glossaries.sty package}%
771 }
772 \fi

@\glo@autosee If \glo@autosee has been defined (glossaries v4.30 onwards), redefine it to test the au-
toseeindex option.
773 \ifdef@\glo@autosee
774 {}%
775   \renewcommand*{\glo@autosee}{{%
776     \if@glsxtr@autoseeindex\glsxtr@org@gloautosee\fi}%
777 }%
778 {}

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.
779 \renewcommand*{\gls@checkseeallowed}{{%
780   \if@glsxtr@autoseeindex\gls@see@noindex\fi
781 }

    Define abbreviations glossaries if required.
782 \glsxtr@abbreviationsdef
783 \let\glsxtr@abbreviationsdef\relax

    Setup shortcuts if required.
784 \glsxtr@setupshortcuts

```

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

```
785 \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`:

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

Now define the user command:

```
787 \newcommand*{\glossariesextrasetup}[1]{%
788   \let\glsxtr@setup@record\relax
789   \let\glsxtr@setupshortcuts\relax
790   \let\glsxtr@redef@forglsentries\relax
791   \setkeys{glossaries-extra.sty}{#1}%
792   \glsxtr@abbreviationsdef
793   \let\glsxtr@abbreviationsdef\relax
794   \glsxtr@setupshortcuts
795   \glsxtr@setup@record
796   \glsxtr@redef@forglsentries
797 }
```

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

```
798 \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.

```
799 \newcommand*{\glsxtr@@do@wrglossary}[1]{%
800   \glsxtrwrglossmark
801   \glsxtr@inc@wrglossaryctr{#1}%
802   \glsxtr@org@@do@wrglossary{#1}%
803 }
```

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

```
804 \let\glsxtr@saveentrycounter\gls@saveentrycounter
```

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

```
805 \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.

```
806 \renewcommand*{\gls@getcounterprefix}[2]{%
807   \protected@edef\gls@thisloc{#1}\protected@edef\gls@thisHloc{#2}%
808   \ifx\gls@thisloc\gls@thisHloc
809     \def\glo@counterprefix{}%
810   \else
```

```

811   \def\@gls@get@counterprefix##1.#1##2\end@getprefix{%
812     \def\@glo@tmp{##2}%
813     \ifx\@glo@tmp\empty
814       \def\@glo@counterprefix{}%
815     \else
816       \def\@glo@counterprefix{##1}%
817     \fi
818   }%
819   \@gls@get@counterprefix#2.#1\end@getprefix

```

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

```

820   \ifx\@glo@counterprefix\empty
821     \ifx\@glsxtr@record@setting\@glsxtr@record@setting@nameref
822       \else
823         \GlossariesExtraWarning{Hyper target ‘#2’ can’t be formed by
824           prefixing^^Jlocation ‘#1’. You need to modify the
825           definition of \string\theH\@gls@counter^^Jotherwise you
826           will get the warning: “name{\@gls@counter.#1}” has been^^J
827           referenced but does not exist”%
828         \ifx\@glsxtr@record@setting\@glsxtr@record@setting@only
829           . You may want to consider using record=nameref instead%
830         \fi}%
831       \fi
832     \fi
833   \fi
834 }

```

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

sxtrdialecthook

```
835 \newcommand*\@glsxtrdialecthook{}{}
```

Set up record option if required.

```
836 \glsxtr@setup@record
```

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

```

837 \AtBeginDocument{%
838   \disable@keys{glossaries-extra.sty}{abbreviations,docdef,record}%
839   \def\@glsxtrundeftag{\glsxtrundeftag}%
840 }

```

1.2 Extra Utilities

```
\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).

```
841 \newcommand*{\GlsXtrIfUnusedOrUndefined}[3]{%
842   \ifglsentryexists{#1}%
843   {\ifbool{glo@\glsdetoklabel{#1}@flag}{#3}{#2}}%
844   {#2}%
845 }
```

```
rifemptyglossary \glsxtrifemptyglossary{\<type>}{\<true>}{\<false>}
```

Provide command to determine if any entries have been added to the glossary (where the glossary label is provided in the first argument). The entries are stored in the comma-separated list `\glolist@<type>`. If this hasn't been defined, the glossary doesn't exist. If it has been defined and is simply a comma, the glossary exists and is empty. (It's initialised to a comma.)

```
846 \newcommand{\glsxtrifemptyglossary}[3]{%
847   \ifcsdef{glolist@#1}%
848   {}%
849   \ifcsstring{glolist@#1}{,}{#2}{#3}%
850 }%
851 {}%
852   \glsxtrundefaction{Glossary type '#1' doesn't exist}{}%
853   #2%
854 }%
855 }
```

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

```
856 \newcommand*{\glsxtrifkeydefined}[3]{%
857   \key@ifundefined{glossentry}{#1}{#3}{#2}%
858 }
```

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

```
859 \newcommand*{\glsxtrprovidestoragekey}{}%
860   \cstar\glsxtrprovide@storagekey@glsxtrprovide@storagekey
861 }
```

vide@storagekey Unstarred version.

```
862 \newcommand*{\glsxtrprovide@storagekey}[3]{%
863   \key@ifundefined{glossentry}{#1}%
864   {}%
865   \define@key{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
866   \appto{\gls@keymap}{, {#1}{#1}}%
867   \appto{\newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
868   \appto{\newglossaryentryposthook}{%
869     \letcs{\@glo@tmp}{@glo@#1}}
```

```
870     \gls@assign@field{#2}{\@glo@label}{#1}{\@glo@tmp}%
871 }
```

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

```
872     \ifblank{#3}%
873     {}%
874     {%
875         \newcommand*{#3}[1]{\@gls@entry@field{##1}{#1}}%
876     }%
877 }
```

Provide the no-link command if not already defined.

```
879     \ifblank{#3}%
880     {}%
881     {%
882         \providecommand*{#3}[1]{\@gls@entry@field{##1}{#1}}%
883     }%
884 }
```

```
885 }
```

`\vide@storagekey` Starred version.

```
886 \newcommand*{\s@glsxtr@provide@storagekey}[1]{%
887     \key@ifundefined{glossentry}{#1}%
888     {}%
889     \expandafter\newcommand\expandafter*\expandafter
890     {\csname gls@assign@#1@field\endcsname}[2]{%
891         \@@gls@expand@field{##1}{#1}{##2}%
892     }%
893 }
```

```
894 {}%
895 \glsxtr@provide@addstoragekey{#1}%
896 }
```

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`

```
897 \newcommand{\GlsXtrFmtField}{\useri}
```

`\DefaultOptions`

```
898 \newcommand{\GlsXtrFmtDefaultOptions}{\noindex}
```

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

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

```

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

\s@glsxtrfmt Starred form.

```

901 \newcommand*{\s@glsxtrfmt}[3] [] {%
902   \new@ifnextchar[{\s@glsxtrfmt[#1]{#2}{#3}}{%
903     {\@@glsxtrfmt[#1]{#2}{#3}{}}{%
904   }}
```

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

```

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

\@@glsxtrfmt Actual inner working.

```

906 \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).

```

907 \begingroup
908   \def\glslabel{#2}%
909   \glsdoifexistsordo{#2}%
910   {%
911     \ifglshasfield{\GlsXtrFmtField}{#2}%
912     {%
913       \let\do@gls@link@checkfirsthyper\relax
914       \expandafter\gls@link\expandafter[\GlsXtrFmtDefaultOptions,#1]{#2}%
915       {\glsxtrfmtdisplay{\glscurrentfieldvalue}{#3}{#4}}%
916     }%
917     {\glsxtrfmtdisplay{@firstofone}{#3}{#4}}%
918   }%
919 }
```

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

```

920 \begingroup
921   \gls@setdefault@glslink@opts
922   \setkeys{glslink}{\GlsXtrFmtDefaultOptions,#1}%
923   \ifKV@glslink@noindex\else\glsadd{#2}\fi
924 \endgroup
925 \glsxtrfmtdisplay{@firstofone}{#3}{#4}%
926 }%
927 \endgroup
928 }
```

`lsxtrfmtdisplay` 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).

```

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

```

\glsxtryfmt No link or indexing.
930 \ifdef\texorpdfstring
931 {
932   \newcommand*{\glsxtryfmt}[2]{%
933     \texorpdfstring{@\glsxtryfmt{\#1}{\#2}}{\#2}%
934   }
935 }
936 {
937   \newcommand*{\glsxtryfmt}{@\glsxtryfmt}
938 }

@glsxtryfmt
939 \newrobustcmd*{\@glsxtryfmt}[2]{%
940   \glsdoifexistsodo{\#1}%
941   {%
942     \ifglshasfield{\GlsXtrFmtField}{\#1}%
943     {%
944       \csuse{\glscurrentfieldvalue}{\#2}%
945     }%
946     {\#2}%
947   }%
948   {\#2}%
949 }

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.
950 \newcommand*{\glsxtrfieldlistadd}[3]{%
951   \listcsadd{glo@\glsdetoklabel{\#1}@{\#2}}{\#3}%
952 }

trfieldlistgadd Similarly but uses \listcsgadd.
953 \newcommand*{\glsxtrfieldlistgadd}[3]{%
954   \listcsgadd{glo@\glsdetoklabel{\#1}@{\#2}}{\#3}%
955 }

trfieldlisteadd Similarly but uses \listcseadd.
956 \newcommand*{\glsxtrfieldlisteadd}[3]{%
957   \listcseadd{glo@\glsdetoklabel{\#1}@{\#2}}{\#3}%
958 }

trfieldlistxadd Similarly but uses \listcsxadd.
959 \newcommand*{\glsxtrfieldlistxadd}[3]{%
960   \listcsxadd{glo@\glsdetoklabel{\#1}@{\#2}}{\#3}%
961 }

```

Now provide commands to iterate over these lists.

```

fielddolistloop
962 \newcommand*{\glsxtrfielddolistloop}[2]{%
963   \dolistcsloop{glo@\glsdetoklabel{#1}@#2}%
964 }

ieldforlistloop
965 \newcommand*{\glsxtrfieldforlistloop}[3]{%
966   \forlistcsloop{#3}{glo@\glsdetoklabel{#1}@#2}%
967 }

List element tests:

trfieldifinlist First argument label, second argument field, third argument item, fourth true part and fifth
false part.
968 \newcommand*{\glsxtrfieldifinlist}[5]{%
969   \ifinlistcs{#3}{glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
970 }

rfieldxifinlist Expands item.
971 \newcommand*{\glsxtrfieldxifinlist}[5]{%
972   \xifinlistcs{#3}{glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
973 }

\sxtrforcsvfield \glsxtrforcsvfield{\label}{\field}{\cs handler}

974 \newcommand*{\glsxtrforcsvfield}[3]{%
975   @_glsxtrifhasfield{#2}{#1}%
976   {%
977     \let\glsxtrtrendfor\endfortrue
978     @_for\@glsxtr@label:=\glscurrentfieldvalue\do
979       {\expandafter#3\expandafter{\@glsxtr@label}}{}}%
980   {}%
981 }

sxtrifhasfield 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.
982 \newrobustcmd{\glsxtrifhasfield}{%
983   @_ifstar{\s@glsxtrifhasfield}{\glsxtrifhasfield}%
984 }

sxtrifhasfield Unstarred version adds grouping.
985 \newcommand{\@glsxtrifhasfield}[4]{%
986   {\s@glsxtrifhasfield{#1}{#2}{#3}{#4}}%
987 }

```

`lsxtrifhasfield` Starred version omits grouping.

```
988 \newcommand{\s@glsxtrifhasfield}[4]{%
989   \letcs{\glscurrentfieldvalue}{\glo@\glsdetoklabel{#2}@#1}%
990   \ifundef\glscurrentfieldvalue
991   {#4}%
992   {%
993     \ifdefempty\glscurrentfieldvalue{#4}{#3}%
994   }%
995 }
```

`rIfFieldNonZero` Designed for numeric fields.

```
996 \newcommand{\GlsXtrIfFieldNonZero}[4]{%
997   \GlsXtrIfFieldCmpNum{#1}{#2}{=}{0}{#4}{#3}%
998 }
```

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

Designed for numeric fields.

```
999 \newcommand{\GlsXtrIfFieldEqNum}[5]{%
1000   \GlsXtrIfFieldCmpNum{#1}{#2}{=}{#3}{#4}{#5}%
1001 }
```

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

Designed for numeric fields.

```
1002 \newcommand{\GlsXtrIfFieldCmpNum}[6]{%
1003   {%
1004     \letcs{\glscurrentfieldvalue}{\glo@\glsdetoklabel{#2}@#1}%
1005     \ifundef\glscurrentfieldvalue
1006     {\def\glscurrentfieldvalue{0}}%
1007     {%
1008       \ifdefempty\glscurrentfieldvalue
1009         {\def\glscurrentfieldvalue{0}}%
1010       {}%
1011     }%
1012     \ifnum\glscurrentfieldvalue#3#4\relax #5\else #6\fi
1013   }%
1014 }
```

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

```

Just uses \ifcsundef.
1015 \newcommand{\GlsXtrIfFieldUndef}[2]{%
1016   \ifcsundef{glo@\glstoklabel{#2}@#1}%
1017 }

\glsxtrusefield Provide a user-level alternative to \@gls@entry@field. The first argument is the entry label.
The second argument is the field label.
1018 \newcommand*\glsxtrusefield}[2]{%
1019   \@gls@entry@field{#1}{#2}%
1020 }

\Glsxtrusefield Provide a user-level alternative to \@Gls@entry@field.
1021 \ifdef\texorpdfstring
1022 {
1023   \newcommand*\Glsxtrusefield}[2]{%
1024     \texorpdfstring
1025       {\@Gls@entry@field{#1}{#2}}
1026       {\@gls@entry@field{#1}{#2}}%
1027   }
1028 }
1029 {
1030   \newcommand*\GLSxtrusefield}[2]{%
1031     \@Gls@entry@field{#1}{#2}%
1032   }
1033 }

\GLSxtrusefield As above but convert to all caps.
1034 \ifdef\texorpdfstring
1035 {
1036   \newcommand*\GLSxtrusefield}[2]{%
1037     \texorpdfstring
1038       {\glsdoifexists{#1}{\mfirstucMakeUppercase{\@gls@entry@field{#1}{#2}}}}%
1039       {\@gls@entry@field{#1}{#2}}%
1040   }
1041 }
1042 {
1043   \newcommand*\GLSxtrusefield}[2]{%
1044     \glsdoifexists{#1}{\mfirstucMakeUppercase{\@gls@entry@field{#1}{#2}}}}%
1045   }
1046 }

\glsxtrdeffield Just use \csdef to provide a field value for the given entry.
1047 \newcommand*\glsxtrdeffield}[2]{\csdef{glo@\glstoklabel{#1}@#2}{}}

\glsxtreffield Just use \csedef to provide a field value for the given entry.
1048 \newcommand*\glsxtreffield}[2]{\protected@csedef{glo@\glstoklabel{#1}@#2}{}}

\glsxtrsetfieldifexists
1049 \newcommand*\glsxtrsetfieldifexists}[3]{\glsdoifexists{#1}{#3}}

```

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

```
1050 \newrobustcmd*\{\GlsXtrSetField\}[3]{%
1051   \glsxtrsetfieldifexists{#1}{#2}%
1052   {\csdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1053 }
```

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

```
1054 \newrobustcmd*\{\GlstrLetField\}[3]{%
1055   \glsxtrsetfieldifexists{#1}{#2}%
1056   {\cslet{glo@\glsdetoklabel{#1}@#2}{#3}}%
1057 }
```

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

```
1058 \newrobustcmd*\{\csGlsXtrLetField\}[3]{%
1059   \glsxtrsetfieldifexists{#1}{#2}%
1060   {\csletcs{glo@\glsdetoklabel{#1}@#2}{#3}}%
1061 }
```

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.

```
1062 \newrobustcmd*\{\GlsXtrLetFieldToField\}[4]{%
1063   \glsxtrsetfieldifexists{#1}{#2}%
1064   {\csletcs{glo@\glsdetoklabel{#1}@#2}{glo@\glsdetoklabel{#3}@#4}}%
1065 }
```

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

```
1066 \newrobustcmd*\{\gGlsXtrSetField\}[3]{%
1067   \glsxtrsetfieldifexists{#1}{#2}%
1068   {\csgdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1069 }
```

\xGlsXtrSetField

```
1070 \newrobustcmd*\{\xGlsXtrSetField\}[3]{%
1071   \glsxtrsetfieldifexists{#1}{#2}%
1072   {\protected@csxdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1073 }
```

\eGlsXtrSetField

```
1074 \newrobustcmd*\{\eGlsXtrSetField\}[3]{%
1075   \glsxtrsetfieldifexists{#1}{#2}%
1076   {\protected@csedef{glo@\glsdetoklabel{#1}@#2}{#3}}%
1077 }
```

XtrIfFieldEqStr

```
1078 \newrobustcmd*\{\GlsXtrIfFieldEqStr\}[5]{%
```

```

1079 \glsxtrifhasfield{#1}{#2}%
1080 {%
1081   \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}%
1082 }%
1083 {#5}%
1084 }

```

`rIfFieldEqXpStr` Like the above but first expands the string.

```

1085 \newrobustcmd*\GlsXtrIfFieldEqXpStr}[5]{%
1086   \glsxtrifhasfield{#1}{#2}%
1087 {%
1088   \protected@edef\@gls@tmp{#3}%
1089   \ifdefequal{\glscurrentfieldvalue}{\@gls@tmp}{#4}{#5}%
1090 }%
1091 {#5}%
1092 }

```

`fXpFieldEqXpStr` Like the above but also expands the field value.

```

1093 \newrobustcmd*\GlsXtrIfXpFieldEqXpStr}[5]{%
1094   \glsxtrifhasfield{#1}{#2}%
1095 {%
1096   \protected@edef\@gls@tmp{\glscurrentfieldvalue}%
1097   \let\glscurrentfieldvalue\@gls@tmp
1098   \protected@edef\@gls@tmp{#3}%
1099   \ifdefequal{\glscurrentfieldvalue}{\@gls@tmp}{#4}{#5}%
1100 }%
1101 {#5}%
1102 }

```

`\GlsXtrForeignText`

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 `\GlsXtrTextField`.

```

1103 \ifdef\foreignlanguage
1104 {
1105   \ifdef\GetTrackedDialectFromLanguageTag
1106   {
1107     \newcommand{\GlsXtrForeignText}[2]{%

```

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

```

1108     \let\@glsxtr@org@currentfieldvalue\glscurrentfieldvalue
1109     \glsxtrifhasfield{\GlsXtrTextField}{#1}%
1110 {%
1111   \expandafter\GetTrackedDialectFromLanguageTag\expandafter
1112   {\glscurrentfieldvalue}{\@glsxtr@dialect}%

```

```
1113     \let\@glsxtr@locale\glscurrentfieldvalue
1114     \let\glscurrentfieldvalue\@glsxtr@org@currentfieldvalue
1115     \ifdefempty\@glsxtr@dialect
1116     {%
```

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

```
1117     \ifundef\TrackedDialectClosestSubMatch
1118     {%
1119         \GlossariesExtraWarning{Can't obtain dialect label
1120             (tracklang v1.3.6+ required)}%
1121     }%
1122     {\let\@glsxtr@dialect\TrackedDialectClosestSubMatch}%
1123 }%
1124 {}%
1125 \ifdefempty\@glsxtr@dialect
1126 {%
```

No tracked dialect found for the root language.

```
1127 }%
1128 {%
```

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

```
1129 \ifcsundef{captions\@glsxtr@dialect}{}%
1130 {%
```

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

```
1131     \IfTrackedDialectHasMapping{\@glsxtr@dialect}%
1132     {%
1133         \edef\@glsxtr@dialect{%
1134             \GetTrackedDialectToMapping{\@glsxtr@dialect}}%
```

Does a caption hook exist for this?

```
1135 \ifcsundef{captions\@glsxtr@dialect}{}%
1136 {%
```

No mapping. Try root language label instead.

```
1137     \ifcsundef{captions\@tracklang@lang}{}%
1138     {%
1139         \let\@glsxtr@dialect\@tracklang@lang
1140     }%
1141 }%
1142 {}%
1143 {%
```

No mapping. Try root language label instead.

```
1144 \ifcsundef{captions\@tracklang@lang}{}%
1145 {%
1146     \let\@glsxtr@dialect\@tracklang@lang
1147 }%
1148 }%
1149 {%
```

```

1150      }%
1151      \ifdefempty{\glsxtr@dialect}
1152      {%
1153          \GlsXtrUnknownDialectWarning{@glsxtr@locale}{\tracklang@lang}%
1154          #2%
1155      }%
1156      {\foreignlanguage{\glsxtr@dialect}{#2}}%
1157  }%
1158  {#2} key not set
1159 }
1160 }
1161 {
1162 \newcommand{\GlsXtrForeignText}[2]{%
1163     \GlossariesExtraWarning{Can't encapsulate foreign text:%
1164         tracklang v1.3.6+ required}%
1165     #2%
1166 }
1167 }
1168 }
1169 {

\foreignlanguage isn't defined so just do text.
1170 \newcommand{\GlsXtrForeignText}[2]{#2}
1171 }

```

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

```
1172 \newcommand*{\GlsXtrTextField}{userii}
```

`\nDialectWarning`

```

1173 \newcommand*{\GlsXtrUnknownDialectWarning}[2]{%
1174     \GlossariesExtraWarning{Can't determine valid dialect label%
1175         for locale '#1' (root language: #2)}%
1176 }
```

`\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.

```

1177 \ifdef{\GlsEntryCounterLabelPrefix}
1178 {%
1179     \newcommand*{\glsxtrpageref}[1]{%
1180         \ifglsentrycounter
1181             \pageref{\GlsEntryCounterLabelPrefix\glsdetoklabel{#1}}%
1182         \else
1183             \ifglssubentrycounter
1184                 \pageref{\GlsEntryCounterLabelPrefix\glsdetoklabel{#1}}%
1185             \else
1186                 \gls{#1}%
1187             \fi
1188     \fi
1189 }
```

```

1189  }
1190 }%
1191 {%
1192 \newcommand*{\glsxtrpageref}[1]{%
1193   \ifglsentrycounter
1194     \pageref{glsentry-\glsdetoklabel{#1}}%
1195   \else
1196     \ifglssubentrycounter
1197       \pageref{glsentry-\glsdetoklabel{#1}}%
1198     \else
1199       \gls{#1}%
1200     \fi
1201   \fi
1202 }
1203 }%

```

lossarypreamble

```

1204 \newcommand{\apptoglossarypreamble}[2][\glsdefaulttype]{%
1205   \ifcsdef{glolist@#1}%
1206   {%
1207     \ifcsundef{@glossarypreamble@#1}%
1208       {\csdef{@glossarypreamble@#1}{}{}}%
1209     {}%
1210     \csappto{@glossarypreamble@#1}{#2}%
1211   }%
1212   {%
1213     \GlossariesExtraWarning{Glossary ‘#1’ is not defined}%
1214   }%
1215 }

```

lossarypreamble

```

1216 \newcommand{\preglossarypreamble}[2][\glsdefaulttype]{%
1217   \ifcsdef{glolist@#1}%
1218   {%
1219     \ifcsundef{@glossarypreamble@#1}%
1220       {\csdef{@glossarypreamble@#1}{}{}}%
1221     {}%
1222     \cspreto{@glossarypreamble@#1}{#2}%
1223   }%
1224   {%
1225     \GlossariesExtraWarning{Glossary ‘#1’ is not defined}%
1226   }%
1227 }

```

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.

```
\ifglsused {\ifglsused{<label>}{<true part>}{<false part>}}
```

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

```
1228 \renewcommand*{\ifglsused}[3]{%
1229   \glsdoifexists{#1}{\ifbool{glo@glsdetoklabel{#1}@flag}{#2}{#3}}{%
1230 }}
```

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`

```
1231 \renewcommand*{\longnewglossaryentry}{}{%
1232   @ifstar \glsxtr@s@longnewglossaryentry@\glsxtr@longnewglossaryentry
1233 }
```

`ewglossaryentry` Starred version.

```
1234 \newcommand{\glsxtr@s@longnewglossaryentry}[3]{%
1235   \glsdoifnoexists{#1}{%
1236     {%
1237       \bgroup
1238         \let\@org@newglossaryentryprehook\@newglossaryentryprehook
1239         \long\def\@newglossaryentryprehook{%
1240           \long\def\@glo@desc{#3}{%
1241             \@org@newglossaryentryprehook
1242           }%
1243           \renewcommand*{\gls@assign@desc}[1]{%
1244             \global\cslet{glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%
1245             \global\cslet{glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
1246           }%
1247           \gls@defglossaryentry{#1}{#2}{%
1248             \egroup
1249           }%
1250     }}
```

`ewglossaryentry` Unstarred version.

```
1251 \newcommand{\glsxtr@longnewglossaryentry}[3]{%
1252   \glsdoifnoexists{#1}{%
1253     {%
1254       \bgroup
1255         \let\@org@newglossaryentryprehook\@newglossaryentryprehook
1256         \long\def\@newglossaryentryprehook{%
1257           \long\def\@glo@desc{#3\glsxtrpostlongdescription}{%
```

```

1258     \org@newglossaryentryprehook
1259 }
1260 \renewcommand*{\gls@assign@desc}[1]{%
1261     \global\cslet{glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%

```

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

```

1262     \global\cslet{glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
1263 }
1264 \gls@defglossaryentry{#1}{#2}%
1265 \egroup
1266 }%
1267 }

```

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

```
1268 \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.

```

1269 \renewcommand{\newignoredglossary}{%
1270   \ifstar\glsxtr@s@newignoredglossary\glsxtr@org@newignoredglossary
1271 }

```

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

```

1272 \newcommand*{\glsxtr@org@newignoredglossary}[1]{%
1273   \ifcsdef{glolist@#1}%
1274   {%
1275     \glsxtrundefaction{Glossary type '#1' already exists}{}%
1276   }%
1277   {%
1278     \ifdefempty{\ignored@glossaries}%
1279     {%
1280       \edef{\ignored@glossaries}{#1}%
1281     }%
1282     {%
1283       \eappto{\ignored@glossaries}{, #1}%
1284     }%
1285     \csgdef{glolist@#1}{,}%
1286     \ifcsundef{gls@#1@entryfmt}%
1287     {%
1288       \def\glsentryfmt[#1]{\glsentryfmt}%
1289     }%
1290     {}%
1291     \ifdefempty{\gls@nohyperlist}%
1292     {%
1293       \renewcommand*{\gls@nohyperlist}{#1}%
1294     }%
1295     {}%

```

```

1296     \eappto{\gls@nohyperlist{,#1}%
1297     }%
1298 }%
1299 }

ignoredglossary Starred form.

1300 \newcommand*{\glsxtr@s@newignoredglossary}[1]{%
1301   \ifcsdef{glolist@#1}{%
1302     {%
1303       \glsxtrundefinedaction{Glossary type '#1' already exists}{}%
1304     }%
1305   }%
1306   \ifdefempty{\ignores@glossaries}{%
1307     {%
1308       \edef{\ignores@glossaries}{#1}%
1309     }%
1310   }%
1311   \eappto{\ignores@glossaries}{,#1}%
1312 }%
1313 \csgdef{glolist@#1}{,}%
1314 \ifcsundef{gls@#1@entryfmt}{%
1315   {%
1316     \def\glsentryfmt[#1]{\glsentryfmt}%
1317   }%
1318 }%
1319 }%
1320 }

```

\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.

```

1321 \glsifusetranslator
1322 {%
1323   \renewcommand*{\glssettoctitle}[1]{%
1324     \ifcsdef{gls@tr@set@#1@toctitle}{%
1325       {%
1326         \csuse{gls@tr@set@#1@toctitle}%
1327       }%
1328     }%
1329     \ifcsdef{@glotype@#1@title}{%
1330       {\def{\glossarytoctitle}{\csname @glotype@#1@title\endcsname}}%
1331       {\def{\glossarytoctitle}{\glossarytitle}}%
1332     }%
1333   }%
1334 }
1335 {
1336   \renewcommand*{\glssettoctitle}[1]{%
1337     \ifcsdef{@glotype@#1@title}{%
1338       {\def{\glossarytoctitle}{\csname @glotype@#1@title\endcsname}}%
1339       {\def{\glossarytoctitle}{\glossarytitle}}%

```

```
1340 }
1341 }
```

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

```
1342 \newcommand{\provideignoredglossary}{%
1343 @ifstar\glsxtr@s@provideignoredglossary\glsxtr@provideignoredglossary
1344 }
```

ignoredglossary Unstarred version.

```
1345 \newcommand*{\glsxtr@provideignoredglossary}[1]{%
1346 \ifcsdef{glolist@\#1}{}
1347 {}%
1348 {}%
1349 \ifdefempty{@ignored@glossaries}{%
1350 {}%
1351 \edef{@ignored@glossaries{\#1}}{%
1352 }%
1353 {}%
1354 \eappto{@ignored@glossaries{,\#1}}{%
1355 }%
1356 \csgdef{glolist@\#1}{,}%
1357 \ifcsundef{gls@\#1@entryfmt}{%
1358 {}%
1359 \defglsentryfmt[\#1]{\glsentryfmt}%
1360 }%
1361 {}%
1362 \ifdefempty{@gls@nohyperlist}{%
1363 {}%
1364 \renewcommand*{\gls@nohyperlist}{\#1}%
1365 }%
1366 {}%
1367 \eappto{@gls@nohyperlist{,\#1}}{%
1368 }%
1369 }%
1370 }
```

ignoredglossary Starred form.

```
1371 \newcommand*{\glsxtr@s@provideignoredglossary}[1]{%
1372 \ifcsdef{glolist@\#1}{}
1373 {}%
1374 {}%
1375 \ifdefempty{@ignored@glossaries}{%
1376 {}%
1377 \edef{@ignored@glossaries{\#1}}{%
1378 }%
1379 {}%
1380 \eappto{@ignored@glossaries{,\#1}}{%
1381 }%
1382 \csgdef{glolist@\#1}{,}%
```

```

1383 \ifcsundef{gls@#1@entryfmt}%
1384 {%
1385     \def\glsentryfmt[#1]{\glsentryfmt}%
1386 }%
1387 {}%
1388 }%
1389 }

```

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

```

1390 \newcommand*{\glsxtrcopytoglossary}[2]{%
1391     \glsdoifexists{#1}{%
1392         {%
1393             \ifcsdef{glolist@#2}{%
1394                 {%
1395                     \cseappto{glolist@#2}{#1,}%
1396                 }%
1397             {}%
1398             \glsxtrundefined{Glossary type '#2' doesn't exist}{}%
1399         }%
1400     }%
1401 }

```

1.3.1 Existence Checks

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

```

1402 \renewcommand{\glsdoifexists}[2]{%
1403     \if\glsentryexists{#1}{#2}{%
1404         {%

```

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

```

1405     \edef\glslabel{\glsdetoklabel{#1}}%
1406     \glsxtrundefined{Glossary entry '\glslabel'%
1407     has not been defined}{You need to define a glossary entry before%
1408     you can reference it.}%
1409 }%
1410 }

```

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

```

1411 \renewcommand{\glsdoifnoexists}[2]{%
1412     \if\glsentryexists{#1}{%
1413         \glsxtrundefined{Glossary entry '\glsdetoklabel{#1}'%
1414         has already been defined}{}{#2}%
1415 }

```

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

```

1416 \ifdef\glsdoifexistsordo
1417 {%
1418   \renewcommand{\glsdoifexistsordo}[3]{%
1419     \ifglsentryexists{#1}{#2}%
1420     {%
1421       \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'}
1422       has not been defined}{You need to define a glossary entry
1423       before you can use it.}%
1424     #3%
1425   }%
1426 }%
1427 }
1428 {%
1429   \glsxtr@warnonexistsordo\glsdoifexistsordo
1430   \newcommand{\glsdoifexistsordo}[3]{%
1431     \ifglsentryexists{#1}{#2}%
1432     {%
1433       \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'}
1434       has not been defined}{You need to define a glossary entry
1435       before you can use it.}%
1436     #3%
1437   }%
1438 }%
1439 }

```

`arynoexistsordo` Similarly for `\doig glossarynoexistsordo`.

```

1440 \ifdef\doig glossarynoexistsordo
1441 {%
1442   \renewcommand{\doig glossarynoexistsordo}[3]{%
1443     \ifglossaryexists{#1}%
1444     {%
1445       \glsxtrundefaction{Glossary type '#1' already exists}{}%
1446     #3%
1447   }%
1448   {#2}%
1449 }%
1450 }
1451 {%
1452   \glsxtr@warnonexistsordo\doig glossarynoexistsordo
1453   \newcommand{\doig glossarynoexistsordo}[3]{%
1454     \ifglossaryexists{#1}%
1455     {%
1456       \glsxtrundefaction{Glossary type '#1' already exists}{}%
1457     #3%
1458   }%
1459   {#2}%
1460 }%
1461 }
1462

```

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.

```
1463 \appto{@newglossaryentryposthook}{%
1464   \ifdefvoid{@glo@see}%
1465   {\csxdef{glo@glo@label @see}{}{}}%
1466   {%
1467     \csxdef{glo@glo@label @see}{\glo@see}{%
1468       \if@glstr@autoseeindex%
1469         \glstr@autoindexcrossrefs%
1470       \fi%
1471     }%
1472   }%
1473 \appto{@gls@keymap}{, {see}{see}}
```

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

```
1474 \newcommand*{\glstrusesee}[1]{%
1475   \glstr@ifexists{#1}{%
1476   {%
1477     \letcs{\glo@see}{\glsdetoklabel{#1}@see}{%
1478     \ifdefempty{@glo@see}%
1479     {}{%
1480       \expandafter\glstr@usesee@glo@see@end@glsstr@usesee%
1481     }%
1482   }%
1483 }%
1484 }
```

\glstr@usesee

```
1485 \newcommand*{\glstr@usesee}[1][\seename]{%
1486   \glstr@usesee[#1]{%
1487 }
```

@\glstr@usesee

```
1488 \def@\glstr@usesee[#1]#2@end@glsstr@usesee{%
1489   \glstruseseeformat{#1}{#2}{}}%
1490 }
```

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

```
1491 \newcommand*{\glstruseseeformat}[2]{%
1492   \glsseeformat[#1]{#2}{}}%
```

lsseeitemformat glossaries originally defined \glsseeitemformat to use \glsentryname but in v3.0 this was switched to use \glsentrytext due to problems occurring with the name field being sanitized. Since this is no longer a problem, glossaries-extra restores the original definition as it

makes more sense to use the name in the cross-reference list. This still uses `\glsaccesstext` for abbreviations.

```
1494 \renewcommand*{\glsseeitemformat}[1]{%
1495   \ifglshasshort{#1}{\glsaccesstext{#1}}{\glsaccessname{#1}}%
1496 }
```

```
\glsxtrhiername \glsxtrhiername{\langle label \rangle}
```

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.

```
1497 \newcommand*{\glsxtrhiername}[1]{%
1498   \glsdoifexists{#1}%
1499   {%
1500     \glsxtrifhasfield{parent}{#1}%
1501     {\glsxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1502     {}%
1503     \ifglshasshort{#1}{\glsaccessshort{#1}}{\glsaccessname{#1}}%
1504   }%
1505 }
```

```
\Glsxtrhiername \Glsxtrhiername{\langle label \rangle}
```

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

```
1506 \newcommand*{\Glsxtrhiername}[1]{%
1507   \glsdoifexists{#1}%
1508   {%
1509     \glsxtrifhasfield{parent}{#1}%
1510     {%
1511       \Glsxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep%
1512       \ifglshasshort{#1}{\glsaccessshort{#1}}{\glsaccessname{#1}}%
1513     }%
1514     {\ifglshasshort{#1}{\Glsaccessshort{#1}}{\Glsaccessname{#1}}}%
1515   }%
1516 }
```

```
\GlsXtrhiername \GlsXtrhiername{\langle label \rangle}
```

As above but converts the first letter of each name to a capital.

```
1517 \newcommand*{\GlsXtrhiername}[1]{%
1518   \glsdoifexists{#1}{%
```

```

1519  {%
1520    \glsxtrifhasfield{parent}{#1}%
1521    {\GlsXtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1522    {}%
1523    \ifglshasshort{#1}{\Glsaccessshort{#1}}{\Glsaccessname{#1}}%
1524  }%
1525 }

```

\Glsxtrhiername \Glsxtrhiername{\label}

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

```

1526 \newcommand*{\Glsxtrhiername}[1]{%
1527   \glsdoifexists{#1}%
1528   {%
1529     \glsxtrifhasfield{parent}{#1}%
1530     {}%
1531     \Glsxtrhiername{\glscurrentfieldvalue}\glsxtrhiernamesep%
1532     \ifglshasshort{#1}{\glsaccessshort{#1}}{\glsaccessname{#1}}%
1533   }%
1534   {\ifglshasshort{#1}{\GLSaccessshort{#1}}{\GLSaccessname{#1}}}%
1535 }%
1536 }

```

\GLSXTRhiername \GLSXTRhiername{\label}

As above but displays all names in all-caps.

```

1537 \newcommand*{\GLSXTRhiername}[1]{%
1538   \glsdoifexists{#1}%
1539   {%
1540     \glsxtrifhasfield{parent}{#1}%
1541     {\GLSXTRhiername{\glscurrentfieldvalue}\glsxtrhiernamesep}%
1542     {}%
1543     \ifglshasshort{#1}{\GLSaccessshort{#1}}{\GLSaccessname{#1}}%
1544   }%
1545 }

```

sxtrhiernamesep Separator used in \glsxtrhiername and variants.

```
1546 \newcommand*{\glsxtrhiernamesep}{\,\small{\triangleright}\,}
```

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

```

1547 \newcommand*{\glsxtruseseealso}[1]{%
1548   \glsdoifexists{#1}%

```

```

1549 {%
1550   \letcs{\@glo@see}{\glsdetoklabel{#1}@seealso}%
1551   \ifdefempty{\glo@see}
1552   {}%
1553   {}%
1554   \expandafter\glsxtruseseealsoformat\expandafter{\@glo@see}%
1555   }%
1556 }%
1557 }

```

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

```

1558 \newcommand*{\glsxtruseseealsoformat}[1]{%
1559   \glsseeformat[\seealsoname]{#1}{}%
1560 }

```

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

```

1561 \newrobustcmd{\glsxtrseelist}[1]{%
1562   \edef\@glo@tmp{\noexpand\glsseelist{#1}}\@glo@tmp
1563 }

```

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

```

1564 \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.

```

1565 \ifdef{\xdycrossrefhook}
1566 {

```

Add the cross-reference class definition to the hook.

```

1567 \appto{\xdycrossrefhook}{%
1568   \write\glswrite{(\define-crossref-class \string"seealso\string"
1569   :unverified )}%
1570   \write\glswrite{(\markup-crossref-list
1571   :class \string"seealso\string"^\space\space\space
1572   :open \string"\string\glsxtruseseealsoformat\glsopenbrace\string"
1573   :close \string"\glsclosebrace\string")}%
1574 }

```

Append to class list.

```

1575 \appto{\xdylocationclassorder}{\space\string"seealso\string"}

```

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

```

1576 \newrobustcmd*{\glsxtrindexseealso}[2]{%
1577   \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
1578     \@glsxtr@recordsee{#1}{#2}%

```

```

1579   \fi
1580   \glsdoifexists{#1}%
1581   {%
1582     \@@glsxtrwrglossmark
1583     \def\@gls@xref{#2}%
1584     \onelevel@sanitize\@gls@xref
1585     \gls@checkmkidxchars\@gls@xref
1586     \gls@glossary{\csname glo@#1@type\endcsname}{%
1587       (indexentry
1588         :tkey (\csname glo@#1@index\endcsname)
1589         :xref (\string"\@gls@xref\string")
1590         :attr \string"seealso\string"
1591       )
1592     }%
1593   }%
1594 }
1595 }%
1596 {

```

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

```

1597 \newrobustcmd*\glsxtrindexseealso{\glssee[\seealsoname]}%
1598 }

```

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`.

```

1599 \ifdef\gls@set@xr@key
1600 {

```

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

```

1601 \define@key{glossentry}{alias}{%
1602   \gls@set@xr@key{alias}{\glo@alias}{#1}%
1603 }
1604 \define@key{glossentry}{seealso}{%
1605   \gls@set@xr@key{seealso}{\glo@seealso}{#1}%
1606 }

```

Add to the key mappings.

```
1607 \appto\gls@keymap{,{alias}{alias},{seealso}{seealso}}
```

Set the default value.

```
1608 \appto\newglossaryentryprehook{\def\glo@alias{}\def\glo@seealso{}%
```

Assign the field values.

```

1609 \appto\newglossaryentryposthook{%
1610   \ifdefvoid\glo@seealso
1611     {\csxdef{\glo@\glo@label}{\glo@seealso}}%

```

```

1612     {%
1613         \csxdef{glo@\glo@label}{\glo@seealso}%
1614         \if@glsxtr@autoseeindex
1615             \glsxtr@autoindexcrossrefs
1616         \fi
1617     }%

```

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

```

1618     \ifdefvoid{\glo@alias}
1619         {\csxdef{glo@\glo@label}{\glo@alias}}%
1620     {%
1621         \csxdef{glo@\glo@label}{\glo@alias}%
1622     }%
1623 }

```

Provide user-level commands to access the values.

```

\glsxtralias
1624 \newcommand*{\glsxtralias}[1]{\gls@entry@field{#1}{alias}}
\trseealsolabels
1625 \newcommand*{\glsxtrseealsolabels}[1]{\gls@entry@field{#1}{seealso}}

```

Add to the \glo@autosee hook.

```

1626 \appto{\glo@autoseehook}{%
1627     \ifdefvoid{\glo@alias}
1628     {%
1629         \ifdefvoid{\glo@seealso}
1630             {}%
1631         {%
1632             \edef{\do@glssee}{\noexpand\glsxtrindexseealso
1633                 {\glo@label}{\glo@seealso}}%
1634             \do@glssee
1635         }%
1636     }%
1637 }

```

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

```

1638 \ifdefvoid{\glo@see}
1639     {%
1640         \edef{\do@glssee}{\noexpand\glssee{\glo@label}{\glo@alias}}%
1641         \do@glssee
1642     }%
1643     {}%
1644 }
1645 }%
1646 }
1647 {

```

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

```

\glsxtralias
1648 \glsaddstoragekey*{alias}{}{\glsxtralias}

trseealsolabels
1649 \glsaddstoragekey*{seealso}{}{\glsxtrseealsolabels}

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

ryentryposthook Append to the hook to check for the alias and seealso keys.
1650 \appto{@newglossaryentryposthook}{%
1651   \ifcsvoid{glo@\glo@label @alias}{%
1652     {%
1653       \ifcsvoid{glo@\glo@label @seealso}{%
1654         {}{%
1655           {%
1656             \edef\@do@glssee{\noexpand\glsxtrindexseealso
1657               {\glo@label}\{\csuse{glo@\glo@label @seealso}\}}{%
1658                 \@do@glssee
1659               }{%
1660             }{%
1661           }{%
1662             \ifdefvoid{glo@see}{%
1663               {%
1664                 \edef\@do@glssee{\noexpand\glssee
1665                   {\glo@label}\{\csuse{glo@\glo@label @alias}\}}{%
1666                     \@do@glssee
1667                   }{%
1668                     {}{%
1669                   }{%
1670                 }{%
1671               }{%
1672             Add all unused cross-references at the end of the document.
1673 \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.
1673 \newcommand{\glsxtraddallcrossrefs}{%
1674   \forallglossaries{\glo@type}{%
1675     {%
1676       \forglsentries[\glo@type]{\glo@label}{%
1677         {%
1678           \ifglsused{\glo@label}{%
1679             {\expandafter\glsxtr@addunusedxrefs\expandafter{\glo@label}}{%
1680               }{%
1681             }{%
1682           }{%
1683         }{%
1684       }{%
1685     }{%
1686   }{%
1687 }

```

```
1681  }%
1682 }
```

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

```
1683 \newcommand*{\@glsxtr@addunusedxrefs}[1]{%
1684   \letcs{\@glo@see}{\glo@\glsdetoklabel{#1}@see}%
1685   \ifdefvoid{\glo@see}%
1686   {}%
1687   {}%
1688   \expandafter\glsxtr@addunused\@glo@see\@end@glsxtr@addunused
1689 }%
1690 \letcs{\@glo@see}{\glo@\glsdetoklabel{#1}@seealso}%
1691 \ifdefvoid{\glo@see}%
1692 {}%
1693 {}%
1694 \expandafter\glsxtr@addunused\@glo@see\@end@glsxtr@addunused
1695 }%
1696 }
```

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

```
1697 \newcommand*{\glsxtr@addunused}[1][]{%
1698   \glsxtr@addunused
1699 }
```

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

```
1700 \def\@glsxtr@addunused#1\@end@glsxtr@addunused{%
1701   \for\@glsxtr@label:=#1\do
1702   {}%
1703   \ifglsused{\@glsxtr@label}{}%
1704   {}%
1705   \glsadd[format=glsxtrunusedformat]{\@glsxtr@label}%
1706   \glsunset{\@glsxtr@label}%
1707   \expandafter\@glsxtr@addunusedxrefs\expandafter{\@glsxtr@label}%
1708 }%
1709 }%
1710 }
```

`xtrunusedformat`

```
1711 \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`.

```
1712 \ifdef{\gls@begindocdefs}
1713 {}%
```

```

1714 \renewcommand*\gls@begindocdefs}{%
1715   \ifnum\glsxtr@docdefval=1\relax
1716     \gls@enablesavenonumberlist
1717     \edef\gls@restoreat{%
1718       \noexpand\catcode`\noexpand\@=\number\catcode`\@}%
1719     \makeatletter
1720     \InputIfFileExists{\jobname.glsdefs}{}{%
1721       \gls@restoreat
1722       \undef\gls@restoreat
1723       \gls@defdocnewglossaryentry
1724     }%
1725   \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.

```

1726   \gls@enablesavenonumberlist
1727   \let\gls@checkseeallowed\relax
1728   \let\newglossaryentry\new@atom@glossaryentry
1729   \global\newwrite\gls@deffile
1730   \immediate\openout\gls@deffile=\jobname.glsdefs

```

Write all currently defined entries.

```

1731   \forallglsentries{\glsentry}{\gls@writedef{\glsentry}}{%
1732     \fi
1733   \fi
1734 }
1735 }%
1736 {%
1737 \ifnum\glsxtr@docdefval=3\relax
1738   \PackageError{glossaries-extra}{Package option
1739     'docdef=\glsxtr@docdefsetting' requires at least version 4.37
1740     of the base glossaries.sty package}{}%
1741 \fi
1742 }

```

m@glossaryentry

```

1743 \newrobustcmd{\new@atom@glossaryentry}[2]{%
1744   \gls@defglossaryentry{#1}{#2}%
1745   \gls@writedef{#1}%
1746 }

```

`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.

```

1747 \let\glsxtr@orgmakenoidxglossaries\makenoidxglossaries
1748 \renewcommand{\makenoidxglossaries}{%
1749   \ifdefequal\glsxtr@record@setting\glsxtr@record@setting@off
1750   {%
1751     \glsxtr@orgmakenoidxglossaries

```

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

```
1752     \renewcommand{\cdo@seeglossary}[2]{%
1753         \cdo@glstrwrglossmark
1754         \edef\cdo@label{\glsdetoklabel{##1}}%
1755         \protected@write\auxout{}{%
1756             \string\cdo@reference
1757             {\csname glo@\cdo@label\cdo@type\endcsname}%
1758             {\cdo@label}%
1759             {%
1760                 \string\glsseeformat##2{}%
1761             }%
1762         }%
1763     }%
```

Check for docdefs=restricted:

```
1764     \if@glsxtrdocdefrestricted
```

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

```
1765     \renewcommand*{\cdo@reference}[3]{%
1766         \ifcsundef{glsref##1}{\csgdef{glsref##1}{}{}}{%
1767             \ifinlistcs##2{@glsref##1}%
1768             {}%
1769             {\listcsgadd{@glsref##1}{##2}}%
1770             \ifcsundef{glo@\glsdetoklabel##2@loclist}{%
1771                 {\csgdef{glo@\glsdetoklabel##2@loclist}{}{}}%
1772             {}%
1773             {\listcsgadd{glo@\glsdetoklabel##2@loclist}{##3}}%
1774         }%
1775     }\else
```

Disable document definitions.

```
1776     \cdo@glstrdocdeffalse
1777     \fi
1778     \disable@keys{glossaries-extra.sty}{docdef}%
1779 }%
1780 {%
1781     \PackageError{glossaries-extra}{\string\makenoidxglossaries\space
1782         not permitted\MessageBreak
1783         with record=\cdo@glstr@record@setting\space package option}%
1784     {You may only use \string\makenoidxglossaries\ space with the
1785         record=off option}%
1786 }%
1787 }
```

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

```
1788 \renewcommand*{\gls@defdocnewglossaryentry}{%
1789     \ifcase\cdo@glstr@docdefval
1790         docdef=false:
```

```

1790 \renewcommand*{\newglossaryentry}[2]{%
1791   \PackageError{glossaries-extra}{Glossary entries must
1792     be \MessageBreak defined in the preamble with \MessageBreak
1793     package option 'docdef=false'\MessageBreak(consider using
1794     'docdef=restricted')}{Move your glossary definitions to
1795     the preamble. You can also put them in a \MessageBreak separate file
1796     and load them with \string\loadglsentries.}%
1797 }%
1798 \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.

```

1799 \let\gls@checkseeallowed\relax
1800 \let\newglossaryentry\new@glossaryentry
1801 \else

```

Restricted mode just needs to allow the `see` value.

```

1802 \let\gls@checkseeallowed\relax
1803 \fi
1804 }%

```

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

```

1805 \newcommand*{\GlsXtrEnableOnTheFly}{%
1806   \@ifstar@sGlsXtrEnableOnTheFly@\GlsXtrEnableOnTheFly
1807 }

```

`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.)

```

1808 \newcommand*{\@sGlsXtrEnableOnTheFly}{%
1809   \renewcommand*{\glsdetoklabel}[1]{%
1810     \expandafter@glsxtr@ifcsstart\string##1 \glsxtr@end@
1811   }%
1812   \expandafter\detokenize\expandafter{##1}%
1813 }%
1814 {\detokenize{##1}}%
1815 }%
1816 \@GlsXtrEnableOnTheFly
1817 }%
1818 \def@glsxtr@ifcsstart#1#2@glsxtr@end@#3#4{%
1819   \expandafter\if\glsbackslash#1%
1820     #3%
1821   \else
1822     #4%

```

```

1823 \fi
1824 }

sxtrstarflywarn
1825 \newcommand*{\glsxtrstarflywarn}{%
1826   \GlossariesExtraWarning{Experimental starred version of
1827   \string\GlsXtrEnableOnTheFly\space in use (please ensure you have
1828   read the warnings in the glossaries-extra user manual)}%
1829 }

```

rEnableOnTheFly

```
1830 \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
1831 \newcommand*{\glsxtrcat}{general}
```

```
\glsxtr
1832 \newcommand*{\glsxtr}[1][]{%
1833   \def\glsxtr@keylist{##1}%
1834   \glsxtr
1835 }
```

```
\@glsxtr
1836 \newcommand*{\@glsxtr}[2][]{%
1837   \ifglsentryexists{##2}%
1838   {%
1839     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1840   }%
1841   {%
1842     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1843       description={\nophantdesc},##1}%
1844   }%
1845   \expandafter\gls\expandafter[\glsxtr@keylist]{##2}%
1846 }
```

```
\Glsxtr
1847 \newcommand*{\Glsxtr}[1][]{%
1848   \def\glsxtr@keylist{##1}%
1849   \glsxtr
1850 }
```

```
\@Glsxtr
1851 \newcommand*{\@Glsxtr}[2][]{%
1852   \ifglsentryexists{##2}%

```

```

1853  {%
1854      \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1855  }%
1856  {%
1857      \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1858          description={\nopostdesc},##1}%
1859  }%
1860  \expandafter\Gls\expandafter[\glsxtr@keylist]{##2}%
1861 }

\glsxtrpl
1862 \newcommand*{\glsxtrpl}[1] [] {%
1863     \def\glsxtr@keylist{##1}%
1864     \glsxtrpl
1865 }

{@glsxtrpl
1866 \newcommand*{@glsxtrpl}[2] [] {%
1867     \ifglsentryexists{##2}%
1868     {%
1869         \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1870     }%
1871     {%
1872         \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1873             description={\nopostdesc},##1}%
1874     }%
1875     \expandafter\glspl\expandafter[\glsxtr@keylist]{##2}%
1876 }

\Glsxtrpl
1877 \newcommand*{\Glsxtrpl}[1] [] {%
1878     \def\glsxtr@keylist{##1}%
1879     \glsxtrpl
1880 }

{@Glsxtrpl
1881 \newcommand*{@Glsxtrpl}[2] [] {%
1882     \ifglsentryexists{##2}%
1883     {%
1884         \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1885     }%
1886     {%
1887         \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1888             description={\nopostdesc},##1}%
1889     }%
1890     \expandafter\glspl\expandafter[\glsxtr@keylist]{##2}%
1891 }

\GlsXtrWarning

```

```

1892 \newcommand*{\GlsXtrWarning}[2]{%
1893   \def\@glsxtr@optlist{##1}%
1894   \onelevel@sanitize\@glsxtr@optlist
1895   \GlossariesExtraWarning{The options '\@glsxtr@optlist' have
1896   been ignored for entry '##2' as it has already been defined}%
1897 }

```

Disable commands after the glossary:

```

1898 \renewcommand{\printglossary}[2]{%
1899   \def\@glsxtr@printglossopts{##1}%
1900   \@glsxtr@orgprintglossary{##1}{##2}%
1901   \def\@glsxtr{\@glsxtr@disabledflycommand\glsxtr}%
1902   \def\@glsxtrpl{\@glsxtr@disabledflycommand\glsxtrpl}%
1903   \def\@Glsxtr{\@glsxtr@disabledflycommand\Glsxtr}%
1904   \def\@Glsxtrpl{\@glsxtr@disabledflycommand\Glsxtrpl}%
1905 }

```

`abledflycommand`

```

1906 \newcommand*{\@glsxtr@disabledflycommand}[1]{%
1907   \PackageError{glossaries-extra}%
1908   {\string##1\space can't be used after any of the \MessageBreak
1909   glossaries have been displayed}%
1910   {The on-the-fly commands enabled by
1911     \string\GlsXtrEnableOnTheFly\space may only be used \MessageBreak
1912     before the glossaries. If you want to use any entries \MessageBreak
1913     after any of the glossaries, you must use the standard \MessageBreak
1914     method of first defining the entry and then using the \MessageBreak
1915     entry with commands like \string\gls}%
1916   \@@glsxtr@disabledflycommand
1917 }%
1918 \newcommand*{\@glsxtr@disabledflycommand}[2][]{##2}

```

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

```

1919 \let\GlsXtrEnableOnTheFly\relax
1920 }%
1921 \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.

```
1922 \newcommand*{\@glsxtr@current@style}{\@glossary@default@style}
```

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

`etglossarystyle`

```
1923 \renewcommand{\setglossarystyle}[1]{%
```

```

1924 \ifcsundef{@glsstyle@#1}%
1925 {%
1926   \PackageError{glossaries-extra}{Glossary style '#1' undefined}{}%
1927 }%
1928 {%
1929   \csname @glsstyle@#1\endcsname

```

Only set the current style if it exists.

```

1930   \protected\edef\@glsxtr@current@style{#1}%
1931 }%
1932 \ifx\@glossary@default@style\relax
1933   \protected\edef\@glossary@default@style{#1}%
1934 \fi
1935 }

```

In case we have an old version of glossaries:

```

1936 \ifdef\@glossary@default@style
1937 {}
1938 {%
1939   \let\@glossary@default@style\relax
1940 }

```

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

```

1941 \ifdef\glslistdottedwidth
1942 {%
1943   \ifdim\glslistdottedwidth=.5\hsize
1944     \setlength{\glslistdottedwidth}{-\dimexpr\maxdimen-1sp\relax}
1945     \AtBeginDocument{%
1946       \ifdim\glslistdottedwidth=-\dimexpr\maxdimen-1sp\relax
1947         \setlength{\glslistdottedwidth}{.5\columnwidth}%
1948       \fi
1949     }%
1950   \fi
1951 }
1952 {}%

```

Similarly for `\glsdescwidth`:

```

\glsdescwidth
1953 \ifdef\glsdescwidth
1954 {%
1955   \ifdim\glsdescwidth=.6\hsize
1956     \setlength{\glsdescwidth}{-\dimexpr\maxdimen-1sp\relax}
1957     \AtBeginDocument{%
1958       \ifdim\glsdescwidth=-\dimexpr\maxdimen-1sp\relax
1959         \setlength{\glsdescwidth}{.6\columnwidth}%
1960       \fi
1961     }%
1962   \fi

```

```
1963 }
1964 {}%
```

and for \glspagelistwidth:

```
lspagelistwidth
1965 \ifdef\glspagelistwidth
1966 {}%
1967   \ifdim\glspagelistwidth=.1\hsize
1968     \setlength{\glspagelistwidth}{-\dimexpr\maxdimen-1sp\relax}
1969   \AtBeginDocument{%
1970     \ifdim\glspagelistwidth=-\dimexpr\maxdimen-1sp\relax
1971       \setlength{\glspagelistwidth}{.1\columnwidth}%
1972     \fi
1973   }%
1974 \fi
1975 }
1976 {}%
```

aryentrynumbers Has the nonumberlist option been used?

```
1977 \def\org@glossaryentrynumbers#1{\#1\gls@save@numberlist{#1}}%
1978 \ifx\org@glossaryentrynumbers\glossaryentrynumbers
1979   \glsnonumberlistfalse
1980   \renewcommand*\glossaryentrynumbers[1]{%
1981     \ifglsentryexists{\glscurrententrylabel}%
1982     {%
1983       \@glsxtrpreloctag
1984       \GlsXtrFormatLocationList{#1}%
1985       \@glsxtrpostloctag
1986       \gls@save@numberlist{#1}%
1987     }{}%
1988   }%
1989 \else
1990   \glsnonumberlisttrue
1991   \renewcommand*\glossaryentrynumbers[1]{%
1992     \ifglsentryexists{\glscurrententrylabel}%
1993     {%
1994       \gls@save@numberlist{#1}%
1995     }{}%
1996   }%
1997 \fi
```

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

```
1998 \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

```

1999 \newcommand*{\GlsXtrEnablePreLocationTag}[2]{%
2000   \let\@glsxtrpreloctag\@glsxtrpreloctag
2001   \let\@glsxtrpostloctag\@glsxtrpostloctag
2002   \renewcommand*{\@glsxtr@pagetag}{#1}%
2003   \renewcommand*{\@glsxtr@pagestag}{#2}%
2004   \renewcommand*{\@glsxtr@savepreloctag}[2]{%
2005     \csgdef{@glsxtr@preloctag##1}{##2}%
2006   }%
2007   \renewcommand*{\@glsxtr@doloctag}{%
2008     \ifcsundef{@glsxtr@preloctag@\glscurrententrylabel}%
2009       {%
2010         \GlossariesWarning{Missing pre-location tag for '\glscurrententrylabel'.}
2011         Rerun required}%
2012     }%
2013     {%
2014       \csuse{@glsxtr@preloctag@\glscurrententrylabel}%
2015     }%
2016   }%
2017 }
2018 \onlypreamble\GlsXtrEnablePreLocationTag

```

glsxtrpreloctag

```

2019 \newcommand*{\@glsxtrpreloctag}{%
2020   \let\@glsxtr@org@delimN\delimN
2021   \let\@glsxtr@org@delimR\delimR
2022   \let\@glsxtr@org@glsignore\glsignore
      \gdef is required as the delimiters may occur inside a scope.
2023   \gdef\@glsxtr@thisloctag{\@glsxtr@pagetag}%
2024   \renewcommand*{\delimN}{%
2025     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
2026     \@glsxtr@org@delimN}%
2027   \renewcommand*{\delimR}{%
2028     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
2029     \@glsxtr@org@delimR}%
2030   \renewcommand*{\glsignore}[1]{%
2031     \gdef\@glsxtr@thisloctag{\relax}%
2032     \@glsxtr@org@glsignore{##1}}%
2033   \glsxtr@doloctag
2034 }

```

glsxtrpreloctag

```
2035 \newcommand*{\@glsxtrpreloctag}{}%
```

```

@glsxtr@pagetag
2036 \newcommand*{\@glsxtr@pagetag}{}%

glsxtr@pagestag
2037 \newcommand*{\@glsxtr@pagestag}{}%

lsxtrpostloctag
2038 \newcommand*{\@@glsxtrpostloctag}{}%
2039   \let\delimN\@glsxtr@org@delimN
2040   \let\delimR\@glsxtr@org@delimR
2041   \let\glsignore\@glsxtr@org@glsignore
2042   \protected@write\@auxout{}{%
2043     {\string\@glsxtr@savepreloctag{\glscurrententrylabel}\{\@glsxtr@thisloctag\}}%
2044   }

lsxtrpostloctag
2045 \newcommand*{\@glsxtrpostloctag}{}%

lsxtr@preloctag
2046 \newcommand*{\@glsxtr@savepreloctag}[2]{}%
2047 \protected@write\@auxout{}{%
2048   \string\providecommand\string\@glsxtr@savepreloctag[2]{}}

glsxtr@doloctag
2049 \newcommand*{\@glsxtr@doloctag}{}%

ss@nonumberlist  Modify the nonumberlist key to use \GlsXtrFormatLocationList (and also save the number
list):
2050 \renewcommand*{\KV@printgloss@nonumberlist}[1]{%
2051   \XKV@plfalse
2052   \XKV@sttrue
2053   \XKV@checkchoice[\XKV@resa]{#1}{true,false}%
2054   {%
2055     \csname glsnonumberlist\XKV@resa\endcsname
2056     \ifglsnonumberlist
2057       \def\glossaryentrynumbers##1{\gls@save@numberlist{##1}}%
2058     \else
2059       \def\glossaryentrynumbers##1{%
2060         \glsxtrpreloctag
2061         \GlsXtrFormatLocationList{##1}%
2062         \glsxtrpostloctag
2063         \gls@save@numberlist{##1}}%
2064     \fi
2065   }%
2066 }

```

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.

```
2067 \renewcommand*{\glsentryfmt}{%
2068   \ifglshasshort{\glslabel}{\glssetabrvfmt{\glscategory{\glslabel}}}{}
2069   \glsifregular{\glslabel}%
2070   {\glsxtrregularfont{\glsentryfmt}}%
2071   {%
2072     \ifglshasshort{\glslabel}%
2073     {\glsxtrabbreviationfont{\glsxtrgenabbrvfmt}}%
2074     {\glsxtrregularfont{\glsentryfmt}}%
2075   }%
2076 }
```

sxtrregularfont Font used for regular entries.

```
2077 \newcommand*{\glsxtrregularfont}[1]{#1}
```

bbreviationfont Font used for abbreviation entries.

```
2078 \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.

```
2079 \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).

```
2080   \@glsxtr@record{#2}{#3}{\glslink}%
2081   \glsdoifexists{#3}%
2082   {%
```

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).

```
2083   \let\glsxtrorg@ifKV@glslink@hyper\ifKV@glslink@hyper
2084   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2085   \def\glscustomtext{#4}%
2086   \@glsxtr@field@linkdefs
2087   #1%
```

```

2088     \gls@link[#2]{#3}{#4}%
2089     \let\ifKV@glslink@hyper\glsxtrorg@ifKV@glslink@hyper
2090   }%
2091 \glspostlinkhook
2092 }

```

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.

```

2093 \let\glsxtr@org@gls@\gls@
2094 \def\gls@#1#2{%
2095   \glsxtr@record{#1}{#2}{glslink}%
2096   \glsxtr@org@gls@{#1}{#2}%
2097 }

```

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

```

2098 \let\glsxtr@org@glspl@\glspl@
2099 \def\glspl@#1#2{%
2100   \glsxtr@record{#1}{#2}{glslink}%
2101   \glsxtr@org@glspl@{#1}{#2}%
2102 }

```

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

```

2103 \let\glsxtr@org@Gls@\Gls@
2104 \def\Gls@#1#2{%
2105   \glsxtr@record{#1}{#2}{glslink}%
2106   \glsxtr@org@Gls@{#1}{#2}%
2107 }

```

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

```

2108 \let\glsxtr@org@Glspl@\Glspl@
2109 \def\Glspl@#1#2{%
2110   \glsxtr@record{#1}{#2}{glslink}%
2111   \glsxtr@org@Glspl@{#1}{#2}%
2112 }

```

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

```

2113 \let\glsxtr@org@GLS@\GLS@
2114 \def\GLS@#1#2{%
2115   \glsxtr@record{#1}{#2}{glslink}%
2116   \glsxtr@org@GLS@{#1}{#2}%
2117 }

```

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

```

2118 \let\glsxtr@org@GLSpl@\GLSpl@
2119 \def\GLSpl@#1#2{%
2120   \glsxtr@record{#1}{#2}{glslink}%
2121   \glsxtr@org@GLSpl@{#1}{#2}%
2122 }

```

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

```
2123 \renewcommand*{\@glsdisp}[3] [] {%
2124   \@glsxtr@record{#1}{#2}{glslink}%
2125   \glsdoifexists{#2}{%
2126     \let\do@gls@link@checkfirsthyper\gls@link@checkfirsthyper
2127     \let\glsifplural\secondoftwo
2128     \let\glscapscase\firstofthree
2129     \def\glscustomtext{#3}%
2130     \def\glsinsert{}%
2131     \def\glo@text{\csname gls@\glstype @entryfmt\endcsname}%
2132     \gls@link[#1]{#2}{\glo@text}%
2133     \ifKV@glslink@local
2134       \glslocalunset{#2}%
2135     \else
2136       \glsunset{#2}%
2137     \fi
2138   }%
2139   \glspostlinkhook
2140 }
```

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

```
2141 \renewcommand*{\@gls@@link}[3] [] {%
2142   \@glsxtr@record{#1}{#2}{glslink}%
2143   \glsdoifexists{#2}{%
2144     {%
2145       \let\do@gls@link@checkfirsthyper\relax
```

Post-link hook commands need initialising.

```
2146   \def\glscustomtext{#3}%
2147   \@glsxtr@field@linkdefs
2148   \@gls@link[#1]{#2}{#3}%
2149 }%
2150 {%
2151   \glstextformat{#3}%
2152 }%
2153 \glspostlinkhook
2154 }
```

\sxtrinitwrgloss Set the default if the wrgloss is omitted.

```
2155 \newcommand*{\glsxtrinitwrgloss}{}%
2156   \glsifattribute{\glslabel}{wrgloss}{after}%
2157 {%
2158   \glsxtrinitwrglossbeforefalse
2159 }%
2160 {%
2161   \glsxtrinitwrglossbeforetrue
2162 }%
2163 }
```

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

```
2164 \newif\ifglsxtrinitwrglossbefore  
2165 \glsxtrinitwrglossbeforetrue
```

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

```
2166 \define@choicekey{glslink}{wrgloss}-%  
2167 [\\glsxtr@wrglossval\\glsxtr@wrglossnr]-%  
2168 {before,after}-%  
2169 {%-  
2170   \ifcase\\glsxtr@wrglossnr\relax  
2171     \\glsxtrinitwrglossbeforetrue  
2172   \\or  
2173     \\glsxtrinitwrglossbeforefalse  
2174   \\fi  
2175 }-%  
  
2176 \define@key{glslink}{thevalue}{\\def\\glsxtr@thevalue{#1}}-%  
  
2177 \define@key{glslink}{theHvalue}{\\def\\glsxtr@theHvalue{#1}}-%
```

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

```
2178 \define@boolkey{glslink}[glsxtr@]{hyperoutside}[true]{-}  
2179 \\glsxtr@hyperoutsidetrue
```

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

```
2180 \define@key{glslink}{textformat}{%-  
2181   \\ifcsdef{#1}{-}  
2182   {%-  
2183     \\letcs{\\glsxtr@local@textformat}{#1}{-}  
2184   }%-  
2185   {%-  
2186     \\PackageError{glossaries-extra}{Unknown control sequence name '#1'}{-}  
2187   }%-  
2188 }-%  
  
2189 \define@key{glslink}{prefix}{\\def\\glolinkprefix{#1}}-%
```

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

```
2190 \\newcommand*{\\glsxtrinithyperoutside}{%-  
2191   \\glsifattribute{\\glslabel}{hyperoutside}{false}{-}  
2192   {%-  
2193     \\glsxtr@hyperoutsidefalse  
2194   }%-  
2195   {%-  
2196     \\glsxtr@hyperoutsidetrue  
2197   }%-  
2198 }-%
```

```
r@inc@linkcount Does nothing by default.
2199 \newcommand*{\glsxtr@inc@linkcount}{}}

slinkpresetkeys User hook performed immediately before options are set. Does nothing by default.
2200 \newcommand*{\glslinkpresetkeys}{}}

sXtrExpandedFmt Helper command that (protected) fully expands second argument and then applies it to the first, which must be a command that takes a single argument.
2201 \newrobustcmd*{\GlsXtrExpandedFmt}[2]{%
2202   \protected@edef\glsxtr@tmp{#2}%
2203   \expandafter#1\expandafter{\glsxtr@tmp}%
2204 }

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.
2205 \newcommand*{\glsxtr@use@equation@counter}{}%
2206   \glsxtr@ifnum@mmode{\def\gls@counter{equation}}{}%
2207 }

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).
2208 \newcommand*{\glsxtr@do@autoadd}[1]{}}


```

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

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

```
2209 \newcommand*{\GlsXtrAutoAddOnFormat}[3][\glslabel]{%
2210   \renewcommand*{\glsxtr@do@autoadd}[1]{%
2211     \begingroup
2212       \protected@edef\glsxtr@do@autoadd{%
2213         \noexpand\ifstreq{\##1}{glslink}{%
2214           \noexpand\DTLifinlist{\glsnumberformat}{\##2}{\noexpand\glsadd[format={\glsnumberformat}}{}}%
2215         }%
2216       }%
2217     }%
2218   }%
2219   \glsxtr@do@autoadd
2220   \endgroup
2221 }%
2222 }
```

\@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.

```
2223 \def\@gls@link[#1]#2#3{%
2224   \leavevmode
2225   \edef\glslabel{\glsdetoklabel{#2}}%
2226   \def\@gls@link@opts{#1}%
2227   \let\@gls@link@label\glslabel
2228   \let\@glsnumberformat\glsxtr@defaultnumberformat
2229   \edef\@gls@counter{\csname glo@\glslabel \counter\endcsname}%
2230   \edef\glstype{\csname glo@\glslabel \type\endcsname}%
2231   \let\org@ifKV@glslink@hyper\ifKV@glslink@hyper
```

Save current value of \glolinkprefix:

```
2232 \let\@glsxtr@org@glolinkprefix\glolinkprefix
```

Initialise \@glsxtr@local@textformat

```
2233 \let\@glsxtr@local@textformat\relax
```

Initialise thevalue and theHvalue (v1.19).

```
2234 \def\@glsxtr@thevalue{}%
2235 \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
```

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

```
2236 \glsxtrinitwrgloss
```

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

```
2237 \glsxtrinithyperoutside
```

Note that the default link options may override \glsxtrinitwrgloss.

```
2238 \@gls@setdefault@glslink@opts
```

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

```
2239 \glsxtr@inc@linkcount
```

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

```
2240 \if@glsxtr@equations
2241   \@glsxtr@use@equation@counter
2242 \fi
```

As the original definition.

```
2243 \do@glsdisablehyperinlist
2244 \do@gls@link@checkfirsthyper
```

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

```
2245 \glslinkpresetkeys
```

Set options.

```
2246 \setkeys{glslink}{#1}%
```

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

```
2247 \glsxtr@do@autoadd{glslink}%
```

User hook after options are set:

```
2248 \glslinkpostsetkeys  
      Check the value and the H value before saving (v1.19).  
2249 \ifdefempty{\@glsxtr@thevalue}{%  
2250 {  
2251   \@gls@saveentrycounter  
2252 }%  
2253 {  
2254   \let\theglsentrycounter\@glsxtr@thevalue  
2255   \def\theHglsentrycounter{\@glsxtr@theHvalue}{%  
2256 }%  
2257 \@gls@setsort{\glslabel}{%
```

Check if the textformat key has been used.

```
2258 \ifx\@glsxtr@local@textformat\relax
```

Check textformat attribute (new to v1.21).

```
2259 \glshasattribute{\glslabel}{textformat}{%  
2260 {  
2261   \edef\@glsxtr@attrval{\glsgetattribute{\glslabel}{textformat}}{  
2262   \ifcsdef{\@glsxtr@attrval}{%  
2263     {  
2264       \let\cs{\@glsxtr@textformat}{\@glsxtr@attrval}{%  
2265     }%  
2266     {  
2267       \GlossariesExtraWarning{Unknown control sequence name  
2268         '\@glsxtr@attrval' supplied in textformat attribute  
2269         for entry '\glslabel'. Reverting to default \string\glstextformat}{%  
2270       \let\@glsxtr@textformat\glstextformat  
2271     }%  
2272   }%  
2273   {  
2274     \let\@glsxtr@textformat\glstextformat  
2275   }%  
2276 \else  
2277   \let\@glsxtr@textformat\@glsxtr@local@textformat  
2278 \fi
```

Do write if it should occur before the link text:

```
2279 \ifglsxtrinitwrglossbefore  
2280   \do@wrglossary{#2}{%  
2281 \fi
```

Do the link text:

```
2282 \ifKV@glslink@hyper  
2283   \ifglsxtr@hyperoutside  
2284     \glslink{\glolinkprefix\glslabel}{\@glsxtr@textformat{#3}}{  
2285   \else  
2286     \glsxtr@textformat{\glslink{\glolinkprefix\glslabel}{#3}}{  
2287   \fi
```

```

2288 \else
2289   \ifglsxtr@hyperoutside
2290     \glsdonohyperlink{\glolinkprefix\glslabel}{\glsxtr@textformat{#3}}%
2291   \else
2292     \glsxtr@textformat{\glsdonohyperlink{\glolinkprefix\glslabel}{#3}}%
2293   \fi
2294 \fi

```

Do write if it should occur after the link text:

```

2295 \ifglsxtrinitwrglossbefore
2296 \else
2297   \do@wrglossary{#2}%
2298 \fi

```

Restore original value of \glolinkprefix:

```
2299 \let\glolinkprefix\glsxtr@org@glolinkprefix
```

As the original definition:

```
2300 \let\ifKV@glslink@hyper\org@ifKV@glslink@hyper
2301 }
```

```
2302 \define@key{glossadd}{thevalue}{\def\glsxtr@thevalue{#1}}
```

```
2303 \define@key{glossadd}{theHvalue}{\def\glsxtr@theHvalue{#1}}
```

lsaddpresetkeys

```
2304 \newcommand*{\glsaddpresetkeys}{}%
```

saddpostsetkeys

```
2305 \newcommand*{\glsaddpostsetkeys}{}%
```

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

```

2306 \renewrobustcmd*{\glsadd}[2][]{%
2307   \glsxtrifinmark
2308   {}%
2309   {}%
2310   \gls@adjustmode
2311   \begingroup
2312   \glsxtr@record{#1}{#2}{glossadd}%
2313   \glsdoifexists{#2}%
2314   {}%
2315   \let\glsnumberformat\glsxtr@defaultnumberformat
2316   \edef\gls@counter{\csname glo@\glsdetoklabel{#2}@counter\endcsname}%
2317   \def\glsxtr@thevalue{}%
2318   \def\glsxtr@theHvalue{\glsxtr@thevalue}%

```

Implement any default settings (before options are set)

```

2319   \glsaddpresetkeys
2320   \setkeys{glossadd}{#1}%

```

Implement any default settings (after options are set)

```
2321      \glsaddpostsetkeys
2322      \ifdefempty{\@glsxtr@thevalue}{%
2323      {%
2324          \@gls@saveentrycounter
2325      }%
2326      {%
2327          \let\theglsentrycounter\@glsxtr@thevalue
2328          \def\theHglsentrycounter{\@glsxtr@theHvalue}%
2329      }%
```

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

```
2330      \@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.

```
2331      \KV@glslink@noindexfalse
2332      \@@do@wrglossary{#2}%
2333      }%
2334      \endgroup
2335  }%
2336 }
```

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

```
2337 \newrobustcmd{\glsaddeach}[2][]{%
2338   \@for \@gls@thislabel:=#2\do{\glsadd[#1]{\@gls@thislabel}}%
2339 }
```

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

```
2340 \newcommand*{\@glsxtr@field@linkdefs}{%
2341   \let\glsxtrifwasfirstuse\@secondoftwo
2342   \let\glsifplural\@secondoftwo
2343   \let\glscapscase\@firstofthree
2344   \let\glsinsert\@empty
2345 }
```

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

`assignfieldfont`

```
2346 \newcommand*{\glsxtrassignfieldfont}[1]{%
2347   \ifglsentryexists{#1}{%
2348   {%
2349     \ifglshasshort{#1}{%
2350     {%
2351       \glssetabbrvfmt{\glscategory{#1}}%
2352       \glsifregular{#1}{%
2353         {\let\@gls@field@font\glsxrregularfont}%
```

```

2354     {\let\@gls@field@font\@firstofone}%
2355   }%
2356   {%
2357     \glsifnotregular{#1}%
2358     {\let\@gls@field@font\@firstofone}%
2359     {\let\@gls@field@font\glsxtrregularfont}%
2360   }%
2361 }%
2362 {%
2363   \let\@gls@field@font@gobble
2364 }%
2365 }

```

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

```

2366 \def\@glstext@#1#2[#3]{%
2367   \glsxtrassignfieldfont{#2}%
2368   \@gls@field@link{#1}{#2}{\@gls@field@font{\glsaccesstext{#2}#3}}%
2369 }

```

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

```

2370 \def\@GLStext@#1#2[#3]{%
2371   \glsxtrassignfieldfont{#2}%
2372   \@gls@field@link[\let\glscapscase\@thirdofthree]{#1}{#2}%
2373   {\@gls@field@font{\GLSaccesstext{#2}\mfirstucMakeUppercase{#3}}}%
2374 }

```

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

```

2375 \def\@Glstext@#1#2[#3]{%
2376   \glsxtrassignfieldfont{#2}%
2377   \@gls@field@link[\let\glscapscase\@secondofthree]{#1}{#2}%
2378   {\@gls@field@font{\Glsaccesstext{#2}#3}}%
2379 }

```

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

```

2380 \newcommand*{\glsxtrchecknohyperfirst}[1]{%
2381   \glsifattribute{#1}{nohyperfirst}{true}{\KV@glslink@hyperfalse}{}%
2382 }

```

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

```

2383 \def\@glsfirst@#1#2[#3]{%
2384   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirst honours the nohyperfirst attribute.

```

2385   \@gls@field@link
2386   [\let\glsxtrifwasfirstuse\@firstoftwo
2387   \glsxtrchecknohyperfirst{#2}%

```

```
2388 ]{#1}{#2}%
2389 {\@gls@field@font{\glsaccessfirst{#2}#3}}%
2390 }
```

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

```
2391 \def\@Glsfirst@#1#2[#3]{%
2392   \glsxtrassignfieldfont{#2}%


```

Ensure that \Glsfirst honours the nohyperfirst attribute.

```
2393   \@gls@field@link
2394   [\let\glsxtrifwasfirstuse\@firstoftwo
2395     \let\glscapscase\@secondofthree
2396     \glsxtrchecknohyperfirst{#2}%
2397   ]%
2398   {#1}{#2}{\@gls@field@font{\Glsaccessfirst{#2}#3}}%
2399 }
```

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

```
2400 \def\@GLSfirst@#1#2[#3]{%
2401   \glsxtrassignfieldfont{#2}%


```

Ensure that \GLSfirst honours the nohyperfirst attribute.

```
2402   \@gls@field@link
2403   [\let\glsxtrifwasfirstuse\@firstoftwo
2404     \let\glscapscase\@thirdofthree
2405     \glsxtrchecknohyperfirst{#2}%
2406   ]%
2407   {#1}{#2}{\@gls@field@font{\GLSaccessfirst{#2}\mfirstucMakeUppercase{#3}}}%
2408 }
```

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

```
2409 \def\@glsplural@#1#2[#3]{%
2410   \glsxtrassignfieldfont{#2}%
2411   \@gls@field@link[\let\glsifplural\@firstoftwo]{#1}{#2}%
2412     {\@gls@field@font{\glsaccessplural{#2}#3}}%
2413 }
```

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

```
2414 \def\@Glsplural@#1#2[#3]{%
2415   \glsxtrassignfieldfont{#2}%
2416   \@gls@field@link
2417   [\let\glsifplural\@firstoftwo
2418     \let\glscapscase\@secondofthree
2419   ]%
2420   {#1}{#2}{\@gls@field@font{\Glsaccessplural{#2}#3}}%
2421 }
```

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

```
2422 \def\@GLSplural@#1#2[#3]{%
```

```

2423 \glsxtrassignfieldfont{#2}%
2424 \@gls@field@link
2425 [\let\glsifplural\@firstoftwo
2426 \let\glscapscase\@thirddofthree
2427 ]%
2428 {#1}{#2}{\@gls@field@font{\GLSaccessplural{#2}\mfirstucMakeUppercase{#3}}}%
2429 }

```

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

```

2430 \def\@glsfirstplural@#1#2[#3]{%
2431 \glsxtrassignfieldfont{#2}%

```

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

```

2432 \@gls@field@link
2433 [\let\glsxtrifwasfirstuse\@firstoftwo
2434 \let\glsifplural\@firstoftwo
2435 \glsxtrchecknohyperfirst{#2}%
2436 ]%
2437 {#1}{#2}{\@gls@field@font{\glsaccessfirstplural{#2}#3}}%
2438 }

```

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

```

2439 \def\@Glsfirstplural@#1#2[#3]{%
2440 \glsxtrassignfieldfont{#2}%

```

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

```

2441 \@gls@field@link
2442 [\let\glsxtrifwasfirstuse\@firstoftwo
2443 \let\glsifplural\@firstoftwo
2444 \let\glscapscase\@secondofthree
2445 \glsxtrchecknohyperfirst{#2}%
2446 ]%
2447 {#1}{#2}{\@gls@field@font{\Glsaccessfirstplural{#2}#3}}%
2448 }

```

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

```

2449 \def\@GLSfirstplural@#1#2[#3]{%
2450 \glsxtrassignfieldfont{#2}%

```

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

```

2451 \@gls@field@link
2452 [\let\glsxtrifwasfirstuse\@firstoftwo
2453 \let\glsifplural\@firstoftwo
2454 \let\glscapscase\@thirddofthree
2455 \glsxtrchecknohyperfirst{#2}%
2456 ]%
2457 {#1}{#2}%
2458 {\@gls@field@font{\GLSaccessfirstplural{#2}\mfirstucMakeUppercase{#3}}}%
2459 }

```

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

```
2460 \def\@glsname@#1#2[#3]{%
2461   \glsxtrassignfieldfont{#2}%
2462   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccessname{#2}#3}}%
2463 }
```

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

```
2464 \def\@Glsname@#1#2[#3]{%
2465   \glsxtrassignfieldfont{#2}%
2466   \gls@field@link
2467   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2468   {\gls@field@font{\Glsaccessname{#2}#3}}%
2469 }
```

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

```
2470 \def\@GLSname@#1#2[#3]{%
2471   \glsxtrassignfieldfont{#2}%
2472   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2473   {#1}{#2}%
2474   {\gls@field@font{\GLSaccessname{#2}\mfirstucMakeUppercase{#3}}}}%
2475 }
```

\@glsdesc@

```
2476 \def\@glsdesc@#1#2[#3]{%
2477   \glsxtrassignfieldfont{#2}%
2478   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccessdesc{#2}#3}}%
2479 }
```

\@Glsdesc@ First letter uppercase version.

```
2480 \def\@Glsdesc@#1#2[#3]{%
2481   \glsxtrassignfieldfont{#2}%
2482   \gls@field@link
2483   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2484   {\gls@field@font{\Glsaccessdesc{#2}#3}}%
2485 }
```

\@GLSdesc@ All uppercase version.

```
2486 \def\@GLSdesc@#1#2[#3]{%
2487   \glsxtrassignfieldfont{#2}%
2488   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2489   {#1}{#2}{\gls@field@font{\GLSaccessdesc{#2}\mfirstucMakeUppercase{#3}}}}%
2490 }
```

@glsdescplural@ No case-changing version.

```
2491 \def\@glsdescplural@#1#2[#3]{%
2492   \glsxtrassignfieldfont{#2}%
2493   \gls@field@link
2494   [\let\glscapscase\@secondoftwo
```

```

2495   \let\glsifplural\@firstoftwo
2496 ]{#1}{#2}{\gls@field@font{\glsaccessdescplural{#2}{#3}}}
2497 }

@Glsdescplural@ First letter uppercase version.
2498 \def\@Glsdescplural@#1#2[#3]{%
2499   \glsxtrassignfieldfont{#2}%
2500   \gls@field@link
2501   [\let\glscapscase\@secondoftwo
2502     \let\glsifplural\@firstoftwo
2503   ]{#1}{#2}{\gls@field@font{\Glsaccessdescplural{#2}{#3}}}
2504 }

@GLSdescplural@ All uppercase version.
2505 \def\@GLSdesc@#1#2[#3]{%
2506   \glsxtrassignfieldfont{#2}%
2507   \gls@field@link
2508   [\let\glscapscase\@thirdoftwo
2509     \let\glsifplural\@firstoftwo
2510   ]%
2511   {#1}{#2}%
2512   {\gls@field@font{\GLSaccessdescplural{#2}\mfirstucMakeUppercase{#3}}}
2513 }

\@glssymbol@
2514 \def\@glssymbol@#1#2[#3]{%
2515   \glsxtrassignfieldfont{#2}%
2516   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccesssymbol{#2}{#3}}}
2517 }

\@Glssymbol@ First letter uppercase version.
2518 \def\@Glssymbol@#1#2[#3]{%
2519   \glsxtrassignfieldfont{#2}%
2520   \gls@field@link
2521   [\let\glscapscase\@secondoftwo]%
2522   {#1}{#2}{\gls@field@font{\Glsaccesssymbol{#2}{#3}}}
2523 }

\@GLSsymbol@ All uppercase version.
2524 \def\@GLSsymbol@#1#2[#3]{%
2525   \glsxtrassignfieldfont{#2}%
2526   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2527   {#1}{#2}{\gls@field@font{\GLSaccesssymbol{#2}\mfirstucMakeUppercase{#3}}}
2528 }

lssymbolplural@ No case-changing version.
2529 \def\@glssymbolplural@#1#2[#3]{%
2530   \glsxtrassignfieldfont{#2}%

```

```

2531 \@gls@field@link
2532 [\let\glscapscase\@secondoftwo
2533 \let\glsifplural\@firstoftwo
2534 ]{#1}{#2}{\@gls@field@font{\glsaccesssymbolplural{#2}{#3}}}
2535 }

```

`lssymbolplural@` First letter uppercase version.

```

2536 \def\@Glssymbolplural@#1#2[#3]{%
2537   \glsxtrassignfieldfont{#2}%
2538   \@gls@field@link
2539   [\let\glscapscase\@secondoftwo
2540   \let\glsifplural\@firstoftwo
2541   ]{#1}{#2}{\@gls@field@font{\Glsaccesssymbolplural{#2}{#3}}}
2542 }

```

`Lsymbolplural@` All uppercase version.

```

2543 \def\@GLSsymbol@#1#2[#3]{%
2544   \glsxtrassignfieldfont{#2}%
2545   \@gls@field@link
2546   [\let\glscapscase\@thirddoftwo
2547   \let\glsifplural\@firstoftwo
2548   ]%
2549   {#1}{#2}%
2550   {\@gls@field@font{\GLSaccesssymbolplural{#2}\mfirstucMakeUppercase{#3}}}
2551 }

```

`\@Glsuseri@` First letter uppercase version.

```

2552 \def\@Glsuseri@#1#2[#3]{%
2553   \glsxtrassignfieldfont{#2}%
2554   \@gls@field@link
2555   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2556   {\@gls@field@font{\Glsentryuseri{#2}{#3}}}
2557 }

```

`\@GLSuseri@` All uppercase version.

```

2558 \def\@GLSuseri@#1#2[#3]{%
2559   \glsxtrassignfieldfont{#2}%
2560   \@gls@field@link[\let\glscapscase\@thirddoftwo]%
2561   {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseri{#2}{#3}}}}
2562 }

```

`\@Glsuserii@` First letter uppercase version.

```

2563 \def\@Glsuserii@#1#2[#3]{%
2564   \glsxtrassignfieldfont{#2}%
2565   \@gls@field@link
2566   [\let\glscapscase\@secondoftwo]%
2567   {#1}{#2}{\@gls@field@font{\Glsentryuserii{#2}{#3}}}
2568 }

```

```

\@GLSuserii@ All uppercase version.
2569 \def\@GLSuserii@#1#2[#3]{%
2570   \glsxtrassignfieldfont{#2}%
2571   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2572   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuserii{#2}{#3}}}}%
2573 }

\@Glsuseriii@ First letter uppercase version.
2574 \def\@Glsuseriii@#1#2[#3]{%
2575   \glsxtrassignfieldfont{#2}%
2576   \gls@field@link
2577   [\let\glscapscase\@secondoftwo]%
2578   {#1}{#2}{\gls@field@font{\Glsentryuseriii{#2}{#3}}}}%
2579 }

\@GLSuseriii@ All uppercase version.
2580 \def\@GLSuseriii@#1#2[#3]{%
2581   \glsxtrassignfieldfont{#2}%
2582   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2583   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuseriii{#2}{#3}}}}%
2584 }

\@Glsuseriv@ First letter uppercase version.
2585 \def\@Glsuseriv@#1#2[#3]{%
2586   \glsxtrassignfieldfont{#2}%
2587   \gls@field@link
2588   [\let\glscapscase\@secondoftwo]%
2589   {#1}{#2}{\gls@font{\Glsentryuseriv{#2}{#3}}}}%
2590 }

\@GLSuseriv@ All uppercase version.
2591 \def\@GLSuseriv@#1#2[#3]{%
2592   \glsxtrassignfieldfont{#2}%
2593   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2594   {#1}{#2}%
2595   {\gls@font{\mfirstucMakeUppercase{\glsentryuseriv{#2}{#3}}}}%
2596 }

\@Glsuserv@ First letter uppercase version.
2597 \def\@Glsuserv@#1#2[#3]{%
2598   \glsxtrassignfieldfont{#2}%
2599   \gls@field@link
2600   [\let\glscapscase\@secondoftwo]%
2601   {#1}{#2}{\gls@font{\Glsentryuserv{#2}{#3}}}}%
2602 }

\@GLSuserv@ All uppercase version.
2603 \def\@GLSuserv@#1#2[#3]{%

```

```

2604 \glsxtrassignfieldfont{#2}%
2605 \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2606 {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuservi{#2}#3}}}%
2607 }

```

\@Glsuservi@ First letter uppercase version.

```

2608 \def\@Glsuservi@#1#2[#3]{%
2609   \glsxtrassignfieldfont{#2}%
2610   \@gls@field@link
2611   [\let\glscapscase\@secondoftwo]%
2612   {#1}{#2}{\@gls@field@font{\Glsentryuservi{#2}#3}}%
2613 }

```

\@GLSuservi@ All uppercase version.

```

2614 \def\@GLSuservi@#1#2[#3]{%
2615   \glsxtrassignfieldfont{#2}%
2616   \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2617   {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuservi{#2}#3}}}%
2618 }

```

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

\@acrshort No case change.

```

2619 \def\@acrshort#1#2[#3]{%
2620   \glsdoifexists{#2}%
2621   {%
2622     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2623     \let\glsxtrifwasfirstuse\@secondoftwo
2624     \let\glsifplural\@secondoftwo
2625     \let\glscapscase\@firstofthree
2626     \let\glsinsert\@empty
2627     \def\glscustomtext{%
2628       \acronymfont{\glsaccessshort{#2}}#3%
2629     }%
2630     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2631   }%
2632   \glspostlinkhook
2633 }

```

\@Acrshort First letter uppercase.

```

2634 \def\@Acrshort#1#2[#3]{%
2635   \glsdoifexists{#2}%
2636   {%
2637     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2638     \let\glsxtrifwasfirstuse\@secondoftwo
2639     \let\glsifplural\@secondoftwo
2640     \let\glscapscase\@secondofthree
2641     \let\glsinsert\@empty

```

```

2642 \def\glscustomtext{%
2643   \acronymfont{\Glsaccessshort{#2}}#3%
2644 }%
2645 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2646 }%
2647 \glspostlinkhook
2648 }

```

\@ACRshort All uppercase.

```

2649 \def\@ACRshort#1#2[#3]{%
2650   \glsdoifexists{#2}%
2651 {%
2652   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2653   \let\glsxtrifwasfirstuse\@secondoftwo
2654   \let\glsifplural\@secondoftwo
2655   \let\glscapscase\@thirdofthree
2656   \let\glsinsert\@empty
2657   \def\glscustomtext{%
2658     \mfirstucMakeUppercase{\acronymfont{\glsaccessshort{#2}}#3}%
2659   }%
2660   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2661 }%
2662 \glspostlinkhook
2663 }

```

\@acrshortpl No case change.

```

2664 \def\@acrshortpl#1#2[#3]{%
2665   \glsdoifexists{#2}%
2666 {%
2667   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2668   \let\glsxtrifwasfirstuse\@secondoftwo
2669   \let\glsifplural\@firstoftwo
2670   \let\glscapscase\@firstofthree
2671   \let\glsinsert\@empty
2672   \def\glscustomtext{%
2673     \acronymfont{\glsaccessshortpl{#2}}#3%
2674   }%
2675   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2676 }%
2677 \glspostlinkhook
2678 }

```

\@Acrshortpl First letter uppercase.

```

2679 \def\@Acrshortpl#1#2[#3]{%
2680   \glsdoifexists{#2}%
2681 {%
2682   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2683   \let\glsxtrifwasfirstuse\@secondoftwo
2684   \let\glsifplural\@firstoftwo

```

```

2685   \let\glscapscase\@secondofthree
2686   \let\glsinsert\@empty
2687   \def\glscustomtext{%
2688     \acronymfont{\Glsaccessshortpl{#2}}#3%
2689   }%
2690   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2691 }%
2692 \glspostlinkhook
2693 }

```

\@ACRshortpl All uppercase.

```

2694 \def\@ACRshortpl#1#2[#3]{%
2695   \glsdoifexists{#2}{%
2696     {%
2697       \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2698       \let\glsxtrifwasfirstuse\@secondoftwo
2699       \let\glsifplural\@firstoftwo
2700       \let\glscapscase\@thirdofthree
2701       \let\glsinsert\@empty
2702       \def\glscustomtext{%
2703         \mfirstrucMakeUppercase{\acronymfont{\glsaccessshortpl{#2}}#3}%
2704       }%
2705       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2706     }%
2707   \glspostlinkhook
2708 }

```

\@acrlong No case change.

```

2709 \def\@acrlong#1#2[#3]{%
2710   \glsdoifexists{#2}{%
2711     {%
2712       \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2713       \let\glsxtrifwasfirstuse\@secondoftwo
2714       \let\glsifplural\@secondoftwo
2715       \let\glscapscase\@firstofthree
2716       \let\glsinsert\@empty
2717       \def\glscustomtext{%
2718         \acronymfont{\glsaccesslong{#2}}#3%
2719       }%
2720       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2721     }%
2722   \glspostlinkhook
2723 }

```

\@Acrlong First letter uppercase.

```

2724 \def\@Acrlong#1#2[#3]{%
2725   \glsdoifexists{#2}{%
2726     {%
2727       \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper

```

```

2728   \let\glsxtrifwasfirstuse\@secondoftwo
2729   \let\glsifplural\@secondoftwo
2730   \let\glscapscase\@secondofthree
2731   \let\glsinsert\@empty
2732   \def\glscustomtext{%
2733     \acronymfont{\Glsaccesslong{#2}}#3%
2734   }%
2735   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2736 }%
2737 \glspostlinkhook
2738 }

```

\@ACRlong All uppercase.

```

2739 \def\@ACRlong#1#2[#3]{%
2740   \glsdoifexists{#2}%
2741 {%
2742   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2743   \let\glsxtrifwasfirstuse\@secondoftwo
2744   \let\glsifplural\@secondoftwo
2745   \let\glscapscase\@thirdofthree
2746   \let\glsinsert\@empty
2747   \def\glscustomtext{%
2748     \mfirstucMakeUppercase{\acronymfont{\glsaccesslong{#2}}#3}%
2749   }%
2750   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2751 }%
2752 \glspostlinkhook
2753 }

```

\@acrlongpl No case change.

```

2754 \def\@acrlongpl#1#2[#3]{%
2755   \glsdoifexists{#2}%
2756 {%
2757   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2758   \let\glsxtrifwasfirstuse\@secondoftwo
2759   \let\glsifplural\@firstoftwo
2760   \let\glscapscase\@firstofthree
2761   \let\glsinsert\@empty
2762   \def\glscustomtext{%
2763     \acronymfont{\glsaccesslongpl{#2}}#3%
2764   }%
2765   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2766 }%
2767 \glspostlinkhook
2768 }

```

\@Acrlongpl First letter uppercase.

```

2769 \def\@Acrlongpl#1#2[#3]{%
2770   \glsdoifexists{#2}%

```

```

2771 {%
2772   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2773   \let\glsxtrifwasfirstuse\@secondoftwo
2774   \let\glsifplural\@firstoftwo
2775   \let\glscapscase\@secondofthree
2776   \let\glsinsert\@empty
2777   \def\glscustomtext{%
2778     \acronymfont{\Glsaccesslongpl{#2}}#3%
2779   }%
2780   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2781 }%
2782 \glspostlinkhook
2783 }

```

\@ACRlongpl All uppercase.

```

2784 \def\@ACRlongpl#1#2[#3]{%
2785   \glsdoifexists{#2}{%
2786     {%
2787       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2788       \let\glsxtrifwasfirstuse\@secondoftwo
2789       \let\glsifplural\@firstoftwo
2790       \let\glscapscase\@thirdofthree
2791       \let\glsinsert\@empty
2792       \def\glscustomtext{%
2793         \mfirstucMakeUppercase{\acronymfont{\glsaccesslongpl{#2}}#3}%
2794       }%
2795       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2796     }%
2797   \glspostlinkhook
2798 }

```

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

\@glsaddkey

```

2799 \renewcommand*{\glsaddkey}[7]{%
2800   \key@ifundefined{glossentry}{#1}{%
2801     {%
2802       \define@key{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
2803       \appto{\gls@keymap}{, #1}{#1}%
2804       \appto{\@newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
2805       \appto{\@newglossaryentryposthook}{%
2806         \letcs{@glo@tmp}{@glo@#1}%
2807         \gls@assign@field{#2}{\glo@label}{#1}{@glo@tmp}%
2808       }%
2809       \newcommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
2810       \newcommand*{#4}[1]{\Gls@entry@field{##1}{#1}}%

```

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

```

2811 \ifcsdef@gls@user@#1@{%

```

```

2812  {%
2813      \PackageError{glossaries}%
2814      {Can't define '\string#5' as helper command
2815      '\expandafter\string\csname @gls@user@#1@\endcsname' already
2816      exists}%
2817  {}%
2818 }%
2819 {%
2820     \expandafter\newcommand\expandafter*\expandafter
2821         {\csname @gls@user@#1\endcsname}[2] []{%
2822             \new@ifnextchar[%
2823                 {\csuse{@gls@user@#1@}{##1}{##2}}%
2824                 {\csuse{@gls@user@#1@}{##1}{##2}[]}}%
2825     \csdef{@gls@user@#1@}##1##2[##3]{%
2826         \@gls@field@link{##1}{##2}{#3{##2}##3}%
2827     }%
2828     \newrobustcmd*{#5}{%
2829         \expandafter\@gls@hyp@opt\csname @gls@user@#1\endcsname}%
2830 }%

```

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

```

2831 \ifcsdef{@Gls@user@#1@}%
2832 {%
2833     \PackageError{glossaries}%
2834     {Can't define '\string#6' as helper command
2835     '\expandafter\string\csname @Gls@user@#1@\endcsname' already
2836     exists}%
2837  {}%
2838 }%
2839 {%
2840     \expandafter\newcommand\expandafter*\expandafter
2841         {\csname @Gls@user@#1\endcsname}[2] []{%
2842             \new@ifnextchar[%
2843                 {\csuse{@Gls@user@#1@}{##1}{##2}}%
2844                 {\csuse{@Gls@user@#1@}{##1}{##2}[]}}%
2845     \csdef{@Gls@user@#1@}##1##2[##3]{%
2846         \@gls@field@link[\let\glscapscase{@secondofthree}%
2847             {##1}{##2}{#4{##2}##3}%
2848     }%
2849     \newrobustcmd*{#6}{%
2850         \expandafter\@gls@hyp@opt\csname @Gls@user@#1\endcsname}%
2851 }%

```

Finally the all caps version (modified):

```

2852 \ifcsdef{@GLS@user@#1@}%
2853 {%
2854     \PackageError{glossaries}%
2855     {Can't define '\string#7' as helper command
2856     '\expandafter\string\csname @GLS@user@#1@\endcsname' already
2857     exists}%

```

```

2858     {}%
2859   }%
2860   {%
2861     \expandafter\newcommand\expandafter*\expandafter
2862       {\csname @GLS@user@\#1\endcsname}[2] []{%
2863         \new@ifnextchar[%
2864           {\csuse{@GLS@user@\#1@}{##1}{##2}}%
2865           {\csuse{@GLS@user@\#1@}{##1}{##2}[]}}%
2866         \csdef{@GLS@user@\#1@}{##1##2##3}{%
2867           \gls@field@link[\let\glscaps@case{@thirdofthree}%
2868             {##1}{##2}{\mfirstuc@MakeUppercase{##2}{##3}}]%
2869         }%
2870         \newrobustcmd*{#7}{%
2871           \expandafter\gls@hyp@opt\csname @GLS@user@\#1\endcsname}%
2872       }%
2873     }%
2874   {%
2875     \PackageError{glossaries-extra}{Key '#1' already exists}{}%
2876   }%
2877 }

```

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

```
2878 \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.

```
2879 \let\glsxtr@org@checkfirsthyper\gls@link@checkfirsthyper
2880 \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`).

```
2881 \ifglsused{\glslabel}%
2882   {\let\glsxtrifwasfirstuse\@secondoftwo}
2883   {\let\glsxtrifwasfirstuse\@firstoftwo}%

Store the category label for convenience.
```

```
2884 \edef\glscategorylabel{\glscategory{\glslabel}}%
2885 \ifglsused{\glslabel}%
2886 {%
2887   \glsifcategoryattribute{\glscategorylabel}{nohypernext}{true}%
2888   {\KV@glslink@hyperfalse}{}%
2889 }%
2890 {%
2891   \glsifcategoryattribute{\glscategorylabel}{nohyperfirst}{true}%
2892   {\KV@glslink@hyperfalse}{}%
```

```
2893  }%
2894  \glslinkcheckfirsthyperhook
2895 }
```

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.

```
2896 \ifdef\do@glsdisablehyperinlist
2897 {%
2898   \let@\glsxtr@do@glsdisablehyperinlist\do@glsdisablehyperinlist
2899   \renewcommand*\do@glsdisablehyperinlist{%
2900     \glsxtr@do@glsdisablehyperinlist
2901     \glsifattribute{\glslabel}{nohyper}{true}{\KV@glslink@hyperfalse}{}}%
2902   }
2903 }
2904 {}
```

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

```
2905 \define@boolkey{glslink}{noindex}[true]{}
2906 \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

```
2907 \ifdef\gls@setdefault@glslink@opts
2908 {%
2909   \renewcommand*\gls@setdefault@glslink@opts{%
2910     \KV@glslink@noindexfalse
2911     \glsxtrsetaliasnoindex
2912   }
2913 }
2914 {}
```

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

```
2915 \newcommand*\gls@setdefault@glslink@opts{%
2916   \KV@glslink@noindexfalse
2917   \glsxtrsetaliasnoindex
2918 }
2919 \preto\do@glsdisablehyperinlist{\gls@setdefault@glslink@opts}
2920 }
```

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.)

```
2921 \providecommand*\glsxtrsetaliasnoindex{%
2922   \KV@glslink@noindextrue
2923 }
```

setaliasnoindex

```

2924 \newcommand*{\@glsxtrsetaliasnoindex}{%
2925   \glsxtrifhasfield{alias}{\glslabel}%
2926   {%
2927     \let\glsxtrindexaliased@\glsxtrindexaliased
2928     \glsxtrsetaliasnoindex
2929     \let\glsxtrindexaliased@\no@glsxtrindexaliased
2930   }%
2931 {}%
2932 }

xtrindexaliased
2933 \newcommand{\@glsxtrindexaliased}{%
2934   \ifKV@glslink@noindex
2935   \else
2936     \begingroup
2937     \let@glsnumberformat@glsxtr@defaultnumberformat
2938     \edef@gls@counter{\csname glo@\glsdetoklabel{\glslabel}@counter\endcsname}%
2939     \glsxtr@saveentrycounter
2940     \@@do@wrglossary{\glsxtralias{\glslabel}}%
2941     \endgroup
2942   \fi
2943 }

xtrindexaliased
2944 \newcommand{\no@glsxtrindexaliased}{%
2945   \PackageError{glossaries-extra}{\string\glsxtrindexaliased\space
2946   not permitted outside definition of \string\glsxtrsetaliasnoindex}%
2947 {}%
2948 }

xtrindexaliased Provide a command to redirect alias indexing, but only allow it to be used within \glsxtrsetaliasnoindex.
2949 \let\glsxtrindexaliased@\no@glsxtrindexaliased

tDefaultGlsOpts Set the default options for \glslink etc.
2950 \newcommand*{\GlsXtrSetDefaultGlsOpts}[1]{%
2951   \renewcommand*{\@gls@setdefault@glslink@opts}{%
2952     \setkeys{glslink}{#1}%
2953     \glsxtrsetaliasnoindex
2954   }%
2955 }

lsxtrifindexing Provide user level command to access it in \glswriteentry.
2956 \newcommand*{\glsxtrifindexing}[2]{%
2957   \ifKV@glslink@noindex #2\else #1\fi
2958 }

\glswriteentry Redefine to test for indexonlyfirst category attribute.
2959 \renewcommand*{\glswriteentry}[2]{%

```

```

2960 \glsxtrifindexing
2961 {%
2962   \ifglsindexonlyfirst
2963     \ifglsused{#1}
2964       {\glsxtrdoautoindexname{#1}{dualindex}}%
2965       {#2}%
2966   \else
2967     \glsifattribute{#1}{indexonlyfirst}{true}%
2968     {\ifglsused{#1}
2969       {\glsxtrdoautoindexname{#1}{dualindex}}%
2970       {#2}%
2971     {#2}%
2972   \fi
2973 }%
2974 {}%
2975 }

```

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

```

2976 \appto\@do@@wrglossary{\@glsxtr@do@@wrindex
2977   \glsxtrdownrglossaryhook{\@gls@label}%
2978 }

```

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

Similarly for the “noidx” version:

`s@noidxglossary`

```

2979 \appto\gls@noidxglossary{\@glsxtr@do@@wrindex
2980   \glsxtrdownrglossaryhook{\@gls@label}%
2981 }

```

`xtr@do@@wrindex`

```

2982 \newcommand*{\@glsxtr@do@@wrindex}{%
2983   \glsxtrdoautoindexname{\@gls@label}{dualindex}%
2984 }

```

`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.)

```
2985 \newcommand*{\glsxtrdownrglossaryhook}[1]{}
```

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

```

2986 \newcommand*{\@gls@alt@hyp@opt}[1]{%
2987   \let\glslinkvar\@firstofthree
2988   \let\@gls@hyp@opt@cs\relax
2989   \@ifstar{\s@gls@hyp@opt}%
2990   {\@ifnextchar+%
2991    {\@firstoftwo{\p@gls@hyp@opt}}%

```

```

2992     {%
2993         \expandafter\@ifnextchar\@gls@alt@hyp@opt@char
2994             {\@firstoftwo{\@alt@gls@hyp@opt}{}}%
2995             {#1}%
2996     }%
2997 }%
2998 }

alt@gls@hyp@opt User version
2999 \newcommand*{\@alt@gls@hyp@opt}[1] []{%
3000   \let\glslinkvar\@firstofthree
3001   \expandafter\@gls@hyp@opt@cs\expandafter[\@gls@alt@hyp@opt@keys,#1]}

lt@hyp@opt@char Contains the character used as the command modifier.
3002 \newcommand*{\@gls@alt@hyp@opt@char}{}}

lt@hyp@opt@keys Contains the option list used as the command modifier.
3003 \newcommand*{\@gls@alt@hyp@opt@keys}{}}

rSetAltModifier
3004 \newcommand*{\GlsXtrSetAltModifier}[2]{%
3005   \let\@gls@hyp@opt\@gls@alt@hyp@opt
3006   \def\@gls@alt@hyp@opt@char{#1}%
3007   \def\@gls@alt@hyp@opt@keys{#2}%
3008   \ifdefequal\@glsxtr@record@setting\@glsxtr@record@setting@off
3009   {}%
3010   {}%

  Let bib2gls know the modifier.
3011   \protected@write\@auxout{}{\string\providecommand{\string\@glsxtr@altmodifier}[1]{}}
3012   \protected@write\@auxout{}{\string\@glsxtr@altmodifier{#1}}
3013 }%
3014 }

org@dohyperlink
3015 \let\glsxtr@org@dohyperlink\glsdohyperlink

glsnavhyperlink Now that \glsdohyperlink (used by \glslink) references \glslabel it's necessary to
patch \glsnavhyperlink to avoid using it (since \glslabel won't be defined). This means
temporarily redefining \glsdohyperlink to its original definition.
  This command is provided by glossary-hypernav so it may not exist.
3016 \ifdef\glsnavhyperlink
3017 {
3018   \renewcommand*{\glsnavhyperlink}[3][\@glo@type]{%
3019     \edef\gls@grplabel{#2}\protected@edef\@gls@grptitle{#3}%

  Scope:
3020  {%
3021    \let\glsdohyperlink\glsxtr@org@dohyperlink

```

```

3022     @glslink{\glsnavhyperlinkname{#1}{#2}{#3}%
3023     }%
3024 }%
3025 }%
3026 {}
```

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

```

3027 \renewcommand*{\glsdohyperlink}[2]{%
3028   \glshasattribute{\glslabel}{targeturl}%
3029 {%
3030   \glshasattribute{\glslabel}{targetname}%
3031 {%
3032   \glshasattribute{\glslabel}{targetcategory}%
3033 {%
3034     \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
3035       {\glsgetattribute{\glslabel}{targetcategory}}%
3036       {\glsgetattribute{\glslabel}{targetname}}%
3037       {{\glsxtrprotectlinks#2}}%
3038     }%
3039   {%
3040     \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
3041       {}%
3042       {\glsgetattribute{\glslabel}{targetname}}%
3043       {{\glsxtrprotectlinks#2}}%
3044     }%
3045   }%
3046   {%
3047     \href{\glsgetattribute{\glslabel}{targeturl}}{%
3048       {{\glsxtrprotectlinks#2}}%
3049     }%
3050   }%
3051 }%
```

Check for alias.

```

3052 \glsfieldfetch{\glslabel}{alias}{\gloaliaslabel}%
3053 \ifdefvoid\gloaliaslabel
3054 {%
3055   \glsxtrhyperlink{#1}{{\glsxtrprotectlinks#2}}%
3056 }%
3057 {%
```

Redirect link to the alias target.

```
3058 \glsxtrhyperlink
```

```

3059     {\glolinkprefix\glsdetoklabel{\gloaliaslabel}}%
3060     {{\glsxtrprotectlinks#2}}%
3061   }%
3062 }%
3063 }

```

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

```

3064 \ifdef{\glsshowtarget}
3065 {
3066   \newcommand{\glsxtrhyperlink}[2]{%
3067     \@glsshowtarget{#1}%
3068     \hyperlink{#1}{#2}%
3069   }%
3070 }
3071 {
3072   \newcommand{\glsxtrhyperlink}[2]{\hyperlink{#1}{#2}}%
3073 }

```

`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.

```

3074 \renewrobustcmd*{\glshyperlink}[2][\glsentrytext{@glo@label}]{%
3075   \glsdoifexists{#2}{%
3076     {%
3077       \def{@glo@label}{#2}%
3078       {\edef{\glslabel}{#2}%
3079         \glslink{\glolinkprefix\glslabel}{#1}}%
3080     }%
3081   }

```

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

```

3082 \renewcommand{\glsdisablehyper}{%
3083   \KV@glslink@hyperfalse
3084   \def{@glslink}{\glsdonohyperlink}%
3085   \let{@glstarget}{\secondoftwo}
3086 }

```

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

```

3087 \renewcommand{\glsenablehyper}{%
3088   \KV@glslink@hypertrue
3089   \def{@glslink}{\glsdohyperlink}%
3090   \def{@glstarget}{\glsdohypertarget}%
3091 }

```

`\lsdonohyperlink` This command was only introduced in glossaries v4.20, so it may not be defined (therefore use `\def`). For older glossaries versions, this won't be used if `hyperref` hasn't been loaded,

which means the indexing will still take place. The generated text is scoped (the link text in `\hyperlink` is also scoped, so it's consistent).

```
3092 \def\glsdonohyperlink#1#2{{\glsxtrprotectlinks #2}}
```

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

```
3093 \ifcsundef{hyperlink}%
3094 {%
3095   \def\@glslink{\glsdonohyperlink}%
3096 }%
3097 {%
3098   \def\@glslink{\glsdohyperlink}%
3099 }
```

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

```
3100 \newcommand*{\glsxtrprotectlinks}{%
3101   \KV@glslink@hyperfalse
3102   \KV@glslink@noindextrue
3103   \let\@gls@\@glsxtr@p@text@
3104   \let\@Gls@\@Glsxtr@p@text@
3105   \let\@GLS@\@GLSxtr@p@text@
3106   \let\@glspl@\@glsxtr@p@plural@
3107   \let\@Glspl@\@Glsxtr@p@plural@
3108   \let\@GLSpl@\@GLSxtr@p@plural@
3109   \let\@glsxtrshort@\glsxtr@p@short@
3110   \let\@Glsxtrshort@\Glsxtr@p@short@
3111   \let\@GLSxtrshort@\GLSxtr@p@short@
3112   \let\@glsxtrlong@\glsxtr@p@long@
3113   \let\@Glsxtrlong@\Glsxtr@p@long@
3114   \let\@GLSxtrlong@\GLSxtr@p@long@
3115   \let\@glsxtrshortpl@\glsxtr@p@shortpl@
3116   \let\@Glsxtrshortpl@\Glsxtr@p@shortpl@
3117   \let\@GLSxtrshortpl@\GLSxtr@p@shortpl@
3118   \let\@glsxtrlongpl@\glsxtr@p@longpl@
3119   \let\@Glsxtrlongpl@\Glsxtr@p@longpl@
3120   \let\@GLSxtrlongpl@\GLSxtr@p@longpl@
3121   \let\@acrshort@\glsxtr@p@acrshort@
3122   \let\@Acrshort@\Glsxtr@p@acrshort@
3123   \let\@ACRshort@\GLSxtr@p@acrshort@
3124   \let\@acrshortpl@\glsxtr@p@acrshortpl@
3125   \let\@Acrshortpl@\Glsxtr@p@acrshortpl@
3126   \let\@ACRshortpl@\GLSxtr@p@acrshortpl@
3127   \let\@acrlong@\glsxtr@p@acrlong@
3128   \let\@Acrlong@\Glsxtr@p@acrlong@
3129   \let\@ACRLong@\GLSxtr@p@acrlong@
3130   \let\@acrlongpl@\glsxtr@p@acrlongpl@
3131   \let\@Acrlongpl@\Glsxtr@p@acrlongpl@
3132   \let\@ACRLongpl@\GLSxtr@p@acrlongpl@
3133 }
```

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

```
@glsxtr@p@text@  
3134 \def\@glsxtr@p@text@#1#2[#3]{{\@glstext@{#1}{#2}[#3]}}  
  
@Glsxtr@p@text@  
3135 \def\@Glsxtr@p@text@#1#2[#3]{{\@Glstext@{#1}{#2}[#3]}}  
  
@GLSxtr@p@text@  
3136 \def\@GLSxtr@p@text@#1#2[#3]{{\@GLStext@{#1}{#2}[#3]}}  
  
lsxtr@p@plural@  
3137 \def\@glsxtr@p@plural@#1#2[#3]{{\@glsplural@{#1}{#2}[#3]}}  
  
lsxtr@p@plural@  
3138 \def\@Glsxtr@p@plural@#1#2[#3]{{\@Glsplural@{#1}{#2}[#3]}}  
  
LSxtr@p@plural@  
3139 \def\@GLSxtr@p@plural@#1#2[#3]{{\@GLSplural@{#1}{#2}[#3]}}  
  
glsxtr@p@short@  
3140 \def\@glsxtr@p@short@#1#2[#3]{%  
3141 {  
3142 \glssetabbrvfmt{\glscategory{#2}}%  
3143 \glsabbrvfont{\glsentryshort{#2}}#3%  
3144 }%  
3145 }  
  
Glsxtr@p@short@  
3146 \def\@Glsxtr@p@short@#1#2[#3]{%  
3147 {  
3148 \glssetabbrvfmt{\glscategory{#2}}%  
3149 \glsabbrvfont{\Glsentryshort{#2}}#3%  
3150 }%  
3151 }  
  
GLSxtr@p@short@  
3152 \def\@GLSxtr@p@short@#1#2[#3]{%  
3153 {  
3154 \glssetabbrvfmt{\glscategory{#2}}%  
3155 \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshort{#2}}#3}%  
3156 }%  
3157 }  
  
sxtr@p@shortpl@  
3158 \def\@glsxtr@p@shortpl@#1#2[#3]{%  
3159 {  
3160 \glssetabbrvfmt{\glscategory{#2}}%
```

```

3161     \glsabrvfont{\glsentryshortpl{#2}}#3%
3162 }%
3163 }

sxtr@p@shortpl@

3164 \def\@Glsxtr@p@shortpl@#1#2[#3] {%
3165   {%
3166     \glssetabrvfmt{\glscategory{#2}}%
3167     \glsabrvfont{\Glsentryshortpl{#2}}#3%
3168   }%
3169 }

Sxtr@p@shortpl@

3170 \def\@GLSxtr@p@shortpl@#1#2[#3] {%
3171   {%
3172     \glssetabrvfmt{\glscategory{#2}}%
3173     \mfirstucMakeUppercase{\glsabrvfont{\glsentryshortpl{#2}}#3}%
3174   }%
3175 }

@glsxtr@p@long@

3176 \def\@glsxtr@p@long@#1#2[#3]{{\glsentrylong{#2}}#3}

@Glsxtr@p@long@

3177 \def\@Glsxtr@p@long@#1#2[#3]{{\Glsentrylong{#2}}#3}

@GLSxtr@p@long@

3178 \def\@GLSxtr@p@long@#1#2[#3] {%
3179   {\mfirstucMakeUppercase{\glslongfont{\glsentrylong{#2}}#3}}}

lsxtr@p@longpl@

3180 \def\@glsxtr@p@longpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}

lsxtr@p@longpl@

3181 \def\@Glsxtr@p@longpl@#1#2[#3]{{\glslongfont{\Glsentrylongpl{#2}}#3}>

LSxtr@p@longpl@

3182 \def\@GLSxtr@p@longpl@#1#2[#3] {%
3183   {\mfirstucMakeUppercase{\glslongfont{\glsentrylongpl{#2}}#3}}}

xtr@p@acrshort@

3184 \def\@glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\glsentryshort{#2}}#3}>

xtr@p@acrshort@

3185 \def\@Glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\Glsentryshort{#2}}#3}>

xtr@p@acrshort@

3186 \def\@GLSxtr@p@acrshort@#1#2[#3] {%
3187   {\mfirstucMakeUppercase{\acronymfont{\glsentryshort{#2}}#3}}}

```

```

r@p@acrshortpl@
    3188 \def\@glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\glsentryshortpl{#2}}#3}}
r@p@acrshortpl@
    3189 \def\@Glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\Glsentryshortpl{#2}}#3}}
r@p@acrshortpl@
    3190 \def\@GLSxtr@p@acrshortpl@#1#2[#3] {%
    3191   {\mfirstucMakeUppercase{\acronymfont{\glsentryshortpl{#2}}#3}}}
sxtr@p@acrlong@
    3192 \def\@glsxtr@p@acrlong@#1#2[#3]{{\glsentrylong{#2}}#3}
sxtr@p@acrlong@
    3193 \def\@Glsxtr@p@acrlong@#1#2[#3]{{\Glsentrylong{#2}}#3}
Sxtr@p@acrlong@
    3194 \def\@GLSxtr@p@acrlong@#1#2[#3] {%
    3195   {\mfirstucMakeUppercase{\glsentrylong{#2}}#3}}}
tr@p@acrlongpl@
    3196 \def\@glsxtr@p@acrlongpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}
tr@p@acrlongpl@
    3197 \def\@Glsxtr@p@acrlongpl@#1#2[#3]{{\Glsentrylongpl{#2}}#3}
tr@p@acrlongpl@
    3198 \def\@GLSxtr@p@acrlongpl@#1#2[#3] {%
    3199   {\mfirstucMakeUppercase{\glsentrylongpl{#2}}#3}}}

        Commands to minimise conflict.

\@glsxtrp@opt
    3200 \newcommand*{\@glsxtrp@opt}{\hyper=false,noindex}

\glsxtrsetpopts Used in glossary to switch hyperlinks on for the \glsxtrp type of commands.
    3201 \newcommand*{\glsxtrsetpopts}[1]{%
    3202   \renewcommand*{\@glsxtrp@opt}{\#1}%
    3203 }

\lossxtrsetpopts Used in glossary to switch hyperlinks on for the \glossxtrp type of commands.
    3204 \newcommand*{\glossxtrsetpopts}{%
    3205   \glsxtrsetpopts{noindex}%
    3206 }

\@@glsxtrp
    3207 \newrobustcmd*{\@@glsxtrp}[2]{%

```

Add scope.

```
3208  {%
3209    \let\glspostlinkhook\relax
3210    \csname#1\expandafter\endcsname\expandafter[\@glsxtrp@opt]{#2}[]%
3211  }%
3212 }

\@glsxtrp
3213 \newrobustcmd*\{@glsxtrp}[2]{%
3214   \ifcsdef{gls#1}{%
3215     {%
3216       \@@glsxtrp{gls#1}{#2}%
3217     }%
3218   }%
3219   \ifcsdef{glsxtr#1}{%
3220     {%
3221       \@@glsxtrp{glsxtr#1}{#2}%
3222     }%
3223   }%
3224   \PackageError{glossaries-extra}{‘#1’ not recognised by
3225     \string\glsxtrp{}}
3226   }%
3227 }%
3228 }
```

\@Glsxtrp

```
3229 \newrobustcmd*\{@Glsxtrp}[2]{%
3230   \ifcsdef{Gls#1}{%
3231     {%
3232       \@@glsxtrp{Gls#1}{#2}%
3233     }%
3234   }%
3235   \ifcsdef{Glsxtr#1}{%
3236     {%
3237       \@@glsxtrp{Glsxtr#1}{#2}%
3238     }%
3239   }%
3240   \PackageError{glossaries-extra}{‘#1’ not recognised by
3241     \string\Glsxtrp{}}
3242   }%
3243 }%
3244 }
```

\@GLSxtrp

```
3245 \newrobustcmd*\{@GLSxtrp}[2]{%
3246   \ifcsdef{GLS#1}{%
3247     {%
3248       \@@glsxtrp{GLS#1}{#2}%
3249     }%
```

```

3250  {%
3251    \ifcsdef{GLSxtr#1}%
3252    {%
3253      \@@glsxtrp{GLSxtr#1}{#2}%
3254    }%
3255    {%
3256      \PackageError{glossaries-extra}{‘#1’ not recognised by
3257        \string\GLSxtrp{}{}}%
3258    }%
3259  }%
3260 }

\glsxtr@entry@p
3261 \newrobustcmd*\glsxtr@headentry@p[2]{%
3262   \glsifattribute{#1}{headuc}{true}%
3263   {%
3264     \mfirstucMakeUppercase{\gls@entry@field{#1}{#2}}%
3265   }%
3266   {%
3267     \gls@entry@field{#1}{#2}%
3268   }%
3269 }

\glsxtrp Not robust as it needs to expand somewhat.
3270 \ifdef\texorpdfstring
3271 {
3272   \newcommand{\glsxtrp}[2]{%
3273     \protect\NoCaseChange
3274     {%
3275       \protect\texorpdfstring
3276       {%
3277         \protect\glsxtrifinmark
3278         {%
3279           \ifcsdef{glsxtrhead#1}%
3280           {%
3281             \protect\csuse{glsxtrhead#1}{#2}%
3282           }%
3283           {%
3284             \glsxtr@headentry@p{#2}{#1}%
3285           }%
3286         }%
3287         {%
3288           \glsxtrp{#1}{#2}%
3289         }%
3290       }%
3291       {%
3292         \protect\gls@entry@field{#2}{#1}%
3293       }%
3294     }%

```

```

3295  }
3296 }
3297 {
3298 \newcommand{\glsxtrp}[2]{%
3299   \protect\NoCaseChange
3300   {%
3301     \protect\glsxtrifinmark
3302     {%
3303       \ifcsdef{glsxtrhead#1}{%
3304         {%
3305           {\protect\csuse{glsxtrhead#1}}%
3306         }%
3307         {%
3308           \glsxtr@headentry@p{#2}{#1}%
3309         }%
3310       }%
3311     {%
3312       \glsxtrp{#1}{#2}%
3313     }%
3314   }%
3315 }
3316 }

```

Provide short synonyms for the most common option.

```
\glsps
3317 \newcommand*{\glsps}{\glsxtrp{short}}


\glspt
3318 \newcommand*{\glspt}{\glsxtrp{text}}
```

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

```

3319 \ifdef\texorpdfstring
3320 {
3321   \newcommand{\Glsxtrp}[2]{%
3322     \protect\NoCaseChange
3323     {%
3324       \protect\texorpdfstring
3325       {%
3326         \protect\glsxtrifinmark
3327         {%
3328           \ifcsdef{Glsxtrhead#1}{%
3329             {%
3330               {\protect\csuse{Glsxtrhead#1}{#2}}%
3331             }%
3332             {%
3333               \protect\@Gls@entry@field{#2}{#1}%
3334             }%

```

```

3335      }%
3336      {%
3337          \Glsxtrp{#1}{#2}%
3338      }%
3339      }%
3340      {%
3341          \protect\gls@entry@field{#2}{#1}%
3342      }%
3343      }%
3344  }
3345 }
3346 {
3347 \newcommand{\Glsxtrp}[2]{%
3348     \protect\NoCaseChange
3349     {%
3350         \protect\glsxtrifinmark
3351     }%
3352         \ifcsdef{Glsxtrhead#1}%
3353         {%
3354             \protect\csuse{Glsxtrhead#1}}%
3355         }%
3356         {%
3357             \protect\gls@entry@field{#2}{#1}%
3358         }%
3359     }%
3360     {%
3361         \Glsxtrp{#1}{#2}%
3362     }%
3363     }%
3364 }
3365 }

```

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

```

3366 \ifdef\texorpdfstring
3367 {
3368 \newcommand{\GLSxtrp}[2]{%
3369     \protect\NoCaseChange
3370     {%
3371         \protect\texorpdfstring
3372     }%
3373         \protect\glsxtrifinmark
3374     }%
3375         \ifcsdef{GLSxtr#1}%
3376         {%
3377             \protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
3378         }%
3379         {%
3380             \protect\mfirstucMakeUppercase
3381         }%

```

```

3382         \protect\@gls@entry@field{#2}{#1}%
3383     }%
3384   }%
3385   }%
3386   {%
3387     \c@GLSxtrp{#1}{#2}%
3388   }%
3389 }%
3390 {%
3391   \protect\@gls@entry@field{#2}{#1}%
3392 }%
3393 }%
3394 }%
3395 }%
3396 {%
3397   \newcommand{\GLSxtrp}[2]{%
3398     \protect\NoCaseChange
3399     {%
3400       \protect\glsxtrifinmark
3401     }%
3402     \ifcsdef{GLSxtr#1}%
3403     {%
3404       \protect\GLSxtrshort[noindex,hyper=false]{#1}[]%
3405     }%
3406     {%
3407       \protect\mfistucMakeUppercase
3408     }%
3409     \protect\@gls@entry@field{#2}{#1}%
3410   }%
3411 }%
3412 }%
3413 {%
3414   \c@GLSxtrp{#1}{#2}%
3415 }%
3416 }%
3417 }%
3418 }

```

1.3.5 Entry Counting

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

First adjust definitions of the unset and reset commands to provide a hook, but changing the flag can cause problems in certain situations, so to allow the normal unsetting to be

temporarily disabled, `\@glsunset` is let to `\@glsxtr@unset`, which performs the actual unsetting through `\@@glsunset` and then does the hook. This means that the unsetting (and the hook) can be switched off by redefining `\@glsunset` and then switched back on again by changing the definition back to `\@glsxtr@unset`.

`\@glsxtr@unset` Global unset.

```
3419 \newcommand*{\@glsxtr@unset}[1]{%
3420   \@@glsunset{#1}%
3421   \glsxtrpostunset{#1}%
3422 }%
```

`\@glsunset` Global unset.

```
3423 \let\@glsunset\@glsxtr@unset
```

`glsxtrpostunset`

```
3424 \newcommand*{\glsxtrpostunset}[1]{}%
```

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

`tUnsetBuffering`

```
3425 \newcommand*{\GlsXtrStartUnsetBuffering}{%
3426   \@ifstar\s@\GlsXtrStartUnsetBuffering\@GlsXtrStartUnsetBuffering
3427 }
```

`tUnsetBuffering` Unstarred version doesn't check for duplicates.

```
3428 \newcommand*{\@GlsXtrStartUnsetBuffering}{%
3429   \let\@glsxtr@org@unset@buffer\@glsxtr@unset@buffer
3430   \def\@glsxtr@unset@buffer{}%
3431   \let\@glsunset\@glsxtrbuffer@unset
3432 }
```

`tUnsetBuffering` Starred version checks for duplicates.

```
3433 \newcommand*{\s@\GlsXtrStartUnsetBuffering}{%
3434   \let\@glsxtr@org@unset@buffer\@glsxtr@unset@buffer
3435   \def\@glsxtr@unset@buffer{}%
3436   \let\@glsunset\@glsxtrbuffer@nodup@unset
3437 }
```

`xtrbuffer@unset` This must use a global change since `\gls` may have to be placed inside `\mbox` (for example, with soul commands).

```
3438 \newcommand*{\@glsxtrbuffer@unset}[1]{%
3439   \listxadd\@glsxtr@unset@buffer{#1}%
3440 }
```

`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.)

```

3441 \newcommand*{\@glsxtrbuffer@nodup@unset}[1]{%
3442   \expandafter\ifinlist\expandafter{\#1}{\@glsxtr@unset@buffer}{}%
3443   {\listxadd{\@glsxtr@unset@buffer}{#1}}%
3444 }



UnsetBuffering


3445 \newcommand*{\GlsXtrStopUnsetBuffering}{%
3446   \@ifstar{s}{\GlsXtrStopUnsetBuffering}{\GlsXtrStopUnsetBuffering}%
3447 }



UnsetBuffering Unstarred form (global unset).


3448 \newcommand*{\@GlsXtrStopUnsetBuffering}{%
3449   \let\@glsunset\@glsxtr@unset
3450   \forlistloop{\@glsunset}{\@glsxtr@unset@buffer}
3451   \let\@glsxtr@unset@buffer\@glsxtr@org@unset@buffer
3452 }



UnsetBuffering Starred form (local unset).


3453 \newcommand*{\s@GlsXtrStopUnsetBuffering}{%
3454   \forlistloop{\glslocalunset}{\glsxtr@unset@buffer}
3455   \let\@glsunset\@glsxtr@unset
3456 }



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


3457 \newcommand*{\GlsXtrForUnsetBufferedList}[1]{%
3458   \forlistloop{\#1}{\glsxtr@unset@buffer}
3459 }



\glslocalunset Local unset.


3460 \renewcommand*{\glslocalunset}[1]{%
3461   \@@glslocalunset{\#1}%
3462   \glsxtrpostlocalunset{\#1}%
3463 }%



rpostlocalunset


3464 \newcommand*{\glsxtrpostlocalunset}[1]{}



\glsreset Global reset.


3465 \renewcommand*{\glsreset}[1]{%
3466   \@@glsreset{\#1}%
3467   \glsxtrpostreset{\#1}%
3468 }%



glsxtrpostreset


3469 \newcommand*{\glsxtrpostreset}[1]{}

```

```
\@glslocalreset Local reset.  
3470 \renewcommand*{\glslocalreset}[1]{%  
3471   \@@glslocalreset{#1}%  
3472   \glsxtrpostlocalreset{#1}%  
3473 }%
```

```
rpostlocalreset  
3474 \newcommand*{\glsxtrpostlocalreset}[1]{}
```

```
slocalreseteach Locally reset a list of entries.  
3475 \newcommand*{\glslocalreseteach}[1]{%  
3476   \gls@ifnotmeasuring  
3477   {  
3478     \@for\gls@thislabel:=#1\do{  
3479       \glsdoifexists{\gls@thislabel}{%  
3480       {  
3481         \glslocalreset{\gls@thislabel}{%  
3482       }%  
3483     }%  
3484   }%  
3485 }
```

```
slocalunseteach Locally unset a list of entries.  
3486 \newcommand*{\glslocalunseteach}[1]{%  
3487   \gls@ifnotmeasuring  
3488   {  
3489     \@for\gls@thislabel:=#1\do{  
3490       \glsdoifexists{\gls@thislabel}{%  
3491       {  
3492         \glslocalunset{\gls@thislabel}{%  
3493       }%  
3494     }%  
3495   }%  
3496 }
```

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

```
3497 \newcommand*{\GlsXtrEnableEntryCounting}[2]{%
```

 Enable entry counting:

```
3498 \glsenableentrycount
```

 Redefine \gls etc:

```
3499 \renewcommand*{\gls}{\cgls}{%  
3500 \renewcommand*{\Gls}{\cGls}{%  
3501 \renewcommand*{\glspol}{\cglspl}{%  
3502 \renewcommand*{\Glspol}{\cGlspol}{%  
3503 \renewcommand*{\GLS}{\cGLS}{%  
3504 \renewcommand*{\GLSpol}{\cGLSpol}{%
```

Set the entrycount attribute:

```
3505 \glsxtr@setentrycountunsetattr{#1}{#2}%
```

In case this command is used again:

```
3506 \let\GlsXtrEnableEntryCounting\glsxtr@setentrycountunsetattr
3507 \renewcommand*\GlsXtrEnableEntryUnitCounting[3]{%
3508   \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryUnitCounting\space
3509   can't be used with \string\GlsXtrEnableEntryCounting}%
3510   {Use one or other but not both commands}}%
3511 }
```

entrycountunsetattr

```
3512 \newcommand*\glsxtr@setentrycountunsetattr[2]{%
3513   @for\glsxtr@cat:=#1\do
3514   {%
3515     \ifdefempty{\glsxtr@cat}{}{%
3516       \glssetcategoryattribute{\glsxtr@cat}{entrycount}{#2}%
3517     }%
3518   }%
3519 }%
3520 }
```

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

enableentrycount

```
3521 \renewcommand*\glsenableentrycount{}%
```

Enable new fields:

```
3522 \appto\newglossaryentry@defcounters{\@newglossaryentry@defcounters}%
```

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

```
3523 \renewcommand*\gls@defdocnewglossaryentry{}%
3524   \renewcommand*\newglossaryentry[2]{%
3525     \PackageError{glossaries}{\string\newglossaryentry\space
3526     may only be used in the preamble when entry counting has
3527     been activated}{If you use \string\glsenableentrycount\space
3528     you must place all entry definitions in the preamble not in
3529     the document environment}}%
3530   }%
3531 }
```

New commands to access new fields:

```
3532 \newcommand*\glsentrycurrcount[1]{%
3533   \ifcsundef{glo@\glsdetoklabel{##1}@currcount}%
3534   {0}{\gls@entry@field{##1}{currcount}}%
3535 }%
3536 \newcommand*\glsentryprevcount[1]{%
3537   \ifcsundef{glo@\glsdetoklabel{##1}@prevcount}%
3538   {0}{\gls@entry@field{##1}{prevcount}}%
3539 }
```

Adjust post unset and reset:

```
3540 \let\@glsxtr@entrycount@org@unset\glsxtrpostunset
3541 \renewcommand*\{\glsxtrpostunset}[1]{%
3542   \@glsxtr@entrycount@org@unset{##1}%
3543   \@gls@increment@currcount{##1}%
3544 }%
3545 \let\@glsxtr@entrycount@org@localunset\glsxtrpostlocalunset
3546 \renewcommand*\{\glsxtrpostlocalunset}[1]{%
3547   \@glsxtr@entrycount@org@localunset{##1}%
3548   \@gls@local@increment@currcount{##1}%
3549 }%
3550 \let\@glsxtr@entrycount@org@reset\glsxtrpostreset
3551 \renewcommand*\{\glsxtrpostreset}[1]{%
3552   \@glsxtr@entrycount@org@reset{##1}%
3553   \csgdef{glo@\glsdetoklabel{##1}@currcount}{0}%
3554 }%
3555 \let\@glsxtr@entrycount@org@localreset\glsxtrpostlocalreset
3556 \renewcommand*\{\glsxtrpostlocalreset}[1]{%
3557   \@glsxtr@entrycount@org@localreset{##1}%
3558   \csdef{glo@\glsdetoklabel{##1}@currcount}{0}%
3559 }%
```

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

```
3560 \let\@cgls@\@@cgls@
3561 \let\@cglspl@\@@cglspl@

3562 \let\@cGls@\@@cGls@
3563 \let\@cGlspl@\@@cGlspl@
3564 \let\@cGLS@\@@cGLS@
3565 \let\@cGLSpl@\@@cGLSpl@
```

The rest is as the original definition.

```
3566 \AtEndDocument{\@gls@write@entrycounts}%
3567 \renewcommand*\{\@gls@entry@count}[2]{%
3568   \csgdef{glo@\glsdetoklabel{##1}@prevcount}{##2}%
3569 }%
3570 \let\glsenableentrycount\relax
3571 \renewcommand*\{\glsenableentryunitcount}{}%
3572   \PackageError{glossaries-extra}{\string\glsenableentryunitcount\space
3573   can't be used with \string\glsenableentrycount}%
3574   {Use one or other but not both commands}%
3575 }%
3576 }
```

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.

```
3577 \renewcommand*\{\@gls@write@entrycounts}{}%
3578 \immediate\write\@auxout
3579   {\string\providecommand*\{\string\@gls@entry@count}[2]{}%}
```

```

3580 \count@=0\relax
3581 \forallglsentries{\@glsentry}{%
3582   \glshasattribute{\@glsentry}{entrycount}%
3583   {%
3584     \ifglsused{\@glsentry}%
3585     {%
3586       \immediate\write\auxout
3587         {\string\@gls@entry@count{\@glsentry}{\glsentrycurrcount{\@glsentry}}}}%
3588     }%
3589     {}%
3590     \advance\count@ by \one
3591   }%
3592   {}%
3593 }%
3594 \ifnum\count@=0
3595   \GlossariesExtraWarning{Entry counting has been enabled
3596     \MessageBreak with \string\glsenableentrycount\space but the
3597     \MessageBreak attribute ‘entrycount’ hasn’t
3598     \MessageBreak been assigned to any of the defined
3599     \MessageBreak entries}%
3600 \fi
3601 }

```

trifcounttrigger \glsxtrifcounttrigger{*label*}{{*trigger format*}}{*normal*}

```

3602 \newcommand*\glsxtrifcounttrigger[3]{%
3603   \glshasattribute{#1}{entrycount}%
3604   {%
3605     \ifnum\glsentryprevcount{#1}>\glsgetattribute{#1}{entrycount}\relax
3606       #3%
3607     \else
3608       #2%
3609     \fi
3610   }%
3611   {#3}%
3612 }

```

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

```

\@@cglscount
3613 \def\@@cglscount[#1][#3]{%
3614   \glsxtrifcounttrigger{#2}%
3615   {%
3616     \cglscountformat{#2}{#3}%
3617     \glsunset{#2}%
3618   }%

```

```

3619  {%
3620    \gls@{#1}{#2} [#3]%
3621  }%
3622 }%


\@@cglspl@

3623 \def\@@cglspl@#1#2[#3]{%
3624   \glsxtrifcounttrigger{#2}%
3625   {%
3626     \cglsplformat{#2}{#3}%
3627     \glsunset{#2}%
3628   }%
3629   {%
3630     \glspl@{#1}{#2} [#3]%
3631   }%
3632 }%


\@@cGls@

3633 \def\@@cGls@#1#2[#3]{%
3634   \glsxtrifcounttrigger{#2}%
3635   {%
3636     \cGlsformat{#2}{#3}%
3637     \glsunset{#2}%
3638   }%
3639   {%
3640     \cGlsformat{#2}{#3}%
3641   }%
3642 }%


\@@cGlsp@

3643 \def\@@cGlsp@#1#2[#3]{%
3644   \glsxtrifcounttrigger{#2}%
3645   {%
3646     \cGlspformat{#2}{#3}%
3647     \glsunset{#2}%
3648   }%
3649   {%
3650     \cGlspformat{#2}{#3}%
3651   }%
3652 }%


\@@cGLS@

3653 \def\@@cGLS@#1#2[#3]{%
3654   \glsxtrifcounttrigger{#2}%
3655   {%
3656     \cGLSformat{#2}{#3}%
3657     \glsunset{#2}%
3658   }%
3659   {%

```

```
3660     \cGLS@{\#1}{\#2}{\#3}%
3661   }%
3662 }%
```

\@cGLSpl@

```
3663 \def\@cGLSpl#1#2[#3]{%
3664   \glsxtrifcounttrigger{#2}%
3665   {%
3666     \cGLSplformat{#2}{#3}%
3667     \glsunset{#2}%
3668   }%
3669   {%
3670     \cGLSpl@{\#1}{\#2}{\#3}%
3671   }%
3672 }%
```

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

\@cglss@

```
3673 \def\@cglss@#1#2[#3]{\gls@{\#1}{\#2}{\#3}}
```

\@cGls@

```
3674 \def\@cGls@#1#2[#3]{\cGls@{\#1}{\#2}{\#3}}
```

\@cglspl@

```
3675 \def\@cglspl@#1#2[#3]{\glspl@{\#1}{\#2}{\#3}}
```

\@cGspl@

```
3676 \def\@cGspl@#1#2[#3]{\cGspl@{\#1}{\#2}{\#3}}
```

Add all upper case versions not provided by glossaries.

\cGLS

```
3677 \newrobustcmd*\cGLS{\gls@hyp@opt\cGLS}
```

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

```
3678 \newcommand*\@cGLS[2][]{%
3679   \new@ifnextchar[\cGLS@{\#1}{\#2}]{\cGLS@{\#1}{\#2}[]}{%
3680 }
```

\@cGLS@

```
3681 \def\@cGLS@#1#2[#3]{\cGLS@{\#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.

```
3682 \newcommand*\cGLSformat[2]{%
3683   \expandafter\mfirstucMakeUppercase\expandafter{\cglssformat{\#1}{\#2}}%
3684 }
```

```

\cGLSp1
3685 \newrobustcmd*\cGLSp1{\gls@hyp@opt\cGLSp1}

\cGLSp1 Defined the un-starred form. Need to determine if there is a final optional argument
3686 \newcommand*\cGLSp1[2][]{%
3687   \new@ifnextchar[\cGLSp1@{\#1}{\#2}]{\cGLSp1@{\#1}{\#2}[]}{%
3688 }

\cGLSp1@
3689 \def\cGLSp1@#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.
3690 \newcommand*\cGLSp1format[2]{%
3691   \expandafter\mfirstrucMakeUppercase\expandafter{\cGLSp1format{\#1}{\#2}}%
3692 }

Modify the trigger formats to check for the regular attribute.

\cglsformat
3693 \renewcommand*\cglsformat[2]{%
3694   \glsifregular{\#1}%
3695   {\glsentryfirst{\#1}}%
3696   {\ifglshaslong{\#1}{\glsentrylong{\#1}}{\glsentryfirst{\#1}}}#2%
3697 }

\cGlsformat
3698 \renewcommand*\cGlsformat[2]{%
3699   \glsifregular{\#1}%
3700   {\Glsentryfirst{\#1}}%
3701   {\ifglshaslong{\#1}{\Glsentrylong{\#1}}{\Glsentryfirst{\#1}}}#2%
3702 }

\cglspformat
3703 \renewcommand*\cglspformat[2]{%
3704   \glsifregular{\#1}%
3705   {\glsentryfirstplural{\#1}}%
3706   {\ifglshaslong{\#1}{\glsentrylongplural{\#1}}{\glsentryfirstplural{\#1}}}#2%
3707 }

\cGlsplformat
3708 \renewcommand*\cGlsplformat[2]{%
3709   \glsifregular{\#1}%
3710   {\Glsentryfirstplural{\#1}}%
3711   {\ifglshaslong{\#1}{\Glsentrylongplural{\#1}}{\Glsentryfirstplural{\#1}}}#2%
3712 }

```

New code similar to above for unit counting.

```

defunitcounters
 3713 \newcommand*{\@newglossaryentry@defunitcounters}{%
 3714   \edef\@glo@countunit{\csuse{@glsxtr@categoryattr@@\@glo@category \unitcount}}%
 3715   \ifdefvoid\@glo@countunit
 3716   {}%
 3717   {}%
 3718   \glsxtr@ifunitcounter{\@glo@countunit}%
 3719   {}%
 3720   {\expandafter\glsxtr@addunitcounter\expandafter{\@glo@countunit}}%
 3721 }%
 3722 }

r@unitcountlist List to keep track of which counters are being used by the entry unit count facility.
 3723 \newcommand*{\@glsxtr@unitcountlist}{}}

@addunitcounter
 3724 \newcommand*{\@glsxtr@addunitcounter}[1]{%
 3725   \listadd{\@glsxtr@unitcountlist}{#1}%
 3726   \ifcsundef{glsxtr@theunit@#1}
 3727   {}%
 3728   \ifcsdef{theH#1}%
 3729   {\csdef{glsxtr@theunit@#1}{\csuse{theH#1}}%}
 3730   {\csdef{glsxtr@theunit@#1}{\csuse{the#1}}%}
 3731 }%
 3732 {}%
 3733 }

r@ifunitcounter
 3734 \newcommand*{\@glsxtr@ifunitcounter}[3]{%
 3735   \xifinlist{#1}{\@glsxtr@unitcountlist}{#2}{#3}%
 3736 }

urrentunitcount
 3737 \newcommand*{\@glsxtr@currentunitcount}[1]{%
 3738   \glo@\glsdetoklabel{#1}@currunit@\glsgetattribute{#1}{unitcount}.%
 3739   \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
 3740 }

eviousunitcount
 3741 \newcommand*{\@glsxtr@previousunitcount}[1]{%
 3742   \glo@\glsdetoklabel{#1}@prevunit@\glsgetattribute{#1}{unitcount}.%
 3743   \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
 3744 }

t@currunitcount
 3745 \newcommand*{\@gls@increment@currunitcount}[1]{%
 3746   \glshasattribute{#1}{unitcount}%
 3747   {}%

```

```

3748 \edef\@glsxtr@csname{\@glsxtr@currentunitcount{#1}}%
3749 \ifcsundef{\@glsxtr@csname}%
3750 {%
3751   \csgdef{\@glsxtr@csname}{1}%
3752   \listcsadd
3753     {\glo@\glsdetoklabel{#1}@unitlist}%
3754     {\glsgetattribute{#1}{unitcount}.}%
3755     \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3756   }%
3757 }%
3758 {%
3759   \csxdef{\@glsxtr@csname}%
3760   {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
3761 }%
3762 }%
3763 {}%
3764 }

t@currunitcount
3765 \newcommand*{\gls@local@increment@currunitcount}[1]{%
3766   \glshasattribute{#1}{unitcount}%
3767 {%
3768   \edef\@glsxtr@csname{\@glsxtr@currentunitcount{#1}}%
3769   \ifcsundef{\@glsxtr@csname}%
3770   {%
3771     \csdef{\@glsxtr@csname}{1}%
3772     \listcseadd
3773       {\glo@\glsdetoklabel{#1}@unitlist}%
3774       {\glsgetattribute{#1}{unitcount}.}%
3775       \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3776     }%
3777   }%
3778   {%
3779     \csedef{\@glsxtr@csname}%
3780     {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
3781   }%
3782 }%
3783 {}%
3784 }

r@currunitcount
3785 \newcommand*{\glsxtr@currunitcount}[2]{%
3786 \ifcsundef
3787 {\glo@\glsdetoklabel{#1}@currunit@#2}%
3788 {0}%
3789 {\csuse{\glo@\glsdetoklabel{#1}@currunit@#2}}%
3790 }%

```

r@prevunitcount

```

3791 \newcommand*{\@glsxtr@prevunitcount}[2]{%
3792   \ifcsundef
3793     {glo@\glsdetoklabel{##1}@prevunit@##2}%
3794   {0}%
3795   {\csuse{glo@\glsdetoklabel{##1}@prevunit@##2}}%
3796 }%

```

entryunitcount

```
3797 \newcommand*{\glsenableentryunitcount}{%
```

Enable new fields:

```
3798 \appto{@newglossaryentry@defcounters{@newglossaryentry@defunitcounters}}%
```

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

```

3799 \renewcommand*{\gls@defdocnewglossaryentry}{%
3800   \renewcommand*{\newglossaryentry}[2]{%
3801     \PackageError{glossaries}{\string\newglossaryentry\space
3802       may only be used in the preamble when entry counting has
3803       been activated}{If you use \string\glsenableentryunitcount\space
3804       you must place all entry definitions in the preamble not in
3805       the document environment}%
3806   }%
3807 }%

```

New commands to access new fields:

```

3808 \newcommand*{\glsentrycurrcount}[1]{%
3809   \@glsxtr@currunitcount{##1}{\glsgetattribute{##1}{unitcount}.%
3810   \csuse{glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
3811 }%
3812 \newcommand*{\glsentryprevcount}[1]{%
3813   \@glsxtr@prevunitcount{##1}{\glsgetattribute{##1}{unitcount}.%
3814   \csuse{glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
3815 }%

```

Access total count:

```

3816 \newcommand*{\glsentryprevtotalcount}[1]{%
3817   \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
3818   {0}%
3819   {%
3820     \number\csuse{glo@\glsdetoklabel{##1}@prevunittotal}%
3821   }%
3822 }%

```

Access max value:

```

3823 \newcommand*{\glsentryprevmaxcount}[1]{%
3824   \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
3825   {0}%
3826   {%
3827     \number\csuse{glo@\glsdetoklabel{##1}@prevunitmax}%
3828   }%
3829 }%

```

Adjust post unset and reset:

```
3830 \let\@glsxtr@entryunitcount@org@unset\glsxtrpostunset
3831 \renewcommand*{\glsxtrpostunset}[1]{%
3832   \@glsxtr@entryunitcount@org@unset{##1}%
3833   \@gls@increment@currunitcount{##1}%
3834 }%
3835 \let\@glsxtr@entryunitcount@org@localunset\glsxtrpostlocalunset
3836 \renewcommand*{\glsxtrpostlocalunset}[1]{%
3837   \@glsxtr@entryunitcount@org@localunset{##1}%
3838   \@gls@local@increment@currunitcount{##1}%
3839 }%
3840 \let\@glsxtr@entryunitcount@org@reset\glsxtrpostreset
3841 \renewcommand*{\glsxtrpostreset}[1]{%
3842   \glshasattribute{##1}{unitcount}%
3843 }%
3844   \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
3845   \ifcsundef{\@glsxtr@csname}%
3846   {}%
3847   {\csgdef{\@glsxtr@csname}{0}}%
3848 }%
3849 }%
3850 }%
3851 \let\@glsxtr@entryunitcount@org@localreset\glsxtrpostlocalreset
3852 \renewcommand*{\glsxtrpostlocalreset}[1]{%
3853   \@glsxtr@entryunitcount@org@localreset{##1}%
3854   \glshasattribute{##1}{unitcount}%
3855 }%
3856   \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
3857   \ifcsundef{\@glsxtr@csname}%
3858   {}%
3859   {\csdef{\@glsxtr@csname}{0}}%
3860 }%
3861 }%
3862 }%
```

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

```
3863 \let\@cgls@\@@cgls@
3864 \let\@cglspl@\@@cglspl@

3865 \let\@cGls@\@@cGls@
3866 \let\@cGlspl@\@@cGlspl@
3867 \let\@cGLS@\@@cGLS@
3868 \let\@cGLSpl@\@@cGLSpl@
```

Write information to the aux file.

```
3869 \AtEndDocument{\@gls@write@entryunitcounts}%
3870 \renewcommand*{\@gls@entry@unitcount}[3]{%
3871   \csgdef{glo@\glsdetoklabel{##1}@prevunit@##3}{##2}%
3872   \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}{}%
```

```

3873 {\csgdef{glo@\glsdetoklabel{##1}@prevunittotal}{##2}}%
3874 {%
3875   \csxdef{glo@\glsdetoklabel{##1}@prevunittotal}{%
3876     \number\numexpr\csuse{glo@\glsdetoklabel{##1}@prevunittotal}+##2}%
3877   }%
3878   \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
3879   {\csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}}%
3880   {%
3881     \ifnum\csuse{glo@\glsdetoklabel{##1}@prevunitmax}<##2
3882       \csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}%
3883     \fi
3884   }%
3885 }%
3886 \let\glsenableentryunitcount\relax
3887 \renewcommand*{\glsenableentrycount}{%
3888   \PackageError{glossaries-extra}{\string\glsenableentrycount\space
3889   can't be used with \string\glsenableentryunitcount}%
3890   {Use one or other but not both commands}%
3891 }%
3892 }
3893 \onlypreamble\glsenableentryunitcount

entry@unitcount
3894 \newcommand*{\@gls@entry@unitcount}[3] {}

entryunitcounts@do
3895 \newcommand*{\@gls@write@entryunitcounts@do}[1]{%
3896   \immediate\write\auxout
3897   {\string\@gls@entry@unitcount
3898     {\@glsentry}\%
3899     {\@glsxtr@currunitcount{\@glsentry}{#1}}%
3900   }%
3901   {#1}\}%
3902 }

entryunitcounts
3903 \newcommand*{\@gls@write@entryunitcounts}{%
3904   \immediate\write\auxout
3905   {\string\providecommand*{\string\@gls@entry@unitcount}[3]{} }%
3906   \count@=0\relax
3907   \forallglsentries{\@glsentry}{%
3908     \glshasattribute{\@glsentry}{unitcount}\%
3909     {%
3910       \ifglsused{\@glsentry}\%
3911       {%
3912         \forlistcsloop
3913           {\@gls@write@entryunitcounts@do}%
3914           {glo@\glsdetoklabel{\@glsentry}@unitlist}\%
3915       }%

```

```

3916      {}%
3917      \advance\count@ by \cne
3918    }%
3919    {}%
3920  }%
3921 \ifnum\count@=0
3922   \GlossariesExtraWarningNoLine{Entry counting has been enabled
3923     \MessageBreak with \string\glsenableentryunitcount\space but the
3924     \MessageBreak attribute ‘unitcount’ hasn’t
3925     \MessageBreak been assigned to any of the defined
3926     \MessageBreak entries}%
3927 \fi
3928 }

```

`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.

```
3929 \newcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
```

Enable entry counting:

```
3930 \glsenableentryunitcount
```

Redefine `\gls` etc:

```

3931 \renewcommand*{\gls}{\cgls}%
3932 \renewcommand*{\Gls}{\cGls}%
3933 \renewcommand*{\glspol}{\cgglspol}%
3934 \renewcommand*{\Glspol}{\cGlspol}%
3935 \renewcommand*{\GLS}{\cGLS}%
3936 \renewcommand*{\GLSpol}{\cGLSpol}%

```

Set the `entrycount` attribute:

```
3937 \@glsxtr@setentryunitcountunsetattr{#1}{#2}{#3}%
```

In case this command is used again:

```

3938 \let\GlsXtrEnableEntryUnitCounting\@glsxtr@setentryunitcountunsetattr
3939 \renewcommand*{\GlsXtrEnableEntryCounting}[2]{%
3940   \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryCounting\space
3941     can't be used with \string\GlsXtrEnableEntryUnitCounting}%
3942   {Use one or other but not both commands}}%
3943 }

```

`tcountunsetattr`

```

3944 \newcommand*{\@glsxtr@setentryunitcountunsetattr}[3]{%
3945   \@for\@glsxtr@cat:=#1\do
3946   {}%
3947   \ifdefempty{\@glsxtr@cat}{}%
3948   {}%
3949   \glssetcategoryattribute{\@glsxtr@cat}{entrycount}{#2}%
3950   \glssetcategoryattribute{\@glsxtr@cat}{unitcount}{#3}%
3951   {}%
3952 }%
3953 }

```

1.3.6 Acronym Modifications

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

nericNewAcronym

```
3954 \renewcommand*{\SetGenericNewAcronym}{%
3955   \let\@Gls@entryname\@Gls@acrentryname
3956   \renewcommand{\newacronym}[4][]{%
3957     \ifempty{\@glsacronymlists}{%
3958       \def\@glo@type{\acronymtype}%
3959       \setkeys{glossentry}{##1}%
3960       \DeclareAcronymList{\@glo@type}%
3961     }%
3962   }%
3963   \glskeylisttok{##1}%
3964   \glslabeltok{##2}%
3965   \glsshorttok{##3}%
3966   \glslongtok{##4}%
3967   \newacronymhook
3968   \protected@edef\@do@newglossaryentry{%
3969     \noexpand\newglossaryentry{\the\glslabeltok}%
3970     {%
3971       type=\acronymtype,
3972       name={\expandonce{\acronymentry{##2}}},%
3973       sort={\acronymsort{\the\glsshorttok}{\the\glslongtok}},%
3974       text={\the\glsshorttok},%
3975       short={\the\glsshorttok},%
3976       shortplural={\the\glsshorttok\noexpand\acrpluralsuffix},%
3977       long={\the\glslongtok},%
3978       longplural={\the\glslongtok\noexpand\acrpluralsuffix},%
3979       category=acronym,
3980       \GenericAcronymFields,
3981       \the\glskeylisttok
3982     }%
3983   }%
3984 }%
3985 \@do@newglossaryentry
3986 }%
3987 \renewcommand*{\acrfullfmt}[3]{%
3988   \glslink[##1]{##2}{\genacrfullformat{##2}{##3}}}%
3989 \renewcommand*{\Acrfullfmt}[3]{%
3990   \glslink[##1]{##2}{\Genacrfullformat{##2}{##3}}}%
3991 \renewcommand*{\ACRfullfmt}[3]{%
3992   \glslink[##1]{##2}{%
```

```

3993     \mfirstucMakeUppercase{\genacrfullformat{##2}{##3}}}}%
3994 \renewcommand*{\acrfullplfmt}[3]{%
3995     \glslink[##1]{##2}{\genplacrfullformat{##2}{##3}}}}%
3996 \renewcommand*{\Acrfullplfmt}[3]{%
3997     \glslink[##1]{##2}{\Genplacrfullformat{##2}{##3}}}}%
3998 \renewcommand*{\ACRfullplfmt}[3]{%
3999     \glslink[##1]{##2}{%
4000         \mfirstucMakeUppercase{\genplacrfullformat{##2}{##3}}}}}}%
4001 \renewcommand*{\glsentryfull}[1]{\genacrfullformat{##1}{}}}}%
4002 \renewcommand*{\Glsentryfull}[1]{\Genacrfullformat{##1}{}}}}%
4003 \renewcommand*{\glsentryfullpl}[1]{\genplacrfullformat{##1}{}}}}%
4004 \renewcommand*{\Glsentryfullpl}[1]{\Genplacrfullformat{##1}{}}}}%
4005 }

```

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:

```

4006 \let\@glsxtr@org@setacronymstyle\setacronymstyle
4007 \let\@glsxtr@org@newacronymstyle\newacronymstyle

```

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

```

4008 \newcommand*{\MakeAcronymsAbbreviations}{%
4009     \renewcommand*{\newacronym}[4][]{%
4010         \glsxtr@newabbreviation{type=\acronymtype,category=acronym,##1}{##2}{##3}{##4}}}}%
4011 }%
4012 \renewcommand*{\firstacronymfont}[1]{\glsfirstabbrvfont{##1}}}}%
4013 \renewcommand*{\acronymfont}[1]{\glsabbrvfont{##1}}}}%
4014 \renewcommand*{\setacronymstyle}[1]{%
4015     \PackageError{glossaries-extra}{\string\setacronymstyle{##1}%
4016     unavailable.%
4017     Use \string\setabbreviationstyle\space instead.%
4018     The original acronym interface can be restored with%
4019     \string\RestoreAcronyms}{}}}}%
4020 }%
4021 \renewcommand*{\newacronymstyle}[1]{%
4022     \GlossariesExtraWarning{New acronym style ‘##1’ won’t be%
4023     available unless you restore the original acronym interface with%
4024     \string\RestoreAcronyms}}}}%
4025     \glsxtr@org@newacronymstyle{##1}}}}%
4026 }%
4027 }

```

Switch acronyms to abbreviations:

```

4028 \MakeAcronymsAbbreviations

```

`RestoreAcronyms` Restore acronyms to glossaries interface.

```

4029 \newcommand*{\RestoreAcronyms}{%
4030   \SetGenericNewAcronym
4031   \renewcommand{\firstacronymfont}[1]{\acronymfont{##1}}%
4032   \renewcommand{\acronymfont}[1]{##1}%
4033   \let\setacronymstyle\@glsxtr@org@setacronymstyle
4034   \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.

```

4035 \renewcommand*{\gls@link@checkfirsthyper}{%
4036   \ifglsused{\glslabel}{%
4037     {\let\glsxtrifwasfirstuse\@secondoftwo}%
4038     {\let\glsxtrifwasfirstuse\@firstoftwo}{%
4039       \glsxtr@org@checkfirsthyper
4040     }%
4041     \glssetcategoryattribute{acronym}{regular}{false}{%
4042       \setacronymstyle{long-short}{%
4043     }

```

\glsacspace Allow the user to customise the maximum value.

```

4044 \renewcommand*{\glsacspace}[1]{%
4045   \settowidth{\dimen@}{(\firstacronymfont{\glsentryshort{#1}})}%
4046   \ifdim\dimen@<\glsacspacemax\else\space\fi
4047 }

```

\glsacspacemax Value used in the above.

```
4048 \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

```
4049 \newcommand*{\@glsxtr@reg@glosslist}{}%
```

Save the original definition of \makeglossaries:

```
4050 \let\@glsxtr@org@makeglossaries\makeglossaries
```

Redefine \makeglossaries to take an optional argument. This should be empty for the usual behaviour (all glossaries need processing with an indexing application) or a comma-separated list of glossary labels indicating those glossaries that should be processed with an indexing application. The optional argument version shouldn’t be used with record.

\makeglossaries

```

4051 \renewcommand*{\makeglossaries}[1][]{%
4052   \glsxtr@if@record@only

```

```

4053 {%
4054   \PackageError{glossaries-extra}{\string\makeglossaries\space
4055     not permitted\MessageBreak with record=\@glsxtr@record@setting\space
4056     package option}%
4057   {You may only use \string\makeglossaries\space with
4058     record=off or record=alsoindex options}%
4059 }%
4060 {%
4061   \ifblank{#1}%
4062     {\@glsxtr@org@makeglossaries}%
4063   {%
4064     \ifx\@glsxtr@record@setting\@glsxtr@record@setting@alsoindex
4065       \PackageError{glossaries-extra}{\string\makeglossaries[#1]\space
4066         not permitted\MessageBreak with record=alsoindex package option}%
4067       {You may only use the hybrid \string\makeglossaries[...]\space with
4068         record=off option}%
4069     \else
4070       \edef\@glsxtr@reg@glosslist{#1}%
4071       \ifundef{\glswrite}{\newwrite\glswrite}{}%
4072       \protected@write\@auxout{}{\string\providecommand
4073         \string\@glsorder[1]{}}
4074       \protected@write\@auxout{}{\string\providecommand
4075         \string\@istfilename[1]{}}
4076       \protected@write\@auxout{}{\string\@istfilename{\listfilename}}%
4077       \protected@write\@auxout{}{\string\@glsorder{\glsorder}}%
4078       \protected@write\@auxout{}{\string\glsxtr@makeglossaries{#1}}
4079       \write\@auxout{\string\providecommand\string\@gls@reference[3]{}}
4080   }

```

Iterate through each supplied glossary type and activate it.

```

4080   \@for\@glo@type:=#1\do{%
4081     \ifdefempty{\@glo@type}{}{\@makeglossary{\@glo@type}}%
4082   }

```

New glossaries must be created before \makeglossaries:

```

4083   \renewcommand*\newglossary[4] []{%
4084     \PackageError{glossaries}{New glossaries
4085       must be created before \string\makeglossaries}{You need
4086       to move \string\makeglossaries\space after all your
4087       \string\newglossary\space commands}%

```

Any subsequence instances of this command should have no effect

```

4088   \let\@makeglossary\relax
4089   \let\makeglossary\relax
4090   \renewcommand\makeglossaries[1] []{}%

```

Disable all commands that have no effect after \makeglossaries

```

4091   \@disable@onlypremakeg

```

Allow see key:

```

4092   \let\gls@checkseeallowed\relax

```

Adjust \do@seeglossary. This needs to check for the entry's existence but don't increment associated counter.

```
4093     \renewcommand*{\do@seeglossary}[2]{%
4094         \glsdoifexists{##1}%
4095         {%
4096             \edef\@gls@label{\glsdetoklabel{##1}}%
4097             \edef\@gls@type{\csname glo@\gls@label \type\endcsname}%
4098             \expandafter\DTLifinlist\expandafter{\@gls@type}{\glsxtr@reg@glosslist}%
4099             {\glsxtr@org@do@seeglossary{##1}{##2}}%
4100             {%
4101                 \@@glsxtrwrglossmark
4102                 \protected@write\auxout{}{%
4103                     \string\@gls@reference
4104                     {\gls@type}{\gls@label}{\string\glsseefORMAT##2{}}%
4105                 }%
4106             }%
4107         }%
4108     }%
```

Adjust \@@do@@wrglossary

```
4109     \let\glsxtr@do@@wrglossary\@@do@@wrglossary
4110     \def\@@do@@wrglossary{%
4111         \edef\@gls@type{\csname glo@\gls@label \type\endcsname}%
4112         \expandafter\DTLifinlist\expandafter{\@gls@type}{\glsxtr@reg@glosslist}%
4113         {\glsxtr@do@@wrglossary}%
4114         {\gls@noidxglossary}%
4115     }%
```

Suppress warning about no \makeglossaries

```
4116     \let\warn@nomakeglossaries\relax
4117     \def\warn@noprintglossary{%
4118         \GlossariesWarning{No \string\printglossary\space
4119             or \string\printglossaries\space
4120             found.\^J(Remove \string\makeglossaries\space if you don't want
4121             any glossaries.)\^JThis document will not have a glossary}%
4122     }%
```

Only warn for glossaries not listed.

```
4123     \renewcommand{\gls@noref@warn}[1]{%
4124         \edef\@gls@type{##1}%
4125         \expandafter\DTLifinlist\expandafter{\@gls@type}{\glsxtr@reg@glosslist}%
4126         {%
4127             \GlossariesExtraWarning{Can't use
4128                 \string\printnoidxglossary[type=\@gls@type]}
4129                 when '\@gls@type' is listed in the optional argument of
4130                 \string\makeglossaries}%
4131         }%
4132     }%
4133     \GlossariesWarning{Empty glossary for
4134     \string\printnoidxglossary[type=##1].}
```

```

4135      Rerun may be required (or you may have forgotten to use
4136      commands like \string\gls)%
4137  }%
4138 }%

```

Adjust display number list to check for type:

```

4139 \renewcommand*\glsdisplaynumberlist[1]{%
4140   \expandafter\DTLifinlist\expandafter{\#\#1}{\@glsxtr@reg@glosslist}%
4141   {\@glsxtr@idx@displaynumberlist{\#\#1}}%
4142   {\@glsxtr@noidx@displaynumberlist{\#\#1}}%
4143 }%

```

Adjust entry list:

```

4144 \renewcommand*\glsentrynumberlist[1]{%
4145   \expandafter\DTLifinlist\expandafter{\#\#1}{\@glsxtr@reg@glosslist}%
4146   {\@glsxtr@idx@entrynumberlist{\#\#1}}%
4147   {\@glsxtr@noidx@entrynumberlist{\#\#1}}%
4148 }%

```

Adjust number list loop

```

4149 \renewcommand*\glsnumberlistloop[2]{%
4150   \expandafter\DTLifinlist\expandafter{\#\#1}{\@glsxtr@reg@glosslist}%
4151   {%
4152     \PackageError{glossaries-extra}{\string\glsnumberlistloop\space
4153       not available for glossary '\#\#1'}{}%
4154   }%
4155   {\@glsxtr@noidx@numberlistloop{\#\#1}{\#\#2}}%
4156 }%

```

Only sanitize sort for normal indexing glossaries.

```

4157 \renewcommand*\glsprestandardsort[3]{%
4158   \expandafter\DTLifinlist\expandafter{\#\#2}{\@glsxtr@reg@glosslist}%
4159   {%
4160     \glsdosanitizesort
4161   }%
4162   {%
4163     \ifglssanitizesort
4164       \@gls@noidx@sanitizesort
4165     \else
4166       \@gls@noidx@nosanitizesort
4167     \fi
4168   }%
4169 }%

```

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

```

4170 \renewcommand*\new@glossaryentry[2]{%
4171   \PackageError{glossaries-extra}{Glossary entries must be defined
4172     in the preamble\MessageBreak when you use the optional argument
4173     of \string\makeglossaries}{Either move your definitions to the
4174     preamble or don't use the optional argument of

```

```

4175      \string\makeglossaries}%
4176  }%

```

Only activate sort key for glossaries that aren't listed in #1 (glossary label is stored in `\@glo@type` but this defaults to `\glsdefaulttype` so some expansion is required).

```

4177      \let\@glo@assign@sortkey\@glsxtr@mixed@assign@sortkey
4178      \renewcommand*\{@printgloss@setsort}{%

```

Need to extract just the type value.

```

4179      \expandafter\@glsxtr@gettype\expandafter,\@glsxtr@printglossopts,%
4180          type=\glsdefaulttype,\@end@glsxtr@gettype
4181      \def\@glo@sorttype{\@glo@default@sorttype}%
4182  }%

```

Check automake setting:

```

4183      \ifglsautomake
4184          \renewcommand*\{@gls@doautomake}{%
4185              \@for\@gls@type:=\glsxtr@reg@glosslist\do{%
4186                  \ifdefempty{\@gls@type}{}{\@gls@automake{\@gls@type}}%
4187              }%
4188          }%
4189      \fi

```

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

```

4190      \ifdef\@glo@check@sortallowed{\@glo@check@sortallowed\makeglossaries}{}%
4191      \fi
4192  }%
4193 }%
4194 }

```

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

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

```

4195 \newcommand{\@glsxtr@orgprintglossary}[2]{%
4196   \def\@glo@type{\glsdefaulttype}%

```

Add check here.

```

4197 \def\glossarytitle{%
4198     \ifcsdef{glotype}{\@glo@type}{\@title}{%
4199         \csuse{glotype}{\@glo@type}{\@title}{%
4200             \glossaryname}%
4201     \def\glossarytoctitle{\glossarytitle}%
4202     \let\org@glossarytitle\glossarytitle
4203     \def\glossarystyle{%
4204         \ifx\glossary@default@style\relax
4205             \GlossariesWarning{No default glossary style provided \MessageBreak
4206                 for the glossary '\@glo@type'. \MessageBreak}

```

```

4207      Using deprecated fallback. \MessageBreak
4208      To fix this set the style with \MessageBreak
4209      \string\setglossarystyle\space or use the \MessageBreak
4210      style key=value option}%
4211      \fi
4212  }%
4213 \def\gls@dotocitle{\glssettoctitle{\@glo@type}}%
4214 \let\@org@glossaryentrynumbers\glossaryentrynumbers
4215 \bgroup
4216   \@printgloss@setsort
4217   \setkeys{printgloss}{#1}%
4218   \ifx\glossarytitle\org@glossarytitle
4219   \else
4220     \cslet{@glotype@\@glo@type @title}{\glossarytitle}%
4221   \fi
4222   \let\currentglossary\@glo@type
4223   \let\org@glossaryentrynumbers\glossaryentrynumbers
4224   \let\glsnonextpages\glsnonextpages
4225   \let\glsnextpages\glsnextpages

4226   \glsxtractivenopost
4227   \gls@dotocitle
4228   \glossarystyle
4229   \let\gls@org@glossaryentryfield\glossentry
4230   \let\gls@org@glossarysubentryfield\subglossentry
4231   \renewcommand{\glossentry}[1]{%
4232     \xdef\glscurrententrylabel{\glsdetoklabel{##1}}%
4233     \gls@org@glossaryentryfield{##1}%
4234   }%
4235   \renewcommand{\subglossentry}[2]{%
4236     \xdef\glscurrententrylabel{\glsdetoklabel{##2}}%
4237     \gls@org@glossarysubentryfield{##1}{##2}%
4238   }%
4239   \gls@preglossaryhook
4240   #2%
4241 \egroup
4242 \global\let\glossaryentrynumbers\@org@glossaryentrynumbers
4243 \global\let\warn@noprtingglossary\relax
4244 }

```

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

```

4245 \newcommand*\glsxtractivenopost{}%
4246 \let\nopostdesc\nopostdesc
4247 \let\glsxtrnropostpunc\glsxtr\nopostpunc
4248 }

```

lsxtrnropostpunc

```
4249 \newrobustcmd*\glsxtrnropostpunc{}%
```

sxtr@nopostrpunc Provide a command that works like \nopostrdesc but only switches off the punctuation without suppressing the post-description hook.

```
4250 \newcommand{\@glsxtr@nopostrpunc}{%
4251   \let\@glsxtr@org@postdescription\glspostdescription
4252   \ifglsnopostrdot
4253     \renewcommand{\glspostdescription}{%
4254       \glsnopostrdottrue
4255       \let\glspostdescription\@glsxtr@org@postdescription
4256       \let\glsxtrrestorepostpunc\@glsxtr@restore@postpunc
4257       \glsxtrpostdescription
4258       \@glsxtr@nopostrpunc@postdesc}%
4259   \else
4260     \renewcommand{\glspostdescription}{%
4261       \let\glspostdescription\@glsxtr@org@postdescription
4262       \let\glsxtrrestorepostpunc\@glsxtr@restore@postpunc
4263       \glsxtrpostdescription
4264       \@glsxtr@nopostrpunc@postdesc}%
4265   \fi
4266   \glsnopostrdotfalse
4267 }
```

stpunc@postdesc

```
4268 \newcommand*\@glsxtr@nopostrpunc@postdesc{}
```

estore@postpunc

```
4269 \newcommand*\@glsxtr@restore@postpunc{%
4270   \def\@glsxtr@nopostrpunc@postdesc{%
4271     \glsxtr@org@postdescription
4272     \let\@glsxtr@nopostrpunc@postdesc\@empty
4273     \let\glsxtrrestorepostpunc\@empty
4274   }%
4275 }
```

restorepostpunc Does nothing outside of glossary.

```
4276 \newcommand*\glsxtrrestorepostpunc{}
```

\@printglossary Redefine.

```
4277 \renewcommand{\@printglossary}[2]{%
4278   \def\@glsxtr@printglossopts{\#1}%
4279   \glsxtr@orgprintglossary{\#1}{\#2}%
4280 }
```

Add a key that switches off the entry targets:

```
4281 \define@choicekey{printgloss}{target}
4282 [\@glsxtr@printglossval\@glsxtr@printglossnr]%
4283 {true,false}[true]%
4284 {%
4285   \ifcase\@glsxtr@printglossnr
```

```

4286     \def\@glstarget{\glsdohypertarget}%
4287     \else
4288     \let\@glstarget\@secondoftwo
4289     \fi
4290 }

```

hypernameprefix

```
4291 \newcommand{\@glsxtrhypernameprefix}{}%
```

New to v1.20:

```

4292 \define@key{printgloss}{targetnameprefix}{%
4293   \renewcommand{\@glsxtrhypernameprefix}{#1}%
4294 }

```

```

4295 \define@key{printgloss}{prefix}{%
4296   \renewcommand{\glolinkprefix}{#1}%
4297 }

```

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

```

4298 \let\@glsxtr@org@glsdohypertarget\glsdohypertarget
4299 \renewcommand{\glsdohypertarget}[2]{%
4300   \@glsxtr@org@glsdohypertarget{\glsxtrhypernameprefix#1}{#2}%
4301 }

```

Update \@glstarget to use \def instead being assigned with \let so that it can pick up the new definition and allow any further redefinitions:

```

4302 \ifx\@glstarget\@glsxtr@org@glsdohypertarget
4303   \def\@glstarget{\glsdohypertarget}%
4304 \fi

```

@makeglossaries For the benefit of makeglossaries

```
4305 \newcommand*\@glsxtr@makeglossaries[1]{}%
```

@glsxtr@gettype Get just the type.

```

4306 \def\@glsxtr@gettype#1,type=#2,#3\end@glsxtr@gettype{%
4307   \def\@glo@type{#2}%
4308 }

```

@assign@sortkey Assign the sort key.

```

4309 \newcommand\@glsxtr@mixed@assign@sortkey[1]{%
4310   \edef\@glo@type{\@glo@type}%
4311   \expandafter\DTLifinlist\expandafter{\@glo@type}{\@glsxtr@reg@glosslist}%
4312   {%
4313     \@glo@no@assign@sortkey{#1}%
4314   }%
4315   {%
4316     \@@glo@assign@sortkey{#1}%
4317   }%
4318 }%

```

Display number list for the regular version:

```
splaynumberlist
4319 \let\@glsxtr@idx@displaynumberlist\glsdisplaynumberlist
```

Display number list for the “noidx” version:

```
splaynumberlist
4320 \newcommand*{\@glsxtr@noidx@displaynumberlist}[1]{%
4321   \letcs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@locist}%
4322   \ifdef{\gls@locist}
4323   {%
4324     \def{\gls@noidxlocist@sep}{%
4325       \def{\gls@noidxlocist@sep}{%
4326         \def{\gls@noidxlocist@sep}{%
4327           \glsnumlistsep
4328         }%
4329         \def{\gls@noidxlocist@finalsep}{\glsnumlistlastsep}%
4330       }%
4331     }%
4332     \def{\gls@noidxlocist@finalsep}{}%
4333     \def{\gls@noidxlocist@prev}{}%
4334     \forlistloop{\glsnoidxdisplaylocishandler}{\gls@locist}%
4335     \gls@noidxlocist@finalsep
4336     \gls@noidxlocist@prev
4337   }%
4338 }
4339 \glsxtrundeftag
4340 \glsdoifexists{#1}%
4341 {%
4342   \GlossariesWarning{Missing location list for '#1'. Either
4343     a rerun is required or you haven't referenced the entry.}%
4344 }%
4345 }%
4346 }%
4347 }
```

And for the number list loop:

```
@numberlistloop
4348 \newcommand*{\@glsxtr@noidx@numberlistloop}[3]{%
4349   \letcs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@locist}%
4350   \let{\gls@org@glsnoidxdisplayloc}{\glsnoidxdisplayloc}
4351   \let{\gls@org@glsseefORMAT}{\glsseefORMAT}
4352   \let{\glsnoidxdisplayloc#2\relax}{\glsnoidxdisplayloc#2\relax}
4353   \let{\glsseefORMAT#3\relax}{\glsseefORMAT#3\relax}
4354   \ifdef{\gls@locist}
4355   {%
4356     \forlistloop{\glsnoidxnumberlistloophandler}{\gls@locist}%
4357   }%
```

```

4358  {%
4359    \glsxtrundeftag
4360    \glsdoifexists{#1}%
4361    {%
4362      \GlossariesWarning{Missing location list for ‘##1’. Either
4363        a rerun is required or you haven’t referenced the entry.}%
4364    }%
4365  }%
4366 \let\glsnoidxdisplayloc\@gls@org@glsnoidxdisplayloc
4367 \let\glsseefORMAT\@gls@org@glsseefORMAT
4368 }%

```

Same for entry number list.

entrynumberlist

```

4369 \newcommand*{\@glsxtr@noidx@entrynumberlist}[1]{%
4370   \let\cs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@loclist}%
4371   \ifdef\@gls@loclist
4372   {%
4373     \glsnoidxloclist{\@gls@loclist}%
4374   }%
4375   {%
4376     \glsxtrundeftag
4377     \glsdoifexists{#1}%
4378     {%
4379       \GlossariesWarning{Missing location list for ‘#1’. Either
4380         a rerun is required or you haven’t referenced the entry.}%
4381     }%
4382   }%
4383 }%

```

entrynumberlist

```
4384 \newcommand*{\@glsxtr@idx@entrynumberlist}[1]{\glsentrynumberlist{#1}}
```

x@grouptitle Patch.

```

4385 \renewcommand*{\@gls@noidx@grouptitle}[2]{%
4386   \protected@edef\@glsxtr@titlelabel{#1}%
4387   \ifdefvoid\@glsxtr@titlelabel
4388   {}%
4389   {%
4390     \protected@edef\@glsxtr@titlelabel{\csuse{\glsxtr@grouptitle@#1}}%
4391   }%
4392   \ifdefvoid{\@glsxtr@titlelabel}%
4393   {}%
4394   \DTLifint{#1}%
4395   {}%
4396   \ifnum#1<256\relax
4397     \edef#2{\char#1\relax}%

```

```

4398     \else
4399         \edef#2{#1}%
4400     \fi
4401 }
4402 {
4403     \ifcsundef{#1groupname}%
4404     {\def#2{#1}%
4405     {\letcs#2{#1groupname}}%
4406     }%
4407 }
4408 {
4409     \let#2\glsxtr@titlelabel
4410 }
4411 }

g@getgroupitle Save original definition of \@gls@getgroupitle
4412 \let\glsxtr@org@gotgroupitle@gls@getgroupitle

trgetgroupitle 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.
4413 \newrobustcmd{\glsxtr@getgroupitle}[2]{%
4414     \protected@edef\glsxtr@titlelabel{\glsxtr@groupitle@#1}%
4415     \onelevel@sanitize\glsxtr@titlelabel
4416     \ifcsdef{\glsxtr@titlelabel}{%
4417         {\letcs{#2}{\glsxtr@titlelabel}}%
4418         {\glsxtr@org@gotgroupitle{#1}{#2}}%
4419     }%
4420 \let\@gls@getgroupitle\glsxtr@getgroupitle

trsetgroupitle Sets the title for the given group label.
4421 \newcommand{\glsxtr@setgroupitle}[2]{%
4422     \protected@edef\glsxtr@titlelabel{\glsxtr@groupitle@#1}%
4423     \onelevel@sanitize\glsxtr@titlelabel
4424     \protected@csxdef{\glsxtr@titlelabel}{#2}%
4425 }

alsetgroupitle As above put only locally defines the title.
4426 \newcommand{\glsxtr@localsetgroupitle}[2]{%
4427     \protected@edef\glsxtr@titlelabel{\glsxtr@groupitle@#1}%
4428     \onelevel@sanitize\glsxtr@titlelabel
4429     \protected@csedef{\glsxtr@titlelabel}{#2}%
4430 }

\glsnavigation Redefine to use new user-level command.
4431 \renewcommand*\glsnavigation{%
4432     \def\gls@between{}%
4433     \ifcsundef{@gls@hypergrouplist@\glo@type}{%
4434         {%

```

```

4435   \def\@gls@list{}%
4436 }%
4437 {%
4438   \expandafter\let\expandafter\@gls@list
4439     \csname @gls@hypergrouplist@\@glo@type\endcsname
4440 }%
4441 \@for\@gls@tmp:=\@gls@list\do{%
4442   \gls@between
4443   \glsxtrgetgrouptitle{\@gls@tmp}{\@gls@grptitle}%
4444   \glsnavhyperlink{\@gls@tmp}{\@gls@grptitle}%
4445   \let\@gls@between\glshypernavsep
4446 }%
4447 }

```

`@noidx@glossary`

```

4448 \renewcommand*{\@print@noidx@glossary}{%
4449   \ifcsdef{@glsref@\@glo@type}%
4450   {%
4451     \ifcsdef{@glo@sortmacro@\@glo@sorttype}%
4452     {%
4453       \csuse{@glo@sortmacro@\@glo@sorttype}{\@glo@type}%
4454     }%
4455     {%
4456       \PackageError{glossaries}{Unknown sort handler '\@glo@sorttype'}{}%
4457     }%
4458     \glossarysection[\glossarytoctitle]{\glossarytitle}%
4459     \glossarypreamble

```

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

```

4460   \def\@gls@currentlettergroup{}%
4461   \begin{theglossary}%
4462     \glossaryheader
4463     \glsresetentrylist
4464     \forlistcsloop{\@gls@noidx@do}{\@glsref@\@glo@type}%
4465     \end{theglossary}%
4466     \glossarypostamble
4467   }%
4468 }

```

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

```

4469   \glsxtrifemptyglossary{\@glo@type}%
4470   {}%
4471   {\glossarysection[\glossarytoctitle]{\glossarytitle}}%
4472   \gls@noref@warn{\@glo@type}%
4473 }%
4474 }

```

`noidxdisplayloc` Patch to check for range formations.

```

4475 \renewcommand*{\glsnoidxdisplayloc}[4]{%
4476   \setentrycounter[#1]{#2}%
4477   \glsxtr@display@loc#3\empty\end@glsxtr@display@loc{#4}%
4478 }

xtr@display@loc Patch to check for range formations.
4479 \def\glsxtr@display@loc#1#2\end@glsxtr@display@loc#3{%
4480   \ifx#1(\relax
4481     \glsxtrdisplaystartloc{#2}{#3}%
4482   \else
4483     \ifx#1)\relax
4484       \glsxtrdisplayendloc{#2}{#3}%
4485     \else
4486       \glsxtrdisplaysingleloc{#1#2}{#3}%
4487     \fi
4488   \fi
4489 }

```

isplaysingleloc Single location.

```

4490 \newcommand*{\glsxtrdisplaysingleloc}[2]{%
4491   \csuse{#1}{#2}%
4492 }

```

By default the range identifiers are simply ignored. A custom list loop handler can be defined by the user to test for ranges by checking the definition of \glsxtrlocrengefmt.

displaystartloc Start of a location range.

```

4493 \newcommand*{\glsxtrdisplaystartloc}[2]{%
4494   \edef\glsxtrlocrengefmt{#1}%
4495   \ifx\glsxtrlocrengefmt\empty
4496     \def\glsxtrlocrengefmt{\glsnumberformat}%
4497   \fi
4498   \expandafter\glsxtrdisplaysingleloc
4499   \expandafter{\glsxtrlocrengefmt}{#2}%
4500 }

```

trdisplayendloc End of a location range.

```

4501 \newcommand*{\glsxtrdisplayendloc}[2]{%
4502   \edef\@glsxtr@tmp{#1}%
4503   \ifdefempty{\@glsxtr@tmp}{\def\@glsxtr@tmp{\glsnumberformat}{}}
4504   \ifx\glsxtrlocrengefmt\@glsxtr@tmp
4505   \else
4506     \GlossariesExtraWarning{Mismatched end location range
4507       (start=\glsxtrlocrengefmt, end=\@glsxtr@tmp)}%
4508   \fi
4509   \expandafter\glsxtrdisplayendlohook\expandafter{\@glsxtr@tmp}{#2}%
4510   \expandafter\glsxtrdisplaysingleloc
4511   \expandafter{\glsxtrlocrengefmt}{#2}%
4512   \def\glsxtrlocrengefmt{}%
4513 }

```

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

```
4514 \newcommand*{\glsxtrdisplayendlochook}[2]{}
```

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

```
4515 \newcommand*{\glsxtrlocrangefmt}{}{}
```

setentrycounter Adjust \setentrycounter to save the original prefix.

```
4516 \renewcommand*{\setentrycounter}[2][]{%
4517   \def\glsxtrcounterprefix{\#1}%
4518   \ifx\glsxtrcounterprefix\empty
4519     \def\@glo@counterprefix{.}%
4520   \else
4521     \def\@glo@counterprefix{.\#1.}%
4522   \fi
4523   \def\glsentrycounter{\#2}%
4524 }
```

ls@removespaces Redefine to allow adjustments to location hyperlink.

```
4525 \def\@gls@removespaces#1 #2\@nil{%
4526   \toks@=\expandafter{\the\toks@#1}%
4527   \ifx\\#2\\%
4528     \edef\x{\the\toks@}%
4529     \ifx\x\empty
4530   \else
```

Expand location (just in case \toks@ is needed for something else).

```
4531   \expandafter\glsxtrlocationhyperlink\expandafter
4532     \glsentrycounter\expandafter\@glo@counterprefix\expandafter{\the\toks@}%
4533   \fi
4534 \else
4535   \@gls@ReturnAfterFi{%
4536     \@gls@removespaces#2\@nil
4537   }%
4538 \fi
4539 }
```

locationhyperlink \glsxtrlocationhyperlink{<counter>}{<prefix>}{<location>}

```
4540 \newcommand*{\glsxtrlocationhyperlink}[3]{%
4541   \ifdefvoid\glsxtrspplocationurl
4542   {%
4543     \GlsXtrInternalLocationHyperlink{\#1}{\#2}{\#3}%
4544   }%
4545   {%
4546     \hyperref{\glsxtrspplocationurl}{\#1\#2\#3}{\#3}%
4547   }%
4548 }
```

```

supphypernumber
4549 \newcommand{\glsxtrsupphypernumber}[1]{%
4550  {%
4551    \glshasattribute{\glscurrententrylabel}{externalallocation}%
4552  {%
4553    \def\glsxtrsupplocationurl{%
4554      \glsgetattribute{\glscurrententrylabel}{externalallocation}}%
4555  }%
4556  {%
4557    \def\glsxtrsupplocationurl{}%
4558  }%
4559  \glshypernumber{#1}%
4560 }%
4561 }

```

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

```

@print@glossary
4562 \renewcommand{\@print@glossary}{%
4563  \makeatletter
4564  \cinput{\jobname.\csname\glototype@\glo@type\in\endcsname}%
4565  \IfFileExists{\jobname.\csname\glototype@\glo@type\in\endcsname}{}{%
4566  }%
4567  {\glsxtrNoGlossaryWarning{\glo@type}}%
4568  \ifglsxindy
4569    \ifcsundef{\xdy@\glo@type\language}{%
4570      {%
4571        \edef\@do@auxoutstuff{%
4572          \noexpand\AtEndDocument{%
4573            \noexpand\immediate\noexpand\write\auxout{%
4574              \string\providecommand\string\@xdylanguage[2]{}{}}%
4575            \noexpand\immediate\noexpand\write\auxout{%
4576              \string\@xdylanguage{\glo@type}\{\xdy@main@language\}}%
4577          }%
4578        }%
4579      }%
4580    }%
4581    \edef\@do@auxoutstuff{%
4582      \noexpand\AtEndDocument{%
4583        \noexpand\immediate\noexpand\write\auxout{%
4584          \string\providecommand\string\@xdylanguage[2]{}{}}%
4585        \noexpand\immediate\noexpand\write\auxout{%
4586          \string\@xdylanguage{\glo@type}\{\csname\xdy@\glo@type\language\endcsname\}}%
4587        }%
4588      }%
4589    }%
4590  }%
4591  \@do@auxoutstuff

```

```

4592 \edef\@do@auxoutstuff{%
4593   \noexpand\AtEndDocument{%
4594     \noexpand\immediate\noexpand\write\@auxout{%
4595       \string\providetcommand\string@gls@codepage[2]{}{}}%
4596     \noexpand\immediate\noexpand\write\@auxout{%
4597       \string@gls@codepage{\@glo@type}{\gls@codepage}}{}}%
4598   }%
4599 }%
4600 \@do@auxoutstuff
4601 \fi
4602 \renewcommand*{\@warn@nomakeglossaries}{%
4603   \GlossariesWarningNoLine{\string\makeglossaries\space
4604   hasn't been used,^^Jthe glossaries will not be updated}{}}%
4605 }%
4606 }

```

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

`\GlsWarningHead` Header message.

```

4607 \newcommand{\GlsXtrNoGlsWarningHead}[2]{%
4608   This document is incomplete. The external file associated with
4609   the glossary '#1' (which should be called \texttt{\#2})
4610   hasn't been created.%}
4611 }

```

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

```

4612 \newcommand{\GlsXtrNoGlsWarningEmptyStart}{%
4613   This has probably happened because there are no entries defined
4614   in this glossary.%}
4615 }

```

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

```

4616 \newcommand{\GlsXtrNoGlsWarningEmptyMain}{%
4617   If you don't want this glossary,
4618   add \texttt{\{nomain\}} to your package option list when you load
4619   \texttt{\{glossaries-extra.sty\}}. For example: %}
4620 }

```

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

```

4621 \newcommand{\GlsXtrNoGlsWarningEmptyNotMain}[1]{%
4622   Did you forget to use \texttt{\{type=\#1\}} when you defined your
4623   entries? If you tried to load entries into this glossary with
4624   \texttt{\{loadglsentries\}} did you remember to use
4625   \texttt{\{[#1]\}} as the optional argument? If you did, check that
4626   the definitions in the file you loaded all had the type set
4627   to \texttt{\{glsdefaulttype\}}.%}
4628 }

```

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

```
4629 \newcommand{\GlsXtrNoGlsWarningCheckFile}[1]{%
4630   Check the contents of the file \texttt{\#1}. If
4631   it's empty, that means you haven't indexed any of your entries in this
4632   glossary (using commands like \texttt{\string\gls} or
4633   \texttt{\string\glsadd}) so this list can't be generated.
4634   If the file isn't empty, the document build process hasn't been
4635   completed.%
```

```
4636 }
```

WarningAutoMake Message when automake option has been used.

```
4637 \newcommand{\GlsXtrNoGlsWarningAutoMake}[1]{%
4638   You may need to rerun \LaTeX. If you already have, it may be that
4639   \TeX's shell escape doesn't allow you to run
4640   \texttt{\ifglsxindy xindy\else makeindex\fi}. Check the
4641   transcript file \texttt{\jobname.log}. If the shell escape is
4642   disabled, try one of the following:
4643
4644 \begin{itemize}
4645   \item Run the external (Lua) application:
4646
4647     \texttt{\makeglossaries-lite.lua \string"\jobname\string"}
4648
4649   \item Run the external (Perl) application:
4650
4651     \texttt{\makeglossaries \string"\jobname\string"}
4652 \end{itemize}
4653
4654 Then rerun \LaTeX\ on this document.
4655 \GlossariesExtraWarning{Rerun required to build the
4656 glossary '#1' or check \TeX's shell escape allows
4657 you to run \texttt{\ifglsxindy xindy\else makeindex\fi}}%
```

```
4658 }
```

WarningMisMatch Mismatching \makenoidxglossaries.

```
4659 \newcommand{\GlsXtrNoGlsWarningMisMatch}{%
4660   You need to either replace \texttt{\string\makenoidxglossaries}
4661   with \texttt{\string\makeglossaries} or replace
4662   \texttt{\string\printglossary} (or \texttt{\string\printglossaries}) with
4663   \texttt{\string\printnoidxglossary}
4664   (or \texttt{\string\printnoidxglossaries}) and then rebuild
4665   this document.%
```

```
4666 }
```

arningBuildInfo Build advice.

```
4667 \newcommand{\GlsXtrNoGlsWarningBuildInfo}{%
4668   Try one of the following:
4669 \begin{itemize}
4670   \item Add \texttt{automake} to your package option list when you load
```

```

4671      \texttt{\glsopenbrace glossaries-extra.sty\glsclosebrace}. For example:
4672
4673      \texttt{\usepackage[automake]\glsopenbrace glossaries-extra\glsclosebrace}
4674
4675      \item Run the external (Lua) application:
4676
4677      \texttt{\makeglossaries-lite.lua \jobname}
4678
4679      \item Run the external (Perl) application:
4680
4681      \texttt{\makeglossaries \jobname}
4682
4683 \end{itemize}
4684
4685 Then rerun \LaTeX\ on this document.%
4686 }

```

`trRecordWarning` Paragraph for `record=only`.

```

4687 \newcommand{\GlsXtrRecordWarning}[1]{%
4688   \texttt{\printglossary} doesn't work
4689   with the \texttt{record=only} package option
4690   use\par\texttt{\printunsrtglossary[type=\#1]}\par
4691   instead (or change the package option).%
4692 }

```

`oGlsWarningTail` Final paragraph.

```

4693 \newcommand{\GlsXtrNoGlsWarningTail}{%
4694   This message will be removed once the problem has been fixed.%
4695 }

```

`GlsWarningNoOut` No out file created. Build advice.

```

4696 \newcommand{\GlsXtrNoGlsWarningNoOut}[1]{%
4697   The file \texttt{\#1} doesn't exist. This most likely means you haven't used
4698   \texttt{\makeglossaries} or you have used
4699   \texttt{\nofiles}. If this is just a draft version of the
4700   document, you can suppress this message using the
4701   \texttt{nomissingglostext} package option.%
4702 }

```

`glossarywarning`

```

4703 \newcommand*{\@glsxtr@defaultnoglossarywarning}[1]{%
4704   \glossarysection[\glossarytoctitle]{\glossarytitle}
4705   \GlsXtrNoGlsWarningHead{\#1}{\jobname.\csname @glotype@\gloctype @in\endcsname}
4706   \par
4707   \glsxtrifemptyglossary{\#1}%
4708   {%
4709     \GlsXtrNoGlsWarningEmptyStart\space
4710     \ifthenelse{\equal{\#1}{main}}{\GlsXtrNoGlsWarningEmptyMain\par
4711       \medskip

```

```

4712     \noindent\texttt{\{string\usepackage[nomain\ifglsacronym ,acronym\fi]\%
4713         \glsopenbrace glossaries-extra\glsclosebrace\}
4714         \medskip
4715     }%
4716     {\GlsXtrNoGlsWarningEmptyNotMain{\#1}}%
4717 }%
4718 {%
4719     \IfFileExists{\jobname.\csname @glotype@\@glo@type @out\endcsname}%
4720     {%
4721         \GlsXtrNoGlsWarningCheckFile
4722             {\jobname.\csname @glotype@\@glo@type @out\endcsname}%
4723
4724         \ifglsautomake
4725
4726         \GlsXtrNoGlsWarningAutoMake{\#1}%
4727
4728     \else
4729
4730         \ifthenelse{\equal{\#1}{main}}%
4731     {%
4732         \GlsXtrNoGlsWarningEmptyMain\par
4733         \medskip
4734         \noindent\texttt{\{string\usepackage[nomain]\%
4735             \glsopenbrace glossaries-extra\glsclosebrace\}
4736             \medskip
4737     }%
4738     {}%
4739
4740     \ifdef{\makeglossaries}{no}{makeglossaries}%
4741     {%
4742         \GlsXtrNoGlsWarningMisMatch
4743     }%
4744     {%
4745         \GlsXtrNoGlsWarningBuildInfo
4746     }%
4747     \fi
4748 }%
4749 {%
4750     \GlsXtrNoGlsWarningNoOut
4751         {\jobname.\csname @glotype@\@glo@type @out\endcsname}%
4752 }%
4753 }%
4754 \par
4755 \GlsXtrNoGlsWarningTail
4756 }

```

glossarywarning Warn about using `\printglossary` with record

```

4757 \newcommand*{\glsxtr@record@glossarywarning}[1]{%
4758     \GlossariesExtraWarning{\string\printglossary\space doesn't work\MessageBreak

```

```

4759 with record=only package option\MessageBreak(use
4760 \string\printunsrtglossary[type=#1])\MessageBreak
4761 instead (or change the package option)%
4762 \glossarysection[\glossarytoctitle]{\glossarytitle}
4763 \GlsXtrRecordWarning{#1}
4764 \GlsXtrNoGlsWarningTail
4765 }

```

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

xtrresourcefile Since it's dangerous for an external application to create a file with a .tex extension, as from v1.11 this enforces a .glstex extension to avoid conflict.

```
4766 \newcommand*{\glsxtrresourcefile}[2][]{%
```

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

```

4767 \disable@keys{glossaries-extra.sty}{record}%
4768 \glsxtr@writefields
4769 \protected@write\auxout{\glsxtrresourceinit}{\string\glsxtr@resource{#1}{#2}}%
4770 \let\@glsxtr@org@see@noindex\gls@see@noindex
4771 \let\@gls@see@noindex\relax
4772 \IfFileExists{#2.glstex}%
4773 {%

```

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

```

4774 \edef\@bibgls@restoreat{\noexpand\catcode\noexpand`\noexpand\@=\number\catcode`\@}%
4775 \makeatletter
4776 \Cinput{#2.glstex}%
4777 \@bibgls@restoreat

```

If the record=nameref option has been set, check if this is supported by the installed version of **bib2gls**.

```

4778 \glsxtr@check@bibgls@nameref
4779 }%
4780 {%
4781 \GlossariesExtraWarning{No file '#2.glstex'}%
4782 }%
4783 \let\@gls@see@noindex\glsxtr@org@see@noindex
4784 }%
4785 \onlypreamble\glsxtrresourcefile

```

@bibgls@nameref This will only warn after **bib2gls** has created the .glstex file, but there's way to check before.

```

4786 \newcommand{\glsxtr@check@bibgls@nameref}{}%
4787 \ifx\glsxtr@record@setting\glsxtr@record@setting@nameref
4788 \ifdef\bibglshrefchar
4789 {}%
4790 {%
4791 \GlossariesExtraWarning{record=nameref requires at least
4792 version 1.8 of bib2gls}%
4793 }%

```

```

4794 \fi
4795 \let\@glsxtr@check@bibgls@nameref\relax
4796 }

xtrresourceinit Code used during the protected write operation.
4797 \newcommand*{\glsxtrresourceinit}{}{}

trresourcecount
4798 \newcount\glsxtrresourcecount

trLoadResources Short cut that uses \glsxtrresourcefile with \jobname as the mandatory argument.
4799 \newcommand*{\GlsXtrLoadResources}[1][]{%
4800   \ifnum\glsxtrresourcecount=0\relax
4801     \glsxtrresourcefile[#1]{\jobname}%
4802   \else
4803     \glsxtrresourcefile[#1]{\jobname-\the\glsxtrresourcecount}%
4804   \fi
4805   \advance\glsxtrresourcecount by 1\relax
4806 }

glsxtr@resource
4807 \newcommand*{\glsxtr@resource}[2]{}{}

\glsxtr@fields
4808 \newcommand*{\glsxtr@fields}[1]{}{}

xtr@texencoding
4809 \newcommand*{\glsxtr@texencoding}[1]{}{}

\glsxtr@langtag
4810 \newcommand*{\glsxtr@langtag}[1]{}{}

@pluralsuffixes
4811 \newcommand*{\glsxtr@pluralsuffixes}[4]{}{}

tr@shortcutsval
4812 \newcommand*{\glsxtr@shortcutsval}[1]{}{}

sxtr@linkprefix
4813 \newcommand*{\glsxtr@linkprefix}[1]{}{}

xtr@writefields This information only needs to be written once, so disable it after it's been used.
4814 \newcommand*{\glsxtr@writefields}{}{%

```

```

4815 \protected@write\@auxout{%
4816   {\string\providecommand*\{\string\glsxtr@fields}[1]{}}%
4817 \protected@write\@auxout{%
4818   {\string\providecommand*\{\string\glsxtr@resource}[2]{}}%
4819 \protected@write\@auxout{%
4820   {\string\providecommand*\{\string\glsxtr@pluralsuffixes}[4]{}}%
4821 \protected@write\@auxout{%
4822   {\string\providecommand*\{\string\glsxtr@shortcutsval}[1]{}}%
4823 \protected@write\@auxout{%
4824   {\string\providecommand*\{\string\glsxtr@linkprefix}[1]{}}%
4825 \protected@write\@auxout{}{\string\glsxtr@fields{\@gls@keymap}}%
```

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`.

```

4832 \ifdef\CurrentTrackedLanguageTag
4833 {%
4834   \protected@write\@auxout{}{%
4835     \string\glsxtr@langtag{\CurrentTrackedLanguageTag}}%
4836 }%
4837 {%
4838 \protected@write\@auxout{}{\string\glsxtr@pluralsuffixes
4839   {\glspluralsuffix}{\abbrvpluralsuffix}{\acrpluralsuffix}}%
4840   {\glsxtrabbrvpluralsuffix}}%
4841 \ifdef\inputencodingname
4842 {%
4843   \protected@write\@auxout{}{\string\glsxtr@texencoding{\inputencodingname}}%
4844 }%
4845 {%
```

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.)

```

4846   @ifpackageloaded{fontspec}%
4847     {\protected@write\@auxout{}{\string\glsxtr@texencoding{utf8}}}}%
4848   {}%
4849 }%
4850 \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.

```

4851 \AtBeginDocument
4852   {\protected@write\@auxout{}{\string\glsxtr@linkprefix{\glolinkprefix}}}}%
4853 \let\glsxtr@writefields\relax
```

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

```
4854 \ifglsautomake
4855   \IfFileExists{\jobname.aux}{%
4856     {\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.

```
4857 \ifx\@gls@doautomake\@gls@doautomake@err
4858   \let\@gls@doautomake\relax
4859   \fi
4860 \fi
4861 }
```

do@automake@err

```
4862 \newcommand*{\@gls@doautomake@err}{%
4863   \PackageError{glossaries}{You must use
4864   \string\makeglossaries\space with automake=true}
4865   {%
4866     Either remove the automake=true setting or
4867     add \string\makeglossaries\space to your document preamble.%
4868   }%
4869 }
```

Allow locations specific to a particular counter to be recorded.

\glsxtr@record

```
4870 \newcommand*{\glsxtr@record}[5]{}
```

@record@nameref Used with record=nameref to include current label information.

```
4871 \newcommand*{\glsxtr@record@nameref}[8]{}
```

r@counterrecord Aux file command.

```
4872 \newcommand*{\glsxtr@counterrecord}[3]{%
4873   \glsxtrfieldlistgadd{\#1}{record.\#2}{\#3}%
4874 }
```

unterrecordhook Hook used by \glsxtr@dorecord.

```
4875 \newcommand*{\glsxtr@counterrecordhook}{}%
```

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

```
4876 \newcommand*{\GlsXtrRecordCounter}[1]{%
4877   \@@glsxtr@recordcounter{\#1}%
4878 }
4879 \onlypreamble\GlsXtrRecordCounter
```

```

doccounterrecord
4880 \newcommand*{\@glsxstr@docounterrecord}[1]{%
4881   \protected@write\@auxout{}{\string\glsxstr@counterrecord
4882     {\@gls@label}{#1}{\csuse{the#1}}}}%
4883 }

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.
4884 \newcommand*{\glsxtrglossentry}[1]{%
4885   \glsxtrtitleorpdforheading
4886   {\@glsxtrglossentry{#1}}%
4887   {\glsentryname{#1}}%
4888   {\glsxtrheadname{#1}}%
4889 }

lsxtrglossentry Another test is needed in case \glsxtrglossentry has been written to the table of contents.
4890 \newrobustcmd*{\@glsxtrglossentry}[1]{%
4891   \glsxtrtitleorpdforheading
4892   {%
4893     \glsdoifexists{#1}%
4894     {%
4895       \begingroup
4896         \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
4897         \edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
4898         \ifglshasparent{#1}%
4899           {\GlsXtrStandaloneSubEntryItem{#1}}%
4900           {\glsentryitem{#1}}%
4901           \GlsXtrStandaloneEntryName{#1}%
4902       \endgroup
4903     }%
4904   }%
4905   {\glsentryname{#1}}%
4906   {\glsxtrheadname{#1}}%
4907 }

daloneEntryName
4908 \newcommand*{\GlsXtrStandaloneEntryName}[1]{%
4909   \glstarget{#1}{\glossentryname{#1}}%
4910 }

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.)

```

```

4911 \newcommand{\GlsXtrStandaloneGlossaryType}{\glsentrytype{\glscurrententrylabel}}}

oneSubEntryItem Used for sub-entries in standalone format. The argument is the entry's label.
4912 \newcommand*{\GlsXtrStandaloneSubEntryItem}[1]{%
4913   \GlsXtrIfFieldEqNum{level}{#1}{1}{\glssubentryitem{#1}}{}%
4914 }

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.
4915 \newcommand*{\glsxtrglossentryother}[3]{%
4916   \ifstrempty{#1}{%
4917     {%
4918       \ifcsdef{glsxtrhead#3}{%
4919         {%
4920           \glsxtrtitleorpdforheading
4921           {\@glsxtrglossentryother{#2}{#3}{#1}}%
4922           {\@gls@entry@field{#2}{#3}}%
4923           {\csuse{glsxtrhead#3}{#2}}%
4924         }%
4925       {%
4926         \glsxtrtitleorpdforheading
4927           {\@glsxtrglossentryother{#2}{#3}{#1}}%
4928           {\@gls@entry@field{#2}{#3}}%
4929           {\@gls@entry@field{\NoCaseChange{#2}}{#3}}%
4930         }%
4931       }%
4932     {%
4933       \glsxtrtitleorpdforheading
4934           {\@glsxtrglossentryother{#2}{#3}{#1}}%
4935           {\@gls@entry@field{#2}{#3}}%
4936           {#1}}%
4937     }%
4938   }

```

glossentryother As \glsxtrglossentry but uses a different field.

```

4939 \newrobustcmd*{\@glsxtrglossentryother}[3]{%
4940   \glsxtrtitleorpdforheading
4941   {%
4942     \glsdoifexists{#1}{%
4943       {%
4944         \begingroup
4945           \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
4946           \edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
4947           \ifglshasparent{#1}{%
4948             {\GlsXtrStandaloneSubEntryItem{#1}}%
4949             {\glsentryitem{#1}}%
4950             \GlsXtrStandaloneEntryOther{#1}}%

```

```

4951     \endgroup
4952   }%
4953 }%
4954 {\@gls@entry@field{#1}{#2}}%
4955 {#3}%
4956 }

```

`aloneEntryOther`

```

4957 \newcommand*{\GlsXtrStandaloneEntryOther}[2]{%
4958   \glstarget{#1}{\glossentrynameother{#1}{#2}}%
4959 }

```

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

```

4960 \newcommand*{\printunsrtglossary}{%
4961   \@ifstar\s@printunsrtglossary\@printunsrtglossary
4962 }

```

`ntunsrtglossary` Unstarred version.

```

4963 \newcommand*{\@printunsrtglossary}[1][]{%
4964   \@printglossary{type=\glsdefaulttype,#1}{\@print@unsrt@glossary}%
4965 }

```

`ntunsrtglossary` Starred version.

```

4966 \newcommand*{\s@printunsrtglossary}[2][]{%
4967   \begingroup
4968   #2%
4969   \@printglossary{type=\glsdefaulttype,#1}{\@print@unsrt@glossary}%
4970   \endgroup
4971 }

```

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

```

4972 \newcommand*{\printunsrtglossaries}{%
4973   \forallglossaries{\@glo@type}{\printunsrtglossary[type=\@glo@type]}%
4974 }

```

`@unsrt@glossary`

```

4975 \newcommand*{\@print@unsrt@glossary}{%
4976   \glossarysection[\glossarytoctitle]{\glossarytitle}%
4977   \glossarypreamble
      check for empty list
4978   \glsxtrifemptyglossary{\@glo@type}%
4979   {%
4980     \GlossariesExtraWarning{No entries defined in glossary '\@glo@type'}%
4981   }%
4982   {%

```

```

4983 \key@ifundefined{glossentry}{group}%
4984 {\let\@gls@getgroupitle\@gls@noidx@getgroupitle}%
4985 {\let\@gls@getgroupitle\@glsxtr@unsrt@getgroupitle}%
4986 \def\@gls@currentlettergroup{}%

```

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

```

4987 \def\@glsxtr@doglossary{%
4988   \begin{theglossary}%
4989     \glossaryheader
4990     \glsresetentrylist
4991   }%
4992   \expandafter\for\expandafter\glscurrententrylabel\expandafter
4993     :\expandafter=\csname glolist@\@glo@type\endcsname\do{%
4994       \ifdefempty{\glscurrententrylabel}%
4995         {}%
4996       {}%

```

Provide a hook (for example to measure width).

```

4997 \let\glsxtr@process\@firstofone
4998 \let\printunsrtglossaryskipentry
4999   \glsxtr@printunsrtglossaryskipentry
5000 \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%

```

Don't check group for child entries.

```

5001 \glsxtr@process
5002 {%
5003   \ifglshasparent{\glscurrententrylabel}{}%
5004   {%
5005     \glsxtr@checkgroup\glscurrententrylabel
5006     \expandafter\appto\expandafter\@glsxtr@doglossary\expandafter
5007       {\@glsxtr@groupheading}%
5008   }%
5009   \eappto\@glsxtr@doglossary{%
5010     \noexpand\@printunsrt@glossary@handler{\glscurrententrylabel}}%
5011   {}%
5012   {}%
5013 }%
5014 \appto\@glsxtr@doglossary{\end{theglossary}}%
5015 \printunsrtglossarypredoglossary
5016 \glsxtr@doglossary
5017 {}%
5018 \glossarypostamble
5019 }

```

entryprocesshook

```
5020 \newcommand*\printunsrtglossaryentryprocesshook}[1]{}
```

ossaryskipentry

```

5021 \newcommand*\printunsrtglossaryskipentry}{%
5022   \PackageError{glossaries-extra}{\string\printunsrtglossaryskipentry\space}
```

```

5023 can only be used within \string\printunsrtglossaryentryprocesshook}{}%
5024 }

ntryprocesshook
5025 \newcommand*{\@glsxtr@printunsrtglossaryskipentry}{%
5026   \let\glsxtr@process\@gobble
5027 }

rypredoglossary
5028 \newcommand*{\printunsrtglossarypredoglossary}{}}

lossary@handler
5029 \newcommand{\@printunsrt@glossary@handler}[1]{%
5030   \xdef\glscurrententrylabel{#1}%
5031   \printunsrtglossaryhandler\glscurrententrylabel
5032 }

glossaryhandler
5033 \newcommand{\printunsrtglossaryhandler}[1]{%
5034   \glsxtrunsrtdo{#1}%
5035 }

```

`\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.

```

5036 \newrobustcmd*{\glsxtriflabelinlist}[4]{%
5037   \protected@edef\glsxtr@doiflabelinlist{\noexpand@gls@ifinlist{#1}{#2}}%
5038   @glsxtr@doiflabelinlist{#3}{#4}%
5039 }

```

```

srtglossaryunit
5040 \newcommand{\print@op@unsrtglossaryunit}[2][]{%
5041   \s@printunsrtglossary[type=\glsdefaulttype,#1]{%
5042     \printunsrtglossaryunitsetup{#2}%
5043   }%
5044 }

```

```

ossaryunitsetup
5045 \newcommand*{\printunsrtglossaryunitsetup}[1]{%
5046   \renewcommand{\printunsrtglossaryhandler}[1]{%
5047     \glsxtrfieldxifinlist{##1}{record.#1}{\csuse{the#1}}%
5048     {\glsxtrunsrtdo{##1}}%
5049     {}%
5050   }%

```

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

```
5051 \ifcsundef{theH#1}%
5052 {%
5053   \renewcommand*{\@glsxtrhypernameprefix}{record.#1.\csuse{the#1}.\@gobble}%
5054 }%
5055 {%
5056   \renewcommand*{\@glsxtrhypernameprefix}{record.#1.\csuse{theH#1}.\@gobble}%
5057 }%
5058 \renewcommand*{\glossarysection}[2][]{%
5059 \appto\glossarypostamble{\glspar\medskip\glspar}%
5060 }
```

srtglossaryunit

```
5061 \newcommand{\print@noop@unsrtglossaryunit}[2][]{%
5062   \PackageError{glossaries-extra}{\string\printunsrtglossaryunit\space
5063   requires the record=only or record=alsoindex package option}{}%
5064 }
```

t@getgroupitle

```
5065 \newrobustcmd*{\@glsxtr@unsrt@getgroupitle}[2]{%
5066   \protected@edef{\@glsxtr@titlelabel{\glsxtr@groupitle@#1}}%
5067   \@onelevel@sanitize{\@glsxtr@titlelabel}%
5068   \ifcsdef{\@glsxtr@titlelabel}%
5069   {\letcs{\#2}{\@glsxtr@titlelabel}}%
5070   {\def{\#2{\#1}}{}}%
5071 }
```

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

```
5072 \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).

```
5073 \newcommand*{\glsxtrgroupfield}{group}
```

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

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

```
5074 \newcommand*{\@glsxtr@checkgroup}[1]{%
5075   \def{\@glsxtr@groupheading}{}%
5076   \key@ifundefined{glossentry}{group}{}%
5077 }
```

```

5078 \letcs{@gls@sort}{glo@glsdetoklabel{#1}@sort}%
5079 \expandafter\glo@grabfirst@gls@sort{}{}\@nil
5080 }%
5081 {%
5082 \protected@edef@glo@thislettergrp{%
5083 \csuse{glo@glsdetoklabel{#1}@glsxtrgroupfield}}%
5084 }%
5085 \ifdefequal{\glo@thislettergrp}{\gls@currentlettergroup}%
5086 {}%
5087 {%
5088 \ifdefempty{\gls@currentlettergroup}{}%
5089 {\def@glsxtr@groupheading{\gls@groupskip}}%
5090 \eappto@glsxtr@groupheading{%
5091 \noexpand\gls@groupheading{\expandonce@glo@thislettergrp}}%
5092 }%
5093 }%
5094 \let@gls@currentlettergroup@glo@thislettergrp
5095 }

```

trLocationField Stores the internal name of the location field.

```
5096 \newcommand*{\GlsXtrLocationField}[location]
```

glsxtr@noidx@do Minor modification of \gls@noidx@do to check for location field if present, but also need to check for the group field.

```

5097 \newcommand{\glsxtr@noidx@do}[1]{%
5098 \ifglsentryexists{#1}{%
5099 {%
5100 \global\letcs{@gls@loclist}{glo@glsdetoklabel{#1}@loclist}%
5101 \global\letcs{@gls@location}{glo@glsdetoklabel{#1}@GlsXtrLocationField}%
5102 \ifglshasparent{#1}{%
5103 {%
5104 \gls@level=\csuse{glo@glsdetoklabel{#1}@level}\relax
5105 \ifdefvoid{\gls@location}{%
5106 {%
5107 \ifdefvoid{\gls@loclist}{%
5108 {%
5109 \subglossentry{\gls@level}{#1}{}}%
5110 }%
5111 {%
5112 \subglossentry{\gls@level}{#1}{}}%
5113 }%
5114 \glossaryentrynumbers{\glsnoidxloclist{\gls@loclist}}%
5115 }%
5116 }%
5117 }%
5118 {%
5119 \subglossentry{\gls@level}{#1}{\glossaryentrynumbers{\gls@location}}%
5120 }%

```

```

5121    }%
5122    {%
5123        \ifdefvoid{\@gls@location}{%
5124            {%
5125                \ifdefvoid{\@gls@loclist}{%
5126                    {%
5127                        \glossentry{\#1}{}}%
5128                    }%
5129                    {%
5130                        \glossentry{\#1}{}}%
5131                    {%
5132                        \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}{}}%
5133                    }%
5134                }%
5135            }%
5136            {%
5137                \glossentry{\#1}{}}%
5138                {%
5139                    \glossaryentrynumbers{\@gls@location}{}}%
5140                }%
5141            }%
5142        }%
5143    }%
5144    {}%
5145 }

```

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
5146 \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
5147 \newcommand*\@glsxtr@providenewgls}{%
5148     \protected@write\auxout{}{\string\providecommand{\string\@glsxtr@newglslike}[2]{}}{}}%
5149     \let\@glsxtr@providenewgls\relax
5150 }
```

`identifyglslike` Identify the command given in the second argument for the benefit of `bib2gls`.

```
5151 \newcommand{\glsxtridentifyglslike}[2]{%
5152     \ifdefequal\@glsxtr@record@setting\@glsxtr@record@setting@off
5153     {}%
5154     {}%
```

```

5155     \glsxtr@providenewgls
5156     \protected@write\@auxout{}{\string\glsxtr@newglslike{#1}{\string#2}}%
5157 }%
5158 }

```

\glsxtrnewgls [\ioptions] [\iprefix] {(\ics)} {(\inner cs name)}

```

5159 \newcommand*{\glsxtrnewgls}[4]{%
5160   \ifdef{\#3}{%
5161     {%
5162       \PackageError{glossaries-extra}{Command \string#3\space already%
5163 defined}{}%
5164     }%
5165     {%

```

Write information to the aux file for bib2gls.

```

5166   \glsxtridentifyglslike{#2}{#3}%
5167   \ifcsdef{@#4like@#2}{%
5168     {%
5169       \advance\glsxtrnewgls@inner by \one
5170       \def\glsxtrnewgls@innercsname{@#4like\number\glsxtrnewgls@inner @#2}%
5171     }%
5172     {\def\glsxtrnewgls@innercsname{@#4like@#2}%
5173       \expandafter\newrobustcmd\expandafter*\expandafter
5174         #3\expandafter{\expandafter\gls@hyp@opt\csname\glsxtrnewgls@innercsname\endcsname}%
5175       \ifstrempy{\#1}{%
5176         {%
5177           \expandafter\newcommand\expandafter*\csname\glsxtrnewgls@innercsname\endcsname[2][]{%
5178             \new@ifnextchar[%]
5179               {\csname @#4@\endcsname{##1}{##2##2}}%
5180               {\csname @#4@\endcsname{##1}{##2##2}[]}%
5181             }%
5182         }%
5183       {%
5184         \expandafter\newcommand\expandafter*\csname\glsxtrnewgls@innercsname\endcsname[2][]{%
5185           \new@ifnextchar[%]
5186             {\csname @#4@\endcsname{##1,##1}{##2##2}}%
5187             {\csname @#4@\endcsname{##1,##1}{##2##2}[]}%
5188           }%
5189         }%
5190       }%
5191     }%

```

\glsxtrnewgls [\ioptions] [\iprefix] {(\ics)}

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

```
5192 \newrobustcmd*\{glsxtrnewgls\}[3] [] {%
5193   \@glsxtrnewgls{\#1}{\#2}{\#3}{gls}%
5194 }
```

`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.

```
5195 \newrobustcmd*\{glsxtrnewglslike\}[6] [] {%
5196   \@glsxtrnewgls{\#1}{\#2}{\#3}{gls}%
5197   \@glsxtrnewgls{\#1}{\#2}{\#4}{glspl}%
5198   \@glsxtrnewgls{\#1}{\#2}{\#5}{Gls}%
5199   \@glsxtrnewgls{\#1}{\#2}{\#6}{Glspl}%
5200 }
```

`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.

```
5201 \newrobustcmd*\{glsxtrnewGLSlike\}[4] [] {%
5202   \@glsxtrnewgls{\#1}{\#2}{\#3}{GLS}%
5203   \@glsxtrnewgls{\#1}{\#2}{\#4}{GLSpl}%
5204 }
```

`\glsxtrnewrgls` As `\glsxtrnewgls` but for `\rgls`.

```
5205 \newrobustcmd*\{glsxtrnewrgls\}[3] [] {%
5206   \@glsxtrnewgls{\#1}{\#2}{\#3}{rgls}%
5207 }
```

`sxtrnewrglslike` As `\glsxtrnewglslike` but for `\rgls` etc.

```
5208 \newrobustcmd*\{glsxtrnewrglslike\}[6] [] {%
5209   \@glsxtrnewgls{\#1}{\#2}{\#3}{rgls}%
5210   \@glsxtrnewgls{\#1}{\#2}{\#4}{rglspl}%
5211   \@glsxtrnewgls{\#1}{\#2}{\#5}{rGls}%
5212   \@glsxtrnewgls{\#1}{\#2}{\#6}{rGlspl}%
5213 }
```

`sxtrnewrGLSlike` As `\glsxtrnewGLSlike` but for `\rGLS` etc.

```
5214 \newrobustcmd*\{glsxtrnewrGLSlike\}[4] [] {%
5215   \@glsxtrnewgls{\#1}{\#2}{\#3}{rGLS}%
5216   \@glsxtrnewgls{\#1}{\#2}{\#4}{rGLSpl}%
5217 }
```

Provide easy access to record count fields.

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

```
5218 \newcommand*\{GlsXtrTotalRecordCount\}[1] {%
5219   \ifcsdef{glo@\glsdetoklabel{\#1}@recordcount}{}%
5220     {\csname glo@\glsdetoklabel{\#1}@recordcount\endcsname}%
5221   {0}%
5222 }
```

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

```
5223 \newcommand*{\GlsXtrRecordCount}[2]{%
5224 \ifcsdef{glo@\glstoklabel{#1}@recordcount.{#2}}{%
5225 {\csname glo@\glstoklabel{#1}@recordcount.{#2}\endcsname}%
5226 {0}%
5227 }
```

`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.

```
5228 \newcommand*{\GlsXtrLocationRecordCount}[3]{%
5229 \ifcsdef{glo@\glstoklabel{#1}@recordcount.{#2}.\glsxtrdetoklocation{#3}}{%
5230 {\csname glo@\glstoklabel{#1}@recordcount.{#2}.\glsxtrdetoklocation{#3}\endcsname}%
5231 {0}%
5232 }
```

`trdetoklocation`

```
5233 \newcommand*{\glsxtrdetoklocation}[1]{#1}
```

`ablerecordcount`

```
5234 \newcommand*{\glsxtrenablerecordcount}{%
5235 \renewcommand*{\gls}{\rgls}%
5236 \renewcommand*{\Gls}{\rGls}%
5237 \renewcommand*{\glspl}{\rglsp}%
5238 \renewcommand*{\Glspl}{\rGlspl}%
5239 \renewcommand*{\GLS}{\rGLS}%
5240 \renewcommand*{\GLSpl}{\rGLSp}%
5241 }
```

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

```
5242 \newcommand*{\glsxtrrecordtriggervalue}[1]{%
5243 \GlsXtrTotalRecordCount{#1}%
5244 }
```

`dCountAttribute`

```
5245 \newcommand*{\GlsXtrSetRecordCountAttribute}[2]{%
5246 @for@\glsxtr@cat:=#1\do
5247 {%
5248 \ifdefempty{@glsxtr@cat}{}{%
5249 {%
5250 \glssetcategoryattribute{@glsxtr@cat}{recordcount}{#2}%
5251 }%
5252 }%
5253 }
```

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

```
5254 \newcommand*{\glsxtrifrecordtrigger}[3]{%
5255   \glshasattribute{#1}{recordcount}%
5256   {%
5257     \ifnum\glsxtrrecordtriggervalue{#1}>\glsgetattribute{#1}{recordcount}\relax
5258       #3%
5259     \else
5260       #2%
5261     \fi
5262   }%
5263   {#3}%
5264 }
```

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

```
5265 \newcommand*{\@glsxtr@rglstrigger@record}[3]{%
5266   \edef\glslabel{\glsdetoklabel{#2}}%
5267   \let\@gls@link@label\glslabel
5268   \def\@glsxtr@thevalue{}%
5269   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
5270   \def\@glsnumberformat{\glstriggerrecordformat}%
5271   \edef\@gls@counter{\csname glo@\glslabel @counter\endcsname}%
5272   \edef\glstype{\csname glo@\glslabel @type\endcsname}%
5273   \def\@glsxtr@thevalue{}%
5274   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
5275   \glsxtrinitwrgloss
5276   \glslinkpresetkeys
5277   \setkeys{glslink}{#1}%
5278   \glslinkpostsetkeys
5279   \ifdefempty{\@glsxtr@thevalue}%
5280   {%
5281     \@gls@saveentrycounter
5282   }%
5283   {%
5284     \let\the\glsentrycounter\@glsxtr@thevalue
5285     \def\theH\glsentrycounter{\@glsxtr@theHvalue}%
5286   }%
5287   \ifglsxtrinitwrglossbefore
5288     \@do@wrglossary{#2}%
5289   \fi
5290   #3%
5291   \ifglsxtrinitwrglossbefore
5292   \else
5293     \@do@wrglossary{#2}%
5294   \fi
5295   \ifKV@glslink@local
5296     \glslocalunset{#2}%

```

```

5297 \else
5298   \glsunset{#2}%
5299 \fi
5300 }

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

5301 \newcommand*{\glstriggerrecordformat}[1]{}

\rgls
5302 \newrobustcmd*{\rgls}{\gls@hyp@opt\rgls}

\@rgls
5303 \newcommand*{\@rgls}[2][]{%
5304   \new@ifnextchar[\{\@rgls@{\#1}{\#2}\}{\@rgls@{\#1}{\#2}[] }%
5305 }

\@rgls@
5306 \def\@rgls@#1#2[#3]{%
5307   \glsxtrifrecordtrigger{#2}%
5308   {%
5309     \glsxtr@rglstrigger@record{#1}{#2}{\rglsformat{#2}{#3}}%
5310   }%
5311   {%
5312     \gls@{\#1}{\#2}[#3]%
5313   }%
5314 }%

\rglsp
5315 \newrobustcmd*{\rglsp}{\gls@hyp@opt\rglsp}

\@rglsp
5316 \newcommand*{\@rglsp}[2][]{%
5317   \new@ifnextchar[\{\@rglsp@{\#1}{\#2}\}{\@rglsp@{\#1}{\#2}[] }%
5318 }

\@rglsp@
5319 \def\@rglsp@#1#2[#3]{%
5320   \glsxtrifrecordtrigger{#2}%
5321   {%
5322     \glsxtr@rglstrigger@record{#1}{#2}{\rglspformat{#2}{#3}}%
5323   }%
5324   {%
5325     \glspl@{\#1}{\#2}[#3]%
5326   }%
5327 }%

\rGls
5328 \newrobustcmd*{\rGls}{\gls@hyp@opt\rGls}

```

```

\@rGls
 5329 \newcommand*{\@rGls}[2] []{%
 5330   \new@ifnextchar[{\@rGls@{\#1}{\#2}}{\@rGls@{\#1}{\#2}[] }%
 5331 }

\@rGls@
 5332 \def\@rGls@#1#2[#3]{%
 5333   \glsxtrifrecordtrigger{#2}%
 5334   {%
 5335     \glsxtr@rglstrigger@record{\#1}{\#2}{\rGlsformat{\#2}{\#3}}%
 5336   }%
 5337   {%
 5338     \@Gls@{\#1}{\#2} [#3]%
 5339   }%
 5340 }%

\rGlspl
 5341 \newrobustcmd*{\rGlspl}{\gls@hyp@opt\@rGlspl}

\@rGlspl
 5342 \newcommand*{\@rGlspl}[2] []{%
 5343   \new@ifnextchar[{\@rGlspl@{\#1}{\#2}}{\@rGlspl@{\#1}{\#2}[] }%
 5344 }

\@rGlspl@
 5345 \def\@rGlspl@#1#2[#3]{%
 5346   \glsxtrifrecordtrigger{#2}%
 5347   {%
 5348     \glsxtr@rglstrigger@record{\#1}{\#2}{\rGlsplformat{\#2}{\#3}}%
 5349   }%
 5350   {%
 5351     \@Glspl@{\#1}{\#2} [#3]%
 5352   }%
 5353 }%

\rGLS
 5354 \newrobustcmd*{\rGLS}{\gls@hyp@opt\@rGLS}

\@rGLS
 5355 \newcommand*{\@rGLS}[2] []{%
 5356   \new@ifnextchar[{\@rGLS@{\#1}{\#2}}{\@rGLS@{\#1}{\#2}[] }%
 5357 }

\@rGLS@
 5358 \def\@rGLS@#1#2[#3]{%
 5359   \glsxtrifrecordtrigger{#2}%
 5360   {%
 5361     \glsxtr@rglstrigger@record{\#1}{\#2}{\rGLSformat{\#2}{\#3}}%

```

```

5362 }%
5363 {%
5364 \Gls@{#1}{#2}[#3]%
5365 }%
5366 }%


\rGLSpl
5367 \newrobustcmd*{\rGLSpl}{\gls@hyp@opt\rGLSpl}

\@rGLSpl
5368 \newcommand*{\@rGLSpl}[2][]{%
5369 \new@ifnextchar[{\@rGLSpl@{#1}{#2}}{\@rGLSpl@{#1}{#2}[]}}%
5370 }

\@rGLSpl@
5371 \def\@rGLSpl@#1#2[#3]{%
5372 \glsxtrifrecordtrigger{#2}%
5373 {%
5374 \glsxtr@rglstrigger@record{#1}{#2}{\rGLSplformat{#2}{#3}}%
5375 }%
5376 {%
5377 \Glspl@{#1}{#2}[#3]%
5378 }%
5379 }%


\rglsformat
5380 \newcommand*{\rglsformat}[2]{%
5381 \glsifregular{#1}%
5382 {\glsentryfirst{#1}}%
5383 {\ifglshaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
5384 }

\rglsplformat
5385 \newcommand*{\rglsplformat}[2]{%
5386 \glsifregular{#1}%
5387 {\glsentryfirstplural{#1}}%
5388 {\ifglshaslong{#1}{\glsentrylongplural{#1}}{\glsentryfirstplural{#1}}}#2%
5389 }

\rGlsformat
5390 \newcommand*{\rGlsformat}[2]{%
5391 \glsifregular{#1}%
5392 {\Glsentryfirst{#1}}%
5393 {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
5394 }

\rGlsplformat
5395 \newcommand*{\rGlsplformat}[2]{%

```

```

5396 \glsifregular{#1}
5397 {\Glsentryfirstplural{#1}}%
5398 {\ifglshaslong{#1}{\Glsentrylongplural{#1}}{\Glsentryfirstplural{#1}}}#2%
5399 }

\rGLSformat
5400 \newcommand*{\rGLSformat}[2]{%
5401 \expandafter\mfirstuc\expandafter{\rglsformat{#1}{#2}}%
5402 }

\rGLSplformat
5403 \newcommand*{\rGLSplformat}[2]{%
5404 \expandafter\mfirstuc\expandafter{\rglsplformat{#1}{#2}}%
5405 }

```

1.4 Link Counting

This is different to the entry counting provided by the base package (which counts the number of times the first use flag is unset). Instead, this method hooks into `\@gls@link` (through `\glsxtr@inc@linkcount`) to increment an associated counter. To preserve resources, the counter is only defined if it needs to be incremented. This method is independent of the presence of hyperlinks. (The “link” part of the name refers to `\@gls@link` not `\hyperlink`.)

`\o@inc@linkcount` This performs the actual incrementing and counter definition. The counter is given by `\c@glsxtr@linkcount@\langle label\rangle` where `\langle label\rangle` is the entry’s label. Since this is performed within `\@gls@link` the label can be accessed with `\glslabel`.

```
5406 \newcommand{\glsxtr@do@inc@linkcount}{%
```

Does this entry have the `linkcount` attribute set?

```
5407 \glsifattribute{\glslabel}{linkcount}{true}%
5408 {%
```

Does the counter exist?

```
5409 \ifcsdef{c@glsxtr@linkcount@\glslabel}{}%
5410 {%
```

Counter doesn’t exist, so define it.

```
5411 \newcounter{glsxtr@linkcount@\glslabel}%
```

If `linkcountmaster` is set, add to counter reset.

```
5412 \glshasattribute{\glslabel}{linkcountmaster}%
5413 {%
```

Need to ensure values are fully expanded.

```
5414 \begingroup
5415 \edef\x{\endgroup\noexpand\@addtoreset{glsxtr@linkcount@\glslabel}%
5416 {\glsgetattribute{\glslabel}{linkcountmaster}}}}
5417 \x
5418 }%
```

```

5419      {}%
5420  }%
    Increment counter:
5421  \glsxtrinlinkcounter{glsxtr@linkcount@\glslabel}%
5422 }%
5423 {}%
5424 }

rinlinkcounter May be redefined to use \refstepcounter if required.
5425 \newcommand*{\glsxtrinlinkcounter}[1]{\stepcounter{#1}{}}

inkCounterValue Expands to the associated link counter register or 0 if not defined.
5426 \newcommand*{\GlsXtrLinkCounterValue}[1]{%
5427 \ifcsundef{c@glsxtr@linkcount@#1}{0}{\csname c@glsxtr@linkcount@#1\endcsname}%
5428 }

rTheLinkCounter Expands to the display value of the associated link counter or 0 if not defined.
5429 \newcommand*{\GlsXtrTheLinkCounter}[1]{%
5430 \ifcsundef{\theglsxtr@linkcount@#1}{0}{%
5431 {\csname theglsxtr@linkcount@#1\endcsname}%
5432 }

fLinkCounterDef Tests if the counter has been defined
5433 \newcommand*{\GlsXtrIfLinkCounterDef}[3]{%
5434 \ifcsundef{\theglsxtr@linkcount@#1}{#3}{#2}%
5435 }

LinkCounterName Expands to the associated link counter name. (No check for existence.)
5436 \newcommand*{\GlsXtrLinkCounterName}[1]{glsxtr@linkcount@#1}

ableLinkCounting \GlsXtrEnableLinkCounting[master counter]{categories}

```

Enable link counting for the given categories.

```

5437 \newcommand*{\GlsXtrEnableLinkCounting}[2][]{%
5438 \let\glsxtr@inc@linkcount@glsxtr@do@inc@linkcount
5439 \@for@glsxtr@label:=#2\do
5440 {%
5441 \glssetcategoryattribute{\@glsxtr@label}{linkcount}{true}%
5442 \ifstrempty{#1}{%
5443 {%
5444 \ifcsundef{c@#1}{%
5445 {\@nocounterr{#1}}%
5446 \glssetcategoryattribute{\@glsxtr@label}{linkcountmaster}{#1}%
5447 }%
5448 }%
5449 }%
5450 @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.

```
5451 \@ifpackageloaded{glossaries-accsupp}{%
5452 {%
```

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

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

```
5453 \newcommand*{\glsaccessname}[1]{%
5454   \glsnameaccessdisplay
5455   {%
5456     \glsentryname{\#1}%
5457   }%
5458   {\#1}%
5459 }
```

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

```
5460 \newcommand*{\Glsaccessname}[1]{%
5461   \glsnameaccessdisplay
5462   {%
5463     \Glsentryname{\#1}%
5464   }%
5465   {\#1}%
5466 }
```

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

```
5467 \newcommand*{\GLSaccessname}[1]{%
5468   \glsnameaccessdisplay
5469   {%
5470     \mfirstucMakeUppercase{\glsentryname{\#1}}%
5471   }%
5472   {\#1}%
5473 }
```

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

```
5474 \newcommand*{\glsaccesstext}[1]{%
5475   \glstextaccessdisplay
5476   {%
5477     \glsentrytext{\#1}%
5478   }%
5479   {\#1}%
5480 }
```

```

\Glsaccesstext Display the text value (no link and no check for existence) with the first letter converted to
upper case.
5481 \newcommand*{\Glsaccesstext}[1]{%
5482   \glstextaccessdisplay
5483   {%
5484     \Glsentrytext{#1}%
5485   }%
5486   {#1}%
5487 }

\GLSaccesstext Display the text value (no link and no check for existence) converted to upper case.
5488 \newcommand*{\GLSaccesstext}[1]{%
5489   \glstextaccessdisplay
5490   {%
5491     \mfirstucMakeUppercase{\glsentrytext{#1}}%
5492   }%
5493   {#1}%
5494 }

glsaccessplural Display the plural value (no link and no check for existence).
5495 \newcommand*{\glsaccessplural}[1]{%
5496   \glspluralaccessdisplay
5497   {%
5498     \glsentryplural{#1}%
5499   }%
5500   {#1}%
5501 }

Glsaccessplural Display the plural value (no link and no check for existence) with the first letter converted to
upper case.
5502 \newcommand*{\Glsaccessplural}[1]{%
5503   \glspluralaccessdisplay
5504   {%
5505     \Glsentryplural{#1}%
5506   }%
5507   {#1}%
5508 }

GLSaccessplural Display the plural value (no link and no check for existence) converted to upper case.
5509 \newcommand*{\GLSaccessplural}[1]{%
5510   \glspluralaccessdisplay
5511   {%
5512     \mfirstucMakeUppercase{\glsentryplural{#1}}%
5513   }%
5514   {#1}%
5515 }

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

```

```

5516 \newcommand*{\glsaccessfirst}[1]{%
5517   \glsfirstaccessdisplay
5518   {%
5519     \glsentryfirst{#1}%
5520   }%
5521   {#1}%
5522 }

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

5523 \newcommand*{\Glsaccessfirst}[1]{%
5524   \glsfirstaccessdisplay
5525   {%
5526     \Glsentryfirst{#1}%
5527   }%
5528   {#1}%
5529 }

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

5530 \newcommand*{\GLSaccessfirst}[1]{%
5531   \glsfirstaccessdisplay
5532   {%
5533     \mfirstucMakeUppercase{\glsentryfirst{#1}}%
5534   }%
5535   {#1}%
5536 }

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

5537 \newcommand*{\glsaccessfirstplural}[1]{%
5538   \glsfirstpluralaccessdisplay
5539   {%
5540     \glsentryfirstplural{#1}%
5541   }%
5542   {#1}%
5543 }

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

5544 \newcommand*{\Glsaccessfirstplural}[1]{%
5545   \glsfirstpluralaccessdisplay
5546   {%
5547     \Glsentryfirstplural{#1}%
5548   }%
5549   {#1}%
5550 }

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

5551 \newcommand*{\GLSaccessfirstplural}[1]{%

```

```

5552   \glsfirstpluralaccessdisplay
5553   {%
5554     \mfirstucMakeUppercase{\glsentryfirstplural{#1}}%
5555   }%
5556   {#1}%
5557 }

```

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

```

5558 \newcommand*{\glsaccesssymbol}[1]{%
5559   \glssymbolaccessdisplay
5560   {%
5561     \glsentrysymbol{#1}%
5562   }%
5563   {#1}%
5564 }

```

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

```

5565 \newcommand*{\Glsaccesssymbol}[1]{%
5566   \glssymbolaccessdisplay
5567   {%
5568     \Glsentrysymbol{#1}%
5569   }%
5570   {#1}%
5571 }

```

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

```

5572 \newcommand*{\GLSaccesssymbol}[1]{%
5573   \glssymbolaccessdisplay
5574   {%
5575     \mfirstucMakeUppercase{\glsentrysymbol{#1}}%
5576   }%
5577   {#1}%
5578 }

```

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

```

5579 \newcommand*{\glsaccesssymbolplural}[1]{%
5580   \glssymbolpluralaccessdisplay
5581   {%
5582     \glsentrysymbolplural{#1}%
5583   }%
5584   {#1}%
5585 }

```

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

```

5586 \newcommand*{\Glsaccesssymbolplural}[1]{%
5587   \glssymbolpluralaccessdisplay

```

```
5588     {%
5589         \Glsentrysymbolplural{#1}%
5590     }%
5591     {#1}%
5592 }
```

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

```
5593 \newcommand*{\GLSaccesssymbolplural}[1]{%
5594     \glssymbolpluralaccessdisplay
5595     {%
5596         \mfirstucMakeUppercase{\glsentrysymbolplural{#1}}%
5597     }%
5598     {#1}%
5599 }
```

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

```
5600 \newcommand*{\glsaccessdesc}[1]{%
5601     \glsdescriptionaccessdisplay
5602     {%
5603         \glsentrydesc{#1}%
5604     }%
5605     {#1}%
5606 }
```

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

```
5607 \newcommand*{\Glsaccessdesc}[1]{%
5608     \glsdescriptionaccessdisplay
5609     {%
5610         \Glsentrydesc{#1}%
5611     }%
5612     {#1}%
5613 }
```

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

```
5614 \newcommand*{\GLSaccessdesc}[1]{%
5615     \glsdescriptionaccessdisplay
5616     {%
5617         \mfirstucMakeUppercase{\glsentrydesc{#1}}%
5618     }%
5619     {#1}%
5620 }
```

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

```
5621 \newcommand*{\glsaccessdescplural}[1]{%
5622     \glsdescriptionpluralaccessdisplay
5623     {%
5624         \glsentrydescplural{#1}%
5625 }
```

```
5625    }%
5626    {#1}%
5627 }
```

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

```
5628 \newcommand*{\Glsaccessdescplural}[1]{%
5629   \glsdescriptionplural\accessdisplay
5630   {%
5631     \Glsentrydescplural{#1}%
5632   }%
5633   {#1}%
5634 }
```

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

```
5635 \newcommand*{\GLSaccessdescplural}[1]{%
5636   \glsdescriptionplural\accessdisplay
5637   {%
5638     \mfirstucMakeUppercase{\glsentrydescplural{#1}}%
5639   }%
5640   {#1}%
5641 }
```

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

```
5642 \newcommand*{\glsaccessshort}[1]{%
5643   \glsshortaccessdisplay
5644   {%
5645     \glsentryshort{#1}%
5646   }%
5647   {#1}%
5648 }
```

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

```
5649 \newcommand*{\Glsaccessshort}[1]{%
5650   \glsshortaccessdisplay
5651   {%
5652     \Glsentryshort{#1}%
5653   }%
5654   {#1}%
5655 }
```

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

```
5656 \newcommand*{\GLSaccessshort}[1]{%
5657   \glsshortaccessdisplay
5658   {%
5659     \mfirstucMakeUppercase{\glsentryshort{#1}}%
5660   }%
```

```
5661     {#1}%
5662 }
```

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

```
5663 \newcommand*{\glsaccessshortpl}[1]{%
5664   \glsshortpluralaccessdisplay
5665   {%
5666     \glsentryshortpl{#1}%
5667   }%
5668   {#1}%
5669 }
```

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

```
5670 \newcommand*{\Glsaccessshortpl}[1]{%
5671   \glsshortpluralaccessdisplay
5672   {%
5673     \Glsentryshortpl{#1}%
5674   }%
5675   {#1}%
5676 }
```

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

```
5677 \newcommand*{\GLSaccessshortpl}[1]{%
5678   \glsshortpluralaccessdisplay
5679   {%
5680     \mfirstucMakeUppercase{\glsentryshortpl{#1}}%
5681   }%
5682   {#1}%
5683 }
```

\glsaccesslong Display the long form (no link and no check for existence).

```
5684 \newcommand*{\glsaccesslong}[1]{%
5685   \glslongaccessdisplay{\glsentrylong{#1}}{#1}%
5686 }
```

\Glsaccesslong Display the long form (no link and no check for existence).

```
5687 \newcommand*{\Glsaccesslong}[1]{%
5688   \glslongaccessdisplay{\Glsentrylong{#1}}{#1}%
5689 }
5690 }
```

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

```
5691 \newcommand*{\GLSaccesslong}[1]{%
5692   \glslongaccessdisplay
5693   {%
5694     \mfirstucMakeUppercase{\glsentrylong{#1}}%
5695   }%
```

```

5696     {#1}%
5697 }

glsaccesslongpl Display the long plural form (no link and no check for existence).
5698 \newcommand*{\glsaccesslongpl}[1]{%
5699   \glslongpluralaccessdisplay{\glsentrylongpl{#1}}{#1}%
5700 }

Glsaccesslongpl Display the long plural form (no link and no check for existence).
5701 \newcommand*{\Glsaccesslongpl}[1]{%
5702   \glslongpluralaccessdisplay{\Glsentrylongpl{#1}}{#1}%
5703 }
5704 }

GLSaccesslongpl Display the longplural value (no link and no check for existence) converted to upper case.
5705 \newcommand*{\GLSaccesslongpl}[1]{%
5706   \glslongpluralaccessdisplay
5707   {%
5708     \mfirstucMakeUppercase{\glsentrylongpl{#1}}%
5709   }%
5710   {#1}%
5711 }

Keys for accessibility support.
5712 \define@key{glsxtrabrv}{access}{%
5713   \def\@gls@nameaccess{#1}%
5714 }

5715 \define@key{glsxtrabrv}{textaccess}{%
5716   \def\@gls@textaccess{#1}%
5717 }

5718 \define@key{glsxtrabrv}{firstaccess}{%
5719   \def\@gls@firstaccess{#1}%
5720 }

5721 \define@key{glsxtrabrv}{shortaccess}{%
5722   \def\@gls@shortaccess{#1}%
5723 }

5724 \define@key{glsxtrabrv}{shortpluralaccess}{%
5725   \def\@gls@shortaccesspl{#1}%
5726 }

@initaccesskeys
5727 \newcommand*{\@gls@initaccesskeys}{%
5728   \def\@gls@nameaccess{}%
5729   \def\@gls@textaccess{}%
5730   \def\@gls@firstaccess{}%
5731   \def\@gls@shortaccess{}%
5732   \def\@gls@shortaccesspl{}%
5733 }

```

```
essattribute@set \gls@ifaccessattribute@set{\langle attribute \rangle}{\langle true \rangle}{\langle false \rangle}
```

```
5734 \newcommand*{\@gls@ifaccessattribute@set}[3]{%
5735   \glsifcategoryattribute{\glscategorylabel}{access#1}{true}%
5736   {#2}%
5737   {%
5738     \glsifcategoryattribute{\glscategorylabel}{access#1}{false}%
5739     {#3}%
5740     {%
5741       \glsifcategoryattribute{\glscategorylabel}{#1}{true}%
5742       {#2}%
5743       {#3}%
5744     }%
5745   }%
5746 }
```

lt@short@access Assign the default value of the shortaccess key. The argument is the short value passed to \newabbreviation.

```
5747 \newcommand{\@gls@setup@default@short@access}[1]{%
```

Check if the accessinsertdots attribute has been set but only if shortaccess hasn't been set.

```
5748 \ifdefempty{\gls@shortaccess}
5749 {%
5750   \glsifcategoryattribute{\glscategorylabel}{accessinsertdots}{true}%
5751   {%
5752     \@glsxtr@insertdots@\gls@shortaccess{#1}%
5753     \eappto{\ExtraCustomAbbreviationFields}{%
5754       shortaccess={\expandonce{\gls@shortaccess}},}%
5755     }%
5756   {%
5757     }%
5758   {%
5759 }
```

If the shortaccess field has been set but shortaccessplural hasn't been set, assign plural form.

```
5759 \ifdefempty{\gls@shortaccess}
5760 {%
5761   {%
5762     \ifdefempty{\gls@shortaccesspl}
5763     {%
5764       \gls@ifaccessattribute@set{aposplural}%
5765     {%
5766       \expandafter{\def{\expandafter{\expandafter{\gls@shortaccesspl}\expandafter{}}{\gls@shortaccess}'\abrvpluralsuffix}}%
5767     }%
5768   {%
5769     {%
5770       \gls@ifaccessattribute@set{noshortplural}%
5771     {%
5772 }}
```

```

5772           \let\@gls@shortaccesspl\@gls@shortaccess
5773       }%
5774   {%
5775       \expandafter\def\expandafter\@gls@shortaccesspl\expandafter{%
5776           \@gls@shortaccess\abrvpluralsuffix}%
5777       }%
5778   }%
5779   \eappto\ExtraCustomAbbreviationFields{%
5780       shortpluralaccess={\expandonce\@gls@shortaccesspl},}%
5781   }%
5782   {}%
5783 }%

```

If access key hasn't been set, check if the nameshortaccess attribute has been set.

```

5784   \ifdefempty\@gls@nameaccess
5785   {}%
5786   \glsifcategoryattribute{\glscategorylabel}{nameshortaccess}{true}%
5787   {}%

```

Do nothing if the shortaccess key hasn't been set.

```

5788   \ifdefempty\@gls@shortaccess
5789   {}%
5790   {}%
5791   \eappto\ExtraCustomAbbreviationFields{%
5792       access={\expandonce\@gls@shortaccess},%
5793       }%
5794   }%
5795   {}%
5796   {}%
5797   }%
5798   {}%

```

If textaccess key hasn't been set, check if the textshortaccess attribute has been set.

```

5799   \ifdefempty\@gls@textaccess
5800   {}%
5801   \glsifcategoryattribute{\glscategorylabel}{textshortaccess}{true}%
5802   {}%

```

Do nothing if the shortaccess key hasn't been set.

```

5803   \ifdefempty\@gls@shortaccess
5804   {}%
5805   {}%
5806   \eappto\ExtraCustomAbbreviationFields{%
5807       textaccess={\expandonce\@gls@shortaccess},%
5808       }%
5809   }%
5810   {}%
5811   {}%
5812   }%
5813   {}%

```

If `firstaccess` key hasn't been set, check if the `firstshortaccess` attribute has been set.

```
5814     \ifdefempty{@gls@firstaccess
5815     {}%
5816     \glsifcategoryattribute{\glscategorylabel}{firstshortaccess}{true}%
5817     {}%
```

Do nothing if the `shortaccess` key hasn't been set.

```
5818     \ifdefempty{@gls@shortaccess
5819     {}%
5820     {}%
5821     \eappto\ExtraCustomAbbreviationFields{%
5822         firstaccess={\expandonce@gls@shortaccess},%
5823     }%
5824     }%
5825     {}%
5826     {}%
5827     {}%
5828     {}%
5829 }
```

End of if accsupp part

```
5830 }
5831 {
```

No accessibility support. Just define these commands to do `\glsentry<xxx>`

```
\glsaccessname Display the name value (no link and no check for existence).
5832 \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.
5833 \newcommand*{\Glsaccessname}[1]{\Glsentryname{#1}}
```



```
\GLSaccessname Display the name value (no link and no check for existence). converted to upper case.
5834 \newcommand*{\GLSaccessname}[1]{%
5835 \protect\mfirstrucMakeUppercase{\glsentryname{#1}}}
```



```
\glsaccesstext Display the text value (no link and no check for existence).
5836 \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.
5837 \newcommand*{\Glsaccesstext}[1]{\Glsentrytext{#1}}
```



```
\GLSaccesstext Display the text value (no link and no check for existence). converted to upper case.
5838 \newcommand*{\GLSaccesstext}[1]{%
5839 \protect\mfirstrucMakeUppercase{\glsentrytext{#1}}}
```



```
glsaccessplural Display the plural value (no link and no check for existence).
5840 \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.

```
5841 \newcommand*{\Glsaccessplural}[1]{\Glsentryplural{\#1}}
```

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

```
5842 \newcommand*{\GLSaccessplural}[1]{%
  \protect\mfirstucMakeUppercase{\glsentryplural{\#1}}}
```

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

```
5844 \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.

```
5845 \newcommand*{\Glsaccessfirst}[1]{\Glsentryfirst{\#1}}
```

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

```
5846 \newcommand*{\GLSaccessfirst}[1]{%
  \protect\mfirstucMakeUppercase{\glsentryfirst{\#1}}}
```

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

```
5848 \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.

```
5849 \newcommand*{\Glsaccessfirstplural}[1]{\Glsentryfirstplural{\#1}}
```

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

```
5850 \newcommand*{\GLSaccessfirstplural}[1]{%
  \protect\mfirstucMakeUppercase{\glsentryfirstplural{\#1}}}
```

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

```
5852 \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.

```
5853 \newcommand*{\Glsaccesssymbol}[1]{\Glsentrysymbol{\#1}}
```

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

```
5854 \newcommand*{\GLSaccesssymbol}[1]{%
  \protect\mfirstucMakeUppercase{\glsentrysymbol{\#1}}}
```

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

```
5856 \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.

```
5857 \newcommand*{\Glsaccesssymbolplural}[1]{\Glsentrysymbolplural{\#1}}
```

esssymbolplural Display the symbolplural value (no link and no check for existence). converted to upper case.
 5858 \newcommand*{\GLSaccesssymbolplural}[1]{%
 5859 \protect\mfirstucMakeUppercase{\glsentrysymbolplural{#1}}}

 \glsaccessdesc Display the desc value (no link and no check for existence).
 5860 \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.
 5861 \newcommand*{\Glsaccessdesc}[1]{\Glsentrydesc{#1}}

 \GLSaccessdesc Display the desc value (no link and no check for existence). converted to upper case.
 5862 \newcommand*{\GLSaccessdesc}[1]{%
 5863 \protect\mfirstucMakeUppercase{\glsentrydesc{#1}}}

 accessdescplural Display the descplural value (no link and no check for existence).
 5864 \newcommand*{\glsaccessdescplural}[1]{\glsentrydescplural{#1}}

 accessdescplural Display the descplural value (no link and no check for existence) with the first letter converted to upper case.
 5865 \newcommand*{\Glsaccessdescplural}[1]{\Glsentrydescplural{#1}}

 accessdescplural Display the descplural value (no link and no check for existence). converted to upper case.
 5866 \newcommand*{\GLSaccessdescplural}[1]{%
 5867 \protect\mfirstucMakeUppercase{\glsentrydescplural{#1}}}

 \glsaccessshort Display the short form (no link and no check for existence).
 5868 \newcommand*{\glsaccessshort}[1]{\glsentryshort{#1}}

 \Glsaccessshort Display the short form with first letter converted to uppercase (no link and no check for existence).
 5869 \newcommand*{\Glsaccessshort}[1]{\Glsentryshort{#1}}

 \GLSaccessshort Display the short value (no link and no check for existence). converted to upper case.
 5870 \newcommand*{\GLSaccessshort}[1]{%
 5871 \protect\mfirstucMakeUppercase{\glsentryshort{#1}}}

 lsaccessshortpl Display the short plural form (no link and no check for existence).
 5872 \newcommand*{\glsaccessshortpl}[1]{\glsentryshortpl{#1}}

 lsaccessshortpl Display the short plural form with first letter converted to uppercase (no link and no check for existence).
 5873 \newcommand*{\Glsaccessshortpl}[1]{\Glsentryshortpl{#1}}

```

LSaccessshortpl Display the shortplural value (no link and no check for existence). converted to upper case.
5874 \newcommand*\GLSaccessshortpl[1]{%
5875 \protect\mfirstucMakeUppercase{\glsentryshortpl{#1}}}

\glsaccesslong Display the long form (no link and no check for existence).
5876 \newcommand*\glsaccesslong[1]{\glsentrylong{#1}}

\Glsaccesslong Display the long form (no link and no check for existence).
5877 \newcommand*\Glsaccesslong[1]{\Glsentrylong{#1}}

\GLSaccesslong Display the long value (no link and no check for existence). converted to upper case.
5878 \newcommand*\GLSaccesslong[1]{%
5879 \protect\mfirstucMakeUppercase{\glsentrylong{#1}}}

glsaccesslongpl Display the long plural form (no link and no check for existence).
5880 \newcommand*\glsaccesslongpl[1]{\glsentrylongpl{#1}}

Glsaccesslongpl Display the long plural form (no link and no check for existence).
5881 \newcommand*\Glsaccesslongpl[1]{\Glsentrylongpl{#1}}

GLSaccesslongpl Display the longplural value (no link and no check for existence). converted to upper case.
5882 \newcommand*\GLSaccesslongpl[1]{%
5883 \protect\mfirstucMakeUppercase{\glsentrylongpl{#1}}}

@initaccesskeys This does nothing if there's no accessibility support.
5884 \newcommand*\@gls@initaccesskeys{}

lt@short@access This does nothing if there's no accessibility support.
5885 \newcommand{\@gls@setup@default@short@access}[1]{}%
End of else part
5886 }


```

1.6 Categories

```

\glscategory Add a new storage key that can be used to indicate a category. The default category is general.
5887 \glsaddstoragekey{category}{general}{\glscategory}

\glsifcategory Convenient shortcut to determine if an entry has the given category.
5888 \newcommand{\glsifcategory}[4]{%
5889 \ifglsfieldeq{#1}{category}{#2}{#3}{#4}%
5890 }


```

Categories can have attributes.

```
categoryattribute \glssetcategoryattribute{\category}{\attribute-label}{\value}
```

Set (or override if already set) an attribute for the given category.

```
5891 \newcommand*\glssetcategoryattribute[3]{%
5892   \csdef{@glsxtr@categoryattr@@#1@#2}{#3}%
5893 }
```

```
categoryattribute \glsgetcategoryattribute{\category}{\attribute-label}
```

Get the value of the given attribute for the given category. Does nothing if the attribute isn't defined.

```
5894 \newcommand*\glsgetcategoryattribute[2]{%
5895   \csuse{@glsxtr@categoryattr@@#1@#2}%
5896 }
```

```
categoryattribute \glshascategoryattribute{\category}{\attribute-label}{\true}{\false}
```

Tests if the category has the given attribute set.

```
5897 \newcommand*\glshascategoryattribute[4]{%
5898   \ifcscvoid{@glsxtr@categoryattr@@#1@#2}{#4}{#3}%
5899 }
```

```
\glssetattribute \glssetattribute{\entry_label}{\attribute-label}{\value}
```

Short cut where the category label is obtained from the entry information.

```
5900 \newcommand*\glssetattribute[3]{%
5901   \glssetcategoryattribute{\glscategory{#1}}{#2}{#3}%
5902 }
```

```
\glsgetattribute \glsgetattribute{\entry_label}{\attribute-label}
```

Short cut where the category label is obtained from the entry information.

```
5903 \newcommand*\glsgetattribute[2]{%
5904   \glsgetcategoryattribute{\glscategory{#1}}{#2}%
5905 }
```

```
\glshasattribute \glshasattribute{\langle entry label \rangle}{\langle attribute-label \rangle}{\langle true \rangle}{\langle false \rangle}
```

Short cut to test if the given attribute has been set where the category label is obtained from the entry information.

```
5906 \newcommand*\glshasattribute[4]{%
5907   \ifglsentryexists{#1}%
5908   {\glshascategoryattribute{\glscategory{#1}}{#2}{#3}{#4}}%
5909   {#4}%
5910 }
```

```
categoryattribute \glsifcategoryattribute{\langle category \rangle}{\langle attribute-label \rangle}{\langle value \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

True if category has the attribute with the given value.

```
5911 \newcommand{\glsifcategoryattribute}[5]{%
5912   \ifcsundef{@glsxtr@categoryattr@@#1@#2}%
5913   {#5}%
5914   {\ifcsstring{@glsxtr@categoryattr@@#1@#2}{#3}{#4}{#5}}%
5915 }
```

```
\glsifattribute \glsifattribute{\langle entry label \rangle}{\langle attribute-label \rangle}{\langle value \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

Short cut to determine if the given entry has a category with the given attribute set.

```
5916 \newcommand{\glsifattribute}[5]{%
5917   \ifglsentryexists{#1}%
5918   {\glsifcategoryattribute{\glscategory{#1}}{#2}{#3}{#4}{#5}}%
5919   {#5}%
5920 }
```

Set attributes for the default general category:

```
5921 \glssetcategoryattribute{general}{regular}{true}
```

Acronyms are regular by default, since they're typically just treated like normal words.

```
5922 \glssetcategoryattribute{acronym}{regular}{true}
```

regularcategory Convenient shortcut to create add the regular attribute.

```
5923 \newcommand*\glssetregularcategory[1]{%
5924   \glssetcategoryattribute{#1}{regular}{true}}%
```

```
fregularcategory \glsifregularcategory{\langle category \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

Short cut to determine if a category has the regular attribute explicitly set to true.

```
5926 \newcommand{\glsifregularcategory}[3]{%
5927   \glsifcategoryattribute{\#1}{regular}{true}{\#2}{\#3}%
5928 }
```

```
tregularcategory \glsifnotregularcategory{\langle category \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

Short cut to determine if a category has the regular attribute explicitly set to false.

```
5929 \newcommand{\glsifnotregularcategory}[3]{%
5930   \glsifcategoryattribute{\#1}{regular}{false}{\#2}{\#3}%
5931 }
```

```
\glsifregular \glsifregular{\langle entry label \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

Short cut to determine if an entry has a regular attribute set to true.

```
5932 \newcommand{\glsifregular}[3]{%
5933   \glsifregularcategory{\glscategory{\#1}}{\#2}{\#3}%
5934 }
```

```
\glsifnotregular \glsifnotregular{\langle entry label \rangle}{\langle true part \rangle}{\langle false part \rangle}
```

Short cut to determine if an entry has a regular attribute set to false.

```
5935 \newcommand{\glsifnotregular}[3]{%
5936   \glsifnotregularcategory{\glscategory{\#1}}{\#2}{\#3}%
5937 }
```

```
oreachincategory \glsforeachincategory[\langle glossary labels \rangle]{\langle category-label \rangle}
{\langle glossary-cs \rangle}{\langle label-cs \rangle}{\langle body \rangle}
```

Iterates through all entries in all the glossaries (or just those listed in *\langle glossary labels \rangle*) and does *\langle body \rangle* if the category matches *\langle category-label \rangle*. The control sequences *\langle glossary-cs \rangle* and *\langle label-cs \rangle* may be used in *\langle body \rangle* to access the glossary label and entry label for the current iteration.

```
5938 \newcommand{\glsforeachincategory}[5][\@glo@types]{%
```

```

5939 \forallglossaries[#1]{#3}%
5940 {%
5941   \forglsentries[#3]{#4}%
5942   {%
5943     \glsifcategory{#4}{#2}{#5}{()}%
5944   }%
5945 }%
5946 }

```

```

achwithattribute \glsforeachwithattribute[<glossary labels>]{<attribute-label>}%
{<attribute-value>}{<glossary-cs>}{<label-cs>}{<body>}

```

Iterates through all entries in all the glossaries (or just those listed in *<glossary labels>*) and does *<body>* if the category attribute *<attribute-label>* matches *<attribute-value>*. The control sequences *<glossary-cs>* and *<label-cs>* may be used in *<body>* to access the glossary label and entry label for the current iteration.

```

5947 \newcommand{\glsforeachwithattribute}[6][\@glo@types]{%
5948   \forallglossaries[#1]{#4}%
5949   {%
5950     \forglsentries[#4]{#5}%
5951     {%
5952       \glsifattribute{#5}{#2}{#3}{#6}{()}%
5953     }%
5954   }%
5955 }

```

If *\newterm* has been defined, redefine it so that it automatically sets the category label to *index* and add *\glsxtrpostdescription*.

```

5956 \ifdef\newterm
5957 {%

```

\newterm

```

5958 \renewcommand*\newterm[2][]{%
5959   \newglossaryentry[#2]{%
5960     type=index, category=index, name={#2}, %
5961     description={\glsxtrpostdescription\nopostdesc}, #1}%
5962 }

```

Indexed terms are regular by default.

```

5963 \glssetcategoryattribute[index]{regular}{true}

```

\trpostdescindex

```

5964 \newcommand*\glsxtrpostdescindex[]{}
5965 {}
5966 {}

```

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.

```
5967 \ifdef\printsymbols  
5968 {%
```

`glsxtrnewsymbol` Unlike `\newterm`, this has a separate argument for the label (since the symbol will likely contain commands).

```
5969 \newcommand*{\glsxtrnewsymbol}[3] []{  
5970   \newglossaryentry{#2}{name={#3},sort={#2},type=symbols,category=symbol,#1}  
5971 }
```

Symbols are regular by default.

```
5972 \glssetcategoryattribute{symbol}{regular}{true}
```

`rpostdescsymbol`

```
5973 \newcommand*{\glsxtrpostdescsymbol}{}  
  
5974 }  
5975 {}
```

Similar for the numbers option.

```
5976 \ifdef\printnumbers  
5977 {%
```

`glsxtrnewnumber`

```
5978 \ifdef\printnumbers  
5979 \newcommand*{\glsxtrnewnumber}[3] []{  
5980   \newglossaryentry{#2}{name={#3},sort={#2},type=numbers,category=number,#1}  
5981 }
```

Numbers are regular by default.

```
5982 \glssetcategoryattribute{number}{regular}{true}
```

`rpostdescnumber`

```
5983 \newcommand*{\glsxtrpostdescnumber}{}  
  
5984 }  
5985 {}
```

`sxtersetcategory` Set the category for all listed labels. The first argument is the list of entry labels and the second argument is the category label.

```
5986 \newcommand*{\glsxtrsetcategory}[2]{%  
5987   @for@glsxtr@label:=#1\do  
5988   {  
5989     \glsfieldxdef{@glsxtr@label}{category}{#2}  
5990   }%  
5991 }
```

`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.

```
5992 \newcommand*{\glsxtrsetcategoryforall}[2]{%
5993   \forallglossaries[#1]{\@glsxtr@type}{%
5994     \forglsentries[\@glsxtr@type]{\@glsxtr@label}{%
5995       {%
5996         \glsfieldxdef{\@glsxtr@label}{category}{#2}{%
5997       }{%
5998     }{%
5999   }}
```

`trfieldtitlecase` `\glsxtrfieldtitlecase{\langle label \rangle}{\langle field \rangle}`

Apply title casing to the contents of the given field.

```
6000 \newcommand*{\glsxtrfieldtitlecase}[2]{%
6001   \expandafter\glsxtrfieldtitlecasecs\expandafter
6002   {\csname glo@\glsdetoklabel{#1}@#2\endcsname}{%
6003 }}
```

`ieldtitlecasecs` The command used by `\glsxtrfieldtitlecase`. May be redefined to use a different command, for example, `\xcapitalisefmtwords`.

```
6004 \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.

```
6005 \@ifpackageloaded{glossaries-accsupp}
6006 {
6007   \renewcommand*{\glossentrydesc}[1]{%
6008     \glsdoifexistsorwarn{#1}{%
6009       {%
6010         \glssetabbrvfmt{\glscategory{#1}}{}}
```

As from version 1.04, allow the `glossdescfont` attribute to determine the font applied.

```
6011   \glshasattribute{#1}{glossdescfont}{%
6012     {%
6013       \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}{%
6014         \ifcsdef{\@glsxtr@attrval}{%
6015           {%
6016             \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}{%
6017           }{%
6018             {%
6019               \GlossariesExtraWarning{Unknown control sequence name
6020                 '\@glsxtr@attrval' supplied in glossdescfont attribute}}
```

```

6021      for entry '#1'. Ignoring}%
6022      \let\@glsxtr@glossdescfont\@firstofone
6023      }%
6024      }%
6025      {\let\@glsxtr@glossdescfont\@firstofone}%
6026      \glsifattribute{#1}{glossdesc}{firstuc}%
6027      {%
6028          \@glsxtr@glossdescfont{\Glsaccessdesc{#1}}%
6029      }%
6030      {%
6031          \glsifattribute{#1}{glossdesc}{title}%
6032          {%
6033              \glsxtr@do@titlecaps@warn
6034              \glsdescriptionaccessdisplay
6035              {%
6036                  \@glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
6037              }%
6038              {#1}%
6039          }%
6040          {%
6041              \@glsxtr@glossdescfont{\glsaccessdesc{#1}}%
6042          }%
6043      }%
6044  }%
6045 }
6046 }
6047 {
6048 \renewcommand*{\glossentrydesc}[1]{%
6049     \glsdoifexistsorwarn{#1}%
6050     {%
6051         \glssetabbrvfmt{\glscategory{#1}}%
6052         \glshasattribute{#1}{glossdescfont}%
6053         {%
6054             \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%
6055             \ifcsdef{\@glsxtr@attrval}%
6056             {%
6057                 \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}%
6058             }%
6059             {%
6060                 \GlossariesExtraWarning{Unknown control sequence name
6061                     '\@glsxtr@attrval' supplied in glossdescfont attribute
6062                     for entry '#1'. Ignoring}%
6063                 \let\@glsxtr@glossdescfont\@firstofone
6064             }%
6065         }%
6066         {\let\@glsxtr@glossdescfont\@firstofone}%
6067         \glsifattribute{#1}{glossdesc}{firstuc}%
6068         {%
6069             \@glsxtr@glossdescfont{\Glsentrydesc{#1}}%

```

```

6070    }%
6071    {%
6072        \glsifattribute{#1}{glossdesc}{title}%
6073        {%
6074            \glsxtr@do@titlecaps@warn
6075            \glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
6076        }%
6077        {%
6078            \glsxtr@glossdescfont{\glsentrydesc{#1}}%
6079        }%
6080    }%
6081 }
6082 }%
6083 }

```

\glossentryname If the glossname attribute is “firstuc” convert first letter to upper case. If the attribute is “title” use title case.

```

6084 \@ifpackageloaded{glossaries-accsupp}
6085 {%
6086     \renewcommand*\glossentryname[1]{%
6087         \glsdoifexistsorwarn{#1}%
6088     }%
6089     \glssetabbrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the glossnamefont attribute to determine the font applied.

```

6090     \glshasattribute{#1}{glossnamefont}%
6091     {%
6092         \edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6093         \ifcsdef{\glsxtr@attrval}%
6094             {%
6095                 \letcs{\glsxtr@glossnamefont}{\glsxtr@attrval}%
6096             }%
6097             {%
6098                 \GlossariesExtraWarning{Unknown control sequence name
6099                     ‘\glsxtr@attrval’ supplied in glossnamefont attribute
6100                     for entry ‘#1’. Reverting to default \string\glsnamefont}%
6101                 \let\glsxtr@glossnamefont\glsnamefont
6102             }%
6103             {%
6104                 \let\glsxtr@glossnamefont\glsnamefont%
6105                 \glsifattribute{#1}{glossname}{firstuc}%
6106                 {%
6107                     \glsnameaccessdisplay
6108                     {%
6109                         \glsxtr@glossnamefont{\Glsentryname{#1}}%
6110                     }%
6111                     {#1}%
6112                 }%
6113                 {%
6114                     \glsifattribute{#1}{glossname}{title}%

```

```

6115      {%
6116          \@glsxtr@do@titlecaps@warn
6117          \glsnameaccessdisplay
6118          {%
6119              \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
6120          }%
6121          {#1}%
6122      }%
6123      {%
6124          \glsifattribute{#1}{glossname}{uc}%
6125          {%
6126              \glsnameaccessdisplay
6127          }%

```

Hide the label from the upper-casing command.

```

6128          \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6129          \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
6130          }%
6131          {#1}%
6132      }%
6133      {%
6134          \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6135          \glsnameaccessdisplay
6136          {%
6137              \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
6138          }%
6139          {#1}%
6140      }%
6141      }%
6142  }%

```

Do post-name hook:

```

6143      \glsxtrpostnamehook{#1}%
6144  }%
6145 }
6146 }
6147 {
6148 \renewcommand*\glossentryname[1]{%
6149     \@glsdoifexistsorwarn{#1}%
6150     {%
6151         \glssetabbrvfmt{\glscategory{#1}}%
6152         \glshasattribute{#1}{glossnamefont}%
6153         {%
6154             \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6155             \ifcsdef{\@glsxtr@attrval}%
6156             {%
6157                 \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6158             }%
6159             {%
6160                 \GlossariesExtraWarning{Unknown control sequence name

```

```

6161     '@glsxtr@attrval' supplied in glossnamefont attribute
6162     for entry '#1'. Reverting to default \string\glsnamefont}%
6163     \let\@glsxtr@glossnamefont\glsnamefont
6164     }%
6165 }%
6166 {\let\@glsxtr@glossnamefont\glsnamefont}%
6167 \glsifattribute{#1}{glossname}{firstuc}%
6168 {%
6169     \@glsxtr@glossnamefont{\Glsentryname{#1}}%
6170 }%
6171 {%
6172     \glsifattribute{#1}{glossname}{title}%
6173     {%
6174         \@glsxtr@do@titlecaps@warn
6175         \@glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
6176     }%
6177     {%
6178         \glsifattribute{#1}{glossname}{uc}%
6179     }%

```

Hide the label from the upper-casing command.

```

6180     \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6181     \@glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
6182     }%
6183     {%

```

This little trick is used by glossaries to allow the user to redefine \glsnamefont to use \makefirstuc. Support it even though they can now use the firstuc attribute.

```

6184     \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6185     \expandafter\@glsxtr@glossnamefont\expandafter{\glo@name}%
6186     }%
6187     {%
6188     }%

```

Do post-name hook.

```

6189     \glsxtrpostnamehook{#1}%
6190     }%
6191 }
6192 }

```

\Glossentryname Redefine to set the abbreviation format and accessibility support.

```

6193 \ifpackageloaded{glossaries-accsupp}
6194 {
6195 \renewcommand*\Glossentryname[1]{%
6196     \glsdoifexistsorwarn{#1}%
6197     {%
6198         \glssetabbrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the glossnamefont attribute to determine the font applied.

```

6199     \glshasattribute{#1}{glossnamefont}%
6200     {%

```

```

6201     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6202     \ifcsdef{\@glsxtr@attrval}%
6203     {%
6204         \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6205     }%
6206     {%
6207         \GlossariesExtraWarning{Unknown control sequence name
6208             '\@glsxtr@attrval' supplied in glossnamefont attribute
6209             for entry '#1'. Reverting to default \string\glsnamefont}%
6210         \let\@glsxtr@glossnamefont\glsnamefont
6211     }%
6212     }%
6213     {\let\@glsxtr@glossnamefont\glsnamefont}%
6214     \glsnameaccessdisplay
6215     {%
6216         \@glsxtr@glossnamefont{\Glsentryname{#1}}%
6217     }%
6218     {#1}%

```

Do post-name hook:

```

6219     \glsxtrpostnamehook{#1}%
6220     }%
6221 }
6222 }
6223 {
6224 \renewcommand*\Glossentryname[1]{%
6225     \glsdoifexistsorwarn{#1}%
6226     {%
6227         \glssetabbrvfmt{\glscategory{#1}}%
6228         \glshasattribute{#1}{glossnamefont}%
6229     }%
6230     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6231     \ifcsdef{\@glsxtr@attrval}%
6232     {%
6233         \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6234     }%
6235     {%
6236         \GlossariesExtraWarning{Unknown control sequence name
6237             '\@glsxtr@attrval' supplied in glossnamefont attribute
6238             for entry '#1'. Reverting to default \string\glsnamefont}%
6239         \let\@glsxtr@glossnamefont\glsnamefont
6240     }%
6241     }%
6242     {\let\@glsxtr@glossnamefont\glsnamefont}%
6243     \@glsxtr@glossnamefont{\Glsentryname{#1}}%

```

Do post-name hook:

```

6244     \glsxtrpostnamehook{#1}%
6245     }%
6246 }

```

```
6247 }
```

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.

```
6248 \newcommand*{\glsxtrpostnamehook}[1]{%
6249   \let\@glsnumberformat\@glsxtr@defaultnumberformat
6250   \glsxtrdoautoindexname{#1}{indexname}}%
```

Allow additional code regardless of category:

```
6251   \glsextrapostnamehook{#1}%
```

Allow categories to hook in here.

```
6252   \csuse{glsxtrpostname}\glscategory{#1}%
6253 }
```

trapostnamehook

```
6254 \newcommand*{\glsextrapostnamehook}[1]{}%
```

\glsdefpostname Provide a convenient command for defining the post-name hook for the given category.

```
6255 \newcommand*{\glsdefpostname}[2]{%
6256   \csdef{glsxtrpostname#1}{#2}%
6257 }
```

etaccessdisplay

```
6258 \@ifpackageloaded{glossaries-accsupp}
6259 {
6260   \newcommand*{\glsxtr@setaccessdisplay}[1]{%
6261     \ifcsdef{gls#1accessdisplay}%
6262       {\letcs{\glsxtr@accessdisplay}{gls#1accessdisplay}}%
6263     {}%
```

This is essentially the reverse of \gls@fetchfield, since the field supplied to \glossentryname has to be the internal label, but the \gls<field>accessdisplay commands use the key name.

```
6264   \edef{\gls@thisval}{#1}%
6265   \for{\gls@map}{\gls@keymap}{\do{%
6266     \edef{\gls@this@key}{\expandafter\@secondoftwo\gls@map}%
6267     \ifeq{\gls@this@key}{\gls@thisval}%
6268     {}%
6269     \edef{\gls@thisval}{\expandafter\@firstoftwo\gls@map}%
6270     \endfortrue
6271   }%
6272   {}%
6273 }%
6274 \ifcsdef{gls@\gls@thisval accessdisplay}%
6275   {\letcs{\glsxtr@accessdisplay}{gls@\gls@thisval accessdisplay}}%
```

```

6276      {\let\@glsxtr@accessdisplay\@firstoftwo}%
6277      }%
6278  }
6279 }
6280 {%
6281  \newcommand*{\glsxtr@setaccessdisplay}[1]{%
6282    \let\@glsxtr@accessdisplay\@firstoftwo}
6283 }

```

`sentrynameother` Provide a command that works like `\glossentryname` but accesses a different field (which must be supplied using its internal field label).

```

6284 \newrobustcmd*{\glossentrynameother}[2]{%
6285   \@glsdoifexistsorwarn{#1}%
6286   {%

```

Accessibility support:

```
6287   \glsxtr@setaccessdisplay{#2}%
```

Set the abbreviation format:

```

6288  \glssetabrvfmt{\glscategory{#1}}%
6289  \glshasattribute{#1}{glossnamefont}%
6290  {%
6291    \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6292    \ifcsdef{\@glsxtr@attrval}%
6293    {%
6294      \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6295    }%
6296    {%
6297      \GlossariesExtraWarning{Unknown control sequence name
6298        '@glsxtr@attrval' supplied in glossnamefont attribute
6299        for entry '#1'. Reverting to default \string\glsnamefont}%
6300      \let\@glsxtr@glossnamefont\glsnamefont
6301    }%
6302  }%
6303  {\let\@glsxtr@glossnamefont\glsnamefont}%
6304  \glsifattribute{#1}{glossname}{firstuc}%
6305  {%
6306    \glsxtr@accessdisplay
6307    {\@glsxtr@glossnamefont{\Gls@entry@field{#1}{#2}}}%
6308    {#1}%
6309  }%
6310  {%
6311    \glsifattribute{#1}{glossname}{title}%
6312    {%
6313      \glsxtr@do@titlecaps@warn
6314      \glsxtr@accessdisplay
6315      {\@glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{#2}}}%
6316      {#1}%
6317    }%
6318    {%

```

```

6319     \glsifattribute{#1}{glossname}{uc}%
6320     {%
6321         \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
6322         \@glsxtr@accessdisplay
6323         {\@glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}}%
6324         {#1}%
6325     }%
6326     {%
6327         \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
6328         \@glsxtr@accessdisplay
6329         {\expandafter\@glsxtr@glossnamefont\expandafter{\glo@name}}%
6330         {#1}%
6331     }%
6332     {%
6333 }

```

Do post-name hook.

```

6334     \glsxtrpostnamehook{#1}%
6335   }%
6336 }

```

`format@override` Determines if the `format` key should override the `indexing` attribute value.

```

6337 \newif\if@glsxtr@format@override
6338 \@glsxtr@format@overridedefalse

```

If overriding is enabled, the `\glshypernumber` command will have to be redefined in the index to use `\hyperpage` instead.

`xFormatOverride`

```

6339 \@ifpackageloaded{hyperref}%
6340 {

```

If `hyperref`'s `hyperindex` option is on, then `hyperref` will automatically add `\hyperpage`, so don't add it.

```

6341 \ifHy@hyperindex
6342   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
6343     \@glsxtr@format@overridetrue
6344     \appto\theindex{\let\glshypernumber\@firstofone}%
6345   }
6346 \else
6347   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
6348     \@glsxtr@format@overridetrue
6349     \appto\theindex{\let\glshypernumber\hyperpage}%
6350   }
6351 \fi
6352 }
6353 {
6354 \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
6355   \@glsxtr@format@overridetrue
6356 }

```

```

6357 }
6358 \only\GlsXtrEnableIndexFormatOverride

doautoindexname
6359 \newcommand*{\glsxtrdoautoindexname}[2]{%
6360   \glshasattribute{#1}{#2}%
6361   {%
6362     \glsxtr@autoindex@setname{#1}%
6363     If the attribute value is simply “true” don’t add an encap, otherwise use the value as the encap.
6364     \protected@edef\@glsxtr@attrval{\glsgetattribute{#1}{#2}}%
6365     \if@glsxtr@format@override
6366       \ifx\@glsnumberformat\@glsxtr@defaultnumberformat
6367       \else
6368         \let\@glsxtr@attrval\@glsnumberformat
6369       \fi
6370       \fi
6371     \ifdefstring{\@glsxtr@attrval}{true}%
6372     {\eappto\glo@name{\@glsxtr@autoindex@encap\@glsxtr@attrval}}%
6373     \expandafter\glsxtrautoindex\expandafter{\glo@name}%
6374   }%
6375   {}%
6376 }

glsxtrautoindex
6377 \newcommand*{\glsxtrautoindex}{\index}

xtrautoindexesc
6378 \newcommand{\glsxtrautoindexesc}{%
6379   \gls@checkmkidxchars\glo@sort
6380   \glsxtr@autoindex@doextra@esc\glo@sort
6381 }

toindex@setname Assign \glo@name for use with indexname attribute.
6382 \newcommand*{\@glsxtr@autoindex@setname}[1]{%
6383   \protected@edef\glo@name{\glsxtrautoindexentry{#1}}%
6384   \glsxtrautoindexassingsort{\glo@sort}{#1}%
6385   \glsxtrautoindexesc
6386   \epreto\glo@name{\glo@sort\glsxtr@autoindex@at}%
6387 }

rautoindexentry Command used for the actual part when auto-indexing.
6388 \newcommand*{\glsxtrautoindexentry}[1]{\string\glsentryname{#1}}

```

indexassignsort Used to assign the sort value when auto-indexing.

```
6389 \newcommand*{\glsxtrautoindexassignsort}[2]{%
6390   \glsletentryfield{#1}{#2}{sort}%
6391 }
```

dex@doextra@esc

```
6392 \newcommand*{\@glsxtr@autoindex@doextra@esc}[1]{%
```

Escape the escape character unless it has already been escaped.

```
6393 \ifx\@glsxtr@autoindex@esc\@gls@quotechar
6394 \else
6395   \def\@gls@checkedmkidx{}%
6396   \edef\@@glsxtr@checkspch{}%
6397     \noexpand\@glsxtr@autoindex@escquote\expandonce{#1}%
6398     \noexpand\@empty\@glsxtr@autoindex@esc\noexpand\@nnil
6399     \@glsxtr@autoindex@esc\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6400   \@@glsxtr@checkspch
6401   \let#1\@gls@checkedmkidx\relax
6402 \fi
```

Escape actual character unless it has already been escaped.

```
6403 \ifx\@glsxtr@autoindex@at\@gls@actualchar
6404 \else
6405   \def\@gls@checkedmkidx{}%
6406   \edef\@@glsxtr@checkspch{}%
6407     \noexpand\@glsxtr@autoindex@escat\expandonce{#1}%
6408     \noexpand\@empty\@glsxtr@autoindex@at\noexpand\@nnil
6409     \@glsxtr@autoindex@at\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6410   \@@glsxtr@checkspch
6411   \let#1\@gls@checkedmkidx\relax
6412 \fi
```

Escape level character unless it has already been escaped.

```
6413 \ifx\@glsxtr@autoindex@level\@gls@levelchar
6414 \else
6415   \def\@gls@checkedmkidx{}%
6416   \edef\@@glsxtr@checkspch{}%
6417     \noexpand\@glsxtr@autoindex@esclevel\expandonce{#1}%
6418     \noexpand\@empty\@glsxtr@autoindex@level\noexpand\@nnil
6419     \@glsxtr@autoindex@level\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6420   \@@glsxtr@checkspch
6421   \let#1\@gls@checkedmkidx\relax
6422 \fi
```

Escape encap character unless it has already been escaped.

```
6423 \ifx\@glsxtr@autoindex@encap\@gls@encapchar
6424 \else
6425   \def\@gls@checkedmkidx{}%
6426   \edef\@@glsxtr@checkspch{}%
6427     \noexpand\@glsxtr@autoindex@escencap\expandonce{#1}%
6428     \noexpand\@empty\@glsxtr@autoindex@encap\noexpand\@nnil
```

```

6429      \@glsxtr@autoindex@encap\noexpand\empty\noexpand\@glsxtr@endescspch}%
6430      \@@glsxtr@checkspch
6431      \let#1\gls@checkedmkidx\relax
6432  \fi
6433 }

```

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`.

```
6434 \newcommand*\{@glsxtr@autoindex@at}{}
```

`trSetActualChar` Set the actual character.

```

6435 \newcommand*\GlsXtrSetActualChar}[1]{%
6436   \gdef\@glsxtr@autoindex@at{#1}%
6437   \def\@glsxtr@autoindex@escat##1##2##3\@glsxtr@endescspch{%
6438     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escat}{##1}{##2}{##3}%
6439   }%
6440 }
6441 \onlypreamble\GlsXtrSetActualChar
6442 \makeatother
6443 \GlsXtrSetActualChar{0}
6444 \makeatletter

```

`autoindex@encap` Encap character for use with `\index`.

```
6445 \newcommand*\{@glsxtr@autoindex@encap}{}
```

`XtrSetEncapChar` Set the encap character.

```

6446 \newcommand*\GlsXtrSetEncapChar}[1]{%
6447   \gdef\@glsxtr@autoindex@encap{#1}%
6448   \def\@glsxtr@autoindex@escencap##1##2##3\@glsxtr@endescspch{%
6449     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escencap}{##1}{##2}{##3}%
6450   }%
6451 }
6452 \GlsXtrSetEncapChar{}%
6453 \onlypreamble\GlsXtrSetEncapChar

```

`autoindex@level` Level character for use with `\index`.

```
6454 \newcommand*\{@glsxtr@autoindex@level}{}
```

`XtrSetLevelChar` Set the encap character.

```

6455 \newcommand*\GlsXtrSetLevelChar}[1]{%
6456   \gdef\@glsxtr@autoindex@level{#1}%
6457   \def\@glsxtr@autoindex@esclevel##1##2##3\@glsxtr@endescspch{%
6458     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@esclevel}{##1}{##2}{##3}%
6459   }%
6460 }
6461 \GlsXtrSetLevelChar{!}%
6462 \onlypreamble\GlsXtrSetLevelChar

```

```

r@autoindex@esc Escape character for use with \index.
6463 \newcommand*{\glsxtr@autoindex@esc}{}

lsXtrSetEscChar Set the escape character.
6464 \newcommand*{\GlsXtrSetEscChar}[1]{%
6465   \gdef\@glsxtr@autoindex@esc{#1}%
6466   \def\@glsxtr@autoindex@escquote##1##2##3\@glsxtr@endescspch{%
6467     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escquote}{##1}{##2}{##3}%
6468   }%
6469 }
6470 \GlsXtrSetEscChar{`}
6471 \onlypreamble\GlsXtrSetEscChar

Set if defined. (For example, if doc package has been loaded.) Actual character \actualchar:
6472 \ifdef\actualchar
6473   {\expandafter\GlsXtrSetActualChar\expandafter{\actualchar}}
6474 {}

Quote character \quotechar:
6475 \ifdef\quotechar
6476   {\expandafter\GlsXtrSetEscChar\expandafter{\quotechar}}
6477 {}

Level character \levelchar:
6478 \ifdef\levelchar
6479   {\expandafter\GlsXtrSetLevelChar\expandafter{\levelchar}}
6480 {}

Encap character \encapchar:
6481 \ifdef\encapchar
6482   {\expandafter\GlsXtrSetEncapChar\expandafter{\encapchar}}
6483 {}

leto@endescspch
6484 \def\@glsxtr@gobbleto@endescspch#1\@glsxtr@endescspch{}

\@@glsxtr@autoindex@escspch{<char>}{<cs>}{<pre>}{<mid>}{<post>}

```

6485 \newcommand*{\@@glsxtr@autoindex@escspch}[5]{%
6486 \gls@tmpb=\expandafter{\gls@checkedmkidx}%
6487 \toks@={#3}%
6488 \ifx\@nnil#3\relax
6489 \def\@@glsxtr@checkspch{\@glsxtr@gobbleto@endescspch#5\@glsxtr@endescspch}%
6490 \else
6491 \ifx\@nnil#4\relax
6492 \edef\gls@checkedmkidx{\the\gls@tmpb\the\toks@}%
6493 \def\@@glsxtr@checkspch{\@glsxtr@gobbleto@endescspch}

```

6494     #4#5\@glsxtr@endescspch}%
6495 \else
6496   \edef\@gls@checkedmkidx{\the\@gls@tmpb\the\toks@%
6497   \@glsxtr@autoindex@esc#1}%
6498   \def\@@glsxtr@checkspch{#2#5#1\@nnil#1\@glsxtr@endescspch}%
6499 \fi
6500 \fi
6501 \@@glsxtr@checkspch
6502 }

```

\Glossentrydesc Redefine to set the abbreviation format and accessibility support.

```

6503 \renewcommand*\Glossentrydesc[1]{%
6504   \glsdoifexistsorwarn{#1}%
6505   {%
6506     \glssetabbrvfmt{\glscategory{#1}}%
6507     \Glsaccessdesc{#1}%
6508   }%
6509 }

```

\glossentrysymbol Redefine to set the abbreviation format and accessibility support.

```

6510 \renewcommand*\glossentrysymbol[1]{%
6511   \glsdoifexistsorwarn{#1}%
6512   {%
6513     \glssetabbrvfmt{\glscategory{#1}}%
6514     \glsaccesssymbol{#1}%
6515   }%
6516 }

```

\glossentrysymbol Redefine to set the abbreviation format and accessibility support.

```

6517 \renewcommand*\Glossentrysymbol[1]{%
6518   \glsdoifexistsorwarn{#1}%
6519   {%
6520     \glssetabbrvfmt{\glscategory{#1}}%
6521     \Glsaccesssymbol{#1}%
6522   }%
6523 }

```

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.

```

6524 \newcommand*\GlsXtrEnableInitialTagging{}%
6525   \@ifstar\s@glsxtr@enabletagging\@glsxtr@enabletagging
6526 }
6527 \onlypreamble\GlsXtrEnableInitialTagging

```

`r@enabletagging` Starred version undefines command.

```

6528 \newcommand*{\s@glsxtr@enabletagging}[2]{%
6529   \undef#2%
6530   \@glsxtr@enabletagging{#1}{#2}%
6531 }

r@enabletagging Internal command.
6532 \newcommand*{\@glsxtr@enabletagging}[2]{%
  Set attributes for categories given in the first argument.
6533   \@for\@glsxtr@cat:=#1\do
6534   {%
6535     \ifdefempty\@glsxtr@cat
6536     {}%
6537     {\glssetcategoryattribute{\@glsxtr@cat}{tagging}{true}}%
6538   }%
6539   \newrobustcmd*#2[1]{##1}%
6540   \def\@glsxtr@taggingcs{#2}%
6541   \renewcommand*\@glsxtr@activate@initialtagging{%
6542     \let#2\@glsxtr@tag
6543   }%
6544   \ifundef\@gls@preglossaryhook
6545   {\GlossariesExtraWarning{Initial tagging requires at least
6546     glossaries.sty v4.19 to work correctly}}%
6547   {}%
6548 }

```

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`

```

6549 \ifundef\mfu@checkword@do
6550 {%
6551   \newcommand*{\mfu@checkword@do}[1]{%
6552     \ifdefstring{\mfu@checkword@arg}{#1}%
6553     {}%
6554     \let\@mfu@domakefirstuc\@firstofone
6555     \listbreak
6556   }%
6557   {}%
6558 }

```

`\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.

```

6559 \ifundef\mfu@checkword
6560 {%
6561   \newcommand{\@glsxtr@do@titlecaps@warn}{%
6562     \GlossariesExtraWarning{mfirstuc.sty too old. Title Caps
6563       support not available}}%

```

One warning should suffice.

```
6564     \let\@glsxtr@do@titlecaps@warn\relax
6565 }
6566 }
6567 {
6568 \renewcommand*{\mfp@checkword}[1]{%
6569     \def\mfp@checkword@arg{#1}%
6570     \let\@mfp@domakefirstuc\makefirstuc
6571     \forlistloop\mfp@checkword@do\@mfp@nocaplist
6572 }
6573 }
6574 }
6575 {}% no patch required
```

@titlecaps@warn Do warning if title case not supported.

```
6576 \newcommand*{\@glsxtr@do@titlecaps@warn}{}%
```

@initialtagging Used in \printglossary but at least v4.19 of glossaries required.

```
6577 \newcommand*{\@glsxtr@activate@initialtagging}{}%
```

\@glsxtr@tag Definition of tagging command when used in glossary.

```
6578 \newrobustcmd*{\@glsxtr@tag}[1]{%
6579     \glsifattribute{\glscurrententrylabel}{tagging}{true}%
6580     {\glsxtrtagfont{#1}}{#1}%
6581 }
```

\glsxtrtagfont Used in the glossary.

```
6582 \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.

```
6583 \ifdef\@gls@preglossaryhook
6584 {
6585     \renewcommand*{\@gls@preglossaryhook}{}%
6586     \@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.

```
6587 \ifundef\@glsxtr@org@postdescription
6588 {
6589     \let\@glsxtr@org@postdescription\glspostdescription
6590     \renewcommand*{\glspostdescription}{}%
6591     \ifglsentryexists{\glscurrententrylabel}%
6592     {
6593         \glsxtrpostdescription
6594         \@glsxtr@org@postdescription
```

```
6595      }%
6596      {}%
6597      }%
6598      }%
6599      {}%
```

Enable the options used by \@@glsxtrp:

```
6600      \glossxtrsetopts
6601      }%
6602 }
6603 {}
```

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.

```
6604 \newcommand*\glsxtrpostdescription}{%
6605   \csuse{glsxtrpostdesc\glscategory}{\glscurrententrylabel}}%
6606 }
```

postdescgeneral

```
6607 \newcommand*\glsxtrpostdescgeneral}{}
```

xtrpostdescterm

```
6608 \newcommand*\glsxtrpostdescterm}{}
```

postdescacronym

```
6609 \newcommand*\glsxtrpostdescacronym}{}
```

escabbreviation

```
6610 \newcommand*\glsxtrpostdescabbreviation}{}
```

\glsdefpostdesc Provide a convenient command for defining the post-description hook for the given category.

```
6611 \newcommand*\glsdefpostdesc}[2]{%
6612   \csdef{glsxtrpostdesc#1}{\glsxtrpostdesc#2}%
6613 }
```

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.

```
6614 \renewcommand*\glspostlinkhook}{%
6615   \ifglsentryexists{\glslabel}{\glsxtrpostlinkhook}{}}%
6616 }
```

xtrpostlinkhook The entry label should already be stored in \glslabel by \gls@link.

```
6617 \newcommand*\glsxtrpostlinkhook}{%
6618   \glsxtrdiscardperiod{\glslabel}}%
```

```

6619 {\glsxtrpostlinkendsentence}%
6620 {\glsxtrifcustomdiscardperiod
6621 {\glsxtrifperiod{\glsxtrpostlinkendsentence}{\glsxtrpostlink}}%
6622 {\glsxtrpostlink}%
6623 }%
6624 }

omdiscardperiod Allow user to provide a custom check. Should expand to #2 if no check is required otherwise expand to #1.
6625 \newcommand*{\glsxtrifcustomdiscardperiod}[2]{#2}

\glsxtrpostlink
6626 \newcommand*{\glsxtrpostlink}%
6627 \csuse{\glsxtrpostlink\glscategory{\glslabel}}%
6628 }

\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.
6629 \newcommand*{\glsdefpostlink}[2]{%
  \ifthenelse{#1}{}
    {\PackageError{glossaries-extra}{Invalid empty category label in \string\glsdefpostlink}{}}
  \csdef{\glsxtrpostlink#1}{#2}%
}
6630 \ifthenelse{\equal{#1}{}}{%
  \PackageError{glossaries-extra}{Invalid empty category label in \string\glsdefpostlink}{}%
  \csdef{\glsxtrpostlink#1}{#2}%
}
6631 {\PackageError{glossaries-extra}{Invalid empty category label in \string\glsdefpostlink}{}%
  \csdef{\glsxtrpostlink#1}{#2}%
}
6632 {\PackageError{glossaries-extra}{Invalid empty category label in \string\glsdefpostlink}{}%
  \csdef{\glsxtrpostlink#1}{#2}%
}
6633 {\PackageError{glossaries-extra}{Invalid empty category label in \string\glsdefpostlink}{}%
  \csdef{\glsxtrpostlink#1}{#2}%
}
6634 }

linkendsentence Done by \glsxtrpostlinkhook if a full stop is discarded.
6635 \newcommand*{\glsxtrpostlinkendsentence}%
6636 \ifcsdef{\glsxtrpostlink\glscategory{\glslabel}}{%
  \csuse{\glsxtrpostlink\glscategory{\glslabel}}%
}
6637 {%
  Put the full stop back.
  .\spacefactor\sfcodes`\. \relax
}
6638 \csuse{\glsxtrpostlink\glscategory{\glslabel}}%
6639 .\spacefactor\sfcodes`\. \relax
6640 }%
6641 {%
  Assume the full stop was discarded because the entry ends with a period, so adjust the space-factor.
  .\spacefactor\sfcodes`\. \relax
}
6642 .\spacefactor\sfcodes`\. \relax
6643 }%
6644 }

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.
6645 \newcommand*{\glsxtrpostlinkAddDescOnFirstUse}%
6646 \glsxtrifwasfirstuse{\space\glsxtrparen{\glsaccessdesc{\glslabel}}}{%
}
6647 }

```

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.

```
6648 \newcommand*{\glsxtrpostlinkAddSymbolOnFirstUse}{%
6649   \glsxtrifwasfirstuse
6650   {%
6651     \ifglshassymbol{\glslabel}%
6652       {\space\glsxtrparen{\glsaccesssymbol{\glslabel}}{}}%
6653       {}%
6654     }%
6655   {}%
6656 }
```

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.

```
6657 \newcommand*{\glsxtrpostlinkAddSymbolDescOnFirstUse}{%
6658   \glsxtrifwasfirstuse
6659   {%
6660     \space\glsxtrparen
6661     {%
6662       \ifglshassymbol{\glslabel}%
6663         {\glsaccesssymbol{\glslabel}, }%
6664         {}%
6665         \glsaccessdesc{\glslabel}%
6666       }%
6667     }%
6668   {}%
6669 }
```

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).

```
6670 \newcommand*{\glsxtrdiscardperiod}[3]{%
6671   \glsxtrifwasfirstuse
6672   {%
6673     \glsifattribute{#1}{retainfirstuseperiod}{true}%
6674     {#3}%
6675   {%
6676     \glsifattribute{#1}{discardperiod}{true}%
6677     {%
6678       \glsifplural
6679       {%
6680         \glsifattribute{#1}{pluraldiscardperiod}{true}%
6681         {\glsxtrifperiod{#2}{#3}}%
6682         {#3}%
6683       }%
6684     {%
6685       \glsxtrifperiod{#2}{#3}%
6686     }%
6687   }%
6688 }
```

```

6686      }%
6687      }%
6688      {#3}%
6689      }%
6690  }%
6691  {%
6692  \glsifattribute{#1}{discardperiod}{true}%
6693  {%
6694  \glsifplural
6695  {%
6696  \glsifattribute{#1}{pluraldiscardperiod}{true}%
6697  {\glsxtrifperiod{#2}{#3}}%
6698  {#3}%
6699  }%
6700  {%
6701  \glsxtrifperiod{#2}{#3}%
6702  }%
6703  }%
6704  {#3}%
6705  }%
6706 }

```

`\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`

```
6707 \newcommand*{\glsxtrifperiod}[1]{\new@ifnextchar.{\@firstoftwo{#1}}}
```

Sometimes it's useful to test if there's a punctuation character following the glossary entry.

`\glsxtr@punctlist` List of characters identified as punctuation marks. (Be careful of babel shorthands!) This doesn't allow for punctuation marks made up from multiple characters (such as ',').

```
6708 \newcommand*{\glsxtr@punctlist}{.,:;?!}
```

`punctuationmark` Add character to punctuation list.

```
6709 \newcommand*{\glsxtraddpunctuationmark}[1]{\appto\glsxtr@punctlist{#1}}
```

`unctuationmarks` Reset the punctuation list.

```
6710 \newcommand*{\glsxtrsetpunctuationmarks}[1]{\def\glsxtr@punctlist{#1}}
```

`\glsxtrifpunc` `\glsxtrifnextpunc{(true part)}{(false part)}`

Test if this is followed by a punctuation mark. (Adapted from `\new@ifnextchar`.)

```

6711 \newcommand*{\glsxtrifnextpunc}[2]{%
6712   \def\reserved@a{#1}%
6713   \def\reserved@b{#2}%
6714   \futurelet\glspunc@token\glsxtr@ifnextpunc
6715 }
```

```

sxtr@ifnextpunc
6716 \newcommand{\glsxtr@ifnextpunc}{%
6717   \glsxtr@ifpunctoken{\glspunc@token}{\let\reserved@b\reserved@a}{}}%
6718   \reserved@b
6719 }

xtr@ifpunctoken Test if the token given in the first argument is in the punctuation list.
6720 \newcommand{\glsxtr@ifpunctoken}[1]{%
6721   \expandafter\glsxtr@ifpunctoken\expandafter#1\glsxtr@punctlist\@nnil
6722 }

xtr@ifpunctoken
6723 \def\glsxtr@ifpunctoken#1#2{%
6724   \let\reserved@d=#2%
6725   \ifx\reserved@d\@nnil
6726     \let\glsxtr@next\glsxtr@notfoundinlist
6727   \else
6728     \ifx#1\reserved@d
6729       \let\glsxtr@next\glsxtr@foundinlist
6730     \else
6731       \let\glsxtr@next\glsxtr@ifpunctoken
6732     \fi
6733   \fi
6734   \glsxtr@next#1%
6735 }

xtr@foundinlist
6736 \def\glsxtr@foundinlist#1\@nnil{\@firstoftwo}

@notfoundinlist
6737 \def\glsxtr@notfoundinlist#1{\@secondoftwo}

glsxtrdopostpunc \glsxtrdopostpunc{\code}

```

If this is followed be a punctuation character, do `\code` after the character otherwise do `\code` before whatever comes next.

```

6738 \newcommand{\glsxtrdopostpunc}[1]{%
6739   \glsxtrifnextpunc{\glsxtr@swaptwo{\#1}}{\#1}{%
6740 }

```

@glsxtr@swaptwo

```

6741 \newcommand{\glsxtr@swaptwo}[2]{\#2\#1}

```

1.7 Abbreviations

The “acronym” code from glossaries is misnamed as it’s more often used for other forms of abbreviations. This code corrects this inconsistency, but rather than just having synonyms, provide commands for abbreviations that have a similar, but not identical, underlying mechanism to acronyms.

If there’s a style for the given category, apply it.

```
6742 \define@key{glsxtrabbrv}{category}{%
6743   \edef\glscategorylabel{\#1}%
6744   \ifcsdef{@glsabbrv@current@\#1}%
6745   {}%
```

Warning should already have been issued.

```
6746   \let\@glsxtr@orgwarndep\GlsXtrWarnDeprecatedAbbrStyle
6747   \let\GlsXtrWarnDeprecatedAbbrStyle\@gobbletwo
6748   \glsxtr@applyabbrvstyle{\csname@glsabbrv@current@\#1\endcsname}%
6749   \let\GlsXtrWarnDeprecatedAbbrStyle\@glsxtr@orgwarndep
6750 }%
6751 {}%
6752 }
```

Save the short plural form. This may be needed before the entry is defined.

```
6753 \define@key{glsxtrabbrv}{shortplural}{%
6754   \def\@gls@shortpl{\#1}%
6755 }
```

Similarly for the long plural form.

```
6756 \define@key{glsxtrabbrv}{longplural}{%
6757   \def\@gls@longpl{\#1}%
6758 }
```

Token registers for the short plural and long plural, provided for use in the abbreviation style definitions.

```
\glsshortpltok
6759 \newtoks\glsshortpltok

\glslongpltok
6760 \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.

```
6761 \newcommand*{\@glsxtr@insertdots}[2]{%
6762   \def#1{}%
6763   \glsxtr@insert@dots#1#2\@nnil
6764 }
```

```
xtr@insert@dots
6765 \newcommand*{\glsxtr@insert@dots}[2]{%
6766   \ifx\@nnil#2\relax
6767   \let\glsxtr@insert@dots@next\gobble
6768   \else
6769   \ifx\relax#2\relax
6770   \else
6771     \appto#1{#2.}%
6772   \fi
6773   \let\glsxtr@insert@dots@next\glsxtr@insert@dots
6774 \fi
6775 \glsxtr@insert@dots@next#1%
6776 }
```

Similarly provide a way of replacing spaces with \glsxtrwordsep, which first needs to be defined:

```
\glsxtrwordsep
6777 \newcommand*{\glsxtrwordsep}{\space}
```

Each word is marked with

```
\glsxtrword
6778 \newcommand*{\glsxtrword}[1]{#1}
```

```
tr@markwordseps
6779 \newcommand*{\glsxtr@markwordseps}[2]{%
6780   \def#1{}%
6781   \glsxtr@mark@wordseps#1#2 \@nnil
6782 }
```

```
r@mark@wordseps
6783 \def\glsxtr@mark@wordseps#1#2 #3{%
6784   \ifdefempty{#1}{%
6785     {\def#1{\protect\glsxtrword{#2}}}%
6786     {\appto#1{\protect\glsxtrwordsep\protect\glsxtrword{#2}}}%
6787   \ifx\@nnil#3\relax
6788   \let\glsxtr@mark@wordseps@next\relax
6789   \else
6790     \def\glsxtr@mark@wordseps@next{%
6791       \glsxtr@mark@wordseps#1#3}%
6792   \fi
6793   \glsxtr@mark@wordseps@next
6794 }
```

`newabbreviation` Define a new generic abbreviation.

```
6795 \newcommand*{\newabbreviation}[4][]{%
6796   \glsxtr@newabbreviation{#1}{#2}{#3}{#4}%
6797 }
```

`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.)

```

6798 \newcommand*{\glsxstr@newabbreviation}[4]{%
6799   \glskeylisttok{#1}%
6800   \glslabeltok{#2}%
6801   \glsshorttok{#3}%
6802   \glslongtok{#4}%

```

Save the original short and long values (before attribute settings modify them).

```

6803   \def\glsxtrorgshort{#3}%
6804   \def\glsxtrorglong{#4}%

```

Provide extra settings for hooks (if modified, this command must end with a comma).

```

6805   \def\ExtraCustomAbbreviationFields{}%

```

Initialise accessibility settings if required.

```

6806   \@gls@initaccesskeys

```

Get the category.

```

6807   \def\glscategorylabel{abbreviation}%
6808   \glsxtr@applyabbrvstyle{\@glsabbrv@current@abbreviation}%

```

Ignore the shortplural and longplural keys.

```

6809   \setkeys*{\glsxtrabbrv}{[shortplural, longplural]{#1}}%

```

Set the default long plural

```

6810   \def@\gls@longpl{#4\glspluralsuffix}%
6811   \let@\gls@default@longpl@\gls@longpl

```

Has the markwords attribute been set?

```

6812   \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
6813   {%
6814     \@glsxtr@markwordseps@\gls@long{#4}%
6815     \expandafter\def\expandafter@\gls@longpl\expandafter
6816       {\@gls@long\glspluralsuffix}%
6817     \let@\gls@default@longpl@\gls@longpl

```

Update `\glslongtok`.

```

6818   \expandafter\glslongtok\expandafter{\@gls@long}%
6819   }%
6820   {}%

```

Has the markshortwords attribute been set? (Not compatible with `insertdots`.)

```

6821   \glsifcategoryattribute{\glscategorylabel}{markshortwords}{true}%
6822   {%
6823     \@glsxtr@markwordseps@\gls@short{#3}%
6824   }%
6825   {}%

```

Has the `insertdots` attribute been set?

```

6826   \glsifcategoryattribute{\glscategorylabel}{insertdots}{true}%
6827   {%
6828     \@glsxtr@insertdots@\gls@short{#3}%

```

```
6829      \expandafter\glsshorttok\expandafter{\@gls@short\spacefactor1000 \relax}%
6830      }%
6831      {\def\@gls@short{#3}}%
6832  }%
```

Has the `aposplural` attribute been set? (Not compatible with `noshortplural`.)

```
6833 \glsifcategoryattribute{\glscategorylabel}{aposplural}{true}%
6834 {%
6835   \expandafter\def\expandafter\@gls@shortpl\expandafter{\@gls@short
6836     '\abrvpluralsuffix}%
6837 }%
6838 {%
```

Has the `noshortplural` attribute been set?

```
6839 \glsifcategoryattribute{\glscategorylabel}{noshortplural}{true}%
6840 {%
6841   \let\@gls@shortpl\@gls@short
6842 }%
6843 {%
6844   \expandafter\def\expandafter\@gls@shortpl\expandafter{\@gls@short
6845     '\abrvpluralsuffix}%
6846 }%
6847 }%
```

Update `\glsshorttok`:

```
6848 \expandafter\glsshorttok\expandafter{\@gls@short}%
```

Hook for further customisation if required:

```
6849 \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).

```
6850 \setkeys*{\glsxtrabbrev}{[category]{#1}}%
```

Has the plural been explicitly set?

```
6851 \ifx\@gls@default@longpl\@gls@longpl
6852 \else
```

Has the `markwords` attribute been set?

```
6853 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
6854 {%
6855   \expandafter\@glsxtr@markwordseps\expandafter\@gls@longpl\expandafter
6856     {\@gls@longpl}%
6857 }%
6858 {%
6859 \fi
```

Set the plural token registers so the values can be accessed by the abbreviation styles.

```
6860 \expandafter\glsshortpltok\expandafter{\@gls@shortpl}%
6861 \expandafter\glslongpltok\expandafter{\@gls@longpl}%
```

Hook for accessibility support (does nothing if `glossaries-accsupp` hasn't been loaded).

```
6862 \gls@setup@default@short@access{#3}%
```

Do any extra setup provided by hook:

```
6863 \newabbreviationhook
```

Define this entry:

```
6864 \protected@edef\@do@newglossaryentry{%
6865   \noexpand\newglossaryentry{\the\glslabeltok}%
6866   {%
6867     type=\glsxtrabbrvtype,%
6868     category=abbreviation,%
6869     short={\the\glsshorthtok},%
6870     shortplural={\the\glsshortpltok},%
6871     long={\the\glslongtok},%
6872     longplural={\the\glslongpltok},%
6873     name={\the\glsshorthtok},%
6874     \CustomAbbreviationFields,%
6875 }
```

Hook may override abbreviation style default settings (this hook must end with a comma if set).

```
6875 \ExtraCustomAbbreviationFields
```

Any explicit fields set in the optional argument override all other settings.

```
6876   \the\glskeylisttok
6877   }%
6878 }%
6879 \do@newglossaryentry
6880 \GlsXtrPostNewAbbreviation
6881 }
```

evpresetkeyhook Hook for extra stuff in \newabbreviation

```
6882 \newcommand*\glsxtrnewabbrevpreshapekeyhook}[3]{}
```

NewAbbreviation Hook used by abbreviation styles.

```
6883 \newcommand*\GlsXtrPostNewAbbreviation{}{}
```

bbreviationhook Hook for use with \newabbreviation.

```
6884 \newcommand*\newabbreviationhook{}{}
```

reviationFields

```
6885 \newcommand*\CustomAbbreviationFields{}{}
```

\glsxtrparen For the parenthetical styles.

```
6886 \newcommand*\glsxtrparen}[1]{(#1)}
```

lsxtrfullformat Full format without case change.

```
6887 \newcommand*\glsxtrfullformat}[2]{%
6888   \glsfirstlongfont{\glsaccesslong{#1}}\#2\glsxtrfullsep{#1}%
6889   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}{%
6890 }}
```

`lsxtrfullformat` Full format with case change.

```
6891 \newcommand*\Glsxtrfullformat}[2]{%
6892   \glsfirstlongfont{\Glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
6893   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}}%
6894 }
```

`xtrfullplformat` Plural full format without case change.

```
6895 \newcommand*\glsxtrfullplformat}[2]{%
6896   \glsfirstlongfont{\glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
6897   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}}%
6898 }
```

`xtrfullplformat` Plural full format with case change.

```
6899 \newcommand*\Glsxtrfullplformat}[2]{%
6900   \glsfirstlongfont{\Glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
6901   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}}%
6902 }
```

`\glsxtrfullsep` Separator used by full format is a space by default. The argument is the entry's label.

```
6903 \newcommand*\glsxtrfullsep}[1]{\space}
```

In-line formats in case first use isn't compatible with `\glsentryfull` (for example, first use suppresses the long form or uses a footnote).

`nlnefullformat` Full format without case change.

```
6904 \newcommand*\glsxtrinlnefullformat}{\glsxtrfullformat}
```

`nlnefullformat` Full format with case change.

```
6905 \newcommand*\Glsxtrinlnefullformat}{\Glsxtrfullformat}
```

`xtrfullplformat` Plural full format without case change.

```
6906 \newcommand*\glsxtrinlnefullplformat}{\glsxtrfullplformat}
```

`nlnefullplformat` Plural full format with case change.

```
6907 \newcommand*\Glsxtrinlnefullplformat}{\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`

```
6908 \renewcommand*\glsentryfull}[1]{\glsxtrinlnefullformat{#1}{}}
```

`\Glsentryfull`

```
6909 \renewcommand*\Glsentryfull}[1]{\Glsxtrinlnefullformat{#1}{}}
```

`\glsentryfullpl`

```
6910 \renewcommand*\glsentryfullpl}[1]{\glsxtrinlnefullplformat{#1}{}}
```

```

\Glsentryfullpl
 6911 \renewcommand*{\Glsentryfullpl}[1]{\Glsxtrinlinefullplformat{#1}{}}
```

sfirstabbrvfont Font changing command used for the abbreviation on first use or in the full format.
 6912 \newcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{#1}}

bbrvdefaultfont Font changing command used for the abbreviation on first use or in the full format.
 6913 \newcommand*{\glsfirstabbrvdefaultfont}[1]{\glsabbrvfont{#1}}

\glsabbrvfont Font changing command used for the abbreviation on subsequent use.
 6914 \newcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{#1}}

bbrvdefaultfont
 6915 \newcommand*{\glsabbrvdefaultfont}[1]{#1}

\glslongfont Font changing command used for the long form in commands like \glsxtrlong.
 6916 \newcommand*{\glslongfont}[1]{\glslongdefaultfont{#1}}

longdefaultfont Default font changing command used for the long form in commands like \glsxtrlong.
 6917 \newcommand*{\glslongdefaultfont}[1]{#1}

lsfirstlongfont Font changing command used for the long form on first use or in the full format.
 6918 \newcommand*{\glsfirstlongfont}[1]{\glslongfont{#1}}

longdefaultfont
 6919 \newcommand*{\glsfirstlongdefaultfont}[1]{\glslongdefaultfont{#1}}

brvpluralsuffix Default plural suffix. Allow an alternative default suffix for abbreviations.
 6920 \newcommand*{\glsxtrabbrvpluralsuffix}{\glspluralsuffix}

brvpluralsuffix Default plural suffix.
 6921 \newcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}

\glsxtrfull Full form (no case-change).
 6922 \newrobustcmd*{\glsxtrfull}{\@gls@hyp@opt\ns@glsxtrfull}
 6923 \newcommand*\ns@glsxtrfull[2][]{%
 6924 \new@ifnextchar[\{\@glsxtr@full{#1}{#2}\}]{%
 6925 {\@glsxtr@full{#1}{#2}[]}%
 6926 }

\@glsxtr@full Low-level macro:
 6927 \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).

```

6928  \glsxstr@record{\#1}{\#2}{\glslink}%
6929  \glsdoifexists{\#2}%
6930  {%
6931    \glssetabrvfmt{\glscategory{\#2}}%
6932    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6933    \let\glsifplural\secondoftwo
6934    \let\glscapscase\firstofthree
6935    \let\glsinsert\empty
6936    \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.

```

6937  \glsxtrsetupfulldefs
6938  \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
6939  }%
6940 \glspostlinkhook
6941 }

```

trsetupfulldefs

```

6942 \newcommand*{\glsxtrsetupfulldefs}{%
6943   \let\glsxtrifwasfirstuse\firstoftwo
6944 }

```

\Glsxtrfull Full form (first letter uppercase).

```

6945 \newrobustcmd*{\Glsxtrfull}{\gls@hyp@opt\ns@Glsxtrfull}
6946 \newcommand*\ns@Glsxtrfull[2][]{%
6947   \new@ifnextchar[\{@Glsxtr@full{\#1}{\#2}}%
6948     {\@Glsxtr@full{\#1}{\#2}[]}%
6949 }

```

\@Glsxtr@full Low-level macro:

```

6950 \def\@Glsxtr@full#1#2[#3]{%
6951   \glsdoifexists{\#2}%
6952   {%
6953     \glssetabrvfmt{\glscategory{\#2}}%
6954     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6955     \let\glsifplural\secondoftwo
6956     \let\glscapscase\secondofthree
6957     \let\glsinsert\empty
6958     \def\glscustomtext{\Glsxtrinlinefullformat{\#2}{\#3}}%
6959     \glsxtrsetupfulldefs
6960     \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
6961   }%
6962 \glspostlinkhook
6963 }

```

\GLSxtrfull Full form (all uppercase).

```
6964 \newrobustcmd*{\GLSxtrfull}{\gls@hyp@opt\ns@GLSxtrfull}
6965 \newcommand*\ns@GLSxtrfull[2][]{%
6966   \new@ifnextchar[{\gls@category{#1}{#2}}{%
6967     {\gls@category{#1}{#2}}[]}}%
6968 }
```

\@GLSxtr@full Low-level macro:

```
6969 \def\@GLSxtr@full#1#2[#3]{%
6970   \glsdoifexists{#2}{%
6971     {%
6972       \glssetabrvfmt{\glscategory{#2}}{%
6973         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6974         \let\glsifplural\@secondoftwo
6975         \let\glscapscase\@thirdofthree
6976         \let\glsinsert\@empty
6977         \def\glscustomtext{\mfirstrucMakeUppercase{\glsxtrinlinefullformat{#2}{#3}}}{%
6978           \glsxtrsetupfulldefs
6979           \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}{%
6980             }{%
6981             \glspostlinkhook
6982           }}
```

\glsxtrfullpl Plural full form (no case-change).

```
6983 \newrobustcmd*{\glsxtrfullpl}{\gls@hyp@opt\ns@glsxtrfullpl}
6984 \newcommand*\ns@glsxtrfullpl[2][]{%
6985   \new@ifnextchar[{\glsxtr@fullpl{#1}{#2}}{%
6986     {\glsxtr@fullpl{#1}{#2}}[]}}%
6987 }
```

\@glsxtr@fullpl Low-level macro:

```
6988 \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).

```
6989   \glsxtr@record{#1}{#2}{\glslink}{%
6990     \glsdoifexists{#2}{%
6991       {%
6992         \glssetabrvfmt{\glscategory{#2}}{%
6993           \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6994           \let\glsifplural\@firstoftwo
6995           \let\glscapscase\@firstofthree
6996           \let\glsinsert\@empty
6997           \def\glscustomtext{\glsxtrinlinefullplformat{#2}{#3}}{%
6998             \glsxtrsetupfulldefs
6999             \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}{%
7000               }{%
7001               \glspostlinkhook
7002             }}
```

\Glsxtrfullpl Plural full form (first letter uppercase).

```
7003 \newrobustcmd*\Glsxtrfullpl{\gls@hyp@opt\ns@Glsxtrfullpl}
7004 \newcommand*\ns@Glsxtrfullpl[2][]{%
7005   \new@ifnextchar[\{@Glsxtr@fullpl{#1}{#2}}%{%
7006     \{@Glsxtr@fullpl{#1}{#2}[]}%{%
7007 }
```

\@Glsxtr@fullpl Low-level macro:

```
7008 \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).

```
7009  \@glsxtr@record{#1}{#2}{glslink}%
7010  \glsdoifexists{#2}%
7011  {%
7012    \glssetabrvfmt{\glscategory{#2}}%
7013    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7014    \let\glsifplural@\firstoftwo
7015    \let\glscapscase@\secondofthree
7016    \let\glsinsert@\empty
7017    \def\glscustomtext{\Glsxtrinlinefullplformat{#2}{#3}}%
7018    \glsxtrsetupfulldefs
7019    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7020  }%
7021  \glspostlinkhook
7022 }
```

\GLSxtrfullpl Plural full form (all upper case).

```
7023 \newrobustcmd*\GLSxtrfullpl{\gls@hyp@opt\ns@GLSxtrfullpl}
7024 \newcommand*\ns@GLSxtrfullpl[2][]{%
7025   \new@ifnextchar[\{@GLSxtr@fullpl{#1}{#2}}%{%
7026     \{@GLSxtr@fullpl{#1}{#2}[]}%{%
7027 }
```

\@GLSxtr@fullpl Low-level macro:

```
7028 \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).

```
7029  \@glsxtr@record{#1}{#2}{glslink}%
7030  \glsdoifexists{#2}%
7031  {%
7032    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7033    \let\glsifplural@\firstoftwo
7034    \let\glscapscase@\thirdofthree
7035    \let\glsinsert@\empty
7036    \def\glscustomtext{%
7037      \mfirstrucMakeUppercase{\glsxtrinlinefullplformat{#2}{#3}}}%
7038    \glsxtrsetupfulldefs
```

```

7039     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7040   }%
7041   \glspostlinkhook
7042 }

```

The short and long forms work in a similar way to acronyms.

\glsxtrshort

```
7043 \newrobustcmd*\glsxtrshort{\gls@hyp@opt\ns@glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7044 \newcommand*\ns@glsxtrshort[2][]{%
7045   \new@ifnextchar{@\glsxtrshort[#1]{#2}}{\glsxtrshort[#1]{#2}[]}%%
7046 }

```

Read in the final optional argument:

```
7047 \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).

```

7048   \glsxtr@record[#1]{#2}{\glslink}%
7049   \glsdoifexists[#2]%
7050   {%

```

Need to make sure \glsabrvfont is set correctly.

```

7051   \glssetabrvfmt{\glscategory{#2}}%
7052   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7053   \let\glsxtrifwasfirstuse\@secondoftwo
7054   \let\glsifplural\@secondoftwo
7055   \let\glscapscase\@firstofthree
7056   \let\glsinsert\@empty
7057   \def\glscustomtext{%
7058     \glsabrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
7059     \ifglsxtrinsertinside\else#3\fi
7060   }%
7061   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7062 }%
7063 \glspostlinkhook
7064 }
```

\Glsxtrshort

```
7065 \newrobustcmd*\Glsxtrshort{\gls@hyp@opt\ns@Glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7066 \newcommand*\ns@Glsxtrshort[2][]{%
7067   \new@ifnextchar{@\Glsxtrshort[#1]{#2}}{\Glsxtrshort[#1]{#2}[]}%%
7068 }

```

Read in the final optional argument:

```
7069 \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).

```

7070  \glsxstr@record{#1}{#2}{glslink}%
7071  \glsdoifexists{#2}%
7072  {%
7073    \glssetabrvfmt{\glscategory{#2}}%
7074    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7075    \let\glsxtrifwasfirstuse\secondoftwo
7076    \let\glsifplural\secondoftwo
7077    \let\glscapscase\secondofthree
7078    \let\glsinsert\empty
7079    \def\glscustomtext{%
7080      \glsabbrvfont{\Glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
7081      \ifglsxtrinsertinside\else#3\fi
7082    }%
7083    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7084  }%
7085  \glspostlinkhook
7086 }

```

\GLSxtrshort

```
7087 \newrobustcmd*\GLSxtrshort{\gls@hyp@opt\ns@GLSxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7088 \newcommand*\ns@GLSxtrshort[2][]{%
7089   \new@ifnextchar[\ns@GLSxtrshort{#1}{#2}]{\ns@GLSxtrshort{#1}{#2}[]}{%
7090 }

```

Read in the final optional argument:

```
7091 \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).

```

7092 \glsxstr@record{#1}{#2}{glslink}%
7093 \glsdoifexists{#2}%
7094 {%
7095   \glssetabrvfmt{\glscategory{#2}}%
7096   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7097   \let\glsxtrifwasfirstuse\secondoftwo
7098   \let\glsifplural\secondoftwo
7099   \let\glscapscase\thirdofthree
7100   \let\glsinsert\empty
7101   \def\glscustomtext{%
7102     \mfirstrucMakeUppercase
7103     \glsabbrvfont{\Glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
7104     \ifglsxtrinsertinside\else#3\fi
7105   }%
7106 }%
7107 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7108 }%

```

```

7109 \glspostlinkhook
7110 }

\glsxtrlong
7111 \newrobustcmd*{\glsxtrlong}{\gls@hyp@opt\ns@glsxtrlong}
    Define the un-starred form. Need to determine if there is a final optional argument
7112 \newcommand*{\ns@glsxtrlong}[2][]{%
7113   \new@ifnextchar[{\glsxtrlong[#1]{#2}}{\glsxtrlong[#1]{#2}[]}%
7114 }

    Read in the final optional argument:
7115 \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).
7116   \glsxtr@record[#1]{#2}{glslink}%
7117   \glsdoifexists{#2}%
7118   {%
7119     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7120     \let\glsxtrifwasfirstuse\secondoftwo
7121     \let\glsifplural\secondoftwo
7122     \let\glscapscase\firstofthree
7123     \let\glsinsert\empty
7124     \def\glscustomtext{%
7125       \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7126       \ifglsxtrinsertinside\else#3\fi
7127     }%
7128     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7129   }%
7130   \glspostlinkhook
7131 }

\Glsxtrlong
7132 \newrobustcmd*{\Glsxtrlong}{\gls@hyp@opt\ns@Glsxtrlong}
    Define the un-starred form. Need to determine if there is a final optional argument
7133 \newcommand*{\ns@Glsxtrlong}[2][]{%
7134   \new@ifnextchar[{\Glsxtrlong[#1]{#2}}{\Glsxtrlong[#1]{#2}[]}%
7135 }

    Read in the final optional argument:
7136 \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).
7137   \glsxtr@record[#1]{#2}{glslink}%
7138   \glsdoifexists{#2}%
7139   {%
7140     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7141     \let\glsxtrifwasfirstuse\secondoftwo

```

```

7142   \let\glsifplural\@secondoftwo
7143   \let\glscapscase\@secondofthree
7144   \let\glsinsert\@empty
7145   \def\glscustomtext{%
7146     \glslongfont{\Glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7147     \ifglsxtrinsertinside\else#3\fi
7148   }%
7149   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7150 }%
7151 \glspostlinkhook
7152 }

```

\GLSxtrlong

```
7153 \newrobustcmd*{\GLSxtrlong}{\gls@hyp@opt\ns@GLSxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7154 \newcommand*{\ns@GLSxtrlong}[2][]{%
7155   \new@ifnextchar[\{@GLSxtrlong{#1}{#2}\}{@GLSxtrlong{#1}{#2}}[]}%
7156 }

```

Read in the final optional argument:

```
7157 \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).

```

7158  \@glsxtr@record{#1}{#2}{\glslink}%
7159  \glsdoifexists{#2}%
7160  {%
7161    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7162    \let\glsxtrifwasfirstuse\@secondoftwo
7163    \let\glsifplural\@secondoftwo
7164    \let\glscapscase\@thirdofthree
7165    \let\glsinsert\@empty
7166    \def\glscustomtext{%
7167      \mfirstrucMakeUppercase
7168      \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7169      \ifglsxtrinsertinside\else#3\fi
7170    }%
7171  }%
7172  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7173 }%
7174 \glspostlinkhook
7175 }

```

Plural short forms:

\glsxtrshortpl

```
7176 \newrobustcmd*{\glsxtrshortpl}{\gls@hyp@opt\ns@glsxtrshortpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7177 \newcommand*{\ns@glsxtrshortpl}[2][]{%
```

```
7178 \new@ifnextchar[{\@glsxtrshortpl{#1}{#2}}{\@glsxtrshortpl{#1}{#2}[]}]%
7179 }
```

Read in the final optional argument:

```
7180 \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).

```
7181 \@glsxtr@record{#1}{#2}{glslink}%
7182 \glsdoifexists{#2}%
7183 {%
7184   \glssetabrvfmt{\glscategory{#2}}%
7185   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7186   \let\glsxtrifwasfirstuse\@secondoftwo
7187   \let\glsifplural\@firstoftwo
7188   \let\glscapscase\@firstofthree
7189   \let\glsinsert\@empty
7190   \def\glscustomtext{%
7191     \glsabbrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7192     \ifglsxtrinsertinside\else#3\fi
7193   }%
7194   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7195 }%
7196 \glspostlinkhook
7197 }
```

\Glsxtrshortpl

```
7198 \newrobustcmd*\Glsxtrshortpl{\gls@hyp@opt\ns@Glsxtrshortpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7199 \newcommand*\ns@Glsxtrshortpl[2][]{%
7200   \new@ifnextchar[{\@Glsxtrshortpl{#1}{#2}}{\@Glsxtrshortpl{#1}{#2}[]}]%
7201 }
```

Read in the final optional argument:

```
7202 \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).

```
7203 \@glsxtr@record{#1}{#2}{glslink}%
7204 \glsdoifexists{#2}%
7205 {%
7206   \glssetabrvfmt{\glscategory{#2}}%
7207   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7208   \let\glsxtrifwasfirstuse\@secondoftwo
7209   \let\glsifplural\@firstoftwo
7210   \let\glscapscase\@secondofthree
7211   \let\glsinsert\@empty
7212   \def\glscustomtext{%
7213     \glsabbrvfont{\Glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7214     \ifglsxtrinsertinside\else#3\fi
    }}
```

```

7215    }%
7216    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7217  }%
7218 \glspostlinkhook
7219 }

```

\GLSxtrshortpl

```

7220 \newrobustcmd*\{\GLSxtrshortpl\}{\gls@hyp@opt\ns@GLSxtrshortpl}
Define the un-starred form. Need to determine if there is a final optional argument
7221 \newcommand*\{\ns@GLSxtrshortpl\}[2][]{%
7222   \new@ifnextchar[{\@GLSxtrshortpl{#1}{#2}}{\@GLSxtrshortpl{#1}{#2}}[]}{%
7223 }

```

Read in the final optional argument:

```
7224 \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).

```

7225 \glsxtr@record{#1}{#2}{\glslink}%
7226 \glsdoifexists{#2}%
7227 {%
7228   \glssetabrvfmt{\glscategory{#2}}%
7229   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7230   \let\glsxtrifwasfirstuse\@secondoftwo
7231   \let\glsifplural\@firstoftwo
7232   \let\glscapscase\@thirdofthree
7233   \let\glsinsert\@empty
7234   \def\glscustomtext{%
7235     \mfirstrucMakeUppercase
7236     {\glsabrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7237       \ifglsxtrinsertinside\else#3\fi
7238     }%
7239   }%
7240   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7241 }%
7242 \glspostlinkhook
7243 }

```

Plural long forms:

\glsxtrlongpl

```

7244 \newrobustcmd*\{\glsxtrlongpl\}{\gls@hyp@opt\ns@glsxtrlongpl}
Define the un-starred form. Need to determine if there is a final optional argument
7245 \newcommand*\{\ns@glsxtrlongpl\}[2][]{%
7246   \new@ifnextchar[{\@glsxtrlongpl{#1}{#2}}{\@glsxtrlongpl{#1}{#2}}[]}{%
7247 }

```

Read in the final optional argument:

```
7248 \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).

```
7249  \glsxstr@record{#1}{#2}{glslink}%
7250  \glsdoifexists{#2}%
7251  {%
7252    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7253    \let\glsxtrifwasfirstuse\secondoftwo
7254    \let\glsifplural\firstoftwo
7255    \let\glscapscase\firstofthree
7256    \let\glsinsert@empty
7257    \def\glscustomtext{%
7258      \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7259      \ifglsxtrinsertinside\else#3\fi
7260    }%
7261    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7262  }%
7263  \glspostlinkhook
7264 }
```

\Glsxtrlongpl
7265 \newrobustcmd*\Glsxtrlongpl{\gls@hyp@opt\ns@Glsxtrlongpl}

Define the un-starred form. Need to determine if there is a final optional argument

```
7266 \newcommand*\ns@Glsxtrlongpl[2][]{%
7267   \new@ifnextchar{`}{\Glsxtrlongpl{#1}{#2}}{\Glsxtrlongpl{#1}{#2}[]}%
7268 }
```

Read in the final optional argument:

```
7269 \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).

```
7270  \glsxstr@record{#1}{#2}{glslink}%
7271  \glsdoifexists{#2}%
7272  {%
7273    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7274    \let\glsxtrifwasfirstuse\secondoftwo
7275    \let\glsifplural\firstoftwo
7276    \let\glscapscase\secondofthree
7277    \let\glsinsert@empty
7278    \def\glscustomtext{%
7279      \glslongfont{\Glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7280      \ifglsxtrinsertinside\else#3\fi
7281    }%
7282    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7283  }%
7284  \glspostlinkhook
7285 }
```

\GLSxtrlongpl

```

7286 \newrobustcmd*{\GLSxtrlongpl}{\gls@hyp@opt\ns@GLSxtrlongpl}
    Define the un-starred form. Need to determine if there is a final optional argument
7287 \newcommand*{\ns@GLSxtrlongpl}[2][]{%
7288   \new@ifnextchar[{\@\GLSxtrlongpl{#1}{#2}}{\@\GLSxtrlongpl{#1}{#2}[]}%}
7289 }

    Read in the final optional argument:
7290 \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).
7291   \glsxtr@record{#1}{#2}{\glslink}%
7292   \glsdoifexists{#2}%
7293   {%
7294     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7295     \let\glsxtrifwasfirstuse\@secondoftwo
7296     \let\glsifplural\@firstoftwo
7297     \let\glscapscase\@thirdofthree
7298     \let\glsinsert\@empty
7299     \def\glscustomtext{%
7300       \mfirstrucMakeUppercase
7301       {\glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7302         \ifglsxtrinsertinside\else#3\fi
7303       }%
7304     }%
7305     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7306   }%
7307   \glspostlinkhook
7308 }

```

\glssetabbrvfmt Set the current format for the given category (or the abbreviation category if unset).

```

7309 \newcommand*{\glssetabbrvfmt}[1]{%
7310   \ifcsdef{\glsabrv@current}{#1}{%
7311     {\glsxtr@applyabbrvfmt{\csname \glsabrv@current@#1\endcsname}}%
7312     {\glsxtr@applyabbrvfmt{\glsabrv@current@abbreviation}}%
7313   }

```

\glsuseabbrvfont Provide a way to use the abbreviation font for a given category for arbitrary text.

```

7314 \newrobustcmd*{\glsuseabbrvfont}[2]{{\glssetabbrvfmt{#2}\glsabrvfont{#1}}}

```

\glsuselongfont Provide a way to use the long font for a given category for arbitrary text.

```

7315 \newrobustcmd*{\glsuselongfont}[2]{{\glssetabbrvfmt{#2}\glslongfont{#1}}}

```

\sxtrgenabbrvfmt Similar to \glsgenacfmt, but for abbreviations.

```

7316 \newcommand*{\glsxtrgenabbrvfmt}{%
7317   \ifdefempty\glscustomtext{%
7318     {%
7319       \ifglsused\glslabel{%
7320         {%

```

Subsequent use:

```
7321      \glsifplural  
7322      {%
```

Subsequent plural form:

```
7323      \glscapscase  
7324      {%
```

Subsequent plural form, don't adjust case:

```
7325      \glsxtrsubsequentplfmt{\glslabel}{\glsinsert} %  
7326      }%  
7327      {%
```

Subsequent plural form, make first letter upper case:

```
7328      \Glsxtrsubsequentplfmt{\glslabel}{\glsinsert} %  
7329      }%  
7330      {%
```

Subsequent plural form, all caps:

```
7331      \mfirstucMakeUppercase  
7332      {\glsxtrsubsequentplfmt{\glslabel}{\glsinsert}} %  
7333      }%  
7334      }%  
7335      {%
```

Subsequent singular form

```
7336      \glscapscase  
7337      {%
```

Subsequent singular form, don't adjust case:

```
7338      \glsxtrsubsequentfmt{\glslabel}{\glsinsert} %  
7339      }%  
7340      {%
```

Subsequent singular form, make first letter upper case:

```
7341      \Glsxtrsubsequentfmt{\glslabel}{\glsinsert} %  
7342      }%  
7343      {%
```

Subsequent singular form, all caps:

```
7344      \mfirstucMakeUppercase  
7345      {\glsxtrsubsequentfmt{\glslabel}{\glsinsert}} %  
7346      }%  
7347      }%  
7348      }%  
7349      {%
```

First use:

```
7350      \glsifplural  
7351      {%
```

First use plural form:

```
7352      \glscapscase  
7353      {%
```

First use plural form, don't adjust case:

```
7354      \glsxtrfullplformat{\glslabel}{\glsinsert}%
7355      }%
7356      {%
```

First use plural form, make first letter upper case:

```
7357      \Glsxtrfullplformat{\glslabel}{\glsinsert}%
7358      }%
7359      {%
```

First use plural form, all caps:

```
7360      \mfirstucMakeUppercase
7361      {\glsxtrfullplformat{\glslabel}{\glsinsert}}%
7362      }%
7363      }%
7364      {%
```

First use singular form

```
7365      \glscapscase
7366      {%
```

First use singular form, don't adjust case:

```
7367      \glsxtrfullformat{\glslabel}{\glsinsert}%
7368      }%
7369      {%
```

First use singular form, make first letter upper case:

```
7370      \Glsxtrfullformat{\glslabel}{\glsinsert}%
7371      }%
7372      {%
```

First use singular form, all caps:

```
7373      \mfirstucMakeUppercase
7374      {\glsxtrfullformat{\glslabel}{\glsinsert}}%
7375      }%
7376      }%
7377      }%
7378      }%
7379      {%
```

User supplied text.

```
7380      \glscustomtext
7381      }%
7382 }
```

`trsubsequentfmt` Subsequent use format (singular no case change).

```
7383 \newcommand*{\glsxtrsubsequentfmt}[2]{%
7384   \glsabbrvfont{\glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
7385   \ifglsxtrinsertinside \else#2\fi
7386 }
7387 \let\glsxtrdefaultsubsequentfmt\glsxtrsubsequentfmt
```

```

subsequentplfmt Subsequent use format (plural no case change).
7388 \newcommand*{\glsxtrsubsequentplfmt}[2]{%
7389   \glsabbrvfont{\glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
7390   \ifglsxtrinsertinside \else#2\fi
7391 }
7392 \let\glsxtrdefaultsubsequentplfmt\glsxtrsubsequentplfmt

```

trsubsequentfmt Subsequent use format (singular, first letter uppercase).

```

7393 \newcommand*{\Glsxtrsubsequentfmt}[2]{%
7394   \glsabbrvfont{\Glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
7395   \ifglsxtrinsertinside \else#2\fi
7396 }
7397 \let\Glsxtrdefaultsubsequentfmt\Glsxtrsubsequentfmt

```

subsequentplfmt Subsequent use format (plural, first letter uppercase).

```

7398 \newcommand*{\Glsxtrsubsequentplfmt}[2]{%
7399   \glsabbrvfont{\Glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
7400   \ifglsxtrinsertinside \else#2\fi
7401 }
7402 \let\Glsxtrdefaultsubsequentplfmt\Glsxtrsubsequentplfmt

```

1.7.1 Abbreviation Styles Setup

breviaitonstyle

```

7403 \newcommand*{\setabbreviationstyle}[2][abbreviation]{%
7404   \ifcsundef{@glsabbrv@disptime@setup@#2}%
7405   {%
7406     \PackageError{glossaries-extra}{Undefined abbreviation style ‘#2’}{}%
7407   }%
7408   {%

```

Have abbreviations already been defined for this category?

```

7409   \ifcsstring{@glsabbrv@current@#1}{#2}%
7410   {%

```

Style already set.

```

7411   }%
7412   {%
7413     \def\@glsxtr@dostylewarn{}%
7414     \glsforeachincategory{#1}{\@gls@type}{\@gls@label}%
7415     {%
7416       \def\@glsxtr@dostylewarn{\GlossariesWarning{Abbreviation
7417         style has been switched \MessageBreak
7418         for category ‘#1’, \MessageBreak
7419         but there have already been entries \MessageBreak
7420         defined for this category. Unwanted \MessageBreak
7421         side-effects may result}}%
7422       \endfortrue
7423     }%
7424     \@glsxtr@dostylewarn

```

Set up the style for the given category.

```
7425      \csdef{@glsabbrv@current@#1}{#2}%
7426      \glsxtr@applyabbrvstyle{#2}%
7427  }%
7428 }%
7429 }
```

applyabbrvstyle Apply the abbreviation style without existence check.

```
7430 \newcommand*{\glsxtr@applyabbrvstyle}[1]{%
7431   \csuse{@glsabbrv@dispstyle@setup@#1}%
7432   \csuse{@glsabbrv@dispstyle@fmts@#1}%
7433 }
```

r@applyabbrvfmt Only apply the style formats.

```
7434 \newcommand*{\glsxtr@applyabbrvfmt}[1]{%
7435   \csuse{@glsabbrv@dispstyle@fmts@#1}%
7436 }
```

abbreviationstyle This is different from \newacronymstyle. The first argument is the label, the second argument sets the information required when defining the new abbreviation and the third argument sets the commands used to display the full format.

```
7437 \newcommand*{\newabbreviationstyle}[3]{%
7438   \ifcsdef{@glsabbrv@dispstyle@setup@#1}%
7439   {}%
7440   \PackageError{glossaries-extra}{Abbreviation style '#1' already%
7441     defined}{}%
7442 }%
7443 {}%
7444 \csdef{@glsabbrv@dispstyle@setup@#1}{%
```

Initialise hook to do nothing. The style may change this.

```
7445   \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
7446   #2}%
7447   \csdef{@glsabbrv@dispstyle@fmts@#1}{%
```

Assume in-line form is the same as first use. The style may change this.

```
7448   \renewcommand*{\glsxtrinlinetfullformat}{\glsxtrfullformat}%
7449   \renewcommand*{\Glsxtrinlinetfullformat}{\Glsxtrfullformat}%
7450   \renewcommand*{\glsxtrinlinetplformat}{\glsxtrfulltplformat}%
7451   \renewcommand*{\Glsxtrinlinetplformat}{\Glsxtrfulltplformat}%
```

Reset \glsxtrsubsequentfmt etc in case a style changes this.

```
7452   \let\glsxtrsubsequentfmt\glsxtrdefaultsubsequentfmt
7453   \let\glsxtrsubsequentplfmt\glsxtrdefaultsubsequentplfmt
7454   \let\Glsxtrsubsequentfmt\Glsxtrdefaultsubsequentfmt
7455   \let\Glsxtrsubsequentplfmt\Glsxtrdefaultsubsequentplfmt
7456   #3}%
7457 }%
7458 }
```

```

abbreviationstyle
7459 \newcommand*{\renewabbreviationstyle}[3]{%
7460   \ifcsundef{@glsabrv@dispstyle@setup@#1}%
7461   {%
7462     \PackageError{glossaries-extra}{Abbreviation style '#1' not defined}{}%
7463   }%
7464   {%
7465     \csdef{@glsabrv@dispstyle@setup@#1}{%

```

Initialise hook to do nothing. The style may change this.

```

7466   \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
7467   #2}%
7468   \csdef{@glsabrv@dispstyle@fmts@#1}{%

```

Assume in-line form is the same as first use. The style may change this.

```

7469   \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}%
7470   \renewcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}%
7471   \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}%
7472   \renewcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}%
7473   #3}%
7474 }%
7475 }

```

`abbreviationstyle` Define a synonym for an abbreviation style. The first argument is the new name. The second argument is the original style's name.

```

7476 \newcommand*{\letabbreviationstyle}[2]{%
7477   \csletcs{@glsabrv@dispstyle@setup@#1}{@glsabrv@dispstyle@setup@#2}%
7478   \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
7479 }

```

`ecated@abbrstyle` `\@glsxtr@deprecated@abbrstyle{\<old-name>}{\<new-name>}`

Define a synonym for a deprecated abbreviation style.

```

7480 \newcommand*{\@glsxtr@deprecated@abbrstyle}[2]{%
7481   \csdef{@glsabrv@dispstyle@setup@#1}{%
7482     \GlsXtrWarnDeprecatedAbbrStyle{#1}{#2}%
7483     \csuse{@glsabrv@dispstyle@setup@#2}%
7484   }%
7485   \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
7486 }

```

`ecatedAbbrStyle` Generate warning for deprecated style use.

```

7487 \newcommand*{\GlsXtrWarnDeprecatedAbbrStyle}[2]{%
7488   \GlossariesExtraWarning{Deprecated abbreviation style name '#1',%
7489   use '#2' instead}%
7490 }

```

```

eAbbrStyleSetup
7491 \newcommand*{\GlsXtrUseAbbrStyleSetup}[1]{%
7492   \ifcsundef{@glsabbrv@dispstyle@setup@#1}{%
7493     {%
7494       \PackageError{glossaries-extra}{%
7495         Unknown abbreviation style definitions '#1'}{}%
7496     }%
7497     {%
7498       \csname @glsabbrv@dispstyle@setup@#1\endcsname
7499     }%
7500   }%
}

seAbbrStyleFmts
7501 \newcommand*{\GlsXtrUseAbbrStyleFmts}[1]{%
7502   \ifcsundef{@glsabbrv@dispstyle@fmts@#1}{%
7503     {%
7504       \PackageError{glossaries-extra}{%
7505         Unknown abbreviation style formats '#1'}{}%
7506     }%
7507     {%
7508       \csname @glsabbrv@dispstyle@fmts@#1\endcsname
7509     }%
7510   }%
}

```

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.

```

7511 \newif\ifglsxtrinsertinside
7512 \glsxtrinsertinsidefalse

```

`trlongshortname`

```

7513 \newcommand*{\glsxtrlongshortname}{%
7514   \protect\glsabbrvfont{\the\glsshorttok}%
7515 }

```

`long-short`

```

7516 \newabbreviationstyle{long-short}{%
7517 {%

```

```

7518 \renewcommand*\CustomAbbreviationFields{%
7519   name={\glsxtrlongshortname},
7520   sort={\the\glsshorttok},
7521   first={\protect\glsfirstlongfont{\the\glslongtok}%
7522     \protect\glsxtrfullsep{\the\glslabeltok}%
7523     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
7524   firstplural={\protect\glsfirstlongfont{\the\glslongpltok}%
7525     \protect\glsxtrfullsep{\the\glslabeltok}%
7526     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%
7527   plural={\protect\glsabbrvfont{\the\glsshortpltok}},%
7528   description={\the\glslongtok}}%

```

Unset the regular attribute if it has been set.

```

7529 \renewcommand*\GlsXtrPostNewAbbreviation{%
7530   \glshasattribute{\the\glslabeltok}{regular}%
7531   {%
7532     \glssetattribute{\the\glslabeltok}{regular}{false}%
7533   }%
7534   {}%
7535 }%
7536 }%
7537 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

7538 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
7539 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7540 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
7541 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7542 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

7543 \renewcommand*\glsxtrfullformat[2]{%
7544   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7545   \ifglsxtrinsertinside\else##2\fi
7546   \glsxtrfullsep{##1}%
7547   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
7548 }%
7549 \renewcommand*\glsxtrfullplformat[2]{%
7550   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7551   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7552   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
7553 }%
7554 \renewcommand*\Glsxtrfullformat[2]{%
7555   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7556   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7557   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
7558 }%
7559 \renewcommand*\Glsxtrfullplformat[2]{%
7560   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7561   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%

```

```
7562     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
7563 }%
7564 }
```

Set this as the default style for general abbreviations:

```
7565 \setabbreviationstyle{long-short}
```

ngshortdescsort

```
7566 \newcommand*{\glsxtrlongshortdescsort}{%
7567 \expandonce\glsxtrorglong\space (\expandonce\glsxtrorgshort)%
7568 }
```

ngshortdescname

```
7569 \newcommand*{\glsxtrlongshortdescname}{%
7570 \protect\glslongfont{\the\glslongtok}%
7571 \glsxtrparen{\protect\glsabbrvfont{\the\glsshorttok}}%
7572 }
```

long-short-desc User supplies description. The long form is included in the name.

```
7573 \newabbreviationstyle{long-short-desc}%
7574 {%
7575 \renewcommand*{\CustomAbbreviationFields}{%
7576   name={\glsxtrlongshortdescname},%
7577   sort={\glsxtrlongshortdescsort},%
7578   first={\protect\glsfirstlongfont{\the\glslongtok}}%
7579     \protect\glsxtrfullsep{\the\glslabeltok}%
7580     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
7581   firstplural={\protect\glsfirstlongfont{\the\glslongpltok}}%
7582     \protect\glsxtrfullsep{\the\glslabeltok}%
7583     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%
```

The text key should only have the short form.

```
7584   text={\protect\glsabbrvfont{\the\glsshorttok}},%
7585   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
7586 }
```

Unset the regular attribute if it has been set.

```
7587 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7588   \glshasattribute{\the\glslabeltok}{regular}%
7589 {%
7590   \glssetattribute{\the\glslabeltok}{regular}{false}%
7591 }%
7592 {}%
7593 }%
7594 }%
7595 {%
7596 \GlsXtrUseAbbrStyleFmts{long-short}%
7597 }
```

```

trshortlongname
7598 \newcommand*\glsxtrshortlongname}{%
7599   \protect\glsabbrvfont{\the\glsshorttok}%
7600 }

short-long Short form followed by long form in parenthesis on first use.
7601 \newabbreviationstyle{short-long}{%
7602 {%
7603   \renewcommand*\CustomAbbreviationFields}{%
7604     name={\glsxtrshortlongname},%
7605     sort={\the\glsshorttok},%
7606     description={\the\glslongtok},%
7607     first={\protect\glsfirstabbrvfont{\the\glsshorttok}}%
7608       \protect\glsxtrfullsep{\the\glslabeltok}%
7609       \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}},%
7610     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}}%
7611       \protect\glsxtrfullsep{\the\glslabeltok}%
7612       \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}},%
7613     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
7614 }

Unset the regular attribute if it has been set.
7615 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7616   \glshasattribute{\the\glslabeltok}{regular}%
7617   {%
7618     \glssetattribute{\the\glslabeltok}{regular}{false}%
7619   }%
7620 }%
7621 }%
7622 {%

In case the user wants to mix and match font styles, these are redefined here.
7623 \renewcommand*\abrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7624 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7625 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
7626 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7627 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

The first use full form and the inline full form are the same for this style.
7628 \renewcommand*\glsxtrfullformat[2]{%
7629   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7630   \ifglsxtrinsertinside\else##2\fi
7631   \glsxtrfullsep{##1}%
7632   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7633 }%
7634 \renewcommand*\glsxtrfullplformat[2]{%
7635   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7636   \ifglsxtrinsertinside\else##2\fi
7637   \glsxtrfullsep{##1}%

```

```

7638     \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7639   }%
7640   \renewcommand*{\Glsxtrfullformat}[2]{%
7641     \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7642     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7643     \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7644   }%
7645   \renewcommand*{\Glsxtrfullplformat}[2]{%
7646     \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7647     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7648     \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7649   }%
7650 }

```

ortlongdescsort

```
7651 \newcommand*{\glsxtrshortlongdescsort}{\the\glsshorttok}
```

ortlongdescname

```

7652 \newcommand*{\glsxtrshortlongdescname}{%
7653   \protect\glsabbrvfont{\the\glsshorttok}%
7654   \glsxtrparen{\protect\glslongfont{\the\glslongtok}}%
7655 }

```

short-long-desc User supplies description. The long form is included in the name.

```

7656 \newabbreviationstyle{short-long-desc}%
7657 {%
7658   \renewcommand*{\CustomAbbreviationFields}{%
7659     name={\glsxtrshortlongdescname},
7660     sort={\glsxtrshortlongdescsort},
7661     first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
7662       \protect\glsxtrfullsep{\the\glslabeltok}%
7663       \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
7664     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
7665       \protect\glsxtrfullsep{\the\glslabeltok}%
7666       \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
7667     text={\protect\glsabbrvfont{\the\glsshorttok}},%
7668     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
7669   }%

```

Unset the regular attribute if it has been set.

```

7670 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7671   \glshasattribute{\the\glslabeltok}{regular}%
7672   {%
7673     \glssetattribute{\the\glslabeltok}{regular}{false}%
7674   }%
7675   {}%
7676 }

```

```

7677 }%
7678 {%
7679   \GlsXtrUseAbbrStyleFmts{short-long}%
7680 }

ongfootnotefont Only used by the “footnote” styles.
7681 \newcommand*{\glsfirstlongfootnotefont}[1]{\glslongfootnotefont{#1}}%

ongfootnotefont Only used by the “footnote” styles.
7682 \newcommand*{\glslongfootnotefont}[1]{\glslongdefaultfont{#1}}%

```

`\glsxtrabbrvfootnote{\langle label \rangle}{\langle long \rangle}`

Command used by footnote abbreviation styles. The default definition ignores the first argument. The second argument *⟨long⟩* includes the font changing command and may be the singular or plural form, depending on the command that was used (for example, `\gls` or `\glspl`).

```
7683 \newcommand*{\glsxtrabbrvfootnote}[2]{\footnote{#2}}
```

xtrfootnotename

```

7684 \newcommand*{\glsxtrfootnotename}{%
7685   \protect\glsabbrvfont{\the\glsshorttok}%
7686 }
```

footnote Short form followed by long form in footnote on first use.

```

7687 \newabbreviationstyle{footnote}{%
7688 {%
7689   \renewcommand*{\CustomAbbreviationFields}{%
7690     name={\glsxtrfootnotename},
7691     sort={\the\glsshorttok},
7692     description={\the\glslongtok},%
7693     first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
7694       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7695         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
7696     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
7697       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7698         {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
7699     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.

```

7700 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7701   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
7702   \glshasattribute{\the\glslabeltok}{regular}%

```

```

7703   {%
7704     \glssetattribute{\the\glslabeltok}{regular}{false}%
7705   }%
7706   {}%
7707 }%
7708 }%
7709 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

7710 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7711 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7712 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
7713 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
7714 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

7715 \renewcommand*{\glsxtrfullformat}[2]{%
7716   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7717   \ifglsxtrinsertinside\else##2\fi
7718   \protect\glsxtrabbrvfootnote{##1}%
7719   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7720 }%
7721 \renewcommand*{\glsxtrfullplformat}[2]{%
7722   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7723   \ifglsxtrinsertinside\else##2\fi
7724   \protect\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7725 }%
7726 }%
7727 \renewcommand*{\Glsxtrfullformat}[2]{%
7728   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7729   \ifglsxtrinsertinside\else##2\fi
7730   \protect\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7731 }%
7732 }%
7733 \renewcommand*{\Glsxtrfullplformat}[2]{%
7734   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7735   \ifglsxtrinsertinside\else##2\fi
7736   \protect\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7737 }%
7738 }%

```

The first use full form and the inline full form use the short (long) style.

```

7739 \renewcommand*{\glsxtrinlinenullformat}[2]{%
7740   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7741   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7742   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7743 }%
7744 \renewcommand*{\glsxtrinlinenullplformat}[2]{%
7745   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7746   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7747   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%

```

```

7748 }%
7749 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7750   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7751   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7752   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}}%
7753 }%
7754 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7755   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7756   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7757   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}}%
7758 }%
7759 }

```

short-footnote

```
7760 \letabbreviationstyle{short-footnote}{footnote}
```

postfootnote Similar to the above but the footnote is placed afterwards, outside the link. This avoids nested links and can also move the footnote marker after any following punctuation mark. Pre v1.07 included \footnote in the first keys, which was incorrect as it caused duplicate footnotes.

```

7761 \newabbreviationstyle{postfootnote}%
7762 {%
7763   \renewcommand*{\CustomAbbreviationFields}{%
7764     name={\glsxtrfootnotename},
7765     sort={\the\glsshorttok},
7766     description={\the\glslongtok},%
7767     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
7768     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
7769     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.

```

7770 \renewcommand*{\GlsXtrPostNewAbbreviation}%
7771   \csdef{glsxtrpostlink\glscategorylabel}{%
7772     \glsxtrifwasfirstuse
7773   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

7774   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
7775   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}%
7776 }%
7777 {}%
7778 }%
7779 \glshasattribute{\the\glslabeltok}{regular}%
7780 {}%
7781   \glssetattribute{\the\glslabeltok}{regular}{false}%
7782 }%
7783 {}%
7784 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```
7785 \renewcommand*{\glsxtrsetupfulldefs}{%
7786   \let\glsxtrifwasfirstuse\@secondoftwo
7787 }%
7788 }%
7789 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
7790 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7791 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7792 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
7793 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
7794 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form. The long form is deferred.

```
7795 \renewcommand*{\glsxtrfullformat}[2]{%
7796   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7797   \ifglsxtrinsertinside\else##2\fi
7798 }%
7799 \renewcommand*{\glsxtrfullplformat}[2]{%
7800   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7801   \ifglsxtrinsertinside\else##2\fi
7802 }%
7803 \renewcommand*{\Glsxtrfullformat}[2]{%
7804   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7805   \ifglsxtrinsertinside\else##2\fi
7806 }%
7807 \renewcommand*{\Glsxtrfullplformat}[2]{%
7808   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7809   \ifglsxtrinsertinside\else##2\fi
7810 }%
```

The first use full form and the inline full form use the short (long) style.

```
7811 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7812   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7813   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7814   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7815 }%
7816 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7817   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7818   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7819   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7820 }%
7821 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7822   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7823   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7824   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7825 }%
7826 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
```

```

7827   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7828   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7829   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7830 }%
7831 }

```

rt-postfootnote

```
7832 \letabbreviationstyle{short-postfootnote}{postfootnote}
```

shortnolongname

```

7833 \newcommand*\glsxtrshortnolongname}{%
7834   \protect\glsabbrvfont{\the\glsshorttok}%
7835 }

```

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.

```

7836 \newabbreviationstyle{short}{%
7837 {%
7838   \renewcommand*\CustomAbbreviationFields}{%
7839     name={\glsxtrshortnolongname},
7840     sort={\the\glsshorttok},
7841     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
7842     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
7843     text={\protect\glsabbrvfont{\the\glsshorttok}},
7844     plural={\protect\glsabbrvfont{\the\glsshortpltok}},
7845     description={\the\glslongtok}}%
7846   \renewcommand*\GlsXtrPostNewAbbreviation}{%
7847     \glssetattribute{\the\glslabeltok}{regular}{true}}%
7848 }%
7849 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

7850 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
7851 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7852 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
7853 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7854 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

7855 \renewcommand*\glsxtrinlinefullformat}[2]{%
7856   \protect\glsfirstabbrvfont{\Glsaccessshort{##1}}%
7857   \ifglsxtrinsertinside##2\fi}%
7858   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7859   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7860 }%
7861 \renewcommand*\glsxtrinlinefullplformat}[2]{%
7862   \protect\glsfirstabbrvfont{\Glsaccessshortpl{##1}}%

```

```

7863   \ifglsxtrinsertinside##2\fi}%
7864   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7865   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7866 }%
7867 \renewcommand*\Glsxtrinlinefullformat}[2]{%
7868   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
7869   \ifglsxtrinsertinside##2\fi}%
7870   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7871   \glsxtrparen{\glsfirstlongfont{\Glsaccesslong{##1}}}%
7872 }%
7873 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
7874   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
7875   \ifglsxtrinsertinside##2\fi}%
7876   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7877   \glsxtrparen{\glsfirstlongfont{\Glsaccesslongpl{##1}}}%
7878 }%

```

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.

```

7879 \renewcommand*\glsxtrfullformat}[2]{%
7880   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7881   \ifglsxtrinsertinside\else##2\fi
7882 }%
7883 \renewcommand*\glsxtrfullplformat}[2]{%
7884   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7885   \ifglsxtrinsertinside\else##2\fi
7886 }%
7887 \renewcommand*\Glsxtrfullformat}[2]{%
7888   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7889   \ifglsxtrinsertinside\else##2\fi
7890 }%
7891 \renewcommand*\Glsxtrfullplformat}[2]{%
7892   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7893   \ifglsxtrinsertinside\else##2\fi
7894 }%
7895 }

```

Set this as the default style for acronyms:

```
7896 \setabbreviationstyle[acronym]{short}
```

short-nolong

```
7897 \letabbreviationstyle{short-nolong}{short}
```

rt-nolong-noreg

Like short-nolong but doesn't set the regular attribute.

```

7898 \newabbreviationstyle{short-nolong-noreg}%
7899 {%
7900   \GlsXtrUseAbbrStyleSetup{short-nolong}%

```

Unset the regular attribute if it has been set.

```
7901 \renewcommand*\GlsXtrPostNewAbbreviation}{%
```

```

7902     \glshasattribute{\the\glslabeltok}{regular}%
7903     {%
7904         \glssetattribute{\the\glslabeltok}{regular}{false}%
7905     }%
7906     {}%
7907   }%
7908 }%
7909 {%
7910   \GlsXtrUseAbbrStyleFmts{short-nolong}%
7911 }

```

trshortdescname

```

7912 \newcommand*{\glsxtrshortdescname}{%
7913   \protect\glsabbrvfont{\the\glsshorttok}%
7914 }

```

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.

```

7915 \newabbreviationstyle{short-desc}%
7916 {%
7917   \renewcommand*{\CustomAbbreviationFields}{%
7918     name={\glsxtrshortdescname},
7919     sort={\the\glsshorttok},
7920     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
7921     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
7922     text={\protect\glsabbrvfont{\the\glsshorttok}},
7923     plural={\protect\glsabbrvfont{\the\glsshortpltok}},
7924     description={\the\glslongtok}}%
7925   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7926     \glssetattribute{\the\glslabeltok}{regular}{true}}%
7927 }%
7928 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

7929 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7930 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{\##1}}%
7931 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{\##1}}%
7932 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\##1}}%
7933 \renewcommand*\glslongfont[1]{\glslongdefaultfont{\##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

7934 \renewcommand*{\glsxtrinlinelinefullformat}[2]{%
7935   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
7936   \ifglsxtrinsertinside\else{\##2}\fi\glsxtrfullsep{\##1}}%
7937   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{\##1}}}%
7938 }%
7939 \renewcommand*{\glsxtrinlinelinefullplformat}[2]{%
7940   \glsfirstabbrvfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside{\##2}\fi}%
7941   \ifglsxtrinsertinside\else{\##2}\fi\glsxtrfullsep{\##1}}%
7942   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{\##1}}}%

```

```

7943 }%
7944 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7945   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7946   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7947   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}}%
7948 }%
7949 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7950   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7951   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7952   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}}%
7953 }%

```

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.

```

7954 \renewcommand*{\glsxtrfullformat}[2]{%
7955   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7956   \ifglsxtrinsertinside\else##2\fi
7957 }%
7958 \renewcommand*{\glsxtrfullplformat}[2]{%
7959   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7960   \ifglsxtrinsertinside\else##2\fi
7961 }%
7962 \renewcommand*{\Glsxtrfullformat}[2]{%
7963   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7964   \ifglsxtrinsertinside\else##2\fi
7965 }%
7966 \renewcommand*{\Glsxtrfullplformat}[2]{%
7967   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7968   \ifglsxtrinsertinside\else##2\fi
7969 }%
7970 }

```

short-nolong-desc

```
7971 \letabbreviationstyle{short-nolong-desc}{short-desc}
```

long-desc-noreg

Like short-nolong-desc but doesn't set the regular attribute.

```

7972 \newabbreviationstyle{short-nolong-desc-noreg}{%
7973 }%
7974 \GlsXtrUseAbbrStyleSetup{short-nolong-desc}%

```

Unset the regular attribute if it has been set.

```

7975 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7976   \glshasattribute{\the\glslabeltok}{regular}%
7977   {%
7978     \glssetattribute{\the\glslabeltok}{regular}{false}%
7979   }%
7980   {}%
7981 }%
7982 }%
7983 }%

```

```
7984 \GlsXtrUseAbbrStyleFmts{short-nolong-desc}%
7985 }
```

nolong-short Similar to **short-nolong** but the full form shows the long form followed by the short form in parentheses.

```
7986 \newabbreviationstyle{nolong-short}%
7987 {%
7988 \GlsXtrUseAbbrStyleSetup{short-nolong}%
7989 }%
7990 {%
7991 \GlsXtrUseAbbrStyleFmts{short-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```
7992 \renewcommand*\glsxtrinlinefullformat}[2]{%
7993 \protect\glsfirstlongfont{\glsaccesslong{##1}%
7994 \ifglsxtrinsertinside##2\fi}%
7995 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7996 \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
7997 }%
7998 \renewcommand*\glsxtrinlinefullplformat}[2]{%
7999 \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
8000 \ifglsxtrinsertinside##2\fi}%
8001 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8002 \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
8003 }%
8004 \renewcommand*\Glsxtrinlinefullformat}[2]{%
8005 \protect\glsfirstlongfont{\glsaccesslong{##1}%
8006 \ifglsxtrinsertinside##2\fi}%
8007 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8008 \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshort{##1}}}}%
8009 }%
8010 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
8011 \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
8012 \ifglsxtrinsertinside##2\fi}%
8013 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8014 \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshortpl{##1}}}}%
8015 }%
8016 }
```

ong-short-noreg Like **nolong-short** but doesn't set the regular attribute.

```
8017 \newabbreviationstyle{nolong-short-noreg}%
8018 {%
8019 \GlsXtrUseAbbrStyleSetup{nolong-short}%

```

Unset the regular attribute if it has been set.

```
8020 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8021 \glshasattribute{\the\glslabeltok}{regular}%
8022 {%
8023 \glssetattribute{\the\glslabeltok}{regular}{false}%
8024 }%
```

```

8025     {}%
8026   }%
8027 }%
8028 {%
8029   \GlsXtrUseAbbrStyleFmts{nolong-short}%
8030 }

```

noshortdescname

```

8031 \newcommand*{\glsxtrlongnoshortdescname}{%
8032   \protect\glslongfont{\the\glslongtok}%
8033 }

```

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.

```

8034 \newabbreviationstyle{long-desc}%
8035 {%
8036   \renewcommand*{\CustomAbbreviationFields}{%
8037     name={\glsxtrlongnoshortdescname},
8038     sort={\the\glslongtok},
8039     first={\protect\glsfirstlongfont{\the\glslongtok}},
8040     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
8041     text={\glslongfont{\the\glslongtok}},
8042     plural={\glslongfont{\the\glslongpltok}}%
8043   }%
8044   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8045     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8046 }%
8047 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8048 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8049 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
8050 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
8051 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8052 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8053 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8054   \glslongfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8055   \ifglsxtrinsertinside \else##2\fi
8056 }%
8057 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8058   \glslongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8059   \ifglsxtrinsertinside \else##2\fi
8060 }%
8061 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8062   \glslongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8063   \ifglsxtrinsertinside \else##2\fi
8064 }%

```

```

8065 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8066   \glslongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8067   \ifglsxtrinsertinside \else##2\fi
8068 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8069 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8070   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8071   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8072   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
8073 }%
8074 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8075   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8076   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8077   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
8078 }%
8079 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8080   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8081   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8082   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
8083 }%
8084 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8085   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8086   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8087   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
8088 }%

```

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.

```

8089 \renewcommand*{\glsxtrfullformat}[2]{%
8090   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8091   \ifglsxtrinsertinside\else##2\fi
8092 }%
8093 \renewcommand*{\glsxtrfullplformat}[2]{%
8094   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8095   \ifglsxtrinsertinside\else##2\fi
8096 }%
8097 \renewcommand*{\Glsxtrfullformat}[2]{%
8098   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8099   \ifglsxtrinsertinside\else##2\fi
8100 }%
8101 \renewcommand*{\Glsxtrfullplformat}[2]{%
8102   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8103   \ifglsxtrinsertinside\else##2\fi
8104 }%
8105 }

```

`ng-noshort-desc` Provide a synonym that matches similar styles.

```
8106 \letabbreviationstyle{long-noshort-desc}{long-desc}
```

`hort-desc-noreg` Like `long-noshort-desc` but doesn't set the `regular` attribute.

```
8107 \newabbreviationstyle{long-noshort-desc-noreg}{%
8108 {%
8109   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}}%
8110   Unset the regular attribute if it has been set.
8111   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8112     \glshasattribute{\the\glslabeltok}{regular}}%
8113     \glssetattribute{\the\glslabeltok}{regular}{false}}%
8114   }%
8115   {}%
8116 }%
8117 }%
8118 {}%
8119 \GlsXtrUseAbbrStyleFmts{long-noshort-desc}%
8120 }
```

`longnoshortname`

```
8121 \newcommand*{\glsxtrlongnoshortname}{%
8122   \protect\glsabbrvfont{\the\glsshorttok}}%
8123 }
```

`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.

```
8124 \newabbreviationstyle{long}{%
8125 {%
8126   \renewcommand*{\CustomAbbreviationFields}{%
8127     name={\glsxtrlongnoshortname},
8128     sort={\the\glsshorttok},
8129     first={\protect\glsfirstlongfont{\the\glslongtok}},
8130     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
8131     text={\glslongfont{\the\glslongtok}},
8132     plural={\glslongfont{\the\glslongpltok}},%
8133     description={\the\glslongtok}}%
8134 }%
8135 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8136   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8137 }%
8138 {}%
8139 \GlsXtrUseAbbrStyleFmts{long-desc}%
8140 }
```

`long-noshort` Provide a synonym that matches similar styles.

```
8141 \letabbreviationstyle{long-noshort}{long}
```

`g-noshort-noreg` Like `long-noshort` but doesn't set the `regular` attribute.

```

8142 \newabbreviationstyle{long-noshort-noreg}%
8143 {%
8144   \GlsXtrUseAbbrStyleSetup{long-noshort}%
     Unset the regular attribute if it has been set.
8145   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8146     \glshasattribute{\the\glslabeltok}{regular}%
8147     {%
8148       \glssetattribute{\the\glslabeltok}{regular}{false}%
8149     }%
8150   {}%
8151 }%
8152 }%
8153 {%
8154   \GlsXtrUseAbbrStyleFmts{long-noshort}%
8155 }

```

1.7.3 Predefined Styles (Small Capitals)

These styles use `\textsc` for the short form.

`\glsxtrscfont` Maintained for backward-compatibility.
8156 `\newcommand*{\glsxtrscfont}[1]{\textsc{#1}}`

`\glsabbrvscfont` Added for consistent naming.
8157 `\newcommand*{\glsabbrvscfont}{\glsxtrscfont}`

`sxtrfirstscfont` Maintained for backward-compatibility.
8158 `\newcommand*{\glsxtrfirstscfont}[1]{\glsabbrvscfont{#1}}`

`irstabbrvscfont` Added for consistent naming.
8159 `\newcommand*{\glsfirstabbrvscfont}{\glsxtrfirstscfont}`

and for the default short form suffix:

`\glsxtrscsuffix`
8160 `\newcommand*{\glsxtrscsuffix}{\glstextup{\glsxtrabbrvpluralsuffix}}`

`long-short-sc`
8161 `\newabbreviationstyle{long-short-sc}%`
8162 {%
8163 \renewcommand*{\CustomAbbreviationFields}{%
8164 name={\glsxtrlongshortname},%
8165 sort={\the\glsshorttok},%
8166 first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%%
8167 \protect\glsxtrfullsep{\the\glslabeltok}%
8168 \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
8169 firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%%
8170 \protect\glsxtrfullsep{\the\glslabeltok}%

```

8171   \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
8172   plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%
8173   description={\the\glslongtok}}%
8174 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8175   \glshasattribute{\the\glslabeltok}{regular}}%
8176   {%
8177     \glssetattribute{\the\glslabeltok}{regular}{false}}%
8178   }%
8179   {}%
8180 }%
8181 }%
8182 {}%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8183 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8184 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8185 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%

```

Use the default long fonts.

```

8186 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8187 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8188 \renewcommand*{\glsxtrfullformat}[2]{%
8189   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8190   \ifglsxtrinsertinside\else##2\fi
8191   \glsxtrfullsep{##1}%
8192   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8193 }%
8194 \renewcommand*{\glsxtrfullplformat}[2]{%
8195   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8196   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8197   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8198 }%
8199 \renewcommand*{\Glsxtrfullformat}[2]{%
8200   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8201   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8202   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8203 }%
8204 \renewcommand*{\Glsxtrfullplformat}[2]{%
8205   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8206   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8207   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8208 }%
8209 }%

```

g-short-sc-desc

```

8210 \newabbreviationstyle{long-short-sc-desc}%
8211 {}%
8212 \renewcommand*{\CustomAbbreviationFields}{%

```

```

8213   name={\glsxtrlongshortdescname},
8214   sort={\glsxtrlongshortdescsort},%
8215   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
8216     \protect\glsxtrfullsep{\the\glslabeltok}%
8217     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
8218   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
8219     \protect\glsxtrfullsep{\the\glslabeltok}%
8220     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
8221   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8222   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
8223 }%

```

Unset the regular attribute if it has been set.

```

8224 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8225   \glshasattribute{\the\glslabeltok}{regular}%
8226   {%
8227     \glssetattribute{\the\glslabeltok}{regular}{false}%
8228   }%
8229   {}%
8230 }%
8231 }%
8232 }%

```

As long-short-sc style:

```

8233 \GlsXtrUseAbbrStyleFmts{long-short-sc}%
8234 }

```

Now the short (long) version

```

8235 \newabbreviationstyle{short-sc-long}%
8236 {%
8237   \renewcommand*{\CustomAbbreviationFields}{%
8238     name={\glsxtrshortlongname},
8239     sort={\the\glsshorttok},
8240     description={\the\glslongtok},%
8241     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
8242       \protect\glsxtrfullsep{\the\glslabeltok}%
8243       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8244     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
8245       \protect\glsxtrfullsep{\the\glslabeltok}%
8246       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8247     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

8248 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8249   \glshasattribute{\the\glslabeltok}{regular}%
8250   {%
8251     \glssetattribute{\the\glslabeltok}{regular}{false}%
8252   }%
8253   {}%
8254 }%
8255 }%

```

```
8256 {%
```

 Use smallcaps and adjust the plural suffix to revert to upright.

```
8257 \renewcommand*\abrvpluralsuffix{\protect\glsxtrscsuffix}%
8258 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8259 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
8260 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8261 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

 The first use full form and the inline full form are the same for this style.

```
8262 \renewcommand*\glsxtrfullformat[2]{%
8263     \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8264     \ifglsxtrinsertinside\else##2\fi
8265     \glsxtrfullsep{##1}%
8266     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8267 }%
8268 \renewcommand*\glsxtrfullplformat[2]{%
8269     \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8270     \ifglsxtrinsertinside\else##2\fi
8271     \glsxtrfullsep{##1}%
8272     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8273 }%
8274 \renewcommand*\Glsxtrfullformat[2]{%
8275     \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8276     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8277     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8278 }%
8279 \renewcommand*\Glsxtrfullplformat[2]{%
8280     \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8281     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8282     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8283 }%
8284 }
```

 As before but user provides description

```
8285 \newabbreviationstyle{short-sc-long-desc}%
8286 {%
8287     \renewcommand*\CustomAbbreviationFields{%
8288         name={\glsxtrshortlongdescname},
8289         sort={\glsxtrshortlongdescsort},
8290         first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
8291             \protect\glsxtrfullsep{\the\glslabeltok}%
8292             \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8293         firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
8294             \protect\glsxtrfullsep{\the\glslabeltok}%
8295             \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8296         text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8297         plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
8298     }%
```

 Unset the regular attribute if it has been set.

```

8299 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8300   \glshasattribute{\the\glslabeltok}{regular}{}
8301   {%
8302     \glssetattribute{\the\glslabeltok}{regular}{false}{}
8303   }%
8304   {}{%
8305 }%
8306 }%
8307 {%

```

As short-sc-long style:

```

8308 \GlsXtrUseAbbrStyleFmts{short-sc-long}{}
8309 }%

```

short-sc

```

8310 \newabbreviationstyle{short-sc}{%
8311 {%
8312   \renewcommand*\CustomAbbreviationFields}{%
8313     name={\glsxtrshortnolongname},%
8314     sort={\the\glsshorttok},%
8315     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
8316     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
8317     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8318     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%
8319     description={\the\glslongtok}}{%
8320   \renewcommand*\GlsXtrPostNewAbbreviation}{%
8321     \glssetattribute{\the\glslabeltok}{regular}{true}{}
8322 }%
8323 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8324 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtrscsuffix}{%
8325 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\#\#1}}{%
8326 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\#\#1}}{%
8327 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\#\#1}}{%
8328 \renewcommand*\glslongfont}[1]{\glslongdefaultfont{\#\#1}}{%

```

The inline full form displays the short form followed by the long form in parentheses.

```

8329 \renewcommand*\glsxtrinlinefullformat}[2]{%
8330   \protect\glsfirstabbrvscfont{\glsaccessshort{\#\#1}}{%
8331     \ifglsxtrinsertinside{\#\#2\fi}{%
8332       \ifglsxtrinsertinside{\else{\#\#2\fi}\glsxtrfullsep{\#\#1}}{%
8333         \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#\#1}}}{%
8334       }{%
8335     \renewcommand*\glsxtrinlinefullplformat}[2]{%
8336       \protect\glsfirstabbrvscfont{\glsaccessshortpl{\#\#1}}{%
8337         \ifglsxtrinsertinside{\#\#2\fi}{%
8338           \ifglsxtrinsertinside{\else{\#\#2\fi}\glsxtrfullsep{\#\#1}}{%
8339             \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{\#\#1}}}{%
8340           }{%

```

```

8341 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8342   \protect\glsfirstabbrvscfont{\Glsaccessshort{##1}}%
8343   \ifglsxtrinsertinside##2\fi}%
8344 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8345 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8346 }%
8347 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8348   \protect\glsfirstabbrvscfont{\Glsaccessshortpl{##1}}%
8349   \ifglsxtrinsertinside##2\fi}%
8350 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8351 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8352 }%

```

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.

```

8353 \renewcommand*{\glsxtrfullformat}[2]{%
8354   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8355   \ifglsxtrinsertinside\else##2\fi
8356 }%
8357 \renewcommand*{\glsxtrfullplformat}[2]{%
8358   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8359   \ifglsxtrinsertinside\else##2\fi
8360 }%
8361 \renewcommand*{\Glsxtrfullformat}[2]{%
8362   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8363   \ifglsxtrinsertinside\else##2\fi
8364 }%
8365 \renewcommand*{\Glsxtrfullplformat}[2]{%
8366   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8367   \ifglsxtrinsertinside\else##2\fi
8368 }%
8369 }%

```

short-sc-nolong

```
8370 \letabbreviationstyle{short-sc-nolong}{short-sc}
```

short-sc-desc

```

8371 \newabbreviationstyle{short-sc-desc}{%
8372 }%
8373 \renewcommand*{\CustomAbbreviationFields}{%
8374   name={\glsxtrshortdescname},
8375   sort={\the\glsshorttok},
8376   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
8377   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
8378   text={\protect\glsabbrvscfont{\the\glsshorttok}},
8379   plural={\protect\glsabbrvscfont{\the\glsshortpltok}},
8380   description={\the\glslongtok}}%
8381 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8382   \glssetattribute{\the\glslabeltok}{regular}{true}}%

```

```
8383 }%
8384 {%
```

Use `smallcaps` and adjust the plural suffix to revert to upright.

```
8385 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8386 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8387 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
8388 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8389 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short format followed by the long form in parentheses.

```
8390 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8391   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8392   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8393   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8394 }%
8395 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8396   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8397   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8398   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8399 }%
8400 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8401   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8402   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8403   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8404 }%
8405 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8406   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8407   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8408   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8409 }%
```

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.

```
8410 \renewcommand*{\glsxtrfullformat}[2]{%
8411   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8412   \ifglsxtrinsertinside\else##2\fi
8413 }%
8414 \renewcommand*{\glsxtrfullplformat}[2]{%
8415   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8416   \ifglsxtrinsertinside\else##2\fi
8417 }%
8418 \renewcommand*{\Glsxtrfullformat}[2]{%
8419   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8420   \ifglsxtrinsertinside\else##2\fi
8421 }%
8422 \renewcommand*{\Glsxtrfullplformat}[2]{%
8423   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8424   \ifglsxtrinsertinside\else##2\fi
8425 }%
8426 }
```

```
-sc-nolong-desc
8427 \letabbreviationstyle{short-sc-nolong-desc}{short-sc-desc}
```

```
nolong-short-sc
8428 \newabbreviationstyle{nolong-short-sc}%
8429 {%
8430   \GlsXtrUseAbbrStyleSetup{short-sc-nolong}%
8431 }%
8432 {%
8433   \GlsXtrUseAbbrStyleFmts{short-sc-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```
8434 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
8435   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
8436     \ifglsxtrinsertinside##2\fi}%
8437   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8438   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8439 }%
8440 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
8441   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
8442     \ifglsxtrinsertinside##2\fi}%
8443   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8444   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8445 }%
8446 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
8447   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
8448     \ifglsxtrinsertinside##2\fi}%
8449   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8450   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8451 }%
8452 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
8453   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
8454     \ifglsxtrinsertinside##2\fi}%
8455   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8456   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8457 }%
8458 }
```

```
long-noshort-sc The smallcaps font will only be used if the short form is explicitly invoked through commands like \glsxtrshort.
```

```
8459 \newabbreviationstyle{long-noshort-sc}%
8460 {%
8461   \renewcommand*\{\CustomAbbreviationFields}{%
8462     name={\glsxtrlongnoshortname},
8463     sort={\the\glsshorttok},
8464     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
8465     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
8466     text={\protect\glslongdefaultfont{\the\glslongtok}},
8467     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
```

```

8468     description={\the\glslongtok}%
8469   }%
8470   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8471     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8472 }%
8473 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8474   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8475   \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8476   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
8477   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8478   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8479   \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8480     \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8481     \ifglsxtrinsertinside \else##2\fi
8482   }%
8483   \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8484     \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8485     \ifglsxtrinsertinside \else##2\fi
8486   }%
8487   \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8488     \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8489     \ifglsxtrinsertinside \else##2\fi
8490   }%
8491   \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8492     \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8493     \ifglsxtrinsertinside \else##2\fi
8494   }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8495   \renewcommand*{\glsxtrinlinefullformat}[2]{%
8496     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8497     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8498     \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8499   }%
8500   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8501     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8502     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8503     \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8504   }%
8505   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8506     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8507     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8508     \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8509   }%
8510   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8511     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8512     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%

```

```
8513     \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%  
8514 }
```

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.

```
8515 \renewcommand*\glsxtrfullformat[2]{%  
8516   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%  
8517   \ifglsxtrinsertinside\else##2\fi  
8518 }%  
8519 \renewcommand*\glsxtrfullplformat[2]{%  
8520   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%  
8521   \ifglsxtrinsertinside\else##2\fi  
8522 }%  
8523 \renewcommand*\Glsxtrfullformat[2]{%  
8524   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%  
8525   \ifglsxtrinsertinside\else##2\fi  
8526 }%  
8527 \renewcommand*\Glsxtrfullplformat[2]{%  
8528   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%  
8529   \ifglsxtrinsertinside\else##2\fi  
8530 }%  
8531 }
```

long-sc Backward compatibility:

```
8532 @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`.

```
8533 \newabbreviationstyle{long-noshort-sc-desc}{%  
8534 {  
8535   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}{%  
8536 }%  
8537 }%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
8538 \renewcommand*\abbrvpluralsuffix{\protect\glsxtrscsuffix}{%  
8539 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%  
8540 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%  
8541 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%  
8542 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
8543 \renewcommand*\glsxtrsubsequentfmt[2]{%  
8544   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}{%  
8545   \ifglsxtrinsertinside \else##2\fi  
8546 }%  
8547 \renewcommand*\glsxtrsubsequentplfmt[2]{%  
8548   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}{%  
8549   \ifglsxtrinsertinside \else##2\fi  
8550 }%
```

```

8551 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
8552   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8553   \ifglsxtrinsertinside \else##2\fi
8554 }%
8555 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
8556   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8557   \ifglsxtrinsertinside \else##2\fi
8558 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8559 \renewcommand*\glsxtrinlinefullformat}[2]{%
8560   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8561   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8562   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8563 }%
8564 \renewcommand*\glsxtrinlinefullplformat}[2]{%
8565   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8566   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8567   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8568 }%
8569 \renewcommand*\Glsxtrinlinefullformat}[2]{%
8570   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8571   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8572   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8573 }%
8574 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
8575   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8576   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8577   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8578 }%

```

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.

```

8579 \renewcommand*\glsxtrfullformat}[2]{%
8580   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8581   \ifglsxtrinsertinside\else##2\fi
8582 }%
8583 \renewcommand*\glsxtrfullplformat}[2]{%
8584   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8585   \ifglsxtrinsertinside\else##2\fi
8586 }%
8587 \renewcommand*\Glsxtrfullformat}[2]{%
8588   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8589   \ifglsxtrinsertinside\else##2\fi
8590 }%
8591 \renewcommand*\Glsxtrfullplformat}[2]{%
8592   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8593   \ifglsxtrinsertinside\else##2\fi
8594 }%
8595 }

```

long-desc-sc Backward compatibility:

```
8596 \glsxtr@deprecated@abbrstyle{long-desc-sc}{long-noshort-sc-desc}
```

short-sc-footnote

```
8597 \newabbreviationstyle{short-sc-footnote}%
8598 {%
8599   \renewcommand*{\CustomAbbreviationFields}{%
8600     name={\glsxtrfootnotename},
8601     sort={\the\glsshorttok},
8602     description={\the\glslongtok},%
8603     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
8604       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8605         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8606     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
8607       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8608         {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
8609     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.

```
8610 \renewcommand*{\GlsXtrPostNewAbbreviation}%
8611   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8612   \glshasattribute{\the\glslabeltok}{regular}%
8613   {%
8614     \glssetattribute{\the\glslabeltok}{regular}{false}%
8615   }%
8616   {}%
8617 }%
8618 }%
8619 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
8620 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8621 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8622 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
8623 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8624 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```
8625 \renewcommand*{\glsxtrfullformat}[2]{%
8626   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8627   \ifglsxtrinsertinside\else##2\fi
8628   \protect\glsxtrabbrvfootnote{##1}%
8629     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}}%
8630 }%
8631 \renewcommand*{\glsxtrfullplformat}[2]{%
8632   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8633   \ifglsxtrinsertinside\else##2\fi
8634   \protect\glsxtrabbrvfootnote{##1}%
8635     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}}%
```

```

8636 }%
8637 \renewcommand*{\Glsxtrfullformat}[2]{%
8638   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8639   \ifglsxtrinsertinside\else##2\fi
8640   \protect\glsxtrabbrvfootnote{##1}%
8641   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8642 }%
8643 \renewcommand*{\Glsxtrfullplformat}[2]{%
8644   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8645   \ifglsxtrinsertinside\else##2\fi
8646   \protect\glsxtrabbrvfootnote{##1}%
8647   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8648 }%

```

The first use full form and the inline full form use the short (long) style.

```

8649 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8650   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8651   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8652   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8653 }%
8654 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8655   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8656   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8657   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8658 }%
8659 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8660   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8661   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8662   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8663 }%
8664 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8665   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8666   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8667   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8668 }%
8669 }%

```

`footnote-sc` Backward compatibility:

```
8670 @glsxtr@deprecated@abbrstyle{footnote-sc}{short-sc-footnote}
```

`sc-postfootnote`

```

8671 \newabbreviationstyle{short-sc-postfootnote}%
8672 }%
8673 \renewcommand*{\CustomAbbreviationFields}{%
8674   name={\glsxtrfootnotename},
8675   sort={\the\glsshorttok},
8676   description={\the\glslongtok},%
8677   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
8678   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
8679   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.

```
8680 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8681   \csdef{glsxtrpostlink\glscategorylabel}{%
8682     \glsxtrifwasfirstuse
8683   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
8684   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8685     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
8686   }%
8687   {}%
8688 }%
8689 \glshasattribute{\the\glslabeltok}{regular}%
8690 {}%
8691   \glssetattribute{\the\glslabeltok}{regular}{false}%
8692 }%
8693 {}%
8694 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
8695 \renewcommand*\glsxtrsetupfulldefs}{%
8696   \let\glsxtrifwasfirstuse\@secondoftwo
8697 }%
8698 }%
8699 {}
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
8700 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtrscssuffix}%
8701 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\##1}}%
8702 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\##1}}%
8703 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{\##1}}%
8704 \renewcommand*\glslongfont[1]{\glslongfootnotefont{\##1}}%
```

The full format displays the short form. The long form is deferred.

```
8705 \renewcommand*\glsxtrfullformat}[2]{%
8706   \glsfirstabbrvscfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
8707   \ifglsxtrinsertinside\else##2\fi
8708 }%
8709 \renewcommand*\glsxtrfullplformat}[2]{%
8710   \glsfirstabbrvscfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside##2\fi}%
8711   \ifglsxtrinsertinside\else##2\fi
8712 }%
8713 \renewcommand*\Glsxtrfullformat}[2]{%
8714   \glsfirstabbrvscfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
8715   \ifglsxtrinsertinside\else##2\fi
8716 }%
8717 \renewcommand*\Glsxtrfullplformat}[2]{%
```

```

8718     \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8719     \ifglsxtrinsertinside\else##2\fi
8720 }%

```

The first use full form and the inline full form use the short (long) style.

```

8721 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8722     \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8723     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8724     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8725 }%
8726 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8727     \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8728     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8729     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8730 }%
8731 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8732     \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8733     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8734     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8735 }%
8736 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8737     \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8738     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8739     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8740 }%
8741 }

```

`postfootnote-sc` Backward compatibility:

```
8742 @glsxtr@deprecated@abbrstyle{postfootnote-sc}{short-sc-postfootnote}
```

1.7.4 Predefined Styles (Fake Small Capitals)

These styles require the `relsize` package, which must be loaded by the user. These styles all use:

`\glsxtrsmfont` Maintained for backward compatibility.

```
8743 \newcommand*{\glsxtrsmfont}[1]{\textsmaller{#1}}
```

`\glsabbrvsmfont` Added for consistent naming.

```
8744 \newcommand*{\glsabbrvsmfont}{\glsxtrsmfont}
```

`\sxtrfirstsmfont` Maintained for backward compatibility.

```
8745 \newcommand*{\sxtrfirstsmfont}[1]{\glsabbrvsmfont{#1}}
```

`\irstabbrvsmfont` Added for consistent naming.

```
8746 \newcommand*{\irstabbrvsmfont}{\sxtrfirstsmfont}
```

and for the default short form suffix:

```

\glsxtrsmsuffix
8747 \newcommand*\{\glsxtrsmsuffix\}{\glsxtrabbrvpluralsuffix}

long-short-sm
8748 \newabbreviationstyle{long-short-sm}%
8749 {%
8750   \renewcommand*\{\CustomAbbreviationFields\}%
8751     name={\glsxtrlongshortname},%
8752     sort={\the\glsshorttok},%
8753     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
8754       \protect\glsxtrfullsep{\the\glslabeltok}%
8755       \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
8756     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
8757       \protect\glsxtrfullsep{\the\glslabeltok}%
8758       \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
8759     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},%
8760     description={\the\glslongtok}}%
8761   \renewcommand*\{\GlsXtrPostNewAbbreviation\}%
8762     \glshasattribute{\the\glslabeltok}{regular}%
8763   {%
8764     \glssetattribute{\the\glslabeltok}{regular}{false}%
8765   }%
8766   {}%
8767 }%
8768 }%
8769 {%
8770   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8771   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8772   \renewcommand*\{\abbrvpluralsuffix\}{\protect\glsxtrsmsuffix}%

```

Use the default long fonts.

```

8773   \renewcommand*\{\glsfirstlongfont\}[1]{\glsfirstlongdefaultfont{##1}}%
8774   \renewcommand*\{\glslongfont\}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8775   \renewcommand*\{\glsxtrfullformat\}[2]%
8776     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8777     \ifglsxtrinsertinside\else##2\fi
8778     \glsxtrfullsep{##1}%
8779     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8780   }%
8781   \renewcommand*\{\glsxtrfullplformat\}[2]%
8782     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8783     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8784     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8785   }%
8786   \renewcommand*\{\GlsXtrfullformat\}[2]%
8787     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8788     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8789     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%

```

```

8790 }%
8791 \renewcommand*{\Glsxtrfullplformat}[2]{%
8792   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8793   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8794   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8795 }%
8796 }

g-short-sm-desc
8797 \newabbreviationstyle{long-short-sm-desc}{%
8798 }%
8799 \renewcommand*{\CustomAbbreviationFields}{%
8800   name={\glsxtrlongshortdescname},%
8801   sort={\glsxtrlongshortdescsort},%
8802   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
8803     \protect\glsxtrfullsep{\the\glslabeltok}%
8804     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
8805   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
8806     \protect\glsxtrfullsep{\the\glslabeltok}%
8807     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
8808   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8809   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}}%
8810 }%

Unset the regular attribute if it has been set.
8811 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8812   \glshasattribute{\the\glslabeltok}{regular}}%
8813 }%
8814   \glssetattribute{\the\glslabeltok}{regular}{false}}%
8815 }%
8816 }%
8817 }%
8818 }%
8819 }%

```

As long-short-sm style:

```

8820 \GlsXtrUseAbbrStyleFmts{long-short-sm}%
8821 }

```

short-sm-long Now the short (long) version

```

8822 \newabbreviationstyle{short-sm-long}{%
8823 }%
8824 \renewcommand*{\CustomAbbreviationFields}{%
8825   name={\glsxtrshortlongname},%
8826   sort={\the\glsshorttok},%
8827   description={\the\glslongtok},%
8828   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}}%
8829     \protect\glsxtrfullsep{\the\glslabeltok}%
8830     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8831   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}}

```

```

8832 \protect\glsxtrfullsep{\the\glslabeltok}%
8833 \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8834 plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

8835 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8836 \glshasattribute{\the\glslabeltok}{regular}%
8837 {%
8838 \glssetattribute{\the\glslabeltok}{regular}{false}%
8839 }%
8840 {}%
8841 }%
8842 }%
8843 {%
8844 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8845 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8846 \renewcommand*\abbrvpluralsuffix{\protect\glsxtrmssuffix}%
8847 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8848 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8849 \renewcommand*\glsxtrfullformat}[2]{%
8850 \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8851 \ifglsxtrinsertinside\else##2\fi
8852 \glsxtrfullsep{##1}%
8853 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8854 }%
8855 \renewcommand*\glsxtrfullplformat}[2]{%
8856 \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8857 \ifglsxtrinsertinside\else##2\fi
8858 \glsxtrfullsep{##1}%
8859 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8860 }%
8861 \renewcommand*\Glsxtrfullformat}[2]{%
8862 \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8863 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8864 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8865 }%
8866 \renewcommand*\Glsxtrfullplformat}[2]{%
8867 \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8868 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8869 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8870 }%
8871 }

```

rt-sm-long-desc As before but user provides description

```

8872 \newabbreviationstyle{short-sm-long-desc}%
8873 {%
8874 \renewcommand*\CustomAbbreviationFields}{%
8875 name={\glsxtrshortlongdescname},

```

```

8876     sort={\glsxtrshortlongdescsort},
8877     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
8878         \protect\glsxtrfullsep{\the\glslabeltok}%
8879         \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8880     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
8881         \protect\glsxtrfullsep{\the\glslabeltok}%
8882         \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8883     text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8884     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}
8885 }%

```

Unset the regular attribute if it has been set.

```

8886 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8887     \glshasattribute{\the\glslabeltok}{regular}%
8888     {}%
8889     \glssetattribute{\the\glslabeltok}{regular}{false}%
8890     {}%
8891     {}%
8892 }%
8893 }%
8894 }%

```

As short-sm-long style:

```

8895 \GlsXtrUseAbbrStyleFmts{short-sm-long}%
8896 }%

```

short-sm

```

8897 \newabbreviationstyle{short-sm}%
8898 {%
8899     \renewcommand*{\CustomAbbreviationFields}{%
8900         name={\glsxtrshortno longname},
8901         sort={\the\glsshorttok},
8902         first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
8903         firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
8904         text={\protect\glsabbrvsmfont{\the\glsshorttok}},
8905         plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
8906         description={\the\glslongtok}}%
8907     \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8908         \glssetattribute{\the\glslabeltok}{regular}{true}%
8909 }%
8910 }%
8911     \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8912     \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8913     \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmssuffix}%
8914     \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8915     \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

8916 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8917     \protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}%

```

```

8918     \ifglsxtrinsertinside##2\fi}%
8919     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8920     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8921 }%
8922 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8923     \protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}%
8924     \ifglsxtrinsertinside##2\fi}%
8925     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8926     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8927 }%
8928 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8929     \protect\glsfirstabbrvsmfont{\Glsaccessshort{##1}}%
8930     \ifglsxtrinsertinside##2\fi}%
8931     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8932     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8933 }%
8934 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8935     \protect\glsfirstabbrvsmfont{\Glsaccessshortpl{##1}}%
8936     \ifglsxtrinsertinside##2\fi}%
8937     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8938     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8939 }%

```

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.

```

8940 \renewcommand*{\glsxtrfullformat}[2]{%
8941     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8942     \ifglsxtrinsertinside\else##2\fi
8943 }%
8944 \renewcommand*{\glsxtrfullplformat}[2]{%
8945     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8946     \ifglsxtrinsertinside\else##2\fi
8947 }%
8948 \renewcommand*{\Glsxtrfullformat}[2]{%
8949     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8950     \ifglsxtrinsertinside\else##2\fi
8951 }%
8952 \renewcommand*{\Glsxtrfullplformat}[2]{%
8953     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8954     \ifglsxtrinsertinside\else##2\fi
8955 }%
8956 }

```

short-sm-nolong

```
8957 \letabbreviationstyle{short-sm-nolong}{short-sm}
```

short-sm-desc

```
8958 \newabbreviationstyle{short-sm-desc}{}
```

```

8959 {%
8960   \renewcommand*{\CustomAbbreviationFields}{%
8961     name={\glsxtrshortdescname},
8962     sort={\the\glsshorttok},
8963     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
8964     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
8965     text={\protect\glsabbrvsmfont{\the\glsshorttok}},
8966     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
8967     description={\the\glslongtok}}%
8968 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8969   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8970 }%
8971 {%
8972   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8973   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8974   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsnsuffix}%
8975   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8976   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

8977 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8978   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8979   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8980   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8981 }%
8982 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8983   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8984   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8985   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8986 }%
8987 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8988   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8989   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8990   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8991 }%
8992 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8993   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8994   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8995   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8996 }%

```

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.

```

8997 \renewcommand*{\glsxtrfullformat}[2]{%
8998   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8999   \ifglsxtrinsertinside\else##2\fi
9000 }%
9001 \renewcommand*{\glsxtrfullplformat}[2]{%
9002   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9003   \ifglsxtrinsertinside\else##2\fi

```

```

9004 }%
9005 \renewcommand*{\Glsxtrfullformat}[2]{%
9006   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9007   \ifglsxtrinsertinside\else##2\fi
9008 }%
9009 \renewcommand*{\Glsxtrfullplformat}[2]{%
9010   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9011   \ifglsxtrinsertinside\else##2\fi
9012 }%
9013 }

-sm-nolong-desc
9014 \letabbreviationstyle{short-sm-nolong-desc}{short-sm-desc}

nolong-short-sm
9015 \newabbreviationstyle{nolong-short-sm}{%
9016 }%
9017 \GlsXtrUseAbbrStyleSetup{short-sm-nolong}%
9018 }%
9019 }%
9020 \GlsXtrUseAbbrStyleFmts{short-sm-nolong}%

The inline full form displays the long form followed by the short form in parentheses.

9021 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9022   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}}%
9023   \ifglsxtrinsertinside##2\fi}%
9024 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9025 \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9026 }%
9027 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9028   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}%
9029   \ifglsxtrinsertinside##2\fi}%
9030 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9031 \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9032 }%
9033 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9034   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}}%
9035   \ifglsxtrinsertinside##2\fi}%
9036 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9037 \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9038 }%
9039 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9040   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
9041   \ifglsxtrinsertinside##2\fi}%
9042 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9043 \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9044 }%
9045 }

```

long-noshort-sm The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```
9046 \newabbreviationstyle{long-noshort-sm}%
9047 {%
9048   \renewcommand*{\CustomAbbreviationFields}{%
9049     name={\glsxtrlongnoshortname},
9050     sort={\the\glsshorttok},
9051     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
9052     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
9053     text={\protect\glslongdefaultfont{\the\glslongtok}},
9054     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
9055     description={\the\glslongtok}%
9056 }%
9057 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9058   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9059 }%
9060 {%
9061   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9062   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9063   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsmsuffix}%
9064   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9065   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
9066 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9067   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9068   \ifglsxtrinsertinside \else##2\fi
9069 }%
9070 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9071   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9072   \ifglsxtrinsertinside \else##2\fi
9073 }%
9074 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9075   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9076   \ifglsxtrinsertinside \else##2\fi
9077 }%
9078 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9079   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9080   \ifglsxtrinsertinside \else##2\fi
9081 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9082 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9083   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9084   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9085   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9086 }%
9087 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9088   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9089   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9090 }
```

```

9090     \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9091 }%
9092 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9093     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9094     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9095     \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9096 }%
9097 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9098     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9099     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
9100     \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9101 }%

```

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.

```

9102 \renewcommand*{\glsxtrfullformat}[2]{%
9103     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9104     \ifglsxtrinsertinside\else##2\fi
9105 }%
9106 \renewcommand*{\glsxtrfullplformat}[2]{%
9107     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9108     \ifglsxtrinsertinside\else##2\fi
9109 }%
9110 \renewcommand*{\Glsxtrfullformat}[2]{%
9111     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9112     \ifglsxtrinsertinside\else##2\fi
9113 }%
9114 \renewcommand*{\Glsxtrfullplformat}[2]{%
9115     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9116     \ifglsxtrinsertinside\else##2\fi
9117 }%
9118 }

```

long-sm Backward compatibility:

```
9119 @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`.

```

9120 \newabbreviationstyle{long-noshort-sm-desc}{%
9121 }%
9122 \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
9123 }%
9124 }%
9125 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9126 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9127 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsmsuffix}%
9128 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9129 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9130 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9131   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9132   \ifglsxtrinsertinside \else##2\fi
9133 }%
9134 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9135   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9136   \ifglsxtrinsertinside \else##2\fi
9137 }%
9138 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9139   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9140   \ifglsxtrinsertinside \else##2\fi
9141 }%
9142 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9143   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9144   \ifglsxtrinsertinside \else##2\fi
9145 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9146 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9147   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9148   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9149   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9150 }%
9151 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9152   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9153   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9154   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9155 }%
9156 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9157   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9158   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9159   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9160 }%
9161 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9162   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9163   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9164   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9165 }%

```

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.

```

9166 \renewcommand*{\glsxtrfullformat}[2]{%
9167   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9168   \ifglsxtrinsertinside\else##2\fi
9169 }%
9170 \renewcommand*{\glsxtrfullplformat}[2]{%
9171   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9172   \ifglsxtrinsertinside\else##2\fi
9173 }%
9174 \renewcommand*{\Glsxtrfullformat}[2]{%

```

```

9175     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9176     \ifglsxtrinsertinside\else##2\fi
9177 }%
9178 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9179     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9180     \ifglsxtrinsertinside\else##2\fi
9181 }%
9182 }

```

long-desc-sm Backward compatibility:

```
9183 \@glsxtr@deprecated@abbrstyle{long-desc-sm}{long-noshort-sm-desc}
```

short-sm-footnote

```

9184 \newabbreviationstyle{short-sm-footnote}%
9185 {%
9186 \renewcommand*\{\CustomAbbreviationFields}{%
9187     name={\glsxtrfootnotename},
9188     sort={\the\glsshorttok},
9189     description={\the\glslongtok},%
9190     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
9191         \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9192             {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9193     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
9194         \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9195             {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9196     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.

```

9197 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
9198     \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9199     \glshasattribute{\the\glslabeltok}{regular}%
9200 }%
9201     \glssetattribute{\the\glslabeltok}{regular}{false}%
9202 }%
9203 {}%
9204 }%
9205 }%
9206 {%
9207 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9208 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9209 \renewcommand*\{\abbrvpluralsuffix}{\protect\glsxtrsmssuffix}%
9210 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
9211 \renewcommand*\{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

9212 \renewcommand*\{\glsxtrfullformat}[2]{%
9213     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9214     \ifglsxtrinsertinside\else##2\fi
9215     \protect\glsxtrabbrvfootnote{##1}%

```

```

9216      {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9217  }%
9218  \renewcommand*{\glsxtrfullplformat}[2]{%
9219    \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9220    \ifglsxtrinsertinside\else##2\fi
9221    \protect\glsxtrabrvfootnote{##1}%
9222    {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9223 }%
9224  \renewcommand*{\Glsxtrfullformat}[2]{%
9225    \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9226    \ifglsxtrinsertinside\else##2\fi
9227    \protect\glsxtrabrvfootnote{##1}%
9228    {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9229 }%
9230  \renewcommand*{\Glsxtrfullplformat}[2]{%
9231    \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9232    \ifglsxtrinsertinside\else##2\fi
9233    \protect\glsxtrabrvfootnote{##1}%
9234    {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9235 }%

```

The first use full form and the inline full form use the short (long) style.

```

9236  \renewcommand*{\glsxtrinlinefullformat}[2]{%
9237    \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9238    \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9239    \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9240 }%
9241  \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9242    \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9243    \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9244    \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9245 }%
9246  \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9247    \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9248    \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9249    \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9250 }%
9251  \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9252    \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9253    \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9254    \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9255 }%
9256 }%

```

footnote-sm Backward compatibility:

```
9257 \glsxtr@deprecated@abbrstyle{footnote-sm}{short-sm-footnote}
```

sm-postfootnote

```
9258 \newabbreviationstyle{short-sm-postfootnote}%
9259 {%
```

```

9260 \renewcommand*\CustomAbbreviationFields{%
9261   name={\glsxtrfootnotename},
9262   sort={\the\glsshorttok},
9263   description={\the\glslongtok},%
9264   first=\protect\glsfirstabbrvsmfont{\the\glsshorttok},%
9265   firstplural=\protect\glsfirstabbrvsmfont{\the\glsshortpltok},%
9266   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.

```

9267 \renewcommand*\GlsXtrPostNewAbbreviation{%
9268   \csdef{glsxtrpostlink}{\glscategorylabel}{%
9269     \glsxtrifwasfirstuse
9270   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

9271   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9272   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
9273 }%
9274 {}%
9275 }%
9276 \glshasattribute{\the\glslabeltok}{regular}%
9277 {}%
9278   \glssetattribute{\the\glslabeltok}{regular}{false}%
9279 }%
9280 {}%
9281 }%

```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```

9282 \renewcommand*\glsxtrsetupfulldefs{%
9283   \let\glsxtrifwasfirstuse\@secondoftwo
9284 }%
9285 }%
9286 {}%
9287 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9288 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9289 \renewcommand*\abbrvpluralsuffix{\protect\glsxtrmssuffix}%
9290 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
9291 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

9292 \renewcommand*\glsxtrfullformat[2]{%
9293   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9294   \ifglsxtrinsertinside\else##2\fi
9295 }%
9296 \renewcommand*\glsxtrfullplformat[2]{%
9297   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9298   \ifglsxtrinsertinside\else##2\fi
9299 }%

```

```

9300 \renewcommand*{\Glsxtrfullformat}[2]{%
9301   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9302   \ifglsxtrinsertinside\else##2\fi
9303 }%
9304 \renewcommand*{\Glsxtrfullplformat}[2]{%
9305   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9306   \ifglsxtrinsertinside\else##2\fi
9307 }%

```

The first use full form and the inline full form use the short (long) style.

```

9308 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9309   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9310   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9311   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9312 }%
9313 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9314   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9315   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9316   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9317 }%
9318 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9319   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9320   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9321   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9322 }%
9323 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9324   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9325   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9326   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9327 }%
9328 }

```

`postfootnote-sm` Backward compatibility:

```
9329 \@glsxtr@deprecated@abbrstyle{postfootnote-sm}{short-sm-postfootnote}
```

1.7.5 Predefined Styles (Emphasized)

These styles use `\emph` for the short form.

`\glsabbrvemfont`

```
9330 \newcommand*{\glsabbrvemfont}[1]{\emph{#1}}%
```

`\glsfirstabbrvemfont`

```
9331 \newcommand*{\glsfirstabbrvemfont}[1]{\glsabbrvemfont{#1}}%
```

The default short form suffix:

`\glsxtremsuffix`

```
9332 \newcommand*{\glsxtremsuffix}{\glsxtrabbrvpluralsuffix}
```

```

firstlongemfont Only used by the “long-em” styles.
9333 \newcommand*{\glsfirstlongemfont}[1]{\glslongemfont{#1}}%

\glslongemfont Only used by the “long-em” styles.
9334 \newcommand*{\glslongemfont}[1]{\emph{#1}}%

long-short-em The long form is just set in the default long font.
9335 \newabbreviationstyle{long-short-em}{%
9336 {%
9337   \renewcommand*{\CustomAbbreviationFields}{%
9338     name={\glsxtrlongshortname},
9339     sort={\the\glsshorttok},
9340     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
9341       \protect\glsxtrfullsep{\the\glslabeltok}%
9342         \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
9343     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
9344       \protect\glsxtrfullsep{\the\glslabeltok}%
9345         \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
9346     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
9347     description={\the\glslongtok}}%
9348   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9349     \glshasattribute{\the\glslabeltok}{regular}}%
9350   {%
9351     \glssetattribute{\the\glslabeltok}{regular}{false}}%
9352   }%
9353   {}%
9354 }%
9355 }%
9356 {%
9357   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
9358   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9359   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
}

Use the default long fonts.
9360 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9361 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

The first use full form and the inline full form are the same for this style.
9362 \renewcommand*{\glsxtrfullformat}[2]{%
9363   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9364   \ifglsxtrinsertinside\else##2\fi
9365   \glsxtrfullsep{##1}%
9366   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9367 }%
9368 \renewcommand*{\glsxtrfullplformat}[2]{%
9369   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9370   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9371   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
9372 }%
9373 \renewcommand*{\Glsxtrfullformat}[2]{%

```

```

9374     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9375     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9376     \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9377 }%
9378 \renewcommand*\Glsxtrfullplformat}[2]{%
9379     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9380     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9381     \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9382 }%
9383 }

```

g-short-em-desc

```

9384 \newabbreviationstyle{long-short-em-desc}%
9385 {%
9386 \renewcommand*\CustomAbbreviationFields}{%
9387     name={\glsxtrlongshortdescname},%
9388     sort={\glsxtrlongshortdescsort},%
9389     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
9390         \protect\glsxtrfullsep{\the\glslabeltok}%
9391         \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
9392     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
9393         \protect\glsxtrfullsep{\the\glslabeltok}%
9394         \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
9395     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
9396     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
9397 }%

```

Unset the regular attribute if it has been set.

```

9398 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9399     \glshasattribute{\the\glslabeltok}{regular}%
9400     {%
9401         \glssetattribute{\the\glslabeltok}{regular}{false}%
9402     }%
9403     {}%
9404 }%
9405 }%
9406 {%

```

As long-short-em style:

```

9407 \GlsXtrUseAbbrStyleFmts{long-short-em}%
9408 }

```

long-em-short-em

```

9409 \newabbreviationstyle{long-em-short-em}%
9410 {%
    \glslongemfont is used in the description since \glsdesc doesn't set the style.
9411 \renewcommand*\CustomAbbreviationFields}{%
9412     name={\glsxtrlongshortname},%
9413     sort={\the\glsshorttok},

```

```

9414   first={\protect\glsfirstlongemfont{\the\glslongtok}%
9415     \protect\glsxtrfullsep{\the\glslabeltok}%
9416     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
9417   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
9418     \protect\glsxtrfullsep{\the\glslabeltok}%
9419     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
9420   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
9421   description={\protect\glslongemfont{\the\glslongtok}}}}%

```

Unset the regular attribute if it has been set.

```

9422 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
9423   \glshasattribute{\glslabeltok}{regular}%
9424   {}%
9425   \glssetattribute{\glslabeltok}{regular}{false}%
9426   {}%
9427   {}%
9428 }%
9429 }%
9430 {}%
9431 \renewcommand*\{\abrvpluralsuffix}{\protect\glsxtremsuffix}%
9432 \renewcommand*\{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
9433 \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9434 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
9435 \renewcommand*\{\glslongfont}[1]{\glslongemfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

9436 \renewcommand*\{\glsxtrfullformat}[2]{%
9437   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9438   \ifglsxtrinsertinside\else##2\fi
9439   \glsxtrfullsep{##1}%
9440   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9441 }%
9442 \renewcommand*\{\glsxtrfullplformat}[2]{%
9443   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9444   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9445   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
9446 }%
9447 \renewcommand*\{\Glsxtrfullformat}[2]{%
9448   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9449   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9450   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9451 }%
9452 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9453   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9454   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9455   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
9456 }%
9457 }

```

m-short-em-desc

```
9458 \newabbreviationstyle{long-em-short-em-desc}%
9459 {%
9460   \renewcommand*{\CustomAbbreviationFields}{%
9461     name={\glsxtrlongshortdescname},
9462     sort={\glsxtrlongshortdescsort},%
9463     first={\protect\glsfirstlongemfont{\the\glslongtok}%
9464       \protect\glsxtrfullsep{\the\glslabeltok}%
9465       \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
9466     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
9467       \protect\glsxtrfullsep{\the\glslabeltok}%
9468       \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
9469     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
9470     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
9471   }%
```

Unset the regular attribute if it has been set.

```
9472 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9473   \glshasattribute{\the\glslabeltok}{regular}%
9474   {%
9475     \glssetattribute{\the\glslabeltok}{regular}{false}%
9476   }%
9477   {}%
9478 }%
9479 }%
9480 {%
9481   \GlsXtrUseAbbrStyleFmts{long-em-short-em}%
9482 }
```

short-em-long Now the short (long) version

```
9483 \newabbreviationstyle{short-em-long}%
9484 {%
9485   \renewcommand*{\CustomAbbreviationFields}{%
9486     name={\glsxtrshortlongname},
9487     sort={\the\glsshorttok},
9488     description={\the\glslongtok},%
9489     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
9490       \protect\glsxtrfullsep{\the\glslabeltok}%
9491       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9492     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
9493       \protect\glsxtrfullsep{\the\glslabeltok}%
9494       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9495     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
9496 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9497   \glshasattribute{\the\glslabeltok}{regular}%
9498   {%
9499     \glssetattribute{\the\glslabeltok}{regular}{false}%
9500   }%
```

```

9501     {}%
9502   }%
9503 }%
9504 {%

```

Mostly as short-long style:

```

9505 \renewcommand*\{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9506 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9507 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
9508 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9509 \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

9510 \renewcommand*\{\glsxtrfullformat}[2]{%
9511   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9512   \ifglsxtrinsertinside\else##2\fi
9513   \glsxtrfullsep{##1}%
9514   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9515 }%
9516 \renewcommand*\{\glsxtrfullplformat}[2]{%
9517   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9518   \ifglsxtrinsertinside\else##2\fi
9519   \glsxtrfullsep{##1}%
9520   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9521 }%
9522 \renewcommand*\{\Glsxtrfullformat}[2]{%
9523   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9524   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9525   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9526 }%
9527 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9528   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9529   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9530   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9531 }%
9532 }

```

`rt-em-long-desc` As before but user provides description

```

9533 \newabbreviationstyle{short-em-long-desc}%
9534 {%
9535 \renewcommand*\{\CustomAbbreviationFields}{%
9536   name={\glsxtrshortlongdescname},
9537   sort={\glsxtrshortlongdescsort},
9538   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
9539     \protect\glsxtrfullsep{\the\glslabeltok}%
9540     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9541   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
9542     \protect\glsxtrfullsep{\the\glslabeltok}%
9543     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9544   text={\protect\glsabbrvemfont{\the\glsshorttok}},%

```

```
9545     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
9546 }
```

Unset the regular attribute if it has been set.

```
9547 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9548     \glshasattribute{\the\glslabeltok}{regular}%
9549     {%
9550         \glssetattribute{\the\glslabeltok}{regular}{false}%
9551     }%
9552     {}%
9553 }%
9554 }%
9555 {%
9556 \GlsXtrUseAbbrStyleFmts{short-em-long}%
9557 }
```

hort-em-long-em

```
9558 \newabbreviationstyle{short-em-long-em}%
9559 {%
```

\glslongemfont is used in the description since \glsdesc doesn't set the style.

```
9560 \renewcommand*{\CustomAbbreviationFields}{%
9561     name={\glsxtrshortlongname},
9562     sort={\the\glsshorttok},
9563     description={\protect\glslongemfont{\the\glslongtok}},%
9564     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
9565         \protect\glsxtrfullsep{\the\glslabeltok}%
9566         \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
9567     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
9568         \protect\glsxtrfullsep{\the\glslabeltok}%
9569         \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
9570     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}
```

Unset the regular attribute if it has been set.

```
9571 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9572     \glshasattribute{\the\glslabeltok}{regular}%
9573     {%
9574         \glssetattribute{\the\glslabeltok}{regular}{false}%
9575     }%
9576     {}%
9577 }%
9578 }%
9579 {%
9580 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9581 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{\##1}}%
9582 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{\##1}}%
9583 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{\##1}}%
9584 \renewcommand*{\glslongfont}[1]{\glslongemfont{\##1}}%
```

The first use full form and the inline full form are the same for this style.

```
9585 \renewcommand*{\glsxtrfullformat}[2]{%
9586   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9587   \ifglsxtrinsertinside\else##2\fi
9588   \glsxtrfullsep{##1}%
9589   \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}%
9590 }%
9591 \renewcommand*{\glsxtrfullplformat}[2]{%
9592   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9593   \ifglsxtrinsertinside\else##2\fi
9594   \glsxtrfullsep{##1}%
9595   \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}%
9596 }%
9597 \renewcommand*{\Glsxtrfullformat}[2]{%
9598   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9599   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9600   \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}%
9601 }%
9602 \renewcommand*{\Glsxtrfullplformat}[2]{%
9603   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9604   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9605   \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}%
9606 }%
9607 }
```

em-long-em-desc

```
9608 \newabbreviationstyle{short-em-long-em-desc}%
9609 {%
9610   \renewcommand*{\CustomAbbreviationFields}{%
9611     name={\glsxtrshortlongdescname},%
9612     sort={\glsxtrshortlongdescsort},%
9613     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
9614       \protect\glsxtrfullsep{\the\glslabeltok}%
9615       \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
9616     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
9617       \protect\glsxtrfullsep{\the\glslabeltok}%
9618       \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
9619     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
9620     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
9621   }%
```

Unset the regular attribute if it has been set.

```
9622 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9623   \glshasattribute{\the\glslabeltok}{regular}%
9624   {%
9625     \glssetattribute{\the\glslabeltok}{regular}{false}%
9626   }%
9627   {}%
9628 }%
```

```

9629 }%
9630 {%
9631   \GlsXtrUseAbbrStyleFmts{short-em-long-em}%
9632 }

short-em

9633 \newabbreviationstyle{short-em}{%
9634 {%
9635   \renewcommand*{\CustomAbbreviationFields}{%
9636     name={\glsxtrshortno longname},
9637     sort={\the\glsshorttok},
9638     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
9639     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
9640     text={\protect\glsabbrvemfont{\the\glsshorttok}},
9641     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},
9642     description={\the\glslongtok}}%
9643   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9644     \glssetattribute{\the\glslabeltok}{regular}{true}}%
9645 }%
9646 {%
9647   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9648   \renewcommand*{\glsabbrvfont[1]}{\glsabbrvemfont{\#1}}%
9649   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{\#1}}%
9650   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\#1}}%
9651   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{\#1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

9652 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9653   \protect\glsfirstabbrvemfont{\glsaccessshort{\#1}}%
9654   \ifglsxtrinsertinside##2\fi}%
9655   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9656   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
9657 }%
9658 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9659   \protect\glsfirstabbrvemfont{\glsaccessshortpl{\#1}}%
9660   \ifglsxtrinsertinside##2\fi}%
9661   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9662   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{\#1}}}%
9663 }%

9664 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9665   \protect\glsfirstabbrvemfont{\Glsaccessshort{\#1}}%
9666   \ifglsxtrinsertinside##2\fi}%
9667   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9668   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
9669 }%
9670 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9671   \protect\glsfirstabbrvemfont{\Glsaccessshortpl{\#1}}%
9672   \ifglsxtrinsertinside##2\fi}%
9673   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%

```

```

9674     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9675 }

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.

9676 \renewcommand*{\glsxtrfullformat}[2]{%
9677   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9678   \ifglsxtrinsertinside\else##2\fi
9679 }%
9680 \renewcommand*{\glsxtrfullplformat}[2]{%
9681   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9682   \ifglsxtrinsertinside\else##2\fi
9683 }%
9684 \renewcommand*{\Glsxtrfullformat}[2]{%
9685   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9686   \ifglsxtrinsertinside\else##2\fi
9687 }%
9688 \renewcommand*{\Glsxtrfullplformat}[2]{%
9689   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9690   \ifglsxtrinsertinside\else##2\fi
9691 }%
9692 }

```

short-em-nolong

```
9693 \letabbreviationstyle{short-em-nolong}{short-em}
```

short-em-desc

```

9694 \newabbreviationstyle{short-em-desc}{%
9695 }%
9696 \renewcommand*{\CustomAbbreviationFields}{%
9697   name={\glsxtrshortdescname},
9698   sort={\the\glsshorttok},
9699   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
9700   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
9701   text={\protect\glsabbrvemfont{\the\glsshorttok}},
9702   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},
9703   description={\the\glslongtok}}%
9704 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9705   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9706 }%
9707 }%
9708 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9709 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9710 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9711 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9712 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

9713 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9714   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%
```

```

9715     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9716     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9717 }%
9718 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9719   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9720   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9721   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9722 }%
9723 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9724   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9725   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9726   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9727 }%
9728 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9729   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9730   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9731   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9732 }%

```

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.

```

9733 \renewcommand*{\glsxtrfullformat}[2]{%
9734   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9735   \ifglsxtrinsertinside\else##2\fi
9736 }%
9737 \renewcommand*{\glsxtrfullplformat}[2]{%
9738   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9739   \ifglsxtrinsertinside\else##2\fi
9740 }%
9741 \renewcommand*{\Glsxtrfullformat}[2]{%
9742   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9743   \ifglsxtrinsertinside\else##2\fi
9744 }%
9745 \renewcommand*{\Glsxtrfullplformat}[2]{%
9746   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9747   \ifglsxtrinsertinside\else##2\fi
9748 }%
9749 }

```

-em-nolong-desc

```
9750 \letabbreviationstyle{short-em-nolong-desc}{short-em-desc}
```

nolong-short-em

```

9751 \newabbreviationstyle{nolong-short-em}%
9752 {%
9753   \GlsXtrUseAbbrStyleSetup{short-em-nolong}%
9754 }%
9755 {%
9756   \GlsXtrUseAbbrStyleFmts{short-em-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```
9757 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9758   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}}%
9759   \ifglsxtrinsertinside##2\fi}%
9760   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9761   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9762 }%
9763 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9764   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}%
9765   \ifglsxtrinsertinside##2\fi}%
9766   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9767   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9768 }%
9769 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9770   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}}%
9771   \ifglsxtrinsertinside##2\fi}%
9772   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9773   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9774 }%
9775 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9776   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
9777   \ifglsxtrinsertinside##2\fi}%
9778   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9779   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9780 }%
9781 }
```

long-noshort-em The short form is explicitly invoked through commands like \glsshort.

```
9782 \newabbreviationstyle{long-noshort-em}{%
9783 }%
9784 \renewcommand*{\CustomAbbreviationFields}{%
9785   name={\glsxtrlongnoshortname},
9786   sort={\the\glsshorttok},
9787   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
9788   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
9789   text={\protect\glslongdefaultfont{\the\glslongtok}},
9790   plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
9791   description={\the\glslongtok}%
9792 }%
9793 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9794   \glssetattribute{\the\glslabeltok}{regular}{true}%
9795 }%
9796 }%
9797 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9798 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9799 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9800 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9801 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```

9802 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9803   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9804   \ifglsxtrinsertinside \else##2\fi
9805 }%
9806 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9807   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9808   \ifglsxtrinsertinside \else##2\fi
9809 }%
9810 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9811   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9812   \ifglsxtrinsertinside \else##2\fi
9813 }%
9814 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9815   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9816   \ifglsxtrinsertinside \else##2\fi
9817 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9818 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9819   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9820   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9821   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9822 }%
9823 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9824   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9825   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9826   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9827 }%
9828 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9829   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9830   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9831   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9832 }%
9833 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9834   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9835   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9836   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9837 }%

```

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.

```

9838 \renewcommand*{\glsxtrfullformat}[2]{%
9839   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9840   \ifglsxtrinsertinside\else##2\fi
9841 }%
9842 \renewcommand*{\glsxtrfullplformat}[2]{%
9843   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9844   \ifglsxtrinsertinside\else##2\fi
9845 }%
9846 \renewcommand*{\Glsxtrfullformat}[2]{%

```

```

9847   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9848   \ifglsxtrinsertinside\else##2\fi
9849 }%
9850 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9851   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9852   \ifglsxtrinsertinside\else##2\fi
9853 }%
9854 }

```

`long-em` Backward compatibility:

```
9855 \@glsxtr@deprecated@abbrstyle{long-em}{long-noshort-em}
```

`g-em-noshort-em` The short form is explicitly invoked through commands like `\glsshort`.

```

9856 \newabbreviationstyle{long-em-noshort-em}%
9857 {%
9858   \renewcommand*\{\CustomAbbreviationFields}{%
9859     name={\glsxtrlongnoshortname},
9860     sort={\the\glsshorttok},
9861     first={\protect\glsfirstlongemfont{\the\glslongtok}},
9862     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
9863     text={\protect\glslongemfont{\the\glslongtok}},
9864     plural={\protect\glslongemfont{\the\glslongpltok}},%
9865     description={\protect\glslongemfont{\the\glslongtok}}%
9866 }%
9867 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
9868   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9869 }%
9870 {%
9871   \renewcommand*\{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9872   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9873   \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9874   \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
9875   \renewcommand*\{\glslongfont}[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9876 \renewcommand*\{\glsxtrsubsequentfmt}[2]{%
9877   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9878   \ifglsxtrinsertinside \else##2\fi
9879 }%
9880 \renewcommand*\{\glsxtrsubsequentplfmt}[2]{%
9881   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9882   \ifglsxtrinsertinside \else##2\fi
9883 }%
9884 \renewcommand*\{\Glsxtrsubsequentfmt}[2]{%
9885   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9886   \ifglsxtrinsertinside \else##2\fi
9887 }%
9888 \renewcommand*\{\Glsxtrsubsequentplfmt}[2]{%
9889   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9890   \ifglsxtrinsertinside \else##2\fi

```

```
9891 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9892 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9893   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9894   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9895   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9896 }%
9897 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9898   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9899   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9900   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
9901 }%
9902 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9903   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9904   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9905   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9906 }%
9907 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9908   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9909   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9910   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
9911 }%
```

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.

```
9912 \renewcommand*{\glsxtrfullformat}[2]{%
9913   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9914   \ifglsxtrinsertinside\else##2\fi
9915 }%
9916 \renewcommand*{\glsxtrfullplformat}[2]{%
9917   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9918   \ifglsxtrinsertinside\else##2\fi
9919 }%
9920 \renewcommand*{\Glsxtrfullformat}[2]{%
9921   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9922   \ifglsxtrinsertinside\else##2\fi
9923 }%
9924 \renewcommand*{\Glsxtrfullplformat}[2]{%
9925   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9926   \ifglsxtrinsertinside\else##2\fi
9927 }%
9928 }
```

`oshort-em-noreg` Like `long-em-noshort-em` but doesn't set the regular attribute.

```
9929 \newabbreviationstyle{long-em-noshort-em-noreg}%
9930 {%
9931   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em}%
}
```

Unset the regular attribute if it has been set.

```

9932 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9933   \glshasattribute{\the\glslabeltok}{regular}{%
9934     {%
9935       \glssetattribute{\the\glslabeltok}{regular}{false}{%
9936     }%
9937   }%
9938 }%
9939 }%
9940 {%
9941 \GlsXtrUseAbbrStyleFmts{long-em-noshort-em}{%
9942 }

```

`noshort-em-desc` The emphasized font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

9943 \newabbreviationstyle{long-noshort-em-desc}{%
9944 {%
9945   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}{%
9946 }%
9947 {%
9948   \renewcommand*\abbrvpluralsuffix}{\protect\glsxtremsuffix}{%
9949   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}{%
9950   \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}{%
9951   \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}{%
9952   \renewcommand*\glslongfont}[1]{\glslongdefaultfont{##1}}{%

```

The format for subsequent use (not used when the regular attribute is set).

```

9953 \renewcommand*\glsxtrsubsequentfmt}[2]{%
9954   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}{%
9955   \ifglsxtrinsertinside \else##2\fi
9956 }%
9957 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
9958   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}{%
9959   \ifglsxtrinsertinside \else##2\fi
9960 }%
9961 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
9962   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}{%
9963   \ifglsxtrinsertinside \else##2\fi
9964 }%
9965 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
9966   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}{%
9967   \ifglsxtrinsertinside \else##2\fi
9968 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9969 \renewcommand*\glsxtrinlinefullformat}[2]{%
9970   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}{%
9971   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}{%
9972   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}{%
9973 }%
9974 \renewcommand*\glsxtrinlinefullplformat}[2]{%

```

```

9975   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9976     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9977     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9978   }%
9979   \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
9980     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9981     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9982     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9983   }%
9984   \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
9985     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9986     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9987     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9988   }%

```

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.

```

9989   \renewcommand*\{\glsxtrfullformat}[2]{%
9990     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9991     \ifglsxtrinsertinside\else##2\fi
9992   }%
9993   \renewcommand*\{\glsxtrfullplformat}[2]{%
9994     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9995     \ifglsxtrinsertinside\else##2\fi
9996   }%
9997   \renewcommand*\{\Glsxtrfullformat}[2]{%
9998     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9999     \ifglsxtrinsertinside\else##2\fi
10000   }%
10001   \renewcommand*\{\Glsxtrfullplformat}[2]{%
10002     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10003     \ifglsxtrinsertinside\else##2\fi
10004   }%
10005 }

```

long-desc-em Backward compatibility:

```
10006 @glsxtr@deprecated@abbrstyle{long-desc-em}{long-noshort-em-desc}
```

noshort-em-desc The short form is explicitly invoked through commands like `\glsshort`. The long form is emphasized.

```

10007 \newabbreviationstyle{long-em-noshort-em-desc}%
10008 {%
10009   \renewcommand*\{\CustomAbbreviationFields}{%
10010     name={\glsxtrlongnoshortdescname},
10011     sort={\the\glslongtok},
10012     first={\protect\glsfirstlongemfont{\the\glslongtok}},
10013     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
10014     text={\glslongemfont{\the\glslongtok}},
10015     plural={\glslongemfont{\the\glslongpltok}}%

```

```

10016 }%
10017 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
10018   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10019 }%
10020 {%
10021 \renewcommand*\{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
10022 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10023 \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10024 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
10025 \renewcommand*\{\glslongfont}[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10026 \renewcommand*\{\glsxtrsubsequentfmt}[2]{%
10027   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10028   \ifglsxtrinsertinside \else##2\fi
10029 }%
10030 \renewcommand*\{\glsxtrsubsequentplfmt}[2]{%
10031   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10032   \ifglsxtrinsertinside \else##2\fi
10033 }%
10034 \renewcommand*\{\Glsxtrsubsequentfmt}[2]{%
10035   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10036   \ifglsxtrinsertinside \else##2\fi
10037 }%
10038 \renewcommand*\{\Glsxtrsubsequentplfmt}[2]{%
10039   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10040   \ifglsxtrinsertinside \else##2\fi
10041 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

10042 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
10043   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10044   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10045   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10046 }%
10047 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
10048   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10049   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10050   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10051 }%
10052 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
10053   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10054   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10055   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10056 }%
10057 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
10058   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10059   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10060   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10061 }%

```

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.

```
10062 \renewcommand*{\glsxtrfullformat}[2]{%
10063   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10064   \ifglsxtrinsertinside\else##2\fi
10065 }%
10066 \renewcommand*{\glsxtrfullplformat}[2]{%
10067   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10068   \ifglsxtrinsertinside\else##2\fi
10069 }%
10070 \renewcommand*{\Glsxtrfullformat}[2]{%
10071   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10072   \ifglsxtrinsertinside\else##2\fi
10073 }%
10074 \renewcommand*{\Glsxtrfullplformat}[2]{%
10075   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10076   \ifglsxtrinsertinside\else##2\fi
10077 }%
10078 }
```

t-em-desc-noreg Like long-em-noshort-em-desc but doesn't set the regular attribute.

```
10079 \newabbreviationstyle{long-em-noshort-em-desc-noreg}{%
10080 {%
10081   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em-desc}}}
```

Unset the regular attribute if it has been set.

```
10082 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10083   \glshasattribute{\the\glslabeltok}{regular}%
10084   {%
10085     \glssetattribute{\the\glslabeltok}{regular}{false}%
10086   }%
10087   {}%
10088 }%
10089 }%
10090 {%
10091   \GlsXtrUseAbbrStyleFmts{long-em-noshort-em-desc}%
10092 }
```

ort-em-footnote

```
10093 \newabbreviationstyle{short-em-footnote}{%
10094 {%
10095   \renewcommand*{\CustomAbbreviationFields}{%
10096     name={\glsxtrfootnotename},
10097     sort={\the\glsshorttok},
10098     description={\the\glslongtok},%
10099     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%
10100     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10101     {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
10102     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}%
```

```

10103      \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10104          {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
10105      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.

10106  \renewcommand*\GlsXtrPostNewAbbreviation{%
10107      \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
10108      \glshasattribute{\the\glslabeltok}{regular}%
10109      {%
10110          \glssetattribute{\the\glslabeltok}{regular}{false}%
10111      }%
10112      {}%
10113  }%
10114 }%
10115 {%
10116  \renewcommand*\abbrvpluralsuffix{\protect\glsxtremsuffix}%
10117  \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10118  \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbvemfont{##1}}%
10119  \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
10120  \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

10121  \renewcommand*\glsxtrfullformat[2]{%
10122      \glsfirstabbvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10123      \ifglsxtrinsertinside\else##2\fi
10124      \protect\glsxtrabbrvfootnote{##1}%
10125      {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10126  }%
10127  \renewcommand*\glsxtrfullplformat[2]{%
10128      \glsfirstabbvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10129      \ifglsxtrinsertinside\else##2\fi
10130      \protect\glsxtrabbrvfootnote{##1}%
10131      {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10132  }%
10133  \renewcommand*\GlsXtrfullformat[2]{%
10134      \glsfirstabbvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10135      \ifglsxtrinsertinside\else##2\fi
10136      \protect\glsxtrabbrvfootnote{##1}%
10137      {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10138  }%
10139  \renewcommand*\GlsXtrfullplformat[2]{%
10140      \glsfirstabbvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10141      \ifglsxtrinsertinside\else##2\fi
10142      \protect\glsxtrabbrvfootnote{##1}%
10143      {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10144  }%

```

The first use full form and the inline full form use the short (long) style.

```

10145  \renewcommand*\glsxtrinlinefullformat[2]{%
10146      \glsfirstabbvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%

```

```

10147     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10148     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10149   }%
10150   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10151     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10152     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10153     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10154   }%
10155   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10156     \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10157     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10158     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10159   }%
10160   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10161     \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10162     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10163     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10164   }%
10165 }

```

`footnote-em` Backward compatibility:

```
10166 @glsxtr@deprecated@abbrstyle{footnote-em}{short-em-footnote}
```

`em-postfootnote`

```

10167 \newabbreviationstyle{short-em-postfootnote}%
10168 {%
10169   \renewcommand*{\CustomAbbreviationFields}{%
10170     name={\glsxtrfootnotename},
10171     sort={\the\glsshorttok},
10172     description={\the\glslongtok},%
10173     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
10174     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
10175     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.

```

10176 \renewcommand*{\GlsXtrPostNewAbbreviation}%
10177   \csdef{glsxtrpostlink\glscategorylabel}%
10178   \glsxtrifwasfirstuse
10179   {%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

10180   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
10181   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
10182   }%
10183   {}%
10184 }%
10185 \glshasattribute{\the\glslabeltok}{regular}%
10186 {}

```

```

10187     \glssetattribute{\the\glslabeltok}{regular}{false}%
10188   }%
10189   {}%
10190 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

10191 \renewcommand*{\glsxtrsetupfulldefs}{%
10192   \let\glsxtrifwasfirstuse\@secondoftwo
10193 }%
10194 }%
10195 {}%
10196 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
10197 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10198 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10199 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
10200 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

10201 \renewcommand*{\glsxtrfullformat}[2]{%
10202   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10203   \ifglsxtrinsertinside\else##2\fi
10204 }%
10205 \renewcommand*{\glsxtrfullplformat}[2]{%
10206   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10207   \ifglsxtrinsertinside\else##2\fi
10208 }%
10209 \renewcommand*{\Glsxtrfullformat}[2]{%
10210   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10211   \ifglsxtrinsertinside\else##2\fi
10212 }%
10213 \renewcommand*{\Glsxtrfullplformat}[2]{%
10214   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10215   \ifglsxtrinsertinside\else##2\fi
10216 }%

```

The first use full form and the inline full form use the short (long) style.

```

10217 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10218   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10219   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10220   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10221 }%
10222 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10223   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10224   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10225   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10226 }%
10227 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10228   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10229   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10230   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%

```

```

10231 }%
10232 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10233   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10234   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10235   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}}%
10236 }%
10237 }

```

`postfootnote-em` Backward compatibility:

```
10238 \@glsxtr@deprecated@abbrstyle{postfootnote-em}{short-em-postfootnote}
```

1.7.6 Predefined Styles (User Parentheses Hook)

These styles allow the user to adjust the parenthetical forms. These styles all test for the existence of the field given by:

`glsxtruserfield` Default is the `useri` field.

```
10239 \newcommand*{\glsxtruserfield}{useri}
```

`glsxtruserparen` The format of the parenthetical information. The first argument is the long/short form. The second argument is the entry's label. If `\glscurrentfieldvalue` has been defined, then we have at least glossaries v4.23, which makes it easier for the user to adjust this.

```

10240 \ifdef\glscurrentfieldvalue
10241 {
10242   \newcommand*{\glsxtruserparen}[2]{%
10243     \glsxtrfullsep{#2}%
10244     \glsxtrparen
10245     {##1\ifglshasfield{\glsxtruserfield}{#2}{, \glscurrentfieldvalue}{}}%
10246   }
10247 }
10248 {
10249   \newcommand*{\glsxtruserparen}[2]{%
10250     \glsxtrfullsep{#2}%
10251     \glsxtrparen
10252     {##1\ifglshasfield{\glsxtruserfield}{#2}{, \@glo@thisvalue}{}}%
10253   }
10254 }

```

Font used for short form:

`lsabrvuserfont`

```
10255 \newcommand*{\glsabrvuserfont}[1]{\glsabrvdefaultfont{#1}}
```

Font used for short form on first use:

`stabrvuserfont`

```
10256 \newcommand*{\glsfirstabrvuserfont}[1]{\glsabrvuserfont{#1}}
```

Font used for long form:

```
glslonguserfont  
10257 \newcommand*{\glslonguserfont}[1]{\glslongdefaultfont{#1}}
```

Font used for long form on first use:

```
rstlonguserfont  
10258 \newcommand*{\glsfirstlonguserfont}[1]{\glslonguserfont{#1}}
```

The default short form suffix:

```
lsxtrusersuffix  
10259 \newcommand*{\glsxtrusersuffix}{\glsxtrabbrvpluralsuffix}
```

Description encapsulator.

```
userdescription The first argument is the description. The second argument is the label.  
10260 \newcommand*{\glsuserdescription}[2]{\glslonguserfont{#1}}
```

long-short-user

```
10261 \newabbreviationstyle{long-short-user}-%  
10262 {%-  
10263 \renewcommand*{\CustomAbbreviationFields}{%-  
10264 name={\glsxtrlongshortname},  
10265 sort={\the\glsshorttok},  
10266 first={\protect\glsfirstlonguserfont{\the\glslongtok}}%  
10267 \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%  
10268 {\the\glslabeltok}},%  
10269 firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}}%  
10270 \protect\glsxtruserparen  
10271 {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%  
10272 plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%  
10273 description={\protect\glsuserdescription{\the\glslongtok}}%  
10274 {\the\glslabeltok}}}}%
```

Unset the regular attribute if it has been set.

```
10275 \renewcommand*{\GlsXtrPostNewAbbreviation}{%-  
10276 \glshasattribute{\the\glslabeltok}{regular}}%  
10277 {%-  
10278 \glssetattribute{\the\glslabeltok}{regular}{false}}%  
10279 }%  
10280 {}%  
10281 }%  
10282 }%  
10283 {%-
```

In case the user wants to mix and match font styles, these are redefined here.

```
10284 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}-%  
10285 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%  
10286 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%  
10287 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%  
10288 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
10289 \renewcommand*{\glsxtrfullformat}[2]{%
10290   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10291   \ifglsxtrinsertinside\else##2\fi
10292   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
10293 }%
10294 \renewcommand*{\glsxtrfullplformat}[2]{%
10295   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10296   \ifglsxtrinsertinside\else##2\fi
10297   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
10298 }%
10299 \renewcommand*{\Glsxtrfullformat}[2]{%
10300   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10301   \ifglsxtrinsertinside\else##2\fi
10302   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
10303 }%
10304 \renewcommand*{\Glsxtrfullplformat}[2]{%
10305   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10306   \ifglsxtrinsertinside\else##2\fi
10307   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
10308 }%
10309 }
```

-postshort-user Like long-short-user but defers the parenthetical matter to after the link.

```
10310 \newabbreviationstyle{long-postshort-user}%
10311 {%
10312   \renewcommand*{\CustomAbbreviationFields}{%
10313     name={\glsxtrlongshortname},
10314     sort={\the\glsshorttok},
10315     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
10316     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
10317     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
10318     description={\protect\glsuserdescription{\the\glslongtok}%
10319       {\the\glslabeltok}}}%
10320   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10321     \csdef{glsxtrpostlink}{\glscategorylabel}{%
10322       \glsxtrifwasfirstuse
10323     }%
10324       \glsxtruserparen
10325         {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}{%
10326           \glslabel}%
10327     }%
10328   }%
10329 }%
10330   \glshasattribute{\the\glslabeltok}{regular}%
10331   {%
10332     \glssetattribute{\the\glslabeltok}{regular}{false}%
10333   }%
```

```

10334     {}%
10335   }%
10336 }%
10337 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

10338 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
10339 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
10340 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
10341 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
10342 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

10343 \renewcommand*{\glsxtrfullformat}[2]{%
10344   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10345   \ifglsxtrinsertinside\else##2\fi
10346 }%
10347 \renewcommand*{\glsxtrfullplformat}[2]{%
10348   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10349   \ifglsxtrinsertinside\else##2\fi
10350 }%
10351 \renewcommand*{\Glsxtrfullformat}[2]{%
10352   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10353   \ifglsxtrinsertinside\else##2\fi
10354 }%
10355 \renewcommand*{\Glsxtrfullplformat}[2]{%
10356   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10357   \ifglsxtrinsertinside\else##2\fi
10358 }%

```

In-line format:

```

10359 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10360   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10361   \ifglsxtrinsertinside\else##2\fi
10362   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
10363 }%
10364 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10365   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10366   \ifglsxtrinsertinside\else##2\fi
10367   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
10368 }%
10369 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10370   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10371   \ifglsxtrinsertinside\else##2\fi
10372   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
10373 }%
10374 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10375   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10376   \ifglsxtrinsertinside\else##2\fi
10377   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%

```

```

10378  }%
10379 }

ortuserdescname
10380 \newcommand*{\glsxtrlongshortuserdescname}{%
10381   \protect\glslonguserfont{\the\glslongtok}%
10382   \protect\glsxtruserparen
10383   {\protect\glsabbrvuserfont{\the\glsshorttok}}{\the\glslabeltok}%
10384 }

```

short-user-desc Like long-postshort-user but the user supplies the description.

```

10385 \newabbreviationstyle{long-postshort-user-desc}%
10386 {%
10387   \renewcommand*{\CustomAbbreviationFields}{%
10388     name={\glsxtrlongshortuserdescname},
10389     sort={\the\glslongtok},
10390     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
10391     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
10392     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
10393     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
10394 }%
10395 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10396   \csdef{glsxtrpostlink}{\glscategorylabel}{%
10397     \glsxtrifwasfirstuse
10398   }%
10399   \glsxtruserparen
10400   {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}%
10401   {\glslabel}%
10402 }%
10403   {}%
10404 }%
10405 \glshasattribute{\the\glslabeltok}{regular}%
10406 {}%
10407   \glssetattribute{\the\glslabeltok}{regular}{false}%
10408 }%
10409   {}%
10410 }%
10411 }%
10412 {}%
10413 \GlsXtrUseAbbrStyleFmts{long-postshort-user}%
10414 }

```

t-postlong-user Like short-long-user but defers the parenthetical matter to after the link.

```

10415 \newabbreviationstyle{short-postlong-user}%
10416 {%
10417   \renewcommand*{\CustomAbbreviationFields}{%
10418     name={\glsxtrshortlongname},
10419     sort={\the\glsshorttok},

```

```

10420   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
10421   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
10422   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
10423   description={\protect\glsuserdescription{\the\glslongtok}%
10424     {\the\glslabeltok}}}}
10425 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10426   \csdef{glsxtrpostlink\glscategorylabel}{%
10427     \glsxtrifwasfirstuse
10428     {%
10429       \glsxtruserparen
10430         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}%
10431         {\glslabel}%
10432     }%
10433     {}%
10434   }%
10435   \glshasattribute{\the\glslabeltok}{regular}%
10436   {%
10437     \glssetattribute{\the\glslabeltok}{regular}{false}%
10438   }%
10439   {}%
10440 }%
10441 }%
10442 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

10443 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
10444 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{\##1}}%
10445 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{\##1}}%
10446 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{\##1}}%
10447 \renewcommand*{\glslongfont}[1]{\glslonguserfont{\##1}}%

```

First use full form:

```

10448 \renewcommand*{\glsxtrfullformat}[2]{%
10449   \glsfirstabbrvuserfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
10450   \ifglsxtrinsertinside\else{\##2}\fi
10451 }%
10452 \renewcommand*{\glsxtrfullplformat}[2]{%
10453   \glsfirstabbrvuserfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside{\##2}\fi}%
10454   \ifglsxtrinsertinside\else{\##2}\fi
10455 }%
10456 \renewcommand*{\GlsXtrfullformat}[2]{%
10457   \glsfirstabbrvuserfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
10458   \ifglsxtrinsertinside\else{\##2}\fi
10459 }%
10460 \renewcommand*{\GlsXtrfullplformat}[2]{%
10461   \glsfirstabbrvuserfont{\Glsaccessshortpl{\##1}\ifglsxtrinsertinside{\##2}\fi}%
10462   \ifglsxtrinsertinside\else{\##2}\fi
10463 }%

```

In-line format:

```

10464 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10465   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10466   \ifglsxtrinsertinside\else##2\fi
10467   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
10468 }%
10469 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10470   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10471   \ifglsxtrinsertinside\else##2\fi
10472   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
10473 }%
10474 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10475   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10476   \ifglsxtrinsertinside\else##2\fi
10477   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
10478 }%
10479 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10480   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10481   \ifglsxtrinsertinside\else##2\fi
10482   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
10483 }%
10484 }

```

onguserdescname

```

10485 \newcommand*{\glsxtrshortlonguserdescname}{%
10486   \protect\glsabbrvuserfont{\the\glsshorttok}%
10487   \protect\glsxtruserparen
10488   {\protect\glslonguserfont{\the\glslongpltok}}%
10489   {\the\glslabeltok}%
10490 }

```

tlong-user-desc Like short-postlong-user but leaves the user to specify the description.

```

10491 \newabbreviationstyle{short-postlong-user-desc}%
10492 {%
10493   \renewcommand*{\CustomAbbreviationFields}{%
10494     name={\glsxtrshortlonguserdescname},
10495     sort={\the\glsshorttok},
10496     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
10497     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
10498     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
10499     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
10500   }%
10501   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10502     \csdef{glsxtrpostlink}{\glscategorylabel}{%
10503       \glsxtrifwasfirstuse
10504       {%
10505         \glsxtruserparen
10506         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}}%
10507         {\glslabel}%

```

```

10508      }%
10509      {}%
10510      }%
10511      \glshasattribute{\the\glslabeltok}{regular}%
10512      {}%
10513      \glssetattribute{\the\glslabeltok}{regular}{false}%
10514      }%
10515      {}%
10516      }%
10517 }%
10518 {}%
10519 \GlsXtrUseAbbrStyleFmts{short-postlong-user}%
10520 }

```

short-user-desc

```

10521 \newabbreviationstyle{long-short-user-desc}%
10522 {}%
10523 \renewcommand*{\CustomAbbreviationFields}{%
10524   name={\glsxtrlongshortuserdescname},%
10525   sort={\glsxtrlongshortdescsort},%
10526   first={\protect\glsfirstlonguserfont{\the\glslongtok}%
10527     \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
10528     {\the\glslabeltok}},%
10529   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}%
10530     \protect\glsxtruserparen%
10531     {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%
10532   text={\protect\glsabbrvfont{\the\glsshorttok}},%
10533   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
10534 }%

```

Unset the regular attribute if it has been set.

```

10535 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10536   \glshasattribute{\the\glslabeltok}{regular}%
10537   {}%
10538   \glssetattribute{\the\glslabeltok}{regular}{false}%
10539   }%
10540   {}%
10541 }%
10542 }%
10543 {}%
10544 \GlsXtrUseAbbrStyleFmts{long-short-user}%
10545 }

```

short-long-user

```

10546 \newabbreviationstyle{short-long-user}%
10547 {}%
\note{\glslonguserfont is used in the description since \glsdesc doesn't set the style. (Now in \glsuserdescription.)}

```

```

10548 \renewcommand*\CustomAbbreviationFields{%
10549   name={\glsxtrshortlongname},
10550   sort={\the\glsshorttok},
10551   description={\protect\glsuserdescription{\the\glslongtok}%
10552     {\the\glslabeltok}},%
10553   first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
10554     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
10555       {\the\glslabeltok}},%
10556   firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
10557     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
10558       {\the\glslabeltok}},%
10559   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%

```

Unset the regular attribute if it has been set.

```

10560 \renewcommand*\GlsXtrPostNewAbbreviation{%
10561   \glshasattribute{\the\glslabeltok}{regular}%
10562   {%
10563     \glssetattribute{\the\glslabeltok}{regular}{false}%
10564   }%
10565   {}%
10566 }%
10567 }%
10568 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

10569 \renewcommand*\abrvpluralsuffix{\glsxtrusersuffix}%
10570 \renewcommand*\glsabbrvfont[1]{\glsabbrvuserfont{##1}}%
10571 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvuserfont{##1}}%
10572 \renewcommand*\glsfirstlongfont[1]{\glsfirstlonguserfont{##1}}%
10573 \renewcommand*\glslongfont[1]{\glslonguserfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10574 \renewcommand*\glsxtrfullformat}[2]{%
10575   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10576   \ifglsxtrinsertinside\else##2\fi
10577   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
10578 }%
10579 \renewcommand*\glsxtrfullplformat}[2]{%
10580   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10581   \ifglsxtrinsertinside\else##2\fi
10582   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
10583 }%
10584 \renewcommand*\Glsxtrfullformat}[2]{%
10585   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10586   \ifglsxtrinsertinside\else##2\fi
10587   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
10588 }%
10589 \renewcommand*\Glsxtrfullplformat}[2]{%
10590   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10591   \ifglsxtrinsertinside\else##2\fi

```

```

10592     \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
10593   }%
10594 }

-long-user-desc
10595 \newabbreviationstyle{short-long-user-desc}%
10596 {%
10597   \renewcommand*{\CustomAbbreviationFields}{%
10598     name={\glsxtrshortlonguserdescname},%
10599     sort={\glsxtrshortlongdescsort},%
10600     first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
10601       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
10602         {\the\glslabeltok}},%
10603     firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
10604       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
10605         {\the\glslabeltok}},%
10606     text={\protect\glsabbrvfont{\the\glsshorttok}},%
10607     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
10608   }%

```

Unset the regular attribute if it has been set.

```

10609   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10610     \glshasattribute{\the\glslabeltok}{regular}%
10611     {}%
10612     \glssetattribute{\the\glslabeltok}{regular}{false}%
10613     {}%
10614     {}%
10615   }%
10616 }%
10617 {%
10618   \GlsXtrUseAbbrStyleFmts{short-long-user}%
10619 }

```

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.

```

10620 \newrobustcmd*{\glsxtrifhyphenstart}[3]{%
10621   \ifx\glsinsert\relax
10622     \expandafter\@glsxtrifhyphenstart#1\relax\relax
10623       \@end@glsxtrifhyphenstart{#2}{#3}%
10624   \else
10625     \@glsxtrifhyphenstart#1\relax\relax\@end@glsxtrifhyphenstart{#2}{#3}%

```

```

10626 \fi
10627 }

trifhyphenstart
10628 \def\@glsxtrifhyphenstart#1#2\end@glsxtrifhyphenstart#3#4{%
10629 \ifx-#1\relax#3\else #4\fi
10630 }

```

rlonghyphenshort

`\glsxtrlonghyphenshort{\label}{\long}{\short}{\insert}`

The `\long` and `\short` arguments may be the plural form. The `\long` argument may also be the first letter uppercase form.

```
10631 \newcommand*\glsxtrlonghyphenshort[4]{%
```

Grouping is needed to localise the redefinitions.

```
10632 {%
```

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.

```

10633 \glsxtrifhyphenstart[#4]{\def\glsxtrwordsep{-}{}{}%}
10634 \glsfirstlonghyphenfont[#2\ifglsxtrinsertinside[#4]\fi}%
10635 \ifglsxtrinsertinside\else[#4]\fi
10636 \glsxtrfullsep{#1}%
10637 \glsxtrparen{\glsfirstabbrvhyphenfont[#3\ifglsxtrinsertinside[#4]\fi}%
10638 \ifglsxtrinsertinside\else[#4]\fi}%
10639 }%
10640 }

```

abbrvhypenfont

```
10641 \newcommand*\glsabbrvhypenfont{\glsabbrvdefaultfont}%
```

abbrvhypenfont

```
10642 \newcommand*\glsfirstabbrvhyphenfont{\glsabbrvhypenfont}%
```

slonghypenfont

```
10643 \newcommand*\glslonghypenfont{\glslongdefaultfont}%
```

tlonghypenfont

```
10644 \newcommand*\glsfirstlonghypenfont{\glslonghypenfont}%
```

The default short form suffix:

xtrhyphensuffix

```
10645 \newcommand*\glsxtrhyphensuffix{\glsxtrabbrvpluralsuffix}
```

en-short-hyphen Designed for use with the markwords attribute.

```
10646 \newabbreviationstyle{long-hyphen-short-hyphen}%
10647 {%
10648   \renewcommand*{\CustomAbbreviationFields}{%
10649     name={\glsxtrlongshortname},
10650     sort={\the\glsshorttok},
10651     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}%
10652       \protect\glsxtrfullsep{\the\glslabeltok}%
10653       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
10654     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}%
10655       \protect\glsxtrfullsep{\the\glslabeltok}%
10656       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}}},%
10657     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10658     description={\protect\glslonghyphenfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
10659   \renewcommand*{\GlsXtrPostNewAbbreviation}%
10660     \glshasattribute{\the\glslabeltok}{regular}%
10661   {%
10662     \glssetattribute{\the\glslabeltok}{regular}{false}%
10663   }%
10664   {}%
10665 }%
10666 }%
10667 {%
10668   \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
10669   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10670   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10671   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
10672   \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
10673   \renewcommand*{\glsxtrfullformat}[2]{%
10674     \glsxtrlonghyphenshort{##1}{\glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
10675   }%
10676   \renewcommand*{\glsxtrfullplformat}[2]{%
10677     \glsxtrlonghyphenshort{##1}{\glsaccesslongpl{##1}}%
10678     {\glsaccessshortpl{##1}}{##2}%
10679   }%
10680   \renewcommand*{\GlsXtrfullformat}[2]{%
10681     \glsxtrlonghyphenshort{##1}{\Glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
10682   }%
10683   \renewcommand*{\GlsXtrfullplformat}[2]{%
10684     \glsxtrlonghyphenshort{##1}{\Glsaccesslongpl{##1}}%
10685     {\glsaccessshortpl{##1}}{##2}%
10686   }%
10687 }
```

ort-hyphen-desc Like long-hyphen-short-hyphen but the description must be supplied by the user.

```
10688 \newabbreviationstyle{long-hyphen-short-hyphen-desc}%
```

```

10689 {%
10690   \renewcommand*{\CustomAbbreviationFields}{%
10691     name={\glsxtrlongshortdescname},
10692     sort={\glsxtrlongshortdescsort},
10693     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}%
10694       \protect\glsxtrfullsep{\the\glslabeltok}%
10695       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
10696     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}%
10697       \protect\glsxtrfullsep{\the\glslabeltok}%
10698       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}}},%
10699     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10700     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10701   }%

```

Unset the regular attribute if it has been set.

```

10702   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10703     \glshasattribute{\the\glslabeltok}{regular}%
10704     {%
10705       \glssetattribute{\the\glslabeltok}{regular}{false}%
10706     }%
10707     {}%
10708   }%
10709 }%
10710 {%
10711   \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%
10712 }

```

`\glsxtrlonghyphennoshort{\<label>}{\<long>}{\<insert>}`

```
10713 \newcommand*{\glsxtrlonghyphennoshort}[3]{%
```

Grouping is needed to localise the redefinitions.

```
10714 {%
If <insert> starts with a hyphen, redefine \glsxtrwordsep to a hyphen. The inserted material
is also inserted into the parenthetical part. (The inserted material is grouped as a precaution-
ary measure.) No change is made to \glsxtrwordsep if <insert> doesn't start with a hyphen.
```

```

10715   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
10716   \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#3}\fi}%
10717   \ifglsxtrinsertinside\else{#3}\fi
10718 }%
10719 }
```

`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.

```

10720 \newabbreviationstyle{long-hyphen-noshort-desc-noreg}%
10721 {%
10722   \renewcommand*{\CustomAbbreviationFields}{%
10723     name={\glsxtrlongnoshortdescname},
10724     sort={\expandonce\glsxtrorglong},
10725     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10726     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10727     plural={\protect\glslonghyphenfont{\the\glslongpltok}}%
10728   }%

```

Unset the regular attribute if it has been set.

```

10729   \renewcommand*{\GlsXtrPostNewAbbreviation}%
10730     \glshasattribute{\the\glslabeltok}{regular}%
10731   {%
10732     \glssetattribute{\the\glslabeltok}{regular}{false}%
10733   }%
10734   {}%
10735 }%
10736 }%
10737 {%
10738   \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%

```

In case the user wants to mix and match font styles, these are redefined here.

```

10739   \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
10740   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
10741   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
10742   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
10743   \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10744   \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10745     \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
10746   }%
10747   \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
10748     \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
10749   }%
10750   \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10751     \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10752   }%
10753   \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10754     \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10755   }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

10756   \renewcommand*{\glsxtrinlinefullformat}[2]{%
10757     \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
10758     \glsxtrfullsep{##1}%
10759     \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
10760   }%
10761   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10762     \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%

```

```

10763     \glsxtrfullsep{##1}%
10764     \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
10765 }%
10766 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10767     \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10768     \glsxtrfullsep{##1}%
10769     \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
10770 }%
10771 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10772     \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10773     \glsxtrfullsep{##1}%
10774     \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
10775 }%

```

The first use full form only displays the long form.

```

10776 \renewcommand*{\glsxtrfullformat}[2]{%
10777     \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
10778 }%
10779 \renewcommand*{\glsxtrfullplformat}[2]{%
10780     \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
10781 }%
10782 \renewcommand*{\Glsxtrfullformat}[2]{%
10783     \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10784 }%
10785 \renewcommand*{\Glsxtrfullplformat}[2]{%
10786     \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10787 }%
10788 }%

```

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.

```

10789 \newabbreviationstyle{long-hyphen-noshort-noreg}%
10790 {%
10791 \renewcommand*{\CustomAbbreviationFields}{%
10792     name={\glsxtrlongnoshortname},
10793     sort={\the\glsshorttok},
10794     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10795     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10796     text={\protect\glslonghyphenfont{\the\glslongtok}},%
10797     plural={\protect\glslonghyphenfont{\the\glslongpltok}},%
10798     description={\the\glslongtok}%
10799 }%

```

Unset the regular attribute if it has been set.

```

10800 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10801     \glshasattribute{\the\glslabeltok}{regular}%
10802     {%
10803         \glssetattribute{\the\glslabeltok}{regular}{false}%
10804     }%

```

```

10805      {}%
10806  }%
10807 }%
10808 {%
10809  \GlsXtrUseAbbrStyleFmts{long-desc}%
10810 }

```

`\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.

```
10811 \newcommand*\glsxtrlonghyphen}[3]{%
```

Grouping is needed to localise the redefinitions.

```

10812  {%
10813  \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
10814  \glsfirstlonghyphenfont{#1}%
10815 }%
10816 }

```

`\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.

```

10817 \newcommand*\glsxtrposthyphenshort}[2]{%
10818  {%
10819  \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
10820  \ifglsxtrinsertinside{\glsfirstlonghyphenfont{#2}}\else{#2}\fi
10821  \glsxtrfullsep{#1}%
10822  \glsxtrparens
10823  {\glsfirstabbrvhyphenfont{\glsentryshort{#1}\ifglsxtrinsertinside{#2}\fi}%
10824  \ifglsxtrinsertinside\else{#2}\fi
10825 }%
10826 }%
10827 }

```

`\glsxtrposthyphensubsequent{\<label>}{\<insert>}`

Format in the post-link hook for subsequent use. The label is ignored by default.

```
10828 \newcommand*\glsxtrposthyphensubsequent}[2]{%
10829  \glsabbrvfont{\ifglsxtrinsertinside {#2}\fi}%

```

```
10830 \ifglsxtrinsertinside \else{#2}\fi  
10831 }
```

`postshort-hyphen` Like `long-hyphen-short-hyphen` but shifts the insert and parenthetical material to the post-link hook.

```
10832 \newabbreviationstyle{long-hyphen-postshort-hyphen}{%  
10833 {  
10834 \renewcommand*{\CustomAbbreviationFields}{%  
10835   name={\glsxtrlongshortname},  
10836   sort={\the\glsshorttok},  
10837   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%  
10838   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%  
10839   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%  
10840   description={\protect\glslonghyphenfont{\the\glslongtok}}}%  
10841 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  
10842   \csdef{glsxtrpostlink\glscategorylabel}{%  
10843     \glsxtrifwasfirstuse  
10844     {  
10845       \glsxtrposthyphenshort{\glslabel}{\glsinsert}}%  
10846     }%  
10847   }%
```

Put the insertion into the post-link:

```
10848   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}}%  
10849   }%  
10850 }%  
10851 \glshasattribute{\the\glslabeltok}{regular}}%  
10852 {  
10853   \glssetattribute{\the\glslabeltok}{regular}{false}}%  
10854 }%  
10855 {}%  
10856 }%  
10857 }%  
10858 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
10859 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}}%  
10860 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%  
10861 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%  
10862 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%  
10863 \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%
```

Subsequent use needs to omit the insertion:

```
10864 \renewcommand*{\glsxtrsubsequentfmt}[2]{%  
10865   \glsabbrvfont{\glsaccessshort{##1}}}%  
10866 }%  
10867 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%  
10868   \glsabbrvfont{\glsaccessshortpl{##1}}}%  
10869 }%  
10870 \renewcommand*{\GlsXtrsubsequentfmt}[2]{%
```

```

10871   \glsabbrvfont{\Glsaccessshort{##1}}%
10872 }%
10873 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10874   \glsabbrvfont{\Glsaccessshortpl{##1}}%
10875 }%

```

First use full form:

```

10876 \renewcommand*{\glsxtrfullformat}[2]{%
10877   \glsxtrlonghyphen{\glsaccesslong{##1}{##1}{##2}}%
10878 }%
10879 \renewcommand*{\glsxtrfullplformat}[2]{%
10880   \glsxtrlonghyphen{\glsaccesslongpl{##1}{##1}{##2}}%
10881 }%
10882 \renewcommand*{\Glsxtrfullformat}[2]{%
10883   \glsxtrlonghyphen{\Glsaccesslong{##1}{##1}{##2}}%
10884 }%
10885 \renewcommand*{\Glsxtrfullplformat}[2]{%
10886   \glsxtrlonghyphen{\Glsaccesslongpl{##1}{##1}{##2}}%
10887 }%

```

In-line format.

```

10888 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10889   \glsfirstlonghyphenfont{\glsaccesslong{##1}}%
10890   \ifglsxtrinsertinside{##2}\fi}%
10891   \ifglsxtrinsertinside \else{##2}\fi
10892 }%
10893 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10894   \glsfirstlonghyphenfont{\glsaccesslongpl{##1}}%
10895   \ifglsxtrinsertinside{##2}\fi}%
10896   \ifglsxtrinsertinside \else{##2}\fi
10897 }%
10898 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10899   \glsfirstlonghyphenfont{\Glsaccesslong{##1}}%
10900   \ifglsxtrinsertinside{##2}\fi}%
10901   \ifglsxtrinsertinside \else{##2}\fi
10902 }%
10903 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10904   \glsfirstlonghyphenfont{\Glsaccesslongpl{##1}}%
10905   \ifglsxtrinsertinside{##2}\fi}%
10906   \ifglsxtrinsertinside \else{##2}\fi
10907 }%
10908 }

```

ort-hyphen-desc Like long-hyphen-postshort-hyphen but the description must be supplied by the user.

```

10909 \newabbreviationstyle{long-hyphen-postshort-hyphen-desc}{%
10910 }%
10911 \renewcommand*{\CustomAbbreviationFields}{%
10912   name={\glsxtrlongshortdescname},%
10913   sort={\glsxtrlongshortdescsort},%
10914   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%

```

```

10915     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10916     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10917     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}}%
10918 }%
10919 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10920   \csdef{glsxtrpostlink}{\glscategorylabel}{%
10921     \glsxtrifwasfirstuse
10922     {%
10923       \glsxtrposthyphenshort{\glslabel}{\glsinsert}}%
10924     }%
10925   }%

```

Put the insertion into the post-link:

```

10926   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}}%
10927 }%
10928 }%
10929 \glshasattribute{\the\glslabeltok}{regular}}%
10930 {%
10931   \glssetattribute{\the\glslabeltok}{regular}{false}}%
10932 }%
10933 {}%
10934 }%
10935 }%
10936 {%
10937 \GlsXtrUseAbbrStyleFmts{long-hyphen-postshort-hyphen}}%
10938 }

```

rshorthypenlong \glsxtrshorthypenlong{\label}{\short}{\long}{\insert}

The *long* and *short* arguments may be the plural form. The *long* argument may also be the first letter uppercase form.

```
10939 \newcommand*\glsxtrshorthypenlong[4]{%
```

Grouping is needed to localise the redefinitions.

```
10940 {%
```

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.)

```

10941 \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
10942 \glsfirstabbrvhypenfont{#2\ifglsxtrinsertinside{#4}\fi}%
10943 \ifglsxtrinsertinside\else{#4}\fi
10944 \glsxtrfullsep{#1}%
10945 \glsxtrparen{\glsfirstlonghyphenfont{#3\ifglsxtrinsertinside{#4}\fi}%
10946 \ifglsxtrinsertinside\else{#4}\fi}%
10947 }%
10948 }

```

hen-long-hyphen Designed for use with the markwords attribute.

```
10949 \newabbreviationstyle{short-hyphen-long-hyphen}%
10950 {%
10951   \renewcommand*{\CustomAbbreviationFields}{%
10952     name={\glsxtrshortlongname},
10953     sort={\the\glsshorttok},
10954     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
10955       \protect\glsxtrfullsep{\the\glslabeltok}%
10956       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
10957     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
10958       \protect\glsxtrfullsep{\the\glslabeltok}%
10959       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
10960     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10961     description={\protect\glslonghypenfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
10962 \renewcommand*{\GlsXtrPostNewAbbreviation}%
10963   \glshasattribute{\the\glslabeltok}{regular}%
10964 {%
10965   \glssetattribute{\the\glslabeltok}{regular}{false}%
10966 }%
10967 {}%
10968 }%
10969 }%
10970 {%
10971   \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
10972   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10973   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10974   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10975   \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
10976 \renewcommand*{\glsxtrfullformat}[2]{%
10977   \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\glsaccesslong{##1}}{##2}%
10978 }%
10979 \renewcommand*{\glsxtrfullplformat}[2]{%
10980   \glsxtrshorthypenlong{##1}%
10981   {\glsaccessshortpl{##1}}{\glsaccesslongpl{##1}}{##2}%
10982 }%
10983 \renewcommand*{\GlsXtrfullformat}[2]{%
10984   \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\Glsaccesslong{##1}}{##2}%
10985 }%
10986 \renewcommand*{\GlsXtrfullplformat}[2]{%
10987   \glsxtrshorthypenlong{##1}%
10988   {\glsaccessshortpl{##1}}{\Glsaccesslongpl{##1}}{##2}%
10989 }%
10990 }
```

ong-hyphen-desc Like short-hyphen-long-hyphen but the description must be supplied by the user.

```
10991 \newabbreviationstyle{short-hyphen-long-hyphen-desc}%
```

```

10992 {%
10993   \renewcommand*{\CustomAbbreviationFields}{%
10994     name={\glsxtrshortlongdescname},
10995     sort={\glsxtrshortlongdescsort},
10996     first={\protect\glsfirstabbrvhyphenfont{\the\glsshorttok}%
10997       \protect\glsxtrfullsep{\the\glslabeltok}%
10998       \glsxtrparen{\protect\glsfirstlonghyphenfont{\the\glslongtok}}},%
10999     firstplural={\protect\glsfirstabbrvhyphenfont{\the\glsshortpltok}%
11000       \protect\glsxtrfullsep{\the\glslabeltok}%
11001       \glsxtrparen{\protect\glsfirstlonghyphenfont{\the\glslongpltok}}},%
11002     text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
11003     plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}}%
11004   }%

```

Unset the regular attribute if it has been set.

```

11005   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11006     \glshasattribute{\the\glslabeltok}{regular}%
11007     {%
11008       \glssetattribute{\the\glslabeltok}{regular}{false}%
11009     }%
11010     {}%
11011   }%
11012 }%
11013 {%
11014   \GlsXtrUseAbbrStyleFmts{short-hyphen-long-hyphen}%
11015 }

```

`\glsxtrshorthyphen{<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.

```
11016 \newcommand*{\glsxtrshorthyphen}[3]{%
```

Grouping is needed to localise the redefinitions.

```

11017 {%
11018   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
11019   \glsfirstabbrvhyphenfont{#1}%
11020 }%
11021 }

```

`\glsxtrposthyphenlong{{<label>}}{<insert>}`

Used in the post-link hook for the short-hyphen-postlong-hyphen style. Much like `\glsxtrshorthyphenlong` but omits the `<short>` part. This always uses the singular long form.

```

11022 \newcommand*{\glsxtrposthyphenlong}[2]{%
11023  {%
11024   \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}{%
11025     \ifglsxtrinsertinside{\glsfirstabbrvhypenfont{#2}}\else{#2}\fi
11026     \glsxtrfullsep{#1}%
11027     \glsxtrparens{%
11028       {\glsfirstlonghypenfont{\glsentrylong{#1}}\ifglsxtrinsertinside{#2}\fi}%
11029       \ifglsxtrinsertinside\else{#2}\fi
11030     }%
11031   }%
11032 }

```

`postlong-hyphen` Like short-hyphen-long-hyphen but shifts the insert and parenthetical material to the post-link hook.

```

11033 \newabbreviationstyle{short-hyphen-postlong-hyphen}{%
11034 {%
11035   \renewcommand*{\CustomAbbreviationFields}{%
11036     name={\glsxtrshortlongname},
11037     sort={\the\glsshorttok},
11038     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
11039     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
11040     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
11041     description={\protect\glslonghypenfont{\the\glslongtok}}}%
11042   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11043     \csdef{glsxtrpostlink\glscategorylabel}{%
11044       \glsxtrifwasfirstuse
11045       {%
11046         \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
11047       }%
11048     }%

```

Put the insertion into the post-link:

```

11049     \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11050   }%
11051 }%
11052 \glshasattribute{\the\glslabeltok}{regular}%
11053 {%
11054   \glssetattribute{\the\glslabeltok}{regular}{false}%
11055 }%
11056 {%
11057 }%
11058 }%
11059 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11060 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
11061 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
11062 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
11063 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
11064 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

Subsequent use needs to omit the insertion:

```
11065 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
11066   \glsabbrvfont{\glsaccessshort{##1}}%
11067 }%
11068 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
11069   \glsabbrvfont{\glsaccessshortpl{##1}}%
11070 }%
11071 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
11072   \glsabbrvfont{\Glsaccessshort{##1}}%
11073 }%
11074 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
11075   \glsabbrvfont{\Glsaccessshortpl{##1}}%
11076 }%
```

First use full form:

```
11077 \renewcommand*{\glsxtrfullformat}[2]{%
11078   \glsxtrshorthyphen{\glsaccessshort{##1}}{##1}{##2}%
11079 }%
11080 \renewcommand*{\glsxtrfullplformat}[2]{%
11081   \glsxtrshorthyphen{\glsaccessshortpl{##1}}{##1}{##2}%
11082 }%
11083 \renewcommand*{\Glsxtrfullformat}[2]{%
11084   \glsxtrshorthyphen{\Glsaccessshort{##1}}{##1}{##2}%
11085 }%
11086 \renewcommand*{\Glsxtrfullplformat}[2]{%
11087   \glsxtrshorthyphen{\Glsaccessshortpl{##1}}{##1}{##2}%
11088 }%
```

In-line format. Commands like `\glsxtrfull` set `\glsinsert` to empty. The entire link-text (provided by the following commands) is stored in `\glscustomtext`.

```
11089 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11090   \glsfirstabbrvhypenfont{\glsaccessshort{##1}}%
11091   \ifglsxtrinsertinside{##2}\fi}%
11092   \ifglsxtrinsertinside \else{##2}\fi
11093 }%
11094 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11095   \glsfirstabbrvhypenfont{\glsaccessshortpl{##1}}%
11096   \ifglsxtrinsertinside{##2}\fi}%
11097   \ifglsxtrinsertinside \else{##2}\fi
11098 }%
11099 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11100   \glsfirstabbrvhypenfont{\Glsaccessshort{##1}}%
11101   \ifglsxtrinsertinside{##2}\fi}%
11102   \ifglsxtrinsertinside \else{##2}\fi
11103 }%
11104 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11105   \glsfirstabbrvhypenfont{\Glsaccessshortpl{##1}}%
11106   \ifglsxtrinsertinside{##2}\fi}%
11107   \ifglsxtrinsertinside \else{##2}\fi
11108 }%
```

```
11109 }
```

ong-hyphen-desc Like short-hyphen-postlong-hyphen but the description must be supplied by the user.

```
11110 \newabbreviationstyle{short-hyphen-postlong-hyphen-desc}%
11111 {%
11112   \renewcommand*{\CustomAbbreviationFields}{%
11113     name={\glsxtrshortlongdescname},
11114     sort={\glsxtrshortlongdescsort},%
11115     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
11116     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
11117     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11118     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
11119 }%
11120 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11121   \csdef{glsxtrpostlink}{\glscategorylabel}%
11122     \glsxtrifwasfirstuse
11123   {%
11124     \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
11125   }%
11126 }
```

Put the insertion into the post-link:

```
11127   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11128 }%
11129 }%
11130 \glshasattribute{\the\glslabeltok}{regular}%
11131 {%
11132   \glssetattribute{\the\glslabeltok}{regular}{false}%
11133 }%
11134 {}%
11135 }%
11136 }%
11137 {%
11138 \GlsXtrUseAbbrStyleFmts{short-hyphen-postlong-hyphen}%
11139 }
```

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

```
11140 \newcommand*{\glsabbrvonlyfont}{\glsabbrvdefaultfont}%
```

stabbrvonlyfont

```
11141 \newcommand*{\glsfirstabbrvonlyfont}{\glsabbrvonlyfont}%
```

glslongonlyfont

```
11142 \newcommand*{\glslongonlyfont}{\glslongdefaultfont}%
```

```
rstlongonlyfont
11143 \newcommand*{\glsfirstlongonlyfont}{\glslongonlyfont}%
```

The default short form suffix:

```
lsxtronlysuffix
11144 \newcommand*{\glsxtronlysuffix}{\glsxtrabbrvpluralsuffix}
```

\glsxtronlyname The default name format for this style.

```
11145 \newcommand*{\glsxtronlyname}%
11146   \protect\glsabbrvonlyfont{\the\glsshorttok}%
11147 }
```

only-short-only

```
11148 \newabbreviationstyle{long-only-short-only}%
11149 {%
11150   \renewcommand*{\CustomAbbreviationFields}%
11151     name={\glsxtronlyname},
11152     sort={\the\glsshorttok},
11153     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
11154     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
11155     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}},%
11156     description={\protect\glslongonlyfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
11157   \renewcommand*{\GlsXtrPostNewAbbreviation}%
11158     \glshasattribute{\the\glslabeltok}{regular}%
11159   {%
11160     \glssetattribute{\the\glslabeltok}{regular}{false}%
11161   }%
11162   {}%
11163 }%
11164 }%
11165 {%
11166   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtronlysuffix}%
11167   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvonlyfont{\##1}}%
11168   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvonlyfont{\##1}}%
11169   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongonlyfont{\##1}}%
11170   \renewcommand*{\glslongfont}[1]{\glslongonlyfont{\##1}}%
```

The first use full form doesn't show the short form.

```
11171   \renewcommand*{\glsxtrfullformat}[2]%
11172     \glsfirstlongonlyfont{\glsaccesslong{\##1}\ifglsxtrinsertinside##2\fi}%
11173     \ifglsxtrinsertinside\else##2\fi
11174 }%
11175   \renewcommand*{\glsxtrfullplformat}[2]%
11176     \glsfirstlongonlyfont{\glsaccesslongpl{\##1}\ifglsxtrinsertinside##2\fi}%
11177     \ifglsxtrinsertinside\else##2\fi
11178 }%
11179   \renewcommand*{\Glsxtrfullformat}[2]%
```

```

11180     \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11181     \ifglsxtrinsertinside\else##2\fi
11182   }%
11183   \renewcommand*{\Glsxtrfullplformat}[2]{%
11184     \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11185     \ifglsxtrinsertinside\else##2\fi
11186   }%

```

The inline full form does show the short form.

```

11187   \renewcommand*{\glsxtrinlinefullformat}[2]{%
11188     \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11189     \ifglsxtrinsertinside\else##2\fi
11190     \glsxtrfullsep{##1}%
11191     \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshort{##1}}}%
11192   }%
11193   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11194     \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11195     \ifglsxtrinsertinside\else##2\fi
11196     \glsxtrfullsep{##1}%
11197     \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
11198   }%
11199   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11200     \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11201     \ifglsxtrinsertinside\else##2\fi
11202     \glsxtrfullsep{##1}%
11203     \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
11204   }%
11205   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11206     \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11207     \ifglsxtrinsertinside\else##2\fi
11208     \glsxtrfullsep{##1}%
11209     \glsxtrparen{\protect\glsfirstabbrvonlyfont{\Glsaccessshortpl{##1}}}%
11210   }%
11211 }

```

xtronlydescsort

```
11212 \newcommand*{\glsxtronlydescsort}{\the\glslongtok}
```

xtronlydescname

```
11213 \newcommand*{\glsxtronlydescname}{%
11214   \protect\glslongfont{\the\glslongtok}%
11215 }
```

short-only-desc

```
11216 \newabbreviationstyle{long-only-short-only-desc}%
11217 {%
11218   \renewcommand*{\CustomAbbreviationFields}{%
11219     name={\glsxtronlydescname},
11220     sort={\glsxtronlydescsort},%
```

```

11221     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
11222     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
11223     text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
11224     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}}%
11225 }%

```

Unset the regular attribute if it has been set.

```

11226 \renewcommand*\GlsXtrPostNewAbbreviation{%
11227   \glshasattribute{\the\glslabeltok}{regular}%
11228   {%
11229     \glssetattribute{\the\glslabeltok}{regular}{false}%
11230   }%
11231   {}%
11232 }%
11233 }%
11234 {%
11235 \GlsXtrUseAbbrStyleFmts{long-only-short-only}%
11236 }%

```

1.8 Using Entries in Headings

There are four main problems with using entries in sectioning commands: they can mess with the first use flag if they end up in the table of contents, they can add unwanted numbers to the entry's location list, the label is corrupted if used inside `\MakeUppercase` (which is used by the default headings style) and they need to be expandable for PDF bookmarks. The glossaries package therefore recommends the use of the expandable commands, such as `\glsentryshort`, instead but this doesn't reflect the formatting since it doesn't include `\glsabbrvfont`. The commands below are an attempt to get around these problems.

The PDF bookmark issue can easily be fixed with `\texorpdfstring` which can simply use the expandable command in the PDF string case. The `TEX` string case can now use `\glsxtrshort` with the `noindex` key set, which prevents the unwanted additions to the location list, and the `hyper` key set to `false`, which prevents the problem of nested links. This just leaves one thing left that needs to be dealt with, and that's what to do if the heading style uses `\MakeUppercase`.

Note that glossaries automatically loads `textcase`, so the label can be protected from case change with `textcase`'s `\NoCaseChange`. This means that we don't have a problem provided the page style uses `\MakeTextUppercase`, but the default heading page style uses `\MakeUppercase`.

To get around this, save the original definition of `\markboth` and `\markright` and adjust it so that `\MakeUppercase` is temporarily redefined to `\MakeTextUppercase`. Some packages or classes redefine these commands, so we can't just assume they still have the original kernel definition.

`\markright` Save original definition:

```
11237 \let\@glsxtr@org@markright\markright
```

Redefine (grouping not added in case it interferes with the original code):

```
11238 \renewcommand*{\markright}[1]{%
11239   \glsxtrmarkhook
11240   @glsxtr@org@markright{\glsxtrinmark#1\glsxtrnotinmark}%
11241   \glsxtrrestoremarkhook
11242 }
```

\markboth Save original definition:

```
11243 \let@glsxtr@org@markboth\markboth
```

Redefine (grouping not added in case it interferes with the original code):

```
11244 \renewcommand*{\markboth}[2]{%
11245   \glsxtrmarkhook
11246   @glsxtr@org@markboth
11247   {\glsxtrinmark#1\glsxtrnotinmark}%
11248   {\glsxtrinmark#2\glsxtrnotinmark}%
11249   \glsxtrrestoremarkhook
11250 }
```

Also do this for \@starttoc

\@starttoc Save original definition:

```
11251 \let@glsxtr@org@starttoc\@starttoc
```

Redefine:

```
11252 \renewcommand*{\@starttoc}[1]{%
11253   \glsxtrmarkhook
11254   @glsxtrinmark
11255   @glsxtr@org@starttoc{#1}%
11256   @glsxtrnotinmark
11257   \glsxtrrestoremarkhook
11258 }
```

If this causes a problem provide a simple way of switching back to the original definitions:

sxtrRevertMarks

```
11259 \newcommand*{\glsxtrRevertMarks}{%
11260   \let\markright\glsxtr@org@markright
11261   \let\markboth\glsxtr@org@markboth
11262   \let@starttoc\glsxtr@org@starttoc
11263 }
```

rRevertTocMarks Just restores \@starttoc.

```
11264 \newcommand*{\glsxtrRevertTocMarks}{%
11265   \let@starttoc\glsxtr@org@starttoc
11266 }
```

\glsxtrifinmark

```
11267 \newcommand*{\glsxtrifinmark}[2]{#2}
```

```

@glsxtrinmark
11268 \newrobustcmd*{\glsxtrinmark}{%
11269   \let\glsxtrifinmark\@firstoftwo
11270 }

glsxtrnotinmark
11271 \newrobustcmd*{\glsxtrnotinmark}{%
11272   \let\glsxtrifinmark\@secondoftwo
11273 }

eorpdfforheading
11274 \ifdef\texorpdfstring
11275 {
11276   \newcommand*{\glsxtrtitleorpdfforheading}[3]{\texorpdfstring{#1}{#2}}
11277 }
11278 {
11279   \newcommand*{\glsxtrtitleorpdfforheading}[3]{#1}
11280 }

```

\glsxtrmarkhook Hook used in new definition of \markboth and \markright to make some changes to apply to the marks:

```

11281 \newcommand*{\glsxtrmarkhook}{%
  Save current definitions:
11282   \let\@glsxtr@org@MakeUppercase\MakeUppercase
11283   \let\@glsxtr@org@glsxtrtitleorpdfforheading\glsxtrtitleorpdfforheading
11284   \let\@glsxtr@org@glsxtrtitleshort\glsxtrtitleshort
11285   \let\@glsxtr@org@glsxtrtitleshortpl\glsxtrtitleshortpl
11286   \let\@glsxtr@org@glsxtrtitleshort\Glsxtrtitleshort
11287   \let\@glsxtr@org@glsxtrtitleshortpl\Glsxtrtitleshortpl
11288   \let\@glsxtr@org@glsxtrtitlename\glsxtrtitlename
11289   \let\@glsxtr@org@Glsxtrtitlename\Glsxtrtitlename
11290   \let\@glsxtr@org@glsxtrtitletext\glsxtrtitletext
11291   \let\@glsxtr@org@Glsxtrtitletext\Glsxtrtitletext
11292   \let\@glsxtr@org@glsxtrtitleplural\glsxtrtitleplural
11293   \let\@glsxtr@org@Glsxtrtitleplural\Glsxtrtitleplural
11294   \let\@glsxtr@org@glsxtrtitlefirst\glsxtrtitlefirst
11295   \let\@glsxtr@org@Glsxtrtitlefirst\Glsxtrtitlefirst
11296   \let\@glsxtr@org@glsxtrtitlefirstplural\glsxtrtitlefirstplural
11297   \let\@glsxtr@org@Glsxtrtitlefirstplural\Glsxtrtitlefirstplural
11298   \let\@glsxtr@org@glsxtrtitlelong\glsxtrtitlelong
11299   \let\@glsxtr@org@glsxtrtitlelongpl\glsxtrtitlelongpl
11300   \let\@glsxtr@org@Glsxtrtitlelong\Glsxtrtitlelong
11301   \let\@glsxtr@org@Glsxtrtitlelongpl\Glsxtrtitlelongpl
11302   \let\@glsxtr@org@glsxtrtitlefull\glsxtrtitlefull
11303   \let\@glsxtr@org@glsxtrtitlefullpl\glsxtrtitlefullpl
11304   \let\@glsxtr@org@Glsxtrtitlefull\Glsxtrtitlefull
11305   \let\@glsxtr@org@Glsxtrtitlefullpl\Glsxtrtitlefullpl

```

New definitions

```

11306 \let\glsxtrifinmark\@firstoftwo
11307 \let\MakeUppercase\MakeTextUppercase
11308 \let\glsxtrtitleorpdforheading\@thirdofthree
11309 \let\glsxtrtitleshort\glsxtrheadshort
11310 \let\glsxtrtitleshortpl\glsxtrheadshortpl
11311 \let\Glsxtrtitleshort\Glsxtrheadshort
11312 \let\Glsxtrtitleshortpl\Glsxtrheadshortpl
11313 \let\glsxtrtitlename\glsxtrheadname
11314 \let\Glsxtrtitlename\Glsxtrheadname
11315 \let\glsxtrtitletext\glsxtrheadtext
11316 \let\Glsxtrtitletext\Glsxtrheadtext
11317 \let\glsxtrtitleplural\glsxtrheadplural
11318 \let\Glsxtrtitleplural\Glsxtrheadplural
11319 \let\glsxtrtitlefirst\glsxtrheadfirst
11320 \let\Glsxtrtitlefirst\Glsxtrheadfirst
11321 \let\glsxtrtitlefirstplural\glsxtrheadfirstplural
11322 \let\Glsxtrtitlefirstplural\Glsxtrheadfirstplural
11323 \let\glsxtrtitlelong\glsxtrheadlong
11324 \let\glsxtrtitlelongpl\glsxtrheadlongpl
11325 \let\Glsxtrtitlelong\Glsxtrheadlong
11326 \let\Glsxtrtitlelongpl\Glsxtrheadlongpl
11327 \let\glsxtrtitlefull\glsxtrheadfull
11328 \let\glsxtrtitlefullpl\glsxtrheadfullpl
11329 \let\Glsxtrtitlefull\Glsxtrheadfull
11330 \let\Glsxtrtitlefullpl\Glsxtrheadfullpl
11331 }

```

`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.)

```

11332 \newcommand*{\glsxtrrestoremarkhook}{%
11333 \let\glsxtrifinmark\@secondoftwo
11334 \let\MakeUppercase\@glsxtr@org@MakeUppercase
11335 \let\glsxtrtitleorpdforheading\@glsxtr@org@glsxtrtitleorpdforheading
11336 \let\glsxtrtitleshort\@glsxtr@org@glsxtrtitleshort
11337 \let\glsxtrtitleshortpl\@glsxtr@org@glsxtrtitleshortpl
11338 \let\Glsxtrtitleshort\@glsxtr@org@Glsxtrtitleshort
11339 \let\Glsxtrtitleshortpl\@glsxtr@org@Glsxtrtitleshortpl
11340 \let\glsxtrtitlename\@glsxtr@org@glsxtrtitlename
11341 \let\Glsxtrtitlename\@glsxtr@org@Glsxtrtitlename
11342 \let\glsxtrtitletext\@glsxtr@org@glsxtrtitletext
11343 \let\Glsxtrtitletext\@glsxtr@org@Glsxtrtitletext
11344 \let\glsxtrtitleplural\@glsxtr@org@glsxtrtitleplural
11345 \let\Glsxtrtitleplural\@glsxtr@org@Glsxtrtitleplural
11346 \let\glsxtrtitlefirst\@glsxtr@org@glsxtrtitlefirst
11347 \let\Glsxtrtitlefirst\@glsxtr@org@Glsxtrtitlefirst
11348 \let\glsxtrtitlefirstplural\@glsxtr@org@glsxtrtitlefirstplural

```

```

11349 \let\Glsxtrtitlefirstplural\@glsxtr@org@Glsxtrtitlefirstplural
11350 \let\glsxtrtitlelong\@glsxtr@org@glsxtrtitlelong
11351 \let\glsxtrtitlelongpl\@glsxtr@org@glsxtrtitlelongpl
11352 \let\Glsxtrtitlelong\@glsxtr@org@Glsxtrtitlelong
11353 \let\Glsxtrtitlelongpl\@glsxtr@org@glsxtrtitlelongpl
11354 \let\glsxtrtitlefull\@glsxtr@org@glsxtrtitlefull
11355 \let\glsxtrtitlefullpl\@glsxtr@org@glsxtrtitlefullpl
11356 \let\Glsxtrtitlefull\@glsxtr@org@Glsxtrtitlefull
11357 \let\Glsxtrtitlefullpl\@glsxtr@org@glsxtrtitlefullpl
11358 }

```

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.

```

11359 \newcommand*\glsxtrheadshort}[1]{%
11360 \protect\NoCaseChange
11361 {%
11362 \glsifattribute{#1}{headuc}{true}%
11363 {%
11364 \GLSxtrshort [noindex,hyper=false]{#1}[]%
11365 }%
11366 {%
11367 \glsxtrshort [noindex,hyper=false]{#1}[]%
11368 }%
11369 }%
11370 }

```

`lsxtrtitleshort` Command to display short form of abbreviation in section title and table of contents.

```

11371 \newrobustcmd*\glsxtrtitleshort}[1]{%
11372 \glsxtrshort [noindex,hyper=false]{#1}[]%
11373 }

```

`sxtrheadshortpl` Command used to display plural short form in the page header. If you want the text converted to upper case, this needs to be redefined to use `\GLSxtrshortpl` instead. If you are using a `smallcaps` style, the default fonts don't provide italic smallcaps.

```

11374 \newcommand*\glsxtrheadshortpl}[1]{%
11375 \protect\NoCaseChange
11376 {%
11377 \glsifattribute{#1}{headuc}{true}%
11378 {%
11379 \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
11380 }%
11381 {%
11382 \glsxtrshortpl [noindex,hyper=false]{#1}[]%
11383 }%
11384 }%
11385 }

```

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents.

```
11386 \newrobustcmd*\{\glsxtrtitleshortpl\}[1]{%
11387   \glsxtrshortpl[noindex,hyper=false]{#1}[]%
11388 }
```

Glsxtrheadshort Command used to display short form in the page header with the first letter converted to upper case.

```
11389 \newcommand*\{\Glsxtrheadshort\}[1]{%
11390   \protect\NoCaseChange
11391   {%
11392     \glsifattribute{#1}{headuc}{true}%
11393     {%
11394       \GLSxtrshort[noindex,hyper=false]{#1}[]%
11395     }%
11396     {%
11397       \Glsxtrshort[noindex,hyper=false]{#1}[]%
11398     }%
11399   }%
11400 }
```

lsxtrtitleshort Command to display short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
11401 \newrobustcmd*\{\Glsxtrtitleshort\}[1]{%
11402   \Glsxtrshort[noindex,hyper=false]{#1}[]%
11403 }
```

sxtrheadshortpl Command used to display plural short form in the page header with the first letter converted to upper case.

```
11404 \newcommand*\{\Glsxtrheadshortpl\}[1]{%
11405   \protect\NoCaseChange
11406   {%
11407     \glsifattribute{#1}{headuc}{true}%
11408     {%
11409       \GLSxtrshortpl[noindex,hyper=false]{#1}[]%
11410     }%
11411     {%
11412       \Glsxtrshortpl[noindex,hyper=false]{#1}[]%
11413     }%
11414   }%
11415 }
```

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
11416 \newrobustcmd*\{\Glsxtrtitleshortpl\}[1]{%
11417   \Glsxtrshortpl[noindex,hyper=false]{#1}[]%
11418 }
```

\glsxtrheadname As above but for the name value.

```

11419 \newcommand*{\glsxtrheadname}[1]{%
11420   \protect\NoCaseChange
11421   {%
11422     \glsifattribute{#1}{headuc}{true}{%
11423       {%
11424         \GLSname[noindex,hyper=false]{#1}[]%
11425       }%
11426     {%
11427       \glsname[noindex,hyper=false]{#1}[]%
11428     }%
11429   }%
11430 }

```

`\glsxtrtitlename` Command to display name value in section title and table of contents.

```

11431 \newrobustcmd*{\glsxtrtitlename}[1]{%
11432   \glsname[noindex,hyper=false]{#1}[]%
11433 }

```

`\Glsxtrheadname` First letter converted to upper case

```

11434 \newcommand*{\Glsxtrheadname}[1]{%
11435   \protect\NoCaseChange
11436   {%
11437     \glsifattribute{#1}{headuc}{true}{%
11438       {%
11439         \GLSname[noindex,hyper=false]{#1}[]%
11440       }%
11441     {%
11442       \Glsname[noindex,hyper=false]{#1}[]%
11443     }%
11444   }%
11445 }

```

`\Glsxtrtitlename` Command to display name value in section title and table of contents with the first letter changed to upper case.

```

11446 \%changes{1.21}{2017-11-03}{new}
11447 \newrobustcmd*{\Glsxtrtitlename}[1]{%
11448   \Glsname[noindex,hyper=false]{#1}[]%
11449 }

```

`\glsxtrheadtext` As above but for the text value.

```

11450 \newcommand*{\glsxtrheadtext}[1]{%
11451   \protect\NoCaseChange
11452   {%
11453     \glsifattribute{#1}{headuc}{true}{%
11454       {%
11455         \GLStext[noindex,hyper=false]{#1}[]%
11456       }%
11457     {%
11458       \glstext[noindex,hyper=false]{#1}[]%

```

```
11459 }%
11460 }%
11461 }
```

`glsxtrtitletext` Command to display text value in section title and table of contents.

```
11462 \newrobustcmd*\{\glsxtrtitletext\}[1]{%
11463   \glstext[noindex,hyper=false]{#1}[]%
11464 }
```

`\Glsxtrheadtext` First letter converted to upper case

```
11465 \newcommand*\{\Glsxtrheadtext\}[1]{%
11466   \protect\NoCaseChange
11467 {%
11468   \glsifattribute{#1}{headuc}{true}%
11469   {%
11470     \GLStext[noindex,hyper=false]{#1}[]%
11471   }%
11472   {%
11473     \Glstext[noindex,hyper=false]{#1}[]%
11474   }%
11475 }%
11476 }
```

`Glsxtrtitletext` Command to display text value in section title and table of contents with the first letter changed to upper case.

```
11477 \newrobustcmd*\{\Glsxtrtitletext\}[1]{%
11478   \Glstext[noindex,hyper=false]{#1}[]%
11479 }
```

`lsxtrheadplural` As above but for the plural value.

```
11480 \newcommand*\{\glsxtrheadplural\}[1]{%
11481   \protect\NoCaseChange
11482 {%
11483   \glsifattribute{#1}{headuc}{true}%
11484   {%
11485     \GLSplural[noindex,hyper=false]{#1}[]%
11486   }%
11487   {%
11488     \glsplural[noindex,hyper=false]{#1}[]%
11489   }%
11490 }%
11491 }
```

`sxtrtitleplural` Command to display plural value in section title and table of contents.

```
11492 \newrobustcmd*\{\glsxtrtitleplural\}[1]{%
11493   \glsplural[noindex,hyper=false]{#1}[]%
11494 }
```

```

lsxtrheadplural Convert first letter to upper case.
11495 \newcommand*\Glsxtrheadplural[1]{%
11496   \protect\NoCaseChange
11497   {%
11498     \glsifattribute{#1}{headuc}{true}{%
11499       {%
11500         \GLSplural[noindex,hyper=false]{#1}[]%
11501       }%
11502       {%
11503         \Glsplural[noindex,hyper=false]{#1}[]%
11504       }%
11505     }%
11506   }
}

sxtrttitleplural Command to display plural value in section title and table of contents with the first letter
changed to upper case.
11507 \newrobustcmd*\Glsxtrtitleplural[1]{%
11508   \Glsplural[noindex,hyper=false]{#1}[]%
11509 }

glsxtrheadfirst As above but for the first value.
11510 \newcommand*\glsxtrheadfirst[1]{%
11511   \protect\NoCaseChange
11512   {%
11513     \glsifattribute{#1}{headuc}{true}{%
11514       {%
11515         \GLSfirst[noindex,hyper=false]{#1}[]%
11516       }%
11517       {%
11518         \glsfirst[noindex,hyper=false]{#1}[]%
11519       }%
11520     }%
11521   }
}

sxtrttitlefirst Command to display first value in section title and table of contents.
11522 \newrobustcmd*\glsxtrtitlefirst[1]{%
11523   \glsfirst[noindex,hyper=false]{#1}[]%
11524 }

Glsxtrheadfirst First letter converted to upper case
11525 \newcommand*\Glsxtrheadfirst[1]{%
11526   \protect\NoCaseChange
11527   {%
11528     \glsifattribute{#1}{headuc}{true}{%
11529       {%
11530         \GLSfirst[noindex,hyper=false]{#1}[]%
11531       }%
11532       {%

```

```
11533     \Glsfirst [noindex,hyper=false]{#1}[]%
11534   }%
11535 }%
11536 }
```

`lsxtrtitlefirst` Command to display `first` value in section title and table of contents with the first letter changed to upper case.

```
11537 \newrobustcmd*\{\Glsxtrtitlefirst\}[1]{%
11538   \Glsfirst [noindex,hyper=false]{#1}[]%
11539 }
```

`headfirstplural` As above but for the `firstplural` value.

```
11540 \newcommand*\{\glsxtrheadfirstplural\}[1]{%
11541   \protect\NoCaseChange
11542 {%
11543   \glsifattribute{#1}{headuc}{true}%
11544   {%
11545     \GLSfirstplural [noindex,hyper=false]{#1}[]%
11546   }%
11547   {%
11548     \glsfirstplural [noindex,hyper=false]{#1}[]%
11549   }%
11550 }%
11551 }
```

`titlefirstplural` Command to display `firstplural` value in section title and table of contents.

```
11552 \newrobustcmd*\{\glsxtrtitlefirstplural\}[1]{%
11553   \glsfirstplural [noindex,hyper=false]{#1}[]%
11554 }
```

`headfirstplural` First letter converted to upper case

```
11555 \newcommand*\{\Glsxtrheadfirstplural\}[1]{%
11556   \protect\NoCaseChange
11557 {%
11558   \glsifattribute{#1}{headuc}{true}%
11559   {%
11560     \GLSfirstplural [noindex,hyper=false]{#1}[]%
11561   }%
11562   {%
11563     \Glsfirstplural [noindex,hyper=false]{#1}[]%
11564   }%
11565 }%
11566 }
```

`titlefirstplural` Command to display `first` value in section title and table of contents with the first letter changed to upper case.

```
11567 \newrobustcmd*\{\Glsxtrtitlefirstplural\}[1]{%
11568   \Glsfirstplural [noindex,hyper=false]{#1}[]%
11569 }
```

\glsxtrheadlong Command used to display long form in the page header.

```
11570 \newcommand*{\glsxtrheadlong}[1]{%
11571   \protect\NoCaseChange
11572   {%
11573     \glsifattribute{#1}{headuc}{true}%
11574     {%
11575       \GLSxtrlong[noindex,hyper=false]{#1}[]%
11576     }%
11577     {%
11578       \glsxtrlong[noindex,hyper=false]{#1}[]%
11579     }%
11580   }%
11581 }
```

\glsxtrtitlelong Command to display long form of abbreviation in section title and table of contents.

```
11582 \newrobustcmd*{\glsxtrtitlelong}[1]{%
11583   \glsxtrlong[noindex,hyper=false]{#1}[]%
11584 }
```

\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.

```
11585 \newcommand*{\glsxtrheadlongpl}[1]{%
11586   \protect\NoCaseChange
11587   {%
11588     \glsifattribute{#1}{headuc}{true}%
11589     {%
11590       \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
11591     }%
11592     {%
11593       \glsxtrlongpl[noindex,hyper=false]{#1}[]%
11594     }%
11595   }%
11596 }
```

\sxtrtitlelongpl Command to display plural long form of abbreviation in section title and table of contents.

```
11597 \newrobustcmd*{\glsxtrtitlelongpl}[1]{%
11598   \glsxtrlongpl[noindex,hyper=false]{#1}[]%
11599 }
```

\Glsxtrheadlong Command used to display long form in the page header with the first letter converted to upper case.

```
11600 \newcommand*{\Glsxtrheadlong}[1]{%
11601   \protect\NoCaseChange
11602   {%
11603     \glsifattribute{#1}{headuc}{true}%
11604     {%
11605       \GLSxtrlong[noindex,hyper=false]{#1}[]%
```

```
11606 }%
11607 {%
11608 \Glsxtrlong[noindex,hyper=false]{#1}[]%
11609 }%
11610 }%
11611 }
```

`Glsxtrtitlelong` Command to display long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
11612 \newrobustcmd*\{\Glsxtrtitlelong\}[1]{%
11613 \Glsxtrlong[noindex,hyper=false]{#1}[]%
11614 }
```

`Glsxtrheadlongpl` Command used to display plural long form in the page header with the first letter converted to upper case.

```
11615 \newcommand*\{\Glsxtrheadlongpl\}[1]{%
11616 \protect\NoCaseChange
11617 {%
11618 \glsifattribute{#1}{headuc}{true}%
11619 {%
11620 \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
11621 }%
11622 {%
11623 \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
11624 }%
11625 }%
11626 }
```

`Glsxtrtitlelongpl` Command to display plural long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
11627 \newrobustcmd*\{\Glsxtrtitlelongpl\}[1]{%
11628 \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
11629 }
```

`\glsxtrheadfull` Command used to display full form in the page header.

```
11630 \newcommand*\{\glsxtrheadfull\}[1]{%
11631 \protect\NoCaseChange
11632 {%
11633 \glsifattribute{#1}{headuc}{true}%
11634 {%
11635 \GLSxtrfull[noindex,hyper=false]{#1}[]%
11636 }%
11637 {%
11638 \glsxtrfull[noindex,hyper=false]{#1}[]%
11639 }%
11640 }%
11641 }
```

`glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents.

```
11642 \newrobustcmd*\{glsxtrtitlefull\}[1]{%
11643   \glsxtrfull[noindex,hyper=false]{#1}[]%
11644 }
```

`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.

```
11645 \newcommand*\{glsxtrheadfullpl\}[1]{%
11646   \protect\NoCaseChange
11647   {%
11648     \glsifattribute{#1}{headuc}{true}%
11649     {%
11650       \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
11651     }%
11652     {%
11653       \glsxtrfullpl[noindex,hyper=false]{#1}[]%
11654     }%
11655   }%
11656 }
```

`sxttitlefullpl` Command to display plural full form of abbreviation in section title and table of contents.

```
11657 \newrobustcmd*\{glsxtrtitlefullpl\}[1]{%
11658   \glsxtrfullpl[noindex,hyper=false]{#1}[]%
11659 }
```

`\Glsxtrheadfull` Command used to display full form in the page header with the first letter converted to upper case.

```
11660 \newcommand*\{\Glsxtrheadfull\}[1]{%
11661   \protect\NoCaseChange
11662   {%
11663     \glsifattribute{#1}{headuc}{true}%
11664     {%
11665       \GLSxtrfull[noindex,hyper=false]{#1}[]%
11666     }%
11667     {%
11668       \Glsxtrfull[noindex,hyper=false]{#1}[]%
11669     }%
11670   }%
11671 }
```

`Glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
11672 \newrobustcmd*\{\Glsxtrtitlefull\}[1]{%
11673   \Glsxtrfull[noindex,hyper=false]{#1}[]%
11674 }
```

`\sxtrheadfullpl` Command used to display plural full form in the page header with the first letter converted to upper case.

```
11675 \newcommand*{\Gsxtrheadfullpl}[1]{%
11676   \protect\NoCaseChange
11677   {%
11678     \glsifattribute{#1}{headuc}{true}{%
11679       {%
11680         \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
11681       }%
11682       {%
11683         \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
11684       }%
11685     }%
11686 }
```

`\sxtrtitlefullpl` Command to display plural full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
11687 \newrobustcmd*{\Gsxtrtitlefullpl}[1]{%
11688   \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
11689 }
```

`\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.

```
11690 \ifdef\texorpdfstring
11691 {
11692   \newcommand*{\glsfmtshort}[1]{%
11693     \texorpdfstring
11694     {\glsxrtitleshort{#1}}%
11695     {\glsentryshort{#1}}%
11696   }
11697 }
11698 {
11699   \newcommand*{\glsfmtshort}[1]{%
11700     \glsxrtitleshort{#1}%
11701 }
```

Similarly for the plural version.

```
\glsfmtshortpl
11702 \ifdef\texorpdfstring
11703 {
11704   \newcommand*{\glsfmtshortpl}[1]{%
11705     \texorpdfstring
11706     {\glsxrtitleshortpl{#1}}%
11707     {\glsentryshortpl{#1}}%
11708   }
11709 }
11710 {
11711   \newcommand*{\glsfmtshortpl}[1]{%
```

```
11712     \glsxtrtitleshortpl{#1}%
11713 }
```

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).

```
11714 \ifdef\textorpdfstring
11715 {
11716     \newcommand*\{\Glsfmtshort}{[1]{%
11717         \textorpdfstring
11718             {\glsxtrtitleshort{#1}}%
11719             {\glsentryshort{#1}}%
11720     }
11721 }
11722 {
11723     \newcommand*\{\Glsfmtshort}{[1]{%
11724         \glsxtrtitleshort{#1}}
11725 }
```

\Glsfmtshortpl Plural form (first letter uppercase).

```
11726 \ifdef\textorpdfstring
11727 {
11728     \newcommand*\{\Glsfmtshortpl}{[1]{%
11729         \textorpdfstring
11730             {\glsxtrtitleshortpl{#1}}%
11731             {\glsentryshortpl{#1}}%
11732     }
11733 }
11734 {
11735     \newcommand*\{\Glsfmtshortpl}{[1]{%
11736         \glsxtrtitleshortpl{#1}}
11737 }
```

\glsfmtname As above but for the name value.

```
11738 \ifdef\textorpdfstring
11739 {
11740     \newcommand*\{\glsfmtname}{[1]{%
11741         \textorpdfstring
11742             {\glsxtrtitlename{#1}}%
11743             {\glsentryname{#1}}%
11744     }
11745 }
11746 {
11747     \newcommand*\{\glsfmtname}{[1]{%
11748         \glsxtrtitlename{#1}}
11749 }
```

\Glsfmtname First letter converted to upper case.

```

11750 \ifdef\textorpdfstring
11751 {
11752   \newcommand*{\Glsfmtname}[1]{%
11753     \textorpdfstring
11754     {\Glsxtrtitlename{#1}}%
11755     {\glsentryname{#1}}%
11756   }
11757 }
11758 {
11759   \newcommand*{\Glsfmtname}[1]{%
11760     \Glsxtrtitlename{#1}%
11761 }

```

\glsfmttext As above but for the text value.

```

11762 \ifdef\textorpdfstring
11763 {
11764   \newcommand*{\glsfmttext}[1]{%
11765     \textorpdfstring
11766     {\Glsxtrtitletext{#1}}%
11767     {\glsentrytext{#1}}%
11768   }
11769 }
11770 {
11771   \newcommand*{\glsfmttext}[1]{%
11772     \Glsxtrtitletext{#1}%
11773 }

```

\Glsfmttext First letter converted to upper case.

```

11774 \ifdef\textorpdfstring
11775 {
11776   \newcommand*{\Glsfmttext}[1]{%
11777     \textorpdfstring
11778     {\Glsxtrtitletext{#1}}%
11779     {\glsentrytext{#1}}%
11780   }
11781 }
11782 {
11783   \newcommand*{\Glsfmttext}[1]{%
11784     \Glsxtrtitletext{#1}%
11785 }

```

\glsfmtplural As above but for the plural value.

```

11786 \ifdef\textorpdfstring
11787 {
11788   \newcommand*{\glsfmtplural}[1]{%
11789     \textorpdfstring
11790     {\Glsxtrtitleplural{#1}}%
11791     {\glsentryplural{#1}}%
11792   }

```

```
11793 }
11794 {
11795 \newcommand*{\glsfmtplural}[1]{%
11796   \glsxtrtitleplural{#1}}
11797 }
```

\Glsfmtplural First letter converted to upper case.

```
11798 \ifdef\textorpdfstring
11799 {
11800 \newcommand*{\Glsfmtplural}[1]{%
11801   \textorpdfstring
11802   {\glsxtrtitleplural{#1}}%
11803   {\glsentryplural{#1}}%
11804 }
11805 }
11806 {
11807 \newcommand*{\Glsfmtplural}[1]{%
11808   \glsxtrtitleplural{#1}}
11809 }
```

\glsfmtfirst As above but for the first value.

```
11810 \ifdef\textorpdfstring
11811 {
11812 \newcommand*{\glsfmtfirst}[1]{%
11813   \textorpdfstring
11814   {\glsxtrtitlefirst{#1}}%
11815   {\glsentryfirst{#1}}%
11816 }
11817 }
11818 {
11819 \newcommand*{\glsfmtfirst}[1]{%
11820   \glsxtrtitlefirst{#1}}
11821 }
```

\Glsfmtfirst First letter converted to upper case.

```
11822 \ifdef\textorpdfstring
11823 {
11824 \newcommand*{\Glsfmtfirst}[1]{%
11825   \textorpdfstring
11826   {\glsxtrtitlefirst{#1}}%
11827   {\glsentryfirst{#1}}%
11828 }
11829 }
11830 {
11831 \newcommand*{\Glsfmtfirst}[1]{%
11832   \glsxtrtitlefirst{#1}}
11833 }
```

\glsfmtfirstpl As above but for the firstplural value.

```

11834 \ifdef\textorpdfstring
11835 {
11836   \newcommand*\glsfmtfirstpl}[1]{%
11837     \textorpdfstring
11838     {\glsxrttitlefirstplural{#1}}%
11839     {\glsentryfirstplural{#1}}%
11840   }
11841 }
11842 {
11843   \newcommand*\glsfmtfirstpl}[1]{%
11844     \glsxrttitlefirstplural{#1}%
11845 }

```

\Glsfmtfirstpl First letter converted to upper case.

```

11846 \ifdef\textorpdfstring
11847 {
11848   \newcommand*\Glsfmtfirstpl}[1]{%
11849     \textorpdfstring
11850     {\Glsxrttitlefirstplural{#1}}%
11851     {\glsentryfirstplural{#1}}%
11852   }
11853 }
11854 {
11855   \newcommand*\Glsfmtfirstpl}[1]{%
11856     \Glsxrttitlefirstplural{#1}%
11857 }

```

\glsfmtlong As above but for the long value.

```

11858 \ifdef\textorpdfstring
11859 {
11860   \newcommand*\glsfmtlong}[1]{%
11861     \textorpdfstring
11862     {\glsxrttitlelong{#1}}%
11863     {\glsentrylong{#1}}%
11864   }
11865 }
11866 {
11867   \newcommand*\glsfmtlong}[1]{%
11868     \glsxrttitlelong{#1}%
11869 }

```

\Glsfmtlong First letter converted to upper case.

```

11870 \ifdef\textorpdfstring
11871 {
11872   \newcommand*\Glsfmtlong}[1]{%
11873     \textorpdfstring
11874     {\Glsxrttitlelong{#1}}%
11875     {\glsentrylong{#1}}%
11876   }

```

```

11877 }
11878 {
11879   \newcommand*{\Glsfmtlong}[1]{%
11880     \Glsxtrtitlelong{#1}%
11881 }

```

\glsfmtlongpl As above but for the longplural value.

```

11882 \ifdef\textorpdfstring
11883 {
11884   \newcommand*{\glsfmtlongpl}[1]{%
11885     \textorpdfstring
11886       {\Glsxtrtitlelongpl{#1}}%
11887       {\glsentrylongpl{#1}}%
11888   }
11889 }
11900 {
11901   \newcommand*{\glsfmtlongpl}[1]{%
11902     \Glsxtrtitlelongpl{#1}%
11903   }

```

\Glsfmtlongpl First letter converted to upper case.

```

11904 \ifdef\textorpdfstring
11905 {
11906   \newcommand*{\Glsfmtlongpl}[1]{%
11907     \textorpdfstring
11908       {\Glsxtrtitlelongpl{#1}}%
11909       {\glsentrylongpl{#1}}%
11910   }
11911 }
11912 {
11913   \newcommand*{\Glsfmtlongpl}[1]{%
11914     \Glsxtrtitlelongpl{#1}%
11915   }

```

\glsfmtfull In-line full format.

```

11916 \ifdef\textorpdfstring
11917 {
11918   \newcommand*{\glsfmtfull}[1]{%
11919     \textorpdfstring
11920       {\Glsxtrtitlefull{#1}}%
11921       {\glsxtrinlinetitleformat{#1}{}}%
11922   }
11923 }
11924 {
11925   \newcommand*{\glsfmtfull}[1]{%
11926     \Glsxtrtitlefull{#1}%
11927   }

```

\Glsfmtfull First letter converted to upper case.

```

11918 \ifdef\textorpdfstring
11919 {
11920   \newcommand*{\Glsfmtfull}[1]{%
11921     \textorpdfstring
11922     {\Glsxrttitlefull{\#1}}%
11923     {\Glsxtrinlinefullformat{\#1}{}}
11924   }
11925 }
11926 {
11927   \newcommand*{\Glsfmtfull}[1]{%
11928     \Glsxrttitlefull{\#1}
11929 }

```

\glsfmtfullpl In-line full plural format.

```

11930 \ifdef\textorpdfstring
11931 {
11932   \newcommand*{\glsfmtfullpl}[1]{%
11933     \textorpdfstring
11934     {\glsxrttitlefullpl{\#1}}%
11935     {\glsxtrinlinefullplformat{\#1}{}}
11936   }
11937 }
11938 {
11939   \newcommand*{\glsfmtfullpl}[1]{%
11940     \glsxrttitlefullpl{\#1}
11941 }

```

\Glsfmtfullpl First letter converted to upper case.

```

11942 \ifdef\textorpdfstring
11943 {
11944   \newcommand*{\Glsfmtfullpl}[1]{%
11945     \textorpdfstring
11946     {\Glsxrttitlefullpl{\#1}}%
11947     {\Glsxtrinlinefullplformat{\#1}{}}
11948   }
11949 }
11950 {
11951   \newcommand*{\Glsfmtfullpl}[1]{%
11952     \Glsxrttitlefullpl{\#1}
11953 }

```

1.9 Multi-Lingual Support

Add the facility to load language modules, if they are installed, but none are provided with this package.

sariesExtraLang

```
11954 \newcommand*{\RequireGlossariesExtraLang}[1]{%
```

```
11955  \@ifundefined{ver@glossariesxtr-#1.ldf}{\input{glossariesxtr-#1.ldf}}{}%
11956 }
```

sariesExtraLang

```
11957 \newcommand*\ProvidesGlossariesExtraLang}[1]{%
11958   \ProvidesFile{glossariesxtr-#1.ldf}%
11959 }
```

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.

```
11960 \newcommand{\glsxtr@loaddialect}{%
11961   \IfTrackedLanguageFileExists{\this@dialect}%
11962   {glossariesxtr-}%
11963   {.ldf}%
11964   {}%
11965   \RequireGlossariesExtraLang{\CurrentTrackedTag}%
11966 }%
11967 {}% not found
```

If `glossaries-extra-bib2gls` has been loaded, `\@glsxtrdialechook` will check for the associated script, otherwise it will do nothing.

```
11968  \@glsxtrdialechook
11969 }
```

```
11970 \@ifpackageloaded{tracklang}%
11971 {}%
11972   \AnyTrackedLanguages
11973   {}%
11974   \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
11975 }%
11976 {}%
11977 }
11978 {}
```

Load `glossaries-extra-stylemods` if required.

```
11979 \@glsxtr@redefstyles
```

and set the style:

```
11980 \@glsxtr@do@style
```

1.10 glossaries-extra-bib2gls.sty

This package provides additional support for `bib2gls` and is automatically loaded by the `record` option.

```
11981 \NeedsTeXFormat{LaTeX2e}
11982 \ProvidesPackage{glossaries-extra-bib2gls}[2018/12/01 1.38 (NLCT)]
```

These are some convenient macros for use with custom rules.

```
\glshex
11983 \newcommand*\glshex{\string\u}
```

```
lscapturedgroup
11984 \newcommand*\lscapturedgroup{\string\$}
```

nZeroChildCount For use with bib2gls's save-child-count resource option.

```
11985 \newcommand*\GlsXtrIfHasNonZeroChildCount}[3]{%
11986   \GlsXtrIfFieldNonZero{childcount}{#1}{#2}{#3}%
11987 }
```

rprovidecommand For use in @preamble, this behaves like \providecommand in the document but like \renewcommand in bib2gls.

```
11988 \newcommand*\glsxtrprovidecommand{\providecommand}
```

glsrenewcommand Like \renewcommand but only generates a warning rather than an error if the command isn't defined.

```
11989 \newcommand*\glsrenewcommand{\@star@or@long\glsxtr@renewcommand}
```

tr@renewcommand

```
11990 \newcommand*\glsxtr@renewcommand}[1]{%
11991   \begingroup \escapechar\m@ne\xdef\@tempa{\string#1}\endgroup
11992   \expandafter\@ifundefined\@tempa
11993   {%
11994     \GlossariesExtraWarning{can't redefine \noexpand#1(not already defined)}%
11995   }%
11996   \relax
11997   \relax
11998   \let\@ifdefinable\@rc@ifdefinable
11999   \new@command#1%
12000 }
```

lossarylocation For use with indexcounter and bib2gls.

```
12001 \newcommand*\glsxtr@wrglossarylocation}[2]{#1}
```

IndexCounterLink `\GlsXtrIndexCounterLink{\text}{\label}`

For use with indexcounter and bib2gls.

```
12002 \ifdef\hyperref
12003 {%
12004   \newcommand*\GlsXtrIndexCounterLink}[2]{%
```

```

12005   \glsxtrifhasfield{indexcounter}{#2}%
12006   {\hyperref[wrglossary.\glscurrentfieldvalue]{#1}}%
12007   {#1}%
12008 }
12009 }
1210 {
1211   \newcommand*{\GlsXtrIndexCounterLink}[2]{#1}
1212 }
```

\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.

```
12013 \newcommand*{\GlsXtrDualField}{dual}
```

\GlsXtrDualBackLink{<text>}{<label>}

Adds a hyperlink to the dual entry.

```

12014 \newcommand*{\GlsXtrDualBackLink}[2]{%
12015   \glsxtrifhasfield{\GlsXtrDualField}{#2}%
12016   {\glshyperlink[#1]{\glscurrentfieldvalue}}%
12017   {#2}%
12018 }
```

`\TeXEntryAliases` Convenient shortcut for use with entry-type-aliases to alias standard BIBTEX entry types to `@bibtexentry`.

```

12019 \newcommand*{\GlsXtrBibTeXEntryAliases}{%
12020   article=bibtexentry,
12021   book=bibtexentry,
12022   booklet=bibtexentry,
12023   conference=bibtexentry,
12024   inbook=bibtexentry,
12025   incollection=bibtexentry,
12026   inproceedings=bibtexentry,
12027   manual=bibtexentry,
12028   mastersthesis=bibtexentry,
12029   misc=bibtexentry,
12030   phdthesis=bibtexentry,
12031   proceedings=bibtexentry,
12032   techreport=bibtexentry,
12033   unpublished=bibtexentry
12034 }
```

`ideBibTeXFields` Convenient shortcut to define the standard BIBTeX fields.

```
12035 \newcommand*\GlsXtrProvideBibTeXFields{}{%
12036   \glsaddstoragekey{address}{}{\glsxtrbibaddress}%
12037   \glsaddstoragekey{author}{}{\glsxtrbibauthor}%
12038   \glsaddstoragekey{booktitle}{}{\glsxtrbibbooktitle}%
12039   \glsaddstoragekey{chapter}{}{\glsxtrbibchapter}%
12040   \glsaddstoragekey{edition}{}{\glsxtrbibedition}%
12041   \glsaddstoragekey{howpublished}{}{\glsxtrbibhowpublished}%
12042   \glsaddstoragekey{institution}{}{\glsxtrbibinstitution}%
12043   \glsaddstoragekey{journal}{}{\glsxtrbibjournal}%
12044   \glsaddstoragekey{month}{}{\glsxtrbibmonth}%
12045   \glsaddstoragekey{note}{}{\glsxtrbibnote}%
12046   \glsaddstoragekey{number}{}{\glsxtrbibnumber}%
12047   \glsaddstoragekey{organization}{}{\glsxtrbiborganization}%
12048   \glsaddstoragekey{pages}{}{\glsxtrbibpages}%
12049   \glsaddstoragekey{publisher}{}{\glsxtrbibpublisher}%
12050   \glsaddstoragekey{school}{}{\glsxtrbibschool}%
12051   \glsaddstoragekey{series}{}{\glsxtrbibseries}%
12052   \glsaddstoragekey{title}{}{\glsxtrbibtitle}%
12053   \glsaddstoragekey{bibtexttype}{}{\glsxtrbibtype}%
12054   \glsaddstoragekey{volume}{}{\glsxtrbibvolume}%
12055 }
```

Multiple supplementary references are only supported with `bib2gls`.

`ltisuplocation` This is like `\glsxtrsups hypernumber` 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 `encap` in case it's required.

```
12056 \newcommand*\GlsXtrMultiSupLocation[3]{%
12057   {%
12058     \def\glsxtrsups locationurl{#2}%
12059     \glshypernumber{#1}%
12060   }%
12061 }
```

`trdisplaysupploc` `\glsxtrdisplaysupploc{<prefix>}{{<counter>}}{<format>}{{<src>}}{<location>}`

This is like `\glsnoidxdisplayloc` but is used for supplementary locations and so requires an extra argument.

```
12062 \newcommand*\GlsXtrDisplaySuppLoc[5]{%
12063   \setentrycounter[#1]{#2}%
12064   \glsxtrMultiSupLocation{#5}{#4}{#3}%
12065 }
```

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.

```
12066 \ifundef\hyperlink
12067 {
12068   \newcommand*\glsxtrdisplaylocnameref[8]{%
12069     \glsnoidxdisplayloc{#1}{#2}{#3}{#4}%
12070   }
12071 }
12072 {
```

Default action uses *<hcounter>*. Equations and pages typically don't have a title, so check the counter name.

```
12073 \newcommand*\glsxtrdisplaylocnameref[8]{%
12074   \ifstrequal{#2}{equation}%
12075     {\glsxtrnamereflink{#3}{(#4)}{#2.#7}{#8}}%
12076   {%
12077     \ifstrempty{#5}%
12078       {%
```

No title, so just use the location as the link text.

```
12079   \glsxtrnamereflink{#3}{#4}{#2.#7}{#8}%
12080   }%
12081   {%
12082     \ifstrequal{#2}{page}%
12083       {\glsxtrnamereflink{#3}{#4}{#2.#7}{#8}}%
12084       {\glsxtrnamereflink{#3}{#5}{#2.#7}{#8}}%
12085     }%
12086   }%
12087 }
12088 }
```

lsxtrnamereflink \glsxtrfmtnamereflink{\<format>}{\<title>}{\<href>}{\<external file>}

```
12089 \newcommand*\glsxtrnamereflink[4]{%
```

Locally change \glshypernumber to \@firstofone to remove the normal location hyperlink.

```
12090 \begingroup
12091 \let\glshypernumber\@firstofone
```

If the *<external file>* argument is empty, an internal link is used, otherwise an external one is needed.

```
12092 \ifstrempty{#4}%
12093   {\glsxtrfmtinternalnameref{#3}{#1}{#2}}%
```

```

12094     {\glsxtrfmtexternalnameref{#3}{#1}{#2}{#4}}%
12095     \endgroup
12096 }

```

```
\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.

```

12097 \newcommand{\glsxtrnameloclink}[6]{%
12098   \begingroup
12099   \setentrycounter[#1]{#2}%
12100   \def\glsxtr@locationhypertext{#5}%
12101   \let\glshypernumber\@firstofone
12102   \def\@glsnumberformat{#3}%
12103   \def\glsxtrspplocationurl{#6}%
12104   \toks@={}%
12105   \glsxtr@bibgls@removespaces#4 \@nil
12106   \endgroup
12107 }

```

`ls@removespaces`

```

12108 \def\glsxtr@bibgls@removespaces#1 #2\@nil{%
12109   \toks@=\expandafter{\the\toks@#1}%
12110   \ifx\\#2\\%
12111     \edef\x{\the\toks@}%
12112     \ifx\x\empty
12113     \else
12114       \protected@edef\x{\glsentrycounter\@glo@counterprefix\the\toks@}%
12115       \ifdefvoid\glsxtrspplocationurl
12116       {%
12117         \expandafter\glsxtrfmtinternalnameref\expandafter{\x}%
12118         {\@glsnumberformat}{\glsxtr@locationhypertext}%
12119       }%
12120       {%
12121         \expandafter\glsxtrfmtexternalnameref\expandafter{\x}%
12122         {\@glsnumberformat}{\glsxtr@locationhypertext}{\glsxtrspplocationurl}%
12123       }%
12124     \fi
12125   \else
12126     \gls@ReturnAfterFi{%
12127       \glsxtr@bibgls@removespaces#2\@nil
12128     }%
12129   \fi
12130 }

```

```
tinternalnameref \glsxtrfmtinternalnameloc{\target}{\format}{\title}
```

```
12131 \newcommand*{\glsxtrfmtinternalnameref}[3]{%
12132   \csuse{#2}{\glsdohyperlink{#1}{#3}}%
12133 }
```

```
texternalnameref \glsxtrfmtexternalnameloc{\target}{\format}{\title}{\file}
```

```
12134 \newcommand*{\glsxtrfmtexternalnameref}[4]{%
12135   \csuse{#2}{\hyperref[#4]{}{#1}{#3}}%
12136 }
```

```
\glsxtrSetWidest \glsxtrSetWidest{\type}{\level}{\text}
```

As from **bib2gls** v1.8, this is used by the `set-widest` resource option for the `alttree` and the styles provided by the `glossary-longextra` package.

```
12137 \newcommand*{\glsxtrSetWidest}[3]{%
```

Check which style options have been provided. (The style packages may not have been loaded.)

```
12138 \ifdef\glsupdatewidest
12139 {%
12140   \ifdef\glslongextraUpdateWidest
12141     {%
```

Relevant style packages all loaded. If the `\type` has been given, append to glossary preamble.

```
12142   \ifstrempty{#1}
12143     {%
12144       \glsupdatewidest[#2]{#3}%
12145       \ifnum#2=0\relax
12146         \glslongextraUpdateWidest[#3]%
12147       \else
12148         \glslongextraUpdateWidestChild[#2]{#3}%
12149       \fi
12150     }%
12151   {%
12152     \apptoglossarypreamble[#1]{\glsupdatewidest[#2]{#3}}%
12153     \ifnum#2=0\relax
12154       \apptoglossarypreamble[#1]{\glslongextraUpdateWidest[#3]}%
12155     \else
12156       \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild[#2]{#3}}%
12157     \fi
12158 }
```

```
12158      }%
12159      }%
12160      {%
```

Only alttree.

```
12161      \ifstrempty{#1}
12162      {%
12163          \glsupdatewidest[#2]{#3}%
12164      }%
12165      {%
12166          \apptoglossarypreamble[#1]{\glsupdatewidest[#2]{#3}}%
12167      }%
12168      }%
12169  }%
12170  {%
```

\glsupdatewidest hasn't been defined. This could just mean that the glossaries-extra-stylemods package hasn't been loaded.

```
12171      \ifdef\glssetwidest
12172      {%
12173          \ifdef\glslongextraUpdateWidest
12174      {%
```

Relevant glossary-tree and glossary-longextra have been loaded. If the *<type>* has been given, append to glossary preamble.

```
12175      \ifstrempty{#1}
12176      {%
12177          \glssetwidest[#2]{#3}%
12178          \ifnum#2=0\relax
12179              \glslongextraUpdateWidest{#3}%
12180          \else
12181              \glslongextraUpdateWidestChild[#2]{#3}%
12182          \fi
12183      }%
12184      {%
12185          \apptoglossarypreamble[#1]{\glssetwidest[#2]{#3}}%
12186          \ifnum#2=0\relax
12187              \apptoglossarypreamble[#1]{\glslongextraUpdateWidest{#3}}%
12188          \else
12189              \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild[#2]{#3}}%
12190          \fi
12191      }%
12192  }%
12193  {%
```

Only alttree.

```
12194      \ifstrempty{#1}
12195      {%
12196          \glssetwidest[#2]{#3}%
12197      }%
12198  {%
```

```

12199      \apptoglossarypreamble[#1]{\glssetwidest[#2]{#3}}%
12200      }%
12201      }%
12202      }%
12203      {%
12204      \ifdef\glslongextraUpdateWidest
12205      {%
glossary-longextra has been loaded.

12206      \ifstrempty{#1}
12207      {%
12208          \ifnum#2=0\relax
12209              \glslongextraUpdateWidest{#3}%
12210          \else
12211              \glslongextraUpdateWidestChild{#2}{#3}%
12212          \fi
12213      }%
12214      {%
12215          \ifnum#2=0\relax
12216              \apptoglossarypreamble[#1]{\glslongextraUpdateWidest{#3}}%
12217          \else
12218              \apptoglossarypreamble[#1]{\glslongextraUpdateWidestChild{#2}{#3}}%
12219          \fi
12220      }%
12221      }%
12222      {}%
12223      }%
12224      }%
12225 }

```

Neither glossary-tree nor glossary-longextra have been loaded. Do nothing.

etWidestFallback \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).

```

12226 \newcommand*\glsxtrSetWidestFallback[2]{%
12227     \ifnum#1=0\relax
12228     \ifdef\glsFindWidestTopLevelName
12229     {%
12230         \glsFindWidestTopLevelName[#2]%
12231     }%
12232     {%
12233         \GlossariesExtraWarning{You need stylemods={tree} to
12234             provide a fallback for set-widest}%
12235     }%

```

```

12236 \else
12237   \ifdef\glsFindWidestLevelTwo
12238   {%
12239     \glsFindWidestLevelTwo[#2]%
12240     \ifdef\glslongextraUpdateWidestChild
12241     {%
12242       \glslongextraUpdateWidestChild[#1]{\csuse{@glswidestnamei}}%
12243       \glslongextraUpdateWidestChild[#1]{\csuse{@glswidestnameii}}%
12244     }%
12245     {}%
12246   }%
12247   {%
12248     \GlossariesExtraWarning{You need stylemods={tree} to
12249       provide a fallback for set-widest}%
12250   }%
12251 \fi
12252 }

```

r@labelprefixes List of label prefixes.

```
12253 \newcommand*{\@glsxtr@labelprefixes}{}%
```

a@labelprefixes List of label prefixes.

```

12254 \newcommand*{\glsxtrclearlabelprefixes}{%
12255   \renewcommand*{\@glsxtr@labelprefixes}{}%
12256 }

```

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.

```

12257 \newcommand*{\glsxtraddlabelprefix}[1]{%
12258   \ifstrempty{#1}%
12259   {\glsxtraddlabelprefix{\empty}}%
12260   {%
12261     \ifdefempty{\glsxtr@labelprefixes}
12262     {\def{\glsxtr@labelprefixes}{#1}}%
12263     {\appto{\glsxtr@labelprefixes}{,#1}}%
12264   }%
12265 }

```

p@addlabelprefix Inserts at the start of the list.

```

12266 \newcommand*{\glsxtrprependlabelprefix}[1]{%
12267   \ifstrempty{#1}%
12268   {\glsxtrprependlabelprefix{\empty}}%
12269   {%
12270     \ifdefempty{\glsxtr@labelprefixes}
12271     {\def{\glsxtr@labelprefixes}{#1}}%
12272     {\preto{\glsxtr@labelprefixes}{#1,}}%
12273   }%
12274 }

```

```
\glsxtrifinlabelprefixlist{\<prefix\>}{\<true\>}{\<false\>}
```

Test if the given prefix is in the list.

```
12275 \newcommand*\glsxtrifinlabelprefixlist[3]{%
12276   \ifstrempty{#1}%
12277   { \glsxtrifinlabelprefixlist{\empty}{#2}{#3} }%
12278   {%
12279     \DTLifinlist{#1}{\glsxtr@labelprefixes}{#2}{#3}%
12280   }%
12281 }
```

`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`.

```
12282 \AtBeginDocument{%
12283   \protected@write\auxout{}{\string\providecommand{\string\glsxtr@prefixlabellist}[1]{}%
12284   \protected@write\auxout{}{\string\glsxtr@prefixlabellist{\glsxtr@labelprefixes}}%
12285 }
```

`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^AT_EX run, so the last prefix in the list needs to be the fallback one. Grouping is used in case of a nested for loop.

```
12286 \newcommand*\glsxtr@get@prefixedlabel[1]{%
12287   \begin{group}
```

Initialise to the unprefixed label in the event that the list is empty.

```
12288   \edef\gls@thislabel{#1}%
12289   \for\glsxtr@prefix:=\glsxtr@labelprefixes\do
12290   {%
12291     \edef\gls@thislabel{\glsxtr@prefix#1}%
12292     \ifglsentryexists{\gls@thislabel}{\endfortrue}{}%
12293   }%
12294   \edef\x{\endgroup\noexpand\def\noexpand\gls@thislabel{\gls@thislabel}}\x
12295 }
```

`\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".

```
12296 \newrobustcmd*\dgls{\gls@hyp@opt@gdls}
```

`\@dgls`

```
12297 \newcommand*\@dgls[2][]{%
12298   \glsxtr@get@prefixedlabel{#2}%
12299   \new@ifnextchar[\gls@thislabel]{\gls@#1\gls@thislabel}[]%
12300 }
```

`\dglspl`

```
12301 \newrobustcmd*\dglspl{\gls@hyp@opt@gdlspl}
```

```

\@dglsp1
12302 \newcommand*{\@dglsp1}[2] []{%
12303   \@glsxtr@get@prefixedlabel{#2}%
12304   \new@ifnextchar[{\@\glspl@{#1}{\@gls@thislabel}}{\@\glspl@{#1}{\@gls@thislabel}[]}%
12305 }

\dGls
12306 \newrobustcmd*{\dGls}{\@gls@hyp@opt\@dGls}

@dGls
12307 \newcommand*{\@dGls}[2] []{%
12308   \@glsxtr@get@prefixedlabel{#2}%
12309   \new@ifnextchar[{\@\Gls@{#1}{\@gls@thislabel}}{\@\Gls@{#1}{\@gls@thislabel}[]}%
12310 }

\dGlspl
12311 \newrobustcmd*{\dGlspl}{\@gls@hyp@opt\@dGlspl}

@dGlspl
12312 \newcommand*{\@dGlspl}[2] []{%
12313   \@glsxtr@get@prefixedlabel{#2}%
12314   \new@ifnextchar[{\@\Glspl@{#1}{\@gls@thislabel}}{\@\Glspl@{#1}{\@gls@thislabel}[]}%
12315 }

\dGLS
12316 \newrobustcmd*{\dGLS}{\@gls@hyp@opt\@dGLS}

@dGLS
12317 \newcommand*{\@dGLS}[2] []{%
12318   \@glsxtr@get@prefixedlabel{#2}%
12319   \new@ifnextchar[{\@\GLS@{#1}{\@gls@thislabel}}{\@\GLS@{#1}{\@gls@thislabel}[]}%
12320 }

\dGLSp1
12321 \newrobustcmd*{\dGLSp1}{\@gls@hyp@opt\@dGLSp1}

@dGLSp1
12322 \newcommand*{\@dGLSp1}[2] []{%
12323   \@glsxtr@get@prefixedlabel{#2}%
12324   \new@ifnextchar[{\@\GLSp1@{#1}{\@gls@thislabel}}{\@\GLSp1@{#1}{\@gls@thislabel}[]}%
12325 }

\dglslink Like \glslink but tries the prefixes.
12326 \newrobustcmd*{\dglslink}[3] []{%
12327   \@glsxtr@get@prefixedlabel{#2}%
12328   \glslink[#1]{\@gls@thislabel}{#3}%
12329 }

```

```
\dglssdisp Like \glsdisp but tries the prefixes.
```

```
12330 \newrobustcmd*\{\dglssdisp\}[3][]{%
12331   \glsxtr@get@prefixedlabel{#2}%
12332   \glsdisp[#1]{\gls@thislabel}{#3}%
12333 }
```

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^AT_EX 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
```

```
12334 \providecommand*\{\Alpha\}{\mathrm{A}}
```

```
\Beta
```

```
12335 \providecommand*\{\Beta\}{\mathrm{B}}
```

```
\Epsilon
```

```
12336 \providecommand*\{\Epsilon\}{\mathrm{E}}
```

```
\Zeta
```

```
12337 \providecommand*\{\Zeta\}{\mathrm{Z}}
```

```
\Eta
```

```
12338 \providecommand*\{\Eta\}{\mathrm{H}}
```

```
\Iota
```

```
12339 \providecommand*\{\Iota\}{\mathrm{I}}
```

```
\Kappa
```

```
12340 \providecommand*\{\Kappa\}{\mathrm{K}}
```

```
\Mu
```

```
12341 \providecommand*\{\Mu\}{\mathrm{M}}
```

```
\Nu
```

```
12342 \providecommand*\{\Nu\}{\mathrm{N}}
```

```
\Omicron
```

```
12343 \providecommand*\{\Omicron\}{\mathrm{O}}
```

```
\Rho
```

```
12344 \providecommand*\{\Rho\}{\mathrm{P}}
```

```

\Tau
12345 \providecommand*\Tau{\mathrm{T}}
```

```

\Chi
12346 \providecommand*\Chi{\mathrm{X}}
```

```

\Digamma
12347 \providecommand*\Digamma{\mathrm{F}}
```

```

\omicron
12348 \providecommand*\omicron{\mathrm{o}}
```

Provide corresponding upright characters if `upgreek` has been loaded. (The upper case characters are the same as above.)

```

12349 \@ifpackageloaded{upgreek}%
12350 {
```

```

\Upalpha
12351 \providecommand*\Upalpha{\mathrm{A}}
```

```

\Upbeta
12352 \providecommand*\Upbeta{\mathrm{B}}
```

```

\Upsilon
12353 \providecommand*\Upsilon{\mathrm{E}}
```

```

\Upzeta
12354 \providecommand*\Upzeta{\mathrm{Z}}
```

```

\Upeta
12355 \providecommand*\Upeta{\mathrm{H}}
```

```

\Upiota
12356 \providecommand*\Upiota{\mathrm{I}}
```

```

\Upkappa
12357 \providecommand*\Upkappa{\mathrm{K}}
```

```

\Upmu
12358 \providecommand*\Upmu{\mathrm{M}}
```

```

\Upnu
12359 \providecommand*\Upnu{\mathrm{N}}
```

```

\Upomicron
12360 \providecommand*\Upomicron{\mathrm{O}}
```

```

\Uprho
12361 \providecommand*\Uprho{\mathrm{P}}
\Uptau
12362 \providecommand*\Uptau{\mathrm{T}}
\Upchi
12363 \providecommand*\Upchi{\mathrm{X}}
\upomicron
12364 \providecommand*\upomicron{\mathrm{o}}
12365 }%
12366 {}% upgreek.sty not loaded

```

This package provides some basic rules, but it's not intended for complete coverage of all locales. The CLDR should provide the appropriate locale-sensitive rules. These macros are primarily to help construct custom rules to include, for example, Greek maths symbols mixed with Latin. For the full rule syntax, see the Java API for [RuleBaseCollator](#)

If you want to provide a rule-block for a particular locale to allow for customization within that locale, create a file called `glossariesxtr-<tag>.1df` (where `<tag>` identifies the locale) and add similar commands. See the description of `\IfTrackedLanguageFileExists` in the `tracklang` manual for the allowed forms of `<tag>`. The simplest is to just use the root language label or ISO code. The file will then be automatically loaded by `glossaries-extra` if the document has support for that language.

When combining these blocks of rules, remember to separate them with the appropriate character. For example:

```

sort-rule={\glsxtrcontrolrules
;\glsxtrspacerules
;\glsxtrnonprintablerules
;\glsxtrcombiningdiacriticrules
,\glsxtrhyphenrules
<\glsxtrgeneralpuncrules
<\glsxtrdigitrules
<\glsxtrfractionrules
<\glsxtrGeneralLatinIVrules
<\glsxtrMathItalicGreekIRules
}

```

`xtrcontrolrules` These are control characters that are usually placed at the start of a rule in the 'ignored characters' section. These control characters are unlikely to appear in any entry fields but are provided for completeness. `\string` is used for punctuation characters in case they've been made active.

```

12367 \newcommand*\glsxtrcontrolrules}{%
12368 \string'\glshex 200B\string'\string=\glshex 200C\string=\glshex 200D
12369 \string=\glshex 200E\string=\glshex 200F\string=\glshex 0000\string=\glshex 0001

```

```

12370 \string=\glshex 0002\string=\glshex 0003\string=\glshex 0004\string=\glshex 0005
12371 \string=\glshex 0006\string=\glshex 0007\string=\glshex 0008
12372 \string=\string'\glshex 0009\string'\string=\string'\glshex 000B\string'
12373 \string=\glshex 000E\string=\glshex 000F\string=\string'\glshex
12374 0010\string'\string=\glshex 0011
12375 \string=\glshex 0012\string=\glshex 0013\string=\glshex 0014\string=\glshex 0015
12376 \string=\glshex 0016\string=\glshex 0017\string=\glshex 0018\string=\glshex 0019
12377 \string=\glshex 001A\string=\glshex 001B\string=\glshex 001C\string=\glshex 001D
12378 \string=\glshex 001E\string=\glshex 001F\string=\glshex 007F\string=\glshex 0080
12379 \string=\glshex 0081\string=\glshex 0082\string=\glshex 0083\string=\glshex 0084
12380 \string=\glshex 0085\string=\glshex 0086\string=\glshex 0087\string=\glshex 0088
12381 \string=\glshex 0089\string=\glshex 008A\string=\glshex 008B\string=\glshex 008C
12382 \string=\glshex 008D\string=\glshex 008E\string=\glshex 008F\string=\glshex 0090
12383 \string=\glshex 0091\string=\glshex 0092\string=\glshex 0093\string=\glshex 0094
12384 \string=\glshex 0095\string=\glshex 0096\string=\glshex 0097\string=\glshex 0098
12385 \string=\glshex 0099\string=\glshex 009A\string=\glshex 009B\string=\glshex 009C
12386 \string=\glshex 009D\string=\glshex 009E\string=\glshex 009F
12387 }
12387 }
```

`lsxtrspacerules` These are space characters.

```

12388 \newcommand*{\glsxtrspacerules}{%
12389 \string' \string'\string;
12390 \string'\glshex 00A0\string'\string;
12391 \string'\glshex 2000\string'\string;
12392 \string'\glshex 2001\string'\string;
12393 \string'\glshex 2002\string'\string;
12394 \string'\glshex 2003\string'\string;
12395 \string'\glshex 2004\string'\string;
12396 \string'\glshex 2005\string'\string;
12397 \string'\glshex 2006\string'\string;
12398 \string'\glshex 2007\string'\string;
12399 \string'\glshex 2008\string'\string;
12400 \string'\glshex 2009\string'\string;
12401 \string'\glshex 200A\string'\string;
12402 \string'\glshex 3000\string'
12403 }
```

`nprintablerules` These are non-printable characters (BOM, tabs, line feed and carriage return).

```

12404 \newcommand*{\glsxtrnonprintablerules}{%
12405 \string'\glshex FFFF\string'\string;
12406 \string'\glshex 000A\string'\string;
12407 \string'\glshex 0009\string'\string;
12408 \string'\glshex 000C\string'\string;
12409 \string'\glshex 000B\string'
12410 }
```

`gdiacriticrules` Combining diacritic marks. This is split into multiple macros.

```

12411 \newcommand*{\glsxtrcombiningdiacriticrules}{%
12412 \glsxtrcombiningdiacriticIrules\string;
```

```
12413 \glsxtrcombiningdiacriticIIRules\string;
12414 \glsxtrcombiningdiacriticIIIRules\string;
12415 \glsxtrcombiningdiacriticIVrules
12416 }
```

diacriticIIRules First set of combining diacritic marks.

```
12417 \newcommand*\{\glsxtrcombiningdiacriticIIRules\{%
12418 \glshex 0301\string;% combining acute
12419 \glshex 0300\string;% combining grave
12420 \glshex 0306\string;% combining breve
12421 \glshex 0302\string;% combining circumflex
12422 \glshex 030C\string;% combining caron
12423 \glshex 030A\string;% combining ring
12424 \glshex 030D\string;% combining vertical line above
12425 \glshex 0308\string;% combining diaeresis
12426 \glshex 030B\string;% combining double acute
12427 \glshex 0303\string;% combining tilde
12428 \glshex 0307\string;% combining dot above
12429 \glshex 0304% combining macron
12430 }
```

diacriticIIIRules Second set of combining diacritic marks.

```
12431 \newcommand*\{\glsxtrcombiningdiacriticIIIRules\{%
12432 \glshex 0337\string;% combining short solidus overlay
12433 \glshex 0327\string;% combining cedilla
12434 \glshex 0328\string;% combining ogonek
12435 \glshex 0323\string;% combining dot below
12436 \glshex 0332\string;% combining low line
12437 \glshex 0305\string;% combining overline
12438 \glshex 0309\string;% combining hook above
12439 \glshex 030E\string;% combining double vertical line above
12440 \glshex 030F\string;% combining double grave accent
12441 \glshex 0310\string;% combining candrabindu
12442 \glshex 0311\string;% combining inverted breve
12443 \glshex 0312\string;% combining turned comma above
12444 \glshex 0313\string;% combining comma above
12445 \glshex 0314\string;% combining reversed comma above
12446 \glshex 0315\string;% combining comma above right
12447 \glshex 0316\string;% combining grave accent below
12448 \glshex 0317% combining acute accent below
12449 }
```

diacriticIIIrules Third set of combining diacritic marks.

```
12450 \newcommand*\{\glsxtrcombiningdiacriticIIIrules\{%
12451 \glshex 0318\string;% combining left tack below
12452 \glshex 0319\string;% combining right tack below
12453 \glshex 031A\string;% combining left angle above
12454 \glshex 031B\string;% combining horn
12455 \glshex 031C\string;% combining left half ring below
```

```

12456 \glshex 031D\string;% combining up tack below
12457 \glshex 031E\string;% combining down tack below
12458 \glshex 031F\string;% combining plus sign below
12459 \glshex 0320\string;% combining minus sign below
12460 \glshex 0321\string;% combining palatalized hook below
12461 \glshex 0322\string;% combining retroflex hook below
12462 \glshex 0324\string;% combining diaresis below
12463 \glshex 0325\string;% combining ring below
12464 \glshex 0326\string;% combining comma below
12465 \glshex 0329\string;% combining vertical line below
12466 \glshex 032A\string;% combining bridge below
12467 \glshex 032B\string;% combining inverted double arch below
12468 \glshex 032C\string;% combining caron below
12469 \glshex 032D\string;% combining circumflex accent below
12470 \glshex 032E\string;% combining breve below
12471 \glshex 032F\string;% combining inverted breve below
12472 \glshex 0330\string;% combining tilde below
12473 \glshex 0331\string;% combining macron below
12474 \glshex 0333\string;% combining double low line
12475 \glshex 0334\string;% combining tilde overlay
12476 \glshex 0335\string;% combining short stroke overlay
12477 \glshex 0336\string;% combining long stroke overlay
12478 \glshex 0338\string;% combining long solidus overlay
12479 \glshex 0339\string;% combining combining right half ring below
12480 \glshex 033A\string;% combining inverted bridge below
12481 \glshex 033B\string;% combining square below
12482 \glshex 033C\string;% combining seagull below
12483 \glshex 033D\string;% combining x above
12484 \glshex 033E\string;% combining vertical tilde
12485 \glshex 033F\string;% combining double overline
12486 \glshex 0342\string;% combining Greek perispomeni
12487 \glshex 0344\string;% combining Greek dialytika tonos
12488 \glshex 0345\string;% combining Greek ypogegrammeni
12489 \glshex 0360\string;% combining double tilde
12490 \glshex 0361\string;% combining double inverted breve
12491 \glshex 0483\string;% combining Cyrillic titlo
12492 \glshex 0484\string;% combining Cyrillic palatalization
12493 \glshex 0485\string;% combining Cyrillic dasia pneumata
12494 \glshex 0486% combining Cyrillic psili pneumata
12495 }

```

iacriticIVrules Fourth set of combining diacritic marks.

```

12496 \newcommand*{\glsxtrcombiningdiacriticIVrules}{%
12497 \glshex 20D0\string;% combining left harpoon above
12498 \glshex 20D1\string;% combining right harpoon above
12499 \glshex 20D2\string;% combining long vertical line overlay
12500 \glshex 20D3\string;% combining short vertical line overlay
12501 \glshex 20D4\string;% combining anticlockwise arrow above
12502 \glshex 20D5\string;% combining clockwise arrow above

```

```

12503 \glshex 20D6\string;% combining left arrow above
12504 \glshex 20D7\string;% combining right arrow above
12505 \glshex 20D8\string;% combining ring overlay
12506 \glshex 20D9\string;% combining clockwise ring overlay
12507 \glshex 20DA\string;% combining anticlockwise ring overlay
12508 \glshex 20DB\string;% combining three dots above
12509 \glshex 20DC\string;% combining four dots above
12510 \glshex 20DD\string;% combining enclosing circle
12511 \glshex 20DE\string;% combining enclosing square
12512 \glshex 20DF\string;% combining enclosing diamond
12513 \glshex 20E0\string;% combining enclosing circle backslash
12514 \glshex 20E1% combining left right arrow above
12515 }

```

sxtrhyphenrules Hyphens.

```

12516 \newcommand*\glsxtrhyphenrules}{%
12517 \string'\string-\string'\string;% ASCII hyphen
12518 \glshex 00AD\string;% soft hyphen
12519 \glshex 2010\string;% hyphen
12520 \glshex 2011\string;% non-breaking hyphen
12521 \glshex 2012\string;% figure dash
12522 \glshex 2013\string;% en dash
12523 \glshex 2014\string;% em dash
12524 \glshex 2015\string;% horizontal bar
12525 \glshex 2212\string=\glshex 207B\string=\glshex 208B% minus sign
12526 }

```

eneralpuncrules General punctuation.

```

12527 \newcommand*\glsxtrgeneralpuncrules}{%
12528 \glsxtrgeneralpuncIrules
12529 \string<\glsxtrcurrentryrules
12530 \string<\glsxtrgeneralpuncIIrules
12531 }

```

ernalpuncIrules First set of general punctuation.

```

12532 \newcommand*\glsxtrgeneralpuncIrules}{%
12533 \string'\glshex 005F\string'% underscore
12534 \string<\glshex 00AF% macron
12535 \string<\string'\glshex 002C\string'% comma
12536 \string<\string'\glshex 003B\string'% semi-colon
12537 \string<\string'\glshex 003A\string'% colon
12538 \string<\string'\glshex 0021\string'% exclamation mark
12539 \string<\glshex 00A1% inverted exclamation mark
12540 \string<\string'\glshex 003F\string'% question mark
12541 \string<\glshex 00BF% inverted question mark
12542 \string<\string'\glshex 002F\string'% solidus
12543 \string<\string'\glshex 002E\string'% full stop
12544 \string<\glshex 00B4% acute accent
12545 \string<\string'\glshex 0060\string'% grave accent

```

```

12546 \string<\string'\glshex 005E\string'% circumflex accent
12547 \string<\glshex 00A8% diaersis
12548 \string<\string'\glshex 007E\string'% tilde
12549 \string<\glshex 00B7% middle dot
12550 \string<\glshex 00B8% cedilla
12551 \string<\string'\glshex 0027\string'% straight apostrophe
12552 \string<\string'\glshex 0022\string'% straight double quote
12553 \string<\glshex 00AB% left guillemet
12554 \string<\glshex 00BB% right guillemet
12555 \string<\string'\glshex 0028\string'% left parenthesis
12556 \string=\glshex 207D\string=\glshex 208D% super/subscript left parenthesis
12557 \string<\string'\glshex 0029\string'% right parenthesis
12558 \string=\glshex 207E\string=\glshex 208E% super/subscript right parenthesis
12559 \string<\string'\glshex 005B\string'% left square bracket
12560 \string<\string'\glshex 005D\string'% right square bracket
12561 \string<\string'\glshex 007B\string'% left curly bracket
12562 \string<\string'\glshex 007D\string'% right curly bracket
12563 \string<\glshex 00A7% section sign
12564 \string<\glshex 00B6% pilcrow sign
12565 \string<\glshex 00A9% copyright sign
12566 \string<\glshex 00AE% registered sign
12567 \string<\string'\glshex 0040\string'% at sign
12568 }

```

trcurrencyrules General punctuation.

```

12569 \newcommand*\{\glsxtrcurrencyrules\}{%
12570 \glshex 00A4% currency sign
12571 \string<\glshex 0E3F% Thai currency symbol baht
12572 \string<\glshex 00A2% cent sign
12573 \string<\glshex 20A1% colon sign
12574 \string<\glshex 20A2% cruzeiro sign
12575 \string<\string'\glshex 0024\string'% dollar sign
12576 \string<\glshex 20AB% dong sign
12577 \string<\glshex 20AC% euro sign
12578 \string<\glshex 20A3% French franc sign
12579 \string<\glshex 20A4% lira sign
12580 \string<\glshex 20A5% mill sign
12581 \string<\glshex 20A6% naira sign
12582 \string<\glshex 20A7% peseta sign
12583 \string<\glshex 00A3% pound sign
12584 \string<\glshex 20A8% rupee sign
12585 \string<\glshex 20AA% new sheqel sign
12586 \string<\glshex 20A9% won sign
12587 \string<\glshex 00A5% yen sign
12588 }

```

eralpuncIIrules Second set of general punctuation.

```

12589 \newcommand*\{\glsxtrgeneralpuncIIrules\}{%
12590 \string'\glshex 002A\string'% asterisk

```

```

12591 \string<\string'\glshex 005C\string'% backslash
12592 \string<\string'\glshex 0026\string'% ampersand
12593 \string<\string'\glshex 0023\string'% hash sign
12594 \string<\string'\glshex 0025\string'% percent sign
12595 \string<\string'\glshex 002B\string'% plus sign
12596 \string=\glshex 207A\string=\glshex 208A% super/subscript plus sign
12597 \string<\glshex 00B1% plus-minus sign
12598 \string<\glshex 00F7% division sign
12599 \string<\glshex 00D7% multiplication sign
12600 \string<\string'\glshex 003C\string'% less-than sign
12601 \string<\string'\glshex 003D\string'% equals sign
12602 \string<\string'\glshex 003E\string'% greater-than sign
12603 \string<\glshex 00AC% not sign
12604 \string<\string'\glshex 007C\string'% vertical bar (pipe)
12605 \string<\glshex 00A6% broken bar
12606 \string<\glshex 00B0% degree sign
12607 \string<\glshex 00B5% micron sign
12608 }

```

eralLatinIrules Basic Latin alphabet.

```

12609 \newcommand*\glsxtrGeneralLatinIrules}{%
12610 \glsxtrLatinA
12611 \string<{b,B%
12612 \string<{c,C%
12613 \string<{d,D%
12614 \string<\glsxtrLatinE
12615 \string<{f,F%
12616 \string<{g,G%
12617 \string<\glsxtrLatinH
12618 \string<\glsxtrLatinI
12619 \string<{j,J%
12620 \string<\glsxtrLatinK
12621 \string<\glsxtrLatinL
12622 \string<\glsxtrLatinM
12623 \string<\glsxtrLatinN
12624 \string<\glsxtrLatinO
12625 \string<\glsxtrLatinP
12626 \string<{q,Q%
12627 \string<{r,R%
12628 \string<\glsxtrLatinS
12629 \string<\glsxtrLatinT
12630 \string<{u,U%
12631 \string<{v,V%
12632 \string<{w,W%
12633 \string<\glsxtrLatinX
12634 \string<{y,Y%
12635 \string<{z,Z
12636 }

```

ralLatinIIrules General Latin alphabet (eth between D and E, ß treated as SS).

```
12637 \newcommand*{\glsxtrGeneralLatinIIrules}{%
12638   \glsxtrLatinA
12639   \string<b,B%
12640   \string<c,C%
12641   \string<d,D%
12642   \string<\glsxtrLatinEth
12643   \string<\glsxtrLatinE
12644   \string<f,F%
12645   \string<g,G%
12646   \string<\glsxtrLatinH
12647   \string<\glsxtrLatinI
12648   \string<j,J%
12649   \string<\glsxtrLatinK
12650   \string<\glsxtrLatinL
12651   \string<\glsxtrLatinM
12652   \string<\glsxtrLatinN
12653   \string<\glsxtrLatinO
12654   \string<\glsxtrLatinP
12655   \string<q,Q%
12656   \string<r,R%
12657   \string<\glsxtrLatinS
12658   \string& SS \string, \glsxtrLatinEszettSs
12659   \string<\glsxtrLatinT
12660   \string<u,U%
12661   \string<v,V%
12662   \string<w,W%
12663   \string<\glsxtrLatinX
12664   \string<y,Y%
12665   \string<z,Z%
12666 }
```

allLatinIIIrules General Latin alphabet (eth between D and E, ß treated as SZ).

```
12667 \newcommand*{\glsxtrGeneralLatinIIIrules}{%
12668   \glsxtrLatinA
12669   \string<b,B%
12670   \string<c,C%
12671   \string<d,D%
12672   \string<\glsxtrLatinEth
12673   \string<\glsxtrLatinE
12674   \string<f,F%
12675   \string<g,G%
12676   \string<\glsxtrLatinH
12677   \string<\glsxtrLatinI
12678   \string<j,J%
12679   \string<\glsxtrLatinK
12680   \string<\glsxtrLatinL
12681   \string<\glsxtrLatinM
12682   \string<\glsxtrLatinN
```

```

12683 \string<\glsxtrLatinO
12684 \string<\glsxtrLatinP
12685 \string<q,Q%
12686 \string<r,R%
12687 \string<\glsxtrLatinS
12688 \string& SZ, \glsxtrLatinEszettSz
12689 \string<\glsxtrLatinT
12690 \string<u,U%
12691 \string<v,V%
12692 \string<w,W%
12693 \string<\glsxtrLatinX
12694 \string<y,Y%
12695 \string<z,Z%
12696 }

```

`ralLatinIVrules` General Latin alphabet (Æ treated as AE and Ø treated as OE, Þ treated as TH, ß treated as SS, eth between D and E).

```

12697 \newcommand*\glsxtrGeneralLatinIVrules}{%
12698 \glsxtrLatinA
12699 \string& AE , \glsxtrLatinAELigature
12700 \string<b,B%
12701 \string<c,C%
12702 \string<d,D%
12703 \string<\glsxtrLatinEth
12704 \string<\glsxtrLatinE
12705 \string<f,F%
12706 \string<g,G%
12707 \string<\glsxtrLatinH
12708 \string<\glsxtrLatinI
12709 \string<j,J%
12710 \string<\glsxtrLatinK
12711 \string<\glsxtrLatinL
12712 \string<\glsxtrLatinM
12713 \string<\glsxtrLatinN
12714 \string<\glsxtrLatinO
12715 \string& OE , \glsxtrLatinOELigature
12716 \string<\glsxtrLatinP
12717 \string<q,Q%
12718 \string<r,R%
12719 \string<\glsxtrLatinS
12720 \string& SS , \glsxtrLatinEszettSs
12721 \string<\glsxtrLatinT
12722 \string& th =\glshex 00DE
12723 \string& TH =\glshex 00FE
12724 \string<u,U%
12725 \string<v,V%
12726 \string<w,W%
12727 \string<\glsxtrLatinX
12728 \string<y,Y%

```

```
12729 \string<z,Z%
12730 }
```

eralLatinVrules General Latin alphabet (eth between D and E, ß treated as SS, Þ treated as TH).

```
12731 \newcommand*{\glsxtrGeneralLatinVrules}{%
12732 \glsxtrLatinA
12733 \string<b,B%
12734 \string<c,C%
12735 \string<d,D%
12736 \string<\glsxtrLatinEth
12737 \string<\glsxtrLatinE
12738 \string<f,F%
12739 \string<g,G%
12740 \string<\glsxtrLatinH
12741 \string<\glsxtrLatinI
12742 \string<j,J%
12743 \string<\glsxtrLatinK
12744 \string<\glsxtrLatinL
12745 \string<\glsxtrLatinM
12746 \string<\glsxtrLatinN
12747 \string<\glsxtrLatinO
12748 \string<\glsxtrLatinP
12749 \string<q,Q%
12750 \string<r,R%
12751 \string<\glsxtrLatinS
12752 \string& SS , \glsxtrLatinEszettSs
12753 \string<\glsxtrLatinT
12754 \string& th =\glshex 00DE
12755 \string& TH =\glshex 00FE
12756 \string<u,U%
12757 \string<v,V%
12758 \string<w,W%
12759 \string<\glsxtrLatinX
12760 \string<y,Y%
12761 \string<z,Z%
12762 }
```

ralLatinVIrules General Latin alphabet (eth between D and E, ß treated as SZ, Þ treated as TH).

```
12763 \newcommand*{\glsxtrGeneralLatinVIrules}{%
12764 \glsxtrLatinA
12765 \string<b,B%
12766 \string<c,C%
12767 \string<d,D%
12768 \string<\glsxtrLatinEth
12769 \string<\glsxtrLatinE
12770 \string<f,F%
12771 \string<g,G%
12772 \string<\glsxtrLatinH
12773 \string<\glsxtrLatinI
```

```

12774 \string<j,J%
12775 \string<\glsxtrLatinK
12776 \string<\glsxtrLatinL
12777 \string<\glsxtrLatinM
12778 \string<\glsxtrLatinN
12779 \string<\glsxtrLatinO
12780 \string<\glsxtrLatinP
12781 \string<q,Q%
12782 \string<r,R%
12783 \string<\glsxtrLatinS
12784 \string& SZ , \glsxtrLatinEszettSz
12785 \string<\glsxtrLatinT
12786 \string& th =\glshex 00DE
12787 \string& TH =\glshex 00FE
12788 \string<u,U%
12789 \string<v,V%
12790 \string<w,W%
12791 \string<\glsxtrLatinX
12792 \string<y,Y%
12793 \string<z,Z%
12794 }

```

`allLatinVIIrules` General Latin alphabet (\textAE between A and B, eth between D and E, insular G as G, \textCE between O and P, long S equivalent to S, \textP between T and U and wynn as W).

```

12795 \newcommand*\glsxtrGeneralLatinVIIrules}{%
12796 \glsxtrLatinA
12797 \string<\glsxtrLatinAEligature
12798 \string<b,B%
12799 \string<c,C%
12800 \string<d,D%
12801 \string<\glsxtrLatinEth
12802 \string<\glsxtrLatinE
12803 \string<f,F%
12804 \string<\glsxtrLatinInsularG
12805 \string<\glsxtrLatinH
12806 \string<\glsxtrLatinI
12807 \string<j,J%
12808 \string<\glsxtrLatinK
12809 \string<\glsxtrLatinL
12810 \string<\glsxtrLatinM
12811 \string<\glsxtrLatinN
12812 \string<\glsxtrLatinO
12813 \string<\glsxtrLatinOEligature
12814 \string<\glsxtrLatinP
12815 \string<q,Q%
12816 \string<r,R%
12817 \string<\glshex 017F=\glsxtrLatinS % s and long s
12818 \string<\glsxtrLatinT
12819 \string<\glsxtrLatinThorn

```

```

12820 \string<u,U%
12821 \string<v,V%
12822 \string< w\string=\glshex 01BF, W\string=\glshex 01F7
12823 \string<\glsxtrLatinX
12824 \string<y,Y%
12825 \string<z,Z%
12826 }

```

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).

```

12827 \newcommand*\glsxtrGeneralLatinVIIIRules}{%
12828 \glsxtrLatinA
12829 \string& AE , \glsxtrLatinAELigature
12830 \string<b,B%
12831 \string<c,C%
12832 \string<\glshex 00F0\string;d,\glshex 00D0\string;D% D and eth
12833 \string<\glsxtrLatinE
12834 \string<f,F%
12835 \string<g,G%
12836 \string<\glsxtrLatinH
12837 \string<\glsxtrLatinI
12838 \string<j,J%
12839 \string<\glsxtrLatinK
12840 \string<\glshex 0142\string=\glsxtrLatinL\string=\glshex 0141% L and \L
12841 \string<\glsxtrLatinM
12842 \string<\glsxtrLatinN
12843 \string<\glshex 00F8\string=\glsxtrLatinO\string=\glshex 00D8% O and \O
12844 \string& OE , \glsxtrLatinOELigature
12845 \string<\glsxtrLatinP
12846 \string<q,Q%
12847 \string<r,R%
12848 \string<\glsxtrLatinS
12849 \string& SS , \glsxtrLatinEszettSs
12850 \string<\glsxtrLatinT
12851 \string& th =\glshex 00DE
12852 \string& TH =\glshex 00FE
12853 \string<u,U%
12854 \string<v,V%
12855 \string<w,W%
12856 \string<\glsxtrLatinX
12857 \string<y,Y%
12858 \string<z,Z%
12859 }

```

```

\glsxtrLatinA
12860 \newcommand*\glsxtrLatinA}{%
12861 a\string=\glshex 00AA\string=\glshex 2090,A
12862 }

```

```

\glsxtrLatinE
12863 \newcommand*\glsxtrLatinE{%
12864   e\string=\glshex 2091,E
12865 }

\glsxtrLatinH
12866 \newcommand*\glsxtrLatinH{%
12867   h\string=\glshex 2095,H
12868 }

\glsxtrLatinI
12869 \newcommand*\glsxtrLatinI{%
12870   i\string=\glshex 2071,I
12871 }

\glsxtrLatinK
12872 \newcommand*\glsxtrLatinK{%
12873   k\string=\glshex 2096,K
12874 }

\glsxtrLatinL
12875 \newcommand*\glsxtrLatinL{%
12876   l\string=\glshex 2097,L
12877 }

\glsxtrLatinM
12878 \newcommand*\glsxtrLatinM{%
12879   m\string=\glshex 2098,M
12880 }

\glsxtrLatinN
12881 \newcommand*\glsxtrLatinN{%
12882   n\string=\glshex 207F\string=\glshex 2099,N
12883 }

\glsxtrLatinO
12884 \newcommand*\glsxtrLatinO{%
12885   o\string=\glshex 00BA\string=\glshex 2092,O
12886 }

\glsxtrLatinP
12887 \newcommand*\glsxtrLatinP{%
12888   p\string=\glshex 209A,P
12889 }

\glsxtrLatinS
12890 \newcommand*\glsxtrLatinS{%
12891   s\string=\glshex 209B,S
12892 }

```

```

\glsxtrLatinT
12893 \newcommand*{\glsxtrLatinT}{%
12894   t\string=\glshex 209C,T
12895 }

\glsxtrLatinX
12896 \newcommand*{\glsxtrLatinX}{%
12897   x\string=\glshex 2093,X
12898 }

lsxtrLatinSchwa Latin schwa (lower case, subscript and upper case).
12899 \newcommand*{\glsxtrLatinSchwa}{%
12900   \glshex 0259\string=\glshex 2094,\glshex 018F
12901 }

trLatinEszettSs
12902 \newcommand*{\glsxtrLatinEszettSs}{%
12903   \glshex 00DF% eszett
12904   \string=\glshex 017Fs % long S s
12905 }

trLatinEszettSz
12906 \newcommand*{\glsxtrLatinEszettSz}{%
12907   \glshex 00DF% eszett
12908   \string= \glshex 017Fz % long S z
12909 }

\glsxtrLatinEth
12910 \newcommand*{\glsxtrLatinEth}{%
12911   \glshex 00F0,\glshex 00D0% eth
12912 }

lsxtrLatinThorn
12913 \newcommand*{\glsxtrLatinThorn}{%
12914   \glshex 00FE,\glshex 00DE% thorn
12915 }

LatinAEligature
12916 \newcommand*{\glsxtrLatinAEligature}{%
12917   \glshex 00E6,\glshex 00C6% AE-ligature
12918 }

LatinOEligature
12919 \newcommand*{\glsxtrLatinOEligature}{%
12920   \glshex 0153,\glshex 0152% OE-ligature
12921 }

```

```
\glsxtrLatinAA
12922 \newcommand*{\glsxtrLatinAA}{%
12923  \glshex 00E5=a\glshex 030A,% \aa
12924  \glshex 00C5=A\glshex 030A% \AA
12925 }
```

```
glsxtrLatinWynn
12926 \newcommand*{\glsxtrLatinWynn}{%
12927  \glshex 01BF,\glshex 01F7% wynn
12928 }
```

```
trLatinInsularG
12929 \newcommand*{\glsxtrLatinInsularG}{%
12930  \glshex 1D79,\glshex A77D% insular G
12931  \string; g, G
12932 }
```

```
sxtrLatinOslash
12933 \newcommand*{\glsxtrLatinOslash}{%
12934  \glshex 00F8,\glshex 00D8% \o, \O
12935 }
```

```
sxtrLatinLslash
12936 \newcommand*{\glsxtrLatinLslash}{%
12937  \glshex 0142,\glshex 0141% \l, \L
12938 }
```

thUpGreekIrules Includes digamma between epsilon and zeta.

```
12939 \newcommand*{\glsxtrMathUpGreekIrules}{%
12940  \glsxtrUpAlpha
12941  \string<\glsxtrUpBeta
12942  \string<\glsxtrUpGamma
12943  \string<\glsxtrUpDelta
12944  \string<\glsxtrUpEpsilon
12945  \string<\glsxtrUpDigamma
12946  \string<\glsxtrUpZeta
12947  \string<\glsxtrUpEta
12948  \string<\glsxtrUpTheta
12949  \string<\glsxtrUpIota
12950  \string<\glsxtrUpKappa
12951  \string<\glsxtrUpLambda
12952  \string<\glsxtrUpMu
12953  \string<\glsxtrUpNu
12954  \string<\glsxtrUpXi
12955  \string<\glsxtrUpOmicron
12956  \string<\glsxtrUpPi
12957  \string<\glsxtrUpRho
12958  \string<\glsxtrUpSigma
```

```

12959 \string<\glsxtrUpTau
12960 \string<\glsxtrUpUpsilon
12961 \string<\glsxtrUpPhi
12962 \string<\glsxtrUpChi
12963 \string<\glsxtrUpPsi
12964 \string<\glsxtrUpOmega
12965 }

```

`hUpGreekIIrules` Doesn't include digamma.

```

12966 \newcommand*\glsxtrMathUpGreekIIrules}{%
12967 \glsxtrUpAlpha
12968 \string<\glsxtrUpBeta
12969 \string<\glsxtrUpGamma
12970 \string<\glsxtrUpDelta
12971 \string<\glsxtrUpEpsilon
12972 \string<\glsxtrUpZeta
12973 \string<\glsxtrUpEta
12974 \string<\glsxtrUpTheta
12975 \string<\glsxtrUpIota
12976 \string<\glsxtrUpKappa
12977 \string<\glsxtrUpLambda
12978 \string<\glsxtrUpMu
12979 \string<\glsxtrUpNu
12980 \string<\glsxtrUpXi
12981 \string<\glsxtrUpOmicron
12982 \string<\glsxtrUpPi
12983 \string<\glsxtrUpRho
12984 \string<\glsxtrUpSigma
12985 \string<\glsxtrUpTau
12986 \string<\glsxtrUpUpsilon
12987 \string<\glsxtrUpPhi
12988 \string<\glsxtrUpChi
12989 \string<\glsxtrUpPsi
12990 \string<\glsxtrUpOmega
12991 }

```

`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.

```

12992 \newcommand*\glsxtrMathItalicGreekIrules}{%
12993 \glsxtrMathItalicAlpha
12994 \string<\glsxtrMathItalicBeta
12995 \string<\glsxtrMathItalicGamma
12996 \string<\glsxtrMathItalicDelta
12997 \string<\glsxtrMathItalicEpsilon
12998 \string<\glsxtrUpDigamma
12999 \string<\glsxtrMathItalicZeta
13000 \string<\glsxtrMathItalicEta
13001 \string<\glsxtrMathItalicTheta
13002 \string<\glsxtrMathItalicIota

```

```

13003 \string<\glsxtrMathItalicKappa
13004 \string<\glsxtrMathItalicLambda
13005 \string<\glsxtrMathItalicMu
13006 \string<\glsxtrMathItalicNu
13007 \string<\glsxtrMathItalicXi
13008 \string<\glsxtrMathItalicOmicron
13009 \string<\glsxtrMathItalicPi
13010 \string<\glsxtrMathItalicRho
13011 \string<\glsxtrMathItalicSigma
13012 \string<\glsxtrMathItalicTau
13013 \string<\glsxtrMathItalicUpsilon
13014 \string<\glsxtrMathItalicPhi
13015 \string<\glsxtrMathItalicChi
13016 \string<\glsxtrMathItalicPsi
13017 \string<\glsxtrMathItalicOmega
13018 }

```

`licGreekIIrules` Doesn't include digamma.

```

13019 \newcommand*\glsxtrMathItalicGreekIIrules}{%
13020 \glsxtrMathItalicAlpha
13021 \string<\glsxtrMathItalicBeta
13022 \string<\glsxtrMathItalicGamma
13023 \string<\glsxtrMathItalicDelta
13024 \string<\glsxtrMathItalicEpsilon
13025 \string<\glsxtrMathItalicZeta
13026 \string<\glsxtrMathItalicEta
13027 \string<\glsxtrMathItalicTheta
13028 \string<\glsxtrMathItalicIota
13029 \string<\glsxtrMathItalicKappa
13030 \string<\glsxtrMathItalicLambda
13031 \string<\glsxtrMathItalicMu
13032 \string<\glsxtrMathItalicNu
13033 \string<\glsxtrMathItalicXi
13034 \string<\glsxtrMathItalicOmicron
13035 \string<\glsxtrMathItalicPi
13036 \string<\glsxtrMathItalicRho
13037 \string<\glsxtrMathItalicSigma
13038 \string<\glsxtrMathItalicTau
13039 \string<\glsxtrMathItalicUpsilon
13040 \string<\glsxtrMathItalicPhi
13041 \string<\glsxtrMathItalicChi
13042 \string<\glsxtrMathItalicPsi
13043 \string<\glsxtrMathItalicOmega
13044 }

```

`upperGreekIrules` Upper case only (includes upright digamma).

```

13045 \newcommand*\glsxtrMathItalicUpperGreekIrules}{%
13046 \glshex 1D6E2% upper case alpha (maths italic)
13047 \string<\glshex 1D6E3% upper case beta (maths italic)

```

```

13048 \string<\glshex 1D6E4% upper case gamma (maths italic)
13049 \string<\glshex 1D6E5% upper case delta (maths italic)
13050 \string<\glshex 1D6E6% upper case epsilon (maths italic)
13051 \string<\glshex 03DC% upper case digamma
13052 \string<\glshex 1D6E7% upper case zeta (maths italic)
13053 \string<\glshex 1D6E8% upper case eta (maths italic)
13054 \string<\glshex 1D6E9% upper case theta (maths italic)
13055 \string=\glshex 1D6F3% upper case theta variant (maths italic)
13056 \string<\glshex 1D6EA% upper case iota (maths italic)
13057 \string<\glshex 1D6EB% upper case kappa (maths italic)
13058 \string<\glshex 1D6EC% upper case lambda (maths italic)
13059 \string<\glshex 1D6ED% upper case mu (maths italic)
13060 \string<\glshex 1D6EE% upper case nu (maths italic)
13061 \string<\glshex 1D6EF% upper case xi (maths italic)
13062 \string<\glshex 1D6F0% upper case omicron (maths italic)
13063 \string<\glshex 1D6F1% upper case pi (maths italic)
13064 \string<\glshex 1D6F2% upper case rho (maths italic)
13065 \string<\glshex 1D6F4% upper case sigma (maths italic)
13066 \string<\glshex 1D6F5% upper case tau (maths italic)
13067 \string<\glshex 1D6F6% upper case upsilon (maths italic)
13068 \string<\glshex 1D6F7% upper case phi (maths italic)
13069 \string<\glshex 1D6F8% upper case chi (maths italic)
13070 \string<\glshex 1D6F9% upper case psi (maths italic)
13071 \string<\glshex 1D6FA% upper case omega (maths italic)
13072 }

```

`perGreekIIrules` Upper case only (doesn't include upright digamma).

```

13073 \newcommand*\glsxtrMathItalicUpperGreekIIrules}{%
13074 \glshex 1D6E2% upper case alpha (maths italic)
13075 \string<\glshex 1D6E3% upper case beta (maths italic)
13076 \string<\glshex 1D6E4% upper case gamma (maths italic)
13077 \string<\glshex 1D6E5% upper case delta (maths italic)
13078 \string<\glshex 1D6E6% upper case epsilon (maths italic)
13079 \string<\glshex 1D6E7% upper case zeta (maths italic)
13080 \string<\glshex 1D6E8% upper case eta (maths italic)
13081 \string<\glshex 1D6E9% upper case theta (maths italic)
13082 \string=\glshex 1D6F3% upper case theta variant (maths italic)
13083 \string<\glshex 1D6EA% upper case iota (maths italic)
13084 \string<\glshex 1D6EB% upper case kappa (maths italic)
13085 \string<\glshex 1D6EC% upper case lambda (maths italic)
13086 \string<\glshex 1D6ED% upper case mu (maths italic)
13087 \string<\glshex 1D6EE% upper case nu (maths italic)
13088 \string<\glshex 1D6EF% upper case xi (maths italic)
13089 \string<\glshex 1D6F0% upper case omicron (maths italic)
13090 \string<\glshex 1D6F1% upper case pi (maths italic)
13091 \string<\glshex 1D6F2% upper case rho (maths italic)
13092 \string<\glshex 1D6F4% upper case sigma (maths italic)
13093 \string<\glshex 1D6F5% upper case tau (maths italic)
13094 \string<\glshex 1D6F6% upper case upsilon (maths italic)

```

```

13095 \string<\glshex 1D6F7% upper case phi (maths italic)
13096 \string<\glshex 1D6F8% upper case chi (maths italic)
13097 \string<\glshex 1D6F9% upper case psi (maths italic)
13098 \string<\glshex 1D6FA% upper case omega (maths italic)
13099 }

```

`owerGreekIrules` Lower case only (includes upright digamma).

```

13100 \newcommand*\glsxtrMathItalicLowerGreekIrules}{%
13101 \glshex 1D6FC% lower case alpha (maths italic)
13102 \string<\glshex 1D6FD% lower case beta (maths italic)
13103 \string<\glshex 1D6FE% lower case gamma (maths italic)
13104 \string<\glshex 1D6FF% lower case delta (maths italic)
13105 \string<\glshex 1D700% lower case epsilon (maths italic)
13106 \string=\glshex 1D716% lower case epsilon variant (maths italic)
13107 \string<\glshex 03DD% lower case digamma
13108 \string<\glshex 1D701% lower case zeta (maths italic)
13109 \string<\glshex 1D702% lower case eta (maths italic)
13110 \string<\glshex 1D703% lower case theta (maths italic)
13111 \string=\glshex 1D717% lower case theta variant (maths italic)
13112 \string<\glshex 1D704% lower case iota (maths italic)
13113 \string<\glshex 1D705% lower case kappa (maths italic)
13114 \string=\glshex 1D718% lower case kappa variant (maths italic)
13115 \string<\glshex 1D706% lower case lambda (maths italic)
13116 \string<\glshex 1D707% lower case mu (maths italic)
13117 \string<\glshex 1D708% lower case nu (maths italic)
13118 \string<\glshex 1D709% lower case xi (maths italic)
13119 \string<\glshex 1D70A% lower case omicron (maths italic)
13120 \string<\glshex 1D70B% lower case pi (maths italic)
13121 \string=\glshex 1D71B% lower case pi variant (maths italic)
13122 \string<\glshex 1D70C% lower case rho (maths italic)
13123 \string=\glshex 1D71A% lower case rho variant (maths italic)
13124 \string<\glshex 1D70D% lower case final sigma (maths italic)
13125 \string=\glshex 1D70E% lower case sigma (maths italic)
13126 \string<\glshex 1D70F% lower case tau (maths italic)
13127 \string<\glshex 1D710% lower case upsilon (maths italic)
13128 \string<\glshex 1D711% lower case phi (maths italic)
13129 \string=\glshex 1D719% lower case phi variant (maths italic)
13130 \string<\glshex 1D712% lower case chi (maths italic)
13131 \string<\glshex 1D713% lower case psi (maths italic)
13132 \string<\glshex 1D714% lower case omega (maths italic)
13133 }

```

`werGreekIIrules` Lower case only (doesn't includes upright digamma).

```

13134 \newcommand*\glsxtrMathItalicLowerGreekIIrules}{%
13135 \glshex 1D6FC% lower case alpha (maths italic)
13136 \string<\glshex 1D6FD% lower case beta (maths italic)
13137 \string<\glshex 1D6FE% lower case gamma (maths italic)
13138 \string<\glshex 1D6FF% lower case delta (maths italic)
13139 \string<\glshex 1D700% lower case epsilon (maths italic)

```

```

13140 \string=\glshex 1D716% lower case epsilon variant (maths italic)
13141 \string<\glshex 1D701% lower case zeta (maths italic)
13142 \string<\glshex 1D702% lower case eta (maths italic)
13143 \string<\glshex 1D703% lower case theta (maths italic)
13144 \string=\glshex 1D717% lower case theta variant (maths italic)
13145 \string<\glshex 1D704% lower case iota (maths italic)
13146 \string<\glshex 1D705% lower case kappa (maths italic)
13147 \string=\glshex 1D718% lower case kappa variant (maths italic)
13148 \string<\glshex 1D706% lower case lambda (maths italic)
13149 \string<\glshex 1D707% lower case mu (maths italic)
13150 \string<\glshex 1D708% lower case nu (maths italic)
13151 \string<\glshex 1D709% lower case xi (maths italic)
13152 \string<\glshex 1D70A% lower case omicron (maths italic)
13153 \string<\glshex 1D70B% lower case pi (maths italic)
13154 \string=\glshex 1D71B% lower case pi variant (maths italic)
13155 \string<\glshex 1D70C% lower case rho (maths italic)
13156 \string=\glshex 1D71A% lower case rho variant (maths italic)
13157 \string<\glshex 1D70D% lower case final sigma (maths italic)
13158 \string=\glshex 1D70E% lower case sigma (maths italic)
13159 \string<\glshex 1D70F% lower case tau (maths italic)
13160 \string<\glshex 1D710% lower case upsilon (maths italic)
13161 \string<\glshex 1D711% lower case phi (maths italic)
13162 \string=\glshex 1D719% lower case phi variant (maths italic)
13163 \string<\glshex 1D712% lower case chi (maths italic)
13164 \string<\glshex 1D713% lower case psi (maths italic)
13165 \string<\glshex 1D714% lower case omega (maths italic)
13166 }

```

MathGreekIrules Includes both upright and italic with digamma between epsilon and zeta.

```

13167 \newcommand*\glsxtrMathGreekIrules}{%
13168 \glsxtrMathItalicAlpha
13169 \string;\glsxtrUpAlpha
13170 \string<\glsxtrMathItalicBeta
13171 \string;\glsxtrUpBeta
13172 \string<\glsxtrMathItalicGamma
13173 \string;\glsxtrUpGamma
13174 \string<\glsxtrMathItalicDelta
13175 \string;\glsxtrUpDelta
13176 \string<\glsxtrMathItalicEpsilon
13177 \string;\glsxtrUpEpsilon
13178 \string<\glsxtrUpDigamma
13179 \string<\glsxtrMathItalicZeta
13180 \string;\glsxtrUpZeta
13181 \string<\glsxtrMathItalicEta
13182 \string;\glsxtrUpEta
13183 \string<\glsxtrMathItalicTheta
13184 \string;\glsxtrUpTheta
13185 \string<\glsxtrMathItalicIota
13186 \string;\glsxtrUpIota

```

```

13187 \string<\glsxtrMathItalicKappa
13188 \string; \glsxtrUpKappa
13189 \string<\glsxtrMathItalicLambda
13190 \string; \glsxtrUpLambda
13191 \string<\glsxtrMathItalicMu
13192 \string; \glsxtrUpMu
13193 \string<\glsxtrMathItalicNu
13194 \string; \glsxtrUpNu
13195 \string<\glsxtrMathItalicXi
13196 \string; \glsxtrUpXi
13197 \string<\glsxtrMathItalicOmicron
13198 \string; \glsxtrUpOmicron
13199 \string<\glsxtrMathItalicPi
13200 \string; \glsxtrUpPi
13201 \string<\glsxtrMathItalicRho
13202 \string; \glsxtrUpRho
13203 \string<\glsxtrMathItalicSigma
13204 \string; \glsxtrUpSigma
13205 \string<\glsxtrMathItalicTau
13206 \string; \glsxtrUpTau
13207 \string<\glsxtrMathItalicUpsilon
13208 \string; \glsxtrUpUpsilon
13209 \string<\glsxtrMathItalicPhi
13210 \string; \glsxtrUpPhi
13211 \string<\glsxtrMathItalicChi
13212 \string; \glsxtrUpChi
13213 \string<\glsxtrMathItalicPsi
13214 \string; \glsxtrUpPsi
13215 \string<\glsxtrMathItalicOmega
13216 \string; \glsxtrUpOmega
13217 }

```

`athGreekIIrules` Includes both upright and italic (digamma not included).

```

13218 \newcommand*\glsxtrMathGreekIIrules}{%
13219 \glsxtrMathItalicAlpha
13220 \string; \glsxtrUpAlpha
13221 \string<\glsxtrMathItalicBeta
13222 \string; \glsxtrUpBeta
13223 \string<\glsxtrMathItalicGamma
13224 \string; \glsxtrUpGamma
13225 \string<\glsxtrMathItalicDelta
13226 \string; \glsxtrUpDelta
13227 \string<\glsxtrMathItalicEpsilon
13228 \string; \glsxtrUpEpsilon
13229 \string<\glsxtrMathItalicZeta
13230 \string; \glsxtrUpZeta
13231 \string<\glsxtrMathItalicEta
13232 \string; \glsxtrUpEta
13233 \string<\glsxtrMathItalicTheta

```

```

13234 \string;\glsxtrUpTheta
13235 \string<\glsxtrMathItalicIota
13236 \string;\glsxtrUpIota
13237 \string<\glsxtrMathItalicKappa
13238 \string;\glsxtrUpKappa
13239 \string<\glsxtrMathItalicLambda
13240 \string;\glsxtrUpLambda
13241 \string<\glsxtrMathItalicMu
13242 \string;\glsxtrUpMu
13243 \string<\glsxtrMathItalicNu
13244 \string;\glsxtrUpNu
13245 \string<\glsxtrMathItalicXi
13246 \string;\glsxtrUpXi
13247 \string<\glsxtrMathItalicOmicron
13248 \string;\glsxtrUpOmicron
13249 \string<\glsxtrMathItalicPi
13250 \string;\glsxtrUpPi
13251 \string<\glsxtrMathItalicRho
13252 \string;\glsxtrUpRho
13253 \string<\glsxtrMathItalicSigma
13254 \string;\glsxtrUpSigma
13255 \string<\glsxtrMathItalicTau
13256 \string;\glsxtrUpTau
13257 \string<\glsxtrMathItalicUpsilon
13258 \string;\glsxtrUpUpsilon
13259 \string<\glsxtrMathItalicPhi
13260 \string;\glsxtrUpPhi
13261 \string<\glsxtrMathItalicChi
13262 \string;\glsxtrUpChi
13263 \string<\glsxtrMathItalicPsi
13264 \string;\glsxtrUpPsi
13265 \string<\glsxtrMathItalicOmega
13266 \string;\glsxtrUpOmega
13267 }

```

\glsxtrUpAlpha

```

13268 \newcommand*{\glsxtrUpAlpha}{%
13269 \glshex 03B1,% lower case alpha
13270 \glshex 0391% upper case alpha
13271 }

```

\glsxtrUpBeta

```

13272 \newcommand*{\glsxtrUpBeta}{%
13273 \glshex 03B2,% lower case beta
13274 \glshex 0392% upper case beta
13275 }

```

\glsxtrUpGamma

```

13276 \newcommand*{\glsxtrUpGamma}{%

```

```

13277 \glsxtrUpGamma
13278 \glsxtrUpGamma
13279 }

\glsxtrUpDelta
13280 \newcommand*{\glsxtrUpDelta}{%
13281 \glsxtrUpDelta
13282 \glsxtrUpDelta
13283 }

glsxtrUpEpsilon
13284 \newcommand*{\glsxtrUpEpsilon}{%
13285 \glsxtrUpEpsilon
13286 \string=\glsxtrUpEpsilon
13287 \glsxtrUpEpsilon
13288 }

glsxtrUpDigamma
13289 \newcommand*{\glsxtrUpDigamma}{%
13290 \glsxtrUpDigamma
13291 \glsxtrUpDigamma
13292 }

\glsxtrUpZeta
13293 \newcommand*{\glsxtrUpZeta}{%
13294 \glsxtrUpZeta
13295 \glsxtrUpZeta
13296 }

\glsxtrUpEta
13297 \newcommand*{\glsxtrUpEta}{%
13298 \glsxtrUpEta
13299 \glsxtrUpEta
13300 }

\glsxtrUpTheta
13301 \newcommand*{\glsxtrUpTheta}{%
13302 \glsxtrUpTheta
13303 \string=\glsxtrUpTheta
13304 \glsxtrUpTheta
13305 }

\glsxtrUpIota
13306 \newcommand*{\glsxtrUpIota}{%
13307 \glsxtrUpIota
13308 \glsxtrUpIota
13309 }

```

```

\glsxtrUpKappa
13310 \newcommand*{\glsxtrUpKappa}{%
13311 \glshex{03BA} lower case kappa
13312 \string=\glshex{03F0}, lower case kappa variant
13313 \glshex{039A} upper case kappa
13314 }

\glsxtrUpLambda
13315 \newcommand*{\glsxtrUpLambda}{%
13316 \glshex{03BB}, lower lambda
13317 \glshex{039B} upper case lambda
13318 }

\glsxtrUpMu
13319 \newcommand*{\glsxtrUpMu}{%
13320 \glshex{03BC}, lower case mu
13321 \glshex{039C} upper case mu
13322 }

\glsxtrUpNu
13323 \newcommand*{\glsxtrUpNu}{%
13324 \glshex{03BD}, lower case nu
13325 \glshex{039D} upper case nu
13326 }

\glsxtrUpXi
13327 \newcommand*{\glsxtrUpXi}{%
13328 \glshex{03BE}, lower case xi
13329 \glshex{039E} upper case xi
13330 }

glsxtrUpOmicron
13331 \newcommand*{\glsxtrUpOmicron}{%
13332 \glshex{03BF}, lower case omicron
13333 \glshex{039F} upper case omicron
13334 }

\glsxtrUpPi
13335 \newcommand*{\glsxtrUpPi}{%
13336 \glshex{03C0} lower case pi
13337 \string=\glshex{03D6}, lower case pi variant
13338 \glshex{03A0} upper case pi
13339 }

\glsxtrUpRho
13340 \newcommand*{\glsxtrUpRho}{%
13341 \glshex{03C1} lower case rho
13342 \string=\glshex{03F1}, lower case rho variant

```

```

13343 \glshex 03A1% upper case rho
13344 }

\glsxtrUpSigma
13345 \newcommand*\glsxtrUpSigma{%
13346 \glshex 03C2% lower case sigma
13347 \string=\glshex 03C3,% lower case sigma
13348 \glshex 03A3% upper case sigma
13349 }

\glsxtrUpTau
13350 \newcommand*\glsxtrUpTau{%
13351 \glshex 03C4,% lower case tau
13352 \glshex 03A4% upper case tau
13353 }

glsxtrUpUpsilon
13354 \newcommand*\glsxtrUpUpsilon{%
13355 \glshex 03C5,% lower case upsilon
13356 \glshex 03A5% upper case upsilon
13357 }

\glsxtrUpPhi
13358 \newcommand*\glsxtrUpPhi{%
13359 \glshex 03C6% lower case phi
13360 \string=\glshex 03D5,% lower case phi variant
13361 \glshex 03A6% upper case phi
13362 }

\glsxtrUpChi
13363 \newcommand*\glsxtrUpChi{%
13364 \glshex 03C7,% lower case chi
13365 \glshex 03A7% upper case chi
13366 }

\glsxtrUpPsi
13367 \newcommand*\glsxtrUpPsi{%
13368 \glshex 03C8,% lower case psi
13369 \glshex 03A8% upper case psi
13370 }

\glsxtrUpOmega
13371 \newcommand*\glsxtrUpOmega{%
13372 \glshex 03C9,% lower case omega
13373 \glshex 03A9% upper case omega
13374 }

```

```

MathItalicAlpha
13375 \newcommand*{\glsxtrMathItalicAlpha}{%
13376  \glshex 1D6FC,% lower case alpha (maths italic)
13377  \glshex 1D6E2% upper case alpha (maths italic)
13378 }

rMathItalicBeta
13379 \newcommand*{\glsxtrMathItalicBeta}{%
13380  \glshex 1D6FD,% lower case beta (maths italic)
13381  \glshex 1D6E3% upper case beta (maths italic)
13382 }

MathItalicGamma
13383 \newcommand*{\glsxtrMathItalicGamma}{%
13384  \glshex 1D6FE,% lower case gamma (maths italic)
13385  \glshex 1D6E4% upper case gamma (maths italic)
13386 }

MathItalicDelta
13387 \newcommand*{\glsxtrMathItalicDelta}{%
13388  \glshex 1D6FF,% lower case delta (maths italic)
13389  \glshex 1D6E5% upper case delta (maths italic)
13390 }

thItalicEpsilon
13391 \newcommand*{\glsxtrMathItalicEpsilon}{%
13392  \glshex 1D700% lower case epsilon (maths italic)
13393  \string=\glshex 1D716,% lower case epsilon variant (maths italic)
13394  \glshex 1D6E6% upper case epsilon (maths italic)
13395 }

rMathItalicZeta
13396 \newcommand*{\glsxtrMathItalicZeta}{%
13397  \glshex 1D701,% lower case zeta (maths italic)
13398  \glshex 1D6E7% upper case zeta (maths italic)
13399 }

trMathItalicEta
13400 \newcommand*{\glsxtrMathItalicEta}{%
13401  \glshex 1D702,% lower case eta (maths italic)
13402  \glshex 1D6E8% upper case eta (maths italic)
13403 }

MathItalicTheta
13404 \newcommand*{\glsxtrMathItalicTheta}{%
13405  \glshex 1D703% lower case theta (maths italic)
13406  \string=\glshex 1D717,% lower case theta variant (maths italic)
13407  \glshex 1D6E9% upper case theta (maths italic)

```

```

13408 \string=\glshex 1D6F3% upper case theta variant (maths italic)
13409 }

rMathItalicIota
13410 \newcommand*\glsxtrMathItalicIota}{%
13411 \glshex 1D704,% lower case iota (maths italic)
13412 \glshex 1D6EA% upper case iota (maths italic)
13413 }

MathItalicKappa
13414 \newcommand*\glsxtrMathItalicKappa}{%
13415 \glshex 1D705% lower case kappa (maths italic)
13416 \string=\glshex 1D718,% lower case kappa variant (maths italic)
13417 \glshex 1D6EB% upper case kappa (maths italic)
13418 }

athItalicLambda
13419 \newcommand*\glsxtrMathItalicLambda}{%
13420 \glshex 1D706,% lower case lambda (maths italic)
13421 \glshex 1D6EC% upper case lambda (maths italic)
13422 }

xtrMathItalicMu
13423 \newcommand*\glsxtrMathItalicMu}{%
13424 \glshex 1D707,% lower case mu (maths italic)
13425 \glshex 1D6ED% upper case mu (maths italic)
13426 }

xtrMathItalicNu
13427 \newcommand*\glsxtrMathItalicNu}{%
13428 \glshex 1D708,% lower case nu (maths italic)
13429 \glshex 1D6EE% upper case nu (maths italic)
13430 }

xtrMathItalicXi
13431 \newcommand*\glsxtrMathItalicXi}{%
13432 \glshex 1D709,% lower case xi (maths italic)
13433 \glshex 1D6EF% upper case xi (maths italic)
13434 }

thItalicOmicron
13435 \newcommand*\glsxtrMathItalicOmicron}{%
13436 \glshex 1D70A,% lower case omicron (maths italic)
13437 \glshex 1D6F0% upper case omicron (maths italic)
13438 }

xtrMathItalicPi
13439 \newcommand*\glsxtrMathItalicPi}{%

```

```

13440 \glshex 1D70B% lower case pi (maths italic)
13441 \string=\glshex 1D71B,% lower case pi variant (maths italic)
13442 \glshex 1D6F1% upper case pi (maths italic)
13443 }

trMathItalicRho
13444 \newcommand*\glsxtrMathItalicRho}{%
13445 \glshex 1D70C% lower case rho (maths italic)
13446 \string=\glshex 1D71A,% lower case rho variant (maths italic)
13447 \glshex 1D6F2% upper case rho (maths italic)
13448 }

MathItalicSigma
13449 \newcommand*\glsxtrMathItalicSigma}{%
13450 \glshex 1D70D% lower case final sigma (maths italic)
13451 \string=\glshex 1D70E,% lower case sigma (maths italic)
13452 \glshex 1D6F4% upper case sigma (maths italic)
13453 }

trMathItalicTau
13454 \newcommand*\glsxtrMathItalicTau}{%
13455 \glshex 1D70F,% lower case tau (maths italic)
13456 \glshex 1D6F5% upper case tau (maths italic)
13457 }

thItalicUpsilon
13458 \newcommand*\glsxtrMathItalicUpsilon}{%
13459 \glshex 1D710,% lower case upsilon (maths italic)
13460 \glshex 1D6F6% upper case upsilon (maths italic)
13461 }

trMathItalicPhi
13462 \newcommand*\glsxtrMathItalicPhi}{%
13463 \glshex 1D711% lower case phi (maths italic)
13464 \string=\glshex 1D719,% lower case phi variant (maths italic)
13465 \glshex 1D6F7% upper case phi (maths italic)
13466 }

trMathItalicChi
13467 \newcommand*\glsxtrMathItalicChi}{%
13468 \glshex 1D712,% lower case chi (maths italic)
13469 \glshex 1D6F8% upper case chi (maths italic)
13470 }

trMathItalicPsi
13471 \newcommand*\glsxtrMathItalicPsi}{%
13472 \glshex 1D713,% lower case psi (maths italic)
13473 \glshex 1D6F9% upper case psi (maths italic)
13474 }

```

```
MathItalicOmega
13475 \newcommand*{\glsxtrMathItalicOmega}{%
13476 \glshex 1D714%, lower case omega (maths italic)
13477 \glshex 1D6FA% upper case omega (maths italic)
13478 }
```

```
thItalicPartial
13479 \newcommand*{\glsxtrMathItalicPartial}{%
13480 \glshex 1D715% partial differential (maths italic)
13481 }
```

```
MathItalicNabla
13482 \newcommand*{\glsxtrMathItalicNabla}{%
13483 \glshex 1D6FB% nabla (maths italic)
13484 }
```

lsxtrdigtrules Digits from the Basic Latin set and subscript and superscript digit rules.

```
13485 \newcommand*{\glsxtrdigtrules}{%
13486 0\string=\glshex 2080\string=\glshex 2070
13487 \string<1\string=\glshex 2081\string=\glshex 00B9
13488 \string<2\string=\glshex 2082\string=\glshex 00B2
13489 \string<3\string=\glshex 2083\string=\glshex 00B3
13490 \string<4\string=\glshex 2084\string=\glshex 2074
13491 \string<5\string=\glshex 2085\string=\glshex 2075
13492 \string<6\string=\glshex 2086\string=\glshex 2076
13493 \string<7\string=\glshex 2087\string=\glshex 2077
13494 \string<8\string=\glshex 2088\string=\glshex 2078
13495 \string<9\string=\glshex 2089\string=\glshex 2079
13496 }
```

BasicDigtrules Digits from the Basic Latin set.

```
13497 \newcommand*{\glsxtrBasicDigtrules}{%
13498 0\string<1\string<2\string<3\string<4%
13499 \string<5\string<6\string<7\string<8\string<9%
13500 }
```

criptDigtrules Subscript digits.

```
13501 \newcommand*{\glsxtrSubScriptDigtrules}{%
13502 \glshex 2080% subscript 0
13503 \string<\glshex 2081% subscript 1
13504 \string<\glshex 2082% subscript 2
13505 \string<\glshex 2083% subscript 3
13506 \string<\glshex 2084% subscript 4
13507 \string<\glshex 2085% subscript 5
13508 \string<\glshex 2086% subscript 6
13509 \string<\glshex 2087% subscript 7
13510 \string<\glshex 2088% subscript 8
13511 \string<\glshex 2089% subscript 9
13512 }
```

criptDigitrules Superscript digits.

```
13513 \newcommand*{\glsxtrSuperScriptDigitrules}{%
13514   \glshex 2070% superscript 0
13515   \string<\glshex 00B9% superscript 1
13516   \string<\glshex 00B2% superscript 2
13517   \string<\glshex 00B3% superscript 3
13518   \string<\glshex 2074% superscript 4
13519   \string<\glshex 2075% superscript 5
13520   \string<\glshex 2076% superscript 6
13521   \string<\glshex 2077% superscript 7
13522   \string<\glshex 2078% superscript 8
13523   \string<\glshex 2079% superscript 9
13524 }
```

trfractionrules Vulgar fractions.

```
13525 \newcommand*{\glsxtrfractionrules}{%
13526   \glshex 215F% fraction numerator one (1/)
13527   \string<\glshex 2189% zero thirds (0/3 = 0)
13528   \string<\glshex 2152% one tenth (1/10 = 0.1)
13529   \string<\glshex 2151% one ninth (1/9 ~ 0.111)
13530   \string<\glshex 215B% one eighth (1/8 = 0.125)
13531   \string<\glshex 2150% one seventh (1/7 ~ 0.143)
13532   \string<\glshex 2159% one sixth (1/6 ~ 0.167)
13533   \string<\glshex 2155% one fifth (1/5 = 0.2)
13534   \string<\glshex 00BC% one quarter (1/4 = 0.25)
13535   \string<\glshex 2153% one third (1/3 ~ 0.333)
13536   \string<\glshex 215C% three eighths (3/8 = 0.375)
13537   \string<\glshex 2156% two fifths (2/5 = 0.4)
13538   \string<\glshex 00BD% one half (1/2 = 0.5)
13539   \string<\glshex 2157% three fifths (3/5 = 0.6)
13540   \string<\glshex 215D% five eighths (5/8 = 0.625)
13541   \string<\glshex 2154% two thirds (2/3 ~ 0.667)
13542   \string<\glshex 00BE% three quarters (3/4 = 0.75)
13543   \string<\glshex 2158% four fifths (4/5 = 0.8)
13544   \string<\glshex 215A% five sixths (5/6 ~ 0.833)
13545   \string<\glshex 215E% seven eighths (7/8 = 0.875)
13546 }
```

sxtrdialecthook Check for scripts associated with the document dialects.

```
13547 \renewcommand{@\glsxtrdialecthook}{%
13548   \ifundef\CurrentTrackedScript
13549     {%
13550       \TrackLangIfHasDefaultScript{\CurrentTrackedLanguage}%
13551     {%
13552       \edef\CurrentTrackedScript{%
13553         \TrackLangGetDefaultScript\CurrentTrackedLanguage}%
13554     }%
13555     {}%
13556   }%
```

```

13557  {}%
13558 \ifdef\CurrentTrackedScript
13559 {%
13560   \let\gls@orgTrackLangRequireDialectPrefix\TrackLangRequireDialectPrefix
13561   \def\TrackLangRequireDialectPrefix{glossariesxtr-}%
13562   \let\CurrentTrackedTag\CurrentTrackedScript
13563   \IfFileExists{\TrackLangRequireDialectPrefix\CurrentTrackedTag.1df}{%
13564     {\RequireGlossariesExtraLang{\CurrentTrackedTag}}%
13565   {}%
13566   \let\TrackLangRequireDialectPrefix\gls@orgTrackLangRequireDialectPrefix
13567 }%
13568 {}%
13569 }

```

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.

```

13570 \ifdef\glsxtr@loaddialect
13571 {}%
13572   \@ifpackageloaded{tracklang}
13573   {}%
13574     \AnyTrackedLanguages
13575     {}%
13576     \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
13577   {}%
13578   {}%
13579 }
13580 {}
13581 }
13582 {}

```

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:

```
13583 \NeedsTeXFormat{LaTeX2e}
13584 \ProvidesPackage{glossaries-extra-stylemods}[2018/12/01 1.38 (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
13585 \newcommand*\{@glsxtr@loadstyles}{}%
```

all Provide all known styles.

```
13586 \DeclareOption{all}{%
13587   \appto\@glsxtr@loadstyles{%
13588     \RequirePackage{glossary-inline}%
13589     \RequirePackage{glossary-list}%
13590     \RequirePackage{glossary-tree}%
13591     \RequirePackage{glossary-mcols}%
13592     \RequirePackage{glossary-long}%
13593     \RequirePackage{glossary-longragged}%
13594     \RequirePackage{glossary-longbooktabs}%
13595     \RequirePackage{glossary-super}%
13596     \RequirePackage{glossary-superragged}%
13597     \RequirePackage{glossary-bookindex}%
13598     \RequirePackage{glossary-longextra}%
13599   }%
13600 }

13601 \DeclareOption*{%
13602   \IfFileExists{glossary-\CurrentOption.sty}%
13603   {\appto\@glsxtr@loadstyles{%
13604     \noexpand\RequirePackage{glossary-\CurrentOption}}%
13605   }%
13606   {}%
```

```

13607     \PackageError{glossaries-extra-styles}%
13608     {Unknown option '\CurrentOption'}{}%
13609   }%
13610 }

```

Process the package options:

```
13611 \ProcessOptions
```

Load the required packages:

```
13612 \@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`.

```
13613 \providecommand*\@glsxtrprelocation}{\space}
```

In case we have an old version of glossaries:

`ewglossarystyle`

```

13614 \providecommand{\renewglossarystyle}[2]{%
13615   \ifcsundef{@glsstyle@#1}{%
13616     {%
13617       \PackageError{glossaries-extra}{Glossary style '#1' isn't already defined}{}%
13618     }%
13619   {%
13620     \csdef{@glsstyle@#1}{#2}%
13621   }%
13622 }

```

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.

```

13623 \ifdef{\@glsstyle@listdotted}{%
13624 {%
13625   \renewglossarystyle{listdotted}{%
13626     \setglossarystyle{list}{%
13627       \renewcommand*\@glossentry}[2]{%
13628         \item[]\makebox[\glslistdottedwidth][l]{%
13629           \glsentryitem{##1}{%
13630             \glstarget{##1}{\glossentryname{##1}}{%
13631               \unskip\leaders\hbox to 2.9mm{\hss}\hfill\strut}%
13632             \glossentrydesc{##1}\glspostdescription}%
13633       \renewcommand*\@subglossentry}[3]{%
13634         \item[]\makebox[\glslistdottedwidth][l]{%
13635           \glssubentryitem{##2}{%
13636             \glstarget{##2}{\glossentryname{##2}}{%
13637               \unskip\leaders\hbox to 2.9mm{\hss}\hfill\strut}%
13638             \glossentrydesc{##2}\glspostdescription}%

```

```
13639 }
13640 }
13641 {%
```

Assume the style isn't required if it hasn't already been defined.

```
13642 }
```

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.

```
13643 \ifdef{\@glsstyle@list}
13644 {%
```

listprelocation Space before number list for top-level entries.

```
13645 \newcommand{\glslistprelocation}{\glsxtrprelocation}
```

childprelocation Space before number list for child entries.

```
13646 \newcommand{\glslistchildprelocation}{\glslistprelocation}
```

childpostlocation Full stop after number list.

```
13647 \newcommand{\glslistchildpostlocation}{.}
```

\glslistdesc

```
13648 \newcommand{\glslistdesc}[1]{\glossentrydesc{#1}\glspostdescription}
```

Redefine list to use these commands.

```
13649 \renewglossarystyle{list}{%
13650   \renewenvironment{theglossary}%
13651     {\begin{description}}{\end{description}}%
13652   \renewcommand*\glossaryheader{}%
13653   \renewcommand*\glsgroupheading[1]{}%
13654   \renewcommand*\glossentry[2]{%
13655     \item[\glossentryitem{##1}%
13656       \glstarget{##1}{\glossentryname{##1}}]%
13657       \glslistdesc{##1}\glslistprelocation ##2}%
13658   \renewcommand*\subglossentry[3]{%
13659     \glssubentryitem{##2}%
13660     \glstarget{##2}{\strut}\space%
13661     \glslistdesc{##2}%
13662     \glslistchildprelocation ##3\glslistchildpostlocation}%
13663   \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\indexspace\fi}%
13664 }
13665 }
13666 {}
```

Similarly for altlist. Since it requires list, the new commands should have been defined above.

```
13667 \ifdef{\@glsstyle@altlist}
13668 {%
```

```

13669 \renewglossarystyle{altlist}{%
13670   \setglossarystyle{list}{%
13671     \renewcommand*{\glossentry}[2]{%
13672       \item[\glsentryitem{##1}]%
13673         \glstarget{##1}{\glossentryname{##1}}]%
13674       \mbox{}\par\nobreak\@afterheading
13675     \glslistdesc{##1}\glslistprelocation ##2}%
13676     \renewcommand{\subglossentry}[3]{%
13677       \par
13678       \glssubentryitem{##2}%
13679         \glstarget{##2}{\strut}\glslistdesc{##2}%
13680       \glslistchildprelocation ##3}%
13681   }
13682 }
13683 {}
```

Redefine `listgroup` so that it discourages a break after group headings.

```

13684 \ifdef{\@glsstyle@listgroup}
13685 {%
13686   \renewglossarystyle{listgroup}{%
13687     \setglossarystyle{list}{%
13688       \renewcommand*{\glsgroupheading}[1]{%
13689         \item[\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}]%
13690       \mbox{}\par\nobreak\@afterheading
13691     }%
13692   }
13693 }
13694 {}
```

Similarly for `listhypergroup`.

```

13695 \ifdef{\@glsstyle@listhypergroup}
13696 {%
13697   \renewglossarystyle{listhypergroup}{%
13698     \setglossarystyle{list}{%
13699       \renewcommand*{\glossaryheader}{%
13700         \glslistnavigationitem{\glsnavigation}}%
13701       \renewcommand*{\glsgroupheading}[1]{%
13702         \item[\glslistgroupheaderfmt
13703           {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}]%
13704         \mbox{}\par\nobreak\@afterheading
13705       }%
13706   }
13707 }
13708 {}
```

Similarly for `altlistgroup`.

```

13709 \ifdef{\@glsstyle@altlistgroup}
13710 {%
13711   \renewglossarystyle{altlistgroup}{%
13712     \setglossarystyle{altlist}{%
13713       \renewcommand*{\glsgroupheading}[1]{%
```

```

13714     \item[\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}]%
13715     \mbox{}\par\nobreak\@afterheading
13716   }%
13717 }
13718 }
13719 {}

```

Similarly for `altlisthypergroup`.

```

13720 \ifdef{\@glsstyle@altlisthypergroup}
13721 {%
13722   \renewglossarystyle{altlisthypergroup}{%
13723     \setglossarystyle{altlist}{%
13724       \renewcommand*{\glossaryheader}{%
13725         \glslistnavigationitem{\glsnavigation}}{%
13726         \renewcommand*{\glsgroupheading}[1]{%
13727           \item[\glslistgroupheaderfmt
13728             {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}]%
13729             \mbox{}\par\nobreak\@afterheading
13730           }%
13731         }%
13732       }%
13733     }%

```

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`.

```

13734 \ifcscdef{@glsstyle@long}
13735 {%
13736   \renewglossarystyle{long}{%
13737     \renewenvironment{theglossary}{%
13738       {\begin{longtable}{lp{\glsdescwidth}}}%
13739       {\end{longtable}}{%
13740         \renewcommand*{\glossaryheader}{%
13741           \renewcommand*{\glsgroupheading}[1]{%
13742             \renewcommand{\glossentry}[2]{%
13743               \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13744               \glossentrydesc{##1}\glspostdescription
13745               \glsxtrprelocation ##2\tabularnewline
13746             }%
13747             \renewcommand{\subglossentry}[3]{%
13748               &
13749               \glssubentryitem{##2}%
13750               \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
13751               \glsxtrprelocation ##3\tabularnewline
13752             }%
13753             \ifglsnogroupskip
13754               \renewcommand*{\glsgroupskip}{%

```

```

13755     \else
13756         \renewcommand*{\glsgroupskip}{\&\tabularnewline}%
13757     \fi
13758 }
13759 }
13760 {}

```

Three column style:

```

13761 \ifcsdef{@glsstyle@long3col}
13762 {%
13763     \renewglossarystyle{long3col}{%
13764         \renewenvironment{theglossary}{%
13765             {\begin{longtable}{lp{\glsdescwidth}p{\glspagelistwidth}}}%
13766             {\end{longtable}}%
13767             \renewcommand*{\glossaryheader}{\%}
13768             \renewcommand*{\glsgroupheading}[1]{\%}
13769             \renewcommand{\glossentry}[2]{\%
13770                 \glsentryitem{\#\#1}\glstarget{\#\#1}{\glossentryname{\#\#1}} \&
13771                 \glossentrydesc{\#\#1}\glspostdescription \& \#\#2\tabularnewline
13772             }%
13773             \renewcommand{\subglossentry}[3]{\%
13774                 \&
13775                 \glssubentryitem{\#\#2}%
13776                 \glstarget{\#\#2}{\strut}\glossentrydesc{\#\#2}\glspostdescription \&
13777                 \#\#3\tabularnewline
13778             }%

```

Conditional needs to be outside of \glsgroupskip otherwise it can cause “Incomplete \iftrue” errors.

```

13779     \ifglsnogroupskip
13780         \renewcommand*{\glsgroupskip}{\%}
13781     \else
13782         \renewcommand*{\glsgroupskip}{\&\tabularnewline}%
13783     \fi
13784 }
13785 }
13786 {}

```

Four column style:

```

13787 \ifcsdef{@glsstyle@long4col}
13788 {%
13789     \renewglossarystyle{long4col}{%
13790         \renewenvironment{theglossary}{%
13791             {\begin{longtable}{llll}}%
13792             {\end{longtable}}%
13793             \renewcommand*{\glossaryheader}{\%}
13794             \renewcommand*{\glsgroupheading}[1]{\%}
13795             \renewcommand{\glossentry}[2]{\%
13796                 \glsentryitem{\#\#1}\glstarget{\#\#1}{\glossentryname{\#\#1}} \&
13797                 \glossentrydesc{\#\#1}\glspostdescription \&
13798                 \glossentrysymbol{\#\#1} \&

```

```

13799     ##2\tabularnewline
13800 }
13801 \renewcommand{\subglossentry}[3]{%
13802     &
13803     \glssubentryitem{##2}%
13804     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13805     \glossentrysymbol{##2} & ##3\tabularnewline
13806 }
13807 \ifglsnogroupskip
13808     \renewcommand*\glsgroupskip{}%
13809 \else
13810     \renewcommand*\glsgroupskip{\& & \tabularnewline}%
13811 \fi
13812 }
13813 }
13814 {}

```

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`.

```

13815 \ifcsdef@glsstyle@longragged}
13816 {%
13817 \renewglossarystyle{longragged}{%
13818 \renewenvironment{theglossary}{%
13819 {\begin{longtable}{l>\raggedright}p{\glsdescwidth}}{}}%
13820 {\end{longtable}}{}}%
13821 \renewcommand*\glossaryheader{}%
13822 \renewcommand*\glsgroupheading}[1]{}}%
13823 \renewcommand{\glossentry}[2]{%
13824     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13825     \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
13826     \tabularnewline
13827 }%
13828 \renewcommand{\subglossentry}[3]{%
13829     &
13830     \glssubentryitem{##2}%
13831     \glstarget{##2}{\strut}\glossentrydesc{##2}%
13832     \glspostdescription\glsxtrprelocation ##3%
13833     \tabularnewline
13834 }%
13835 \ifglsnogroupskip
13836     \renewcommand*\glsgroupskip{}%
13837 \else

```

```

13838     \renewcommand*{\glsgroupskip}{ & \tabularnewline}%
13839     \fi
13840   }
13841 }
13842 {}

```

Three and four column styles don't use \glsxtrprelocation since the number list is in its own column.

```

13843 \ifcsdef{@glsstyle@longragged3col}%
13844 {%
13845   \renewglossarystyle{longragged3col}{%
13846     \renewenvironment{theglossary}{%
13847       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}{%
13848         >{\raggedright}p{\glspagelistwidth}}}%
13849     {\end{longtable}}{%
13850       \renewcommand*{\glossaryheader}{}{%
13851       \renewcommand*{\glsgroupheading}[1]{}{%
13852       \renewcommand{\glossentry}[2]{%
13853         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13854           \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
13855       }{%
13856         \renewcommand{\subglossentry}[3]{%
13857           &
13858             \glssubentryitem{##2}{%
13859               \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13860               ##3\tabularnewline
13861             }{%
13862               \ifglsnogroupskip
13863                 \renewcommand*{\glsgroupskip}{}{%
13864               \else
13865                 \renewcommand*{\glsgroupskip}{\& \&\tabularnewline}%
13866               \fi
13867             }{%
13868           }{%
13869         }{%

```

Four column style:

```

13870 \ifcsdef{@glsstyle@altnogroupskip}%
13871 {%
13872   \renewglossarystyle{altnogroupskip}{%
13873     \renewenvironment{theglossary}{%
13874       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glsdescwidth}}{%
13875         >{\raggedright}p{\glspagelistwidth}}}%
13876     {\end{longtable}}{%
13877       \renewcommand*{\glossaryheader}{}{%
13878       \renewcommand*{\glsgroupheading}[1]{}{%
13879       \renewcommand{\glossentry}[2]{%
13880         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13881           \glossentrydesc{##1}\glspostdescription & \glossentrysymbol{##1} &

```

```

13882     ##2\tabularnewline
13883 }
13884 \renewcommand{\subglossentry}[3]{%
13885     &
13886     \glssubentryitem{##2}%
13887     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13888     \glossentrysymbol{##2} & ##3\tabularnewline
13889 }

13890 \ifglsnogroupskip
13891     \renewcommand*\glsgroupskip{}%
13892 \else
13893     \renewcommand*\glsgroupskip{\& \&\tabularnewline}%
13894 \fi
13895 }
13896 }
13897 {}

```

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`.

```

13898 \ifcsdef{glsstyle@super}{%
13899 }{%
13900     \renewglossarystyle{super}{%
13901         \renewenvironment{theglossary}{%
13902             {\tablehead{}\tabletail{}%
13903             \begin{supertabular}{lp{\glsdescwidth}}}}{%
13904             \end{supertabular}}%
13905         \renewcommand*\glossaryheader{}%
13906         \renewcommand*\glsgroupheading[1]{}%
13907         \renewcommand{\glossentry}[2]{%
13908             \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13909             \glossentrydesc{##1}\glspostdescription
13910             \glsxtrprelocation ##2\tabularnewline
13911         }%
13912         \renewcommand{\subglossentry}[3]{%
13913             &
13914             \glssubentryitem{##2}%
13915             \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
13916             \glsxtrprelocation ##3\tabularnewline
13917         }%
13918     \ifglsnogroupskip
13919         \renewcommand*\glsgroupskip{}%
13920     \else
13921         \renewcommand*\glsgroupskip{\& \tabularnewline}%
13922     \fi
13923 }

```

```

13924 }
13925 {}

Three column style:

13926 \ifcsdef{@glsstyle@super3col}
13927 {%
13928   \renewglossarystyle{super3col}{%
13929     \renewenvironment{theglossary}{%
13930       {\tablehead{}\tabletail{}%
13931       \begin{supertabular}{lp{\glsdescwidth}p{\glspagelistwidth}}}}%
13932     {\end{supertabular}}%
13933     \renewcommand*\glossaryheader{}%
13934     \renewcommand*\glsgroupheading[1]{}%
13935     \renewcommand{\glossentry}[2]{%
13936       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13937       \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
13938     }%
13939     \renewcommand{\subglossentry}[3]{%
13940       &
13941       \glssubentryitem{##2}%
13942       \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13943       ##3\tabularnewline
13944     }%
13945   \ifglsnogroupskip
13946     \renewcommand*\glsgroupskip{}%
13947   \else
13948     \renewcommand*\glsgroupskip{ & \tabularnewline}%
13949   \fi
13950 }
13951 }
13952 {}

```

Four column styles:

```

13953 \ifcsdef{@glsstyle@super4col}
13954 {%
13955   \renewglossarystyle{super4col}{%
13956     \renewenvironment{theglossary}{%
13957       {\tablehead{}\tabletail{}%
13958       \begin{supertabular}{llll}\{}%
13959     {\end{supertabular}}%
13960     \renewcommand*\glossaryheader{}%
13961     \renewcommand*\glsgroupheading[1]{}%
13962     \renewcommand{\glossentry}[2]{%
13963       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13964       \glossentrydesc{##1}\glspostdescription &
13965       \glossentrysymbol{##1} & ##2\tabularnewline
13966     }%
13967     \renewcommand{\subglossentry}[3]{%
13968       &

```

```

13969     \glssubentryitem{##2}%
13970     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13971     \glossentrysymbol{##2} & ##3\tabularnewline
13972 }%

13973 \ifglsnogroupskip
13974     \renewcommand*\glsgroupskip{}%
13975 \else
13976     \renewcommand*\glsgroupskip{\& \&\tabularnewline}%
13977 \fi
13978 }
13979 }
13980 {}

```

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`.

```

13981 \ifcsdef{@glsstyle@superragged}%
13982 {%
13983     \renewglossarystyle{superragged}{%
13984         \renewenvironment{theglossary}%
13985             {\tablehead{}\tabletail{}%
13986             \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}}{}}%
13987             \end{supertabular}%
13988         \renewcommand*\glossaryheader{}%
13989         \renewcommand*\glsgroupheading[1]{}%
13990         \renewcommand{\glossentry}[2]{%
13991             \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13992             \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
13993             \tabularnewline
13994 }%
13995         \renewcommand{\subglossentry}[3]{%
13996             &
13997             \glssubentryitem{##2}%
13998             \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
13999             \glsxtrprelocation ##3%
14000             \tabularnewline
14001 }%
14002 \ifglsnogroupskip
14003     \renewcommand*\glsgroupskip{}%
14004 \else
14005     \renewcommand*\glsgroupskip{\& \tabularnewline}%
14006 \fi
14007 }
14008 }
14009 {}

```

Three column style:

```
14010 \ifcsdef{@glsstyle@superragged3col}{%
14011 }{%
14012   \renewglossarystyle{superragged3col}{%
14013     \renewenvironment{theglossary}{%
14014       {\tablehead{}\tabletail{}{%
14015         \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}}{%
14016           \end{supertabular}}{%
14017             \begin{supertabular}{}{%
14018               \renewcommand*\glossaryheader{}{%
14019                 \renewcommand*\glsgroupheading}[1]{%
14020                   \renewcommand*\glossentry}[2]{%
14021                     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14022                     \glossentrydesc{##1}\glspostdescription &
14023                     ##2\tabularnewline
14024                   }{%
14025                     \renewcommand*\subglossentry}[3]{%
14026                       &
14027                         \glssubentryitem{##2}{%
14028                           \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
14029                           ##3\tabularnewline
14030                     }{%
14031                     \ifglsnogroupskip
14032                       \renewcommand*\glsgroupskip{}{%
14033                     \else
14034                       \renewcommand*\glsgroupskip{ & &\tabularnewline}{%
14035                     \fi
14036                   }{%
14037                 }{%
14038               }{%
14039 }
```

Four columns:

```
14039 \ifcsdef{@glsstyle@altsuperragged4col}{%
14040 }{%
14041   \renewglossarystyle{altsuperragged4col}{%
14042     \renewenvironment{theglossary}{%
14043       {\tablehead{}\tabletail{}{%
14044         \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}l>{\raggedright}p{\glsdescwidth}}{%
14045           \end{supertabular}}{%
14046             \begin{supertabular}{}{%
14047               \renewcommand*\glossaryheader{}{%
14048                 \renewcommand*\glossentry}[2]{%
14049                   \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
14050                     \glossentrydesc{##1}\glspostdescription &
14051                     \glossentrysymbol{##1} & ##2\tabularnewline
14052                   }{%
14053                     \renewcommand*\subglossentry}[3]{%
14054                       &
14055                         \glssubentryitem{##2}{%
14056                           \end{supertabular}}{%
14057                         \end{supertabular}}{%
14058                       \end{supertabular}}{%
14059                     }{%
14060                   }{%
14061                 }{%
14062               }{%
14063             }{%
14064           }{%
14065         }{%
14066       }{%
14067     }{%
14068   }{%
14069 }
```

```

14056      \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
14057      \glossentrysymbol{##2} & ##3\tabularnewline
14058 }%
14059 \ifglsnogroupskip
14060     \renewcommand*\glsgroupskip{}%
14061 \else
14062     \renewcommand*\glsgroupskip}{\& \&\tabularnewline}%
14063 \fi
14064 }
14065 }
14066 {}
```

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`.

```

14067 \ifdef{\@glsstyle@inline}
14068 {%
14069   \renewcommand*\glspostinline{.\spacefactor\sfcodespace}%
Just use \glsxtrpostdescription instead of \glspostdescription.
14070   \renewcommand*\glsinlinedescformat[3]{%
14071     \space#1\glsxtrpostdescription}
14072   \renewcommand*\glsinlinesubdescformat[3]{%
14073     #1\glsxtrpostdescription}
```

The default settings don't show the location lists, so there's no adjustment for `\glsxtrprelocation`.

```

14074 }
14075 {}
```

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.

```

14076 \ifdef{\glstreenamefmt}
14077 {%
defaultnamefmt
14078   \newcommand{\glstreedefaultnamefmt}[1]{\textbf{#1}}
\glstreenamefmt
14079   \renewcommand{\glstreenamefmt}[1]{\glstreedefaultnamefmt{#1}}
```

egroupheaderfmt This command was only introduced to glossary-tree v4.22, so it may not be defined.

```
14080 \def\glstreegroupheaderfmt#1{\glstreedefaultnamefmt{#1}}
```

eenavigationfmt This command was only introduced to glossary-tree v4.22, so it may not be defined.

```
14081 \def\glstreenavigationfmt#1{\glstreedefaultnamefmt{#1}}
```

```
14082 }
```

```
14083 {}
```

The index style is redefined so that the space before the number list isn't hard coded.

```
14084 \ifdef{@glsstyle@index}
```

```
14085 {
```

treeprelocation The space before the number list for top-level entries. This is shared by the other tree styles.

```
14086 \newcommand*\glstreeprelocation{\glsxtrprelocation}
```

childprelocation The space before the number list for child entries. This is shared by the other tree styles.

```
14087 \newcommand*\glstreechildprelocation{\glstreeprelocation}
```

Modify the index style.

```
14088 \renewglossarystyle[index]{%
14089   \renewenvironment{theglossary}{%
14090     \setlength{\parindent}{0pt}%
14091     \setlength{\parskip}{0pt plus 0.3pt}%
14092     \let\item\glstreeitem
14093     \let\subitem\glstreesubitem
14094     \let\subsubitem\glstreesubsubitem
14095   }%
14096   {\par}%
14097   \renewcommand*\glossaryheader{}%
14098   \renewcommand*\glsgroupheading[1]{}%
14099   \renewcommand*\glossentry[2]{%
14100     \item\glsentryitem{##1}%
14101     \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
14102     \glstreesymbol{##1}%
14103     \glstreedesc{##1}%
14104     \glstreeprelocation ##2%
14105   }%
14106   \renewcommand{\subglossentry}[3]{%
14107     \ifcase##1\relax
14108       \item
14109     \or
14110       \subitem
14111       \glssubentryitem{##2}%
14112     \else
14113       \subsubitem
14114     \fi
14115     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
14116     \glstreechildsymbol{##2}%
}
```

```

14117      \glstreechilddesc{##2}%
14118      \glstreechildprelocation ##3%
14119  }%
14120  \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
14121 }
14122 }
14123 {}

```

The `indexgroup` style is redefined to discourage a page break after the heading.

```

14124 \ifdef{\@glsstyle@indexgroup}
14125 {%
14126   \renewglossarystyle{indexgroup}{%
14127     \setglossarystyle{index}%
14128     \renewcommand*{\glsgroupheading}[1]{%
14129       \item\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
14130       \nopagebreak\indexspace
14131       \nobreak\@afterheading
14132     }%
14133   }
14134 }
14135 {}

```

Similarly for `indexhypergroup`.

```

14136 \ifdef{\@glsstyle@indexhypergroup}
14137 {%
14138   \renewglossarystyle{indexhypergroup}{%
14139     \setglossarystyle{index}%
14140     \renewcommand*{\glossaryheader}{%
14141       \item\glstreenavigationfmt{\glsnavigation}%
14142       \nobreak\@afterheading\indexspace}%
14143     \renewcommand*{\glsgroupheading}[1]{%
14144       \item\glstreegroupheaderfmt
14145       {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
14146       \nopagebreak\indexspace
14147       \nobreak\@afterheading}%
14148   }%
14149 }
14150 {}

```

Adjust tree style to remove hard coded space before number list.

```

14151 \ifdef{\@glsstyle@tree}
14152 {%

```

Provide a command for use with the tree styles that displays the pre-description separator, the description and post-description hook.

```

\glstreedesc
14153 \newcommand{\glstreedesc}[1]{%
14154   \glstreepredesc\glossentrydesc{#1}\glspostdescription
14155 }

```

Similarly for the symbol.

```
\glstreesymbol
14156 \newcommand{\glstreesymbol}[1]{%
14157   \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{}%
14158 }%
```

And for the child entries:

```
lstreechilddesc
14159 \newcommand{\glstreechilddesc}[1]{%
14160   \glstreechildpredesc\glossentrydesc{#1}\glspostdescription
14161 }%
```

`treechildsymbol` This just behaves in the same way as the top-level.

```
14162 \newcommand{\glstreechildsymbol}[1]{%
14163   \glstreesymbol{#1}%
14164 }%
14165 \renewglossarystyle{tree}{%
14166   \renewenvironment{theglossary}{%
14167     \setlength{\parindent}{0pt}%
14168     \setlength{\parskip}{0pt plus 0.3pt}%
14169   }%
14170   \renewcommand*\glossaryheader[]{}%
14171   \renewcommand*\glsgroupheading[1]{}%
14172   \renewcommand{\glossentry}[2]{%
14173     \hangindent0pt\relax
14174     \parindent0pt\relax
14175     \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
14176     \glstreesymbol{##1}%
14177     \glstreedesc{##1}%
14178     \glstreeprelocation##2\par
14179   }%
14180   \renewcommand{\subglossentry}[3]{%
14181     \hangindent##1\glstreeindent\relax
14182     \parindent##1\glstreeindent\relax
14183     \ifnum##1=1\relax
14184       \glssubentryitem{##2}%
14185     \fi
14186     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
14187     \glstreechildsymbol{##2}%
14188     \glstreechilddesc{##2}%
14189     \glstreechildprelocation ##3\par
14190   }%
14191   \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\indexspace\fi}%
14192 }%
14193 }%
14194 {}
```

The `treegroup` style is redefined to discourage a page break after the heading.

```
14195 \ifdef{@glsstyle@treegroup}
```

```

14196 {%
14197   \renewglossarystyle{treegroup}{%
14198     \setglossarystyle{tree}%
14199     \renewcommand{\glsgroupheading}[1]{\par
14200       \noindent\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}\par
14201       \nopagebreak\indexspace\nobreak\@afterheading}%
14202   }%
14203 }%
14204 {}%

```

Similarly for treehypergroup

```

14205 \ifdef{\@glsstyle@treehypergroup}%
14206 {%
14207   \renewglossarystyle{treehypergroup}{%
14208     \setglossarystyle{tree}%
14209     \renewcommand*\glossaryheader{%
14210       \par\noindent\glstreenavigationfmt{\glsnavigation}\par
14211       \nobreak\@afterheading\indexspace}%
14212     \renewcommand*\glsgroupheading[1]{%
14213       \par\noindent
14214       \glstreegroupheaderfmt
14215       {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}\par
14216       \nopagebreak\indexspace\nobreak\@afterheading}%
14217   }%
14218 }%
14219 {}%

```

Adjust treenoname style to remove hard coded space before number list.

```

14220 \ifdef{\@glsstyle@treenoname}%
14221 {%

```

Provide a command for use with the treenoname styles that displays the pre-description separator, the description and post-description hook.

treenonamedesc

```

14222 \newcommand{\glstreenonamedesc}[1]{%
14223   \glstreepredesc\glossentrydesc{\#1}\glspostdescription
14224 }%

```

Similarly for the symbol.

treenonamesymbol

```

14225 \newcommand{\glstreenonamesymbol}[1]{%
14226   \ifglshassymbol{\#1}{\space(\glossentrysymbol{\#1})}{}%
14227 }%

```

nonamechilddesc The child entry doesn't have the pre-description separator as the name isn't displayed.

```

14228 \newcommand{\glstreenonamechilddesc}[1]{%
14229   \glossentrydesc{\#1}\glspostdescription
14230 }%

```

```

14231 \renewglossarystyle{treenoname}{%
14232   \renewenvironment{theglossary}%
14233   { \setlength{\parindent}{0pt}%
14234     \setlength{\parskip}{0pt plus 0.3pt} }%
14235   {}%
14236   \renewcommand*\glossaryheader{}%
14237   \renewcommand*\glsgroupheding}[1]{}%
14238   \renewcommand{\glossentry}[2]{%
14239     \hangindent0pt\relax
14240     \parindent0pt\relax
14241     \glsgentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
14242     \glstreenonamesymbol{##1}%
14243     \glstreenonamedesc{##1}%
14244     \glstreeprelocation##2\par
14245   }%
14246   \renewcommand{\subglossentry}[3]{%
14247     \hangindent##1\glstreeindent\relax
14248     \parindent##1\glstreeindent\relax
14249     \ifnum##1=1\relax
14250       \glssubentryitem{##2}%
14251     \fi
14252     \glstarget{##2}{\strut}%
14253     \glstreenonamechilddesc{##2}%
14254     \glstreechildprelocation##3\par
14255   }%
14256   \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\indexspace\fi}%
14257 }
14258 }
14259 {}
```

The treenonamegroup style is redefined to discourage a page break after the heading.

```

14260 \ifdef{\@glsstyle@treenonamegroup}
14261 {}%
14262   \renewglossarystyle{treenonamegroup}{%
14263     \setglossarystyle{treenoname}%
14264     \renewcommand{\glsgroupheding}[1]{\par
14265       \noindent\glstreegroupheaderfmt
14266       {\glsgetgrouptitle{##1}}%
14267       \nopagebreak\indexspace\nobreak\@afterheading
14268     }%
14269   }
14270 }
14271 {}
```

Similarly for treenonamehypergroup

```

14272 \ifdef{\@glsstyle@treenonamehypergroup}
14273 {}%
14274   \renewglossarystyle{treenonamehypergroup}{%
14275     \setglossarystyle{treenoname}%
14276     \renewcommand*\glossaryheader{}%
```

```

14277     \par\noindent\glstreenavigationfmt{\glsnavigation}\par
14278     \nobreak\@afterheading\indexspace}%
14279     \renewcommand*{\glsgroupheading}[1]{%
14280         \par\noindent
14281         \glstreegroupheaderfmt
14282             {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
14283             \nopagebreak\indexspace\nobreak\@afterheading}%
14284     }
14285 }
14286 {}

```

The alttree style is redefined to make it easier to made minor adjustments.

```

14287 \ifdef{\@glsstyle@alttree}
14288 {%

```

Only redefine this style if it's already been defined.

symbolDescLocation `\glsxtralttreeSymbolDescLocation{<label>}{<location list>}`

Layout the symbol, description and location for top-level entries.

```

14289 \newcommand{\glsxtralttreeSymbolDescLocation}[2]{%
14290     {%
14291         \let\par\glsxtrAltTreePar
14292         \ifglshassymbol{#1}{(\glossentrysymbol{#1})\space}{}%
14293         \glossentrydesc{#1}\glspostdescription\glstreeprelocation #2\par
14294     }%
14295 }

```

trAltTreeIndent Paragraph indent for subsequent paragraphs in multi-paragraph descriptions.

```

14296 \newlength\glsxtrAltTreeIndent

```

lsxtrAltTreePar Multi-paragraph descriptions need to keep the hanging indent.

```

14297 \newcommand{\glsxtrAltTreePar}{%
14298     \@@par
14299     \glsxtrAltTreeSetHangIndent
14300     \setlength{\parindent}{\dimexpr\hangindent+\glsxtrAltTreeIndent}%
14301 }

```

symbolDescLocation `\glsxtralttreeSubSymbolDescLocation{<level>}{<label>}{<location list>}`

Layout the symbol, description and location for sub-entries. Defaults to the same as the top-level.

```

14302 \newcommand{\glsxtralttreeSubSymbolDescLocation}[3]{%
14303     \glsxtralttreeSymbolDescLocation{#2}{#3}%
14304 }

```

`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.

```
14305 \newlength\glsxtrtreetopindent
```

`sxtralttreeInit` User-level initialisation for the `alttree` style.

```
14306 \newcommand*\glsxtralttreeInit}{%
14307   \settowidth{\glsxtrtreetopindent}{\glstreenamefmt{\glsgwidestname\space}}%
14308   \glsxtrAltTreeIndent=\parindent
14309 }
```

`\glssetwidest` The original `\glssetwidest` only uses `\def`. This uses `\gdef`.

```
14310 \newcommand*\glssetwidest}[2][0]{%
14311   \csgdef{@glswidestname\romannumeral#1}{#2}%
14312 }
```

`\eglssetwidest` The original `\glssetwidest` only uses `\def`. This uses `\protected@csedef`.

```
14313 \newcommand*\eglssetwidest}[2][0]{%
14314   \protected@csedef{@glswidestname\romannumeral#1}{#2}%
14315 }
```

`\xglssetwidest` Like the above but uses `\protected@csxdef`.

```
14316 \newcommand*\xglssetwidest}[2][0]{%
14317   \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
14318 }
```

`\glsupdatewidest` Only sets if new value is wider than old value.

```
14319 \newcommand*\glsupdatewidest}[2][0]{%
14320   \ifcsundef{@glswidestname\romannumeral#1}%
14321     {\csdef{@glswidestname\romannumeral#1}{#2}}%
14322     {%
14323       \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
14324       \settowidth{\dimen@ii}{#2}%
14325       \ifdim\dimen@ii>\dimen@
14326         \csdef{@glswidestname\romannumeral#1}{#2}%
14327       \fi
14328     }%
14329 }
```

`\glsupdatewidest` As above but global definition.

```
14330 \newcommand*\gglssupdatewidest}[2][0]{%
14331   \ifcsundef{@glswidestname\romannumeral#1}%
14332     {\csgdef{@glswidestname\romannumeral#1}{#2}}%
14333     {%
14334       \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
14335       \settowidth{\dimen@ii}{#2}%
14336       \ifdim\dimen@ii>\dimen@
14337         \csgdef{@glswidestname\romannumeral#1}{#2}%
14338       \fi
14339 }
```

```
14339     }%
14340 }
```

`glsupdatewidest` As `\glsupdatewidest` but expands value.

```
14341 \newcommand*{\eglsupdatewidest}[2][0]{%
14342   \ifcsundef{@glswidestname\romannumeral#1}%
14343   { \protected@csedef{@glswidestname\romannumeral#1}{#2}}%
14344   {%
14345     \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
14346     \settowidth{\dimen@ii}{#2}%
14347     \ifdim\dimen@ii>\dimen@%
14348       \protected@csedef{@glswidestname\romannumeral#1}{#2}}%
14349     \fi%
14350   }%
14351 }
```

`glsupdatewidest` As above but global.

```
14352 \newcommand*{\xglsupdatewidest}[2][0]{%
14353   \ifcsundef{@glswidestname\romannumeral#1}%
14354   { \protected@csxdef{@glswidestname\romannumeral#1}{#2}}%
14355   {%
14356     \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
14357     \settowidth{\dimen@ii}{#2}%
14358     \ifdim\dimen@ii>\dimen@%
14359       \protected@csxdef{@glswidestname\romannumeral#1}{#2}}%
14360     \fi%
14361   }%
14362 }
```

`lsgetwidestname` Provide a user-level macro to obtain the widest top-level name.

```
14363 \newcommand*{\glsgetwidestname}{\@glswidestname}
```

`etwidestsubname` Provide a user-level macro to obtain the widest sub-entry name.

```
14364 \newcommand*{\glsgetwidestsubname}[1]{%
14365   \ifcsundef{@glswidestname\romannumeral#1}%
14366   { \glsgetwidestname}%
14367   { \csuse{@glswidestname\romannumeral#1}}%
14368 }
```

`estTopLevelName` CamelCase is easier for long command names. Provide a CamelCase synonym of `\glsfindwidesttoplevelname`.

```
14369 \let\glsFindWidestTopLevelName\glsfindwidesttoplevelname
```

`sedTopLevelName` Like `\glsfindwidesttoplevelname` but has an additional check that the entry has been used. Only useful if the glossaries occur at the end of the document, in which case this command should go at the start of the glossary. Alternatively, place at the end of the document and save for the next run.

```
14370 \newrobustcmd*{\glsFindWidestUsedTopLevelName}[1][\@glo@types]{%
14371   \dimen@=0pt\relax
```

```

14372 \gls@tmp{len=0pt}\relax
14373 \forall{glossaries}{[\#1]}{\gls@type}{%
14374 {%
14375   \for{glsentries}{[\@gls@type]}{[\@glo@label]}{%
14376   {%
14377     \if{glsused}{[\@glo@label]}{%
14378     {%
14379       \if{glshasparent}{[\@glo@label]}{%
14380       {}{%
14381       {%
14382         \set{towidth}{[\dimen@]}{%
14383           \glstreenamefmt{[\glsentryname{[\@glo@label]}]}{%
14384           \if{dim}{[\dimen@]}{>}{\gls@tmp{len}}{%
14385             \gls@tmp{len}=[\dimen@]{%
14386               \glssetwidest{[\glsentryname{[\@glo@label]}]}{%
14387               \fi{%
14388             }{%
14389           }{%
14390         }{%
14391       }{%
14392     }{%
14393   }{%

```

`destUsedAnyName` Like the above but doesn't check the parent key. Useful if all levels should have the same width for the name.

```

14394 \newrobustcmd*{\glsFindWidestUsedAnyName}[1][[\@glo@types]]{%
14395   \dimen@=0pt\relax
14396   \gls@tmp{len=0pt}\relax
14397   \forall{glossaries}{[\#1]}{\gls@type}{%
14398   {%
14399     \for{glsentries}{[\@gls@type]}{[\@glo@label]}{%
14400     {%
14401       \if{glsused}{[\@glo@label]}{%
14402       {%
14403         \set{towidth}{[\dimen@]}{%
14404           \glstreenamefmt{[\glsentryname{[\@glo@label]}]}{%
14405           \if{dim}{[\dimen@]}{>}{\gls@tmp{len}}{%
14406             \gls@tmp{len}=[\dimen@]{%
14407               \glssetwidest{[\glsentryname{[\@glo@label]}]}{%
14408               \fi{%
14409             }{%
14410           }{%
14411         }{%
14412       }{%
14413   }{%

```

`ndWidestAnyName` Like the above but doesn't check if the entry has been used.

```

14414 \newrobustcmd*{\glsFindWidestAnyName}[1][[\@glo@types]]{%
14415   \dimen@=0pt\relax

```

```

14416 \gls@tmp@len=0pt\relax
14417 \forall@glossaries[\#1]{\gls@type}%
14418 {%
14419   \for@glsentries[\gls@type]{\glo@label}%
14420   {%
14421     \settowidth{\dimen@}%
14422     {\glstreenamefmt{\glsentryname{\glo@label}}}%
14423     \ifdim\dimen@>\gls@tmp@len
14424       \gls@tmp@len=\dimen@
14425       \eglssetwidest{\glsentryname{\glo@label}}%
14426     \fi
14427   }%
14428 }%
14429 }

```

`\estUsedLevelTwo` This is like `\glsFindWidestUsedTopLevelName` but also sets the first two sub-levels as well.
Any entry that has a great-grandparent is ignored.

```

14430 \newrobustcmd*{\glsFindWidestUsedLevelTwo}[1][\glo@types]%
14431   \dimen@=0pt\relax
14432   \dimen@i=0pt\relax
14433   \dimen@ii=0pt\relax
14434   \forall@glossaries[\#1]{\gls@type}%
14435   {%
14436     \for@glsentries[\gls@type]{\glo@label}%
14437     {%
14438       \ifglsused{\glo@label}%
14439         {%
14440           \ifglshasparent{\glo@label}%
14441             {%
14442               \edef@glo@parent{\csuse{\glo@glsdetoklabel{\glo@label}}@\parent}%
14443               \ifglshasparent{\glo@parent}%
14444                 {%
14445                   \edef@glo@parent{\csuse{\glo@glsdetoklabel{\glo@parent}}@\parent}%
14446                   \ifglshasparent{\glo@parent}%
14447                     {}%
14448                   {%
14449                     \settowidth{\gls@tmp@len}%
14450                     {\glstreenamefmt{\glsentryname{\glo@label}}}%
14451                     \ifdim\gls@tmp@len>\dimen@ii
14452                       \dimen@ii=\gls@tmp@len
14453                       \eglssetwidest[2]{\glsentryname{\glo@label}}%
14454                     \fi
14455                   }%
14456                 }%
14457               {%
14458                 \settowidth{\gls@tmp@len}%
14459                 {\glstreenamefmt{\glsentryname{\glo@label}}}%
14460                 \ifdim\gls@tmp@len>\dimen@i
14461                   \dimen@i=\gls@tmp@len

```

```

14462          \eglssetwidest[1]{\glsentryname{\@glo@label}}%
14463          \fi
14464      }%
14465  }%
14466  {%
14467      \settowidth{\gls@tmp{len}}%
14468          {\glstreenamefmt{\glsentryname{\@glo@label}}}%
14469          \ifdim\gls@tmp{len}>\dimen@%
14470              \dimen@=\gls@tmp{len}
14471              \eglssetwidest{\glsentryname{\@glo@label}}%
14472          \fi
14473      }%
14474  }%
14475  {}%
14476  }%
14477 }%
14478 }

```

dWidestLevelTwo This is like \glsFindWidestUsedLevelTwo but doesn't check if the entry has been used.

```

14479 \newrobustcmd*{\glsFindWidestLevelTwo}[1][\@glo@types]{%
14480     \dimen@=0pt\relax
14481     \dimen@i=0pt\relax
14482     \dimen@ii=0pt\relax
14483     \forallglossaries[#1]{\gls@type}%
14484     {%
14485         \forglsentries[\gls@type]{\glo@label}%
14486         {%
14487             \ifglshasparent{\glo@label}%
14488             {%
14489                 \edef\glo@parent{\csuse{\glo@\glsdetoklabel{\glo@label}}\parent}%
14490                 \ifglshasparent{\glo@parent}%
14491                 {%
14492                     \edef\glo@parent{\csuse{\glo@\glsdetoklabel{\glo@parent}}\parent}%
14493                     \ifglshasparent{\glo@parent}%
14494                     {}%
14495                     {%
14496                         \settowidth{\gls@tmp{len}}%
14497                             {\glstreenamefmt{\glsentryname{\glo@label}}}%
14498                             \ifdim\gls@tmp{len}>\dimen@i%
14499                                 \dimen@ii=\gls@tmp{len}
14500                                 \eglssetwidest[2]{\glsentryname{\glo@label}}%
14501                             \fi
14502                         }%
14503                     }%
14504                     {%
14505                         \settowidth{\gls@tmp{len}}%
14506                             {\glstreenamefmt{\glsentryname{\glo@label}}}%
14507                             \ifdim\gls@tmp{len}>\dimen@i%
14508                                 \dimen@i=\gls@tmp{len}

```

```

14509          \eglssetwidest[1]{\glsentryname{\@glo@label}}%
14510          \fi
14511      }%
14512  }%
14513  {%
14514      \settowidth{\gls@tmpplen}%
14515          {\glstreenamefmt{\glsentryname{\@glo@label}}}%
14516          \ifdim\gls@tmpplen>\dimen@
14517              \dimen@=\gls@tmpplen
14518              \eglssetwidest{\glsentryname{\@glo@label}}%
14519          \fi
14520      }%
14521  }%
14522  }%
14523 }

```

`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.

```

14524 \newrobustcmd*\glsFindWidestUsedAnyNameSymbol}[2][\@glo@types]{%
14525     \dimen@=0pt\relax
14526     \gls@tmpplen=0pt\relax
14527     #2=0pt\relax
14528     \forallglossaries[#1]{\gls@type}%
14529     {%
14530         \forglsentries[\gls@type]{\glo@label}%
14531         {%
14532             \ifglsused{\glo@label}%
14533             {%
14534                 \settowidth{\dimen@}%
14535                     {\glstreenamefmt{\glsentryname{\glo@label}}}%
14536                     \ifdim\dimen@>\gls@tmpplen
14537                         \gls@tmpplen=\dimen@
14538                         \eglssetwidest{\glsentryname{\glo@label}}%
14539                     \fi
14540                     \settowidth{\dimen@}%
14541                         {\glsentrysymbol{\glo@label}}%
14542                         \ifdim\dimen@>#2\relax
14543                             #2=\dimen@
14544                         \fi
14545             }%
14546             {}%
14547         }%
14548     }%
14549 }

```

`stAnyNameSymbol` Like the above but doesn't check if the entry has been used.

```

14550 \newrobustcmd*\glsFindWidestAnyNameSymbol}[2][\@glo@types]{%
14551     \dimen@=0pt\relax
14552     \gls@tmpplen=0pt\relax

```

```

14553 #2=0pt\relax
14554 \forallglossaries[#1]{\@gls@type}%
14555 {%
14556   \forglsentries[\@gls@type]{\@glo@label}%
14557   {%
14558     \settowidth{\dimen@}%
14559     {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
14560     \ifdim\dimen@>\gls@tmpplen
14561       \gls@tmpplen=\dimen@
14562       \eglssetwidest{\glsentryname{\@glo@label}}%
14563     \fi
14564     \settowidth{\dimen@}%
14565     {\glsentrysymbol{\@glo@label}}%
14566     \ifdim\dimen@>#2\relax
14567       #2=\dimen@
14568     \fi
14569   }%
14570 }%
14571 }

```

`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. The length of the widest location list is stored in the third argument, which should also be a length register.

```

14572 \newrobustcmd*{\glsFindWidestUsedAnyNameSymbolLocation}[3][\@glo@types]{%
14573   \dimen@=0pt\relax
14574   \gls@tmpplen=0pt\relax
14575   #2=0pt\relax
14576   #3=0pt\relax
14577   \forallglossaries[#1]{\@gls@type}%
14578   {%
14579     \forglsentries[\@gls@type]{\@glo@label}%
14580     {%
14581       \ifglsused{\@glo@label}%
14582         {%
14583           \settowidth{\dimen@}%
14584           {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
14585           \ifdim\dimen@>\gls@tmpplen
14586             \gls@tmpplen=\dimen@
14587             \eglssetwidest{\glsentryname{\@glo@label}}%
14588           \fi
14589           \settowidth{\dimen@}%
14590           {\glsentrysymbol{\@glo@label}}%
14591           \ifdim\dimen@>#2\relax
14592             #2=\dimen@
14593           \fi
14594           \settowidth{\dimen@}%
14595           {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}}%
14596           \ifdim\dimen@>#3\relax

```

```

14597         #3=\dimen@%
14598         \fi%
14599     }%
14600     {}%
14601     }%
14602     {}%
14603 }

```

`eSymbolLocation` Like the `\glsFindWidestUsedAnyNameSymbol` but doesn't check if the entry has been used.

```

14604 \newrobustcmd*\{\glsFindWidestAnyNameSymbolLocation}[3][\@glo@types]{%
14605   \dimen@=0pt\relax
14606   \gls@tmplen=0pt\relax
14607   #2=0pt\relax
14608   #3=0pt\relax
14609   \forallglossaries[#1]{\gls@type}{%
14610     {%
14611       \forglsentries[\gls@type]{\glo@label}{%
14612         {%
14613           \settowidth{\dimen@}{%
14614             {\glstreenamefmt{\glsentryname{\glo@label}}}{%
14615             \ifdim\dimen@>\gls@tmplen
14616               \gls@tmplen=\dimen@
14617               \eglssetwidest{\glsentryname{\glo@label}}{%
14618                 \fi
14619                 \settowidth{\dimen@}{%
14620                   {\glsentrysymbol{\glo@label}}{%
14621                     \ifdim\dimen@>#2\relax
14622                       #2=\dimen@
14623                     \fi
14624                     \settowidth{\dimen@}{%
14625                       {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}{%
14626                         \ifdim\dimen@>#3\relax
14627                           #3=\dimen@
14628                         \fi
14629                       }%
14630                     }%
14631                   }%
14632     }%
14633   }%
14634   \gls@tmplen=0pt\relax
14635   #2=0pt\relax
14636   \forallglossaries[#1]{\gls@type}{%
14637     {%
14638       \forglsentries[\gls@type]{\glo@label}{%
14639         {%

```

`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.

```

14632 \newrobustcmd*\{\glsFindWidestUsedAnyNameLocation}[2][\@glo@types]{%
14633   \dimen@=0pt\relax
14634   \gls@tmplen=0pt\relax
14635   #2=0pt\relax
14636   \forallglossaries[#1]{\gls@type}{%
14637     {%
14638       \forglsentries[\gls@type]{\glo@label}{%
14639         {%

```

```

14640     \ifglsused{\@glo@label}%
14641     {%
14642         \settowidth{\dimen@}%
14643         {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
14644         \ifdim\dimen@>\gls@tmp{%
14645             \gls@tmp=\dimen@%
14646             \eglssetwidest{\glsentryname{\@glo@label}}%
14647             \fi%
14648             \settowidth{\dimen@}%
14649             {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}}%
14650             \ifdim\dimen@>#2\relax
14651                 #2=\dimen@%
14652                 \fi%
14653             }%
14654             {}%
14655         }%
14656     }%
14657 }

```

`AnyNameLocation` Like the `\glsFindWidestAnyNameLocation` but doesn't check the **first use** flag.

```

14658 \newrobustcmd*{\glsFindWidestAnyNameLocation}[2][\@glo@types]{%
14659     \dimen@=0pt\relax
14660     \gls@tmp=0pt\relax
14661     #2=0pt\relax
14662     \forallglossaries[#1]{\gls@type}%
14663     {%
14664         \forglsentries[\gls@type]{\@glo@label}%
14665         {%
14666             \settowidth{\dimen@}%
14667             {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
14668             \ifdim\dimen@>\gls@tmp{%
14669                 \gls@tmp=\dimen@%
14670                 \eglssetwidest{\glsentryname{\@glo@label}}%
14671                 \fi%
14672                 \settowidth{\dimen@}%
14673                 {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}}%
14674                 \ifdim\dimen@>#2\relax
14675                     #2=\dimen@%
14676                     \fi%
14677                 }%
14678             }%
14679 }

```

`computeTreeIndent` Compute the value of `\glstreeindent`. Argument is the entry label. (Ignored in default definition, but this command may be redefined to take the particular entry into account.) Note that the sub-levels modify `\glstreeindent`.

```

14680 \newcommand*{\glsxtrComputeTreeIndent}[1]{%
14681     \glstreeindent=\glsxtrtreeopindent\relax
14682 }

```

```
uteTreeSubIndent \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.

```
14683 \newcommand*{\glsxtrComputeTreeSubIndent}[3]{%
14684   \ifcsundef{@glswidestname\romannumeral#1}%
14685   {%
14686     \settowidth{#3}{\glstreenamefmt{\@glswidestname\space}}%
14687   }%
14688   {%
14689     \settowidth{#3}{\glstreenamefmt{%
14690       \csname @glswidestname\romannumeral#1\endcsname\space}}%
14691   }%
14692 }
```

eeSetHangIndent Set \hangindent for top-level entries:

```
14693 \newcommand*{\glsxtrAltTreeSetHangIndent}{\hangindent\glstreeindent}
```

etSubHangIndent Set \hangindent for sub-entries:

```
14694 \newcommand*{\glsxtrAltTreeSetSubHangIndent}[1]{\hangindent\glstreeindent}
```

Redefine alttree:

```
14695 \renewglossarystyle{alttree}{%
14696   \renewenvironment{theglossary}%
14697   {%
14698     \glsxtralttreeInit
14699     \def\@gls@prevlevel{-1}%
14700     \mbox{}\par}%
14701   {\par}%
14702   \renewcommand*{\glossaryheader}{}%
14703   \renewcommand*{\glsgroupheading}[1]{}%
14704   \renewcommand{\glossentry}[2]{%
14705     \ifnum\@gls@prevlevel=0\relax
14706     \else
14707       \glsxtrComputeTreeIndent{##1}%
14708     \fi
14709     \parindent\glstreeindent
14710     \glsxtrAltTreeSetHangIndent
14711     \makebox[0pt][r]%
14712     {%
14713       \glstreenamebox{\glstreeindent}%
14714     {%
14715       \glsentryitem{##1}%
14716       \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
14717     }%
14718   }%
```

```

14719     \glsxtralldsymboldesclocation{##1}{##2}%
14720     \def\@gls@prevlevel{0}%
14721 }
14722 \renewcommand{\subglossentry}[3]{%
14723   \ifnum##1=1\relax
14724     \glssubentryitem{##2}%
14725   \fi
14726   \ifnum\@gls@prevlevel=##1\relax
14727   \else
14728     \glsxtrcomputetreesubindent{##1}{##2}{\gls@tmpplen}%
14729     \ifnum\@gls@prevlevel<##1\relax
14730       \setlength\glstreeindent\gls@tmpplen
14731       \addtolength\glstreeindent\parindent
14732       \parindent\glstreeindent
14733     \else
14734       \ifnum\@gls@prevlevel=0\relax
14735         \glsxtrcomputeindent{##2}%
14736       \else
14737         \glsxtrcomputetreesubindent{\@gls@prevlevel}{##2}{\glstreeindent}%
14738       \fi
14739       \addtolength\parindent{-\glstreeindent}%
14740       \setlength\glstreeindent\parindent
14741     \fi
14742   \fi
14743   \glsxtralttreeSetSubHangIndent{##1}%
14744   \makebox[0pt][r]{\glstreenamebox{\gls@tmpplen}{%
14745     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}}}%
14746   \glsxtralldsymboldesclocation{##1}{##2}{##3}%
14747   \def\@gls@prevlevel{##1}%
14748 }%
14749 \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
14750 }%
14751 }%
14752 {%
14753 }

```

Redefine `alttreegroup` so that it discourages a break after group headings. Can't use `\@afterheading` here as it messes with the first item of the group.

```

14754 \ifdef{@glsstyle@alttreegroup}%
14755 {%
14756   \renewglossarystyle{alttreegroup}{%
14757     \setglossarystyle{alttree}%
14758     \renewcommand{\glsgroupheading}[1]{\par
14759       \def\@gls@prevlevel{-1}%
14760       \hangindent0pt\relax
14761       \parindent0pt\relax
14762       \glstreegroupheaderfmt{\glsgetgroup{##1}}%
14763       \nopagebreak\indexspace\nopagebreak
14764     }%
14765   }%

```

```

14766 }%
14767 {%
14768 }

    Similarly for alttreehypergroup.
14769 \ifdef{@glsstyle@alttreehypergroup}%
14770 {%
14771   \renewglossarystyle{alttreehypergroup}{%
14772     \setglossarystyle{alttree}{%
14773       \renewcommand*{\glossaryheader}{%
14774         \par
14775         \def@gls@prevlevel{-1}%
14776         \hangindent0pt\relax
14777         \parindent0pt\relax
14778         \glstreenavigationfmt{\glsnavigation}\par\indexspace
14779       }%
14780       \renewcommand*{\glsgroupheading}[1]{%
14781         \par
14782         \def@gls@prevlevel{-1}%
14783         \hangindent0pt\relax
14784         \parindent0pt\relax
14785         \glstreegroupheaderfmt
14786         {\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}\par
14787         \nopagebreak\indexspace\nopagebreak
14788       }%
14789     }%
14790   }%
14791 {%
14792 }

```

2.9 Multicolumn Styles

Adjust `mcolindexgroup` to discourage page breaks after the group headings.

```

14793 \ifdef{@glsstyle@mcolindexgroup}%
14794 {%
14795   \renewglossarystyle{mcolindexgroup}{%
14796     \setglossarystyle{mcolindex}{%
14797       \renewcommand*{\glsgroupheading}[1]{%
14798         \item\glstreegroupheaderfmt{\glsgetgroupname{##1}}%
14799         \nopagebreak\indexspace\nobreak\@afterheading
14800       }%
14801     }%
14802   }%
14803 {%
14804 }

```

Similarly for `mcolindexhypergroup`.

```

14805 \ifdef{@glsstyle@mcolindexhypergroup}%
14806 {%

```

```

14807 \renewglossarystyle{mcolindexhypergroup}{%
14808   \setglossarystyle{mcolindex}%
14809   \renewcommand*{\glossaryheader}{%
14810     \item\glstreenavigationfmt{\glsnavigation}%
14811     \indexspace
14812   }%
14813   \renewcommand*{\glsgroupheading}[1]{%
14814     \item\glstreegroupheaderfmt
14815     {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
14816     \nopagebreak\indexspace\nobreak\@afterheading
14817   }%
14818 }
14819 }%
14820 {%
14821 }

```

Similarly for mcolindexspannav.

```

14822 \ifdef{@glsstyle@mcolindexspannav}%
14823 {%
14824   \renewglossarystyle{mcolindexspannav}{%
14825     \setglossarystyle{index}%
14826     \renewenvironment{theglossary}%
14827     {%
14828       \begin{multicols}{\glsmcols}[\noindent\glstreenavigationfmt{\glsnavigation}]%
14829       \setlength{\parindent}{0pt}%
14830       \setlength{\parskip}{0pt plus 0.3pt}%
14831       \let\item\glstreeitem}%
14832     {\end{multicols}}%
14833     \renewcommand*{\glsgroupheading}[1]{%
14834       \item\glstreegroupheaderfmt
14835       {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
14836       \nopagebreak\indexspace\nobreak\@afterheading
14837     }%
14838   }
14839 }%
14840 {%
14841 }

```

Similarly for mcoltreegroup.

```

14842 \ifdef{@glsstyle@mcoltreegroup}%
14843 {%
14844   \renewglossarystyle{mcoltreegroup}{%
14845     \setglossarystyle{mcoltree}%
14846     \renewcommand{\glsgroupheading}[1]{\par
14847       \noindent\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}}%
14848       \nopagebreak\indexspace\nobreak\@afterheading
14849     }%
14850   }
14851 }%
14852 {%

```

```
14853 }
```

Similarly for mcoltreehypergroup.

```
14854 \ifdef{@glsstyle@mcoltreehypergroup}
14855 {%
14856   \renewglossarystyle{mcoltreehypergroup}{%
14857     \setglossarystyle{mcoltree}%
14858     \renewcommand*\glossaryheader{%
14859       \par\noindent\glstreenavigationfmt{\glsnavigation}\par\indexspace
14860     }%
14861     \renewcommand*\glsgroupheading[1]{%
14862       \par\noindent
14863       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgroupname{##1}}}{%
14864         \nopagebreak\indexspace\nobreak\@afterheading
14865       }%
14866     }%
14867   }%
14868 {%
14869 }
```

Similarly for mcoltreespannav.

```
14870 \ifdef{@glsstyle@mcoltreespannav}
14871 {%
14872   \renewglossarystyle{mcoltreespannav}{%
14873     \setglossarystyle{tree}%
14874     \renewenvironment{theglossary}{%
14875       {%
14876         \begin{multicols}{\glsmcols}%
14877           [\noindent\glstreenavigationfmt{\glsnavigation}]%
14878           \setlength{\parindent}{0pt}%
14879           \setlength{\parskip}{0pt plus 0.3pt}%
14880       }%
14881       {\end{multicols}}%
14882       \renewcommand*\glsgroupheading[1]{%
14883         \par\noindent
14884         \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgroupname{##1}}}{%
14885           \nopagebreak\indexspace\nobreak\@afterheading
14886         }%
14887       }%
14888     }%
14889   }%
14890 }
```

Similarly for mcoltreenonamegroup.

```
14891 \ifdef{@glsstyle@mcoltreenonamegroup}
14892 {%
14893   \renewglossarystyle{mcoltreenonamegroup}{%
14894     \setglossarystyle{mcoltreenoname}%
14895     \renewcommand{\glsgroupheading}[1]{\par
14896       \noindent\glstreegroupheaderfmt{\glsgetgroupname{##1}}{%
14897         \nopagebreak\indexspace\nobreak\@afterheading
```

```

14898     }%
14899   }
14900 }%
14901 {%
14902 }

```

Similarly for mcoltreeonenamehypergroup.

```

14903 \ifdef{@glsstyle@mcoltreeonenamehypergroup}%
14904 {%
14905   \renewglossarystyle{mcoltreeonenamehypergroup}{%
14906     \setglossarystyle{mcoltreeonename}{%
14907       \renewcommand*\glossaryheader{%
14908         \par\noindent\glstreenavigationfmt{\glsnavigation}\par\indexspace}%
14909       \renewcommand*\glsgroupheading[1]{%
14910         \par\noindent
14911         \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroup{##1}}}%
14912         \nopagebreak\indexspace\nobreak\@afterheading}%
14913     }%
14914 }%
14915 {%
14916 }

```

Similarly for mcoltreeonenamespannav.

```

14917 \ifdef{@glsstyle@mcoltreeonenamespannav}%
14918 {%
14919   \renewglossarystyle{mcoltreeonenamespannav}{%
14920     \setglossarystyle{treenename}{%
14921       \renewenvironment{theglossary}{%
14922         {%
14923           \begin{multicols}{\glsmcols}%
14924             [\noindent\glstreenavigationfmt{\glsnavigation}]%
14925             \setlength{\parindent}{0pt}%
14926             \setlength{\parskip}{0pt plus 0.3pt}%
14927         }%
14928         {\end{multicols}}%
14929       \renewcommand*\glsgroupheading[1]{%
14930         \par\noindent
14931         \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroup{##1}}}%
14932         \nopagebreak\indexspace\nobreak\@afterheading}%
14933     }%
14934 }%
14935 {%
14936 }

```

mcolaltree needs adjusting so that it uses \glsxtralttreeInit This doesn't use \mbox{} \par which would unbalance the top of the columns.

```

14937 \ifdef{@glsstyle@mcolaltree}%
14938 {%
14939   \renewglossarystyle{mcolaltree}{%
14940     \setglossarystyle{alttree}{%
14941       \renewenvironment{theglossary}{%

```

```

14942   {%
14943     \glsxtralttreeInit
14944     \def\@gls@prevlevel{-1}%
14945     \begin{multicols}{\glsmcols}%
14946   }%
14947   {\par\end{multicols}}%
14948 }
14949 }%
14950 {%
14951 }

```

Redefine mcolalttreegroup to discourage page breaks after the group headings.

```

14952 \ifdef{\@glsstyle@mcolalttreegroup}%
14953 {%
14954   \renewglossarystyle{mcolalttreegroup}{%
14955     \setglossarystyle{mcolalttree}%
14956     \renewcommand{\glsgroupheading}[1]{\par
14957       \def\@gls@prevlevel{-1}%
14958       \hangindent0pt\relax
14959       \parindent0pt\relax
14960       \glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
14961       \nopagebreak\indexspace\nopagebreak
14962     }%
14963   }%
14964 }%
14965 {%
14966 }

```

Similarly for mcolalttreehypergroup.

```

14967 \ifdef{\@glsstyle@mcolalttreehypergroup}%
14968 {%
14969   \renewglossarystyle{mcolalttreehypergroup}{%
14970     \setglossarystyle{mcolalttree}%
14971     \renewcommand*\glossaryheader{%
14972       \par
14973       \def\@gls@prevlevel{-1}%
14974       \hangindent0pt\relax
14975       \parindent0pt\relax
14976       \glstreenavigationfmt{\glsnavigation}%
14977       \par\indexspace
14978     }%
14979     \renewcommand*\glsgroupheading[1]{%
14980       \par
14981       \def\@gls@prevlevel{-1}%
14982       \hangindent0pt\relax
14983       \parindent0pt\relax
14984       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
14985       \nopagebreak\indexspace\nopagebreak
14986     }%
14987   }

```

```
14988 }%
14989 {%
14990 }
```

Similarly for mcolalttreesspannav.

```
14991 \ifdef{\glsstyle@mcolalttreesspannav}%
14992 {%
14993   \renewglossarystyle{mcolalttreesspannav}{%
14994     \setglossarystyle{alttree}{%
14995       \renewenvironment{theglossary}{%
14996         {%
14997           \glsxtralttreeInit
14998           \def\gls@prevlevel{-1}%
14999           \begin{multicols}{\glsmcols}%
15000             [\noindent\glstreenavigationfmt{\glsnavigation}]%
15001           }%
15002         {\end{multicols}}%
15003         \renewcommand*\glsgroupheading[1]{%
15004           \par
15005           \def\gls@prevlevel{-1}%
15006           \hangindent0pt\relax
15007           \parindent0pt\relax
15008           \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroup{##1}}}%
15009           \nopagebreak\indexspace\nopagebreak
15010         }%
15011       }%
15012     }%
15013   {%
15014 }}
```

Reset the default style

```
15015 \ifx@glossary@default@style\relax
15016 \else
15017   \setglossarystyle{\glsxtrcurrent@style}
15018 \fi
```

3 bookindex style (glossary-bookindex.sty)

3.1 Package Initialisation and Options

```
15019 \NeedsTeXFormat{LaTeX2e}
15020 \ProvidesPackage{glossary-bookindex}[2018/12/01 1.38 (NLCT)]

    Load required packages.
15021 \RequirePackage{multicol}
15022 \RequirePackage{glossary-tree}

trbookindexcols  Number of columns.
15023 \newcommand{\glsxtrbookindexcols}{2}

trbookindexname  Format used for top-level entries. (Argument is the label.)
15024 \newcommand*{\glsxtrbookindexname}[1]{\glossentryname{#1}}


ookindexsubname  Format used for sub entries.
15025 \newcommand*{\glsxtrbookindexsubname}[1]{\glsxtrbookindexname{#1}}


sxtrprelocation  Provide in case glossaries-stylemods isn't loaded.
15026 \providecommand*{\glsxtrprelocation}{\space}

ndexprelocation  Separator used before location list for top-level entries. Version 1.22 has removed the
    \ifglsnopostrdot check since this style doesn't display the description.
15027 \newcommand*{\glsxtrbookindexprelocation}[1]{%
15028     \glsxtrifhasfield{location}{#1}%
15029     {,\glsxtrprelocation}%
15030     {\glsxtrprelocation}%
15031 }
```

xsubprelocation Separator used before location list for sub-entries.

```
15032 \newcommand*{\glsxtrbookindexsubprelocation}[1]{%
15033     \glsxtrbookindexprelocation{#1}%
15034 }
```

xparentchildsep Separator used between top-level parent and child entry.

```
15035 \newcommand{\glsxtrbookindexparentchildsep}{\nopagebreak}
```

rentsubchildsep Separator used between sub-level parent and child entry.

```
15036 \newcommand{\glsxtrbookindexparentsubchildsep}{\glsxtrbookindexparentchildsep}
```

ookindexbetween Between two top-level entries identified by the labels in the arguments.
15037 \newcommand{\glsxtrbookindexbetween}[2]{}

indexsubbetween Between two level 1 entries identified by the labels in the arguments.
15038 \newcommand{\glsxtrbookindexsubbetween}[2]{}

exsubsubbetween Between two level 2 entries identified by the labels in the arguments.
15039 \newcommand{\glsxtrbookindexsubsubbetween}[2]{}

indexatendgroup At the end of a letter group. The argument is the index of the last top-level entry.
15040 \newcommand{\glsxtrbookindexatendgroup}[1]{}

exsubatendgroup At the end of a letter group. The argument is the index of the last level 1 entry.
15041 \newcommand{\glsxtrbookindexsubatendgroup}[1]{}

ubsubatendgroup At the end of a letter group. The argument is the index of the last level 2 entry.
15042 \newcommand{\glsxtrbookindexsubsubatendgroup}[1]{}

kindexgroupskip Group separator.
15043 \newcommand{\glsxtrbookindexgroupskip}{\ifglsnogroupskip\else\indexspace\fi}
Format group title.

dexformatheader Group separator.
15044 \newcommand*{\glsxtrbookindexformatheader}[1]{%
15045 \par{\centering\glstreegroupheaderfmt{\#1}\par}%
15046 }

okindexbookmark Book mark group heading if supported.
15047 \ifdef\pdfbookmark
15048 {%
15049 \newcommand*{\glsxtrbookindexbookmark}[2]{%
15050 \ifdefstring{\@glossarysec}{chapter}%
15051 {\pdfbookmark[1]{\#1}{\#2}}%
15052 {\pdfbookmark[2]{\#1}{\#2}}%
15053 }%
15054 }%
15055 {%
15056 \newcommand*{\glsxtrbookindexbookmark}[2]{%
15057 }

kindexcolspread
15058 \newcommand*{\glsxtrbookindexcolspread}{}

dexmulticolsenv
15059 \newcommand*{\glsxtrbookindexmulticolsenv}{\multicols}

Define the style.

```
15060 \newglossarystyle{bookindex}{%
15061   \setglossarystyle{index}%
15062   \renewenvironment{theglossary}%
15063 {%
15064   \ifempty{\glsxtrbookindexcols}{%
15065     \expandafter\begin\expandafter{\glsxtrbookindexmulticolsenv}%
15066     {\glsxtrbookindexcols}%
15067   }%
15068   \expandafter\begin\expandafter{\glsxtrbookindexmulticolsenv}%
15069   {\glsxtrbookindexcols}[\glsxtrbookindexcols]{%
15070   }%
15071   \setlength{\parindent}{0pt}%
15072   \setlength{\parskip}{0pt plus 0.3pt}%
15073   \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
15074   \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
15075   \let\@glsxtr@bookindex@between\gobble
15076   \let\@glsxtr@bookindex@subbetween\gobble
15077   \let\@glsxtr@bookindex@subsubbetween\gobble
15078   \let\@glsxtr@bookindex@atendgroup\relax
15079   \let\@glsxtr@bookindex@subatendgroup\relax
15080   \let\@glsxtr@bookindex@subsubatendgroup\relax
15081   \let\@glsxtr@bookindexgroupskip\relax
15082 }%
15083 }%
15084 }%
15085 {%
```

Do end group hooks.

```
15086   \@glsxtr@bookindex@subsubatendgroup
15087   \@glsxtr@bookindex@subatendgroup
15088   \@glsxtr@bookindex@atendgroup
```

End multicols environment.

```
15089   \expandafter\end\expandafter{\glsxtrbookindexmulticolsenv}%
15090 }%
```

Use ragged right as columns are likely to be narrow and indexes tend not to be fully justified.

```
15091   \renewcommand*{\glossaryheader}{\raggedright}%
```

Top level entry format.

```
15092   \renewcommand*{\glossentry}[2]{%
```

Do separator.

```
15093   \@glsxtr@bookindex@between{##1}%
```

Update separators.

```
15094   \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
15095   \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
15096   \let\@glsxtr@bookindex@subbetween\gobble
15097   \let\@glsxtr@bookindex@subsubbetween\gobble
15098   \edef\@glsxtr@bookindex@between{%
```

```

15099      \noexpand\glsxtrbookindexbetween{##1}%
15100  }%
15101  \edef\@glsxtr@bookindex@atendgroup{%
15102      \noexpand\glsxtrbookindexatendgroup{##1}%
15103  }%
15104  \let\@glsxtr@bookindex@subatendgroup\relax
15105  \let\@glsxtr@bookindex@subsubatendgroup\relax

```

Format entry.

```

15106  \glstreeitem
15107      \glsentryitem{##1}%
15108      \glstarget{##1}{\glsxtrbookindexname{##1}}%
15109  \glsxtrbookindexprelocation{##1}##2%
15110 }%
15111 \renewcommand{\subglossentry}[3]{%
15112     \ifcase##1\relax

```

Level 0 (shouldn't happen as that's formatted with \glossentry).

```

15113  \glstreeitem
15114  \or

```

Level 1.

```

15115  \glsxtr@bookindex@sep
15116  \glsxtr@bookindex@subbetween{##2}%
15117  \let\@glsxtr@bookindex@sep\relax

```

Update separators.

```

15118  \let\@glsxtr@bookindex@subsubbetween@gobble
15119  \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
15120  \edef\@glsxtr@bookindex@subbetween{%
15121      \noexpand\glsxtrbookindexsubbetween{##2}%
15122  }%
15123  \edef\@glsxtr@bookindex@atsubendgroup{%
15124      \noexpand\glsxtrbookindexatsubendgroup{##1}%
15125  }%

```

Start sub-item.

```

15126  \glstreesubitem
15127  \glssubentryitem{##2}%
15128 \else

```

All other levels.

```

15129  \glsxtr@bookindex@subsep
15130  \glsxtr@bookindex@subsubbetween{##2}%

```

Update separators.

```

15131  \let\@glsxtr@bookindex@subsep\relax
15132  \edef\@glsxtr@bookindex@subsubbetween{%
15133      \noexpand\glsxtrbookindexsubsubbetween{##2}%
15134  }%
15135  \edef\@glsxtr@bookindex@atsubsubendgroup{%
15136      \noexpand\glsxtrbookindexatsubsubendgroup{##1}%
15137  }%

```

Start sub-sub-item.

```
15138     \glstreesubsubitem
15139     \fi
```

Format entry.

```
15140     \glstarget{##2}{\glsxtrbookindexsubname{##2}}%
15141     \glsxtrbookindexsubprelocation{##2}##3%
15142 }%
```

The group skip is moved to the group heading to avoid interfering with the end letter group hooks.

```
15143 \renewcommand*\glsgroupskip{}%
```

Group heading format.

```
15144 \renewcommand*\glsgroupheading[1]{%
```

Do end group hooks.

```
15145 \@glsxtr@bookindex@subsubatendgroup
15146 \@glsxtr@bookindex@subatendgroup
15147 \@glsxtr@bookindex@atendgroup
15148 \@glsxtr@bookindexgroupskip
```

Update separators.

```
15149 \let@\glsxtr@bookindexgroupskip\glsxtrbookindexgroupskip
15150 \let@\glsxtr@bookindex@between@\gobble
15151 \let@\glsxtr@bookindex@atendgroup\relax
15152 \let@\glsxtr@bookindex@subatendgroup\relax
15153 \let@\glsxtr@bookindex@subsubatendgroup\relax
```

Fetch the group title from the label supplied in #1.

```
15154 \glsxtrgetgrouptitle{##1}{\thisgrptitle}%
```

Do the PDF bookmark if supported.

```
15155 \glsxtrbookindexbookmark{\thisgrptitle}{index.##1}%
```

Format the group title.

```
15156 \glsxtrbookindexformatheader{\thisgrptitle}%
15157 \nopagebreak\indexspace\nopagebreak\@afterheading
15158 }%
15159 }
```

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.

```
15160 \newcommand{\glsxtrbookindexthepage}{%
15161 \ifdef\currentglossary{\currentglossary.\arabic{page}}{\arabic{page}}%
15162 }
```

`kindexmarkentry` Writes entry information to the .aux file. The argument is the entry label.

```
15163 \newcommand*{\glsxtrbookindexmarkentry}[1]{%
15164   \protected@write\auxout{%
15165   {\let\glsxtrbookindexthepage\relax}%
15166   {\string\glsxtr@setbookindexmark{\glsxtrbookindexthepage}{#1}}%
15167 }
```

`etbookindexmark`

```
15168 \newcommand*{\glsxtr@setbookindexmark}[2]{%
15169   \ifcsundef{\glsxtr@idxfirstmark@#1}{%
15170     {\csgdef{\glsxtr@idxfirstmark@#1}{#2}}%
15171   }%
15172   {\csgdef{\glsxtr@idxlastmark@#1}{#2}}%
15173 }
```

`dexfirstmarkfmt`

```
15174 \newcommand*{\glsxtrbookindexfirstmarkfmt}[1]{%
15175   \glsentryname{#1}}%
15176 }
```

`kindexfirstmark`

```
15177 \newcommand*{\glsxtrbookindexfirstmark}{%
15178   \letcs{\glsxtr@label}{\glsxtr@idxfirstmark@\glsxtrbookindexthepage}%
15179   \ifdef{\glsxtr@label}{%
15180     {\glsxtrbookindexfirstmarkfmt{\glsxtr@label}}%
15181   }%
15182 }
```

`ndexlastmarkfmt`

```
15183 \newcommand*{\glsxtrbookindexlastmarkfmt}[1]{%
15184   \glsentryname{#1}}%
15185 }
```

`okindexlastmark`

```
15186 \newcommand*{\glsxtrbookindexlastmark}{%
15187   \letcs{\glsxtr@label}{\glsxtr@idxlastmark@\glsxtrbookindexthepage}%
15188   \ifdef{\glsxtr@label}{%
15189     {\glsxtrbookindexlastmarkfmt{\glsxtr@label}}%
15190   }%
15191 }
```

4 longextra styles (glossary-longextra.sty)

4.1 Package Initialisation and Options

Provides additional long styles.

```
15192 \NeedsTeXFormat{LaTeX2e}
15193 \ProvidesPackage{glossary-longextra}[2018/12/01 1.38 (NLCT)]
Load required packages.
15194 \RequirePackage{glossary-longbooktabs}
```

```
longextraNameFmt \glslongextraNameFmt{\label}
```

Governs the way the name is displayed.

```
15195 \newcommand{\glslongextraNameFmt}[1]{%
15196   \glsentryitem{\#1}\glstarget{\#1}{\glossentryname{\#1}}%
15197 }
```

```
longextraDescFmt \glslongextraDescFmt{\label}
```

Governs the way the description is displayed.

```
15198 \newcommand{\glslongextraDescFmt}[1]{%
15199   \glossentrydesc{\#1}\glspostdescription
15200 }
```

```
ngextraSymbolFmt \glslongextraSymbolFmt{\label}
```

Governs the way the symbol is displayed.

```
15201 \newcommand{\glslongextraSymbolFmt}[1]{\glossentrysymbol{\#1}}
```

```
extraLocationFmt \glslongextraLocationFmt{\label}{\locationlist}
```

Governs the way the location is displayed.

```
15202 \newcommand{\glslongextraLocationFmt}[2]{#2}
```

```
gextraSubNameFmt \glslongextraSubNameFmt{<level>}{<label>}
```

Governs the way the child name is displayed. Just does the sub-entry counter, if enabled, and the target.

```
15203 \newcommand{\glslongextraSubNameFmt}[2]{%  
15204 \glssubentryitem{#2}\glstarget{#2}{\strut}}%  
15205 }
```

```
gextraSubDescFmt \glslongextraSubDescFmt{<level>}{<label>}
```

Governs the way the child description is displayed.

```
15206 \newcommand{\glslongextraSubDescFmt}[2]{%  
15207 \glslongextraDescFmt{#2}}%  
15208 }
```

```
xtraSubSymbolFmt \glslongextraSubSymbolFmt{<level>}{<label>}
```

Governs the way the child symbol is displayed.

```
15209 \newcommand{\glslongextraSubSymbolFmt}[2]{%  
15210 \glslongextraSymbolFmt{#2}}%  
15211 }
```

```
raSubLocationFmt \glslongextraSubLocationFmt{<level>}{<label>}{<location list>}
```

Governs the way the child location list is displayed.

```
15212 \newcommand{\glslongextraSubLocationFmt}[3]{#3}
```

gextraNameAlign Alignment for the name column.

```
15213 \newcommand{\glslongextraNameAlign}{l}
```

gextraDescAlign Alignment for the description column.

```
15214 \newcommand{\glslongextraDescAlign}{>{\raggedright}p{\glsdescwidth}}
```

xtraSymbolAlign Alignment for the symbol column.

```
15215 \newcommand{\glslongextraSymbolAlign}{c}
```

`raLocationAlign` Alignment for the location column.

```
15216 \newcommand{\glslongextraLocationAlign}{>{\raggedright}p{\glspagelistwidth}}
```

`traGroupHeading` Used to format the letter group headings. The first argument is the number of columns in the table. The second is the group *label* (not the title).

```
15217 \newcommand{\glslongextraGroupHeading}[2]{}
```

`traHeaderFormat` Format for the column headers.

```
15218 \newcommand{\glslongextraHeaderFmt}[1]{\textbf{#1}}
```

`aNameDescHeader`

```
15219 \newcommand{\glslongextraNameDescHeader}{%
15220   \glslongextraNameDescTabularHeader\endhead
15221   \glslongextraNameDescTabularFooter\endfoot
15222 }
```

`scTabularHeader`

```
15223 \newcommand{\glslongextraNameDescTabularHeader}{%
15224   \toprule
15225   \glslongextraHeaderFmt\entryname &
15226   \glslongextraHeaderFmt\descriptionname\tabularnewline
15227   \midrule
15228 }
```

`scTabularFooter`

```
15229 \newcommand{\glslongextraNameDescTabularFooter}{%
15230   \bottomrule
15231 }
```

Unlike the `almtree` style, there aren't different widths for the hierarchical levels.

`gextraSetWidest` Provide in case the tree styles haven't been loaded.

```
15232 \newcommand*{\glslongextraSetWidest}[1]{%
15233   \def\@glslongextrawidestname{#1}%
15234 }
```

`extrawidestname` Pick up the widest name from the `almtree` style if it has been set. (Will expand to nothing otherwise.)

```
15235 \newcommand*{\@glslongextrawidestname}{\csuse{@glswidestname}}
```

`traUpdateWidest`

```
15236 \newcommand*{\glslongextraUpdateWidest}[1]{%
15237   \ifundef\@glslongextrawidestname
15238   {\def\@glslongextrawidestname{#1}}%
15239   {%
15240     \settowidth{\dimen@}{\@glslongextrawidestname}%
15241     \settowidth{\dimen@ii}{#1}%
15242     \ifdim\dimen@ii>\dimen@
```

```
15243     \def\@glslongextrawidestname{#1}%
15244     \fi
15245 }%
15246 }
```

```
updateWidestChild \glslongextraUpdateWidestChild{\langle level\rangle}{\langle text\rangle}
```

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.

```
15247 \newcommand*{\glslongextraUpdateWidestChild}[2]{}
```

traSetDescWidth Computes the value of \glsdescwidth for the styles that only have name and description columns.

```
15248 \newcommand{\glslongextraSetDescWidth}{%
15249   \settowidth{\gls@tmpplen}{\glslongextraHeaderFmt\entryname}}
```

Has the widest name been set.

```
15250   \settowidth{\dimen@}{\glsnamefont{\@glslongextrawidestname}}%
15251   \ifdim\dimen@>\gls@tmpplen
15252     \gls@tmpplen=\dimen@
15253   \fi
```

Description width is \linewidth less 4\tabcolsep less the width of the name column.

```
15254   \setlength{\glsdescwidth}{\dimexpr\linewidth-4\tabcolsep-\gls@tmpplen}%
15255 }
```

SymSetDescWidth Computes the value of \glsdescwidth for the styles that only have name, symbol and description columns.

```
15256 \newcommand{\glslongextraSymSetDescWidth}{%
```

Work out the size for just the name and description style.

```
15257   \glslongextraSetDescWidth
```

Now work out the symbol column width. This is assuming that the column title will be the widest text in the column.

```
15258   \settowidth{\gls@tmpplen}{\glslongextraHeaderFmt\symbolname}
```

Subtract 2\tabcolsep and the symbol header width.

```
15259   \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\gls@tmpplen}%
15260 }
```

LocSetDescWidth Computes the value of \glsdescwidth for the styles that only have name, location and description columns.

```
15261 \newcommand{\glslongextraLocSetDescWidth}{%
```

Work out the size for just the name and description style.

```
15262   \glslongextraSetDescWidth
```

Subtract 2\tabcolsep and the location list column width.

```
15263 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\glspagelistwidth}%
15264 }
```

LocSetDescWidth Computes the value of \glsdescwidth for the styles that have name, symbol, location and description columns.

```
15265 \newcommand{\glslongextraSymLocSetDescWidth}{%
```

Work out the size for just the name, symbol and description style.

```
15266 \glslongextraSymSetDescWidth
```

Subtract 2\tabcolsep and the location list column width.

```
15267 \setlength{\glsdescwidth}{\dimexpr\glsdescwidth-2\tabcolsep-\glspagelistwidth}%
15268 }
```

ExtraUseTabular If true use tabular instead of longtable. Obviously only intended for short glossaries that can fit into a single page.

```
15269 \newif\ifGlsLongExtraUseTabular
```

```
15270 \GlsLongExtraUseTabularfalse
```

raTabularVAlign Only used with the tabular setting.

```
15271 \newcommand*{\glslongextraTabularVAlign}[c]{
```

long-name-desc Two column style with multi-lined descriptions and header. This is similar to the longragged-booktabs style.

```
15272 \newglossarystyle[long-name-desc]{%
15273 {%
15274 \ifGlsLongExtraUseTabular
15275 \renewenvironment{theglossary}{%
15276 {%
15277 \glslongextraSetDescWidth
15278 \edef\@glslongextra@begintab{%
15279 \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
15280 \expandonce\glslongextraNameAlign
15281 \expandonce\glslongextraDescAlign}}%
15282 \glslongextra@begintab
15283 }%
15284 {%
15285 \glslongextraNameDescTabularFooter
15286 \end{tabular}%
15287 }%
15288 \renewcommand*{\glossaryheader}{\glslongextraNameDescTabularHeader}%
15289 \else
15290 \renewenvironment{theglossary}{%
15291 {%
15292 \glspatchLToutput
15293 \glslongextraSetDescWidth
15294 \edef\@glslongextra@begintab{%
15295 \noexpand\begin{longtable}{%
```

```

15296      \expandonce\glslongextraNameAlign
15297      \expandonce\glslongextraDescAlign}}}%
15298      \glslongextra@begintab
15299  }%
15300  {\end{longtable}}%
15301  \renewcommand*\{\glossaryheader}{\glslongextraNameDescHeader}%
15302 \fi
15303 \renewcommand*\{\glsgroupheading}[1]{\glslongextraGroupHeading{2}{##1}}%
15304 \renewcommand{\glossentry}[2]{%
15305   \glslongextraNameFmt{##1} &
15306   \glslongextraDescFmt{##1}\tabularnewline
15307 }%
15308 \renewcommand{\subglossentry}[3]{%
15309   \glslongextraSubNameFmt{##1}{##2}%
15310   &
15311   \glslongextraSubDescFmt{##1}{##2}%
15312   \tabularnewline
15313 }%
15314 \ifglsnogroupskip
15315   \renewcommand*\{\glsgroupskip}{}%
15316 \else
15317   \renewcommand*\{\glsgroupskip}{\glspenaltygroupskip}%
15318 \fi
15319 }

```

cLocationHeader

```

15320 \newcommand{\glslongextraNameDescLocationHeader}{%
15321 \glslongextraNameDescLocationTabularHeader\endhead
15322 \glslongextraNameDescLocationTabularFooter\endfoot
15323 }

```

onTabularHeader

```

15324 \newcommand{\glslongextraNameDescLocationTabularHeader}{%
15325 \toprule
15326 \glslongextraHeaderFmt\entryname &
15327 \glslongextraHeaderFmt\descriptionname &
15328 \glslongextraHeaderFmt\pagelistname\tabularnewline
15329 \midrule
15330 }

```

onTabularFooter

```

15331 \newcommand{\glslongextraNameDescLocationTabularFooter}{%
15332 \bottomrule
15333 }

```

g-name-desc-loc Three columns: name, description and location list.

```

15334 \newglossarystyle{long-name-desc-loc}{%
15335 {%
15336   \ifGlsLongExtraUseTabular

```

```

15337 \renewenvironment{theglossary}%
15338 {%
15339   \glslongextraLocSetDescWidth
15340   \edef\@glslongextra@begintab{%
15341     \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
15342       \expandonce\glslongextraNameAlign
15343       \expandonce\glslongextraDescAlign
15344       \expandonce\glslongextraLocationAlign
15345     }{%
15346       \glslongextra@begintab
15347     }%
15348     {%
15349       \glslongextraNameDescLocationTabularFooter
15350       \end{tabular}%
15351     }%
15352   \renewcommand*\glossaryheader{\glslongextraNameDescLocationTabularHeader}%
15353 \else
15354   \renewenvironment{theglossary}%
15355   {%
15356     \glspatchLToutput
15357     \glslongextraLocSetDescWidth
15358     \edef\@glslongextra@begintab{%
15359       \noexpand\begin{longtable}{%
15360         \expandonce\glslongextraNameAlign
15361         \expandonce\glslongextraDescAlign
15362         \expandonce\glslongextraLocationAlign
15363       }{%
15364         \glslongextra@begintab
15365       }%
15366       {\end{longtable}}%
15367     \renewcommand*\glossaryheader{\glslongextraNameDescLocationHeader}%
15368   \fi
15369   \renewcommand*\glsgroupheading[1]{\glslongextraGroupHeading{3}{##1}}%
15370   \renewcommand{\glossentry}[2]{%
15371     \glslongextraNameFmt{##1} &
15372     \glslongextraDescFmt{##1} &
15373     \glslongextraLocationFmt{##1}{##2}\tabularnewline
15374   }%
15375   \renewcommand{\subglossentry}[3]{%
15376     \glslongextraSubNameFmt{##1}{##2}&
15377     \glslongextraSubDescFmt{##1}{##2}&
15378     \glslongextraSubLocationFmt{##1}{##2}{##3}%
15379     \tabularnewline
15380   }%
15381   \ifglsnogroupskip
15382     \renewcommand*\glsgroupskip{}%
15383   \else
15384     \renewcommand*\glsgroupskip{\glspenaltygroupskip}%
15385   \fi

```

```

15386 }

aDescNameHeader
15387 \newcommand{\glslongextraDescNameHeader}{%
15388   \glslongextraDescNameTabularHeader\endhead
15389   \glslongextraDescNameTabularFooter\endfoot
15390 }

meTabularHeader
15391 \newcommand{\glslongextraDescNameTabularHeader}{%
15392   \toprule
15393   \glslongextraHeaderFmt\descriptionname&
15394   \glslongextraHeaderFmt\entryname \tabularnewline
15395   \midrule
15396 }

meTabularFooter
15397 \newcommand{\glslongextraDescNameTabularFooter}{%
15398   \bottomrule
15399 }

```

`long-desc-name` Like `name-desc` but swaps the columns.

```

15400 \newglossarystyle{long-desc-name}{%
15401 {%
15402   \ifGlsLongExtraUseTabular
15403     \renewenvironment{theglossary}{%
15404       {%
15405         \glslongextraSetDescWidth
15406         \edef\@glslongextra@begintab{%
15407           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
15408             \expandonce\glslongextraDescAlign
15409             \expandonce\glslongextraNameAlign}}%
15410         \@glslongextra@begintab
15411       }%
15412     {%
15413       \glslongextraDescNameTabularFooter
15414       \end{tabular}%
15415     }%
15416     \renewcommand*\glossaryheader{\glslongextraDescNameTabularHeader}%
15417   \else
15418     \renewenvironment{theglossary}{%
15419       {%
15420         \glspatchLToutput
15421         \glslongextraSetDescWidth
15422         \edef\@glslongextra@begintab{%
15423           \noexpand\begin{longtable}{%
15424             \expandonce\glslongextraDescAlign
15425             \expandonce\glslongextraNameAlign}}%
15426         \@glslongextra@begintab

```

```

15427    }%
15428    {\end{longtable}}%
15429    \renewcommand*{\glossaryheader}{\glslongextraDescNameHeader}%
15430 \fi
15431 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{2}{##1}}%
15432 \renewcommand{\glossentry}[2]{%
15433     \glslongextraDescFmt{##1} &
15434     \glslongextraNameFmt{##1}\tabularnewline
15435 }%
15436 \renewcommand{\subglossentry}[3]{%
15437     \glslongextraSubDescFmt{##1}{##2} &
15438     \glslongextraSubNameFmt{##1}{##2}\tabularnewline
15439 }%
15440 \ifglsnogroupskip
15441     \renewcommand*{\glsgroupskip}{}%
15442 \else
15443     \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
15444 \fi
15445 }

```

nDescNameHeader

```

15446 \newcommand{\glslongextraLocationDescNameHeader}{%
15447 \glslongextraLocationDescNameTabularHeader\endhead
15448 \glslongextraLocationDescNameTabularFooter\endfoot
15449 }

```

meTabularHeader

```

15450 \newcommand{\glslongextraLocationDescNameTabularHeader}{%
15451 \toprule
15452 \glslongextraHeaderFmt\pagelistname&
15453 \glslongextraHeaderFmt\descriptionname&
15454 \glslongextraHeaderFmt\entryname \tabularnewline
15455 \midrule
15456 }

```

meTabularFooter

```

15457 \newcommand{\glslongextraLocationDescNameTabularFooter}{%
15458 \bottomrule
15459 }

```

g-loc-desc-name Three columns: location, description and name.

```

15460 \newglossarystyle{long-loc-desc-name}{%
15461 }%
15462 \ifGlsLongExtraUseTabular
15463 {%
15464     \glslongextraLocSetDescWidth
15465     \edef\@glslongextra@begintab{%
15466         \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
15467             \expandonce\glslongextraLocationAlign

```

```

15468      \expandonce\glslongextraDescAlign
15469      \expandonce\glslongextraNameAlign}}%
15470      \glslongextra@begintab
15471 }%
15472 {%
15473     \glslongextraLocationDescNameTabularFooter
15474     \end{tabular}%
15475 }%
15476 \renewcommand*{\glossaryheader}{\glslongextraLocationDescNameTabularHeader}%
15477 \else
15478 \renewenvironment{theglossary}%
15479 {%
15480     \glspatchLToutput
15481     \glslongextraLocSetDescWidth
15482     \edef\glslongextra@begintab{%
15483         \noexpand\begin{longtable}{%
15484             \expandonce\glslongextraLocationAlign
15485             \expandonce\glslongextraDescAlign
15486             \expandonce\glslongextraNameAlign}}%
15487         \glslongextra@begintab
15488 }%
15489     \end{longtable}%
15490 \renewcommand*{\glossaryheader}{\glslongextraLocationDescNameHeader}%
15491 \fi
15492 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}}%
15493 \renewcommand{\glossentry}[2]{%
15494     \glslongextraLocationFmt{##1}{##2} &
15495     \glslongextraDescFmt{##1} &
15496     \glslongextraNameFmt{##1}\tabularnewline
15497 }%
15498 \renewcommand{\subglossentry}[3]{%
15499     \glslongextraSubLocationFmt{##1}{##2}{##3} &
15500     \glslongextraSubDescFmt{##1}{##2} &
15501     \glslongextraSubNameFmt{##1}{##2}\tabularnewline
15502 }%
15503 \ifglsnogroupskip
15504     \renewcommand{\glsgroupskip}{}%
15505 \else
15506     \renewcommand{\glsgroupskip}{\glspenaltygroupskip}%
15507 \fi
15508 }

```

meDescSymHeader

```

15509 \newcommand{\glslongextraNameDescSymHeader}{%
15510 \glslongextraNameDescSymTabularHeader\endhead
15511 \glslongextraNameDescSymTabularFooter\endfoot
15512 }

```

ymTabularHeader

```

15513 \newcommand{\glslongextraNameDescSymTabularHeader}{%
15514   \toprule
15515   \glslongextraHeaderFmt\entryname &
15516   \glslongextraHeaderFmt\descriptionname &
15517   \glslongextraHeaderFmt\symbolname\tabularnewline
15518   \midrule
15519 }

ymTabularFooter
15520 \newcommand{\glslongextraNameDescSymTabularFooter}{%
15521   \bottomrule
15522 }

```

g-name-desc-sym Three column style with symbol in the third column.

```

15523 \newglossarystyle{long-name-desc-sym}{%
15524 {%
15525   \ifGlsLongExtraUseTabular
15526     \renewenvironment{theglossary}{%
15527       {%
15528         \glslongextraSymSetDescWidth
15529         \edef\@glslongextra@begintab{%
15530           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
15531             \expandonce\glslongextraNameAlign
15532             \expandonce\glslongextraDescAlign
15533             \expandonce\glslongextraSymbolAlign
15534           }{}}%
15535         \@glslongextra@begintab
15536       }%
15537       {%
15538         \glslongextraNameDescSymTabularFooter
15539         \end{tabular}%
15540       }%
15541     \renewcommand*{\glossaryheader}{\glslongextraNameDescSymTabularHeader}%
15542   \else
15543     \renewenvironment{theglossary}{%
15544       {%
15545         \glspatchLToutput
15546         \glslongextraSymSetDescWidth
15547         \edef\@glslongextra@begintab{%
15548           \noexpand\begin{longtable}{%
15549             \expandonce\glslongextraNameAlign
15550             \expandonce\glslongextraDescAlign
15551             \expandonce\glslongextraSymbolAlign
15552           }{}}%
15553         \@glslongextra@begintab
15554       }%
15555       {\end{longtable}}%
15556     \renewcommand*{\glossaryheader}{\glslongextraNameDescSymHeader}%
15557   \fi

```

```

15558 \renewcommand*\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}}%
15559 \renewcommand{\glossentry}[2]{%
15560   \glslongextraNameFmt{##1} &
15561   \glslongextraDescFmt{##1} &
15562   \glslongextraSymbolFmt{##1}\tabularnewline
15563 }%
15564 \renewcommand{\subglossentry}[3]{%
15565   \glslongextraSubNameFmt{##1}{##2} &
15566   \glslongextraSubDescFmt{##1}{##2} &
15567   \glslongextraSubSymbolFmt{##1}{##2}%
15568   \tabularnewline
15569 }%
15570 \ifglsnogroupskip
15571   \renewcommand*\glsgroupskip{}%
15572 \else
15573   \renewcommand*\glsgroupskip{\glspenaltygroupskip}%
15574 \fi
15575 }

```

mLocationHeader

```

15576 \newcommand{\glslongextraNameDescSymLocationHeader}{%
15577 \glslongextraNameDescSymLocationTabularHeader\endhead
15578 \glslongextraNameDescSymLocationTabularFooter\endfoot
15579 }

```

onTabularHeader

```

15580 \newcommand{\glslongextraNameDescSymLocationTabularHeader}{%
15581 \toprule
15582 \glslongextraHeaderFmt\entryname &
15583 \glslongextraHeaderFmt\descriptionname &
15584 \glslongextraHeaderFmt\symbolname &
15585 \glslongextraHeaderFmt\pagelistname\tabularnewline
15586 \midrule
15587 }

```

onTabularFooter

```

15588 \newcommand{\glslongextraNameDescSymLocationTabularFooter}{%
15589 \bottomrule
15590 }

```

me-desc-sym-loc Four columns: name, description and location

```

15591 \newglossarystyle{long-name-desc-sym-loc}{%
15592 }%
15593 \ifGlsLongExtraUseTabular
15594 \renewenvironment{theglossary}{%
15595 }%
15596   \glslongextraSymLocSetDescWidth
15597   \edef\@glslongextra@begin{%
15598     \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%

```

```

15599      \expandonce\glslongextraNameAlign
15600      \expandonce\glslongextraDescAlign
15601      \expandonce\glslongextraSymbolAlign
15602      \expandonce\glslongextraLocationAlign
15603  } } %
15604  \glslongextra@begintab
15605 } %
15606 { %
15607   \glslongextraNameDescSymLocationTabularFooter
15608   \end{tabular} %
15609 } %
15610 \renewcommand*\{\glossaryheader}{\glslongextraNameDescSymLocationTabularHeader}%
15611 \else
15612 \ renewenvironment{theglossary}%
15613 { %
15614   \glspatchLToutput
15615   \glslongextraSymLocSetDescWidth
15616   \edef\glslongextra@begintab{%
15617     \noexpand\begin{longtable} {%
15618       \expandonce\glslongextraNameAlign
15619       \expandonce\glslongextraDescAlign
15620       \expandonce\glslongextraSymbolAlign
15621       \expandonce\glslongextraLocationAlign
15622     } } %
15623     \glslongextra@begintab
15624   } %
15625   {\end{longtable}} %
15626 \renewcommand*\{\glossaryheader}{\glslongextraNameDescSymLocationHeader}%
15627 \fi
15628 \renewcommand*\{\glsgroupheading}[1]{\glslongextraGroupHeading{4}{##1}}%
15629 \renewcommand{\glossentry}[2]{%
15630   \glslongextraNameFmt{##1} &
15631   \glslongextraDescFmt{##1} &
15632   \glslongextraSymbolFmt{##1}&
15633   \glslongextraLocationFmt{##1}{##2}\tabularnewline
15634 } %
15635 \renewcommand{\subglossentry}[3]{%
15636   \glslongextraSubNameFmt{##1}{##2} &
15637   \glslongextraSubDescFmt{##1}{##2} &
15638   \glslongextraSubSymbolFmt{##1}{##2}&
15639   \glslongextraSubLocationFmt{##1}{##2}{##3}%
15640   \tabularnewline
15641 } %
15642 \ifglsnogroupskip
15643   \renewcommand*\{\glsgroupskip}{}%
15644 \else
15645   \renewcommand*\{\glsgroupskip}{\glspenaltygroupskip}%
15646 \fi
15647 }

```

```

meSymDescHeader
15648 \newcommand{\glslongextraNameSymDescHeader}{%
15649  \glslongextraNameSymDescTabularHeader\endhead
15650  \glslongextraNameSymDescTabularFooter\endfoot
15651 }

scTabularHeader
15652 \newcommand{\glslongextraNameSymDescTabularHeader}{%
15653  \toprule
15654  \glslongextraHeaderFmt\entryname &
15655  \glslongextraHeaderFmt\symbolname &
15656  \glslongextraHeaderFmt\descriptionname\tabularnewline
15657  \midrule
15658 }

scTabularFooter
15659 \newcommand{\glslongextraNameSymDescTabularFooter}{%
15660  \bottomrule
15661 }

```

g-name-sym-desc Three column style with symbol in the second column.

```

15662 \newglossarystyle{long-name-sym-desc}{%
15663 {%
15664  \ifGlsLongExtraUseTabular
15665   \renewenvironment{theglossary}{%
15666    {%
15667      \glslongextraSymSetDescWidth
15668      \edef\@glslongextra@begintab{%
15669        \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
15670          \expandonce\glslongextraNameAlign
15671          \expandonce\glslongextraSymbolAlign
15672          \expandonce\glslongextraDescAlign
15673        }{}}%
15674      \@glslongextra@begintab
15675    }{%
15676    {%
15677      \glslongextraNameSymDescTabularFooter
15678      \end{tabular}%
15679    }%
15680    \renewcommand*\glossaryheader{\glslongextraNameSymDescTabularHeader}%
15681  \else
15682   \renewenvironment{theglossary}{%
15683    {%
15684      \glspatchLToutput
15685      \glslongextraSymSetDescWidth
15686      \edef\@glslongextra@begintab{%
15687        \noexpand\begin{longtable}[]{%
15688          \expandonce\glslongextraNameAlign
15689          \expandonce\glslongextraSymbolAlign

```

```

15690      \expandonce\glslongextraDescAlign
15691      } } %
15692      \glslongextra@begintab
15693      } %
15694      {\end{longtable}} %
15695      \renewcommand*{\glossaryheader}{\glslongextraNameSymDescHeader} %
15696      \fi
15697      \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}} %
15698      \renewcommand{\glossentry}[2]{%
15699          \glslongextraNameFmt{##1} &
15700          \glslongextraSymbolFmt{##1} &
15701          \glslongextraDescFmt{##1}\tabularnewline
15702      } %
15703      \renewcommand{\subglossentry}[3]{%
15704          \glslongextraSubNameFmt{##1}{##2} &
15705          \glslongextraSubSymbolFmt{##1}{##2} &
15706          \glslongextraSubDescFmt{##1}{##2}\tabularnewline
15707      } %
15708      \ifglsnogroupskip
15709          \renewcommand*{\glsgroupskip}{} %
15710      \else
15711          \renewcommand*{\glsgroupskip}{\glspenaltygroupskip} %
15712      \fi
15713 }

```

cLocationHeader

```

15714 \newcommand{\glslongextraNameSymDescLocationHeader}{%
15715     \glslongextraNameSymDescLocationTabularHeader\endhead
15716     \glslongextraNameSymDescLocationTabularFooter\endfoot
15717 }

```

onTabularHeader

```

15718 \newcommand{\glslongextraNameSymDescLocationTabularHeader}{%
15719     \toprule
15720     \glslongextraHeaderFmt\entryname &
15721     \glslongextraHeaderFmt\symbolname &
15722     \glslongextraHeaderFmt\descriptionname &
15723     \glslongextraHeaderFmt\pagelistname\tabularnewline
15724     \midrule
15725 }

```

onTabularFooter

```

15726 \newcommand{\glslongextraNameSymDescLocationTabularFooter}{%
15727     \bottomrule
15728 }

```

`me-sym-desc-loc` Four column style with symbol in the second column.

```

15729 \newglossarystyle{long-name-sym-desc-loc}{%
15730     }

```

```

15731 \ifGlsLongExtraUseTabular
15732   \renewenvironment{theglossary}%
15733   {%
15734     \glslongextraSymLocSetDescWidth
15735     \edef\@glslongextra@begintab{%
15736       \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
15737         \expandonce\glslongextraNameAlign
15738         \expandonce\glslongextraSymbolAlign
15739         \expandonce\glslongextraDescAlign
15740         \expandonce\glslongextraLocationAlign
15741       }{}}%
15742     \glslongextra@begintab
15743   }%
15744   {%
15745     \glslongextraNameSymDescLocationTabularFooter
15746     \end{tabular}%
15747   }%
15748   \renewcommand*\{\glossaryheader}{\glslongextraNameSymDescLocationTabularHeader}%
15749 \else
15750   \renewenvironment{theglossary}%
15751   {%
15752     \glspatchLToutput
15753     \glslongextraSymLocSetDescWidth
15754     \edef\@glslongextra@begintab{%
15755       \noexpand\begin{longtable}[%}
15756         \expandonce\glslongextraNameAlign
15757         \expandonce\glslongextraSymbolAlign
15758         \expandonce\glslongextraDescAlign
15759         \expandonce\glslongextraLocationAlign
15760       }{}}%
15761     \glslongextra@begintab
15762   }%
15763   {\end{longtable}%
15764   \renewcommand*\{\glossaryheader}{\glslongextraNameSymDescLocationHeader}%
15765 \fi
15766 \renewcommand*\{\glsgroupheading}[1]{\glslongextraGroupHeading{4}{##1}}%
15767 \renewcommand{\glossentry}[2]{%
15768   \glslongextraNameFmt{##1} &
15769   \glslongextraSymbolFmt{##1} &
15770   \glslongextraDescFmt{##1} &
15771   \glslongextraLocationFmt{##1}{##2}\tabularnewline
15772 }%
15773 \renewcommand{\subglossentry}[3]{%
15774   \glslongextraSubNameFmt{##1}{##2} &
15775   \glslongextraSubSymbolFmt{##1}{##2} &
15776   \glslongextraSubDescFmt{##1}{##2} &
15777   \glslongextraSubLocationFmt{##1}{##2}{##3}\tabularnewline
15778 }%
15779 \ifglsnogroupskip

```

```

15780     \renewcommand*\glsgroupskip{}%
15781 \else
15782     \renewcommand*\glsgroupskip{\glspenaltygroupskip}%
15783 \fi
15784 }

mDescNameHeader
15785 \newcommand{\glslongextraSymDescNameHeader}{%
15786 \glslongextraSymDescNameTabularHeader\endhead
15787 \glslongextraSymDescNameTabularFooter\endfoot
15788 }

meTabularHeader
15789 \newcommand{\glslongextraSymDescNameTabularHeader}{%
15790 \toprule
15791 \glslongextraHeaderFmt\symbolname &
15792 \glslongextraHeaderFmt\descriptionname &
15793 \glslongextraHeaderFmt\entryname\tabularnewline
15794 \midrule
15795 }

meTabularFooter
15796 \newcommand{\glslongextraSymDescNameTabularFooter}{%
15797 \bottomrule
15798 }


```

`g-sym-desc-name` Three column style with symbol in the first column, description in the second and name in the third.

```

15799 \newglossarystyle{long-sym-desc-name}{%
15800 {%
15801 \ifGlsLongExtraUseTabular
15802 \renewenvironment{theglossary}{%
15803 {%
15804 \glslongextraSymSetDescWidth
15805 \edef\@glslongextra@begintab{%
15806 \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
15807 \expandonce\glslongextraSymbolAlign
15808 \expandonce\glslongextraDescAlign
15809 \expandonce\glslongextraNameAlign
15810 }}%
15811 \glslongextra@begintab
15812 }%
15813 {%
15814 \glslongextraSymDescNameTabularFooter
15815 \end{tabular}%
15816 }%
15817 \renewcommand*\glossaryheader{\glslongextraSymDescNameTabularHeader}%
15818 \else
15819 \renewenvironment{theglossary}{%

```

```

15820  {%
15821   \glspatchLToutput
15822   \glslongextraSymSetDescWidth
15823   \edef\@glslongextra@begintab{%
15824     \noexpand\begin{longtable}{%
15825       \expandonce\glslongextraSymbolAlign
15826       \expandonce\glslongextraDescAlign
15827       \expandonce\glslongextraNameAlign
15828     }{}}%
15829   \glslongextra@begintab
15830   }%
15831   {\end{longtable}}%
15832   \renewcommand*\{\glossaryheader}{\glslongextraSymDescNameHeader}%
15833   \fi
15834   \renewcommand*\{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}}%
15835   \renewcommand{\glossentry}[2]{%
15836     \glslongextraSymbolFmt{##1} &
15837     \glslongextraDescFmt{##1} &
15838     \glslongextraNameFmt{##1}\tabularnewline
15839   }%
15840   \renewcommand{\subglossentry}[3]{%
15841     \glslongextraSubSymbolFmt{##1}{##2} &
15842     \glslongextraSubDescFmt{##1}{##2} &
15843     \glslongextraSubNameFmt{##1}{##2}\tabularnewline
15844   }%
15845   \ifglsnogroupskip
15846     \renewcommand*\{\glsgroupskip}{}%
15847   \else
15848     \renewcommand*\{\glsgroupskip}{\glspenaltygroupskip}%
15849   \fi
15850 }

```

mDescNameHeader

```

15851 \newcommand{\glslongextraLocationSymDescNameHeader}{%
15852   \glslongextraLocationSymDescNameTabularHeader\endhead
15853   \glslongextraLocationSymDescNameTabularFooter\endfoot
15854 }

```

meTabularHeader

```

15855 \newcommand{\glslongextraLocationSymDescNameTabularHeader}{%
15856   \toprule
15857   \glslongextraHeaderFmt\pagelistname &
15858   \glslongextraHeaderFmt\symbolname &
15859   \glslongextraHeaderFmt\descriptionname &
15860   \glslongextraHeaderFmt\entryname\tabularnewline
15861   \midrule
15862 }

```

meTabularFooter

```

15863 \newcommand{\glslongextraLocationSymDescNameTabularFooter}{%
15864   \bottomrule
15865 }

c-sym-desc-name Four column style with location list, symbol, description and name.
15866 \newglossarystyle{long-loc-sym-desc-name}{%
15867 {%
15868   \ifGlsLongExtraUseTabular
15869     \renewenvironment{theglossary}{%
15870       {%
15871         \glslongextraSymLocSetDescWidth
15872         \edef\@glslongextra@begintab{%
15873           \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
15874             \expandonce\glslongextraLocationAlign
15875             \expandonce\glslongextraSymbolAlign
15876             \expandonce\glslongextraDescAlign
15877             \expandonce\glslongextraNameAlign
15878           }{}}%
15879         \@glslongextra@begintab
15880       }{%
15881       {%
15882         \glslongextraLocationSymDescNameTabularFooter
15883         \end{tabular}%
15884       }%
15885     \renewcommand*\{\glossaryheader}{\glslongextraLocationSymDescNameTabularHeader}%
15886   \else
15887     \renewenvironment{theglossary}{%
15888       {%
15889         \glspatchLToutput
15890         \glslongextraSymLocSetDescWidth
15891         \edef\@glslongextra@begintab{%
15892           \noexpand\begin{longtable}{%
15893             \expandonce\glslongextraLocationAlign
15894             \expandonce\glslongextraSymbolAlign
15895             \expandonce\glslongextraDescAlign
15896             \expandonce\glslongextraNameAlign
15897           }{}}%
15898         \@glslongextra@begintab
15899       }{%
15900       {\end{longtable}}%
15901     \renewcommand*\{\glossaryheader}{\glslongextraLocationSymDescNameHeader}%
15902   \fi
15903   \renewcommand*\{\glsgroupheading}[1]{\glslongextraGroupHeading{4}{##1}}%
15904   \renewcommand{\glossentry}[2]{%
15905     \glslongextraLocationFmt{##1}{##2} &
15906     \glslongextraSymbolFmt{##1} &
15907     \glslongextraDescFmt{##1} &
15908     \glslongextraNameFmt{##1}\tabularnewline
15909   }%

```

```

15910 \renewcommand{\subglossentry}[3]{%
15911     \glslongextraSubLocationFmt{##1}{##2}{##3} &
15912     \glslongextraSubSymbolFmt{##1}{##2} &
15913     \glslongextraSubDescFmt{##1}{##2} &
15914     \glslongextraSubNameFmt{##1}{##2}\tabularnewline
15915 }%
15916 \ifglsnogroupskip
15917     \renewcommand*{\glsgroupskip}{}%
15918 \else
15919     \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
15920 \fi
15921 }

```

scSymNameHeader

```

15922 \newcommand{\glslongextraDescSymNameHeader}{%
15923     \glslongextraDescSymNameTabularHeader\endhead
15924     \glslongextraDescSymNameTabularFooter\endfoot
15925 }

```

meTabularHeader

```

15926 \newcommand{\glslongextraDescSymNameTabularHeader}{%
15927     \toprule
15928     \glslongextraHeaderFmt\descriptionname &
15929     \glslongextraHeaderFmt\symbolname &
15930     \glslongextraHeaderFmt\entryname\tabularnewline
15931     \midrule
15932 }

```

meTabularFooter

```

15933 \newcommand{\glslongextraDescSymNameTabularFooter}{%
15934     \bottomrule
15935 }

```

g-desc-sym-name Three column style with description in the first column, symbol in the second and name in the third.

```

15936 \newglossarystyle{long-desc-sym-name}{%
15937 }%
15938 \ifGlsLongExtraUseTabular
15939     \renewenvironment{theglossary}{%
15940         \%
15941         \glslongextraSymSetDescWidth
15942         \edef\@glslongextra@begintab{%
15943             \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
15944                 \expandonce\glslongextraDescAlign
15945                 \expandonce\glslongextraSymbolAlign
15946                 \expandonce\glslongextraNameAlign
15947             }{}}%
15948         \@glslongextra@begintab
15949     }%

```

```

15950    {%
15951        \glslongextraDescSymNameTabularFooter
15952        \end{tabular}%
15953    }%
15954    \renewcommand*{\glossaryheader}{\glslongextraDescSymNameTabularHeader}%
15955 \else
15956     \renewenvironment{theglossary}%
15957    {%
15958        \glspatchLToutput
15959        \glslongextraSymSetDescWidth
15960        \edef\@glslongextra@begintab{%
15961            \noexpand\begin{longtable}{%
15962                \expandonce\glslongextraDescAlign
15963                \expandonce\glslongextraSymbolAlign
15964                \expandonce\glslongextraNameAlign
15965            }{}}%
15966        \glslongextra@begintab
15967    }%
15968    {\end{longtable}}%
15969    \renewcommand*{\glossaryheader}{\glslongextraDescSymNameHeader}%
15970 \fi
15971 \renewcommand*{\glsgroupheading}[1]{\glslongextraGroupHeading{3}{##1}}%
15972 \renewcommand{\glossentry}[2]{%
15973     \glslongextraDescFmt{##1} &
15974     \glslongextraSymbolFmt{##1} &
15975     \glslongextraNameFmt{##1}\tabularnewline
15976 }%
15977 \renewcommand{\subglossentry}[3]{%
15978     \glslongextraSubDescFmt{##1}{##2} &
15979     \glslongextraSubSymbolFmt{##1}{##2} &
15980     \glslongextraSubNameFmt{##1}{##2}\tabularnewline
15981 }%
15982 \ifglsnogroupskip
15983     \renewcommand*{\glsgroupskip}{}%
15984 \else
15985     \renewcommand*{\glsgroupskip}{\glspenaltygroupskip}%
15986 \fi
15987 }

```

scSymNameHeader

```

15988 \newcommand{\glslongextraLocationDescSymNameHeader}{%
15989 \glslongextraLocationDescSymNameTabularHeader\endhead
15990 \glslongextraLocationDescSymNameTabularFooter\endfoot
15991 }

```

meTabularHeader

```

15992 \newcommand{\glslongextraLocationDescSymNameTabularHeader}{%
15993 \toprule
15994 \glslongextraHeaderFmt\pagelistname &

```

```

15995 \glslongextraHeaderFmt\descriptionname &
15996 \glslongextraHeaderFmt\symbolname &
15997 \glslongextraHeaderFmt\entryname\tabularnewline
15998 \midrule
15999 }

meTabularFooter
16000 \newcommand{\glslongextraLocationDescSymNameTabularFooter}{%
16001 \bottomrule
16002 }

c-desc-sym-name Four column style with location list, description, symbol and name.
16003 \newglossarystyle{long-loc-desc-sym-name}{%
16004 {%
16005 \ifGlsLongExtraUseTabular
16006 \renewenvironment{theglossary}{%
16007 {%
16008 \glslongextraSymLocSetDescWidth
16009 \edef\@glslongextra@begintab{%
16010 \noexpand\begin{tabular}[\glslongextraTabularVAlign]{%
16011 \expandonce\glslongextraLocationAlign
16012 \expandonce\glslongextraDescAlign
16013 \expandonce\glslongextraSymbolAlign
16014 \expandonce\glslongextraNameAlign
16015 }}%
16016 \glslongextra@begintab
16017 }%
16018 {%
16019 \glslongextraLocationDescSymNameTabularFooter
16020 \end{tabular}%
16021 }%
16022 \renewcommand*\glossaryheader{\glslongextraLocationDescSymNameTabularHeader}%
16023 \else
16024 \renewenvironment{theglossary}{%
16025 {%
16026 \glspatchLToutput
16027 \glslongextraSymLocSetDescWidth
16028 \edef\@glslongextra@begintab{%
16029 \noexpand\begin{longtable}{{%
16030 \expandonce\glslongextraLocationAlign
16031 \expandonce\glslongextraDescAlign
16032 \expandonce\glslongextraSymbolAlign
16033 \expandonce\glslongextraNameAlign
16034 }}%
16035 \glslongextra@begintab
16036 }%
16037 {\end{longtable}}%
16038 \renewcommand*\glossaryheader{\glslongextraLocationDescSymNameHeader}%
16039 \fi

```

```

16040 \renewcommand*\glsgroupheading}[1]{\glslongextraGroupHeading{4}{##1}}%
16041 \renewcommand{\glossentry}[2]{%
16042   \glslongextraLocationFmt{##1}{##2} &
16043   \glslongextraDescFmt{##1} &
16044   \glslongextraSymbolFmt{##1} &
16045   \glslongextraNameFmt{##1}\tabularnewline
16046 }%
16047 \renewcommand{\subglossentry}[3]{%
16048   \glslongextraSubLocationFmt{##1}{##2}{##3} &
16049   \glslongextraSubDescFmt{##1}{##2} &
16050   \glslongextraSubSymbolFmt{##1}{##2} &
16051   \glslongextraSubNameFmt{##1}{##2}\tabularnewline
16052 }%
16053 \ifglsnogroupskip
16054   \renewcommand*\glsgroupskip}{%
16055 \else
16056   \renewcommand*\glsgroupskip}{\glspenaltygroupskip}%
16057 \fi
16058 }

```

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 332
\glsfmtshort: new 331
\Glsfmtshortpl: new 332
\glsfmtshortpl: new 331
short: switched inline full form to short
(long) 234

0.3 (2015-12-02)

\@ACRlong: added redefinition 86
\@ACRlongpl: added redefinition 87
\@ACRshort: added redefinition 84
\@ACRshortpl: added redefinition 85
\@Acrlong: added redefinition 85
\@Acrlongpl: added redefinition 86
\@Acrshort: added redefinition 83
\@Acrshortpl: added redefinition 84
\@GLSdesc@: added redefinition 79
\@GLSdescplural@: added redefinition 80
\@GLSfirst@: added redefinition 77
\@GLSfirstplural@: added redefinition 78
\@GLSname@: added redefinition 79
\@GLSplural@: added redefinition 77
\@GLSsymbol@: added redefinition 80
\@GLSsymbolplural@: added
redefinition 81
\@GLStext@: added redefinition 76
\@GLSuseri@: added redefinition 81
\@GLSuserii@: added redefinition 82
\@GLSuseriii@: added redefinition 82
\@GLSuseriv@: added redefinition 82
\@GLSuserv@: added redefinition 82
\@GLSuservi@: added redefinition 83
\@Glsdesc@: added redefinition 79
\@Glsdescplural@: added redefinition 80
\@Glsfirst@: added redefinition 77
\@Glsfirstplural@: added redefinition 78
\@Glsname@: added redefinition 79
\@Gsplural@: added redefinition 77

\@Glssymbol@: added redefinition 80
\@Glssymbolplural@: added
redefinition 81
\@Gls{text@: added redefinition 76
\@Glsuseri@: added redefinition 81
\@Glsuserii@: added redefinition 81
\@Glsuseriii@: added redefinition 82
\@Glsuseriv@: added redefinition 82
\@Glsuserv@: added redefinition 82
\@Glsuservi@: added redefinition 83
\@Acrlong: added redefinition 85
\@Acrlongpl: added redefinition 86
\@acrshort: added redefinition 83
\@acrshortpl: added redefinition 84
\@gls@field@link: added optional
argument 67
\@glsdescplural@: added redefinition 79
\@glsfirst@: added redefinition 76
\@glsfirstplural@: added redefinition 78
\@glsplural@: added redefinition 77
\@glssymbolplural@: added
redefinition 80
\@glsxtr@defaultnoglossarywarning:
new 139
\@glsxtr@field@linkdefs: new 75
\@glsxtr@insertdots: new 202
\@print@glossary: added redefinition 136
\glsabbrvdefaultfont: renamed from
 \abbrvdefaultfont 208
\glsaccessdesc: new 166
\glsaccessdescplural: new 166
\glsaccessfirst: new 163
\glsaccessfirstplural: new 164
\Glsaccesslong: new 168
\glsaccesslong: new 168
\glsaccessname: new 162
\glsaccessplural: new 163
\Glsaccessshort: new 167
\glsaccessshort: new 167
\Glsaccessshortpl: new 168

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\glsaccesssymbol: new	165
\glsaccesssymbolplural: new	165
\glsaccesstext: new	162
\glsentryfmt: added check for short ..	67
\glslongpltok: new	202
\glsshortpltok: new	202
\glsxtr@newabbreviation: fixed family name in \setkeys	204
\glsxtrdiscardperiod: added check for plural	199
\GLSxtrlongpl: new	218
\Glsxtrlongpl: new	218
\glsxtrlongpl: new	217
\glsxtrNoGlossaryWarning: new	23
\glsxtrpostlinkAddDescOnFirstUse: new	198
\glsxtrpostlinkAddSymbolOnFirstUse: new	199
\glsxtrpostlinkendsentence: new ..	198
\GLSxtrshortpl: new	217
\Glsxtrshortpl: new	216
\glsxtrshortpl: new	215
short-long-desc: fixed name to use \glslabeltok	229
long-short-desc: fixed name to use \glslabeltok	227
0.4 (2015-12-03)	
\@glsxtr@doabbreviationsdef: added redefinition of \acronymtype	20
\Glsfmtshort: changed to use \Glsxtrshort	332
\glsfmtshort: changed to use \glsxtrshort	331
\Glsfmtshortpl: changed to use \glsxtrshortpl	332
\glsfmtshortpl: changed to use \glsxtrshortpl	331
\glsxtrifemptyglossary: new	31
\glsxtrnewnumber: added extra argument	180
\glsxtrnewsymbol: added extra argument	180
\MakeAcronymsAbbreviations: set the default type to \acronymtype	121
\newterm: fixed name argument	179
0.5 (2015-12-07)	
\@cGLS: new	112
\@cGLS@: new	112
\@cGLSpl: new	113
\@cGLSpl@: new	113
\@glsxtr@setentrycountunsetattr: new	108
\cGLS: new	112
\cGLSformat: new	112
\cGLSpl: new	113
\cGLSplformat: new	113
\GlossariesExtraWarningNoLine: new	18
\glsenableentrycount: new	108
\glsfirstabrvdefaultfont: new ..	208
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\Glsfmtfirst: new	334
\glsfmtfirst: new	334
\Glsfmtfirstpl: new	335
\glsfmtfirstpl: new	334
\Glsfmtplural: new	334
\glsfmtplural: new	333
\Glsfmtshort: changed to use \Glsxtrtitleshort	332
renamed from \Glsentryfmtshort ..	332
\glsfmtshort: changed to use \glsxtrtitleshort	331
renamed from \glsentryfmtshort ..	331
\Glsfmtshortpl: changed to use \Glsxtrtitleshortpl	332
renamed from \Glsentryfmtshortpl	332
\glsfmtshortpl: changed to use \glsxtrtitleshortpl	331
renamed from \glsentryfmtshortpl	331
\Glsfmttext: new	333
\glsfmttext: new	333
\glshasattribute: new	177
\glshascategoryattribute: new ..	176
\glsxtremsuffix: new	270
\GlsXtrEnableEntryCounting: new ..	107
\glsxtrifcounttrigger: new	110
\glsxtrscfont: new	242
\glsxtrscsuffix: new	242
\glsxtrsmfont: new	256
\glsxtrsmsuffix: new	257
short-em: new	278
short-em-desc: new	279
short-em-footnote: new	288
short-em-long: new	274
short-em-long-desc: new	275

short-em-postfootnote: new	290
short-sc-footnote: new	253
short-sc-postfootnote: new	254
short-sm: new	260
short-sm-desc: new	261
short-sm-footnote: new	267
short-sm-long: new	258
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long-noshort-em-desc: new	285
long-noshort-sm: new	263
long-noshort-sm-desc: new	265
long-short-em: new	271
long-short-em-desc: new	272
long-short-sm: new	257
long-short-sm-desc: new	258
0.5.1 (2015-12-02)	
\Glsaccesstext: new	163
0.5.1 (2015-12-07)	
\@glsxtr@doaccsupp: new	23
General: removed \ifglsxtruseuchhead	322
\Glsaccessdesc: new	166
\Glsaccessdescplural: new	167
\Glsaccessfirst: new	164
\Glsaccessfirstplural: new	164
\Glsaccessname: new	162
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\Glsaccesssymbol: new	165
\Glsaccesssymbolplural: new	165
\Glsxtrheadfirst: now uses headuc attribute	326
\glsxtrheadfirst: now uses headuc attribute	326
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\glsxtrheadfirstplural: now uses headuc attribute	327
\Glsxtrheadplural: now uses headuc attribute	326
\glsxtrheadplural: now uses headuc attribute	325
\Glsxtrheadshort: now uses headuc attribute	323
\glsxtrheadshort: now uses headuc attribute	322
\Glsxtrheadshortpl: now uses headuc attribute	323
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\Glsxtrheadtext: now uses headuc attribute	325
\glsxtrheadtext: now uses headuc attribute	324
short-em-footnote: switch off regular attribute if set	289
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short-long-desc: switch off regular attribute if set	229
short-sc-footnote: switch off regular attribute if set	253
short-sm-footnote: switch off regular attribute if set	267
long-short: switch off regular attribute if set	226
long-short-desc: switch off regular attribute if set	227
long-short-sc-desc: switch off regular attribute if set	244
footnote: switch off regular attribute if set	230
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0.5.2 (2015-12-08)	
\@GLSdesc@: added accessibility support	79
\@GLSdescplural@: added accessibility support	80
\@GLSfirst@: added accessibility support	77
\@GLSfirstplural@: added accessibility support	78
\@GLSname@: added accessibility support	79
\@GLSplural@: added accessibility support	77
\@GLSsymbol@: added accessibility support	80
\@GLSsymbolplural@: added accessibility support	81
\@GLStext@: added accessibility support	76
\@Glsdesc@: added accessibility support	79
\@Glsdescplural@: added accessibility support	80
\@Glsfirst@: added accessibility support	77
\@Glsfirstplural@: added accessibility support	78

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\@Glssymbolplural@: added accessibility support	81	\glssetabbrvfmt from	
\@Glstext@: added accessibility support ..	76	\glsxtrabbrvfmt to here	67
\@glsdesc@: added accessibility support ..	79	\GlsXtrEnableInitialTagging: new ..	194
\@glsdescplural@: added accessibility support	79	\glsxtrfieldtitlecase: new	181
\@glsfirst@: added accessibility support	76	\GlsXtrFormatLocationList: new ...	64
\@glsfirstplural@: added accessibility support	78	\glsxtrnewabbrevpresetkeyhook:	
\@glsname@: added accessibility support ..	79	new	206
\@glsplural@: added accessibility support	77	\glsxtrtagfont: new	196
\@glssymbol@: added accessibility support	80	\KV@printgloss@nonumberlist: added ..	66
\@glssymbolplural@: added accessibility support	80	\mfu@checkword@do: added	195
\@glstext@: added accessibility support ..	76	\setabbreviationstyle: added check	
\@glsxtr@activate@initialtagging:		for post-definition style switch	222
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\@glsxtr@do@titlecaps@warn: new ..	196	\@glsxtr@autoindex@at: new	192
\@glsxtr@tag: new	196	\@glsxtr@autoindex@encap: new ...	192
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and tidied up code to use just one		\@glsxtr@autoindex@level: new ...	192
\@ifpackageloaded	162	\@glsxtr@autoindex@setname: new ..	190
removed \glsxtrabbrvfmt	219	\@glsxtr@doabbreviationsdef: new ..	20
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\Glossentrydesc: added	194	\GlsXtrNoGlsWarningNoAutoMakeMain	
\Glossentryname: added	185	138
\Glossentrysymbol: added	194	\glsdescwidth: added	63
\glossentrysymbol: added	194	\glspagelistwidth: added	64
\GLSaccessdesc: new	166, 174	\glsxtrdoautoindexname: new	190
\GLSaccessdescplural: new ...	167, 174	\glsxtrpostnamehook: new	187
\GLSaccessfirst: new	164, 173	\if@glsxtr@format@override: new ..	189
\GLSaccessfirstplural: new ..	164, 173	\ProvidesGlossariesExtraLang: new ..	338
\GLSaccesslong: new	168, 175	\RequireGlossariesExtraLang: new ..	337
\GLSaccesslongpl: new	169, 175	0.5.4 (2015-12-15)	
\Glsaccesslongpl: new	169	\@newglossaryentry@defunitcounters:	
\glsaccesslongpl: new	169	new	114
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\GLSaccessshort: new	167, 174	\@GLSxtr@p@acrshort@: new	98
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\@Glsxtr@p@acrshort@: new	98
\@Glsxtr@p@acrshortpl@: new	99
\@Glsxtr@p@long@: new	98
\@Glsxtr@p@longpl@: new	98
\@Glsxtr@p@plural@: new	97
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\@gls@alt@hyp@opt: new	92
\@gls@alt@hyp@opt@char: new	93
\@gls@alt@hyp@opt@keys: new	93
\@gls@increment@currunitcount: new	114
\@gls@local@increment@currunitcount: new	115
\@gls@setdefault@glslink@opts: new	90
\@glsxtr: new	60
\@glsxtr@addunitcounter: new	114
\@glsxtr@currunitcount: new	115
\@glsxtr@ifunitcounter: new	114
\@glsxtr@p@acrlong@: new	99
\@glsxtr@p@acrlongpl@: new	99
\@glsxtr@p@acrshort@: new	98
\@glsxtr@p@acrshortpl@: new	99
\@glsxtr@p@long@: new	98
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\@glsxtr@p@short@: new	97
\@glsxtr@p@shortpl@: new	97
\@glsxtr@p@text@: new	97
\@glsxtr@prevunitcount: new	115
\@glsxtr@setentryunitcountunsetattr: new	119
\@glsxtr@unitcountlist: new	114
\@glsxtrpl: new	61
\@newglossaryentryposthook: added empty see value if not set and added 'see' to field key map	49
\@sGlsXtrEnableOnTheFly: new	59
\cGlsformat: added	113
\cglsmformat: added	113
\cGsplformat: added	113
\cglspfformat: added	113
\glsdisablehyper: added	95
\glsdohyperlink: added	94
\glsdonohyperlink: added	96
\glsenableentryunitcount: new	116
\glshasattribute: added check for entry's existence	177
\glsifattribute: added check for entry's existence	177
\glspostlinkhook: added existence check	197
\Glsxtr: new	60
\glsxtr: new	60
\glsxtrcat: new	60
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\Glsxtrpl: new	61
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1.0 (2016-01-24)	
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\@glsxtr@idx@entrynumberlist: new	131
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\@glsxtr@noidx@entrynumberlist: new	131
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1.01 (2016-02-02)	
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1.02 (2016-04-25)	
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\glsfmtfullpl: new	337	\@GLSfirstplural@: set abbreviation and regular format	78
\Glsfmtlong: new	335	\@GLSname@: set abbreviation and regular format	79
\glsfmtlong: new	335	\@GLSplural@: set abbreviation and regular format	77
\Glsfmtlongpl: new	336	\@GLSsymbol@: set regular format	80
\glsfmtlongpl: new	336	\@GLSsymbolplural@: set regular format	81
\Glsxtrheadfull: new	330	\@GLStext@: set abbreviation and regular format	76
\glsxtrheadfull: new	329	\@GLSuseri@: set regular format	81
\Glsxtrheadfullpl: new	331	\@GLSuserii@: set regular format	82
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\Glsxtrheadlong: new	328	\@GLSuseriv@: set regular format	82
\glsxtrheadlong: new	328	\@GLSuserv@: set regular format	82
\Glsxtrheadlongpl: new	329	\@GLSuservi@: set regular format	83
\glsxtrheadlongpl: new	328	\@Glsdesc@: set abbreviation and regular format	79
\Glsxtrtitlefull: new	330	\@Glsdescplural@: set abbreviation and regular format	80
\glsxtrtitlefull: new	330	\@Glsfirst@: set abbreviation and regular format	77
\Glsxtrtitlefullpl: new	331	\@Glsfirstplural@: set abbreviation and regular format	78
\glsxtrtitlefullpl: new	330	\@Glsname@: set abbreviation and regular format	79
\Glsxtrtitlelong: new	329	\@Glsplural@: set abbreviation and regular format	77
\glsxtrtitlelong: new	328	\@Glssymbol@: set regular format	80
\Glsxtrtitlelongpl: new	329	\@Glsymbolplural@: set regular format	81
\glsxtrtitlelongpl: new	328	\@GLstext@: set abbreviation and regular format	76
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\@GLSplural@: fixed bug \@GLSplural@ should be redefined not \@GLSplural@	77	\@Glsdesc@: set abbreviation and regular format	79
\@Glsfirstplural@: bug fix: misspelt cs name	78	\@Glsplural@: set abbreviation and regular format	77
\@Glsplural@: fixed bug \@Glsplural@ should be redefined not \@Glsplural@	77	\@Glssymbol@: set regular format	80
\@glsplural@: fixed bug \@glsplural@ should be redefined not \@glsplural@	77	\@Glssymbolplural@: set regular format	81
\glsxtrtitlelongpl: bug fix: changed \glsxtrlong to \glsxtrlongpl ..	328	\@GLstext@: set abbreviation and regular format	76
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\@glsxtrpostloctag: new	66	\@GLSuserv@: set regular format	82
\@GLSdesc@: set abbreviation and regular format	79	\@Glsdesc@: set abbreviation and regular format	79
		\@glsdescplural@: set abbreviation and regular format	79
		\@glsfirst@: set abbreviation and regular format	76

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