

# **glossaries-extra.sty v1.37: 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.

# **Contents**

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

## 1.1 Package Initialisation and Options

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{glossaries-extra}[2018/11/30 1.37 (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 }
```

Declare package options.

`sxtrundefaction` 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##1\endcsname}%
51     \ifdefstring{\@@glo@list}{,}{%
52       \%
53       \GlossariesExtraWarning{No entries defined in glossary '##1'}%
54     }%
55     \%
56     \@for##2:=\@@glo@list\do

```

```

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



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

```

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

```

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

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

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

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

```

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

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

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

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     \@glsxtr@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{\glsxref{#2}}%
257   \onelevel@sanitize@glsxref
258   \protected@write{\auxout}{\string\glsxtr@recordsee{#1}{\glsxref}}{}%
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 Initialization 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    \disable@keys{glossaries-extra.sty}{abbreviations}%
488  If the acronym option hasn't been used, change \acronymtype to \glsxtrabbrvtype.
489  \ifglsacronym
490  \else
491    \renewcommand*{\acronymtype}{\glsxtrabbrvtype}%
492  \fi
493 }%}

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{GLS}}%
507  \newcommand*{\As}{\Glsxtrshort}%
508  \newcommand*{\Asp}{\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   \glsxtrtitleorpdforheading
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 }
```

```
878 {%
```

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}
```

`tDefaultOptions`

```
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   \ifundefined\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     \ifundefined\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       \glsxtrunodef{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@auto@see@index%
1469         \glstr@auto@index@crossrefs%
1470       \fi%
1471     }%
1472   }%
1473 \appto{@gls@keymap}{, {see}{see}}
```

\glstr@uses@see Apply \glss@eformat to the see key if not empty.

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

\glstr@uses@see

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

\@glstr@uses@see

```
1488 \def{\glstr@uses@see[#1]\#2\end@\glstr@uses@see}{%
1489   \glstr@uses@eformat{#1}{#2}{}}%
1490 }
```

xtrus@see@format The format used by \glstr@uses@see. The first argument is the tag (such as \seename). The second argument is the comma-separated list of cross-referenced labels.

```
1491 \newcommand*{\glstr@uses@eformat}[2]{%
1492   \glss@eformat[#1]{#2}{}}%
```

lsseeitemformat glossaries originally defined \glss@eitemformat 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   \ifcvoid{glo@\glo@label @alias}{%  
1652     {}%  
1653     \ifcvoid{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 }
```

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

```
1662 \ifdefvoid{glo@see}{%  
1663   \edef\do@glssee{\noexpand\glssee  
1664     {\glo@label}\csuse{glo@\glo@label @alias}}}%  
1665   \do@glssee  
1666 }%  
1667 {}%  
1668 }%  
1669 }%  
1670 }  
  
1671 }
```

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

```
1672 \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\glsxtraddunusedxrefs\expandafter{\glo@label}}{}}%  
1680     }%
```

```
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@glxtrwrglossmark
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@glxtrdocdeffalse
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@glsxtr@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@glsxtr@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={\nopostdesc},##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\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@field@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@field@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@field@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{\glsentryuserv{#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{\Glsentryuserv{#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{\glsentryuserv{#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         \mfirstucMakeUppercase{\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{##3}{##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     \glsabbrvfont{\glsentryshortpl{#2}}#3%
3162 }%
3163 }

sxtr@p@shortpl@

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

Sxtr@p@shortpl@

3170 \def\@GLSxtr@p@shortpl@#1#2[#3] {%
3171   {%
3172     \glssetabbrvfmt{\glscategory{#2}}%
3173     \mfirstucMakeUppercase{\glsabbrvfont{\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\mfirstrucMakeUppercase
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}{\cGlspl}{%  
3503 \renewcommand*{\GLS}{\cGLS}{%  
3504 \renewcommand*{\GLSpol}{\cGLSpl}{%
```

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\providetoggle*\{\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   \GlossariesExtraWarningNoLine{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}{\triggerformat}{\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 \cglss used when entry counting is enabled.

```

\@@cglss@
3613 \def\@@cglss#1#2[#3]{%
3614   \glsxtrifcounttrigger{#2}%
3615   {%
3616     \cglssformat{#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 \cglS etc so that it can be used interchangeable with \gls etc.

\@cglS@

```
3673 \def\@cglS@#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]{\cglSpl@{\#1}{\#2}{\#3}}%
```

\@cGlspl@

```
3676 \def\@cGlspl@#1#2[#3]{\cGlspl@{\#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\mfirstuc\expandafter{\cglSformat{\#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@doseeglossary{##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@noprintglossary\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 }
```

#### glsdohypertarget 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
4305 %\end{macro}
```

#### @makeglossaries For the benefit of makeglossaries

```
4306 \newcommand*{\glsxtr@makeglossaries}[1]{}%
```

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

```
4307 \def\@glsxtr@gettype#1,type=#2,#3@end@glsxtr@gettype{%
4308   \def\@glo@type{#2}%
4309 }
```

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

```
4310 \newcommand{\glsxtr@mixed@assign@sortkey}[1]{%
4311   \edef\@glo@type{\@glo@type}%
4312   \expandafter\DTLifinlist\expandafter{\@glo@type}{\@glsxtr@reg@glosslist}%
4313   {%
4314     \glo@no@assign@sortkey{#1}%
4315   }%
4316   {%
4317     \glo@no@assign@sortkey{#1}%
4318   }%
4319 }%
```

Display number list for the regular version:

```
splaynumberlist
4320 \let\@glsxtr@idx@displaynumberlist\glsdisplaynumberlist
```

Display number list for the “noidx” version:

```
splaynumberlist
4321 \newcommand*{\@glsxtr@noidx@displaynumberlist}[1]{%
4322   \letcs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@locist}%
4323   \ifdef{\gls@locist}
4324   {%
4325     \def{\gls@noidxlocist@sep}{%
4326       \def{\gls@noidxlocist@sep}{%
4327         \def{\gls@noidxlocist@sep}{%
4328           \glsnumlistsep
4329         }%
4330         \def{\gls@noidxlocist@finalsep}{\glsnumlistlastsep}%
4331       }%
4332     }%
4333     \def{\gls@noidxlocist@finalsep}{}%
4334     \def{\gls@noidxlocist@prev}{}%
4335     \forlistloop{\glsnoidxdisplaylocishandler}{\gls@locist}%
4336     \gls@noidxlocist@finalsep
4337     \gls@noidxlocist@prev
4338   }%
4339 }
4340 \glsxtrundeftag
4341 \glsdoifexists{#1}%
4342 {%
4343   \GlossariesWarning{Missing location list for '#1'. Either
4344     a rerun is required or you haven't referenced the entry.}%
4345 }%
4346 }%
4347 }%
4348 }
```

And for the number list loop:

```
@numberlistloop
4349 \newcommand*{\@glsxtr@noidx@numberlistloop}[3]{%
4350   \letcs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@locist}%
4351   \let{\gls@org@glsnoidxdisplayloc}{\glsnoidxdisplayloc}
4352   \let{\gls@org@glsseefORMAT}{\glsseefORMAT}
4353   \let{\glsnoidxdisplayloc#2\relax}{\glsnoidxdisplayloc#2\relax}
4354   \let{\glsseefORMAT#3\relax}{\glsseefORMAT#3\relax}
4355   \ifdef{\gls@locist}
4356   {%
4357     \forlistloop{\glsnoidxnumberlistloophandler}{\gls@locist}%
4358   }%
```

```

4359  {%
4360    \glsxtrundeftag
4361    \glsdoifexists{#1}%
4362    {%
4363      \GlossariesWarning{Missing location list for ‘##1’. Either
4364        a rerun is required or you haven’t referenced the entry.}%
4365    }%
4366  }%
4367  \let\glsnoidxdisplayloc\@gls@org@glsnoidxdisplayloc
4368  \let\glsseefORMAT\@gls@org@glsseefORMAT
4369 }%

```

Same for entry number list.

#### entrynumberlist

```

4370 \newcommand*{\@glsxtr@noidx@entrynumberlist}[1]{%
4371   \let\cs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@loclist}%
4372   \ifdef\@gls@loclist
4373   {%
4374     \glsnoidxloclist{\@gls@loclist}%
4375   }%
4376   {%
4377     \glsxtrundeftag
4378     \glsdoifexists{#1}%
4379     {%
4380       \GlossariesWarning{Missing location list for ‘#1’. Either
4381         a rerun is required or you haven’t referenced the entry.}%
4382     }%
4383   }%
4384 }%

```

#### entrynumberlist

```
4385 \newcommand*{\@glsxtr@idx@entrynumberlist}[1]{\glsentrynumberlist{#1}}
```

#### x@grouptitle Patch.

```

4386 \renewcommand*{\@gls@noidx@grouptitle}[2]{%
4387   \protected@edef\@glsxtr@titlelabel{#1}%
4388   \ifdefvoid\@glsxtr@titlelabel
4389   {}%
4390   {%
4391     \protected@edef\@glsxtr@titlelabel{\csuse{\glsxtr@grouptitle@#1}}%
4392   }%
4393   \ifdefvoid{\@glsxtr@titlelabel}%
4394   {}%
4395   \DTLifint{#1}%
4396   {}%
4397   \ifnum#1<256\relax
4398     \edef#2{\char#1\relax}%

```

```

4399     \else
4400         \edef#2{#1}%
4401     \fi
4402 }
4403 {%
4404     \ifcsundef{#1groupname}%
4405     {\def#2{#1}%
4406     {\letcs#2{#1groupname}}%
4407     }%
4408 }
4409 {%
4410     \let#2\glsxtr@titlelabel
4411 }
4412 }

g@getgroupitle Save original definition of \@gls@getgroupitle
4413 \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.
4414 \newrobustcmd{\glsxtr@getgroupitle}[2]{%
4415     \protected@edef\glsxtr@titlelabel{\glsxtr@groupitle@#1}%
4416     \onelevel@sanitize\glsxtr@titlelabel
4417     \ifcsdef{\glsxtr@titlelabel}%
4418     {\letcs{#2}{\glsxtr@titlelabel}}%
4419     {\glsxtr@org@gotgroupitle{#1}{#2}}%
4420 }
4421 \let\@gls@getgroupitle\glsxtr@getgroupitle

trsetgroupitle Sets the title for the given group label.
4422 \newcommand{\glsxtr@setgroupitle}[2]{%
4423     \protected@edef\glsxtr@titlelabel{\glsxtr@groupitle@#1}%
4424     \onelevel@sanitize\glsxtr@titlelabel
4425     \protected@csxdef{\glsxtr@titlelabel}{#2}%
4426 }

alsetgroupitle As above put only locally defines the title.
4427 \newcommand{\glsxtr@localsetgroupitle}[2]{%
4428     \protected@edef\glsxtr@titlelabel{\glsxtr@groupitle@#1}%
4429     \onelevel@sanitize\glsxtr@titlelabel
4430     \protected@csedef{\glsxtr@titlelabel}{#2}%
4431 }

\glsnavigation Redefine to use new user-level command.
4432 \renewcommand*\glsnavigation{%
4433     \def\gls@between{}%
4434     \ifcsundef{@gls@hypergrouplist@\glo@type}%
4435     {%

```

```

4436     \def\@gls@list{}%
4437 }%
4438 {%
4439     \expandafter\let\expandafter\@gls@list
4440         \csname @gls@hypergrouplist@\@glo@type\endcsname
4441 }%
4442 \@for\@gls@tmp:=\@gls@list\do{%
4443     \gls@between
4444     \glsxtrgetgrouptitle{\@gls@tmp}{\@gls@grptitle}%
4445     \glsnavhyperlink{\@gls@tmp}{\@gls@grptitle}%
4446     \let\@gls@between\glshypernavsep
4447 }%
4448 }

```

@noidx@glossary

```

4449 \renewcommand*{\@print@noidx@glossary}{%
4450     \ifcsdef{@glsref@\@glo@type}%
4451     {%
4452         \ifcsdef{@glo@sortmacro@\@glo@sorttype}%
4453         {%
4454             \csuse{@glo@sortmacro@\@glo@sorttype}{\@glo@type}%
4455         }%
4456         {%
4457             \PackageError{glossaries}{Unknown sort handler '\@glo@sorttype'}{}%
4458         }%
4459         \glossarysection[\glossarytoctitle]{\glossarytitle}%
4460         \glossarypreamble

```

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

```

4461     \def\@gls@currentlettergroup{}%
4462     \begin{theglossary}%
4463         \glossaryheader
4464         \glsresetentrylist
4465         \forlistcsloop{\@gls@noidx@do}{\@glsref@\@glo@type}%
4466         \end{theglossary}%
4467         \glossarypostamble
4468     }%
4469 }

```

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

```

4470     \glsxtrifemptyglossary{\@glo@type}%
4471     {}%
4472     {\glossarysection[\glossarytoctitle]{\glossarytitle}}%
4473     \gls@noref@warn{\@glo@type}%
4474 }%
4475 }

```

noidxdisplayloc Patch to check for range formations.

```

4476 \renewcommand*{\glsnoidxdisplayloc}[4]{%
4477   \setentrycounter[#1]{#2}%
4478   \glsxtr@display@loc#3\empty\end@glsxtr@display@loc{#4}%
4479 }

```

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

```

4480 \def\glsxtr@display@loc#1#2\end@glsxtr@display@loc#3{%
4481   \ifx#1(\relax
4482     \glsxtrdisplaystartloc{#2}{#3}%
4483   \else
4484     \ifx#1)\relax
4485       \glsxtrdisplayendloc{#2}{#3}%
4486     \else
4487       \glsxtrdisplaysingleloc{#1#2}{#3}%
4488     \fi
4489   \fi
4490 }

```

isplaysingleloc Single location.

```

4491 \newcommand*{\glsxtrdisplaysingleloc}[2]{%
4492   \csuse{#1}{#2}%
4493 }

```

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.

```

4494 \newcommand*{\glsxtrdisplaystartloc}[2]{%
4495   \edef\glsxtrlocrengefmt{#1}%
4496   \ifx\glsxtrlocrengefmt\empty
4497     \def\glsxtrlocrengefmt{\glsnumberformat}%
4498   \fi
4499   \expandafter\glsxtrdisplaysingleloc
4500   \expandafter{\glsxtrlocrengefmt}{#2}%
4501 }

```

trdisplayendloc End of a location range.

```

4502 \newcommand*{\glsxtrdisplayendloc}[2]{%
4503   \edef\@glsxtr@tmp{#1}%
4504   \ifdefempty{\@glsxtr@tmp}{\def\@glsxtr@tmp{\glsnumberformat}{}}
4505   \ifx\glsxtrlocrengefmt\@glsxtr@tmp
4506   \else
4507     \GlossariesExtraWarning{Mismatched end location range
4508       (start=\glsxtrlocrengefmt, end=\@glsxtr@tmp)}%
4509   \fi
4510   \expandafter\glsxtrdisplayendlohook\expandafter{\@glsxtr@tmp}{#2}%
4511   \expandafter\glsxtrdisplaysingleloc
4512   \expandafter{\glsxtrlocrengefmt}{#2}%
4513   \def\glsxtrlocrengefmt{}%
4514 }

```

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

```
4515 \newcommand*{\glsxtrdisplayendlochook}[2]{}
```

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

```
4516 \newcommand*{\glsxtrlocrangefmt}{}%
```

setentrycounter Adjust \setentrycounter to save the original prefix.

```
4517 \renewcommand*{\setentrycounter}[2][]{%
4518   \def\glsxtrcounterprefix{#1}%
4519   \ifx\glsxtrcounterprefix\empty
4520     \def\@glo@counterprefix{.}%
4521   \else
4522     \def\@glo@counterprefix{.#1}%
4523   \fi
4524   \def\glsentrycounter{#2}%
4525 }
```

ls@removespaces Redefine to allow adjustments to location hyperlink.

```
4526 \def\@gls@removespaces#1 #2\@nil{%
4527   \toks@=\expandafter{\the\toks@#1}%
4528   \ifx\\#2\\%
4529     \edef\x{\the\toks@}%
4530     \ifx\x\empty
4531   \else
```

Expand location (just in case \toks@ is needed for something else).

```
4532   \expandafter\glsxtrlocationhyperlink\expandafter
4533     \glsentrycounter\expandafter\@glo@counterprefix\expandafter{\the\toks@}%
4534   \fi
4535 \else
4536   \@gls@ReturnAfterFi{%
4537     \@gls@removespaces#2\@nil
4538   }%
4539 \fi
4540 }
```

locationhyperlink \glsxtrlocationhyperlink{<counter>}{<prefix>}{<location>}

```
4541 \newcommand*{\glsxtrlocationhyperlink}[3]{%
4542   \ifdefvoid\glsxtrspplocationurl
4543   {%
4544     \GlsXtrInternalLocationHyperlink{#1}{#2}{#3}%
4545   }%
4546   {%
4547     \hyperref{\glsxtrspplocationurl}{}{#1#2#3}{#3}%
4548   }%
4549 }
```

```

suphypernumber
4550 \newcommand{\glsxtrsupsuphypernumber}[1]{%
4551  {%
4552    \glshasattribute{\glscurrententrylabel}{externalallocation}%
4553  {%
4554    \def\glsxtrsuplocationurl{%
4555      \glsgetattribute{\glscurrententrylabel}{externalallocation}%
4556    }%
4557  {%
4558    \def\glsxtrsuplocationurl{}%
4559  }%
4560  \glshypernumber{#1}%
4561 }%
4562 }

```

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

```

@print@glossary
4563 \renewcommand{\@print@glossary}{%
4564  \makeatletter
4565  \cinput{\jobname.\csname\glototype@\glo@type\in\endcsname}%
4566  \IfFileExists{\jobname.\csname\glototype@\glo@type\in\endcsname}{}{%
4567  }%
4568  {\glsxtrNoGlossaryWarning{\glo@type}}%
4569  \ifglsxindy
4570  \ifcsundef{\xdy@\glo@type\language}%
4571  {%
4572    \edef\@do@auxoutstuff{%
4573      \noexpand\AtEndDocument{%
4574        \noexpand\immediate\noexpand\write\auxout{%
4575          \string\providecommand\string\@xdylanguage[2]{}%
4576        \noexpand\immediate\noexpand\write\auxout{%
4577          \string\@xdylanguage{\glo@type}\{\xdy@main@language\}}%
4578      }%
4579    }%
4580  }%
4581  {%
4582    \edef\@do@auxoutstuff{%
4583      \noexpand\AtEndDocument{%
4584        \noexpand\immediate\noexpand\write\auxout{%
4585          \string\providecommand\string\@xdylanguage[2]{}%
4586        \noexpand\immediate\noexpand\write\auxout{%
4587          \string\@xdylanguage{\glo@type}\{\csname\xdy@\glo@type\language\endcsname\}}%
4588      }%
4589    }%
4590  }%
4591  }%
4592  \@do@auxoutstuff

```

```

4593 \edef\@do@auxoutstuff{%
4594   \noexpand\AtEndDocument{%
4595     \noexpand\immediate\noexpand\write\@auxout{%
4596       \string\providetcommand\string@gls@codepage[2]{}{}}%
4597     \noexpand\immediate\noexpand\write\@auxout{%
4598       \string@gls@codepage{\@glo@type}{\gls@codepage}}{}}%
4599   }%
4600 }%
4601 \@do@auxoutstuff
4602 \fi
4603 \renewcommand*{\@warn@nomakeglossaries}{%
4604   \GlossariesWarningNoLine{\string\makeglossaries\space
4605   hasn't been used,^^Jthe glossaries will not be updated}{}}%
4606 }%
4607 }

```

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

`\GlsWarningHead` Header message.

```

4608 \newcommand{\GlsXtrNoGlsWarningHead}[2]{%
4609   This document is incomplete. The external file associated with
4610   the glossary '#1' (which should be called \texttt{\#2})
4611   hasn't been created.%}
4612 }

```

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

```

4613 \newcommand{\GlsXtrNoGlsWarningEmptyStart}{%
4614   This has probably happened because there are no entries defined
4615   in this glossary.%}
4616 }

```

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

```

4617 \newcommand{\GlsXtrNoGlsWarningEmptyMain}{%
4618   If you don't want this glossary,
4619   add \texttt{\{nomain\}} to your package option list when you load
4620   \texttt{\{glossaries-extra.sty\}}. For example: %}
4621 }

```

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

```

4622 \newcommand{\GlsXtrNoGlsWarningEmptyNotMain}[1]{%
4623   Did you forget to use \texttt{\{type=\#1\}} when you defined your
4624   entries? If you tried to load entries into this glossary with
4625   \texttt{\{loadglsentries\}} did you remember to use
4626   \texttt{\{[#1]\}} as the optional argument? If you did, check that
4627   the definitions in the file you loaded all had the type set
4628   to \texttt{\{glsdefaulttype\}}.%}
4629 }

```

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

```
4630 \newcommand{\GlsXtrNoGlsWarningCheckFile}[1]{%
4631   Check the contents of the file \texttt{\#1}. If
4632   it's empty, that means you haven't indexed any of your entries in this
4633   glossary (using commands like \texttt{\string\gls} or
4634   \texttt{\string\glsadd}) so this list can't be generated.
4635   If the file isn't empty, the document build process hasn't been
4636   completed.%
```

```
4637 }
```

WarningAutoMake Message when automake option has been used.

```
4638 \newcommand{\GlsXtrNoGlsWarningAutoMake}[1]{%
4639   You may need to rerun \LaTeX. If you already have, it may be that
4640   \TeX's shell escape doesn't allow you to run
4641   \texttt{\ifglsxindy xindy\else makeindex\fi}. Check the
4642   transcript file \texttt{\jobname.log}. If the shell escape is
4643   disabled, try one of the following:
4644
4645   \begin{itemize}
4646     \item Run the external (Lua) application:
4647
4648       \texttt{\makeglossaries-lite.lua \string"\jobname\string"}
4649
4650     \item Run the external (Perl) application:
4651
4652       \texttt{\makeglossaries \string"\jobname\string"}
4653   \end{itemize}
4654
4655   Then rerun \LaTeX\ on this document.
4656   \GlossariesExtraWarning{Rerun required to build the
4657   glossary '#1' or check \TeX's shell escape allows
4658   you to run \texttt{\ifglsxindy xindy\else makeindex\fi}}%
```

```
4659 }
```

WarningMisMatch Mismatching \makenoidxglossaries.

```
4660 \newcommand{\GlsXtrNoGlsWarningMisMatch}{%
4661   You need to either replace \texttt{\string\makenoidxglossaries}
4662   with \texttt{\string\makeglossaries} or replace
4663   \texttt{\string\printglossary} (or \texttt{\string\printglossaries}) with
4664   \texttt{\string\printnoidxglossary}
4665   (or \texttt{\string\printnoidxglossaries}) and then rebuild
4666   this document.%
```

```
4667 }
```

arningBuildInfo Build advice.

```
4668 \newcommand{\GlsXtrNoGlsWarningBuildInfo}{%
4669   Try one of the following:
4670   \begin{itemize}
4671     \item Add \texttt{automake} to your package option list when you load
```

```

4672     \texttt{\glsopenbrace glossaries-extra.sty\glsclosebrace}. For example:
4673
4674     \texttt{\string\usepackage[automake]\string
4675         \glsopenbrace glossaries-extra\glsclosebrace}
4676
4677     \item Run the external (Lua) application:
4678
4679     \texttt{\makeglossaries-lite.lua \string"\jobname\string"}
4680
4681     \item Run the external (Perl) application:
4682
4683     \texttt{\makeglossaries \string"\jobname\string"}
4684 \end{itemize}
4685
4686 Then rerun \LaTeX\ on this document.%
4687 }

```

`trRecordWarning` Paragraph for record=only.

```

4688 \newcommand{\GlsXtrRecordWarning}[1]{%
4689   \texttt{\string\printglossary} doesn't work
4690   with the \texttt{record=only} package option
4691   use\par\texttt{\string\printunsrtglossary[type=\#1]}\par
4692   instead (or change the package option).%
4693 }

```

`oGlsWarningTail` Final paragraph.

```

4694 \newcommand{\GlsXtrNoGlsWarningTail}{%
4695   This message will be removed once the problem has been fixed.%
4696 }

```

`GlsWarningNoOut` No out file created. Build advice.

```

4697 \newcommand{\GlsXtrNoGlsWarningNoOut}[1]{%
4698   The file \texttt{\#1} doesn't exist. This most likely means you haven't used
4699   \texttt{\string\makeglossaries} or you have used
4700   \texttt{\string\nofiles}. If this is just a draft version of the
4701   document, you can suppress this message using the
4702   \texttt{nomissingglisttext} package option.%
4703 }

```

`glossarywarning`

```

4704 \newcommand*{\@glsxtr@defaultnoglossarywarning}[1]{%
4705   \glossarysection[\glossarytoctitle]{\glossarytitle}
4706   \GlsXtrNoGlsWarningHead{\#1}{\jobname.\csname @glotype@\gloctype @in\endcsname}
4707   \par
4708   \glsxtrifemptyglossary{\#1}%
4709   {%
4710     \GlsXtrNoGlsWarningEmptyStart\space
4711     \ifthenelse{\equal{\#1}{main}}{\GlsXtrNoGlsWarningEmptyMain\par
4712       \medskip

```

```

4713   \noindent\texttt{\{ \string\usepackage[nomain\ifglsacronym ,acronym\fi]\%
4714     \glsopenbrace glossaries-extra\glsclosebrace\}}
4715   \medskip
4716   }%
4717   {\GlsXtrNoGlsWarningEmptyNotMain{\#1}}%
4718 }%
4719 {%
4720   \IfFileExists{\jobname.\csname @glotype@\glo@type @out\endcsname}%
4721   {%
4722     \GlsXtrNoGlsWarningCheckFile
4723       {\jobname.\csname @glotype@\glo@type @out\endcsname}%
4724
4725     \ifglsautomake
4726
4727     \GlsXtrNoGlsWarningAutoMake{\#1}%
4728
4729   \else
4730
4731     \ifthenelse{\equal{\#1}{main}}%
4732     {%
4733       \GlsXtrNoGlsWarningEmptyMain\par
4734       \medskip
4735       \noindent\texttt{\{ \string\usepackage[nomain]\%
4736         \glsopenbrace glossaries-extra\glsclosebrace\}}
4737       \medskip
4738     }%
4739     {}%
4740
4741     \ifdef{\makeglossaries}{\no{\makeglossaries}}%
4742     {%
4743       \GlsXtrNoGlsWarningMisMatch
4744     }%
4745     {%
4746       \GlsXtrNoGlsWarningBuildInfo
4747     }%
4748   \fi
4749 }%
4750 {%
4751   \GlsXtrNoGlsWarningNoOut
4752     {\jobname.\csname @glotype@\glo@type @out\endcsname}}%
4753 }%
4754 }%
4755 \par
4756 \GlsXtrNoGlsWarningTail
4757 }

```

**glossarywarning** Warn about using `\printglossary` with record

```

4758 \newcommand*{\glsxtr@record@glossarywarning}[1]{%
4759   \GlossariesExtraWarning{\string\printglossary\space doesn't work\MessageBreak}

```

```

4760 with record=only package option\MessageBreak(use
4761 \string\printunsrtglossary[type=#1])\MessageBreak
4762 instead (or change the package option){%
4763 \glossarysection[\glossarytoctitle]{\glossarytitle}
4764 \GlsXtrRecordWarning{#1}
4765 \GlsXtrNoGlsWarningTail
4766 }

```

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.

```
4767 \newcommand*\{\glsxtrresourcefile}[2] [] {%
```

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

```

4768 \disable@keys{glossaries-extra.sty}{record}%
4769 \glsxtr@writefields
4770 \protected@write\@auxout{\glsxtrresourceinit}{\string\glsxtr@resource{#1}{#2}}%
4771 \let\@glsxtr@org@see@noindex\gls@see@noindex
4772 \let\@gls@see@noindex\relax
4773 \IfFileExists{#2.glstex}%
4774 {%

```

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

```

4775 \edef\@bibgls@restoreat{\noexpand\catcode\noexpand`\noexpand\@=\number\catcode`\@}%
4776 \makeatletter
4777 \@input{#2.glstex}%
4778 \@bibgls@restoreat

```

If the record=nameref option has been set, check if this is supported by the installed version of **bib2gls**.

```

4779 \glsxtr@check@bibgls@nameref
4780 }%
4781 {%
4782 \GlossariesExtraWarning{No file '#2.glstex'}%
4783 }%
4784 \let\@gls@see@noindex\glsxtr@org@see@noindex
4785 }%
4786 \onlypreamble\glsxtrresourcefile

```

**@bibgls@nameref** This will only warn after **bib2gls** has created the .glstex file, but there's way to check before.

```

4787 \newcommand{\glsxtr@check@bibgls@nameref}{%
4788 \ifx\glsxtr@record@setting\glsxtr@record@setting@nameref
4789 \ifdef\bibglshrefchar
4790 {}%
4791 {%
4792 \GlossariesExtraWarning{record=nameref requires at least
4793 version 1.8 of bib2gls}%
4794 }%

```

```

4795 \fi
4796 \let\@glsxtr@check@bibgls@nameref\relax
4797 }

xtrresourceinit Code used during the protected write operation.
4798 \newcommand*{\glsxtrresourceinit}{{}

trresourcecount
4799 \newcount\glsxtrresourcecount

trLoadResources Short cut that uses \glsxtrresourcefile with \jobname as the mandatory argument.
4800 \newcommand*{\GlsXtrLoadResources}[1][]{%
4801   \ifnum\glsxtrresourcecount=0\relax
4802     \glsxtrresourcefile[#1]{\jobname}%
4803   \else
4804     \glsxtrresourcefile[#1]{\jobname-\the\glsxtrresourcecount}%
4805   \fi
4806   \advance\glsxtrresourcecount by 1\relax
4807 }

glsxtr@resource
4808 \newcommand*{\glsxtr@resource}[2]{{}

\glsxtr@fields
4809 \newcommand*{\glsxtr@fields}[1]{{}

xtr@texencoding
4810 \newcommand*{\glsxtr@texencoding}[1]{{}

\glsxtr@langtag
4811 \newcommand*{\glsxtr@langtag}[1]{{}

@pluralsuffixes
4812 \newcommand*{\glsxtr@pluralsuffixes}[4]{{}

tr@shortcutsval
4813 \newcommand*{\glsxtr@shortcutsval}[1]{{}

sxtr@linkprefix
4814 \newcommand*{\glsxtr@linkprefix}[1]{{}

xtr@writefields This information only needs to be written once, so disable it after it's been used.
4815 \newcommand*{\glsxtr@writefields}{{%
```

```

4816 \protected@write\@auxout{%
4817   {\string\providecommand*{\string\glsxtr@fields}[1]{}}%
4818 \protected@write\@auxout{%
4819   {\string\providecommand*{\string\glsxtr@resource}[2]{}}%
4820 \protected@write\@auxout{%
4821   {\string\providecommand*{\string\glsxtr@pluralsuffixes}[4]{}}%
4822 \protected@write\@auxout{%
4823   {\string\providecommand*{\string\glsxtr@shortcutsval}[1]{}}%
4824 \protected@write\@auxout{%
4825   {\string\providecommand*{\string\glsxtr@linkprefix}[1]{}}%
4826 \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`.

```

4833 \ifdef\CurrentTrackedLanguageTag
4834 {%
4835   \protected@write\@auxout{}{%
4836     \string\glsxtr@langtag{\CurrentTrackedLanguageTag}}%
4837 }%
4838 {%
4839 \protected@write\@auxout{}{\string\glsxtr@pluralsuffixes
4840   {\glspluralsuffix}{\abbrvpluralsuffix}{\acrpluralsuffix}}%
4841   {\glsxtrabbrvpluralsuffix}}%
4842 \ifdef\inputencodingname
4843 {%
4844   \protected@write\@auxout{}{\string\glsxtr@texencoding{\inputencodingname}}%
4845 }%
4846 {%
```

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.)

```

4847   @ifpackageloaded{fontspec}%
4848     {\protected@write\@auxout{}{\string\glsxtr@texencoding{utf8}}}}%
4849   {}%
4850 }%
4851 \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.

```

4852 \AtBeginDocument
4853   {\protected@write\@auxout{}{\string\glsxtr@linkprefix{\glolinkprefix}}}}%
4854 \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.

```
4855 \ifglsautomake
4856   \IfFileExists{\jobname.aux}{%
4857     {\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.

```
4858 \ifx\@gls@doautomake\@gls@doautomake@err
4859   \let\@gls@doautomake\relax
4860 \fi
4861 \fi
4862 }
```

do@automake@err

```
4863 \newcommand*{\@gls@doautomake@err}{%
4864   \PackageError{glossaries}{You must use
4865     \string\makeglossaries\space with automake=true}
4866   {%
4867     Either remove the automake=true setting or
4868     add \string\makeglossaries\space to your document preamble.%
4869   }%
4870 }
```

Allow locations specific to a particular counter to be recorded.

\glsxtr@record

```
4871 \newcommand*{\glsxtr@record}[5]{}
```

@record@nameref Used with record=nameref to include current label information.

```
4872 \newcommand*{\glsxtr@record@nameref}[8]{}
```

r@counterrecord Aux file command.

```
4873 \newcommand*{\glsxtr@counterrecord}[3]{%
4874   \glsxtrfieldlistgadd{\#1}{record.\#2}{\#3}%
4875 }
```

unterrecordhook Hook used by \glsxtr@dorecord.

```
4876 \newcommand*{\glsxtr@counterrecordhook}{}%
```

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

```
4877 \newcommand*{\GlsXtrRecordCounter}[1]{%
4878   \@@glsxtr@recordcounter{\#1}%
4879 }
4880 \onlypreamble\GlsXtrRecordCounter
```

doccounterrecord

```
4881 \newcommand*{\@glsxstr@docounterrecord}[1]{%
4882   \protected@write\@auxout{}{\string\glsxstr@counterrecord
4883     {\@gls@label}{#1}{\csuse{the#1}}}}%
4884 }
```

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.

```
4885 \newcommand*{\glsxtrglossentry}[1]{%
4886   \glsxtrtitleorpdforheading
4887   {\@glsxtrglossentry{#1}}%
4888   {\glsentryname{#1}}%
4889   {\glsxtrheadname{#1}}%
4890 }
```

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

```
4891 \newrobustcmd*{\@glsxtrglossentry}[1]{%
4892   \glsxtrtitleorpdforheading
4893   {%
4894     \glsdoifexists{#1}%
4895     {%
4896       \begingroup
4897         \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
4898         \edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
4899         \ifglshasparent{#1}%
4900           {\GlsXtrStandaloneSubEntryItem{#1}}%
4901           {\glsentryitem{#1}}%
4902           \GlsXtrStandaloneEntryName{#1}%
4903         \endgroup
4904     }%
4905   }%
4906   {\glsentryname{#1}}%
4907   {\glsxtrheadname{#1}}%
4908 }
```

daloneEntryName

```
4909 \newcommand*{\GlsXtrStandaloneEntryName}[1]{%
4910   \glstarget{#1}{\glossentryname{#1}}%
4911 }
```

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.)

```

4912 \newcommand{\GlsXtrStandaloneGlossaryType}{\glsentrytype{\glscurrententrylabel}}}

oneSubEntryItem Used for sub-entries in standalone format. The argument is the entry's label.
4913 \newcommand*{\GlsXtrStandaloneSubEntryItem}[1]{%
4914   \GlsXtrIfFieldEqNum{level}{#1}{1}{\glssubentryitem{#1}}{}%
4915 }

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.
4916 \newcommand*{\glsxtrglossentryother}[3]{%
4917   \ifstrempty{#1}{%
4918     {%
4919       \ifcsdef{glsxtrhead#3}{%
4920         {%
4921           \glsxtrtitleorpdfforheading
4922           {\@glsxtrglossentryother{#2}{#3}{#1}}%
4923           {\@gls@entry@field{#2}{#3}}%
4924           {\csuse{glsxtrhead#3}{#2}}%
4925         }%
4926       {%
4927         \glsxtrtitleorpdfforheading
4928         {\@glsxtrglossentryother{#2}{#3}{#1}}%
4929         {\@gls@entry@field{#2}{#3}}%
4930         {\@gls@entry@field{\NoCaseChange{#2}}{#3}}%
4931       }%
4932     }%
4933   {%
4934     \glsxtrtitleorpdfforheading
4935     {\@glsxtrglossentryother{#2}{#3}{#1}}%
4936     {\@gls@entry@field{#2}{#3}}%
4937     {#1}}%
4938   }%
4939 }

glossentryother As \glsxtrglossentry but uses a different field.
4940 \newrobustcmd*{\glsxtrglossentryother}[3]{%
4941   \glsxtrtitleorpdfforheading
4942   {%
4943     \glsdoifexists{#1}{%
4944       {%
4945         \begingroup
4946           \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
4947           \edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
4948           \ifglshasparent{#1}{%
4949             {\GlsXtrStandaloneSubEntryItem{#1}}%
4950             {\glsentryitem{#1}}%
4951             \GlsXtrStandaloneEntryOther{#1}}%

```

```

4952     \endgroup
4953   }%
4954 }%
4955 {\@gls@entry@field{#1}{#2}}%
4956 {#3}%
4957 }

```

`aloneEntryOther`

```

4958 \newcommand*{\GlsXtrStandaloneEntryOther}[2]{%
4959   \glstarget{#1}{\glossentrynameother{#1}{#2}}%
4960 }

```

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

```

4961 \newcommand*{\printunsrtglossary}{%
4962   \@ifstar\s@printunsrtglossary\@printunsrtglossary
4963 }

```

`ntunsrtglossary` Unstarred version.

```

4964 \newcommand*{\@printunsrtglossary}[1][]{%
4965   \@printglossary{type=\glsdefaulttype,#1}{\@print@unsrt@glossary}%
4966 }

```

`ntunsrtglossary` Starred version.

```

4967 \newcommand*{\s@printunsrtglossary}[2][]{%
4968   \begingroup
4969   #2%
4970   \@printglossary{type=\glsdefaulttype,#1}{\@print@unsrt@glossary}%
4971   \endgroup
4972 }

```

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

```

4973 \newcommand*{\printunsrtglossaries}{%
4974   \forallglossaries{\@glo@type}{\printunsrtglossary[type=\@glo@type]}%
4975 }

```

`@unsrt@glossary`

```

4976 \newcommand*{\@print@unsrt@glossary}{%
4977   \glossarysection[\glossarytoctitle]{\glossarytitle}%
4978   \glossarypreamble
      check for empty list
4979   \glsxtrifemptyglossary{\@glo@type}%
4980   {%
4981     \GlossariesExtraWarning{No entries defined in glossary '\@glo@type'}%
4982   }%
4983   {%

```

```

4984 \key@ifundefined{glossentry}{group}%
4985 {\let\@gls@getgroupitle\@gls@noidx@getgroupitle}%
4986 {\let\@gls@getgroupitle\@glsxtr@unsrt@getgroupitle}%
4987 \def\@gls@currentlettergroup{}%

```

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

```

4988 \def\@glsxtr@doglossary{%
4989   \begin{theglossary}%
4990     \glossaryheader
4991     \glsresetentrylist
4992   }%
4993   \expandafter\for\expandafter\glscurrententrylabel\expandafter
4994     :\expandafter=\csname glolist@\@glo@type\endcsname\do{%
4995       \ifdefempty{\glscurrententrylabel}%
4996         {}%
4997       {}%

```

Provide a hook (for example to measure width).

```

4998 \let\glsxtr@process\@firstofone
4999 \let\printunsrtglossaryskipentry
5000   \glsxtr@printunsrtglossaryskipentry
5001 \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%

```

Don't check group for child entries.

```

5002 \glsxtr@process
5003 {%
5004   \ifglshasparent{\glscurrententrylabel}{}%
5005   {%
5006     \glsxtr@checkgroup\glscurrententrylabel
5007     \expandafter\appto\expandafter\glsxtr@doglossary\expandafter
5008       {\glsxtr@groupheading}%
5009   }%
5010   \eappto\glsxtr@doglossary{%
5011     \noexpand\printunsrt@glossary@handler{\glscurrententrylabel}}%
5012   }%
5013 }%
5014 }%
5015 \appto\glsxtr@doglossary{\end{theglossary}}%
5016 \printunsrtglossarypredoglossary
5017 \glsxtr@doglossary
5018 }%
5019 \glossarypostamble
5020 }

```

ntryprocesshook

```
5021 \newcommand*\printunsrtglossaryentryprocesshook}[1]{}
```

ossaryskipentry

```
5022 \newcommand*\printunsrtglossaryskipentry}{%
5023 \PackageError{glossaries-extra}{\string\printunsrtglossaryskipentry\space}
```

```

5024 can only be used within \string\printunsrtglossaryentryprocesshook}{}%
5025 }

ntryprocesshook
5026 \newcommand*{\@glsxtr@printunsrtglossaryskipentry}{%
5027   \let\glsxtr@process\@gobble
5028 }

rypredoglossary
5029 \newcommand*{\printunsrtglossarypredoglossary}{}{}
```

lossary@handler

```

5030 \newcommand{\@printunsrt@glossary@handler}[1]{%
5031   \xdef\glscurrententrylabel{#1}%
5032   \printunsrtglossaryhandler\glscurrententrylabel
5033 }
```

glossaryhandler

```

5034 \newcommand{\printunsrtglossaryhandler}[1]{%
5035   \glsxtrunsrtdo{#1}%
5036 }
```

`\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.

```

5037 \newrobustcmd*{\glsxtriflabelinlist}[4]{%
5038   \protected@edef\glsxtr@doiflabelinlist{\noexpand@gls@ifinlist{#1}{#2}}%
5039   @glsxtr@doiflabelinlist{#3}{#4}%
5040 }
```

srtglossaryunit

```

5041 \newcommand{\print@op@unsrtglossaryunit}[2][]{%
5042   \s@printunsrtglossary[type=\glsdefaulttype,#1]{%
5043     \printunsrtglossaryunitsetup{#2}%
5044   }%
5045 }
```

ossaryunitsetup

```

5046 \newcommand*{\printunsrtglossaryunitsetup}[1]{%
5047   \renewcommand{\printunsrtglossaryhandler}[1]{%
5048     \glsxtrfieldxifinlist{##1}{record.#1}{\csuse{the#1}}%
5049     {\glsxtrunsrtdo{##1}}%
5050     {}%
5051   }%
```

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

```
5052 \ifcsundef{theH#1}%
5053 {%
5054   \renewcommand*{\@glsxtrhypernameprefix}{record.#1.\csuse{the#1}.\@gobble}%
5055 }%
5056 {%
5057   \renewcommand*{\@glsxtrhypernameprefix}{record.#1.\csuse{theH#1}.\@gobble}%
5058 }%
5059 \renewcommand*{\glossarysection}[2][]{%
5060 \appto\glossarypostamble{\glspar\medskip\glspar}%
5061 }
```

#### srtglossaryunit

```
5062 \newcommand{\print@noop@unsrtglossaryunit}[2][]{%
5063   \PackageError{glossaries-extra}{\string\printunsrtglossaryunit\space
5064     requires the record=only or record=alsoindex package option}{}%
5065 }
```

#### t@getgroupitle

```
5066 \newrobustcmd*{\@glsxtr@unsrt@getgroupitle}[2]{%
5067   \protected@edef{\@glsxtr@titlelabel{\glsxtr@groupitle@#1}}%
5068   \@onelevel@sanitize{\@glsxtr@titlelabel}%
5069   \ifcsdef{\@glsxtr@titlelabel}%
5070   {\letcs{\#2}{\@glsxtr@titlelabel}}%
5071   {\def{\#2{\#1}}{}}%
5072 }
```

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

```
5073 \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).

```
5074 \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.

```
5075 \newcommand*{\@glsxtr@checkgroup}[1]{%
5076   \def{\@glsxtr@groupheading}{}%
5077   \key@ifundefined{glossentry}{group}{}%
5078 }
```

```

5079   \letcs{\@gls@sort}{\glo@glsdetoklabel{#1}@sort}%
5080   \expandafter\glo@grabfirst\@gls@sort{}{}\@nil
5081 }%
5082 {%
5083   \protected@edef\@glo@thislettergrp{%
5084     \csuse{\glo@glsdetoklabel{#1}@glsxtrgroupfield}}%
5085 }%
5086 \ifdefequal{\@glo@thislettergrp}{\@gls@currentlettergroup}%
5087 {}%
5088 {%
5089   \ifdefempty{\@gls@currentlettergroup}{}{%
5090     \def\@glsxtr@groupheading{\glsgroupskip}%
5091     \appto{\@glsxtr@groupheading}{%
5092       \noexpand\glsgroupheading{\expandonce{\@glo@thislettergrp}}%
5093     }%
5094   }%
5095 \let\@gls@currentlettergroup\@glo@thislettergrp
5096 }

```

`trLocationField` Stores the internal name of the location field.

```
5097 \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.

```

5098 \newcommand{\@glsxtr@noidx@do}[1]{%
5099   \ifglsentryexists{#1}{%
5100     {%
5101       \global\letcs{\@gls@loclist}{\glo@glsdetoklabel{#1}@loclist}%
5102       \global\letcs{\@gls@location}{\glo@glsdetoklabel{#1}@GlsXtrLocationField}%
5103       \ifglshasparent{#1}{%
5104         {%
5105           \gls@level=\csuse{\glo@glsdetoklabel{#1}@level}\relax
5106           \ifdefvoid{\@gls@location}{%
5107             {%
5108               \ifdefvoid{\@gls@loclist}{%
5109                 {%
5110                   \subglossentry{\gls@level}{#1}{}%
5111                 }%
5112                 {%
5113                   \subglossentry{\gls@level}{#1}%
5114                 }%
5115                   \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}%
5116                 }%
5117               }%
5118             }%
5119             {%
5120               \subglossentry{\gls@level}{#1}{\glossaryentrynumbers{\@gls@location}}%
5121             }%
5122           }%
5123         }%
5124       }%
5125     }%
5126   }%
5127 }

```

```

5122  }%
5123  {%
5124      \ifdefvoid{\@gls@location}{%
5125          {%
5126              \ifdefvoid{\@gls@loclist}{%
5127                  {%
5128                      \glossentry{\#1}{}}%
5129                  }%
5130                  {%
5131                      \glossentry{\#1}{}}%
5132                      {%
5133                          \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}{}}%
5134                          }%
5135                          }%
5136          }%
5137          {%
5138              \glossentry{\#1}{}}%
5139              {%
5140                  \glossaryentrynumbers{\@gls@location}{}}%
5141                  }%
5142                  }%
5143          }%
5144      }%
5145  {}%
5146 }

```

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
5147 \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
5148 \newcommand*\@glsxtr@providenewgls}{%
5149  \protected@write\auxout{}{\string\providecommand{\string\glsxtr@newglslike}[2]{}}%
5150  \let\@glsxtr@providenewgls\relax
5151 }
```

`identifyglslike` Identify the command given in the second argument for the benefit of `bib2gls`.

```
5152 \newcommand{\glsxtridentifyglslike}[2]{%
5153  \ifdefequal\@glsxtr@record@setting\@glsxtr@record@setting@off
5154  {}%
5155  {}%
```

```

5156     \glsxtr@providenewgls
5157     \protected@write\@auxout{}{\string\glsxtr@newglslike{#1}{\string#2}}%
5158 }%
5159 }

```

\glsxtrnewgls [\ioptions] [\iprefix] [\ics] [\innercsname]

```

5160 \newcommand*{\glsxtrnewgls}[4]{%
5161   \ifdef{\#3}{%
5162     {%
5163       \PackageError{glossaries-extra}{Command \string#3\space already%
5164 defined}{}%
5165     }%
5166     {%

```

Write information to the aux file for bib2gls.

```

5167   \glsxtridentifyglslike{#2}{#3}%
5168   \ifcsdef{@#4like@#2}{%
5169     {%
5170       \advance\glsxtrnewgls@inner by \one
5171       \def\glsxtrnewgls@innercsname{@#4like\number\glsxtrnewgls@inner @#2}%
5172     }%
5173     {\def\glsxtrnewgls@innercsname{@#4like@#2}%
5174      \expandafter\newrobustcmd\expandafter*\expandafter
5175      #3\expandafter{\expandafter\gls@hyp@opt\csname\glsxtrnewgls@innercsname\endcsname}%
5176      \ifstrempy{\#1}{%
5177        {%
5178          \expandafter\newcommand\expandafter*\csname\glsxtrnewgls@innercsname\endcsname[2][]{%
5179            \new@ifnextchar[%]
5180              {\csname @#4@\endcsname{##1}{##2##2}}%
5181              {\csname @#4@\endcsname{##1}{##2##2}[]}%
5182            }%
5183        }%
5184        {%
5185          \expandafter\newcommand\expandafter*\csname\glsxtrnewgls@innercsname\endcsname[2][]{%
5186            \new@ifnextchar[%]
5187              {\csname @#4@\endcsname{##1,##1}{##2##2}}%
5188              {\csname @#4@\endcsname{##1,##1}{##2##2}[]}%
5189            }%
5190        }%
5191      }%
5192    }%

```

\glsxtrnewgls [\ioptions] [\iprefix] [\ics]

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

```
5193 \newrobustcmd*\{glsxtrnewgls\}[3] [] {%
5194   \@glsxtrnewgls{\#1}{\#2}{\#3}{gls}%
5195 }
```

`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.

```
5196 \newrobustcmd*\{glsxtrnewglslike\}[6] [] {%
5197   \@glsxtrnewgls{\#1}{\#2}{\#3}{gls}%
5198   \@glsxtrnewgls{\#1}{\#2}{\#4}{glspl}%
5199   \@glsxtrnewgls{\#1}{\#2}{\#5}{Gls}%
5200   \@glsxtrnewgls{\#1}{\#2}{\#6}{Glspl}%
5201 }
```

`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.

```
5202 \newrobustcmd*\{glsxtrnewGLSlike\}[4] [] {%
5203   \@glsxtrnewgls{\#1}{\#2}{\#3}{GLS}%
5204   \@glsxtrnewgls{\#1}{\#2}{\#4}{GLSpl}%
5205 }
```

`\glsxtrnewrgls` As `\glsxtrnewgls` but for `\rgls`.

```
5206 \newrobustcmd*\{glsxtrnewrgls\}[3] [] {%
5207   \@glsxtrnewgls{\#1}{\#2}{\#3}{rgls}%
5208 }
```

`sxtrnewrglslike` As `\glsxtrnewglslike` but for `\rgls` etc.

```
5209 \newrobustcmd*\{glsxtrnewrglslike\}[6] [] {%
5210   \@glsxtrnewgls{\#1}{\#2}{\#3}{rgls}%
5211   \@glsxtrnewgls{\#1}{\#2}{\#4}{rglspl}%
5212   \@glsxtrnewgls{\#1}{\#2}{\#5}{rGls}%
5213   \@glsxtrnewgls{\#1}{\#2}{\#6}{rGlspl}%
5214 }
```

`sxtrnewrGLSlike` As `\glsxtrnewGLSlike` but for `\rGLS` etc.

```
5215 \newrobustcmd*\{glsxtrnewrGLSlike\}[4] [] {%
5216   \@glsxtrnewgls{\#1}{\#2}{\#3}{rGLS}%
5217   \@glsxtrnewgls{\#1}{\#2}{\#4}{rGLSpl}%
5218 }
```

Provide easy access to record count fields.

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

```
5219 \newcommand*\{GlsXtrTotalRecordCount\}[1] {%
5220   \ifcsdef{glo@\glsdetoklabel{\#1}@recordcount}%
5221     {\csname glo@\glsdetoklabel{\#1}@recordcount\endcsname}%
5222     {0}%
5223 }
```

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

```
5224 \newcommand*{\GlsXtrRecordCount}[2]{%
5225   \ifcsdef{glo@\glstoklabel{#1}@recordcount.{#2}}{%
5226     {\csname glo@\glstoklabel{#1}@recordcount.{#2}\endcsname}%
5227   {0}%
5228 }
```

`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.

```
5229 \newcommand*{\GlsXtrLocationRecordCount}[3]{%
5230   \ifcsdef{glo@\glstoklabel{#1}@recordcount.{#2}.\glsxtrdetoklocation{#3}}{%
5231     {\csname glo@\glstoklabel{#1}@recordcount.{#2}.\glsxtrdetoklocation{#3}\endcsname}%
5232   {0}%
5233 }
```

`trdetoklocation`

```
5234 \newcommand*{\glsxtrdetoklocation}[1]{#1}
```

`ablerecordcount`

```
5235 \newcommand*{\glsxtrenablerecordcount}{%
5236   \renewcommand*{\gls}{\rgls}%
5237   \renewcommand*{\Gls}{\rGls}%
5238   \renewcommand*{\glspl}{\rglsp}%
5239   \renewcommand*{\Glspl}{\rGlspl}%
5240   \renewcommand*{\GLS}{\rGLS}%
5241   \renewcommand*{\GLSpl}{\rGLSp}%
5242 }
```

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

```
5243 \newcommand*{\glsxtrrecordtriggervalue}[1]{%
5244   \GlsXtrTotalRecordCount{#1}%
5245 }
```

`dCountAttribute`

```
5246 \newcommand*{\GlsXtrSetRecordCountAttribute}[2]{%
5247   @for@\glsxtr@cat:=#1\do
5248   {%
5249     \ifdefempty{@glsxtr@cat}{}{%
5250       {\glssetcategoryattribute{@glsxtr@cat}{recordcount}{#2}}%
5251     }%
5252   }%
5253 }%
5254 }
```

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

```
5255 \newcommand*{\glsxtrifrecordtrigger}[3]{%
5256   \glshasattribute{#1}{recordcount}%
5257 {%
5258   \ifnum\glsxtrrecordtriggervalue{#1}>\glsgetattribute{#1}{recordcount}\relax
5259     #3%
5260   \else
5261     #2%
5262   \fi
5263 }%
5264 {#3}%
5265 }
```

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

```
5266 \newcommand*{\@glsxtr@rglstrigger@record}[3]{%
5267   \edef\glslabel{\glsdetoklabel{#2}}%
5268   \let\@gls@link@label\glslabel
5269   \def\@glsxtr@thevalue{}%
5270   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
5271   \def\@glsnumberformat{\glstriggerrecordformat}%
5272   \edef\@gls@counter{\csname glo@\glslabel @counter\endcsname}%
5273   \edef\glsstype{\csname glo@\glslabel @type\endcsname}%
5274   \def\@glsxtr@thevalue{}%
5275   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
5276   \glsxtrinitwrgloss
5277   \glslinkpresetkeys
5278   \setkeys{glslink}{#1}%
5279   \glslinkpostsetkeys
5280   \ifdefempty{\@glsxtr@thevalue}%
5281 {%
5282   \@gls@saveentrycounter
5283 }%
5284 {%
5285   \let\the\glsentrycounter\@glsxtr@thevalue
5286   \def\theH\glsentrycounter{\@glsxtr@theHvalue}%
5287 }%
5288 \ifglsxtrinitwrglossbefore
5289   \@do@wrglossary{#2}%
5290 \fi
5291 #3%
5292 \ifglsxtrinitwrglossbefore
5293 \else
5294   \@do@wrglossary{#2}%
5295 \fi
5296 \ifKV@glslink@local
5297   \glslocalunset{#2}%

```

```

5298 \else
5299   \glsunset{#2}%
5300 \fi
5301 }

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

5302 \newcommand{\glstriggerrecordformat}[1] {}

\rgls
5303 \newrobustcmd{\rgls}{\gls@hyp@opt\rgls}

\@rgls
5304 \newcommand{\@rgls}[2][]{%
5305   \new@ifnextchar[\@rgls@{\#1}{\#2}]{\@rgls@{\#1}{\#2}[]}{%
5306 }

\@rgls@
5307 \def\@rgls@#1#2[#3]{%
5308   \glsxtrifrecordtrigger{#2}%
5309   {%
5310     \glsxtr@rglstrigger@record{#1}{#2}{\rglsformat{#2}{#3}}%
5311   }%
5312   {%
5313     \gls@{\#1}{\#2}[#3]%
5314   }%
5315 }%

\rglsp
5316 \newrobustcmd{\rglsp}{\gls@hyp@opt\rglsp}

\@rglsp
5317 \newcommand{\@rglsp}[2][]{%
5318   \new@ifnextchar[\@rglsp@{\#1}{\#2}]{\@rglsp@{\#1}{\#2}[]}{%
5319 }

\@rglsp@
5320 \def\@rglsp@#1#2[#3]{%
5321   \glsxtrifrecordtrigger{#2}%
5322   {%
5323     \glsxtr@rglstrigger@record{#1}{#2}{\rglspformat{#2}{#3}}%
5324   }%
5325   {%
5326     \glspl@{\#1}{\#2}[#3]%
5327   }%
5328 }%

\rGls
5329 \newrobustcmd{\rGls}{\gls@hyp@opt\rGls}

```

```

\@rGls
5330 \newcommand*{\@rGls}[2] []{%
5331   \new@ifnextchar[{\@rGls@{\#1}{\#2}}{\@rGls@{\#1}{\#2}[] }%
5332 }

\@rGls@
5333 \def\@rGls@#1#2[#3]{%
5334   \glsxtrifrecordtrigger{#2}%
5335   {%
5336     \glsxtr@rglstrigger@record{#1}{#2}{\rGlsformat{#2}{#3}}%
5337   }%
5338   {%
5339     \@Gls@{\#1}{\#2} [#3]%
5340   }%
5341 }%

\rGlspl
5342 \newrobustcmd*{\rGlspl}{\gls@hyp@opt\@rGlspl}

\@rGlspl
5343 \newcommand*{\@rGlspl}[2] []{%
5344   \new@ifnextchar[{\@rGlspl@{\#1}{\#2}}{\@rGlspl@{\#1}{\#2}[] }%
5345 }

\@rGlspl@
5346 \def\@rGlspl@#1#2[#3]{%
5347   \glsxtrifrecordtrigger{#2}%
5348   {%
5349     \glsxtr@rglstrigger@record{#1}{#2}{\rGlsplformat{#2}{#3}}%
5350   }%
5351   {%
5352     \@Glspl@{\#1}{\#2} [#3]%
5353   }%
5354 }%

\rGLS
5355 \newrobustcmd*{\rGLS}{\gls@hyp@opt\@rGLS}

\@rGLS
5356 \newcommand*{\@rGLS}[2] []{%
5357   \new@ifnextchar[{\@rGLS@{\#1}{\#2}}{\@rGLS@{\#1}{\#2}[] }%
5358 }

\@rGLS@
5359 \def\@rGLS@#1#2[#3]{%
5360   \glsxtrifrecordtrigger{#2}%
5361   {%
5362     \glsxtr@rglstrigger@record{#1}{#2}{\rGLSformat{#2}{#3}}%

```

```

5363 }%
5364 {%
5365 \Gls@{#1}{#2}[#3]%
5366 }%
5367 }%


\rGLSpl
5368 \newrobustcmd*\rGLSpl{\gls@hyp@opt\rGLSpl}

\@rGLSpl
5369 \newcommand*\@rGLSpl[2][]{%
5370 \new@ifnextchar[\@rGLSpl@{#1}{#2}]{\@rGLSpl@{#1}{#2}[]}{%
5371 }}

\@rGLSpl@
5372 \def\@rGLSpl@#1#2[#3]{%
5373 \glsxtrifrecordtrigger{#2}%
5374 {%
5375 \glsxtr@rglstrigger@record{#1}{#2}{\rGLSplformat{#2}{#3}}%
5376 }%
5377 {%
5378 \Glspl@{#1}{#2}[#3]%
5379 }%
5380 }%


\rglsformat
5381 \newcommand*\rglsformat[2]{%
5382 \glsifregular{#1}%
5383 {\glsentryfirst{#1}}%
5384 {\ifglshaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
5385 }

\rglsplformat
5386 \newcommand*\rglsplformat[2]{%
5387 \glsifregular{#1}%
5388 {\glsentryfirstplural{#1}}%
5389 {\ifglshaslong{#1}{\glsentrylongplural{#1}}{\glsentryfirstplural{#1}}}#2%
5390 }

\rGlsformat
5391 \newcommand*\rGlsformat[2]{%
5392 \glsifregular{#1}%
5393 {\Glsentryfirst{#1}}%
5394 {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
5395 }

\rGlsplformat
5396 \newcommand*\rGlsplformat[2]{%

```

```

5397 \glsifregular{#1}
5398 {\Glsentryfirstplural{#1}}%
5399 {\ifglshaslong{#1}{\Glsentrylongplural{#1}}{\Glsentryfirstplural{#1}}}#2%
5400 }

\rGLSformat
5401 \newcommand*{\rGLSformat}[2]{%
5402 \expandafter\mfirstuc\expandafter{\rglsformat{#1}{#2}}%
5403 }

\rGLSplformat
5404 \newcommand*{\rGLSplformat}[2]{%
5405 \expandafter\mfirstuc\expandafter{\rglsplformat{#1}{#2}}%
5406 }

```

## 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`.

```
5407 \newcommand{\glsxtr@do@inc@linkcount}{%
```

Does this entry have the `linkcount` attribute set?

```
5408 \glsifattribute{\glslabel}{linkcount}{true}%
5409 {%
```

Does the counter exist?

```
5410 \ifcsdef{c@glsxtr@linkcount@\glslabel}{}%
5411 {%
```

Counter doesn’t exist, so define it.

```
5412 \newcounter{glsxtr@linkcount@\glslabel}%
```

If `linkcountmaster` is set, add to counter reset.

```
5413 \glshasattribute{\glslabel}{linkcountmaster}%
5414 {%
```

Need to ensure values are fully expanded.

```
5415 \begingroup
5416 \edef\x{\endgroup\noexpand\@addtoreset{glsxtr@linkcount@\glslabel}%
5417 {\glsgetattribute{\glslabel}{linkcountmaster}}}}
5418 \x
5419 }%
```

```

5420      {}%
5421  }%
    Increment counter:
5422  \glsxtrinlinkcounter{glsxtr@linkcount@\glslabel}%
5423 }%
5424 {}%
5425 }

rinlinkcounter May be redefined to use \refstepcounter if required.
5426 \newcommand*{\glsxtrinlinkcounter}[1]{\stepcounter{#1}{}}

inkCounterValue Expands to the associated link counter register or 0 if not defined.
5427 \newcommand*{\GlsXtrLinkCounterValue}[1]{%
5428 \ifcsundef{c@glsxtr@linkcount@#1}{0}{\csname c@glsxtr@linkcount@#1\endcsname}%
5429 }

rTheLinkCounter Expands to the display value of the associated link counter or 0 if not defined.
5430 \newcommand*{\GlsXtrTheLinkCounter}[1]{%
5431 \ifcsundef{\theglsxtr@linkcount@#1}{0}{%
5432 {\csname theglsxtr@linkcount@#1\endcsname}%
5433 }

fLinkCounterDef Tests if the counter has been defined
5434 \newcommand*{\GlsXtrIfLinkCounterDef}[3]{%
5435 \ifcsundef{\theglsxtr@linkcount@#1}{#3}{#2}%
5436 }

LinkCounterName Expands to the associated link counter name. (No check for existence.)
5437 \newcommand*{\GlsXtrLinkCounterName}[1]{glsxtr@linkcount@#1}

ableLinkCounting \GlsXtrEnableLinkCounting[master counter]{categories}

```

Enable link counting for the given categories.

```

5438 \newcommand*{\GlsXtrEnableLinkCounting}[2][]{%
5439 \let\glsxtr@inc@linkcount@glsxtr@do@inc@linkcount
5440 @for@glsxtr@label:=#2\do
5441 {%
5442 \glssetcategoryattribute{@glsxtr@label}{linkcount}{true}%
5443 \ifstrempty{#1}{%
5444 {%
5445 \ifcsundef{c@#1}{%
5446 {@nocounterr{#1}}%
5447 \glssetcategoryattribute{@glsxtr@label}{linkcountmaster}{#1}%
5448 }%
5449 }%
5450 }%
5451 @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.

```
5452 \@ifpackageloaded{glossaries-accsupp}{%
5453 {%
```

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

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

```
5454 \newcommand*{\glsaccessname}[1]{%
5455   \glsnameaccessdisplay
5456   {%
5457     \glsentryname{\#1}%
5458   }%
5459   {\#1}%
5460 }
```

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

```
5461 \newcommand*{\Glsaccessname}[1]{%
5462   \glsnameaccessdisplay
5463   {%
5464     \Glsentryname{\#1}%
5465   }%
5466   {\#1}%
5467 }
```

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

```
5468 \newcommand*{\GLSaccessname}[1]{%
5469   \glsnameaccessdisplay
5470   {%
5471     \mfirstucMakeUppercase{\glsentryname{\#1}}%
5472   }%
5473   {\#1}%
5474 }
```

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

```
5475 \newcommand*{\glsaccesstext}[1]{%
5476   \glstextaccessdisplay
5477   {%
5478     \glsentrytext{\#1}%
5479   }%
5480   {\#1}%
5481 }
```

```

\Glsaccesstext Display the text value (no link and no check for existence) with the first letter converted to
upper case.
5482 \newcommand*{\Glsaccesstext}[1]{%
5483   \glstextaccessdisplay
5484   {%
5485     \Glsentrytext{#1}%
5486   }%
5487   {#1}%
5488 }

\GLSaccesstext Display the text value (no link and no check for existence) converted to upper case.
5489 \newcommand*{\GLSaccesstext}[1]{%
5490   \glstextaccessdisplay
5491   {%
5492     \mfirstucMakeUppercase{\glsentrytext{#1}}%
5493   }%
5494   {#1}%
5495 }

glsaccessplural Display the plural value (no link and no check for existence).
5496 \newcommand*{\glsaccessplural}[1]{%
5497   \glspluralaccessdisplay
5498   {%
5499     \glsentryplural{#1}%
5500   }%
5501   {#1}%
5502 }

Glsaccessplural Display the plural value (no link and no check for existence) with the first letter converted to
upper case.
5503 \newcommand*{\Glsaccessplural}[1]{%
5504   \glspluralaccessdisplay
5505   {%
5506     \Glsentryplural{#1}%
5507   }%
5508   {#1}%
5509 }

GLSaccessplural Display the plural value (no link and no check for existence) converted to upper case.
5510 \newcommand*{\GLSaccessplural}[1]{%
5511   \glspluralaccessdisplay
5512   {%
5513     \mfirstucMakeUppercase{\glsentryplural{#1}}%
5514   }%
5515   {#1}%
5516 }

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

```

```

5517 \newcommand*{\glsaccessfirst}[1]{%
5518   \glsfirstaccessdisplay
5519   {%
5520     \glsentryfirst{#1}%
5521   }%
5522   {#1}%
5523 }

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

5524 \newcommand*{\Glsaccessfirst}[1]{%
5525   \glsfirstaccessdisplay
5526   {%
5527     \Glsentryfirst{#1}%
5528   }%
5529   {#1}%
5530 }

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

5531 \newcommand*{\GLSaccessfirst}[1]{%
5532   \glsfirstaccessdisplay
5533   {%
5534     \mfirstucMakeUppercase{\glsentryfirst{#1}}%
5535   }%
5536   {#1}%
5537 }

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

5538 \newcommand*{\glsaccessfirstplural}[1]{%
5539   \glsfirstpluralaccessdisplay
5540   {%
5541     \glsentryfirstplural{#1}%
5542   }%
5543   {#1}%
5544 }

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

5545 \newcommand*{\Glsaccessfirstplural}[1]{%
5546   \glsfirstpluralaccessdisplay
5547   {%
5548     \Glsentryfirstplural{#1}%
5549   }%
5550   {#1}%
5551 }

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

5552 \newcommand*{\GLSaccessfirstplural}[1]{%

```

```

5553   \glsfirstpluralaccessdisplay
5554   {%
5555     \mfirstucMakeUppercase{\glsentryfirstplural{#1}}%
5556   }%
5557   {#1}%
5558 }

```

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

```

5559   \newcommand*{\glsaccesssymbol}[1]{%
5560     \glssymbolaccessdisplay
5561     {%
5562       \glsentrysymbol{#1}%
5563     }%
5564     {#1}%
5565   }

```

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

```

5566   \newcommand*{\Glsaccesssymbol}[1]{%
5567     \glssymbolaccessdisplay
5568     {%
5569       \Glsentrysymbol{#1}%
5570     }%
5571     {#1}%
5572   }

```

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

```

5573   \newcommand*{\GLSaccesssymbol}[1]{%
5574     \glssymbolaccessdisplay
5575     {%
5576       \mfirstucMakeUppercase{\glsentrysymbol{#1}}%
5577     }%
5578     {#1}%
5579   }

```

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

```

5580   \newcommand*{\glsaccesssymbolplural}[1]{%
5581     \glssymbolpluralaccessdisplay
5582     {%
5583       \glsentrysymbolplural{#1}%
5584     }%
5585     {#1}%
5586   }

```

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

```

5587   \newcommand*{\Glsaccesssymbolplural}[1]{%
5588     \glssymbolpluralaccessdisplay

```

```
5589     {%
5590         \Glsentrysymbolplural{#1}%
5591     }%
5592     {#1}%
5593 }
```

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

```
5594 \newcommand*{\GLSaccesssymbolplural}[1]{%
5595     \glssymbolpluralaccessdisplay
5596     {%
5597         \mfirstucMakeUppercase{\glsentrysymbolplural{#1}}%
5598     }%
5599     {#1}%
5600 }
```

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

```
5601 \newcommand*{\glsaccessdesc}[1]{%
5602     \glsdescriptionaccessdisplay
5603     {%
5604         \glsentrydesc{#1}%
5605     }%
5606     {#1}%
5607 }
```

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

```
5608 \newcommand*{\Glsaccessdesc}[1]{%
5609     \glsdescriptionaccessdisplay
5610     {%
5611         \Glsentrydesc{#1}%
5612     }%
5613     {#1}%
5614 }
```

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

```
5615 \newcommand*{\GLSaccessdesc}[1]{%
5616     \glsdescriptionaccessdisplay
5617     {%
5618         \mfirstucMakeUppercase{\glsentrydesc{#1}}%
5619     }%
5620     {#1}%
5621 }
```

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

```
5622 \newcommand*{\glsaccessdescplural}[1]{%
5623     \glsdescriptionpluralaccessdisplay
5624     {%
5625         \glsentrydescplural{#1}%
5626 }
```

```
5626    }%
5627    {#1}%
5628 }
```

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

```
5629 \newcommand*{\Glsaccessdescplural}[1]{%
5630   \glsdescriptionplural\accessdisplay
5631   {%
5632     \Glsentrydescplural{#1}%
5633   }%
5634   {#1}%
5635 }
```

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

```
5636 \newcommand*{\GLSaccessdescplural}[1]{%
5637   \glsdescriptionplural\accessdisplay
5638   {%
5639     \mfirstucMakeUppercase{\glsentrydescplural{#1}}%
5640   }%
5641   {#1}%
5642 }
```

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

```
5643 \newcommand*{\glsaccessshort}[1]{%
5644   \glsshortaccessdisplay
5645   {%
5646     \glsentryshort{#1}%
5647   }%
5648   {#1}%
5649 }
```

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

```
5650 \newcommand*{\Glsaccessshort}[1]{%
5651   \glsshortaccessdisplay
5652   {%
5653     \Glsentryshort{#1}%
5654   }%
5655   {#1}%
5656 }
```

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

```
5657 \newcommand*{\GLSaccessshort}[1]{%
5658   \glsshortaccessdisplay
5659   {%
5660     \mfirstucMakeUppercase{\glsentryshort{#1}}%
5661   }%
```

```
5662     {#1}%
5663 }
```

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

```
5664 \newcommand*{\glsaccessshortpl}[1]{%
5665   \glsshortpluralaccessdisplay
5666   {%
5667     \glsentryshortpl{#1}%
5668   }%
5669   {#1}%
5670 }
```

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

```
5671 \newcommand*{\Glsaccessshortpl}[1]{%
5672   \glsshortpluralaccessdisplay
5673   {%
5674     \Glsentryshortpl{#1}%
5675   }%
5676   {#1}%
5677 }
```

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

```
5678 \newcommand*{\GLSaccessshortpl}[1]{%
5679   \glsshortpluralaccessdisplay
5680   {%
5681     \mfirstucMakeUppercase{\glsentryshortpl{#1}}%
5682   }%
5683   {#1}%
5684 }
```

\glsaccesslong Display the long form (no link and no check for existence).

```
5685 \newcommand*{\glsaccesslong}[1]{%
5686   \glslongaccessdisplay{\glsentrylong{#1}}{#1}%
5687 }
```

\Glsaccesslong Display the long form (no link and no check for existence).

```
5688 \newcommand*{\Glsaccesslong}[1]{%
5689   \glslongaccessdisplay{\Glsentrylong{#1}}{#1}%
5690 }
5691 }
```

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

```
5692 \newcommand*{\GLSaccesslong}[1]{%
5693   \glslongaccessdisplay
5694   {%
5695     \mfirstucMakeUppercase{\glsentrylong{#1}}%
5696   }%
```

```

5697     {#1}%
5698 }

```

`glsaccesslongpl` Display the long plural form (no link and no check for existence).

```

5699 \newcommand*{\glsaccesslongpl}[1]{%
5700   \glslongpluralaccessdisplay{\glsentrylongpl{#1}}{#1}%
5701 }

```

`Glsaccesslongpl` Display the long plural form (no link and no check for existence).

```

5702 \newcommand*{\Glsaccesslongpl}[1]{%
5703   \glslongpluralaccessdisplay{\Glsentrylongpl{#1}}{#1}%
5704 }
5705 }

```

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

```

5706 \newcommand*{\GLSaccesslongpl}[1]{%
5707   \glslongpluralaccessdisplay
5708   {%
5709     \mfirstucMakeUppercase{\glsentrylongpl{#1}}%
5710   }%
5711   {#1}%
5712 }

```

Keys for accessibility support.

```

5713 \define@key{glsxtrabrv}{access}{%
5714   \def\@gls@nameaccess{#1}%
5715 }
5716 \define@key{glsxtrabrv}{textaccess}{%
5717   \def\@gls@textaccess{#1}%
5718 }
5719 \define@key{glsxtrabrv}{firstaccess}{%
5720   \def\@gls@firstaccess{#1}%
5721 }
5722 \define@key{glsxtrabrv}{shortaccess}{%
5723   \def\@gls@shortaccess{#1}%
5724 }
5725 \define@key{glsxtrabrv}{shortpluralaccess}{%
5726   \def\@gls@shortaccesspl{#1}%
5727 }

```

`@initaccesskeys`

```

5728 \newcommand*{\@gls@initaccesskeys}{%
5729   \def\@gls@nameaccess{}%
5730   \def\@gls@textaccess{}%
5731   \def\@gls@firstaccess{}%
5732   \def\@gls@shortaccess{}%
5733   \def\@gls@shortaccesspl{}%
5734 }

```

```
essattribute@set \gls@ifaccessattribute@set{\langle attribute \rangle}{\langle true \rangle}{\langle false \rangle}
```

```
5735 \newcommand*{\@gls@ifaccessattribute@set}[3]{%
5736   \glsifcategoryattribute{\glscategorylabel}{access#1}{true}%
5737   {#2}%
5738   {%
5739     \glsifcategoryattribute{\glscategorylabel}{access#1}{false}%
5740     {#3}%
5741     {%
5742       \glsifcategoryattribute{\glscategorylabel}{#1}{true}%
5743       {#2}%
5744       {#3}%
5745     }%
5746   }%
5747 }
```

lt@short@access Assign the default value of the shortaccess key. The argument is the short value passed to \newabbreviation.

```
5748 \newcommand{\@gls@setup@default@short@access}[1]{%
```

Check if the accessinsertdots attribute has been set but only if shortaccess hasn't been set.

```
5749 \ifdefempty{\gls@shortaccess}
5750 {%
5751   \glsifcategoryattribute{\glscategorylabel}{accessinsertdots}{true}%
5752   {%
5753     \@glsxtr@insertdots@\gls@shortaccess{#1}%
5754     \eappto{\ExtraCustomAbbreviationFields}{%
5755       shortaccess={\expandonce{\gls@shortaccess}},}%
5756     }%
5757   {%
5758   }%
5759 }
```

If the shortaccess field has been set but shortaccessplural hasn't been set, assign plural form.

```
5760 \ifdefempty{\gls@shortaccess}
5761 {%
5762 {%
5763 \ifdefempty{\gls@shortaccesspl}
5764 {%
5765   \gls@ifaccessattribute@set{aposplural}%
5766   {%
5767     \expandafter{\def{\expandafter{\expandafter{\gls@shortaccesspl}\expandafter{}}%
5768       {\gls@shortaccess}'\abrvpluralsuffix}}%
5769   }%
5770   {%
5771     \gls@ifaccessattribute@set{noshortplural}%
5772   }%
```

```

5773         \let\@gls@shortaccesspl\@gls@shortaccess
5774     }%
5775     {%
5776         \expandafter\def\expandafter\@gls@shortaccesspl\expandafter{%
5777             \@gls@shortaccess\abrvpluralsuffix}%
5778     }%
5779     {%
5780         \eappto\ExtraCustomAbbreviationFields{%
5781             shortpluralaccess={\expandonce\@gls@shortaccesspl},}%
5782     }%
5783     {}%
5784 }

```

If access key hasn't been set, check if the nameshortaccess attribute has been set.

```

5785 \ifdefempty\@gls@nameaccess
5786 {%
5787     \glsifcategoryattribute{\glscategorylabel}{nameshortaccess}{true}%
5788 }

```

Do nothing if the shortaccess key hasn't been set.

```

5789 \ifdefempty\@gls@shortaccess
5790 {}%
5791 {%
5792     \eappto\ExtraCustomAbbreviationFields{%
5793         access={\expandonce\@gls@shortaccess},%
5794     }%
5795 }%
5796 {%
5797 }%
5798 }%
5799 }

```

If textaccess key hasn't been set, check if the textshortaccess attribute has been set.

```

5800 \ifdefempty\@gls@textaccess
5801 {%
5802     \glsifcategoryattribute{\glscategorylabel}{textshortaccess}{true}%
5803 }

```

Do nothing if the shortaccess key hasn't been set.

```

5804 \ifdefempty\@gls@shortaccess
5805 {}%
5806 {%
5807     \eappto\ExtraCustomAbbreviationFields{%
5808         textaccess={\expandonce\@gls@shortaccess},%
5809     }%
5810 }%
5811 {%
5812 }%
5813 }%
5814 }

```

If `firstaccess` key hasn't been set, check if the `firstshortaccess` attribute has been set.

```
5815     \ifdefempty{@gls@firstaccess
5816     {}%
5817     \glsifcategoryattribute{\glscategorylabel}{firstshortaccess}{true}%
5818     {}%
```

Do nothing if the `shortaccess` key hasn't been set.

```
5819     \ifdefempty{@gls@shortaccess
5820     {}%
5821     {}%
5822     \eappto\ExtraCustomAbbreviationFields{%
5823         firstaccess={\expandonce@gls@shortaccess},%
5824     }%
5825     }%
5826     {}%
5827     {}%
5828     }%
5829     {}%
5830 }
```

End of if accsupp part

```
5831 }
5832 {
```

No accessibility support. Just define these commands to do `\glsentry<xxx>`

```
\glsaccessname Display the name value (no link and no check for existence).
5833 \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.
5834 \newcommand*{\Glsaccessname}[1]{\Glsentryname{#1}}
```

  

```
\GLSaccessname Display the name value (no link and no check for existence). converted to upper case.
5835 \newcommand*{\GLSaccessname}[1]{%
5836     \protect\mfirstrucMakeUppercase{\glsentryname{#1}}}
```

  

```
\glsaccesstext Display the text value (no link and no check for existence).
5837 \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.
5838 \newcommand*{\Glsaccesstext}[1]{\Glsentrytext{#1}}
```

  

```
\GLSaccesstext Display the text value (no link and no check for existence). converted to upper case.
5839 \newcommand*{\GLSaccesstext}[1]{%
5840     \protect\mfirstrucMakeUppercase{\glsentrytext{#1}}}
```

  

```
glsaccessplural Display the plural value (no link and no check for existence).
5841 \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.  
5842 \newcommand\*{\Glsaccessplural}[1]{\Glsentryplural{\#1}}

**GLSaccessplural** Display the plural value (no link and no check for existence). converted to upper case.  
5843 \newcommand\*{\GLSaccessplural}[1]{%  
5844 \protect\mfistucMakeUppercase{\glsentryplural{\#1}}}

**\glsaccessfirst** Display the first value (no link and no check for existence).  
5845 \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.  
5846 \newcommand\*{\Glsaccessfirst}[1]{\Glsentryfirst{\#1}}

**\GLSaccessfirst** Display the first value (no link and no check for existence). converted to upper case.  
5847 \newcommand\*{\GLSaccessfirst}[1]{%  
5848 \protect\mfistucMakeUppercase{\glsentryfirst{\#1}}}

**cessfirstplural** Display the firstplural value (no link and no check for existence).  
5849 \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.  
5850 \newcommand\*{\Glsaccessfirstplural}[1]{\Glsentryfirstplural{\#1}}

**cessfirstplural** Display the firstplural value (no link and no check for existence). converted to upper case.  
5851 \newcommand\*{\GLSaccessfirstplural}[1]{%  
5852 \protect\mfistucMakeUppercase{\glsentryfirstplural{\#1}}}

**glsaccesssymbol** Display the symbol value (no link and no check for existence).  
5853 \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.  
5854 \newcommand\*{\Glsaccesssymbol}[1]{\Glsentrysymbol{\#1}}

**GLSaccesssymbol** Display the symbol value (no link and no check for existence). converted to upper case.  
5855 \newcommand\*{\GLSaccesssymbol}[1]{%  
5856 \protect\mfistucMakeUppercase{\glsentrysymbol{\#1}}}

**esssymbolplural** Display the symbolplural value (no link and no check for existence).  
5857 \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.  
5858 \newcommand\*{\Glsaccesssymbolplural}[1]{\Glsentrysymbolplural{\#1}}

`\esssymbolplural` Display the symbolplural value (no link and no check for existence). converted to upper case.  
 5859 `\newcommand*{\GLSaccesssymbolplural}[1]{%`  
 5860 `\protect\mfirstucMakeUppercase{\glsentrysymbolplural{#1}}}`

`\glsaccessdesc` Display the desc value (no link and no check for existence).  
 5861 `\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.  
 5862 `\newcommand*{\Glsaccessdesc}[1]{\Glsentrydesc{#1}}`

`\GLSaccessdesc` Display the desc value (no link and no check for existence). converted to upper case.  
 5863 `\newcommand*{\GLSaccessdesc}[1]{%`  
 5864 `\protect\mfirstucMakeUppercase{\glsentrydesc{#1}}}`

`\accessdescplural` Display the descplural value (no link and no check for existence).  
 5865 `\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.  
 5866 `\newcommand*{\Glsaccessdescplural}[1]{\Glsentrydescplural{#1}}`

`\accessdescplural` Display the descplural value (no link and no check for existence). converted to upper case.  
 5867 `\newcommand*{\GLSaccessdescplural}[1]{%`  
 5868 `\protect\mfirstucMakeUppercase{\glsentrydescplural{#1}}}`

`\glsaccessshort` Display the short form (no link and no check for existence).  
 5869 `\newcommand*{\glsaccessshort}[1]{\glsentryshort{#1}}`

`\Glsaccessshort` Display the short form with first letter converted to uppercase (no link and no check for existence).  
 5870 `\newcommand*{\Glsaccessshort}[1]{\Glsentryshort{#1}}`

`\GLSaccessshort` Display the short value (no link and no check for existence). converted to upper case.  
 5871 `\newcommand*{\GLSaccessshort}[1]{%`  
 5872 `\protect\mfirstucMakeUppercase{\glsentryshort{#1}}}`

`\lsaccessshortpl` Display the short plural form (no link and no check for existence).  
 5873 `\newcommand*{\glsaccessshortpl}[1]{\glsentryshortpl{#1}}`

`\lsaccessshortpl` Display the short plural form with first letter converted to uppercase (no link and no check for existence).  
 5874 `\newcommand*{\Glsaccessshortpl}[1]{\Glsentryshortpl{#1}}`

```

LSaccessshortpl Display the shortplural value (no link and no check for existence). converted to upper case.
5875 \newcommand*{\GLSaccessshortpl}[1]{%
5876   \protect\mfirstucMakeUppercase{\glsentryshortpl{#1}}}

\glsaccesslong Display the long form (no link and no check for existence).
5877 \newcommand*{\glsaccesslong}[1]{\glsentrylong{#1}}

\Glsaccesslong Display the long form (no link and no check for existence).
5878 \newcommand*{\Glsaccesslong}[1]{\Glsentrylong{#1}}

\GLSaccesslong Display the long value (no link and no check for existence). converted to upper case.
5879 \newcommand*{\GLSaccesslong}[1]{%
5880   \protect\mfirstucMakeUppercase{\glsentrylong{#1}}}

glsaccesslongpl Display the long plural form (no link and no check for existence).
5881 \newcommand*{\glsaccesslongpl}[1]{\glsentrylongpl{#1}}

Glsaccesslongpl Display the long plural form (no link and no check for existence).
5882 \newcommand*{\Glsaccesslongpl}[1]{\Glsentrylongpl{#1}}

GLSaccesslongpl Display the longplural value (no link and no check for existence). converted to upper case.
5883 \newcommand*{\GLSaccesslongpl}[1]{%
5884   \protect\mfirstucMakeUppercase{\glsentrylongpl{#1}}}

@initaccesskeys This does nothing if there's no accessibility support.
5885 \newcommand*{\@gls@initaccesskeys}{}}

lt@short@access This does nothing if there's no accessibility support.
5886 \newcommand{\@gls@setup@default@short@access}[1]{}%
End of else part
5887 }


```

## 1.6 Categories

```

\glscategory Add a new storage key that can be used to indicate a category. The default category is general.
5888 \glsaddstoragekey{category}{general}{\glscategory}

\glsifcategory Convenient shortcut to determine if an entry has the given category.
5889 \newcommand{\glsifcategory}[4]{%
5890   \ifglsfieldeq{#1}{category}{#2}{#3}{#4}%
5891 }


```

Categories can have attributes.

```
categoryattribute \glssetcategoryattribute{\category}{\attribute-label}{\value}
```

Set (or override if already set) an attribute for the given category.

```
5892 \newcommand*\glssetcategoryattribute[3]{%
5893   \csdef{@glsxtr@categoryattr@@#1@#2}{#3}%
5894 }
```

```
categoryattribute \glsgetcategoryattribute{\category}{\attribute-label}
```

Get the value of the given attribute for the given category. Does nothing if the attribute isn't defined.

```
5895 \newcommand*\glsgetcategoryattribute[2]{%
5896   \csuse{@glsxtr@categoryattr@@#1@#2}%
5897 }
```

```
categoryattribute \glshascategoryattribute{\category}{\attribute-label}{\true}{\false}
```

Tests if the category has the given attribute set.

```
5898 \newcommand*\glshascategoryattribute[4]{%
5899   \ifcscvoid{@glsxtr@categoryattr@@#1@#2}{#4}{#3}%
5900 }
```

```
\glssetattribute \glssetattribute{\entry_label}{\attribute-label}{\value}
```

Short cut where the category label is obtained from the entry information.

```
5901 \newcommand*\glssetattribute[3]{%
5902   \glssetcategoryattribute{\glscategory{#1}}{#2}{#3}%
5903 }
```

```
\glsgetattribute \glsgetattribute{\entry_label}{\attribute-label}
```

Short cut where the category label is obtained from the entry information.

```
5904 \newcommand*\glsgetattribute[2]{%
5905   \glsgetcategoryattribute{\glscategory{#1}}{#2}%
5906 }
```

```
\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.

```
5907 \newcommand*\glshasattribute[4]{%
5908   \ifglsentryexists{#1}%
5909   {\glshascategoryattribute{\glscategory{#1}}{#2}{#3}{#4}}%
5910   {#4}%
5911 }
```

```
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.

```
5912 \newcommand{\glsifcategoryattribute}[5]{%
5913   \ifcsundef{@glsxtr@categoryattr@@#1@#2}%
5914   {#5}%
5915   {\ifcsstring{@glsxtr@categoryattr@@#1@#2}{#3}{#4}{#5}}%
5916 }
```

```
\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.

```
5917 \newcommand{\glsifattribute}[5]{%
5918   \ifglsentryexists{#1}%
5919   {\glsifcategoryattribute{\glscategory{#1}}{#2}{#3}{#4}{#5}}%
5920   {#5}%
5921 }
```

Set attributes for the default general category:

```
5922 \glssetcategoryattribute{general}{regular}{true}
```

Acronyms are regular by default, since they're typically just treated like normal words.

```
5923 \glssetcategoryattribute{acronym}{regular}{true}
```

regularcategory Convenient shortcut to create add the regular attribute.

```
5924 \newcommand*\glssetregularcategory[1]{%
5925   \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.

```
5927 \newcommand{\glsifregularcategory}[3]{%
5928   \glsifcategoryattribute{\#1}{regular}{true}{\#2}{\#3}%
5929 }
```

```
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.

```
5930 \newcommand{\glsifnotregularcategory}[3]{%
5931   \glsifcategoryattribute{\#1}{regular}{false}{\#2}{\#3}%
5932 }
```

```
\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.

```
5933 \newcommand{\glsifregular}[3]{%
5934   \glsifregularcategory{\glscategory{\#1}}{\#2}{\#3}%
5935 }
```

```
\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.

```
5936 \newcommand{\glsifnotregular}[3]{%
5937   \glsifnotregularcategory{\glscategory{\#1}}{\#2}{\#3}%
5938 }
```

```
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.

```
5939 \newcommand{\glsforeachincategory}[5][\@glo@types]{%
```

```

5940 \forallglossaries[#1]{#3}%
5941 {%
5942   \forglsentries[#3]{#4}%
5943   {%
5944     \glsifcategory{#4}{#2}{#5}{()}%
5945   }%
5946 }%
5947 }

```

```

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.

```

5948 \newcommand{\glsforeachwithattribute}[6][\@glo@types]{%
5949   \forallglossaries[#1]{#4}%
5950   {%
5951     \forglsentries[#4]{#5}%
5952     {%
5953       \glsifattribute{#5}{#2}{#3}{#6}{()}%
5954     }%
5955   }%
5956 }

```

If `\newterm` has been defined, redefine it so that it automatically sets the category label to `index` and add `\glsxtrpostdescription`.

```

5957 \ifdef\newterm
5958 {%

```

`\newterm`

```

5959 \renewcommand*\newterm[2][]{%
5960   \newglossaryentry[#2]{%
5961     type=index, category=index, name={#2}, %
5962     description={\glsxtrpostdescription\nopostdesc}, #1}%
5963 }

```

Indexed terms are regular by default.

```

5964 \glssetcategoryattribute[index]{regular}{true}

```

`trpostdescindex`

```

5965 \newcommand*\glsxtrpostdescindex[]{}
5966 {}
5967 {}

```

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.

```
5968 \ifdef\printsymbols  
5969 {%
```

`glsxtrnewsymbol` Unlike `\newterm`, this has a separate argument for the label (since the symbol will likely contain commands).

```
5970 \newcommand*{\glsxtrnewsymbol}[3] []{  
5971     \newglossaryentry{#2}{name={#3},sort={#2},type=symbols,category=symbol,#1}  
5972 }
```

Symbols are regular by default.

```
5973 \glssetcategoryattribute{symbol}{regular}{true}
```

`rpostdescsymbol`

```
5974 \newcommand*{\glsxtrpostdescsymbol}{}  
  
5975 }  
5976 {}
```

Similar for the numbers option.

```
5977 \ifdef\printnumbers  
5978 {%
```

`glsxtrnewnumber`

```
5979 \ifdef\printnumbers  
5980 \newcommand*{\glsxtrnewnumber}[3] []{  
5981     \newglossaryentry{#2}{name={#3},sort={#2},type=numbers,category=number,#1}  
5982 }
```

Numbers are regular by default.

```
5983 \glssetcategoryattribute{number}{regular}{true}
```

`rpostdescnumber`

```
5984 \newcommand*{\glsxtrpostdescnumber}{}  
  
5985 }  
5986 {}
```

`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.

```
5987 \newcommand*{\glsxtrsetcategory}[2]{%  
5988     @for@glsxtr@label:=#1\do  
5989     {  
5990         \glsfieldxdef{@glsxtr@label}{category}{#2}  
5991     }%  
5992 }
```

`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.

```
5993 \newcommand*{\glsxtrsetcategoryforall}[2]{%
5994   \forallglossaries[#1]{\@glsxtr@type}{%
5995     \forglsentries[\@glsxtr@type]{\@glsxtr@label}{%
5996       {%
5997         \glsfieldxdef{\@glsxtr@label}{category}{#2}{%
5998       }{%
5999     }{%
6000   }}
```

`trfieldtitlecase` `\glsxtrfieldtitlecase{\langle label \rangle}{\langle field \rangle}`

Apply title casing to the contents of the given field.

```
6001 \newcommand*{\glsxtrfieldtitlecase}[2]{%
6002   \expandafter\glsxtrfieldtitlecasecs\expandafter
6003   {\csname glo@\glsdetoklabel{#1}@#2\endcsname}{%
6004 }}
```

`ieldtitlecasecs` The command used by `\glsxtrfieldtitlecase`. May be redefined to use a different command, for example, `\xcapitalisefmtwords`.

```
6005 \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.

```
6006 \@ifpackageloaded{glossaries-accsupp}
6007 {
6008   \renewcommand*{\glossentrydesc}[1]{%
6009     \glsdoifexistsorwarn{#1}{%
6010       {%
6011         \glssetabbrvfmt{\glscategory{#1}}{}}
```

As from version 1.04, allow the `glossdescfont` attribute to determine the font applied.

```
6012   \glshasattribute{#1}{glossdescfont}{%
6013     {%
6014       \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}{%
6015         \ifcsdef{\@glsxtr@attrval}{%
6016           {%
6017             \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}{%
6018           }{%
6019             {%
6020               \GlossariesExtraWarning{Unknown control sequence name
6021                 '\@glsxtr@attrval' supplied in glossdescfont attribute}}
```

```

6022      for entry '#1'. Ignoring}%
6023      \let\@glsxtr@glossdescfont\@firstofone
6024      }%
6025      }%
6026      {\let\@glsxtr@glossdescfont\@firstofone}%
6027      \glsifattribute{#1}{glossdesc}{firstuc}%
6028      {%
6029          \@glsxtr@glossdescfont{\Glsaccessdesc{#1}}%
6030      }%
6031      {%
6032          \glsifattribute{#1}{glossdesc}{title}%
6033          {%
6034              \@glsxtr@do@titlecaps@warn
6035              \glsdescriptionaccessdisplay
6036              {%
6037                  \@glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
6038              }%
6039              {#1}%
6040          }%
6041          {%
6042              \@glsxtr@glossdescfont{\glsaccessdesc{#1}}%
6043          }%
6044      }%
6045  }%
6046 }
6047 }
6048 {
6049 \renewcommand*{\glossentrydesc}[1]{%
6050     \glsdoifexistsorwarn{#1}%
6051     {%
6052         \glssetabbrvfmt{\glscategory{#1}}%
6053         \glshasattribute{#1}{glossdescfont}%
6054         {%
6055             \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%
6056             \ifcsdef{\@glsxtr@attrval}%
6057             {%
6058                 \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}%
6059             }%
6060             {%
6061                 \GlossariesExtraWarning{Unknown control sequence name
6062                     '\@glsxtr@attrval' supplied in glossdescfont attribute
6063                     for entry '#1'. Ignoring}%
6064                 \let\@glsxtr@glossdescfont\@firstofone
6065             }%
6066         }%
6067         {\let\@glsxtr@glossdescfont\@firstofone}%
6068         \glsifattribute{#1}{glossdesc}{firstuc}%
6069         {%
6070             \@glsxtr@glossdescfont{\Glsentrydesc{#1}}%

```

```

6071     }%
6072     {%
6073         \glsifattribute{#1}{glossdesc}{title}%
6074         {%
6075             \glsxtr@do@titlecaps@warn
6076             \glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
6077         }%
6078         {%
6079             \glsxtr@glossdescfont{\glsentrydesc{#1}}%
6080         }%
6081     }%
6082   }%
6083 }
6084 }
```

\glossentryname If the glossname attribute is “firstuc” convert first letter to upper case. If the attribute is “title” use title case.

```

6085 \@ifpackageloaded{glossaries-accsupp}
6086 {
6087     \renewcommand*\glossentryname[1]{%
6088         \glsdoifexistsorwarn{#1}%
6089     }%
6090     \glssetabbrvfmt{\glscategory{#1}}%
```

As from version 1.04, allow the glossnamefont attribute to determine the font applied.

```

6091     \glshasattribute{#1}{glossnamefont}%
6092     {%
6093         \edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6094         \ifcsdef{\glsxtr@attrval}%
6095         {%
6096             \letcs{\glsxtr@glossnamefont}{\glsxtr@attrval}%
6097         }%
6098     }%
6099     \GlossariesExtraWarning{Unknown control sequence name
6100     ‘\glsxtr@attrval’ supplied in glossnamefont attribute
6101     for entry ‘#1’. Reverting to default \string\glsnamefont}%
6102     \let\glsxtr@glossnamefont\glsnamefont
6103   }%
6104 }%
6105 {\let\glsxtr@glossnamefont\glsnamefont}%
6106 \glsifattribute{#1}{glossname}{firstuc}%
6107 {%
6108     \glsnameaccessdisplay
6109     {%
6110         \glsxtr@glossnamefont{\Glsentryname{#1}}%
6111     }%
6112     {#1}%
6113 }%
6114 {%
6115     \glsifattribute{#1}{glossname}{title}%

```

```

6116      {%
6117          \glsxstr@do@titlecaps@warn
6118          \glsnameaccessdisplay
6119          {%
6120              \glsxstr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
6121          }%
6122          {#1}%
6123      }%
6124      {%
6125          \glsifattribute{#1}{glossname}{uc}%
6126          {%
6127              \glsnameaccessdisplay
6128          }%

```

Hide the label from the upper-casing command.

```

6129          \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6130          \glsxstr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
6131          }%
6132          {#1}%
6133      }%
6134      {%
6135          \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6136          \glsnameaccessdisplay
6137          {%
6138              \expandafter\glsxstr@glossnamefont\expandafter{\glo@name}%
6139          }%
6140          {#1}%
6141      }%
6142      {%
6143  }%

```

Do post-name hook:

```

6144      \glsxtrpostnamehook{#1}%
6145  }%
6146 }
6147 }
6148 {
6149 \renewcommand*\glossentryname[1]{%
6150     \glsdoifexistsorwarn{#1}%
6151     {%
6152         \glssetabbrvfmt{\glscategory{#1}}%
6153         \glshasattribute{#1}{glossnamefont}%
6154     }%
6155     \edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6156     \ifcsdef{\glsxtr@attrval}%
6157     {%
6158         \letcs{\glsxtr@glossnamefont}{\glsxtr@attrval}%
6159     }%
6160     {%
6161         \GlossariesExtraWarning{Unknown control sequence name}

```

```

6162     '@glsxtr@attrval' supplied in glossnamefont attribute
6163     for entry '#1'. Reverting to default \string\glsnamefont}%
6164     \let\@glsxtr@glossnamefont\glsnamefont
6165     }%
6166 }%
6167 {\let\@glsxtr@glossnamefont\glsnamefont}%
6168 \glsifattribute{#1}{glossname}{firstuc}%
6169 {%
6170     \@glsxtr@glossnamefont{\Glsentryname{#1}}%
6171 }%
6172 {%
6173     \glsifattribute{#1}{glossname}{title}%
6174     {%
6175         \@glsxtr@do@titlecaps@warn
6176         \@glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
6177     }%
6178     {%
6179         \glsifattribute{#1}{glossname}{uc}%
6180     }%

```

Hide the label from the upper-casing command.

```

6181     \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6182     \@glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
6183     }%
6184 {%

```

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.

```

6185     \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
6186     \expandafter\@glsxtr@glossnamefont\expandafter{\glo@name}%
6187     }%
6188     }%
6189 }%

```

Do post-name hook.

```

6190     \glsxtrpostnamehook{#1}%
6191     }%
6192 }
6193 }

```

\Glossentryname Redefine to set the abbreviation format and accessibility support.

```

6194 \ifpackageloaded{glossaries-accsupp}
6195 {
6196 \renewcommand*\Glossentryname[1]{%
6197     \glsdoifexistsorwarn{#1}%
6198     {%
6199         \glssetabbrvfmt{\glscategory{#1}}%

```

As from version 1.04, allow the glossnamefont attribute to determine the font applied.

```

6200     \glshasattribute{#1}{glossnamefont}%
6201     {%

```

```

6202     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6203     \ifcsdef{\@glsxtr@attrval}%
6204     {%
6205         \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6206     }%
6207     {%
6208         \GlossariesExtraWarning{Unknown control sequence name
6209             '\@glsxtr@attrval' supplied in glossnamefont attribute
6210             for entry '#1'. Reverting to default \string\glsnamefont}%
6211         \let\@glsxtr@glossnamefont\glsnamefont
6212     }%
6213     }%
6214     {\let\@glsxtr@glossnamefont\glsnamefont}%
6215     \glsnameaccessdisplay
6216     {%
6217         \@glsxtr@glossnamefont{\Glsentryname{#1}}%
6218     }%
6219     {#1}%

```

Do post-name hook:

```

6220     \glsxtrpostnamehook{#1}%
6221     }%
6222 }
6223 }
6224 {
6225 \renewcommand*\Glossentryname[1]{%
6226     \glsdoifexistsorwarn{#1}%
6227     {%
6228         \glssetabbrvfmt{\glscategory{#1}}%
6229         \glshasattribute{#1}{glossnamefont}%
6230     }%
6231     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6232     \ifcsdef{\@glsxtr@attrval}%
6233     {%
6234         \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6235     }%
6236     {%
6237         \GlossariesExtraWarning{Unknown control sequence name
6238             '\@glsxtr@attrval' supplied in glossnamefont attribute
6239             for entry '#1'. Reverting to default \string\glsnamefont}%
6240         \let\@glsxtr@glossnamefont\glsnamefont
6241     }%
6242     }%
6243     {\let\@glsxtr@glossnamefont\glsnamefont}%
6244     \@glsxtr@glossnamefont{\Glsentryname{#1}}%

```

Do post-name hook:

```

6245     \glsxtrpostnamehook{#1}%
6246     }%
6247 }

```

```
6248 }
```

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.

```
6249 \newcommand*{\glsxtrpostnamehook}[1]{%
6250   \let\@glsnumberformat\@glsxtr@defaultnumberformat
6251   \glsxtrdoautoindexname{#1}{indexname}}%
```

Allow additional code regardless of category:

```
6252 \glsextrapostnamehook{#1}%
```

Allow categories to hook in here.

```
6253 \csuse{glsxtrpostname}\glscategory{#1}%
6254 }
```

trapostnamehook

```
6255 \newcommand*{\glsextrapostnamehook}[1]{}%
```

\glsdefpostname Provide a convenient command for defining the post-name hook for the given category.

```
6256 \newcommand*{\glsdefpostname}[2]{%
6257   \csdef{glsxtrpostname#1}{#2}%
6258 }
```

etaccessdisplay

```
6259 \ifpackageloaded{glossaries-accsupp}
6260 {
6261   \newcommand*{\glsxtr@setaccessdisplay}[1]{%
6262     \ifcsdef{gls#1accessdisplay}%
6263       {\letcs{\glsxtr@accessdisplay}{gls#1accessdisplay}}%
6264     {}%
```

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.

```
6265   \edef{\gls@thisval}{#1}%
6266   \for{\gls@map}{\gls@keymap}{\do{%
6267     \edef{\gls@this@key}{\expandafter\@secondoftwo\gls@map}%
6268     \ifeq{\gls@this@key}{\gls@thisval}{%
6269       {}%
6270       \edef{\gls@thisval}{\expandafter\@firstoftwo\gls@map}%
6271       \endfortrue
6272     }%
6273     {}%
6274   }%
6275   \ifcsdef{gls\gls@thisval accessdisplay}{%
6276     {\letcs{\glsxtr@accessdisplay}{gls\gls@thisval accessdisplay}}%
```

```

6277      {\let\@glsxtr@accessdisplay\@firstoftwo}%
6278  }%
6279 }
6280 }%
6281 {%
6282 \newcommand*{\glsxtr@setaccessdisplay}[1]{%
6283   \let\@glsxtr@accessdisplay\@firstoftwo}
6284 }

```

`sentrynameother` Provide a command that works like `\glossentryname` but accesses a different field (which must be supplied using its internal field label).

```

6285 \newrobustcmd*{\glossentrynameother}[2]{%
6286   \@glsdoifexistsorwarn{#1}%
6287   {%

```

Accessibility support:

```
6288   \glsxtr@setaccessdisplay{#2}%

```

Set the abbreviation format:

```

6289   \glssetabrvfmt{\glscategory{#1}}%
6290   \glshasattribute{#1}{glossnamefont}%
6291   {%
6292     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6293     \ifcsdef{\@glsxtr@attrval}%
6294     {%
6295       \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6296     }%
6297     {%
6298       \GlossariesExtraWarning{Unknown control sequence name
6299         '@glsxtr@attrval' supplied in glossnamefont attribute
6300         for entry '#1'. Reverting to default \string\glsnamefont}%
6301       \let\@glsxtr@glossnamefont\glsnamefont
6302     }%
6303   }%
6304   {\let\@glsxtr@glossnamefont\glsnamefont}%
6305   \glsifattribute{#1}{glossname}{firstuc}%
6306   {%
6307     \@glsxtr@accessdisplay
6308     {\@glsxtr@glossnamefont{\Gls@entry@field{#1}{#2}}}%
6309     {#1}%
6310   }%
6311   {%
6312     \glsifattribute{#1}{glossname}{title}%
6313     {%
6314       \@glsxtr@do@titlecaps@warn
6315       \@glsxtr@accessdisplay
6316       {\@glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{#2}}}%
6317       {#1}%
6318     }%
6319   }%

```

```

6320     \glsifattribute{#1}{glossname}{uc}%
6321     {%
6322         \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
6323         \@glsxtr@accessdisplay
6324         {\@glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}}%
6325         {#1}%
6326     }%
6327     {%
6328         \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
6329         \@glsxtr@accessdisplay
6330         {\expandafter\@glsxtr@glossnamefont\expandafter{\glo@name}}%
6331         {#1}%
6332     }%
6333     {%
6334 }

```

Do post-name hook.

```

6335     \glsxtrpostnamehook{#1}%
6336 }
6337 }

```

`format@override` Determines if the `format` key should override the `indexing` attribute value.

```

6338 \newif\if@glsxtr@format@override
6339 \@glsxtr@format@overridedefalse

```

If overriding is enabled, the `\glshypernumber` command will have to be redefined in the index to use `\hyperpage` instead.

`xFormatOverride`

```

6340 \@ifpackageloaded{hyperref}%
6341 {

```

If hyperref's `hyperindex` option is on, then `hyperref` will automatically add `\hyperpage`, so don't add it.

```

6342 \ifHy@hyperindex
6343     \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
6344         \@glsxtr@format@overridetrue
6345         \appto\theindex{\let\glshypernumber\@firstofone}%
6346     }
6347 \else
6348     \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
6349         \@glsxtr@format@overridetrue
6350         \appto\theindex{\let\glshypernumber\hyperpage}%
6351     }
6352 \fi
6353 }
6354 {
6355     \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
6356         \@glsxtr@format@overridetrue
6357     }

```

```

6358 }
6359 \only\GlsXtrEnableIndexFormatOverride

doautoindexname
6360 \newcommand*{\glsxtrdoautoindexname}[2]{%
6361   \glshasattribute{#1}{#2}%
6362   {%
      Escape any makeindex/xindy characters in the value of the name field. Take care with babel
      as this won't work if the category code has changed for those characters.
6363   \glsxtr@autoindex@setname{#1}%
      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   {}%
6373   {\eappto\glo@name{\glsxtr@autoindex@encap\glsxtr@attrval}}%
6374   \expandafter\glsxtrautoindex\expandafter{\glo@name}%
6375 }%
6376 {}%
6377 }

glsxtrautoindex
6378 \newcommand*{\glsxtrautoindex}{\index}

xtrautoindexesc
6379 \newcommand{\glsxtrautoindexesc}{%
6380   \gls@checkmkidxchars\glo@sort
6381   \glsxtr@autoindex@doextra@esc\glo@sort
6382 }

toindex@setname Assign \glo@name for use with indexname attribute.
6383 \newcommand*{\glsxtr@autoindex@setname}[1]{%
6384   \protected@edef\glo@name{\glsxtrautoindexentry{#1}}%
6385   \glsxtrautoindexassingsort{\glo@sort}{#1}%
6386   \glsxtrautoindexesc
6387   \epreto\glo@name{\glo@sort\glsxtr@autoindex@at}%
6388 }

rautoindexentry Command used for the actual part when auto-indexing.
6389 \newcommand*{\glsxtrautoindexentry}[1]{\string\glsentryname{#1}}

```

```

indexassingsort Used to assign the sort value when auto-indexing.
6390 \newcommand*{\glsxtrautoindexassingsort}[2]{%
6391   \glsletentryfield{#1}{#2}{sort}%
6392 }

dex@doextra@esc
6393 \newcommand*{\@glsxtr@autoindex@doextra@esc}[1]{%
  Escape the escape character unless it has already been escaped.
6394   \ifx\@glsxtr@autoindex@esc\@gls@quotechar
6395     \else
6396       \def\@gls@checkedmkidx{}%
6397       \edef\@glsxtr@checkspch{%
6398         \noexpand\@glsxtr@autoindex@esc\@gls@expandonce{#1}%
6399         \noexpand\@empty\@glsxtr@autoindex@esc\noexpand\@nnil
6400         \@glsxtr@autoindex@esc\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6401       \@@glsxtr@checkspch
6402       \let#1\@gls@checkedmkidx\relax
6403     \fi
  Escape actual character unless it has already been escaped.
6404   \ifx\@glsxtr@autoindex@at\@gls@actualchar
6405     \else
6406       \def\@gls@checkedmkidx{}%
6407       \edef\@glsxtr@checkspch{%
6408         \noexpand\@glsxtr@autoindex@escat\@gls@expandonce{#1}%
6409         \noexpand\@empty\@glsxtr@autoindex@at\noexpand\@nnil
6410         \@glsxtr@autoindex@at\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6411       \@@glsxtr@checkspch
6412       \let#1\@gls@checkedmkidx\relax
6413     \fi
  Escape level character unless it has already been escaped.
6414   \ifx\@glsxtr@autoindex@level\@gls@levelchar
6415     \else
6416       \def\@gls@checkedmkidx{}%
6417       \edef\@glsxtr@checkspch{%
6418         \noexpand\@glsxtr@autoindex@esclevel\@gls@expandonce{#1}%
6419         \noexpand\@empty\@glsxtr@autoindex@level\noexpand\@nnil
6420         \@glsxtr@autoindex@level\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6421       \@@glsxtr@checkspch
6422       \let#1\@gls@checkedmkidx\relax
6423     \fi
  Escape encap character unless it has already been escaped.
6424   \ifx\@glsxtr@autoindex@encap\@gls@encapchar
6425     \else
6426       \def\@gls@checkedmkidx{}%
6427       \edef\@glsxtr@checkspch{%
6428         \noexpand\@glsxtr@autoindex@escencap\@gls@expandonce{#1}%
6429         \noexpand\@empty\@glsxtr@autoindex@encap\noexpand\@nnil

```

```

6430      \@glsxtr@autoindex@encap\noexpand\empty\noexpand\@glsxtr@endescspch}%
6431      \@@glsxtr@checkspch
6432      \let#1\gls@checkedmkidx\relax
6433 \fi
6434 }

```

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`.

```
6435 \newcommand*\{@glsxtr@autoindex@at}{}
```

`trSetActualChar` Set the actual character.

```

6436 \newcommand*\GlsXtrSetActualChar}[1]{%
6437   \gdef\@glsxtr@autoindex@at{#1}%
6438   \def\@glsxtr@autoindex@escat##1##2##3\@glsxtr@endescspch{%
6439     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escat}{##1}{##2}{##3}%
6440   }%
6441 }%
6442 \onlypreamble\GlsXtrSetActualChar
6443 \makeatother
6444 \GlsXtrSetActualChar{0}
6445 \makeatletter

```

`autoindex@encap` Encap character for use with `\index`.

```
6446 \newcommand*\{@glsxtr@autoindex@encap}{}
```

`XtrSetEncapChar` Set the encap character.

```

6447 \newcommand*\GlsXtrSetEncapChar}[1]{%
6448   \gdef\@glsxtr@autoindex@encap{#1}%
6449   \def\@glsxtr@autoindex@escencap##1##2##3\@glsxtr@endescspch{%
6450     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escencap}{##1}{##2}{##3}%
6451   }%
6452 }%
6453 \GlsXtrSetEncapChar{}%
6454 \onlypreamble\GlsXtrSetEncapChar

```

`autoindex@level` Level character for use with `\index`.

```
6455 \newcommand*\{@glsxtr@autoindex@level}{}
```

`XtrSetLevelChar` Set the encap character.

```

6456 \newcommand*\GlsXtrSetLevelChar}[1]{%
6457   \gdef\@glsxtr@autoindex@level{#1}%
6458   \def\@glsxtr@autoindex@esclevel##1##2##3\@glsxtr@endescspch{%
6459     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@esclevel}{##1}{##2}{##3}%
6460   }%
6461 }%
6462 \GlsXtrSetLevelChar{!}%
6463 \onlypreamble\GlsXtrSetLevelChar

```

```

r@autoindex@esc Escape character for use with \index.
6464 \newcommand*{\glsxtr@autoindex@esc}{}

lsXtrSetEscChar Set the escape character.
6465 \newcommand*{\GlsXtrSetEscChar}[1]{%
6466   \gdef\@glsxtr@autoindex@esc{#1}%
6467   \def\@glsxtr@autoindex@escquote##1##2##3\@glsxtr@endescspch{%
6468     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escquote}{##1}{##2}{##3}%
6469   }%
6470 }
6471 \GlsXtrSetEscChar{`}
6472 \onlypreamble\GlsXtrSetEscChar

Set if defined. (For example, if doc package has been loaded.) Actual character \actualchar:
6473 \ifdef\actualchar
6474   {\expandafter\GlsXtrSetActualChar\expandafter{\actualchar}}
6475 {}

Quote character \quotechar:
6476 \ifdef\quotechar
6477   {\expandafter\GlsXtrSetEscChar\expandafter{\quotechar}}
6478 {}

Level character \levelchar:
6479 \ifdef\levelchar
6480   {\expandafter\GlsXtrSetLevelChar\expandafter{\levelchar}}
6481 {}

Encap character \encapchar:
6482 \ifdef\encapchar
6483   {\expandafter\GlsXtrSetEncapChar\expandafter{\encapchar}}
6484 {}

leto@endescspch
6485 \def\@glsxtr@gobbleto@endescspch#1\@glsxtr@endescspch{}

\@@glsxtr@autoindex@escspch{<char>}{<cs>}{<pre>}{<mid>}{<post>}

```

6486 \newcommand\*{\@@glsxtr@autoindex@escspch}[5]{%
6487 \gls@tmpb=\expandafter{\gls@checkedmkidx}%
6488 \toks@={#3}%
6489 \ifx\@nnil#3\relax
6490 \def\@@glsxtr@checkspch{\@glsxtr@gobbleto@endescspch#5\@glsxtr@endescspch}%
6491 \else
6492 \ifx\@nnil#4\relax
6493 \edef\gls@checkedmkidx{\the\gls@tmpb\the\toks@}%
6494 \def\@@glsxtr@checkspch{\@glsxtr@gobbleto@endescspch}

```

6495      #4#5\@glsxtr@endescspch}%
6496  \else
6497    \edef\@gls@checkedmkidx{\the\@gls@tmpb\the\toks@%
6498      \@glsxtr@autoindex@esc#1}%
6499    \def\@@glsxtr@checkspch{#2#5#1\@nnil#1\@glsxtr@endescspch}%
6500  \fi
6501 \fi
6502 \@@glsxtr@checkspch
6503 }

```

\Glossentrydesc Redefine to set the abbreviation format and accessibility support.

```

6504 \renewcommand*\Glossentrydesc[1]{%
6505   \glsdoifexistsorwarn{#1}%
6506   {%
6507     \glssetabbrvfmt{\glscategory{#1}}%
6508     \Glsaccessdesc{#1}%
6509   }%
6510 }

```

\glossentrysymbol Redefine to set the abbreviation format and accessibility support.

```

6511 \renewcommand*\glossentrysymbol[1]{%
6512   \glsdoifexistsorwarn{#1}%
6513   {%
6514     \glssetabbrvfmt{\glscategory{#1}}%
6515     \glsaccesssymbol{#1}%
6516   }%
6517 }

```

\glossentrysymbol Redefine to set the abbreviation format and accessibility support.

```

6518 \renewcommand*\Glossentrysymbol[1]{%
6519   \glsdoifexistsorwarn{#1}%
6520   {%
6521     \glssetabbrvfmt{\glscategory{#1}}%
6522     \Glsaccesssymbol{#1}%
6523   }%
6524 }

```

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.

```

6525 \newcommand*\GlsXtrEnableInitialTagging{%
6526   \@ifstar\s@glsxtr@enabletagging\@glsxtr@enabletagging
6527 }
6528 \onlypreamble\GlsXtrEnableInitialTagging

```

`r@enabletagging` Starred version undefines command.

```

6529 \newcommand*{\s@glsxtr@enabletagging}[2]{%
6530   \undef#2%
6531   \glsxtr@enabletagging{#1}{#2}%
6532 }

r@enabletagging Internal command.

6533 \newcommand*{\@glsxtr@enabletagging}[2]{%
  Set attributes for categories given in the first argument.

6534 \@for\@glsxtr@cat:=#1\do
6535 {%
  6536   \ifdefempty\@glsxtr@cat
  6537   {}%
  6538   {\glssetcategoryattribute{\@glsxtr@cat}{tagging}{true}}%
6539 }%
6540 \newrobustcmd*#2[1]{##1}%
6541 \def\@glsxtr@taggingcs{#2}%
6542 \renewcommand*\@glsxtr@activate@initialtagging{%
  6543   \let#2\@glsxtr@tag
6544 }%
6545 \ifundef\@gls@preglossaryhook
6546 {\GlossariesExtraWarning{Initial tagging requires at least
  6547   glossaries.sty v4.19 to work correctly}}%
6548 {}%
6549 }

```

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`

```

6550 \ifundef\mfu@checkword@do
6551 {%
6552   \newcommand*{\mfu@checkword@do}[1]{%
6553     \ifdefstring{\mfu@checkword@arg}{#1}%
6554     {}%
6555     \let\@mfu@domakefirstuc\@firstofone
6556     \listbreak
6557   }%
6558   {}%
6559 }

```

`\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.

```

6560 \ifundef\mfu@checkword
6561 {%
6562   \newcommand{\@glsxtr@do@titlecaps@warn}{%
6563     \GlossariesExtraWarning{mfirstuc.sty too old. Title Caps
6564       support not available}%

```

One warning should suffice.

```
6565     \let\@glsxtr@do@titlecaps@warn\relax
6566 }
6567 }
6568 {
6569     \renewcommand*\mfp@checkword[1]{%
6570         \def\mfp@checkword@arg{#1}%
6571         \let\@mfp@domakefirstuc\makefirstuc
6572         \forlistloop\mfp@checkword@do\@mfp@nocaplist
6573     }
6574 }
6575 }
6576 {}% no patch required
```

@titlecaps@warn Do warning if title case not supported.

```
6577 \newcommand*{\@glsxtr@do@titlecaps@warn}{}%
```

@initialtagging Used in \printglossary but at least v4.19 of glossaries required.

```
6578 \newcommand*{\@glsxtr@activate@initialtagging}{}%
```

\@glsxtr@tag Definition of tagging command when used in glossary.

```
6579 \newrobustcmd*{\@glsxtr@tag}[1]{%
6580     \glsifattribute{\glscurrententrylabel}{tagging}{true}%
6581     {\glsxtrtagfont{#1}}{#1}%
6582 }
```

\glsxtrtagfont Used in the glossary.

```
6583 \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.

```
6584 \ifdef\@gls@preglossaryhook
6585 {
6586     \renewcommand*{\@gls@preglossaryhook}{}%
6587     \@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.

```
6588 \ifundef\@glsxtr@org@postdescription
6589 {
6590     \let\@glsxtr@org@postdescription\glspostdescription
6591     \renewcommand*{\glspostdescription}{}%
6592     \ifglsentryexists{\glscurrententrylabel}%
6593     {
6594         \glsxtrpostdescription
6595         \@glsxtr@org@postdescription
```

```
6596      }%
6597      {}%
6598      }%
6599      }%
6600      {}%
```

Enable the options used by \@@glsxtrp:

```
6601      \glossxtrsetopts
6602      }%
6603 }
6604 {}
```

**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.

```
6605 \newcommand*\glsxtrpostdescription}{%
6606   \csuse{glsxtrpostdesc\glscategory{\glscurrententrylabel}}%
6607 }
```

**postdescgeneral**

```
6608 \newcommand*\glsxtrpostdescgeneral}{}
```

**xtrpostdescterm**

```
6609 \newcommand*\glsxtrpostdescterm}{}
```

**postdescacronym**

```
6610 \newcommand*\glsxtrpostdescacronym}{}
```

**escabbreviation**

```
6611 \newcommand*\glsxtrpostdescabbreviation}{}
```

**\glsdefpostdesc** Provide a convenient command for defining the post-description hook for the given category.

```
6612 \newcommand*\glsdefpostdesc}[2]{%
6613   \csdef{glsxtrpostdesc#1}{\#2}%
6614 }
```

**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.

```
6615 \renewcommand*\glspostlinkhook}{%
6616   \ifglsentryexists{\glslabel}{\glsxtrpostlinkhook}{}}%
6617 }
```

**xtrpostlinkhook** The entry label should already be stored in \glslabel by \gls@link.

```
6618 \newcommand*\glsxtrpostlinkhook}{%
6619   \glsxtrdiscardperiod{\glslabel}}%
```

```

6620 {\glsxtrpostlinkendsentence}%
6621 {\glsxtrifcustomdiscardperiod
6622 {\glsxtrifperiod{\glsxtrpostlinkendsentence}{\glsxtrpostlink}}%
6623 {\glsxtrpostlink}%
6624 }%
6625 }

omdiscardperiod Allow user to provide a custom check. Should expand to #2 if no check is required otherwise expand to #1.
6626 \newcommand*{\glsxtrifcustomdiscardperiod}[2]{#2}

\glsxtrpostlink
6627 \newcommand*{\glsxtrpostlink}%
6628 {\csuse{\glsxtrpostlink}{\glscategory{\glslabel}}}%
6629 }

\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.
6630 \newcommand*{\glsdefpostlink}[2]{%
  \ifthenelse{\equal{#1}{}}{%
    \PackageError{glossaries-extra}{Invalid empty category label in \string\glsdefpostlink}{}%
    \csdef{\glsxtrpostlink#1}{#2}%
  }%
}

linkendsentence Done by \glsxtrpostlinkhook if a full stop is discarded.
6636 \newcommand*{\glsxtrpostlinkendsentence}%
6637 {\ifcsdef{\glsxtrpostlink}{\glscategory{\glslabel}}{%
6638 }%
6639 {\csuse{\glsxtrpostlink}{\glscategory{\glslabel}}}%
}

Put the full stop back.
6640 .\spacefactor\sfcodes`\. \relax
6641 }%
6642 %

Assume the full stop was discarded because the entry ends with a period, so adjust the space-factor.
6643 \spacefactor\sfcodes`\. \relax
6644 }%
6645 }

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.
6646 \newcommand*{\glsxtrpostlinkAddDescOnFirstUse}%
6647 {\glsxtrifwasfirstuse{\space\glsxtrparen{\glsaccessdesc{\glslabel}}}}%
6648 }

```

`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.

```
6649 \newcommand*{\glsxtrpostlinkAddSymbolOnFirstUse}{%
6650   \glsxtrifwasfirstuse
6651   {%
6652     \ifglshassymbol{\glslabel}%
6653     {\space\glsxtrparen{\glsaccesssymbol{\glslabel}}{}}%
6654     {}%
6655   }%
6656   {}%
6657 }
```

`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.

```
6658 \newcommand*{\glsxtrpostlinkAddSymbolDescOnFirstUse}{%
6659   \glsxtrifwasfirstuse
6660   {%
6661     \space\glsxtrparen
6662     {%
6663       \ifglshassymbol{\glslabel}%
6664       {\glsaccesssymbol{\glslabel}, }%
6665       {}%
6666       \glsaccessdesc{\glslabel}%
6667     }%
6668   }%
6669   {}%
6670 }
```

`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).

```
6671 \newcommand*{\glsxtrdiscardperiod}[3]{%
6672   \glsxtrifwasfirstuse
6673   {%
6674     \glsifattribute{#1}{retainfirstuseperiod}{true}%
6675     {#3}%
6676   }%
6677   \glsifattribute{#1}{discardperiod}{true}%
6678   {%
6679     \glsifplural
6680     {%
6681       \glsifattribute{#1}{pluraldiscardperiod}{true}%
6682       {\glsxtrifperiod{#2}{#3}}%
6683       {#3}%
6684     }%
6685     {%
6686       \glsxtrifperiod{#2}{#3}%
6687     }%
6688   }%
6689 }
```

```

6687      }%
6688      }%
6689      {#3}%
6690      }%
6691  }%
6692  {%
6693  \glsifattribute{#1}{discardperiod}{true}%
6694  {%
6695    \glsifplural
6696    {%
6697      \glsifattribute{#1}{pluraldiscardperiod}{true}%
6698      {\glsxtrifperiod{#2}{#3}}%
6699      {#3}%
6700    }%
6701    {%
6702      \glsxtrifperiod{#2}{#3}%
6703    }%
6704  }%
6705  {#3}%
6706 }%
6707 }

```

`\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`

```
6708 \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 ',').

```
6709 \newcommand*{\glsxtr@punctlist}{.,:;?!}
```

`punctuationmark` Add character to punctuation list.

```
6710 \newcommand*{\glsxtraddpunctuationmark}[1]{\appto\glsxtr@punctlist{#1}}
```

`unctuationmarks` Reset the punctuation list.

```
6711 \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`.)

```

6712 \newcommand*{\glsxtrifnextpunc}[2]{%
6713   \def\reserved@a{#1}%
6714   \def\reserved@b{#2}%
6715   \futurelet\glspunc@token\glsxtr@ifnextpunc
6716 }
```

```

sxtr@ifnextpunc
 6717 \newcommand{\glsxtr@ifnextpunc}{%
 6718   \glsxtr@ifpunctoken{\glspunc@token}{\let\reserved@b\reserved@a}{}}%
 6719   \reserved@b
 6720 }

xtr@ifpunctoken Test if the token given in the first argument is in the punctuation list.
 6721 \newcommand{\glsxtr@ifpunctoken}[1]{%
 6722   \expandafter\glsxtr@ifpunctoken\expandafter#1\glsxtr@punctlist\@nnil
 6723 }

xtr@ifpunctoken
 6724 \def\glsxtr@ifpunctoken#1#2{%
 6725   \let\reserved@d=#2%
 6726   \ifx\reserved@d\@nnil
 6727     \let\glsxtr@next\glsxtr@notfoundinlist
 6728   \else
 6729     \ifx#1\reserved@d
 6730       \let\glsxtr@next\glsxtr@foundinlist
 6731     \else
 6732       \let\glsxtr@next\glsxtr@ifpunctoken
 6733     \fi
 6734   \fi
 6735   \glsxtr@next#1%
 6736 }

xtr@foundinlist
 6737 \def\glsxtr@foundinlist#1\@nnil{\@firstoftwo}

@notfoundinlist
 6738 \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.

```

6739 \newcommand{\glsxtrdopostpunc}[1]{%
 6740   \glsxtrifnextpunc{\glsxtr@swaptwo{\#1}}{\#1}%
 6741 }

```

@glsxtr@swaptwo

```

6742 \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.

```
6743 \define@key{glsxtrabbrv}{category}{%
6744   \edef\glscategorylabel{\#1}%
6745   \ifcsdef{@glsabbrv@current@\#1}%
6746   {}%
```

Warning should already have been issued.

```
6747   \let\@glsxtr@orgwarndep\GlsXtrWarnDeprecatedAbbrStyle
6748   \let\GlsXtrWarnDeprecatedAbbrStyle\@gobbletwo
6749   \glsxtr@applyabbrvstyle{\csname@glsabbrv@current@\#1\endcsname}%
6750   \let\GlsXtrWarnDeprecatedAbbrStyle\@glsxtr@orgwarndep
6751 }%
6752 {}%
6753 }
```

Save the short plural form. This may be needed before the entry is defined.

```
6754 \define@key{glsxtrabbrv}{shortplural}{%
6755   \def\@gls@shortpl{\#1}%
6756 }
```

Similarly for the long plural form.

```
6757 \define@key{glsxtrabbrv}{longplural}{%
6758   \def\@gls@longpl{\#1}%
6759 }
```

Token registers for the short plural and long plural, provided for use in the abbreviation style definitions.

```
\glsshortpltok
6760 \newtoks\glsshortpltok

\glslongpltok
6761 \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.

```
6762 \newcommand*{\@glsxtr@insertdots}[2]{%
6763   \def#1{}%
6764   \glsxtr@insert@dots#1#2\@nnil
6765 }
```

```
xtr@insert@dots
6766 \newcommand*{\glsxtr@insert@dots}[2]{%
6767   \ifx\@nnil#2\relax
6768   \let\glsxtr@insert@dots@next\gobble
6769   \else
6770   \ifx\relax#2\relax
6771   \else
6772     \appto#1{#2.}%
6773   \fi
6774   \let\glsxtr@insert@dots@next\glsxtr@insert@dots
6775 \fi
6776 \glsxtr@insert@dots@next#1%
6777 }
```

Similarly provide a way of replacing spaces with \glsxtrwordsep, which first needs to be defined:

```
\glsxtrwordsep
6778 \newcommand*{\glsxtrwordsep}{\space}
```

Each word is marked with

```
\glsxtrword
6779 \newcommand*{\glsxtrword}[1]{#1}
```

```
tr@markwordseps
6780 \newcommand*{\glsxtr@markwordseps}[2]{%
6781   \def#1{}%
6782   \glsxtr@mark@wordseps#1#2 \@nnil
6783 }
```

```
r@mark@wordseps
6784 \def\glsxtr@mark@wordseps#1#2 #3{%
6785   \ifdefempty{#1}{%
6786     {\def#1{\protect\glsxtrword{#2}}}%
6787     {\appto#1{\protect\glsxtrwordsep\protect\glsxtrword{#2}}}%
6788   \ifx\@nnil#3\relax
6789   \let\glsxtr@mark@wordseps@next\relax
6790   \else
6791     \def\glsxtr@mark@wordseps@next{%
6792       \glsxtr@mark@wordseps#1#3}%
6793   \fi
6794   \glsxtr@mark@wordseps@next
6795 }
```

`newabbreviation` Define a new generic abbreviation.

```
6796 \newcommand*{\newabbreviation}[4][]{%
6797   \glsxtr@newabbreviation{#1}{#2}{#3}{#4}%
6798 }
```

`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.)

```

6799 \newcommand*{\glsxstr@newabbreviation}[4]{%
6800   \glskeylisttok{#1}%
6801   \glslabeltok{#2}%
6802   \glsshorttok{#3}%
6803   \glslongtok{#4}%

```

Save the original short and long values (before attribute settings modify them).

```

6804   \def\glsxtrorgshort{#3}%
6805   \def\glsxtrorglong{#4}%

```

Provide extra settings for hooks (if modified, this command must end with a comma).

```

6806   \def\ExtraCustomAbbreviationFields{}%

```

Initialise accessibility settings if required.

```

6807   \gls@initaccesskeys

```

Get the category.

```

6808   \def\glscategorylabel{abbreviation}%
6809   \glsxtr@applyabbrvstyle{\glsabbrv@current@abbreviation}%

```

Ignore the shortplural and longplural keys.

```

6810   \setkeys*{\glsxtrabbrv}{[shortplural, longplural]{#1}}%

```

Set the default long plural

```

6811   \def\gls@longpl{#4\glspluralsuffix}%
6812   \let\gls@default@longpl\gls@longpl

```

Has the markwords attribute been set?

```

6813   \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
6814   {%
6815     \glsxtr@markwordseps\gls@long{#4}%
6816     \expandafter\def\expandafter\gls@longpl\expandafter
6817       {\gls@long\glspluralsuffix}%
6818     \let\gls@default@longpl\gls@longpl

```

Update `\glslongtok`.

```

6819   \expandafter\glslongtok\expandafter{\gls@long}%
6820   }%
6821   {}%

```

Has the markshortwords attribute been set? (Not compatible with `insertdots`.)

```

6822   \glsifcategoryattribute{\glscategorylabel}{markshortwords}{true}%
6823   {%
6824     \glsxtr@markwordseps\gls@short{#3}%
6825   }%
6826   {}%

```

Has the `insertdots` attribute been set?

```

6827   \glsifcategoryattribute{\glscategorylabel}{insertdots}{true}%
6828   {%
6829     \glsxtr@insertdots\gls@short{#3}%

```

```
6830      \expandafter\glsshorttok\expandafter{\@gls@short\spacefactor1000 \relax}%
6831  }%
6832  {\def\@gls@short{#3}}%
6833 }%
```

Has the `aposplural` attribute been set? (Not compatible with `noshortplural`.)

```
6834 \glsifcategoryattribute{\glscategorylabel}{aposplural}{true}%
6835 {%
6836   \expandafter\def\expandafter\@gls@shortpl\expandafter{\@gls@short
6837     '\abrvpluralsuffix}%
6838 }%
6839 {%
```

Has the `noshortplural` attribute been set?

```
6840 \glsifcategoryattribute{\glscategorylabel}{noshortplural}{true}%
6841 {%
6842   \let\@gls@shortpl\@gls@short
6843 }%
6844 {%
6845   \expandafter\def\expandafter\@gls@shortpl\expandafter{\@gls@short
6846     '\abrvpluralsuffix}%
6847 }%
6848 }%
```

Update `\glsshorttok`:

```
6849 \expandafter\glsshorttok\expandafter{\@gls@short}%
```

Hook for further customisation if required:

```
6850 \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).

```
6851 \setkeys*{\glsxtrabbrev}{[category]{#1}}%
```

Has the plural been explicitly set?

```
6852 \ifx\@gls@default@longpl\@gls@longpl
6853 \else
```

Has the `markwords` attribute been set?

```
6854 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
6855 {%
6856   \expandafter\@glsxtr@markwordseps\expandafter\@gls@longpl\expandafter
6857     {\@gls@longpl}%
6858 }%
6859 {%
6860 \fi
```

Set the plural token registers so the values can be accessed by the abbreviation styles.

```
6861 \expandafter\glsshortpltok\expandafter{\@gls@shortpl}%
6862 \expandafter\glslongpltok\expandafter{\@gls@longpl}%
```

Hook for accessibility support (does nothing if `glossaries-accsupp` hasn't been loaded).

```
6863 \gls@setup@default@short@access{#3}%
```

Do any extra setup provided by hook:

```
6864 \newabbreviationhook
```

Define this entry:

```
6865 \protected@edef{\do@newglossaryentry}{%
6866   \noexpand\newglossaryentry{\the\glslabeltok}%
6867   {%
6868     type=\glsxtrabbrvtype,%
6869     category=abbreviation,%
6870     short={\the\glsshorthttok},%
6871     shortplural={\the\glsshortplttok},%
6872     long={\the\glslongttok},%
6873     longplural={\the\glslongplttok},%
6874     name={\the\glsshorthttok},%
6875     \CustomAbbreviationFields,%
6876 }
```

Hook may override abbreviation style default settings (this hook must end with a comma if set).

```
6876 \ExtraCustomAbbreviationFields
```

Any explicit fields set in the optional argument override all other settings.

```
6877 \the\glskeylisttok
6878 }%
6879 }%
6880 \do@newglossaryentry
6881 \GlsXtrPostNewAbbreviation
6882 }
```

`evpresetkeyhook` Hook for extra stuff in `\newabbreviation`

```
6883 \newcommand*{\glsxtrnewabbrevpresetkeyhook}[3]{}{}
```

`NewAbbreviation` Hook used by abbreviation styles.

```
6884 \newcommand*{\GlsXtrPostNewAbbreviation}{}{}
```

`bbreviationhook` Hook for use with `\newabbreviation`.

```
6885 \newcommand*{\newabbreviationhook}{}{}
```

`reviationFields`

```
6886 \newcommand*{\CustomAbbreviationFields}{}{}
```

`\glsxtrparen` For the parenthetical styles.

```
6887 \newcommand*{\glsxtrparen}[1]{(#1)}
```

`lsxtrfullformat` Full format without case change.

```
6888 \newcommand*{\glsxtrfullformat}[2]{%
6889   \glsfirstlongfont{\glsaccesslong{\#1}}\#2\glsxtrfullsep{\#1}%
6890   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{\#1}}}%
6891 }
```

`lsxtrfullformat` Full format with case change.

```
6892 \newcommand*\Glsxtrfullformat}[2]{%
6893   \glsfirstlongfont{\Glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
6894   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}}%
6895 }
```

`xtrfullplformat` Plural full format without case change.

```
6896 \newcommand*\glsxtrfullplformat}[2]{%
6897   \glsfirstlongfont{\glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
6898   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}}%
6899 }
```

`xtrfullplformat` Plural full format with case change.

```
6900 \newcommand*\Glsxtrfullplformat}[2]{%
6901   \glsfirstlongfont{\Glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
6902   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}}%
6903 }
```

`\glsxtrfullsep` Separator used by full format is a space by default. The argument is the entry's label.

```
6904 \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.

```
6905 \newcommand*\glsxtrinlnefullformat}{\glsxtrfullformat}
```

`nlnefullformat` Full format with case change.

```
6906 \newcommand*\Glsxtrinlnefullformat}{\Glsxtrfullformat}
```

`xtrfullplformat` Plural full format without case change.

```
6907 \newcommand*\glsxtrinlnefullplformat}{\glsxtrfullplformat}
```

`nlnefullplformat` Plural full format with case change.

```
6908 \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`

```
6909 \renewcommand*\glsentryfull}[1]{\glsxtrinlnefullformat{#1}{}}
```

`\Glsentryfull`

```
6910 \renewcommand*\Glsentryfull}[1]{\Glsxtrinlnefullformat{#1}{}}
```

`\glsentryfullpl`

```
6911 \renewcommand*\glsentryfullpl}[1]{\glsxtrinlnefullplformat{#1}{}}
```

```

\Glsentryfullpl
 6912 \renewcommand*{\Glsentryfullpl}[1]{\Glsxtrinlinefullplformat{#1}{}}
```

**sfirstabbrvfont** Font changing command used for the abbreviation on first use or in the full format.  
 6913 \newcommand\*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{#1}}

**bbrvdefaultfont** Font changing command used for the abbreviation on first use or in the full format.  
 6914 \newcommand\*{\glsfirstabbrvdefaultfont}[1]{\glsabbrvfont{#1}}

**\glsabbrvfont** Font changing command used for the abbreviation on subsequent use.  
 6915 \newcommand\*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{#1}}

**bbrvdefaultfont**  
 6916 \newcommand\*{\glsabbrvdefaultfont}[1]{#1}

**\glslongfont** Font changing command used for the long form in commands like \glsxtrlong.  
 6917 \newcommand\*{\glslongfont}[1]{\glslongdefaultfont{#1}}

**longdefaultfont** Default font changing command used for the long form in commands like \glsxtrlong.  
 6918 \newcommand\*{\glslongdefaultfont}[1]{#1}

**lsfirstlongfont** Font changing command used for the long form on first use or in the full format.  
 6919 \newcommand\*{\glsfirstlongfont}[1]{\glslongfont{#1}}

**longdefaultfont**  
 6920 \newcommand\*{\glsfirstlongdefaultfont}[1]{\glslongdefaultfont{#1}}

**brvpluralsuffix** Default plural suffix. Allow an alternative default suffix for abbreviations.  
 6921 \newcommand\*{\glsxtrabbrvpluralsuffix}{\glspluralsuffix}

**brvpluralsuffix** Default plural suffix.  
 6922 \newcommand\*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}

**\glsxtrfull** Full form (no case-change).  
 6923 \newrobustcmd\*{\glsxtrfull}{\@gls@hyp@opt\ns@glsxtrfull}  
 6924 \newcommand\*\ns@glsxtrfull[2][]{%  
 6925 \new@ifnextchar[\{\@glsxtr@full{#1}{#2}\}]{%  
 6926 {\@glsxtr@full{#1}{#2}[]}%  
 6927 }

**\@glsxtr@full** Low-level macro:  
 6928 \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).

```

6929  \glsxstr@record{\#1}{\#2}{\glslink}%
6930  \glsdoifexists{\#2}%
6931  {%
6932    \glssetabrvfmt{\glscategory{\#2}}%
6933    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6934    \let\glsifplural\secondoftwo
6935    \let\glscapscase\firstofthree
6936    \let\glsinsert\empty
6937    \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.

```

6938  \glsxtrsetupfulldefs
6939  \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
6940  }%
6941 \glspostlinkhook
6942 }

```

#### trsetupfulldefs

```

6943 \newcommand*{\glsxtrsetupfulldefs}{%
6944   \let\glsxtrifwasfirstuse\firstoftwo
6945 }

```

#### \Glsxtrfull Full form (first letter uppercase).

```

6946 \newrobustcmd*{\Glsxtrfull}{\gls@hyp@opt\ns@Glsxtrfull}
6947 \newcommand*\ns@Glsxtrfull[2][]{%
6948   \new@ifnextchar[\{@Glsxtr@full{\#1}{\#2}}%
6949     {\@Glsxtr@full{\#1}{\#2}[]}%
6950 }

```

#### \@Glsxtr@full Low-level macro:

```

6951 \def\@Glsxtr@full#1#2[#3]{%
6952   \glsdoifexists{\#2}%
6953   {%
6954     \glssetabrvfmt{\glscategory{\#2}}%
6955     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6956     \let\glsifplural\secondoftwo
6957     \let\glscapscase\secondofthree
6958     \let\glsinsert\empty
6959     \def\glscustomtext{\Glsxtrinlinefullformat{\#2}{\#3}}%
6960     \glsxtrsetupfulldefs
6961     \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
6962   }%
6963 \glspostlinkhook
6964 }

```

\GLSxtrfull Full form (all uppercase).

```
6965 \newrobustcmd*{\GLSxtrfull}{\gls@hyp@opt\ns@GLSxtrfull}
6966 \newcommand*\ns@GLSxtrfull[2][]{%
6967   \new@ifnextchar[{\gls@category{#1}{#2}}{%
6968     {\gls@category{#1}{#2}}[]}}%
6969 }
```

\@GLSxtr@full Low-level macro:

```
6970 \def\@GLSxtr@full#1#2[#3]{%
6971   \glsdoifexists{#2}{%
6972     {%
6973       \glssetabrvfmt{\glscategory{#2}}{%
6974         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6975         \let\glsifplural\@secondoftwo
6976         \let\glscapscase\@thirdofthree
6977         \let\glsinsert\@empty
6978         \def\glscustomtext{\mfirstrucMakeUppercase{\glsxtrinlinefullformat{#2}{#3}}}{%
6979           \glsxtrsetupfulldefs
6980           \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}{%
6981             }%
6982           \glspostlinkhook
6983     }}
```

\glsxtrfullpl Plural full form (no case-change).

```
6984 \newrobustcmd*{\glsxtrfullpl}{\gls@hyp@opt\ns@glsxtrfullpl}
6985 \newcommand*\ns@glsxtrfullpl[2][]{%
6986   \new@ifnextchar[{\glsxtr@fullpl{#1}{#2}}{%
6987     {\glsxtr@fullpl{#1}{#2}}[]}}%
6988 }
```

\@glsxtr@fullpl Low-level macro:

```
6989 \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).

```
6990   \glsxtr@record{#1}{#2}{\glslink}{%
6991     \glsdoifexists{#2}{%
6992       {%
6993         \glssetabrvfmt{\glscategory{#2}}{%
6994           \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6995           \let\glsifplural\@firstoftwo
6996           \let\glscapscase\@firstofthree
6997           \let\glsinsert\@empty
6998           \def\glscustomtext{\glsxtrinlinefullplformat{#2}{#3}}{%
6999             \glsxtrsetupfulldefs
7000             \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}{%
7001               }%
7002             \glspostlinkhook
7003     }}
```

\Glsxtrfullpl Plural full form (first letter uppercase).

```
7004 \newrobustcmd*\Glsxtrfullpl{\gls@hyp@opt\ns@Glsxtrfullpl}
7005 \newcommand*\ns@Glsxtrfullpl[2][]{%
7006   \new@ifnextchar[\{@Glsxtr@fullpl{#1}{#2}}%{%
7007     {\@Glsxtr@fullpl{#1}{#2}[]}%
7008 }
```

\@Glsxtr@fullpl Low-level macro:

```
7009 \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).

```
7010  \@glsxtr@record{#1}{#2}{glslink}%
7011  \glsdoifexists{#2}%
7012  {%
7013    \glssetabrvfmt{\glscategory{#2}}%
7014    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7015    \let\glsifplural@\firstoftwo
7016    \let\glscapscase@\secondofthree
7017    \let\glsinsert@\empty
7018    \def\glscustomtext{\Glsxtrinlinefullplformat{#2}{#3}}%
7019    \glsxtrsetupfulldefs
7020    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7021  }%
7022  \glspostlinkhook
7023 }
```

\GLSxtrfullpl Plural full form (all upper case).

```
7024 \newrobustcmd*\GLSxtrfullpl{\gls@hyp@opt\ns@GLSxtrfullpl}
7025 \newcommand*\ns@GLSxtrfullpl[2][]{%
7026   \new@ifnextchar[\{@GLSxtr@fullpl{#1}{#2}}%{%
7027     {\@GLSxtr@fullpl{#1}{#2}[]}%
7028 }
```

\@GLSxtr@fullpl Low-level macro:

```
7029 \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).

```
7030  \@glsxtr@record{#1}{#2}{glslink}%
7031  \glsdoifexists{#2}%
7032  {%
7033    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7034    \let\glsifplural@\firstoftwo
7035    \let\glscapscase@\thirdofthree
7036    \let\glsinsert@\empty
7037    \def\glscustomtext{%
7038      \mfirstrucMakeUppercase{\glsxtrinlinefullplformat{#2}{#3}}}%
7039    \glsxtrsetupfulldefs
```

```

7040     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7041   }%
7042   \glspostlinkhook
7043 }

```

The short and long forms work in a similar way to acronyms.

\glsxtrshort

```
7044 \newrobustcmd*\glsxtrshort{\gls@hyp@opt\ns@glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7045 \newcommand*\ns@glsxtrshort[2][]{%
7046   \new@ifnextchar{@\glsxtrshort[#1]{#2}}{\glsxtrshort[#1]{#2}[]}{%
7047 }

```

Read in the final optional argument:

```
7048 \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).

```

7049  \glsxtr@record[#1]{#2}{glslink}%
7050  \glsdoifexists[#2]%
7051  {%

```

Need to make sure \glsabrvfont is set correctly.

```

7052  \glssetabrvfmt{\glscategory{#2}}%
7053  \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7054  \let\glsxtrifwasfirstuse\@secondoftwo
7055  \let\glsifplural\@secondoftwo
7056  \let\glscapscase\@firstofthree
7057  \let\glsinsert\@empty
7058  \def\glscustomtext{%
7059    \glsabrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
7060    \ifglsxtrinsertinside\else#3\fi
7061  }%
7062  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7063 }%
7064 \glspostlinkhook
7065 }

```

\Glsxtrshort

```
7066 \newrobustcmd*\Glsxtrshort{\gls@hyp@opt\ns@Glsxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7067 \newcommand*\ns@Glsxtrshort[2][]{%
7068   \new@ifnextchar{@\Glsxtrshort[#1]{#2}}{\Glsxtrshort[#1]{#2}[]}{%
7069 }

```

Read in the final optional argument:

```
7070 \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).

```

7071  \@glsxtr@record{\#1}{\#2}{\glslink}%
7072  \glsdoifexists{\#2}%
7073  {%
7074    \glssetabrvfmt{\glscategory{\#2}}%
7075    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7076    \let\glsxtrifwasfirstuse@secondoftwo
7077    \let\glsifplural@secondoftwo
7078    \let\glscapscase@secondofthree
7079    \let\glsinsert@\empty
7080    \def\glscustomtext{%
7081      \glsabbrvfont{\Glsaccessshort{\#2}\ifglsxtrinsertinside#3\fi}%
7082      \ifglsxtrinsertinside\else#3\fi
7083    }%
7084    \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
7085  }%
7086  \glspostlinkhook
7087 }

```

#### \GLSxtrshort

```
7088 \newrobustcmd*\GLSxtrshort{\gls@hyp@opt\ns@GLSxtrshort}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7089 \newcommand*\ns@GLSxtrshort[2][]{%
7090   \new@ifnextchar[\ns@GLSxtrshort{\#1}{\#2}]{\ns@GLSxtrshort{\#1}{\#2}[]}{%
7091 }

```

Read in the final optional argument:

```
7092 \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).

```

7093  \@glsxtr@record{\#1}{\#2}{\glslink}%
7094  \glsdoifexists{\#2}%
7095  {%
7096    \glssetabrvfmt{\glscategory{\#2}}%
7097    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7098    \let\glsxtrifwasfirstuse@secondoftwo
7099    \let\glsifplural@secondoftwo
7100    \let\glscapscase@thirdofthree
7101    \let\glsinsert@\empty
7102    \def\glscustomtext{%
7103      \mfistucMakeUppercase
7104      \glsabbrvfont{\Glsaccessshort{\#2}\ifglsxtrinsertinside#3\fi}%
7105      \ifglsxtrinsertinside\else#3\fi
7106    }%
7107  }%
7108  \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
7109 }

```

```

7110 \glspostlinkhook
7111 }

\glsxtrlong
7112 \newrobustcmd*{\glsxtrlong}{\gls@hyp@opt\ns@glsxtrlong}
    Define the un-starred form. Need to determine if there is a final optional argument
7113 \newcommand*{\ns@glsxtrlong}[2][]{%
7114 \new@ifnextchar[{\glsxtrlong[#1]{#2}}{\glsxtrlong[#1]{#2}[]}%
7115 }

    Read in the final optional argument:
7116 \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).
7117 \glsxtr@record[#1]{#2}{glslink}%
7118 \glsdoifexists{#2}%
7119 {%
7120 \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7121 \let\glsxtrifwasfirstuse\secondoftwo
7122 \let\glsifplural\secondoftwo
7123 \let\glscapscase\firstofthree
7124 \let\glsinsert\empty
7125 \def\glscustomtext{%
7126 \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7127 \ifglsxtrinsertinside\else#3\fi
7128 }%
7129 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7130 }%
7131 \glspostlinkhook
7132 }

\Glsxtrlong
7133 \newrobustcmd*{\Glsxtrlong}{\gls@hyp@opt\ns@Glsxtrlong}
    Define the un-starred form. Need to determine if there is a final optional argument
7134 \newcommand*{\ns@Glsxtrlong}[2][]{%
7135 \new@ifnextchar[{\Glsxtrlong[#1]{#2}}{\Glsxtrlong[#1]{#2}[]}%
7136 }

    Read in the final optional argument:
7137 \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).
7138 \glsxtr@record[#1]{#2}{glslink}%
7139 \glsdoifexists{#2}%
7140 {%
7141 \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7142 \let\glsxtrifwasfirstuse\secondoftwo

```

```

7143   \let\glsifplural\@secondoftwo
7144   \let\glscapscase\@secondofthree
7145   \let\glsinsert\@empty
7146   \def\glscustomtext{%
7147     \glslongfont{\Glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7148     \ifglsxtrinsertinside\else#3\fi
7149   }%
7150   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7151 }%
7152 \glspostlinkhook
7153 }

```

## \GLSxtrlong

```
7154 \newrobustcmd*{\GLSxtrlong}{\gls@hyp@opt\ns@GLSxtrlong}
```

Define the un-starred form. Need to determine if there is a final optional argument

```

7155 \newcommand*{\ns@GLSxtrlong}[2][]{%
7156   \new@ifnextchar[\{@GLSxtrlong{#1}{#2}\}{\@GLSxtrlong{#1}{#2}}[]}%
7157 }

```

Read in the final optional argument:

```
7158 \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).

```

7159  \@glsxtr@record{#1}{#2}{\glslink}%
7160  \glsdoifexists{#2}%
7161  {%
7162    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7163    \let\glsxtrifwasfirstuse\@secondoftwo
7164    \let\glsifplural\@secondoftwo
7165    \let\glscapscase\@thirdofthree
7166    \let\glsinsert\@empty
7167    \def\glscustomtext{%
7168      \mfirstrucMakeUppercase
7169      \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
7170      \ifglsxtrinsertinside\else#3\fi
7171    }%
7172  }%
7173  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7174 }%
7175 \glspostlinkhook
7176 }

```

Plural short forms:

## \glsxtrshortpl

```
7177 \newrobustcmd*{\glsxtrshortpl}{\gls@hyp@opt\ns@glsxtrshortpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7178 \newcommand*{\ns@glsxtrshortpl}[2][]{%
```

```
7179 \new@ifnextchar[{\@glsxtrshortpl{#1}{#2}}{\@glsxtrshortpl{#1}{#2}[]}]%
7180 }
```

Read in the final optional argument:

```
7181 \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).

```
7182 \@glsxtr@record{#1}{#2}{glslink}%
7183 \glsdoifexists{#2}%
7184 {%
7185   \glssetabrvfmt{\glscategory{#2}}%
7186   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7187   \let\glsxtrifwasfirstuse\@secondoftwo
7188   \let\glsifplural\@firstoftwo
7189   \let\glscapscase\@firstofthree
7190   \let\glsinsert\@empty
7191   \def\glscustomtext{%
7192     \glsabbrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7193     \ifglsxtrinsertinside\else#3\fi
7194   }%
7195   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7196 }%
7197 \glspostlinkhook
7198 }
```

\Glsxtrshortpl

```
7199 \newrobustcmd*\Glsxtrshortpl{\gls@hyp@opt\ns@Glsxtrshortpl}
```

Define the un-starred form. Need to determine if there is a final optional argument

```
7200 \newcommand*\ns@Glsxtrshortpl[2][]{%
7201   \new@ifnextchar[{\@Glsxtrshortpl{#1}{#2}}{\@Glsxtrshortpl{#1}{#2}[]}]%
7202 }
```

Read in the final optional argument:

```
7203 \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).

```
7204 \@glsxtr@record{#1}{#2}{glslink}%
7205 \glsdoifexists{#2}%
7206 {%
7207   \glssetabrvfmt{\glscategory{#2}}%
7208   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7209   \let\glsxtrifwasfirstuse\@secondoftwo
7210   \let\glsifplural\@firstoftwo
7211   \let\glscapscase\@secondofthree
7212   \let\glsinsert\@empty
7213   \def\glscustomtext{%
7214     \glsabbrvfont{\Glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7215     \ifglsxtrinsertinside\else#3\fi
    }}
```

```

7216    }%
7217    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7218  }%
7219 \glspostlinkhook
7220 }

```

### \GLSxtrshortpl

```

7221 \newrobustcmd*\{\GLSxtrshortpl\}{\gls@hyp@opt\ns@GLSxtrshortpl}
Define the un-starred form. Need to determine if there is a final optional argument
7222 \newcommand*\{\ns@GLSxtrshortpl\}[2][]{%
7223  \new@ifnextchar[{\@GLSxtrshortpl{#1}{#2}}{\@GLSxtrshortpl{#1}{#2}}[]}{%
7224 }

```

Read in the final optional argument:

```
7225 \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).

```

7226 \glsxtr@record{#1}{#2}{\glslink}%
7227 \glsdoifexists{#2}%
7228 {%
7229  \glssetabrvfmt{\glscategory{#2}}%
7230  \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7231  \let\glsxtrifwasfirstuse\@secondoftwo
7232  \let\glsifplural\@firstoftwo
7233  \let\glscapscase\@thirdofthree
7234  \let\glsinsert\@empty
7235  \def\glscustomtext{%
7236   \mfirstrucMakeUppercase
7237   {\glsabrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
7238   \ifglsxtrinsertinside\else#3\fi
7239   }%
7240   }%
7241  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7242 }%
7243 \glspostlinkhook
7244 }

```

Plural long forms:

### \glsxtrlongpl

```

7245 \newrobustcmd*\{\glsxtrlongpl\}{\gls@hyp@opt\ns@glsxtrlongpl}
Define the un-starred form. Need to determine if there is a final optional argument
7246 \newcommand*\{\ns@glsxtrlongpl\}[2][]{%
7247  \new@ifnextchar[{\@glsxtrlongpl{#1}{#2}}{\@glsxtrlongpl{#1}{#2}}[]}{%
7248 }

```

Read in the final optional argument:

```
7249 \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).

```

7250  \glsxstr@record{#1}{#2}{glslink}%
7251  \glsdoifexists{#2}%
7252  {%
7253    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7254    \let\glsxtrifwasfirstuse\secondoftwo
7255    \let\glsifplural\firstoftwo
7256    \let\glscapscase\firstofthree
7257    \let\glsinsert\empty
7258    \def\glscustomtext{%
7259      \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7260      \ifglsxtrinsertinside\else#3\fi
7261    }%
7262    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7263  }%
7264  \glspostlinkhook
7265 }
```

\Glsxtrlongpl  
7266 \newrobustcmd\*\Glsxtrlongpl{\gls@hyp@opt\ns@Glsxtrlongpl}

Define the un-starred form. Need to determine if there is a final optional argument

```

7267 \newcommand*\ns@Glsxtrlongpl[2][]{%
7268   \new@ifnextchar{`}{\Glsxtrlongpl{#1}{#2}}{\Glsxtrlongpl{#1}{#2}[]}%
```

Read in the final optional argument:

7270 \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).

```

7271  \glsxstr@record{#1}{#2}{glslink}%
7272  \glsdoifexists{#2}%
7273  {%
7274    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7275    \let\glsxtrifwasfirstuse\secondoftwo
7276    \let\glsifplural\firstoftwo
7277    \let\glscapscase\secondofthree
7278    \let\glsinsert\empty
7279    \def\glscustomtext{%
7280      \glslongfont{\Glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7281      \ifglsxtrinsertinside\else#3\fi
7282    }%
7283    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7284  }%
7285  \glspostlinkhook
7286 }
```

\GLSxtrlongpl

```

7287 \newrobustcmd*{\GLSxtrlongpl}{\gls@hyp@opt\ns@GLSxtrlongpl}
    Define the un-starred form. Need to determine if there is a final optional argument
7288 \newcommand*{\ns@GLSxtrlongpl}[2][]{%
7289   \new@ifnextchar[{\@\GLSxtrlongpl{#1}{#2}}{\@\GLSxtrlongpl{#1}{#2}[]}{%
7290 }

    Read in the final optional argument:
7291 \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).
7292  \@glsxtr@record{#1}{#2}{glslink}%
7293  \glsdoifexists{#2}%
7294  {%
7295    \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
7296    \let\glsxtrifwasfirstuse@secondoftwo
7297    \let\glsifplural@firstoftwo
7298    \let\glscapscase@thirdofthree
7299    \let\glsinsert@empty
7300    \def\glscustomtext{%
7301      \mfirstrucMakeUppercase
7302      {\glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7303       \ifglsxtrinsertinside\else#3\fi
7304     }%
7305   }%
7306   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7307 }%
7308 \glspostlinkhook
7309 }

\glssetabbrvfmt Set the current format for the given category (or the abbreviation category if unset).
7310 \newcommand*{\glssetabbrvfmt}[1]{%
7311   \ifcsdef{\glsabrv@current@#1}{%
7312     {\glsxtr@applyabbrvfmt{\csname \glsabrv@current@#1\endcsname}}%
7313     {\glsxtr@applyabbrvfmt{\glsabrv@current@abbreviation}}%
7314   }

\glsuseabbrvfont Provide a way to use the abbreviation font for a given category for arbitrary text.
7315 \newrobustcmd*{\glsuseabbrvfont}[2]{{\glssetabbrvfmt{#2}\glsabrvfont{#1}}}

\glsuselongfont Provide a way to use the long font for a given category for arbitrary text.
7316 \newrobustcmd*{\glsuselongfont}[2]{{\glssetabbrvfmt{#2}\glslongfont{#1}}}

\sxtrogenabbrvfmt Similar to \glsgenacfmt, but for abbreviations.
7317 \newcommand*{\glsxtrgenabbrvfmt}{%
7318   \ifdefempty\glscustomtext{%
7319   }%
7320   \ifglsused\glslabel{%
7321   }%

```

Subsequent use:

```
7322     \glsifplural  
7323     {%
```

Subsequent plural form:

```
7324     \glscapscase  
7325     {%
```

Subsequent plural form, don't adjust case:

```
7326         \glsxtrsubsequentplfmt{\glslabel}{\glsinsert} %  
7327     }%  
7328     {%
```

Subsequent plural form, make first letter upper case:

```
7329         \Glsxtrsubsequentplfmt{\glslabel}{\glsinsert} %  
7330     }%  
7331     {%
```

Subsequent plural form, all caps:

```
7332         \mfirstucMakeUppercase  
7333             {\glsxtrsubsequentplfmt{\glslabel}{\glsinsert}} %  
7334         }%  
7335         }%  
7336     {%
```

Subsequent singular form

```
7337     \glscapscase  
7338     {%
```

Subsequent singular form, don't adjust case:

```
7339         \glsxtrsubsequentfmt{\glslabel}{\glsinsert} %  
7340     }%  
7341     {%
```

Subsequent singular form, make first letter upper case:

```
7342         \Glsxtrsubsequentfmt{\glslabel}{\glsinsert} %  
7343     }%  
7344     {%
```

Subsequent singular form, all caps:

```
7345         \mfirstucMakeUppercase  
7346             {\glsxtrsubsequentfmt{\glslabel}{\glsinsert}} %  
7347         }%  
7348         }%  
7349     }%  
7350     {%
```

First use:

```
7351     \glsifplural  
7352     {%
```

First use plural form:

```
7353     \glscapscase  
7354     {%
```

First use plural form, don't adjust case:

```
7355      \glsxtrfullplformat{\glslabel}{\glsinsert}%
7356      }%
7357      {%
```

First use plural form, make first letter upper case:

```
7358      \Glsxtrfullplformat{\glslabel}{\glsinsert}%
7359      }%
7360      {%
```

First use plural form, all caps:

```
7361      \mfirstucMakeUppercase
7362          {\glsxtrfullplformat{\glslabel}{\glsinsert}}%
7363      }%
7364      }%
7365      {%
```

First use singular form

```
7366      \glscapscase
7367      {%
```

First use singular form, don't adjust case:

```
7368      \glsxtrfullformat{\glslabel}{\glsinsert}%
7369      }%
7370      {%
```

First use singular form, make first letter upper case:

```
7371      \Glsxtrfullformat{\glslabel}{\glsinsert}%
7372      }%
7373      {%
```

First use singular form, all caps:

```
7374      \mfirstucMakeUppercase
7375          {\glsxtrfullformat{\glslabel}{\glsinsert}}%
7376      }%
7377      }%
7378      }%
7379      }%
7380      {%
```

User supplied text.

```
7381      \glscustomtext
7382      }%
7383 }
```

`trsubsequentfmt` Subsequent use format (singular no case change).

```
7384 \newcommand*{\glsxtrsubsequentfmt}[2]{%
7385     \glsabbrvfont{\glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
7386     \ifglsxtrinsertinside \else#2\fi
7387 }
7388 \let\glsxtrdefaultsubsequentfmt\glsxtrsubsequentfmt
```

```

subsequentplfmt Subsequent use format (plural no case change).
7389 \newcommand*{\glsxtrsubsequentplfmt}[2]{%
7390   \glsabbrvfont{\glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
7391   \ifglsxtrinsertinside \else#2\fi
7392 }
7393 \let\glsxtrdefaultsubsequentplfmt\glsxtrsubsequentplfmt

```

trsubsequentfmt Subsequent use format (singular, first letter uppercase).

```

7394 \newcommand*{\Glsxtrsubsequentfmt}[2]{%
7395   \glsabbrvfont{\Glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
7396   \ifglsxtrinsertinside \else#2\fi
7397 }
7398 \let\Glsxtrdefaultsubsequentfmt\Glsxtrsubsequentfmt

```

subsequentplfmt Subsequent use format (plural, first letter uppercase).

```

7399 \newcommand*{\Glsxtrsubsequentplfmt}[2]{%
7400   \glsabbrvfont{\Glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
7401   \ifglsxtrinsertinside \else#2\fi
7402 }
7403 \let\Glsxtrdefaultsubsequentplfmt\Glsxtrsubsequentplfmt

```

### 1.7.1 Abbreviation Styles Setup

breviaitonstyle

```

7404 \newcommand*{\setabbreviationstyle}[2][abbreviation]{%
7405   \ifcsundef{@glsabbrv@disptime@setup@#2}%
7406   {%
7407     \PackageError{glossaries-extra}{Undefined abbreviation style ‘#2’}{}%
7408   }%
7409   {%

```

Have abbreviations already been defined for this category?

```

7410   \ifcsstring{@glsabbrv@current@#1}{#2}%
7411   {%

```

Style already set.

```

7412   }%
7413   {%
7414     \def\@glsxtr@dostylewarn{}%
7415     \glsforeachincategory{#1}{\@gls@type}{\@gls@label}%
7416     {%
7417       \def\@glsxtr@dostylewarn{\GlossariesWarning{Abbreviation
7418         style has been switched \MessageBreak
7419         for category ‘#1’, \MessageBreak
7420         but there have already been entries \MessageBreak
7421         defined for this category. Unwanted \MessageBreak
7422         side-effects may result}}%
7423       \endfortrue
7424     }%
7425     \@glsxtr@dostylewarn

```

Set up the style for the given category.

```
7426      \csdef{@glsabbrv@current@#1}{#2}%
7427          \glsxtr@applyabbrvstyle{#2}%
7428      }%
7429  }%
7430 }
```

applyabbrvstyle Apply the abbreviation style without existence check.

```
7431 \newcommand*{\glsxtr@applyabbrvstyle}[1]{%
7432     \csuse{@glsabbrv@dispstyle@setup@#1}%
7433     \csuse{@glsabbrv@dispstyle@fmts@#1}%
7434 }
```

r@applyabbrvfmt Only apply the style formats.

```
7435 \newcommand*{\glsxtr@applyabbrvfmt}[1]{%
7436     \csuse{@glsabbrv@dispstyle@fmts@#1}%
7437 }
```

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.

```
7438 \newcommand*{\newabbreviationstyle}[3]{%
7439     \ifcsdef{@glsabbrv@dispstyle@setup@#1}%
7440     {}%
7441     \PackageError{glossaries-extra}{Abbreviation style '#1' already%
7442     defined}{}%
7443 }%
7444 {}%
7445 \csdef{@glsabbrv@dispstyle@setup@#1}{%
```

Initialise hook to do nothing. The style may change this.

```
7446     \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
7447     #2}%
7448     \csdef{@glsabbrv@dispstyle@fmts@#1}{%
```

Assume in-line form is the same as first use. The style may change this.

```
7449     \renewcommand*{\glsxtrinlinetfullformat}{\glsxtrfullformat}%
7450     \renewcommand*{\Glsxtrinlinetfullformat}{\Glsxtrfullformat}%
7451     \renewcommand*{\glsxtrinlinetplformat}{\glsxtrfulltplformat}%
7452     \renewcommand*{\Glsxtrinlinetplformat}{\Glsxtrfulltplformat}%
```

Reset \glsxtrsubsequentfmt etc in case a style changes this.

```
7453     \let\glsxtrsubsequentfmt\glsxtrdefaultsubsequentfmt
7454     \let\glsxtrsubsequentplfmt\glsxtrdefaultsubsequentplfmt
7455     \let\Glsxtrsubsequentfmt\Glsxtrdefaultsubsequentfmt
7456     \let\Glsxtrsubsequentplfmt\Glsxtrdefaultsubsequentplfmt
7457     #3}%
7458 }%
7459 }
```

```

abbreviationstyle
7460 \newcommand*{\renewabbreviationstyle}[3]{%
7461   \ifcsundef{@glsabrv@dispstyle@setup@#1}%
7462   {%
7463     \PackageError{glossaries-extra}{Abbreviation style '#1' not defined}{}%
7464   }%
7465   {%
7466     \csdef{@glsabrv@dispstyle@setup@#1}{%

```

Initialise hook to do nothing. The style may change this.

```

7467   \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
7468   #2}%
7469   \csdef{@glsabrv@dispstyle@fmts@#1}{%

```

Assume in-line form is the same as first use. The style may change this.

```

7470   \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}%
7471   \renewcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}%
7472   \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}%
7473   \renewcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}%
7474   #3}%
7475 }%
7476 }

```

**abbreviationstyle** Define a synonym for an abbreviation style. The first argument is the new name. The second argument is the original style's name.

```

7477 \newcommand*{\letabbreviationstyle}[2]{%
7478   \csletcs{@glsabrv@dispstyle@setup@#1}{@glsabrv@dispstyle@setup@#2}%
7479   \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
7480 }

```

**ecated@abbrstyle** \glsxtr@deprecated@abbrstyle{\i{old-name}}{\i{new-name}}

Define a synonym for a deprecated abbreviation style.

```

7481 \newcommand*{\@glsxtr@deprecated@abbrstyle}[2]{%
7482   \csdef{@glsabrv@dispstyle@setup@#1}{%
7483     \GlsXtrWarnDeprecatedAbbrStyle{#1}{#2}%
7484     \csuse{@glsabrv@dispstyle@setup@#2}%
7485   }%
7486   \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
7487 }

```

**ecatedAbbrStyle** Generate warning for deprecated style use.

```

7488 \newcommand*{\GlsXtrWarnDeprecatedAbbrStyle}[2]{%
7489   \GlossariesExtraWarning{Deprecated abbreviation style name '#1',%
7490   use '#2' instead}%
7491 }

```

```

eAbbrStyleSetup
7492 \newcommand*{\GlsXtrUseAbbrStyleSetup}[1]{%
7493   \ifcsundef{@glsabbrv@dispstyle@setup@#1}{%
7494     {%
7495       \PackageError{glossaries-extra}{%
7496         Unknown abbreviation style definitions '#1'}{}%
7497     }%
7498     {%
7499       \csname @glsabbrv@dispstyle@setup@#1\endcsname
7500     }%
7501   }%
}

seAbbrStyleFmts
7502 \newcommand*{\GlsXtrUseAbbrStyleFmts}[1]{%
7503   \ifcsundef{@glsabbrv@dispstyle@fmts@#1}{%
7504     {%
7505       \PackageError{glossaries-extra}{%
7506         Unknown abbreviation style formats '#1'}{}%
7507     }%
7508     {%
7509       \csname @glsabbrv@dispstyle@fmts@#1\endcsname
7510     }%
7511   }%
}

```

### 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.

```

7512 \newif\ifglsxtrinsertinside
7513 \glsxtrinsertinsidefalse

```

`trlongshortname`

```

7514 \newcommand*{\glsxtrlongshortname}{%
7515   \protect\glsabbrvfont{\the\glsshorttok}%
7516 }

```

`long-short`

```

7517 \newabbreviationstyle{long-short}{%
7518 {%

```

```

7519 \renewcommand*\CustomAbbreviationFields{%
7520   name={\glsxtrlongshortname},
7521   sort={\the\glsshorttok},
7522   first={\protect\glsfirstlongfont{\the\glslongtok}%
7523     \protect\glsxtrfullsep{\the\glslabeltok}%
7524     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
7525   firstplural={\protect\glsfirstlongfont{\the\glslongpltok}%
7526     \protect\glsxtrfullsep{\the\glslabeltok}%
7527     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%
7528   plural={\protect\glsabbrvfont{\the\glsshortpltok}},%
7529   description={\the\glslongtok}}%

```

Unset the regular attribute if it has been set.

```

7530 \renewcommand*\GlsXtrPostNewAbbreviation{%
7531   \glshasattribute{\the\glslabeltok}{regular}%
7532   {%
7533     \glssetattribute{\the\glslabeltok}{regular}{false}%
7534   }%
7535   {}%
7536 }%
7537 }%
7538 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

7539 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
7540 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7541 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
7542 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7543 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

7544 \renewcommand*\glsxtrfullformat[2]{%
7545   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7546   \ifglsxtrinsertinside\else##2\fi
7547   \glsxtrfullsep{##1}%
7548   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
7549 }%
7550 \renewcommand*\glsxtrfullplformat[2]{%
7551   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7552   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7553   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
7554 }%
7555 \renewcommand*\Glsxtrfullformat[2]{%
7556   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7557   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7558   \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
7559 }%
7560 \renewcommand*\Glsxtrfullplformat[2]{%
7561   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7562   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%

```

```
7563     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%  
7564 }%  
7565 }
```

Set this as the default style for general abbreviations:

```
7566 \setabbreviationstyle{long-short}
```

#### ngshortdescsort

```
7567 \newcommand*{\glsxtrlongshortdescsort}{%  
7568 \expandonce\glsxtrorglong\space (\expandonce\glsxtrorgshort)%  
7569 }
```

#### ngshortdescname

```
7570 \newcommand*{\glsxtrlongshortdescname}{%  
7571 \protect\glslongfont{\the\glslongtok}  
7572 \glsxtrparen{\protect\glsabbrvfont{\the\glsshorttok}}%  
7573 }
```

**long-short-desc** User supplies description. The long form is included in the name.

```
7574 \newabbreviationstyle{long-short-desc}{%  
7575 }%  
7576 \renewcommand*{\CustomAbbreviationFields}{%  
7577   name={\glsxtrlongshortdescname},  
7578   sort={\glsxtrlongshortdescsort},%  
7579   first={\protect\glsfirstlongfont{\the\glslongtok}}%  
7580     \protect\glsxtrfullsep{\the\glslabeltok}%  
7581     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%  
7582   firstplural={\protect\glsfirstlongfont{\the\glslongpltok}}%  
7583     \protect\glsxtrfullsep{\the\glslabeltok}%  
7584     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%
```

The text key should only have the short form.

```
7585   text={\protect\glsabbrvfont{\the\glsshorttok}},%  
7586   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%  
7587 }%
```

Unset the regular attribute if it has been set.

```
7588 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  
7589   \glshasattribute{\the\glslabeltok}{regular}}%  
7590   {}%  
7591   \glssetattribute{\the\glslabeltok}{regular}{false}}%  
7592   {}%  
7593   {}%  
7594 }%  
7595 }%  
7596 {}%  
7597 \GlsXtrUseAbbrStyleFmts{long-short}}%  
7598 }
```

```

trshortlongname
7599 \newcommand*\glsxtrshortlongname}{%
7600   \protect\glsabbrvfont{\the\glsshorttok}%
7601 }

short-long Short form followed by long form in parenthesis on first use.
7602 \newabbreviationstyle{short-long}{%
7603 {%
7604   \renewcommand*\CustomAbbreviationFields}{%
7605     name={\glsxtrshortlongname},%
7606     sort={\the\glsshorttok},%
7607     description={\the\glslongtok},%
7608     first={\protect\glsfirstabbrvfont{\the\glsshorttok}}%
7609     \protect\glsxtrfullsep{\the\glslabeltok}%
7610     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}},%
7611     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}}%
7612     \protect\glsxtrfullsep{\the\glslabeltok}%
7613     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}},%
7614     plural={\protect\glsabbrvfont{\the\glsshortpltok}}}}%

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 }%
7623 {%

In case the user wants to mix and match font styles, these are redefined here.
7624 \renewcommand*\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7625 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7626 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
7627 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7628 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

The first use full form and the inline full form are the same for this style.
7629 \renewcommand*\glsxtrfullformat[2]{%
7630   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7631   \ifglsxtrinsertinside\else##2\fi
7632   \glsxtrfullsep{##1}%
7633   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}}%
7634 }%
7635 \renewcommand*\glsxtrfullplformat[2]{%
7636   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7637   \ifglsxtrinsertinside\else##2\fi
7638   \glsxtrfullsep{##1}}%

```

```

7639     \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7640   }%
7641   \renewcommand*{\Glsxtrfullformat}[2]{%
7642     \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7643     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7644     \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7645   }%
7646   \renewcommand*{\Glsxtrfullplformat}[2]{%
7647     \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7648     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7649     \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7650   }%
7651 }

```

#### ortlongdescsort

```
7652 \newcommand*{\glsxtrshortlongdescsort}{\the\glsshorttok}
```

#### ortlongdescname

```

7653 \newcommand*{\glsxtrshortlongdescname}{%
7654   \protect\glsabbrvfont{\the\glsshorttok}%
7655   \glsxtrparen{\protect\glslongfont{\the\glslongtok}}%
7656 }

```

**short-long-desc** User supplies description. The long form is included in the name.

```

7657 \newabbreviationstyle{short-long-desc}%
7658 {%
7659   \renewcommand*{\CustomAbbreviationFields}{%
7660     name={\glsxtrshortlongdescname},
7661     sort={\glsxtrshortlongdescsort},
7662     first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
7663       \protect\glsxtrfullsep{\the\glslabeltok}%
7664       \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
7665     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
7666       \protect\glsxtrfullsep{\the\glslabeltok}%
7667       \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
7668     text={\protect\glsabbrvfont{\the\glsshorttok}},%
7669     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
7670   }%

```

Unset the regular attribute if it has been set.

```

7671 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7672   \glshasattribute{\the\glslabeltok}{regular}%
7673   {%
7674     \glssetattribute{\the\glslabeltok}{regular}{false}%
7675   }%
7676   {}%
7677 }

```

```

7678 }%
7679 {%
7680   \GlsXtrUseAbbrStyleFmts{short-long}%
7681 }

ongfootnotefont Only used by the “footnote” styles.
7682 \newcommand*{\glsfirstlongfootnotefont}[1]{\glslongfootnotefont{\#1}}%

ongfootnotefont Only used by the “footnote” styles.
7683 \newcommand*{\glslongfootnotefont}[1]{\glslongdefaultfont{\#1}}%

xtrabbrvfootnote \glsxtrabbrvfootnote{\langle label \rangle}{\langle long \rangle}

Command used by footnote abbreviation styles. The default definition ignores the first argument. The second argument ⟨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).
7684 \newcommand*{\glsxtrabbrvfootnote}[2]{\footnote{\#2}}

```

xtrfootnotename

```

7685 \newcommand*{\glsxtrfootnotename}{%
7686   \protect\glsabbrvfont{\the\glsshorttok}%
7687 }

```

footnote Short form followed by long form in footnote on first use.

```

7688 \newabbreviationstyle{footnote}%
7689 {%
7690   \renewcommand*{\CustomAbbreviationFields}{%
7691     name={\glsxtrfootnotename},
7692     sort={\the\glsshorttok},
7693     description={\the\glslongtok},%
7694     first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
7695       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7696         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
7697     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
7698       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7699         {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
7700     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.

```

7701 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7702   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
7703   \glshasattribute{\the\glslabeltok}{regular}%

```

```

7704   {%
7705     \glssetattribute{\the\glslabeltok}{regular}{false}%
7706   }%
7707   {}%
7708 }%
7709 }%
7710 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

7711 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7712 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7713 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
7714 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
7715 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

7716 \renewcommand*{\glsxtrfullformat}[2]{%
7717   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7718   \ifglsxtrinsertinside\else##2\fi
7719   \protect\glsxtrabbrvfootnote{##1}%
7720   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7721 }%
7722 \renewcommand*{\glsxtrfullplformat}[2]{%
7723   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7724   \ifglsxtrinsertinside\else##2\fi
7725   \protect\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7726 }%
7727 }%
7728 \renewcommand*{\Glsxtrfullformat}[2]{%
7729   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7730   \ifglsxtrinsertinside\else##2\fi
7731   \protect\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7732 }%
7733 }%
7734 \renewcommand*{\Glsxtrfullplformat}[2]{%
7735   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7736   \ifglsxtrinsertinside\else##2\fi
7737   \protect\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7738 }%
7739 }%

```

The first use full form and the inline full form use the short (long) style.

```

7740 \renewcommand*{\glsxtrinlinenullformat}[2]{%
7741   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7742   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7743   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7744 }%
7745 \renewcommand*{\glsxtrinlinenullplformat}[2]{%
7746   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7747   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7748   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%

```

```

7749 }%
7750 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7751   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7752   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7753   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}}%
7754 }%
7755 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7756   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7757   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7758   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}}%
7759 }%
7760 }

```

#### short-footnote

```
7761 \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.

```

7762 \newabbreviationstyle{postfootnote}%
7763 {%
7764   \renewcommand*{\CustomAbbreviationFields}{%
7765     name={\glsxtrfootnotename},
7766     sort={\the\glsshorttok},
7767     description={\the\glslongtok},%
7768     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
7769     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
7770     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.

```

7771 \renewcommand*{\GlsXtrPostNewAbbreviation}%
7772   \csdef{glsxtrpostlink\glscategorylabel}{%
7773     \glsxtrifwasfirstuse
7774   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

7775   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
7776   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}%
7777 }%
7778 {}%
7779 }%
7780 \glshasattribute{\the\glslabeltok}{regular}%
7781 {}%
7782   \glssetattribute{\the\glslabeltok}{regular}{false}%
7783 }%
7784 {}%
7785 }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```
7786 \renewcommand*{\glsxtrsetupfulldefs}{%
7787   \let\glsxtrifwasfirstuse\@secondoftwo
7788 }%
7789 }%
7790 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
7791 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7792 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7793 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
7794 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
7795 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form. The long form is deferred.

```
7796 \renewcommand*{\glsxtrfullformat}[2]{%
7797   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7798   \ifglsxtrinsertinside\else##2\fi
7799 }%
7800 \renewcommand*{\glsxtrfullplformat}[2]{%
7801   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7802   \ifglsxtrinsertinside\else##2\fi
7803 }%
7804 \renewcommand*{\Glsxtrfullformat}[2]{%
7805   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7806   \ifglsxtrinsertinside\else##2\fi
7807 }%
7808 \renewcommand*{\Glsxtrfullplformat}[2]{%
7809   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7810   \ifglsxtrinsertinside\else##2\fi
7811 }%
```

The first use full form and the inline full form use the short (long) style.

```
7812 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7813   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7814   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7815   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7816 }%
7817 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7818   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7819   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7820   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7821 }%
7822 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7823   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7824   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7825   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7826 }%
7827 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
```

```

7828     \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7829     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7830     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7831 }%
7832 }

```

#### rt-postfootnote

```
7833 \letabbreviationstyle{short-postfootnote}{postfootnote}
```

#### shortnolongname

```

7834 \newcommand*\glsxtrshortnolongname}{%
7835   \protect\glsabbrvfont{\the\glsshorttok}%
7836 }

```

**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.

```

7837 \newabbreviationstyle{short}{%
7838 {%
7839   \renewcommand*\CustomAbbreviationFields}{%
7840     name={\glsxtrshortnolongname},
7841     sort={\the\glsshorttok},
7842     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
7843     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
7844     text={\protect\glsabbrvfont{\the\glsshorttok}},
7845     plural={\protect\glsabbrvfont{\the\glsshortpltok}},
7846     description={\the\glslongtok}}%
7847   \renewcommand*\GlsXtrPostNewAbbreviation}{%
7848     \glssetattribute{\the\glslabeltok}{regular}{true}}%
7849 }%
7850 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

7851 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
7852 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7853 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
7854 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7855 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

7856 \renewcommand*\glsxtrinlinefullformat}[2]{%
7857   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
7858   \ifglsxtrinsertinside##2\fi}%
7859   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7860   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7861 }%
7862 \renewcommand*\glsxtrinlinefullplformat}[2]{%
7863   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%

```

```

7864     \ifglsxtrinsertinside##2\fi}%
7865     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7866     \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}}%
7867 }%
7868 \renewcommand*\Glsxtrinlinefullformat}[2]{%
7869   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
7870   \ifglsxtrinsertinside##2\fi}%
7871   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7872   \glsxtrparen{\glsfirstlongfont{\Glsaccesslong{##1}}}}%
7873 }%
7874 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
7875   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
7876   \ifglsxtrinsertinside##2\fi}%
7877   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7878   \glsxtrparen{\glsfirstlongfont{\Glsaccesslongpl{##1}}}}%
7879 }%

```

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.

```

7880 \renewcommand*\glsxtrfullformat}[2]{%
7881   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7882   \ifglsxtrinsertinside\else##2\fi
7883 }%
7884 \renewcommand*\glsxtrfullplformat}[2]{%
7885   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7886   \ifglsxtrinsertinside\else##2\fi
7887 }%
7888 \renewcommand*\Glsxtrfullformat}[2]{%
7889   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7890   \ifglsxtrinsertinside\else##2\fi
7891 }%
7892 \renewcommand*\Glsxtrfullplformat}[2]{%
7893   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7894   \ifglsxtrinsertinside\else##2\fi
7895 }%
7896 }

```

Set this as the default style for acronyms:

```
7897 \setabbreviationstyle[acronym]{short}
```

#### short-nolong

```
7898 \letabbreviationstyle{short-nolong}{short}
```

#### rt-nolong-noreg

Like short-nolong but doesn't set the regular attribute.

```

7899 \newabbreviationstyle{short-nolong-noreg}%
7900 {%
7901   \GlsXtrUseAbbrStyleSetup{short-nolong}%

```

Unset the regular attribute if it has been set.

```
7902 \renewcommand*\GlsXtrPostNewAbbreviation}{%
```

```

7903   \glshasattribute{\the\glslabeltok}{regular}%
7904   {%
7905     \glssetattribute{\the\glslabeltok}{regular}{false}%
7906   }%
7907   {}%
7908 }%
7909 }%
7910 {%
7911   \GlsXtrUseAbbrStyleFmts{short-nolong}%
7912 }

```

#### trshortdescname

```

7913 \newcommand*{\glsxtrshortdescname}{%
7914   \protect\glsabbrvfont{\the\glsshorttok}%
7915 }

```

**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.

```

7916 \newabbreviationstyle{short-desc}%
7917 {%
7918   \renewcommand*{\CustomAbbreviationFields}{%
7919     name={\glsxtrshortdescname},
7920     sort={\the\glsshorttok},
7921     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
7922     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
7923     text={\protect\glsabbrvfont{\the\glsshorttok}},
7924     plural={\protect\glsabbrvfont{\the\glsshortpltok}},
7925     description={\the\glslongtok}}%
7926   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7927     \glssetattribute{\the\glslabeltok}{regular}{true}%
7928 }%
7929 }

```

In case the user wants to mix and match font styles, these are redefined here.

```

7930 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7931 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{\##1}}%
7932 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{\##1}}%
7933 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\##1}}%
7934 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{\##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

7935 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7936   \glsfirstabbrvfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
7937   \ifglsxtrinsertinside\else{\##2}\fi\glsxtrfullsep{\##1}%
7938   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{\##1}}}%
7939 }%
7940 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7941   \glsfirstabbrvfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside{\##2}\fi}%
7942   \ifglsxtrinsertinside\else{\##2}\fi\glsxtrfullsep{\##1}%
7943   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{\##1}}}%

```

```

7944 }%
7945 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7946   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7947   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7948   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}}%
7949 }%
7950 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7951   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7952   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7953   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}}%
7954 }%

```

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.

```

7955 \renewcommand*{\glsxtrfullformat}[2]{%
7956   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7957   \ifglsxtrinsertinside\else##2\fi
7958 }%
7959 \renewcommand*{\glsxtrfullplformat}[2]{%
7960   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7961   \ifglsxtrinsertinside\else##2\fi
7962 }%
7963 \renewcommand*{\Glsxtrfullformat}[2]{%
7964   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7965   \ifglsxtrinsertinside\else##2\fi
7966 }%
7967 \renewcommand*{\Glsxtrfullplformat}[2]{%
7968   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7969   \ifglsxtrinsertinside\else##2\fi
7970 }%
7971 }

```

#### short-nolong-desc

```
7972 \letabbreviationstyle{short-nolong-desc}{short-desc}
```

#### long-desc-noreg

Like short-nolong-desc but doesn't set the regular attribute.

```

7973 \newabbreviationstyle{short-nolong-desc-noreg}%
7974 {%
7975   \GlsXtrUseAbbrStyleSetup{short-nolong-desc}%

```

Unset the regular attribute if it has been set.

```

7976 \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
7977   \glshasattribute{\the\glslabeltok}{regular}%
7978   {%
7979     \glssetattribute{\the\glslabeltok}{regular}{false}%
7980   }%
7981   {}%
7982 }%
7983 }%
7984 {%

```

```
7985 \GlsXtrUseAbbrStyleFmts{short-nolong-desc}%
7986 }
```

**nolong-short** Similar to **short-nolong** but the full form shows the long form followed by the short form in parentheses.

```
7987 \newabbreviationstyle{nolong-short}%
7988 {%
7989 \GlsXtrUseAbbrStyleSetup{short-nolong}%
7990 }%
7991 {%
7992 \GlsXtrUseAbbrStyleFmts{short-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```
7993 \renewcommand*\glsxtrinlinefullformat}[2]{%
7994 \protect\glsfirstlongfont{\glsaccesslong{##1}%
7995 \ifglsxtrinsertinside##2\fi}%
7996 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7997 \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}}%
7998 }%
7999 \renewcommand*\glsxtrinlinefullplformat}[2]{%
8000 \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
8001 \ifglsxtrinsertinside##2\fi}%
8002 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8003 \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}}%
8004 }%
8005 \renewcommand*\Glsxtrinlinefullformat}[2]{%
8006 \protect\glsfirstlongfont{\glsaccesslong{##1}%
8007 \ifglsxtrinsertinside##2\fi}%
8008 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8009 \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshort{##1}}}}%
8010 }%
8011 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
8012 \protect\glsfirstlongfont{\glsaccesslongpl{##1}%
8013 \ifglsxtrinsertinside##2\fi}%
8014 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8015 \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshortpl{##1}}}}%
8016 }%
8017 }
```

**ong-short-noreg** Like **nolong-short** but doesn't set the regular attribute.

```
8018 \newabbreviationstyle{nolong-short-noreg}%
8019 {%
8020 \GlsXtrUseAbbrStyleSetup{nolong-short}%

```

Unset the regular attribute if it has been set.

```
8021 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8022 \glshasattribute{\the\glslabeltok}{regular}%
8023 {%
8024 \glssetattribute{\the\glslabeltok}{regular}{false}%
8025 }%
```

```

8026      {}%
8027  }%
8028 }%
8029 {%
8030   \GlsXtrUseAbbrStyleFmts{nolong-short}%
8031 }

```

#### noshortdescname

```

8032 \newcommand*{\glsxtrlongnoshortdescname}{%
8033   \protect\glslongfont{\the\glslongtok}%
8034 }

```

**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.

```

8035 \newabbreviationstyle{long-desc}%
8036 {%
8037   \renewcommand*{\CustomAbbreviationFields}{%
8038     name={\glsxtrlongnoshortdescname},
8039     sort={\the\glslongtok},
8040     first={\protect\glsfirstlongfont{\the\glslongtok}},
8041     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
8042     text={\glslongfont{\the\glslongtok}},
8043     plural={\glslongfont{\the\glslongpltok}}%
8044   }%
8045   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8046     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8047 }%
8048 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

8049 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
8050 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
8051 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
8052 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8053 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8054 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8055   \glslongfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8056   \ifglsxtrinsertinside \else##2\fi
8057 }%
8058 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8059   \glslongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8060   \ifglsxtrinsertinside \else##2\fi
8061 }%
8062 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8063   \glslongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8064   \ifglsxtrinsertinside \else##2\fi
8065 }%

```

```

8066 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8067   \glslongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8068   \ifglsxtrinsertinside \else##2\fi
8069 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8070 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8071   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8072   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8073   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
8074 }%
8075 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8076   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8077   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8078   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
8079 }%
8080 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8081   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8082   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8083   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
8084 }%
8085 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8086   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8087   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8088   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
8089 }%

```

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.

```

8090 \renewcommand*{\glsxtrfullformat}[2]{%
8091   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8092   \ifglsxtrinsertinside\else##2\fi
8093 }%
8094 \renewcommand*{\glsxtrfullplformat}[2]{%
8095   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8096   \ifglsxtrinsertinside\else##2\fi
8097 }%
8098 \renewcommand*{\Glsxtrfullformat}[2]{%
8099   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8100   \ifglsxtrinsertinside\else##2\fi
8101 }%
8102 \renewcommand*{\Glsxtrfullplformat}[2]{%
8103   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8104   \ifglsxtrinsertinside\else##2\fi
8105 }%
8106 }

```

`ng-noshort-desc` Provide a synonym that matches similar styles.

```
8107 \letabbreviationstyle{long-noshort-desc}{long-desc}
```

`hort-desc-noreg` Like `long-noshort-desc` but doesn't set the `regular` attribute.

```
8108 \newabbreviationstyle{long-noshort-desc-noreg}{%
8109 {%
8110   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}}%
8111   Unset the regular attribute if it has been set.
8112   \renewcommand*\GlsXtrPostNewAbbreviation{%
8113     \glshasattribute{\the\glslabeltok}{regular}}%
8114     \glssetattribute{\the\glslabeltok}{regular}{false}}%
8115   }%
8116   {}%
8117 }%
8118 }%
8119 {}%
8120 \GlsXtrUseAbbrStyleFmts{long-noshort-desc}%
8121 }
```

`longnoshortname`

```
8122 \newcommand*\glsxtrlongnoshortname{%
8123   \protect\glsabbrvfont{\the\glsshorttok}}%
8124 }
```

`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.

```
8125 \newabbreviationstyle{long}{%
8126 {%
8127   \renewcommand*\CustomAbbreviationFields{%
8128     name={\glsxtrlongnoshortname},
8129     sort={\the\glsshorttok},
8130     first={\protect\glsfirstlongfont{\the\glslongtok}},
8131     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
8132     text={\glslongfont{\the\glslongtok}},
8133     plural={\glslongfont{\the\glslongpltok}},%
8134     description={\the\glslongtok}}%
8135 }%
8136 \renewcommand*\GlsXtrPostNewAbbreviation{%
8137   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8138 }%
8139 {}%
8140 \GlsXtrUseAbbrStyleFmts{long-desc}%
8141 }
```

`long-noshort` Provide a synonym that matches similar styles.

```
8142 \letabbreviationstyle{long-noshort}{long}
```

`g-noshort-noreg` Like `long-noshort` but doesn't set the `regular` attribute.

```

8143 \newabbreviationstyle{long-noshort-noreg}%
8144 {%
8145   \GlsXtrUseAbbrStyleSetup{long-noshort}%
     Unset the regular attribute if it has been set.
8146   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8147     \glshasattribute{\the\glslabeltok}{regular}%
8148     {%
8149       \glssetattribute{\the\glslabeltok}{regular}{false}%
8150     }%
8151     {}%
8152   }%
8153 }%
8154 {%
8155   \GlsXtrUseAbbrStyleFmts{long-noshort}%
8156 }

```

### 1.7.3 Predefined Styles (Small Capitals)

These styles use `\textsc` for the short form.

`\glsxtrscfont` Maintained for backward-compatibility.  
8157 `\newcommand*{\glsxtrscfont}[1]{\textsc{#1}}`

`\glsabbrvscfont` Added for consistent naming.  
8158 `\newcommand*{\glsabbrvscfont}{\glsxtrscfont}`

`sxtrfirstscfont` Maintained for backward-compatibility.  
8159 `\newcommand*{\glsxtrfirstscfont}[1]{\glsabbrvscfont{#1}}`

`irstabbrvscfont` Added for consistent naming.  
8160 `\newcommand*{\glsfirstabbrvscfont}{\glsxtrfirstscfont}`

and for the default short form suffix:

`\glsxtrscsuffix`  
8161 `\newcommand*{\glsxtrscsuffix}{\glstextup{\glsxtrabbrvpluralsuffix}}`

`long-short-sc`  
8162 `\newabbreviationstyle{long-short-sc}%`
8163 {%
8164 \renewcommand\*{\CustomAbbreviationFields}{%
8165 name={\glsxtrlongshortname},%
8166 sort={\the\glsshorttok},%
8167 first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%%
8168 \protect\glsxtrfullsep{\the\glslabeltok}%
8169 \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
8170 firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%%
8171 \protect\glsxtrfullsep{\the\glslabeltok}%

```

8172     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
8173     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%
8174     description={\the\glslongtok}}%
8175 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8176   \glshasattribute{\the\glslabeltok}{regular}}%
8177   {%
8178     \glssetattribute{\the\glslabeltok}{regular}{false}}%
8179   }%
8180   {}%
8181 }%
8182 }%
8183 {}%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8184 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8185 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8186 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%

```

Use the default long fonts.

```

8187 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8188 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8189 \renewcommand*{\glsxtrfullformat}[2]{%
8190   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8191   \ifglsxtrinsertinside\else##2\fi
8192   \glsxtrfullsep{##1}%
8193   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8194 }%
8195 \renewcommand*{\glsxtrfullplformat}[2]{%
8196   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8197   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8198   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8199 }%
8200 \renewcommand*{\Glsxtrfullformat}[2]{%
8201   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8202   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8203   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8204 }%
8205 \renewcommand*{\Glsxtrfullplformat}[2]{%
8206   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8207   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8208   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8209 }%
8210 }%

```

## g-short-sc-desc

```

8211 \newabbreviationstyle{long-short-sc-desc}{%
8212 {}%
8213 \renewcommand*{\CustomAbbreviationFields}{%

```

```

8214     name={\glsxtrlongshortdescname},
8215     sort={\glsxtrlongshortdescsort},%
8216     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
8217       \protect\glsxtrfullsep{\the\glslabeltok}%
8218       \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
8219     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
8220       \protect\glsxtrfullsep{\the\glslabeltok}%
8221       \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
8222     text={\protect\glsabrvscfont{\the\glsshorttok}},%
8223     plural={\protect\glsabrvscfont{\the\glsshortpltok}}%
8224   }%

```

Unset the regular attribute if it has been set.

```

8225   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8226     \glshasattribute{\the\glslabeltok}{regular}%
8227     {%
8228       \glssetattribute{\the\glslabeltok}{regular}{false}%
8229     }%
8230   }%
8231 }%
8232 }%
8233 }%

```

As long-short-sc style:

```

8234   \GlsXtrUseAbbrStyleFmts{long-short-sc}%
8235 }

```

Now the short (long) version

```

8236 \newabbreviationstyle{short-sc-long}%
8237 {%
8238   \renewcommand*{\CustomAbbreviationFields}{%
8239     name={\glsxtrshortlongname},
8240     sort={\the\glsshorttok},
8241     description={\the\glslongtok},%
8242     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
8243       \protect\glsxtrfullsep{\the\glslabeltok}%
8244       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8245     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
8246       \protect\glsxtrfullsep{\the\glslabeltok}%
8247       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8248     plural={\protect\glsabrvscfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

8249   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8250     \glshasattribute{\the\glslabeltok}{regular}%
8251     {%
8252       \glssetattribute{\the\glslabeltok}{regular}{false}%
8253     }%
8254   }%
8255 }%
8256 }%

```

```
8257 {%
```

    Use smallcaps and adjust the plural suffix to revert to upright.

```
8258 \renewcommand*\abrvpluralsuffix{\protect\glsxtrscsuffix}%
8259 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8260 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
8261 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8262 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

    The first use full form and the inline full form are the same for this style.

```
8263 \renewcommand*\glsxtrfullformat[2]{%
8264     \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8265     \ifglsxtrinsertinside\else##2\fi
8266     \glsxtrfullsep{##1}%
8267     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8268 }%
8269 \renewcommand*\glsxtrfullplformat[2]{%
8270     \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8271     \ifglsxtrinsertinside\else##2\fi
8272     \glsxtrfullsep{##1}%
8273     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8274 }%
8275 \renewcommand*\Glsxtrfullformat[2]{%
8276     \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8277     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8278     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8279 }%
8280 \renewcommand*\Glsxtrfullplformat[2]{%
8281     \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8282     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8283     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8284 }%
8285 }
```

    As before but user provides description

```
8286 \newabbreviationstyle{short-sc-long-desc}%
8287 {%
8288     \renewcommand*\CustomAbbreviationFields{%
8289         name={\glsxtrshortlongdescname},
8290         sort={\glsxtrshortlongdescsort},
8291         first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
8292             \protect\glsxtrfullsep{\the\glslabeltok}%
8293             \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8294         firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
8295             \protect\glsxtrfullsep{\the\glslabeltok}%
8296             \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8297         text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8298         plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
8299     }%
```

    Unset the regular attribute if it has been set.

```

8300 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8301   \glshasattribute{\the\glslabeltok}{regular}{%
8302     {%
8303       \glssetattribute{\the\glslabeltok}{regular}{false}{%
8304     }%
8305   }%
8306 }%
8307 }%
8308 {%

```

As short-sc-long style:

```

8309 \GlsXtrUseAbbrStyleFmts{short-sc-long}{%
8310 }%

```

#### short-sc

```

8311 \newabbreviationstyle{short-sc}{%
8312 {%
8313   \renewcommand*\CustomAbbreviationFields}{%
8314     name={\glsxtrshortnolongname},%
8315     sort={\the\glsshorttok},%
8316     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
8317     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
8318     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8319     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%
8320     description={\the\glslongtok}}%
8321   \renewcommand*\GlsXtrPostNewAbbreviation}{%
8322   \glssetattribute{\the\glslabeltok}{regular}{true}{%
8323 }%
8324 }%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8325 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtrscsuffix}{%
8326 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}{%
8327 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}{%
8328 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}{%
8329 \renewcommand*\glslongfont}[1]{\glslongdefaultfont{##1}}{%

```

The inline full form displays the short form followed by the long form in parentheses.

```

8330 \renewcommand*\glsxtrinlinefullformat}[2]{%
8331   \protect\glsfirstabbrvscfont{\glsaccessshort{##1}}{%
8332     \ifglsxtrinsertinside##2\fi}{%
8333     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}{%
8334     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}{%
8335 }%
8336 \renewcommand*\glsxtrinlinefullplformat}[2]{%
8337   \protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}{%
8338     \ifglsxtrinsertinside##2\fi}{%
8339     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}{%
8340     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}{%
8341 }%

```

```

8342 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8343   \protect\glsfirstabbrvscfont{\Glsaccessshort{##1}}%
8344   \ifglsxtrinsertinside##2\fi}%
8345   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8346   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8347 }%
8348 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8349   \protect\glsfirstabbrvscfont{\Glsaccessshortpl{##1}}%
8350   \ifglsxtrinsertinside##2\fi}%
8351   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8352   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8353 }%

```

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.

```

8354 \renewcommand*{\glsxtrfullformat}[2]{%
8355   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8356   \ifglsxtrinsertinside\else##2\fi
8357 }%
8358 \renewcommand*{\glsxtrfullplformat}[2]{%
8359   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8360   \ifglsxtrinsertinside\else##2\fi
8361 }%
8362 \renewcommand*{\Glsxtrfullformat}[2]{%
8363   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8364   \ifglsxtrinsertinside\else##2\fi
8365 }%
8366 \renewcommand*{\Glsxtrfullplformat}[2]{%
8367   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8368   \ifglsxtrinsertinside\else##2\fi
8369 }%
8370 }%

```

#### short-sc-nolong

```
8371 \letabbreviationstyle{short-sc-nolong}{short-sc}
```

#### short-sc-desc

```

8372 \newabbreviationstyle{short-sc-desc}{%
8373 }%
8374 \renewcommand*{\CustomAbbreviationFields}{%
8375   name={\glsxtrshortdescname},
8376   sort={\the\glsshorttok},
8377   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
8378   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
8379   text={\protect\glsabbrvscfont{\the\glsshorttok}},
8380   plural={\protect\glsabbrvscfont{\the\glsshortpltok}},
8381   description={\the\glslongtok}}%
8382 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8383   \glssetattribute{\the\glslabeltok}{regular}{true}}%

```

```
8384 }%
8385 {%
```

Use `smallcaps` and adjust the plural suffix to revert to upright.

```
8386 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8387 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8388 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
8389 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8390 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short format followed by the long form in parentheses.

```
8391 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8392   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8393   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8394   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8395 }%
8396 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8397   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8398   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8399   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8400 }%
8401 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8402   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8403   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8404   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8405 }%
8406 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8407   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8408   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8409   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8410 }%
```

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.

```
8411 \renewcommand*{\glsxtrfullformat}[2]{%
8412   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8413   \ifglsxtrinsertinside\else##2\fi
8414 }%
8415 \renewcommand*{\glsxtrfullplformat}[2]{%
8416   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8417   \ifglsxtrinsertinside\else##2\fi
8418 }%
8419 \renewcommand*{\Glsxtrfullformat}[2]{%
8420   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8421   \ifglsxtrinsertinside\else##2\fi
8422 }%
8423 \renewcommand*{\Glsxtrfullplformat}[2]{%
8424   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8425   \ifglsxtrinsertinside\else##2\fi
8426 }%
8427 }
```

```
-sc-nolong-desc
8428 \letabbreviationstyle{short-sc-nolong-desc}{short-sc-desc}
```

```
nolong-short-sc
8429 \newabbreviationstyle{nolong-short-sc}%
8430 {%
8431   \GlsXtrUseAbbrStyleSetup{short-sc-nolong}%
8432 }%
8433 {%
8434   \GlsXtrUseAbbrStyleFmts{short-sc-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```
8435 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
8436   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
8437     \ifglsxtrinsertinside##2\fi}%
8438   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8439   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8440 }%
8441 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
8442   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
8443     \ifglsxtrinsertinside##2\fi}%
8444   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8445   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8446 }%
8447 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
8448   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
8449     \ifglsxtrinsertinside##2\fi}%
8450   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8451   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8452 }%
8453 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
8454   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
8455     \ifglsxtrinsertinside##2\fi}%
8456   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8457   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8458 }%
8459 }
```

```
long-noshort-sc The smallcaps font will only be used if the short form is explicitly invoked through commands like \glsxtrshort.
```

```
8460 \newabbreviationstyle{long-noshort-sc}%
8461 {%
8462   \renewcommand*\{\CustomAbbreviationFields}{%
8463     name={\glsxtrlongnoshortname},
8464     sort={\the\glsshorttok},
8465     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
8466     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
8467     text={\protect\glslongdefaultfont{\the\glslongtok}},
8468     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
```

```

8469     description={\the\glslongtok}%
8470   }%
8471   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8472     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8473 }%
8474 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8475   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8476   \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8477   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
8478   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8479   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8480   \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8481     \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8482     \ifglsxtrinsertinside \else##2\fi
8483   }%
8484   \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8485     \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8486     \ifglsxtrinsertinside \else##2\fi
8487   }%
8488   \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8489     \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8490     \ifglsxtrinsertinside \else##2\fi
8491   }%
8492   \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8493     \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8494     \ifglsxtrinsertinside \else##2\fi
8495   }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8496   \renewcommand*{\glsxtrinlinefullformat}[2]{%
8497     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8498     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8499     \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8500   }%
8501   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8502     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8503     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8504     \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8505   }%
8506   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8507     \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8508     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8509     \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8510   }%
8511   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8512     \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8513     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%

```

```
8514     \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%  
8515 }
```

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.

```
8516 \renewcommand*{\glsxtrfullformat}[2]{%  
8517   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%  
8518   \ifglsxtrinsertinside\else##2\fi  
8519 }%  
8520 \renewcommand*{\glsxtrfullplformat}[2]{%  
8521   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%  
8522   \ifglsxtrinsertinside\else##2\fi  
8523 }%  
8524 \renewcommand*{\Glsxtrfullformat}[2]{%  
8525   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%  
8526   \ifglsxtrinsertinside\else##2\fi  
8527 }%  
8528 \renewcommand*{\Glsxtrfullplformat}[2]{%  
8529   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%  
8530   \ifglsxtrinsertinside\else##2\fi  
8531 }%  
8532 }
```

**long-sc** Backward compatibility:

```
8533 @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`.

```
8534 \newabbreviationstyle{long-noshort-sc-desc}{%  
8535 }%  
8536 \GlsXtrUseAbbrStyleSetup{long-noshort-desc}{%  
8537 }%  
8538 }%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
8539 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}{%  
8540 \renewcommand*{\glsabbrvfont[1]}{\glsabbrvscfont{##1}}%  
8541 \renewcommand*{\glsfirstabbrvfont[1]}{\glsfirstabbrvscfont{##1}}%  
8542 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%  
8543 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
8544 \renewcommand*{\glsxtrsubsequentfmt}[2]{%  
8545   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}}%  
8546   \ifglsxtrinsertinside \else##2\fi  
8547 }%  
8548 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%  
8549   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}}%  
8550   \ifglsxtrinsertinside \else##2\fi  
8551 }%
```

```

8552 \renewcommand*\{\Glsxtrsubsequentfmt\}[2]{%
8553   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8554   \ifglsxtrinsertinside \else##2\fi
8555 }%
8556 \renewcommand*\{\Glsxtrsubsequentplfmt\}[2]{%
8557   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8558   \ifglsxtrinsertinside \else##2\fi
8559 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8560 \renewcommand*\{\glsxtrinlinefullformat\}[2]{%
8561   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8562   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8563   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8564 }%
8565 \renewcommand*\{\glsxtrinlinefullplformat\}[2]{%
8566   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8567   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8568   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8569 }%
8570 \renewcommand*\{\Glsxtrinlinefullformat\}[2]{%
8571   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8572   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8573   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8574 }%
8575 \renewcommand*\{\Glsxtrinlinefullplformat\}[2]{%
8576   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8577   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8578   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8579 }%

```

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.

```

8580 \renewcommand*\{\glsxtrfullformat\}[2]{%
8581   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8582   \ifglsxtrinsertinside\else##2\fi
8583 }%
8584 \renewcommand*\{\glsxtrfullplformat\}[2]{%
8585   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8586   \ifglsxtrinsertinside\else##2\fi
8587 }%
8588 \renewcommand*\{\Glsxtrfullformat\}[2]{%
8589   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8590   \ifglsxtrinsertinside\else##2\fi
8591 }%
8592 \renewcommand*\{\Glsxtrfullplformat\}[2]{%
8593   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8594   \ifglsxtrinsertinside\else##2\fi
8595 }%
8596 }

```

long-desc-sc Backward compatibility:

```
8597 \glsxtr@deprecated@abbrstyle{long-desc-sc}{long-noshort-sc-desc}
```

short-sc-footnote

```
8598 \newabbreviationstyle{short-sc-footnote}%
8599 {%
8600   \renewcommand*{\CustomAbbreviationFields}{%
8601     name={\glsxtrfootnotename},
8602     sort={\the\glsshorttok},
8603     description={\the\glslongtok},%
8604     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}%
8605       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8606         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8607     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
8608       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8609         {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
8610     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.

```
8611 \renewcommand*{\GlsXtrPostNewAbbreviation}%
8612   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8613   \glshasattribute{\the\glslabeltok}{regular}%
8614   {%
8615     \glssetattribute{\the\glslabeltok}{regular}{false}%
8616   }%
8617   {}%
8618 }%
8619 }%
8620 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
8621 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8622 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8623 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
8624 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8625 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

The full format displays the short form followed by the long form as a footnote.

```
8626 \renewcommand*{\glsxtrfullformat}[2]{%
8627   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8628   \ifglsxtrinsertinside\else##2\fi
8629   \protect\glsxtrabbrvfootnote{##1}%
8630   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8631 }%
8632 \renewcommand*{\glsxtrfullplformat}[2]{%
8633   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8634   \ifglsxtrinsertinside\else##2\fi
8635   \protect\glsxtrabbrvfootnote{##1}%
8636   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
```

```

8637 }%
8638 \renewcommand*{\Glsxtrfullformat}[2]{%
8639   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8640   \ifglsxtrinsertinside\else##2\fi
8641   \protect\glsxtrabbrvfootnote{##1}%
8642   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8643 }%
8644 \renewcommand*{\Glsxtrfullplformat}[2]{%
8645   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8646   \ifglsxtrinsertinside\else##2\fi
8647   \protect\glsxtrabbrvfootnote{##1}%
8648   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8649 }%

```

The first use full form and the inline full form use the short (long) style.

```

8650 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8651   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8652   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8653   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8654 }%
8655 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8656   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8657   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8658   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8659 }%
8660 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8661   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8662   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8663   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8664 }%
8665 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8666   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8667   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8668   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8669 }%
8670 }%

```

`footnote-sc` Backward compatibility:

```
8671 @glsxtr@deprecated@abbrstyle{footnote-sc}{short-sc-footnote}
```

`sc-postfootnote`

```

8672 \newabbreviationstyle{short-sc-postfootnote}%
8673 }%
8674 \renewcommand*{\CustomAbbreviationFields}{%
8675   name={\glsxtrfootnotename},
8676   sort={\the\glsshorttok},
8677   description={\the\glslongtok},%
8678   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
8679   firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
8680   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.

```
8681 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8682   \csdef{glsxtrpostlink\glscategorylabel}{%
8683     \glsxtrifwasfirstuse
8684   }%
```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```
8685   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8686     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}} }%
8687   }%
8688   {}%
8689 }%
8690 \glshasattribute{\the\glslabeltok}{regular}%
8691 {}%
8692   \glssetattribute{\the\glslabeltok}{regular}{false}%
8693 }%
8694 {}%
8695 }%
```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```
8696 \renewcommand*\glsxtrsetupfulldefs}{%
8697   \let\glsxtrifwasfirstuse\@secondoftwo
8698 }%
8699 }%
8700 {}%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
8701 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtrscssuffix}%
8702 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\##1}}%
8703 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\##1}}%
8704 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{\##1}}%
8705 \renewcommand*\glslongfont[1]{\glslongfootnotefont{\##1}}%
```

The full format displays the short form. The long form is deferred.

```
8706 \renewcommand*\glsxtrfullformat}[2]{%
8707   \glsfirstabbrvscfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
8708   \ifglsxtrinsertinside\else##2\fi
8709 }%
8710 \renewcommand*\glsxtrfullplformat}[2]{%
8711   \glsfirstabbrvscfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside##2\fi}%
8712   \ifglsxtrinsertinside\else##2\fi
8713 }%
8714 \renewcommand*\Glsxtrfullformat}[2]{%
8715   \glsfirstabbrvscfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
8716   \ifglsxtrinsertinside\else##2\fi
8717 }%
8718 \renewcommand*\Glsxtrfullplformat}[2]{%
```

```

8719     \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8720     \ifglsxtrinsertinside\else##2\fi
8721 }%

```

The first use full form and the inline full form use the short (long) style.

```

8722 \renewcommand*{\glsxtrinlinelinefullformat}[2]{%
8723   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8724   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8725   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8726 }%
8727 \renewcommand*{\glsxtrinlinelinefullplformat}[2]{%
8728   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8729   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8730   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8731 }%
8732 \renewcommand*{\Glsxtrinlinelinefullformat}[2]{%
8733   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8734   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8735   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8736 }%
8737 \renewcommand*{\Glsxtrinlinelinefullplformat}[2]{%
8738   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8739   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8740   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8741 }%
8742 }

```

`postfootnote-sc` Backward compatibility:

```
8743 @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.

```
8744 \newcommand*{\glsxtrsmfont}[1]{\textsmaller{#1}}
```

`\glsabbrvsmfont` Added for consistent naming.

```
8745 \newcommand*{\glsabbrvsmfont}{\glsxtrsmfont}
```

`\sxtrfirstsmfont` Maintained for backward compatibility.

```
8746 \newcommand*{\sxtrfirstsmfont}[1]{\glsabbrvsmfont{#1}}
```

`\irstabbrvsmfont` Added for consistent naming.

```
8747 \newcommand*{\irstabbrvsmfont}{\sxtrfirstsmfont}
```

and for the default short form suffix:

```

\glsxtrsmsuffix
8748 \newcommand*\{\glsxtrsmsuffix\}{\glsxtrabbrvpluralsuffix}

long-short-sm
8749 \newabbreviationstyle{long-short-sm}%
8750 {%
8751   \renewcommand*\{\CustomAbbreviationFields\}%
8752     name={\glsxtrlongshortname},%
8753     sort={\the\glsshorttok},%
8754     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}\%%
8755       \protect\glsxtrfullsep{\the\glslabeltok}\%%
8756       \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
8757     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}\%%
8758       \protect\glsxtrfullsep{\the\glslabeltok}\%%
8759       \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
8760     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},%
8761     description={\the\glslongtok}\%%
8762   \renewcommand*\{\GlsXtrPostNewAbbreviation\}%
8763     \glshasattribute{\the\glslabeltok}{regular}\%
8764   {%
8765     \glssetattribute{\the\glslabeltok}{regular}{false}\%
8766   }%
8767   {}%
8768 }%
8769 }%
8770 {%
8771   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{\##1}}%
8772   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{\##1}}%
8773   \renewcommand*\{\abbrvpluralsuffix\}{\protect\glsxtrsmsuffix}%

```

Use the default long fonts.

```

8774 \renewcommand*\{\glsfirstlongfont\}[1]{\glsfirstlongdefaultfont{\##1}}%
8775 \renewcommand*\{\glslongfont\}[1]{\glslongdefaultfont{\##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8776 \renewcommand*\{\glsxtrfullformat\}[2]%
8777   \glsfirstlongdefaultfont{\glsaccesslong{\##1}\ifglsxtrinsertinside{\##2}\fi}\%
8778   \ifglsxtrinsertinside\else{\##2}\fi
8779   \glsxtrfullsep{\##1}\%
8780   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{\##1}}}\%
8781 }%
8782 \renewcommand*\{\glsxtrfullplformat\}[2]%
8783   \glsfirstlongdefaultfont{\glsaccesslongpl{\##1}\ifglsxtrinsertinside{\##2}\fi}\%
8784   \ifglsxtrinsertinside\else{\##2}\fi\glsxtrfullsep{\##1}\%
8785   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{\##1}}}\%
8786 }%
8787 \renewcommand*\{\GlsXtrfullformat\}[2]%
8788   \glsfirstlongdefaultfont{\Glsaccesslong{\##1}\ifglsxtrinsertinside{\##2}\fi}\%
8789   \ifglsxtrinsertinside\else{\##2}\fi\glsxtrfullsep{\##1}\%
8790   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{\##1}}}\%

```

```

8791 }%
8792 \renewcommand*{\Glsxtrfullplformat}[2]{%
8793   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8794   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8795   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8796 }%
8797 }

```

#### g-short-sm-desc

```

8798 \newabbreviationstyle{long-short-sm-desc}{%
8799 }%
8800 \renewcommand*{\CustomAbbreviationFields}{%
8801   name={\glsxtrlongshortdescname},%
8802   sort={\glsxtrlongshortdescsort},%
8803   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
8804     \protect\glsxtrfullsep{\the\glslabeltok}%
8805     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
8806   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
8807     \protect\glsxtrfullsep{\the\glslabeltok}%
8808     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
8809   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8810   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}}%
8811 }%

```

Unset the regular attribute if it has been set.

```

8812 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8813   \glshasattribute{\the\glslabeltok}{regular}}%
8814 }%
8815   \glssetattribute{\the\glslabeltok}{regular}{false}}%
8816 }%
8817 }%
8818 }%
8819 }%
8820 }%

```

As long-short-sm style:

```

8821 \GlsXtrUseAbbrStyleFmts{long-short-sm}%
8822 }

```

#### short-sm-long Now the short (long) version

```

8823 \newabbreviationstyle{short-sm-long}{%
8824 }%
8825 \renewcommand*{\CustomAbbreviationFields}{%
8826   name={\glsxtrshortlongname},%
8827   sort={\the\glsshorttok},%
8828   description={\the\glslongtok},%
8829   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}}%
8830     \protect\glsxtrfullsep{\the\glslabeltok}%
8831     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8832   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}%

```

```

8833 \protect\glsxtrfullsep{\the\glslabeltok}%
8834 \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8835 plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

8836 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8837 \glshasattribute{\the\glslabeltok}{regular}%
8838 {%
8839 \glssetattribute{\the\glslabeltok}{regular}{false}%
8840 }%
8841 {}%
8842 }%
8843 }%
8844 {%
8845 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8846 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8847 \renewcommand*\abbrvpluralsuffix{\protect\glsxtrmssuffix}%
8848 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8849 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

8850 \renewcommand*\glsxtrfullformat}[2]{%
8851 \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8852 \ifglsxtrinsertinside\else##2\fi
8853 \glsxtrfullsep{##1}%
8854 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8855 }%
8856 \renewcommand*\glsxtrfullplformat}[2]{%
8857 \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8858 \ifglsxtrinsertinside\else##2\fi
8859 \glsxtrfullsep{##1}%
8860 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8861 }%
8862 \renewcommand*\Glsxtrfullformat}[2]{%
8863 \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8864 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8865 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8866 }%
8867 \renewcommand*\Glsxtrfullplformat}[2]{%
8868 \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8869 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8870 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8871 }%
8872 }

```

`rt-sm-long-desc` As before but user provides description

```

8873 \newabbreviationstyle{short-sm-long-desc}%
8874 {%
8875 \renewcommand*\CustomAbbreviationFields}{%
8876 name={\glsxtrshortlongdescname},

```

```

8877   sort={\glsxtrshortlongdescsort},
8878   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
8879     \protect\glsxtrfullsep{\the\glslabeltok}%
8880     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8881   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
8882     \protect\glsxtrfullsep{\the\glslabeltok}%
8883     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8884   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8885   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}
886 }

```

Unset the regular attribute if it has been set.

```

8887 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8888   \glshasattribute{\the\glslabeltok}{regular}%
8889   {%
8890     \glssetattribute{\the\glslabeltok}{regular}{false}%
8891   }%
8892   {}%
8893 }
8894 }%
8895 {%

```

As short-sm-long style:

```

8896 \GlsXtrUseAbbrStyleFmts{short-sm-long}%
8897 }

```

#### short-sm

```

8898 \newabbreviationstyle{short-sm}%
8899 {%
8900   \renewcommand*{\CustomAbbreviationFields}{%
8901     name={\glsxtrshortno longname},
8902     sort={\the\glsshorttok},
8903     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
8904     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
8905     text={\protect\glsabbrvsmfont{\the\glsshorttok}},
8906     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
8907     description={\the\glslongtok}}%
8908   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8909     \glssetattribute{\the\glslabeltok}{regular}{true}%
8910   }%
8911 }%
8912 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8913 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8914 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmssuffix}%
8915 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8916 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

8917 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8918   \protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}%

```

```

8919     \ifglsxtrinsertinside##2\fi}%
8920     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8921     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8922 }%
8923 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8924     \protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}%
8925     \ifglsxtrinsertinside##2\fi}%
8926     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8927     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8928 }%
8929 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8930     \protect\glsfirstabbrvsmfont{\Glsaccessshort{##1}}%
8931     \ifglsxtrinsertinside##2\fi}%
8932     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8933     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8934 }%
8935 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8936     \protect\glsfirstabbrvsmfont{\Glsaccessshortpl{##1}}%
8937     \ifglsxtrinsertinside##2\fi}%
8938     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8939     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8940 }%

```

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.

```

8941 \renewcommand*{\glsxtrfullformat}[2]{%
8942     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8943     \ifglsxtrinsertinside\else##2\fi
8944 }%
8945 \renewcommand*{\glsxtrfullplformat}[2]{%
8946     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8947     \ifglsxtrinsertinside\else##2\fi
8948 }%
8949 \renewcommand*{\Glsxtrfullformat}[2]{%
8950     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8951     \ifglsxtrinsertinside\else##2\fi
8952 }%
8953 \renewcommand*{\Glsxtrfullplformat}[2]{%
8954     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8955     \ifglsxtrinsertinside\else##2\fi
8956 }%
8957 }

```

#### short-sm-nolong

```
8958 \letabbreviationstyle{short-sm-nolong}{short-sm}
```

#### short-sm-desc

```
8959 \newabbreviationstyle{short-sm-desc}{}
```

```

8960 {%
8961   \renewcommand*{\CustomAbbreviationFields}{%
8962     name={\glsxtrshortdescname},
8963     sort={\the\glsshorttok},
8964     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
8965     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
8966     text={\protect\glsabbrvsmfont{\the\glsshorttok}},
8967     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
8968     description={\the\glslongtok}}%
8969 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8970   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8971 }%
8972 {%
8973   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8974   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8975   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsuffix}%
8976   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8977   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

8978 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8979   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8980   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8981   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8982 }%
8983 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8984   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8985   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8986   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8987 }%
8988 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8989   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8990   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8991   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8992 }%
8993 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8994   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8995   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8996   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8997 }%

```

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.

```

8998 \renewcommand*{\glsxtrfullformat}[2]{%
8999   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9000   \ifglsxtrinsertinside\else##2\fi
9001 }%
9002 \renewcommand*{\glsxtrfullplformat}[2]{%
9003   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9004   \ifglsxtrinsertinside\else##2\fi

```

```

9005 }%
9006 \renewcommand*{\Glsxtrfullformat}[2]{%
9007   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9008   \ifglsxtrinsertinside\else##2\fi
9009 }%
9010 \renewcommand*{\Glsxtrfullplformat}[2]{%
9011   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9012   \ifglsxtrinsertinside\else##2\fi
9013 }%
9014 }

-sm-nolong-desc
9015 \letabbreviationstyle{short-sm-nolong-desc}{short-sm-desc}

nolong-short-sm
9016 \newabbreviationstyle{nolong-short-sm}%
9017 {%
9018   \GlsXtrUseAbbrStyleSetup{short-sm-nolong}%
9019 }%
9020 {%
9021   \GlsXtrUseAbbrStyleFmts{short-sm-nolong}%

The inline full form displays the long form followed by the short form in parentheses.

9022 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9023   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
9024   \ifglsxtrinsertinside##2\fi}%
9025   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9026   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9027 }%
9028 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9029   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
9030   \ifglsxtrinsertinside##2\fi}%
9031   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9032   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9033 }%
9034 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9035   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
9036   \ifglsxtrinsertinside##2\fi}%
9037   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9038   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9039 }%
9040 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9041   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
9042   \ifglsxtrinsertinside##2\fi}%
9043   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9044   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9045 }%
9046 }

```

long-noshort-sm The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```
9047 \newabbreviationstyle{long-noshort-sm}%
9048 {%
9049   \renewcommand*{\CustomAbbreviationFields}{%
9050     name={\glsxtrlongnoshortname},
9051     sort={\the\glsshorttok},
9052     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
9053     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
9054     text={\protect\glslongdefaultfont{\the\glslongtok}},
9055     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
9056     description={\the\glslongtok}%
9057 }%
9058 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9059   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9060 }%
9061 {%
9062   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9063   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9064   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsmsuffix}%
9065   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9066   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
9067 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9068   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9069   \ifglsxtrinsertinside \else##2\fi
9070 }%
9071 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9072   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9073   \ifglsxtrinsertinside \else##2\fi
9074 }%
9075 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9076   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9077   \ifglsxtrinsertinside \else##2\fi
9078 }%
9079 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9080   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9081   \ifglsxtrinsertinside \else##2\fi
9082 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9083 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9084   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9085   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9086   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9087 }%
9088 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9089   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9090   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9091 }
```

```

9091   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9092 }%
9093 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9094   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9095   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9096   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
9097 }%
9098 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9099   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9100   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9101   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
9102 }%

```

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.

```

9103 \renewcommand*{\glsxtrfullformat}[2]{%
9104   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9105   \ifglsxtrinsertinside\else##2\fi
9106 }%
9107 \renewcommand*{\glsxtrfullplformat}[2]{%
9108   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9109   \ifglsxtrinsertinside\else##2\fi
9110 }%
9111 \renewcommand*{\Glsxtrfullformat}[2]{%
9112   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9113   \ifglsxtrinsertinside\else##2\fi
9114 }%
9115 \renewcommand*{\Glsxtrfullplformat}[2]{%
9116   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9117   \ifglsxtrinsertinside\else##2\fi
9118 }%
9119 }

```

#### long-sm Backward compatibility:

```
9120 @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`.

```

9121 \newabbreviationstyle{long-noshort-sm-desc}{%
9122 }%
9123 \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
9124 }%
9125 }%
9126 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9127 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9128 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsmsuffix}%
9129 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9130 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9131 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9132   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9133   \ifglsxtrinsertinside \else##2\fi
9134 }%
9135 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9136   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9137   \ifglsxtrinsertinside \else##2\fi
9138 }%
9139 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9140   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9141   \ifglsxtrinsertinside \else##2\fi
9142 }%
9143 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9144   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9145   \ifglsxtrinsertinside \else##2\fi
9146 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9147 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9148   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9149   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9150   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9151 }%
9152 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9153   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9154   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9155   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9156 }%
9157 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9158   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9159   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9160   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
9161 }%
9162 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9163   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9164   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9165   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
9166 }%

```

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.

```

9167 \renewcommand*{\glsxtrfullformat}[2]{%
9168   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9169   \ifglsxtrinsertinside\else##2\fi
9170 }%
9171 \renewcommand*{\glsxtrfullplformat}[2]{%
9172   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9173   \ifglsxtrinsertinside\else##2\fi
9174 }%
9175 \renewcommand*{\Glsxtrfullformat}[2]{%

```

```

9176     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9177     \ifglsxtrinsertinside\else##2\fi
9178 }%
9179 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9180     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9181     \ifglsxtrinsertinside\else##2\fi
9182 }%
9183 }

```

**long-desc-sm** Backward compatibility:

```
9184 \@glsxtr@deprecated@abbrstyle{long-desc-sm}{long-noshort-sm-desc}
```

**short-sm-footnote**

```

9185 \newabbreviationstyle{short-sm-footnote}%
9186 {%
9187 \renewcommand*\{\CustomAbbreviationFields}{%
9188     name={\glsxtrfootnotename},
9189     sort={\the\glsshorttok},
9190     description={\the\glslongtok},%
9191     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
9192         \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9193             {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9194     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
9195         \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9196             {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9197     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.

```

9198 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
9199     \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9200     \glshasattribute{\the\glslabeltok}{regular}%
9201     {%
9202         \glssetattribute{\the\glslabeltok}{regular}{false}%
9203     }%
9204     {}%
9205 }%
9206 }%
9207 {%
9208 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9209 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9210 \renewcommand*\{\abbrvpluralsuffix}{\protect\glsxtrsmssuffix}%
9211 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
9212 \renewcommand*\{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

9213 \renewcommand*\{\glsxtrfullformat}[2]{%
9214     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9215     \ifglsxtrinsertinside\else##2\fi
9216     \protect\glsxtrabbrvfootnote{##1}%

```

```

9217     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9218 }%
9219 \renewcommand*{\glsxtrfullplformat}[2]{%
9220   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9221   \ifglsxtrinsertinside\else##2\fi
9222   \protect\glsxtrabrvfootnote{##1}%
9223   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9224 }%
9225 \renewcommand*{\Glsxtrfullformat}[2]{%
9226   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9227   \ifglsxtrinsertinside\else##2\fi
9228   \protect\glsxtrabrvfootnote{##1}%
9229   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9230 }%
9231 \renewcommand*{\Glsxtrfullplformat}[2]{%
9232   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9233   \ifglsxtrinsertinside\else##2\fi
9234   \protect\glsxtrabrvfootnote{##1}%
9235   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9236 }%

```

The first use full form and the inline full form use the short (long) style.

```

9237 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9238   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9239   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9240   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9241 }%
9242 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9243   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9244   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9245   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9246 }%
9247 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9248   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9249   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9250   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9251 }%
9252 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9253   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9254   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9255   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9256 }%
9257 }

```

**footnote-sm Backward compatibility:**

```
9258 \glsxtr@deprecated@abbrstyle{footnote-sm}{short-sm-footnote}
```

**sm-postfootnote**

```
9259 \newabbreviationstyle{short-sm-postfootnote}%
9260 {%
```

```

9261 \renewcommand*\CustomAbbreviationFields{%
9262   name={\glsxtrfootnotename},
9263   sort={\the\glsshorttok},
9264   description={\the\glslongtok},%
9265   first=\protect\glsfirstabbrvsmfont{\the\glsshorttok},%
9266   firstplural=\protect\glsfirstabbrvsmfont{\the\glsshortpltok},%
9267   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.

```

9268 \renewcommand*\GlsXtrPostNewAbbreviation{%
9269   \csdef{glsxtrpostlink}{\glscategorylabel}{%
9270     \glsxtrifwasfirstuse
9271   }%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

9272   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9273   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
9274 }%
9275 {}%
9276 }%
9277 \glshasattribute{\the\glslabeltok}{regular}%
9278 {}%
9279   \glssetattribute{\the\glslabeltok}{regular}{false}%
9280 }%
9281 {}%
9282 }%

```

The footnote needs to be suppressed in the inline form, so \glsxtrfull must set the first use switch off.

```

9283 \renewcommand*\glsxtrsetupfulldefs{%
9284   \let\glsxtrifwasfirstuse\@secondoftwo
9285 }%
9286 }%
9287 {}%
9288 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9289 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9290 \renewcommand*\abbrvpluralsuffix{\protect\glsxtrmssuffix}%
9291 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
9292 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

9293 \renewcommand*\glsxtrfullformat}[2]{%
9294   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9295   \ifglsxtrinsertinside\else##2\fi
9296 }%
9297 \renewcommand*\glsxtrfullplformat}[2]{%
9298   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9299   \ifglsxtrinsertinside\else##2\fi
9300 }%

```

```

9301 \renewcommand*{\Glsxtrfullformat}[2]{%
9302   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9303   \ifglsxtrinsertinside\else##2\fi
9304 }%
9305 \renewcommand*{\Glsxtrfullplformat}[2]{%
9306   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9307   \ifglsxtrinsertinside\else##2\fi
9308 }%

```

The first use full form and the inline full form use the short (long) style.

```

9309 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9310   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9311   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9312   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9313 }%
9314 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9315   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9316   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9317   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9318 }%
9319 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9320   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9321   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9322   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9323 }%
9324 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9325   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9326   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9327   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9328 }%
9329 }

```

`postfootnote-sm` Backward compatibility:

```
9330 @glsxtr@deprecated@abbrstyle{postfootnote-sm}{short-sm-postfootnote}
```

## 1.7.5 Predefined Styles (Emphasized)

These styles use `\emph` for the short form.

`\glsabbrvemfont`

```
9331 \newcommand*{\glsabbrvemfont}[1]{\emph{#1}}%
```

`\glsfirstabbrvemfont`

```
9332 \newcommand*{\glsfirstabbrvemfont}[1]{\glsabbrvemfont{#1}}%
```

The default short form suffix:

`\glsxtremsuffix`

```
9333 \newcommand*{\glsxtremsuffix}{\glsxtrabbrvpluralsuffix}
```

```

firstlongemfont Only used by the “long-em” styles.
9334 \newcommand*{\glsfirstlongemfont}[1]{\glslongemfont{#1}}%

\glslongemfont Only used by the “long-em” styles.
9335 \newcommand*{\glslongemfont}[1]{\emph{#1}}%

long-short-em The long form is just set in the default long font.
9336 \newabbreviationstyle{long-short-em}{%
9337 {%
9338   \renewcommand*{\CustomAbbreviationFields}{%
9339     name={\glsxtrlongshortname},
9340     sort={\the\glsshorttok},
9341     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%
9342       \protect\glsxtrfullsep{\the\glslabeltok}%
9343         \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
9344     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%
9345       \protect\glsxtrfullsep{\the\glslabeltok}%
9346         \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
9347     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
9348     description={\the\glslongtok}}%
9349   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9350     \glshasattribute{\the\glslabeltok}{regular}}%
9351   {%
9352     \glssetattribute{\the\glslabeltok}{regular}{false}}%
9353   }%
9354   {}%
9355 }%
9356 }%
9357 {%
9358   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
9359   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9360   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%

```

Use the default long fonts.

```

9361 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9362 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

9363 \renewcommand*{\glsxtrfullformat}[2]{%
9364   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9365   \ifglsxtrinsertinside\else##2\fi
9366   \glsxtrfullsep{##1}%
9367   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9368 }%
9369 \renewcommand*{\glsxtrfullplformat}[2]{%
9370   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9371   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9372   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
9373 }%
9374 \renewcommand*{\Glsxtrfullformat}[2]{%

```

```

9375   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9376   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9377   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9378 }%
9379 \renewcommand*\Glsxtrfullplformat}[2]{%
9380   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9381   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9382   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9383 }%
9384 }

```

#### g-short-em-desc

```

9385 \newabbreviationstyle{long-short-em-desc}%
9386 {%
9387 \renewcommand*\CustomAbbreviationFields}{%
9388   name={\glsxtrlongshortdescname},%
9389   sort={\glsxtrlongshortdescsort},%
9390   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
9391     \protect\glsxtrfullsep{\the\glslabeltok}%
9392     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
9393   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
9394     \protect\glsxtrfullsep{\the\glslabeltok}%
9395     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
9396   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
9397   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
9398 }%

```

Unset the regular attribute if it has been set.

```

9399 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9400   \glshasattribute{\the\glslabeltok}{regular}%
9401   {%
9402     \glssetattribute{\the\glslabeltok}{regular}{false}%
9403   }%
9404   {}%
9405 }%
9406 }%
9407 {%

```

As long-short-em style:

```

9408 \GlsXtrUseAbbrStyleFmts{long-short-em}%
9409 }

```

#### long-em-short-em

```

9410 \newabbreviationstyle{long-em-short-em}%
9411 {%
  \glslongemfont is used in the description since \glsdesc doesn't set the style.
9412 \renewcommand*\CustomAbbreviationFields}{%
9413   name={\glsxtrlongshortname},%
9414   sort={\the\glsshorttok},

```

```

9415   first={\protect\glsfirstlongemfont{\the\glslongtok}%
9416     \protect\glsxtrfullsep{\the\glslabeltok}%
9417     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
9418   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
9419     \protect\glsxtrfullsep{\the\glslabeltok}%
9420     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
9421   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
9422   description={\protect\glslongemfont{\the\glslongtok}}}}%

```

Unset the regular attribute if it has been set.

```

9423   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9424     \glshasattribute{\glslabeltok}{regular}%
9425     {}%
9426     \glssetattribute{\glslabeltok}{regular}{false}%
9427   }%
9428   {}%
9429 }%
9430 }%
9431 {}%
9432   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9433   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
9434   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9435   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
9436   \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

9437   \renewcommand*{\glsxtrfullformat}[2]{%
9438     \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9439     \ifglsxtrinsertinside\else##2\fi
9440     \glsxtrfullsep{##1}%
9441     \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9442 }%
9443   \renewcommand*{\glsxtrfullplformat}[2]{%
9444     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9445     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9446     \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
9447 }%
9448   \renewcommand*{\Glsxtrfullformat}[2]{%
9449     \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9450     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9451     \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9452 }%
9453   \renewcommand*{\Glsxtrfullplformat}[2]{%
9454     \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9455     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9456     \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
9457 }%
9458 }

```

m-short-em-desc

```
9459 \newabbreviationstyle{long-em-short-em-desc}%
9460 {%
9461   \renewcommand*{\CustomAbbreviationFields}{%
9462     name={\glsxtrlongshortdescname},
9463     sort={\glsxtrlongshortdescsort},%
9464     first={\protect\glsfirstlongemfont{\the\glslongtok}%
9465       \protect\glsxtrfullsep{\the\glslabeltok}%
9466       \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
9467     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
9468       \protect\glsxtrfullsep{\the\glslabeltok}%
9469       \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
9470     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
9471     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
9472   }%
```

Unset the regular attribute if it has been set.

```
9473 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9474   \glshasattribute{\the\glslabeltok}{regular}%
9475   {%
9476     \glssetattribute{\the\glslabeltok}{regular}{false}%
9477   }%
9478   {}%
9479 }%
9480 }%
9481 {%
9482   \GlsXtrUseAbbrStyleFmts{long-em-short-em}%
9483 }
```

short-em-long Now the short (long) version

```
9484 \newabbreviationstyle{short-em-long}%
9485 {%
9486   \renewcommand*{\CustomAbbreviationFields}{%
9487     name={\glsxtrshortlongname},
9488     sort={\the\glsshorttok},
9489     description={\the\glslongtok},%
9490     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
9491       \protect\glsxtrfullsep{\the\glslabeltok}%
9492       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9493     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
9494       \protect\glsxtrfullsep{\the\glslabeltok}%
9495       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9496     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
9497 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9498   \glshasattribute{\the\glslabeltok}{regular}%
9499   {%
9500     \glssetattribute{\the\glslabeltok}{regular}{false}%
9501   }%
```

```

9502     {}%
9503   }%
9504 }%
9505 {%

```

Mostly as short-long style:

```

9506 \renewcommand*\{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9507 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9508 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
9509 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9510 \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

9511 \renewcommand*\{\glsxtrfullformat}[2]{%
9512   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9513   \ifglsxtrinsertinside\else##2\fi
9514   \glsxtrfullsep{##1}%
9515   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9516 }%
9517 \renewcommand*\{\glsxtrfullplformat}[2]{%
9518   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9519   \ifglsxtrinsertinside\else##2\fi
9520   \glsxtrfullsep{##1}%
9521   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9522 }%
9523 \renewcommand*\{\Glsxtrfullformat}[2]{%
9524   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9525   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9526   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9527 }%
9528 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9529   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9530   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9531   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9532 }%
9533 }

```

`rt-em-long-desc` As before but user provides description

```

9534 \newabbreviationstyle{short-em-long-desc}%
9535 {%
9536 \renewcommand*\{\CustomAbbreviationFields}{%
9537   name={\glsxtrshortlongdescname},
9538   sort={\glsxtrshortlongdescsort},
9539   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
9540     \protect\glsxtrfullsep{\the\glslabeltok}%
9541     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9542   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
9543     \protect\glsxtrfullsep{\the\glslabeltok}%
9544     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9545   text={\protect\glsabbrvemfont{\the\glsshorttok}},%

```

```
9546     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
9547 }
```

Unset the regular attribute if it has been set.

```
9548 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9549   \glshasattribute{\the\glslabeltok}{regular}%
9550   {%
9551     \glssetattribute{\the\glslabeltok}{regular}{false}%
9552   }%
9553   {}%
9554 }%
9555 }%
9556 {%
9557 \GlsXtrUseAbbrStyleFmts{short-em-long}%
9558 }
```

hort-em-long-em

```
9559 \newabbreviationstyle{short-em-long-em}%
9560 {%
```

\glslongemfont is used in the description since \glsdesc doesn't set the style.

```
9561 \renewcommand*{\CustomAbbreviationFields}{%
9562   name={\glsxtrshortlongname},
9563   sort={\the\glsshorttok},
9564   description={\protect\glslongemfont{\the\glslongtok}},%
9565   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
9566     \protect\glsxtrfullsep{\the\glslabeltok}%
9567     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
9568   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
9569     \protect\glsxtrfullsep{\the\glslabeltok}%
9570     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
9571   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```
9572 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9573   \glshasattribute{\the\glslabeltok}{regular}%
9574   {%
9575     \glssetattribute{\the\glslabeltok}{regular}{false}%
9576   }%
9577   {}%
9578 }%
9579 }%
9580 {%
9581 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9582 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{\##1}}%
9583 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{\##1}}%
9584 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{\##1}}%
9585 \renewcommand*{\glslongfont}[1]{\glslongemfont{\##1}}%
```

The first use full form and the inline full form are the same for this style.

```
9586 \renewcommand*{\glsxtrfullformat}[2]{%
9587   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9588   \ifglsxtrinsertinside\else##2\fi
9589   \glsxtrfullsep{##1}%
9590   \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}%
9591 }%
9592 \renewcommand*{\glsxtrfullplformat}[2]{%
9593   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9594   \ifglsxtrinsertinside\else##2\fi
9595   \glsxtrfullsep{##1}%
9596   \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}%
9597 }%
9598 \renewcommand*{\Glsxtrfullformat}[2]{%
9599   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9600   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9601   \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}%
9602 }%
9603 \renewcommand*{\Glsxtrfullplformat}[2]{%
9604   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9605   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9606   \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}%
9607 }%
9608 }
```

em-long-em-desc

```
9609 \newabbreviationstyle{short-em-long-em-desc}{%
9610 }%
9611 \renewcommand*{\CustomAbbreviationFields}{%
9612   name={\glsxtrshortlongdescname},%
9613   sort={\glsxtrshortlongdescsort},%
9614   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
9615     \protect\glsxtrfullsep{\the\glslabeltok}%
9616     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
9617   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
9618     \protect\glsxtrfullsep{\the\glslabeltok}%
9619     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
9620   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
9621   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
9622 }%
```

Unset the regular attribute if it has been set.

```
9623 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9624   \glshasattribute{\the\glslabeltok}{regular}%
9625   {}%
9626   \glssetattribute{\the\glslabeltok}{regular}{false}%
9627   {}%
9628   {}%
9629 }%
```

```

9630 }%
9631 {%
9632   \GlsXtrUseAbbrStyleFmts{short-em-long-em}%
9633 }

short-em

9634 \newabbreviationstyle{short-em}{%
9635 {%
9636   \renewcommand*{\CustomAbbreviationFields}{%
9637     name={\glsxtrshortno longname},
9638     sort={\the\glsshorttok},
9639     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
9640     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
9641     text={\protect\glsabbrvemfont{\the\glsshorttok}},
9642     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},
9643     description={\the\glslongtok}}%
9644   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9645     \glssetattribute{\the\glslabeltok}{regular}{true}}%
9646 }%
9647 {%
9648   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9649   \renewcommand*{\glsabbrvfont[1]}{\glsabbrvemfont{\#1}}%
9650   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{\#1}}%
9651   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\#1}}%
9652   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{\#1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

9653 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9654   \protect\glsfirstabbrvemfont{\glsaccessshort{\#1}}%
9655   \ifglsxtrinsertinside##2\fi}%
9656   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9657   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
9658 }%
9659 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9660   \protect\glsfirstabbrvemfont{\glsaccessshortpl{\#1}}%
9661   \ifglsxtrinsertinside##2\fi}%
9662   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9663   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{\#1}}}%
9664 }%

9665 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9666   \protect\glsfirstabbrvemfont{\Glsaccessshort{\#1}}%
9667   \ifglsxtrinsertinside##2\fi}%
9668   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
9669   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
9670 }%
9671 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9672   \protect\glsfirstabbrvemfont{\Glsaccessshortpl{\#1}}%
9673   \ifglsxtrinsertinside##2\fi}%
9674   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%

```

```

9675     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%
9676 }%

```

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.

```

9677 \renewcommand*{\glsxtrfullformat}[2]{%
9678   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9679   \ifglsxtrinsertinside\else##2\fi
9680 }%
9681 \renewcommand*{\glsxtrfullplformat}[2]{%
9682   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9683   \ifglsxtrinsertinside\else##2\fi
9684 }%
9685 \renewcommand*{\Glsxtrfullformat}[2]{%
9686   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9687   \ifglsxtrinsertinside\else##2\fi
9688 }%
9689 \renewcommand*{\Glsxtrfullplformat}[2]{%
9690   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9691   \ifglsxtrinsertinside\else##2\fi
9692 }%
9693 }

```

### short-em-nolong

```
9694 \letabbreviationstyle{short-em-nolong}{short-em}
```

### short-em-desc

```

9695 \newabbreviationstyle{short-em-desc}{%
9696 }%
9697 \renewcommand*{\CustomAbbreviationFields}{%
9698   name={\glsxtrshortdescname},
9699   sort={\the\glsshorttok},
9700   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
9701   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
9702   text={\protect\glsabbrvemfont{\the\glsshorttok}},
9703   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},
9704   description={\the\glslongtok}}%
9705 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9706   \glssetattribute{\the\glslabeltok}{regular}{true}}%
9707 }%
9708 }%
9709 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9710 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9711 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9712 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9713 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

9714 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9715   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%

```

```

9716     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9717     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9718 }%
9719 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9720   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9721   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9722   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9723 }%
9724 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9725   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9726   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9727   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9728 }%
9729 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9730   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9731   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9732   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9733 }%

```

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.

```

9734 \renewcommand*{\glsxtrfullformat}[2]{%
9735   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9736   \ifglsxtrinsertinside\else##2\fi
9737 }%
9738 \renewcommand*{\glsxtrfullplformat}[2]{%
9739   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9740   \ifglsxtrinsertinside\else##2\fi
9741 }%
9742 \renewcommand*{\Glsxtrfullformat}[2]{%
9743   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9744   \ifglsxtrinsertinside\else##2\fi
9745 }%
9746 \renewcommand*{\Glsxtrfullplformat}[2]{%
9747   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9748   \ifglsxtrinsertinside\else##2\fi
9749 }%
9750 }

```

#### -em-nolong-desc

```
9751 \letabbreviationstyle{short-em-nolong-desc}{short-em-desc}
```

#### nolong-short-em

```

9752 \newabbreviationstyle{nolong-short-em}%
9753 {%
9754   \GlsXtrUseAbbrStyleSetup{short-em-nolong}%
9755 }%
9756 {%
9757   \GlsXtrUseAbbrStyleFmts{short-em-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```
9758 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9759   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}}%
9760   \ifglsxtrinsertinside##2\fi}%
9761   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9762   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9763 }%
9764 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9765   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}%
9766   \ifglsxtrinsertinside##2\fi}%
9767   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9768   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9769 }%
9770 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9771   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}}%
9772   \ifglsxtrinsertinside##2\fi}%
9773   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9774   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9775 }%
9776 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9777   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
9778   \ifglsxtrinsertinside##2\fi}%
9779   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9780   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9781 }%
9782 }
```

long-noshort-em The short form is explicitly invoked through commands like \glsshort.

```
9783 \newabbreviationstyle{long-noshort-em}{%
9784 }%
9785 \renewcommand*{\CustomAbbreviationFields}{%
9786   name={\glsxtrlongnoshortname},
9787   sort={\the\glsshorttok},
9788   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
9789   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
9790   text={\protect\glslongdefaultfont{\the\glslongtok}},
9791   plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
9792   description={\the\glslongtok}%
9793 }%
9794 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9795   \glssetattribute{\the\glslabeltok}{regular}{true}%
9796 }%
9797 }%
9798 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9799 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9800 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9801 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9802 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```

9803 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9804   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9805   \ifglsxtrinsertinside \else##2\fi
9806 }%
9807 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9808   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9809   \ifglsxtrinsertinside \else##2\fi
9810 }%
9811 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9812   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9813   \ifglsxtrinsertinside \else##2\fi
9814 }%
9815 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9816   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9817   \ifglsxtrinsertinside \else##2\fi
9818 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9819 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9820   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9821   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9822   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9823 }%
9824 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9825   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9826   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9827   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9828 }%
9829 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9830   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9831   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9832   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9833 }%
9834 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9835   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9836   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9837   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9838 }%

```

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.

```

9839 \renewcommand*{\glsxtrfullformat}[2]{%
9840   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9841   \ifglsxtrinsertinside\else##2\fi
9842 }%
9843 \renewcommand*{\glsxtrfullplformat}[2]{%
9844   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9845   \ifglsxtrinsertinside\else##2\fi
9846 }%
9847 \renewcommand*{\Glsxtrfullformat}[2]{%

```

```

9848     \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9849     \ifglsxtrinsertinside\else##2\fi
9850 }%
9851 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9852     \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9853     \ifglsxtrinsertinside\else##2\fi
9854 }%
9855 }

```

`long-em` Backward compatibility:

```
9856 @glsxtr@deprecated@abbrstyle{long-em}{long-noshort-em}
```

`g-em-noshort-em` The short form is explicitly invoked through commands like `\glsshort`.

```

9857 \newabbreviationstyle{long-em-noshort-em}%
9858 {%
9859     \renewcommand*\{\CustomAbbreviationFields}{%
9860         name={\glsxtrlongnoshortname},
9861         sort={\the\glsshorttok},
9862         first={\protect\glsfirstlongemfont{\the\glslongtok}},
9863         firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
9864         text={\protect\glslongemfont{\the\glslongtok}},
9865         plural={\protect\glslongemfont{\the\glslongpltok}},%
9866         description={\protect\glslongemfont{\the\glslongtok}}%
9867 }%
9868     \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
9869         \glssetattribute{\the\glslabeltok}{regular}{true}}%
9870 }%
9871 {%
9872     \renewcommand*\{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9873     \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9874     \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9875     \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
9876     \renewcommand*\{\glslongfont}[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9877 \renewcommand*\{\glsxtrsubsequentfmt}[2]{%
9878     \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9879     \ifglsxtrinsertinside \else##2\fi
9880 }%
9881 \renewcommand*\{\glsxtrsubsequentplfmt}[2]{%
9882     \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9883     \ifglsxtrinsertinside \else##2\fi
9884 }%
9885 \renewcommand*\{\Glsxtrsubsequentfmt}[2]{%
9886     \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9887     \ifglsxtrinsertinside \else##2\fi
9888 }%
9889 \renewcommand*\{\Glsxtrsubsequentplfmt}[2]{%
9890     \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9891     \ifglsxtrinsertinside \else##2\fi

```

```
9892 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9893 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9894   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9895   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9896   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9897 }%
9898 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9899   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9900   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9901   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
9902 }%
9903 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9904   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9905   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9906   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9907 }%
9908 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9909   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9910   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9911   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}}%
9912 }%
```

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.

```
9913 \renewcommand*{\glsxtrfullformat}[2]{%
9914   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9915   \ifglsxtrinsertinside\else##2\fi
9916 }%
9917 \renewcommand*{\glsxtrfullplformat}[2]{%
9918   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9919   \ifglsxtrinsertinside\else##2\fi
9920 }%
9921 \renewcommand*{\Glsxtrfullformat}[2]{%
9922   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9923   \ifglsxtrinsertinside\else##2\fi
9924 }%
9925 \renewcommand*{\Glsxtrfullplformat}[2]{%
9926   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9927   \ifglsxtrinsertinside\else##2\fi
9928 }%
9929 }
```

`oshort-em-noreg` Like `long-em-noshort-em` but doesn't set the regular attribute.

```
9930 \newabbreviationstyle{long-em-noshort-em-noreg}%
9931 {%
9932   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em}%
}
```

Unset the regular attribute if it has been set.

```

9933 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9934   \glshasattribute{\the\glslabeltok}{regular}{%
9935     {%
9936       \glssetattribute{\the\glslabeltok}{regular}{false}{%
9937     }%
9938   }%
9939 }%
9940 }%
9941 {%
9942 \GlsXtrUseAbbrStyleFmts{long-em-noshort-em}{%
9943 }

```

`noshort-em-desc` The emphasized font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

9944 \newabbreviationstyle{long-noshort-em-desc}{%
9945 {%
9946   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}{%
9947 }%
9948 {%
9949   \renewcommand*\abbrvpluralsuffix}{\protect\glsxtremsuffix}{%
9950   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}{%
9951   \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}{%
9952   \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}{%
9953   \renewcommand*\glslongfont}[1]{\glslongdefaultfont{##1}}{%

```

The format for subsequent use (not used when the regular attribute is set).

```

9954 \renewcommand*\glsxtrsubsequentfmt}[2]{%
9955   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}{%
9956   \ifglsxtrinsertinside \else##2\fi
9957 }%
9958 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
9959   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}{%
9960   \ifglsxtrinsertinside \else##2\fi
9961 }%
9962 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
9963   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}{%
9964   \ifglsxtrinsertinside \else##2\fi
9965 }%
9966 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
9967   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}{%
9968   \ifglsxtrinsertinside \else##2\fi
9969 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9970 \renewcommand*\glsxtrinlinefullformat}[2]{%
9971   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}{%
9972   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}{%
9973   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}{%
9974 }%
9975 \renewcommand*\glsxtrinlinefullplformat}[2]{%

```

```

9976   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9977   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9978   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9979 }%
9980 \renewcommand*\Glsxtrinlinefullformat}[2]{%
9981   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9982   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9983   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9984 }%
9985 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
9986   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9987   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9988   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9989 }%

```

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.

```

9990 \renewcommand*\glsxtrfullformat}[2]{%
9991   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9992   \ifglsxtrinsertinside\else##2\fi
9993 }%
9994 \renewcommand*\glsxtrfullplformat}[2]{%
9995   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9996   \ifglsxtrinsertinside\else##2\fi
9997 }%
9998 \renewcommand*\Glsxtrfullformat}[2]{%
9999   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10000   \ifglsxtrinsertinside\else##2\fi
10001 }%
10002 \renewcommand*\Glsxtrfullplformat}[2]{%
10003   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10004   \ifglsxtrinsertinside\else##2\fi
10005 }%
10006 }

```

**long-desc-em** Backward compatibility:

```
10007 @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.

```

10008 \newabbreviationstyle{long-em-noshort-em-desc}%
10009 {%
10010   \renewcommand*\CustomAbbreviationFields}{%
10011     name={\glsxtrlongnoshortdescname},
10012     sort={\the\glslongtok},
10013     first={\protect\glsfirstlongemfont{\the\glslongtok}},
10014     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
10015     text={\glslongemfont{\the\glslongtok}},
10016     plural={\glslongemfont{\the\glslongpltok}}%

```

```

10017 }%
10018 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
10019   \glssetattribute{\the\glslabeltok}{regular}{true}}%
10020 }%
10021 {%
10022 \renewcommand*\{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
10023 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10024 \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10025 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
10026 \renewcommand*\{\glslongfont}[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10027 \renewcommand*\{\glsxtrsubsequentfmt}[2]{%
10028   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10029   \ifglsxtrinsertinside \else##2\fi
10030 }%
10031 \renewcommand*\{\glsxtrsubsequentplfmt}[2]{%
10032   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10033   \ifglsxtrinsertinside \else##2\fi
10034 }%
10035 \renewcommand*\{\Glsxtrsubsequentfmt}[2]{%
10036   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
10037   \ifglsxtrinsertinside \else##2\fi
10038 }%
10039 \renewcommand*\{\Glsxtrsubsequentplfmt}[2]{%
10040   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
10041   \ifglsxtrinsertinside \else##2\fi
10042 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

10043 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
10044   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10045   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
10046 \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10047 }%
10048 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
10049   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10050   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
10051 \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10052 }%
10053 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
10054   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10055   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
10056 \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
10057 }%
10058 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
10059   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10060   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
10061 \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
10062 }%

```

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.

```
10063 \renewcommand*{\glsxtrfullformat}[2]{%
10064   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10065   \ifglsxtrinsertinside\else##2\fi
10066 }%
10067 \renewcommand*{\glsxtrfullplformat}[2]{%
10068   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10069   \ifglsxtrinsertinside\else##2\fi
10070 }%
10071 \renewcommand*{\Glsxtrfullformat}[2]{%
10072   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10073   \ifglsxtrinsertinside\else##2\fi
10074 }%
10075 \renewcommand*{\Glsxtrfullplformat}[2]{%
10076   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10077   \ifglsxtrinsertinside\else##2\fi
10078 }%
10079 }
```

t-em-desc-noreg Like long-em-noshort-em-desc but doesn't set the regular attribute.

```
10080 \newabbreviationstyle{long-em-noshort-em-desc-noreg}{%
10081 {%
10082   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em-desc}}}
```

Unset the regular attribute if it has been set.

```
10083 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10084   \glshasattribute{\the\glslabeltok}{regular}%
10085   {%
10086     \glssetattribute{\the\glslabeltok}{regular}{false}%
10087   }%
10088   {}%
10089 }%
10090 }%
10091 {%
10092   \GlsXtrUseAbbrStyleFmts{long-em-noshort-em-desc}%
10093 }
```

ort-em-footnote

```
10094 \newabbreviationstyle{short-em-footnote}{%
10095 {%
10096   \renewcommand*{\CustomAbbreviationFields}{%
10097     name={\glsxtrfootnotename},
10098     sort={\the\glsshorttok},
10099     description={\the\glslongtok},%
10100     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%
10101     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10102     {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
10103     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}%
```

```

10104     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
10105         {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
10106     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.

10107 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10108     \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
10109     \glshasattribute{\the\glslabeltok}{regular}%
10110     {%
10111         \glssetattribute{\the\glslabeltok}{regular}{false}%
10112     }%
10113     {}%
10114 }%
10115 }%
10116 {}%
10117 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
10118 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10119 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbvemfont{##1}}%
10120 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
10121 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form followed by the long form as a footnote.

```

10122 \renewcommand*{\glsxtrfullformat}[2]{%
10123     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10124     \ifglsxtrinsertinside\else##2\fi
10125     \protect\glsxtrabbrvfootnote{##1}%
10126     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10127 }%
10128 \renewcommand*{\glsxtrfullplformat}[2]{%
10129     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10130     \ifglsxtrinsertinside\else##2\fi
10131     \protect\glsxtrabbrvfootnote{##1}%
10132     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10133 }%
10134 \renewcommand*{\Glsxtrfullformat}[2]{%
10135     \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10136     \ifglsxtrinsertinside\else##2\fi
10137     \protect\glsxtrabbrvfootnote{##1}%
10138     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10139 }%
10140 \renewcommand*{\Glsxtrfullplformat}[2]{%
10141     \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10142     \ifglsxtrinsertinside\else##2\fi
10143     \protect\glsxtrabbrvfootnote{##1}%
10144     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10145 }%

```

The first use full form and the inline full form use the short (long) style.

```

10146 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10147     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%

```

```

10148     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10149     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10150   }%
10151   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10152     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10153     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10154     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10155   }%
10156   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10157     \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10158     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10159     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10160   }%
10161   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10162     \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10163     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10164     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10165   }%
10166 }

```

`footnote-em` Backward compatibility:

```
10167 @glsxtr@deprecated@abbrstyle{footnote-em}{short-em-footnote}
```

`em-postfootnote`

```

10168 \newabbreviationstyle{short-em-postfootnote}%
10169 {%
10170   \renewcommand*{\CustomAbbreviationFields}{%
10171     name={\glsxtrfootnotename},
10172     sort={\the\glsshorttok},
10173     description={\the\glslongtok},%
10174     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
10175     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
10176     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.

```

10177 \renewcommand*{\GlsXtrPostNewAbbreviation}%
10178   \csdef{glsxtrpostlink\glscategorylabel}%
10179     \glsxtrifwasfirstuse
10180   {%

```

Needs the specific font command here as the style may have been lost by the time the footnote occurs.

```

10181   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
10182     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
10183   }%
10184   {}%
10185 }%
10186 \glshasattribute{\the\glslabeltok}{regular}%
10187 {}

```

```

10188     \glssetattribute{\the\glslabeltok}{regular}{false}%
10189     }%
10190     {}%
10191   }%

```

The footnote needs to be suppressed in the inline form, so `\glsxtrfull` must set the first use switch off.

```

10192   \renewcommand*{\glsxtrsetupfulldefs}{%
10193     \let\glsxtrifwasfirstuse\@secondoftwo
10194   }%
10195 }%
10196 {%
10197   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
10198   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
10199   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
10200   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
10201   \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

The full format displays the short form. The long form is deferred.

```

10202   \renewcommand*{\glsxtrfullformat}[2]{%
10203     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10204     \ifglsxtrinsertinside\else##2\fi
10205   }%
10206   \renewcommand*{\glsxtrfullplformat}[2]{%
10207     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10208     \ifglsxtrinsertinside\else##2\fi
10209   }%
10210   \renewcommand*{\Glsxtrfullformat}[2]{%
10211     \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10212     \ifglsxtrinsertinside\else##2\fi
10213   }%
10214   \renewcommand*{\Glsxtrfullplformat}[2]{%
10215     \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10216     \ifglsxtrinsertinside\else##2\fi
10217   }%

```

The first use full form and the inline full form use the short (long) style.

```

10218   \renewcommand*{\glsxtrinlinefullformat}[2]{%
10219     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10220     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10221     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
10222   }%
10223   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10224     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10225     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10226     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
10227   }%
10228   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10229     \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10230     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10231     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%

```

```

10232 }%
10233 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10234   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10235   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
10236   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}}%
10237 }%
10238 }

```

postfootnote-em Backward compatibility:

```
10239 \@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.

```
10240 \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.

```

10241 \ifdef\glscurrentfieldvalue
10242 {
10243   \newcommand*{\glsxtruserparen}[2]{%
10244     \glsxtrfullsep{##2}%
10245     \glsxtrparen
10246     {##1\ifglshasfield{\glsxtruserfield}{##2}{, \glscurrentfieldvalue}{}{}}%
10247 }
10248 }
10249 {
10250   \newcommand*{\glsxtruserparen}[2]{%
10251     \glsxtrfullsep{##2}%
10252     \glsxtrparen
10253     {##1\ifglshasfield{\glsxtruserfield}{##2}{, \@glo@thisvalue}{}{}}%
10254 }
10255 }

```

Font used for short form:

`lsabrvuserfont`

```
10256 \newcommand*{\glsabrvuserfont}[1]{\glsabrvdefaultfont{#1}}
```

Font used for short form on first use:

`stabrvuserfont`

```
10257 \newcommand*{\glsfirstabrvuserfont}[1]{\glsabrvuserfont{#1}}
```

Font used for long form:

```
glslonguserfont  
10258 \newcommand*{\glslonguserfont}[1]{\glslongdefaultfont{#1}}
```

Font used for long form on first use:

```
rstlonguserfont  
10259 \newcommand*{\glsfirstlonguserfont}[1]{\glslonguserfont{#1}}
```

The default short form suffix:

```
lsxtrusersuffix  
10260 \newcommand*{\glsxtrusersuffix}{\glsxtrabbrvpluralsuffix}
```

Description encapsulator.

```
userdescription The first argument is the description. The second argument is the label.  
10261 \newcommand*{\glsuserdescription}[2]{\glslonguserfont{#1}}
```

```
long-short-user  
10262 \newabbreviationstyle{long-short-user}-%  
10263 {%-  
10264 \renewcommand*{\CustomAbbreviationFields}{%-  
10265 name={\glsxtrlongshortname},  
10266 sort={\the\glsshorttok},  
10267 first={\protect\glsfirstlonguserfont{\the\glslongtok}}%  
10268 \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%  
10269 {\the\glslabeltok}},%  
10270 firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}}%  
10271 \protect\glsxtruserparen  
10272 {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%  
10273 plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%  
10274 description={\protect\glsuserdescription{\the\glslongtok}}%  
10275 {\the\glslabeltok}}}}%
```

Unset the regular attribute if it has been set.

```
10276 \renewcommand*{\GlsXtrPostNewAbbreviation}{%-  
10277 \glshasattribute{\the\glslabeltok}{regular}}%  
10278 {%-  
10279 \glssetattribute{\the\glslabeltok}{regular}{false}}%  
10280 }%  
10281 {}%  
10282 }%  
10283 }%  
10284 {%-
```

In case the user wants to mix and match font styles, these are redefined here.

```
10285 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}-%  
10286 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%  
10287 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%  
10288 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%  
10289 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
10290 \renewcommand*{\glsxtrfullformat}[2]{%
10291   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10292   \ifglsxtrinsertinside\else##2\fi
10293   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
10294 }%
10295 \renewcommand*{\glsxtrfullplformat}[2]{%
10296   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10297   \ifglsxtrinsertinside\else##2\fi
10298   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
10299 }%
10300 \renewcommand*{\Glsxtrfullformat}[2]{%
10301   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10302   \ifglsxtrinsertinside\else##2\fi
10303   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
10304 }%
10305 \renewcommand*{\Glsxtrfullplformat}[2]{%
10306   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10307   \ifglsxtrinsertinside\else##2\fi
10308   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
10309 }%
10310 }
```

-postshort-user Like long-short-user but defers the parenthetical matter to after the link.

```
10311 \newabbreviationstyle{long-postshort-user}%
10312 {%
10313 \renewcommand*{\CustomAbbreviationFields}{%
10314   name={\glsxtrlongshortname},
10315   sort={\the\glsshorttok},
10316   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
10317   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
10318   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
10319   description={\protect\glsuserdescription{\the\glslongtok}%
10320     {\the\glslabeltok}}}%
10321 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10322   \csdef{glsxtrpostlink}{\glscategorylabel}{%
10323     \glsxtrifwasfirstuse
10324   }%
10325     \glsxtruserparen
10326       {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}{%
10327         \glslabel}%
10328   }%
10329   {}%
10330 }%
10331   \glshasattribute{\the\glslabeltok}{regular}%
10332   {}%
10333     \glssetattribute{\the\glslabeltok}{regular}{false}%
10334 }
```

```

10335     {}%
10336   }%
10337 }%
10338 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

10339 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
10340 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
10341 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
10342 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
10343 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

10344 \renewcommand*{\glsxtrfullformat}[2]{%
10345   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10346   \ifglsxtrinsertinside\else##2\fi
10347 }%
10348 \renewcommand*{\glsxtrfullplformat}[2]{%
10349   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10350   \ifglsxtrinsertinside\else##2\fi
10351 }%
10352 \renewcommand*{\Glsxtrfullformat}[2]{%
10353   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10354   \ifglsxtrinsertinside\else##2\fi
10355 }%
10356 \renewcommand*{\Glsxtrfullplformat}[2]{%
10357   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10358   \ifglsxtrinsertinside\else##2\fi
10359 }%

```

In-line format:

```

10360 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10361   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10362   \ifglsxtrinsertinside\else##2\fi
10363   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
10364 }%
10365 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10366   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10367   \ifglsxtrinsertinside\else##2\fi
10368   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
10369 }%
10370 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10371   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10372   \ifglsxtrinsertinside\else##2\fi
10373   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
10374 }%
10375 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10376   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10377   \ifglsxtrinsertinside\else##2\fi
10378   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%

```

```

10379  }%
10380 }

ortuserdescname
10381 \newcommand*{\glsxtrlongshortuserdescname}{%
10382   \protect\glslonguserfont{\the\glslongtok}%
10383   \protect\glsxtruserparen
10384   {\protect\glsabbrvuserfont{\the\glsshorttok}}{\the\glslabeltok}%
10385 }

```

**short-user-desc** Like long-postshort-user but the user supplies the description.

```

10386 \newabbreviationstyle{long-postshort-user-desc}%
10387 {%
10388   \renewcommand*{\CustomAbbreviationFields}{%
10389     name={\glsxtrlongshortuserdescname},
10390     sort={\the\glslongtok},
10391     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
10392     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
10393     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
10394     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
10395   }%
10396   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10397     \csdef{glsxtrpostlink}{\glscategorylabel}{%
10398       \glsxtrifwasfirstuse
10399       {%
10400         \glsxtruserparen
10401         {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}%
10402         {\glslabel}%
10403       }%
10404       {}%
10405     }%
10406     \glshasattribute{\the\glslabeltok}{regular}%
10407     {%
10408       \glssetattribute{\the\glslabeltok}{regular}{false}%
10409     }%
10410     {}%
10411   }%
10412 }%
10413 {%
10414   \GlsXtrUseAbbrStyleFmts{long-postshort-user}%
10415 }

```

**t-postlong-user** Like short-long-user but defers the parenthetical matter to after the link.

```

10416 \newabbreviationstyle{short-postlong-user}%
10417 {%
10418   \renewcommand*{\CustomAbbreviationFields}{%
10419     name={\glsxtrshortlongname},
10420     sort={\the\glsshorttok},

```

```

10421   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
10422   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
10423   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
10424   description={\protect\glsuserdescription{\the\glslongtok}%
10425     {\the\glslabeltok}}}}
10426 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10427   \csdef{glsxtrpostlink\glscategorylabel}{%
10428     \glsxtrifwasfirstuse
10429     {%
10430       \glsxtruserparen
10431         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}%
10432         {\glslabel}%
10433     }%
10434     {}%
10435   }%
10436   \glshasattribute{\the\glslabeltok}{regular}%
10437   {%
10438     \glssetattribute{\the\glslabeltok}{regular}{false}%
10439   }%
10440   {}%
10441 }%
10442 }%
10443 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

10444 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
10445 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{\##1}}%
10446 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{\##1}}%
10447 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{\##1}}%
10448 \renewcommand*{\glslongfont}[1]{\glslonguserfont{\##1}}%

```

First use full form:

```

10449 \renewcommand*{\glsxtrfullformat}[2]{%
10450   \glsfirstabbrvuserfont{\glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
10451   \ifglsxtrinsertinside\else{\##2}\fi
10452 }%
10453 \renewcommand*{\glsxtrfullplformat}[2]{%
10454   \glsfirstabbrvuserfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside{\##2}\fi}%
10455   \ifglsxtrinsertinside\else{\##2}\fi
10456 }%
10457 \renewcommand*{\GlsXtrfullformat}[2]{%
10458   \glsfirstabbrvuserfont{\Glsaccessshort{\##1}\ifglsxtrinsertinside{\##2}\fi}%
10459   \ifglsxtrinsertinside\else{\##2}\fi
10460 }%
10461 \renewcommand*{\GlsXtrfullplformat}[2]{%
10462   \glsfirstabbrvuserfont{\Glsaccessshortpl{\##1}\ifglsxtrinsertinside{\##2}\fi}%
10463   \ifglsxtrinsertinside\else{\##2}\fi
10464 }%

```

In-line format:

```

10465 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10466   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10467   \ifglsxtrinsertinside\else##2\fi
10468   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
10469 }%
10470 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10471   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10472   \ifglsxtrinsertinside\else##2\fi
10473   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
10474 }%
10475 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10476   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10477   \ifglsxtrinsertinside\else##2\fi
10478   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
10479 }%
10480 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10481   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10482   \ifglsxtrinsertinside\else##2\fi
10483   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
10484 }%
10485 }

```

#### onguserdescname

```

10486 \newcommand*{\glsxtrshortlonguserdescname}{%
10487   \protect\glsabbrvuserfont{\the\glsshorttok}%
10488   \protect\glsxtruserparen
10489   {\protect\glslonguserfont{\the\glslongpltok}}%
10490   {\the\glslabeltok}%
10491 }

```

tlong-user-desc Like short-postlong-user but leaves the user to specify the description.

```

10492 \newabbreviationstyle{short-postlong-user-desc}%
10493 {%
10494   \renewcommand*{\CustomAbbreviationFields}{%
10495     name={\glsxtrshortlonguserdescname},
10496     sort={\the\glsshorttok},
10497     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
10498     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
10499     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
10500     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
10501   }%
10502   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10503     \csdef{glsxtrpostlink}{\glscategorylabel}{%
10504       \glsxtrifwasfirstuse
10505       {%
10506         \glsxtruserparen
10507         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}}%
10508         {\glslabel}%

```

```

10509      }%
10510      {}%
10511      }%
10512      \glshasattribute{\the\glslabeltok}{regular}%
10513      {}%
10514      \glssetattribute{\the\glslabeltok}{regular}{false}%
10515      }%
10516      {}%
10517      }%
10518 }%
10519 {}%
10520 \GlsXtrUseAbbrStyleFmts{short-postlong-user}%
10521 }

```

#### short-user-desc

```

10522 \newabbreviationstyle{long-short-user-desc}%
10523 {}%
10524 \renewcommand*{\CustomAbbreviationFields}{%
10525   name={\glsxtrlongshortuserdescname},%
10526   sort={\glsxtrlongshortdescsort},%
10527   first={\protect\glsfirstlonguserfont{\the\glslongtok}%
10528     \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
10529     {\the\glslabeltok}},%
10530   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}%
10531     \protect\glsxtruserparen%
10532       {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%
10533   text={\protect\glsabbrvfont{\the\glsshorttok}},%
10534   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
10535 }%

```

Unset the regular attribute if it has been set.

```

10536 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10537   \glshasattribute{\the\glslabeltok}{regular}%
10538   {}%
10539   \glssetattribute{\the\glslabeltok}{regular}{false}%
10540   }%
10541   {}%
10542 }%
10543 }%
10544 {}%
10545 \GlsXtrUseAbbrStyleFmts{long-short-user}%
10546 }

```

#### short-long-user

```

10547 \newabbreviationstyle{short-long-user}%
10548 {}%
\noindent \glslonguserfont is used in the description since \glsdesc doesn't set the style. (Now in \glsuserdescription.)

```

```

10549 \renewcommand*\CustomAbbreviationFields{%
10550   name={\glsxtrshortlongname},
10551   sort={\the\glsshorttok},
10552   description={\protect\glsuserdescription{\the\glslongtok}%
10553     {\the\glslabeltok}},%
10554   first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
10555     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
10556     {\the\glslabeltok}},%
10557   firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
10558     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
10559     {\the\glslabeltok}},%
10560   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%

```

Unset the regular attribute if it has been set.

```

10561 \renewcommand*\GlsXtrPostNewAbbreviation{%
10562   \glshasattribute{\the\glslabeltok}{regular}%
10563   {%
10564     \glssetattribute{\the\glslabeltok}{regular}{false}%
10565   }%
10566   {}%
10567 }%
10568 }%
10569 {%

```

In case the user wants to mix and match font styles, these are redefined here.

```

10570 \renewcommand*\abbrvpluralsuffix{\glsxtrusersuffix}%
10571 \renewcommand*\glsabbrvfont[1]{\glsabbrvuserfont{##1}}%
10572 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvuserfont{##1}}%
10573 \renewcommand*\glsfirstlongfont[1]{\glsfirstlonguserfont{##1}}%
10574 \renewcommand*\glslongfont[1]{\glslonguserfont{##1}}%

```

The first use full form and the inline full form are the same for this style.

```

10575 \renewcommand*\glsxtrfullformat}[2]{%
10576   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10577   \ifglsxtrinsertinside\else##2\fi
10578   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
10579 }%
10580 \renewcommand*\glsxtrfullplformat}[2]{%
10581   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10582   \ifglsxtrinsertinside\else##2\fi
10583   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
10584 }%
10585 \renewcommand*\Glsxtrfullformat}[2]{%
10586   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10587   \ifglsxtrinsertinside\else##2\fi
10588   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
10589 }%
10590 \renewcommand*\Glsxtrfullplformat}[2]{%
10591   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10592   \ifglsxtrinsertinside\else##2\fi

```

```

10593     \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
10594 }%
10595 }

-long-user-desc
10596 \newabbreviationstyle{short-long-user-desc}%
10597 {%
10598   \renewcommand*{\CustomAbbreviationFields}{%
10599     name={\glsxtrshortlonguserdescname},%
10600     sort={\glsxtrshortlongdescsort},%
10601     first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
10602       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
10603         {\the\glslabeltok}},%
10604     firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
10605       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
10606         {\the\glslabeltok}},%
10607     text={\protect\glsabbrvfont{\the\glsshorttok}},%
10608     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
10609   }%

```

Unset the regular attribute if it has been set.

```

10610   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10611     \glshasattribute{\the\glslabeltok}{regular}%
10612     {}%
10613     \glssetattribute{\the\glslabeltok}{regular}{false}%
10614     {}%
10615     {}%
10616   }%
10617 }%
10618 {%
10619   \GlsXtrUseAbbrStyleFmts{short-long-user}%
10620 }

```

### 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.

```

10621 \newrobustcmd*{\glsxtrifhyphenstart}[3]{%
10622   \ifx\glsinsert\relax
10623     \expandafter\@glsxtrifhyphenstart#1\relax\relax
10624       \@end@glsxtrifhyphenstart{#2}{#3}%
10625   \else
10626     \@glsxtrifhyphenstart#1\relax\relax\@end@glsxtrifhyphenstart{#2}{#3}%

```

```

10627 \fi
10628 }

trifhyphenstart
10629 \def\@glsxtrifhyphenstart#1#2\@end@glsxtrifhyphenstart#3#4{%
10630 \ifx-#1\relax#3\else #4\fi
10631 }

```

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.

```
10632 \newcommand*\glsxtrlonghyphenshort[4]{%
```

Grouping is needed to localise the redefinitions.

```
10633 {%
```

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.

```

10634 \glsxtrifhyphenstart[#4]{\def\glsxtrwordsep{-}{}{}%}
10635 \glsfirstlonghyphenfont[#2\ifglsxtrinsertinside[#4]\fi}%
10636 \ifglsxtrinsertinside\else[#4]\fi
10637 \glsxtrfullsep{#1}%
10638 \glsxtrparen{\glsfirstabbrvhyphenfont[#3\ifglsxtrinsertinside[#4]\fi}%
10639 \ifglsxtrinsertinside\else[#4]\fi}%
10640 }%
10641 }

```

abbrvhypenfont

```
10642 \newcommand*\glsabbrvhypenfont{\glsabbrvdefaultfont}%
```

abbrvhypenfont

```
10643 \newcommand*\glsfirstabbrvhypenfont{\glsabbrvhypenfont}%
```

slonghypenfont

```
10644 \newcommand*\glslonghypenfont{\glslongdefaultfont}%
```

tlonghypenfont

```
10645 \newcommand*\glsfirstlonghypenfont{\glslonghypenfont}%
```

The default short form suffix:

xtrhyphensuffix

```
10646 \newcommand*\glsxtrhyphensuffix{\glsxtrabbrvpluralsuffix}
```

en-short-hyphen Designed for use with the markwords attribute.

```
10647 \newabbreviationstyle{long-hyphen-short-hyphen}%
10648 {%
10649   \renewcommand*{\CustomAbbreviationFields}{%
10650     name={\glsxtrlongshortname},
10651     sort={\the\glsshorttok},
10652     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}%
10653       \protect\glsxtrfullsep{\the\glslabeltok}%
10654       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
10655     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}%
10656       \protect\glsxtrfullsep{\the\glslabeltok}%
10657       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}}},%
10658     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10659     description={\protect\glslonghyphenfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
10660   \renewcommand*{\GlsXtrPostNewAbbreviation}%
10661     \glshasattribute{\the\glslabeltok}{regular}%
10662   {%
10663     \glssetattribute{\the\glslabeltok}{regular}{false}%
10664   }%
10665   {}%
10666 }%
10667 }%
10668 {%
10669   \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
10670   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10671   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10672   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
10673   \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
10674   \renewcommand*{\glsxtrfullformat}[2]{%
10675     \glsxtrlonghyphenshort{##1}{\glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
10676   }%
10677   \renewcommand*{\glsxtrfullplformat}[2]{%
10678     \glsxtrlonghyphenshort{##1}{\glsaccesslongpl{##1}}%
10679     {\glsaccessshortpl{##1}}{##2}%
10680   }%
10681   \renewcommand*{\GlsXtrfullformat}[2]{%
10682     \glsxtrlonghyphenshort{##1}{\Glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
10683   }%
10684   \renewcommand*{\GlsXtrfullplformat}[2]{%
10685     \glsxtrlonghyphenshort{##1}{\Glsaccesslongpl{##1}}%
10686     {\glsaccessshortpl{##1}}{##2}%
10687   }%
10688 }
```

ort-hyphen-desc Like long-hyphen-short-hyphen but the description must be supplied by the user.

```
10689 \newabbreviationstyle{long-hyphen-short-hyphen-desc}%
```

```

10690 {%
10691   \renewcommand*{\CustomAbbreviationFields}{%
10692     name={\glsxtrlongshortdescname},
10693     sort={\glsxtrlongshortdescsort},
10694     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}%
10695       \protect\glsxtrfullsep{\the\glslabeltok}%
10696       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
10697     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}%
10698       \protect\glsxtrfullsep{\the\glslabeltok}%
10699       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}}},%
10700     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10701     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10702   }%

```

Unset the regular attribute if it has been set.

```

10703   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10704     \glshasattribute{\the\glslabeltok}{regular}%
10705     {%
10706       \glssetattribute{\the\glslabeltok}{regular}{false}%
10707     }%
10708     {}%
10709   }%
10710 }%
10711 {%
10712   \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%
10713 }

```

`\glsxtrlonghyphennoshort{\<label>}{\<long>}{\<insert>}`

```
10714 \newcommand*{\glsxtrlonghyphennoshort}[3]{%
```

Grouping is needed to localise the redefinitions.

```
10715 {%
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.
```

```

10716   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
10717   \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#3}\fi}%
10718   \ifglsxtrinsertinside\else{#3}\fi
10719 }%
10720 }
```

`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.

```

10721 \newabbreviationstyle{long-hyphen-noshort-desc-noreg}%
10722 {%
10723   \renewcommand*{\CustomAbbreviationFields}{%
10724     name={\glsxtrlongnoshortdescname},
10725     sort={\expandonce\glsxtrorglong},
10726     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10727     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10728     plural={\protect\glslonghyphenfont{\the\glslongpltok}}%
10729   }%

```

Unset the regular attribute if it has been set.

```

10730   \renewcommand*{\GlsXtrPostNewAbbreviation}%
10731     \glshasattribute{\the\glslabeltok}{regular}%
10732   {%
10733     \glssetattribute{\the\glslabeltok}{regular}{false}%
10734   }%
10735   {}%
10736 }%
10737 }%
10738 {%
10739   \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%

```

In case the user wants to mix and match font styles, these are redefined here.

```

10740   \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
10741   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
10742   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
10743   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
10744   \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10745   \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10746     \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
10747   }%
10748   \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
10749     \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
10750   }%
10751   \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10752     \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10753   }%
10754   \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10755     \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10756   }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

10757   \renewcommand*{\glsxtrinlinefullformat}[2]{%
10758     \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
10759     \glsxtrfullsep{##1}%
10760     \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
10761   }%
10762   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10763     \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%

```

```

10764     \glsxtrfullsep{##1}%
10765     \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
10766   }%
10767   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10768     \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10769     \glsxtrfullsep{##1}%
10770     \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
10771   }%
10772   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10773     \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10774     \glsxtrfullsep{##1}%
10775     \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
10776   }%

```

The first use full form only displays the long form.

```

10777   \renewcommand*{\glsxtrfullformat}[2]{%
10778     \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
10779   }%
10780   \renewcommand*{\glsxtrfullplformat}[2]{%
10781     \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
10782   }%
10783   \renewcommand*{\Glsxtrfullformat}[2]{%
10784     \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10785   }%
10786   \renewcommand*{\Glsxtrfullplformat}[2]{%
10787     \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10788   }%
10789 }

```

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.

```

10790 \newabbreviationstyle{long-hyphen-noshort-noreg}%
10791 {%
10792   \renewcommand*{\CustomAbbreviationFields}{%
10793     name={\glsxtrlongnoshortname},
10794     sort={\the\glsshorttok},
10795     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10796     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10797     text={\protect\glslonghyphenfont{\the\glslongtok}},%
10798     plural={\protect\glslonghyphenfont{\the\glslongpltok}},%
10799     description={\the\glslongtok}%
10800   }%

```

Unset the regular attribute if it has been set.

```

10801   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10802     \glshasattribute{\the\glslabeltok}{regular}%
10803     {%
10804       \glssetattribute{\the\glslabeltok}{regular}{false}%
10805     }%

```

```

10806      {}%
10807  }%
10808 }%
10809 {%
10810  \GlsXtrUseAbbrStyleFmts{long-desc}%
10811 }

```

`\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.

```
10812 \newcommand*\glsxtrlonghyphen}[3]{%
```

Grouping is needed to localise the redefinitions.

```

10813  {%
10814  \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
10815  \glsfirstlonghyphenfont{#1}%
10816 }%
10817 }

```

`\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.

```

10818 \newcommand*\glsxtrposthyphenshort}[2]{%
10819  {%
10820  \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
10821  \ifglsxtrinsertinside{\glsfirstlonghyphenfont{#2}}\else{#2}\fi
10822  \glsxtrfullsep{#1}%
10823  \glsxtrparens
10824  {\glsfirstabbrvhyphenfont{\glsentryshort{#1}\ifglsxtrinsertinside{#2}\fi}%
10825  \ifglsxtrinsertinside\else{#2}\fi
10826 }%
10827 }%
10828 }

```

`\glsxtrposthyphensubsequent{\<label>}{\<insert>}`

Format in the post-link hook for subsequent use. The label is ignored by default.

```

10829 \newcommand*\glsxtrposthyphensubsequent}[2]{%
10830  \glsabbrvfont{\ifglsxtrinsertinside {#2}\fi}%

```

```
10831 \ifglsxtrinsertinside \else{#2}\fi  
10832 }
```

`postshort-hyphen` Like `long-hyphen-short-hyphen` but shifts the insert and parenthetical material to the post-link hook.

```
10833 \newabbreviationstyle{long-hyphen-postshort-hyphen}{%  
10834 {  
10835   \renewcommand*{\CustomAbbreviationFields}{%  
10836     name={\glsxtrlongshortname},  
10837     sort={\the\glsshorttok},  
10838     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%  
10839     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%  
10840     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%  
10841     description={\protect\glslonghyphenfont{\the\glslongtok}}}%  
10842   \renewcommand*{\GlsXtrPostNewAbbreviation}{%  
10843     \csdef{glsxtrpostlink\glscategorylabel}{%  
10844       \glsxtrifwasfirstuse  
10845       {  
10846         \glsxtrposthyphenshort{\glslabel}{\glsinsert}}%  
10847       }%  
10848     }%
```

Put the insertion into the post-link:

```
10849   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}}%  
10850   }%  
10851 }%  
10852 \glshasattribute{\the\glslabeltok}{regular}}%  
10853 {  
10854   \glssetattribute{\the\glslabeltok}{regular}{false}}%  
10855 }%  
10856 {}%  
10857 }%  
10858 }%  
10859 {%
```

In case the user wants to mix and match font styles, these are redefined here.

```
10860 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}}%  
10861 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%  
10862 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%  
10863 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%  
10864 \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%
```

Subsequent use needs to omit the insertion:

```
10865 \renewcommand*{\glsxtrsubsequentfmt}[2]{%  
10866   \glsabbrvfont{\glsaccessshort{##1}}}%  
10867 }%  
10868 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%  
10869   \glsabbrvfont{\glsaccessshortpl{##1}}}%  
10870 }%  
10871 \renewcommand*{\GlsXtrsubsequentfmt}[2]{%
```

```

10872     \glsabbrvfont{\Glsaccessshort{##1}}%
10873   }%
10874   \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10875     \glsabbrvfont{\Glsaccessshortpl{##1}}%
10876   }%

```

First use full form:

```

10877   \renewcommand*{\glsxtrfullformat}[2]{%
10878     \glsxtrlonghyphen{\glsaccesslong{##1}{##1}{##2}}%
10879   }%
10880   \renewcommand*{\glsxtrfullplformat}[2]{%
10881     \glsxtrlonghyphen{\glsaccesslongpl{##1}{##1}{##2}}%
10882   }%
10883   \renewcommand*{\Glsxtrfullformat}[2]{%
10884     \glsxtrlonghyphen{\Glsaccesslong{##1}{##1}{##2}}%
10885   }%
10886   \renewcommand*{\Glsxtrfullplformat}[2]{%
10887     \glsxtrlonghyphen{\Glsaccesslongpl{##1}{##1}{##2}}%
10888   }%

```

In-line format.

```

10889   \renewcommand*{\glsxtrinlinefullformat}[2]{%
10890     \glsfirstlonghyphenfont{\glsaccesslong{##1}}%
10891     \ifglsxtrinsertinside{##2}\fi}%
10892     \ifglsxtrinsertinside \else{##2}\fi
10893   }%
10894   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10895     \glsfirstlonghyphenfont{\glsaccesslongpl{##1}}%
10896     \ifglsxtrinsertinside{##2}\fi}%
10897     \ifglsxtrinsertinside \else{##2}\fi
10898   }%
10899   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10900     \glsfirstlonghyphenfont{\Glsaccesslong{##1}}%
10901     \ifglsxtrinsertinside{##2}\fi}%
10902     \ifglsxtrinsertinside \else{##2}\fi
10903   }%
10904   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10905     \glsfirstlonghyphenfont{\Glsaccesslongpl{##1}}%
10906     \ifglsxtrinsertinside{##2}\fi}%
10907     \ifglsxtrinsertinside \else{##2}\fi
10908   }%
10909 }

```

**ort-hyphen-desc** Like long-hyphen-postshort-hyphen but the description must be supplied by the user.

```

10910 \newabbreviationstyle{long-hyphen-postshort-hyphen-desc}{%
10911 }%
10912 \renewcommand*{\CustomAbbreviationFields}{%
10913   name={\glsxtrlongshortdescname},%
10914   sort={\glsxtrlongshortdescsort},%
10915   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%

```

```

10916     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10917     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10918     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}}%
10919 }%
10920 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10921   \csdef{glsxtrpostlink}{\glscategorylabel}{%
10922     \glsxtrifwasfirstuse
10923   }%
10924   \glsxtrposthyphenshort{\glslabel}{\glsinsert}}%
10925 }%
10926 }%

```

Put the insertion into the post-link:

```

10927     \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}}%
10928   }%
10929 }%
10930 \glshasattribute{\the\glslabeltok}{regular}}%
10931 {%
10932   \glssetattribute{\the\glslabeltok}{regular}{false}}%
10933 }%
10934 {}%
10935 }%
10936 }%
10937 {%
10938 \GlsXtrUseAbbrStyleFmts{long-hyphen-postshort-hyphen}}%
10939 }

```

rshorthypenlong \glsxtrshorthypenlong{\langle label \rangle}{\langle short \rangle}{\langle long \rangle}{\langle insert \rangle}

The *⟨long⟩* and *⟨short⟩* arguments may be the plural form. The *⟨long⟩* argument may also be the first letter uppercase form.

```
10940 \newcommand*\glsxtrshorthypenlong[4]{%
```

Grouping is needed to localise the redefinitions.

```
10941 {%
```

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.)

```

10942 \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
10943 \glsfirstabbrvhypenfont{#2\ifglsxtrinsertinside{#4}\fi}%
10944 \ifglsxtrinsertinside\else{#4}\fi
10945 \glsxtrfullsep{#1}%
10946 \glsxtrparen{\glsfirstlonghyphenfont{#3\ifglsxtrinsertinside{#4}\fi}%
10947 \ifglsxtrinsertinside\else{#4}\fi}%
10948 }%
10949 }

```

hen-long-hyphen Designed for use with the markwords attribute.

```
10950 \newabbreviationstyle{short-hyphen-long-hyphen}%
10951 {%
10952   \renewcommand*{\CustomAbbreviationFields}{%
10953     name={\glsxtrshortlongname},
10954     sort={\the\glsshorttok},
10955     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
10956       \protect\glsxtrfullsep{\the\glslabeltok}%
10957       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
10958     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
10959       \protect\glsxtrfullsep{\the\glslabeltok}%
10960       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
10961     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10962     description={\protect\glslonghypenfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
10963 \renewcommand*{\GlsXtrPostNewAbbreviation}%
10964   \glshasattribute{\the\glslabeltok}{regular}%
10965 {%
10966   \glssetattribute{\the\glslabeltok}{regular}{false}%
10967 }%
10968 {}%
10969 }%
10970 }%
10971 {%
10972   \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
10973   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10974   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10975   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10976   \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%
```

The first use full form and the inline full form are the same for this style.

```
10977 \renewcommand*{\glsxtrfullformat}[2]{%
10978   \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\glsaccesslong{##1}}{##2}%
10979 }%
10980 \renewcommand*{\glsxtrfullplformat}[2]{%
10981   \glsxtrshorthypenlong{##1}%
10982   {\glsaccessshortpl{##1}}{\glsaccesslongpl{##1}}{##2}%
10983 }%
10984 \renewcommand*{\GlsXtrfullformat}[2]{%
10985   \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\Glsaccesslong{##1}}{##2}%
10986 }%
10987 \renewcommand*{\GlsXtrfullplformat}[2]{%
10988   \glsxtrshorthypenlong{##1}%
10989   {\glsaccessshortpl{##1}}{\Glsaccesslongpl{##1}}{##2}%
10990 }%
10991 }
```

ong-hyphen-desc Like short-hyphen-long-hyphen but the description must be supplied by the user.

```
10992 \newabbreviationstyle{short-hyphen-long-hyphen-desc}%
```

```

10993 {%
10994   \renewcommand*{\CustomAbbreviationFields}{%
10995     name={\glsxtrshortlongdescname},
10996     sort={\glsxtrshortlongdescsort},
10997     first={\protect\glsfirstabbrvhyphenfont{\the\glsshorttok}%
10998       \protect\glsxtrfullsep{\the\glslabeltok}%
10999       \glsxtrparen{\protect\glsfirstlonghyphenfont{\the\glslongtok}}},%
11000     firstplural={\protect\glsfirstabbrvhyphenfont{\the\glsshortpltok}%
11001       \protect\glsxtrfullsep{\the\glslabeltok}%
11002       \glsxtrparen{\protect\glsfirstlonghyphenfont{\the\glslongpltok}}},%
11003     text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
11004     plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}}%
11005   }%

```

Unset the regular attribute if it has been set.

```

11006   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11007     \glshasattribute{\the\glslabeltok}{regular}%
11008     {%
11009       \glssetattribute{\the\glslabeltok}{regular}{false}%
11010     }%
11011     {}%
11012   }%
11013 }%
11014 {%
11015   \GlsXtrUseAbbrStyleFmts{short-hyphen-long-hyphen}%
11016 }

```

lsxtrshorthyphen **\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.

```
11017 \newcommand*{\glsxtrshorthyphen}[3]{%
```

Grouping is needed to localise the redefinitions.

```

11018 {%
11019   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
11020   \glsfirstabbrvhyphenfont{#1}%
11021 }%
11022 }

```

trposthyphenlong **\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.

```

11023 \newcommand*{\glsxtrposthyphenlong}[2]{%
11024  {%
11025   \glsxtrifyhyphenstart{\#2}{\def\glsxtrwordsep{-}}{}{%
11026     \ifglsxtrinsertinside{\glsfirstabbrvhypenfont{\#2}}\else{\#2}\fi
11027     \glsxtrfullsep{\#1}%
11028     \glsxtrparens{%
11029       {\glsfirstlonghypenfont{\glsentrylong{\#1}}\ifglsxtrinsertinside{\#2}\fi}%
11030       \ifglsxtrinsertinside\else{\#2}\fi
11031     }%
11032   }%
11033 }

```

`postlong-hyphen` Like short-hyphen-long-hyphen but shifts the insert and parenthetical material to the post-link hook.

```

11034 \newabbreviationstyle{short-hyphen-postlong-hyphen}{%
11035 {%
11036   \renewcommand*{\CustomAbbreviationFields}{%
11037     name={\glsxtrshortlongname},
11038     sort={\the\glsshorttok},
11039     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
11040     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
11041     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
11042     description={\protect\glslonghypenfont{\the\glslongtok}}}%
11043 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11044   \csdef{glsxtrpostlink\glscategorylabel}{%
11045     \glsxtrifywasfirstuse
11046   }%
11047   \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
11048 }%
11049 }%

```

Put the insertion into the post-link:

```

11050   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11051   }%
11052 }%
11053 \glshasattribute{\the\glslabeltok}{regular}%
11054 {%
11055   \glssetattribute{\the\glslabeltok}{regular}{false}%
11056 }%
11057 {%
11058 }%
11059 }%
11060 }%

```

In case the user wants to mix and match font styles, these are redefined here.

```

11061 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
11062 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{\##1}}%
11063 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{\##1}}%
11064 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{\##1}}%
11065 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{\##1}}%

```

Subsequent use needs to omit the insertion:

```
11066 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
11067   \glsabbrvfont{\glsaccessshort{##1}}%
11068 }%
11069 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
11070   \glsabbrvfont{\glsaccessshortpl{##1}}%
11071 }%
11072 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
11073   \glsabbrvfont{\Glsaccessshort{##1}}%
11074 }%
11075 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
11076   \glsabbrvfont{\Glsaccessshortpl{##1}}%
11077 }%
```

First use full form:

```
11078 \renewcommand*{\glsxtrfullformat}[2]{%
11079   \glsxtrshorthyphen{\glsaccessshort{##1}}{##1}{##2}%
11080 }%
11081 \renewcommand*{\glsxtrfullplformat}[2]{%
11082   \glsxtrshorthyphen{\glsaccessshortpl{##1}}{##1}{##2}%
11083 }%
11084 \renewcommand*{\Glsxtrfullformat}[2]{%
11085   \glsxtrshorthyphen{\Glsaccessshort{##1}}{##1}{##2}%
11086 }%
11087 \renewcommand*{\Glsxtrfullplformat}[2]{%
11088   \glsxtrshorthyphen{\Glsaccessshortpl{##1}}{##1}{##2}%
11089 }%
```

In-line format. Commands like `\glsxtrfull` set `\glsinsert` to empty. The entire link-text (provided by the following commands) is stored in `\glscustomtext`.

```
11090 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11091   \glsfirstabbrvhypenfont{\glsaccessshort{##1}}%
11092   \ifglsxtrinsertinside{##2}\fi}%
11093 \ifglsxtrinsertinside \else{##2}\fi
11094 }%
11095 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11096   \glsfirstabbrvhypenfont{\glsaccessshortpl{##1}}%
11097   \ifglsxtrinsertinside{##2}\fi}%
11098 \ifglsxtrinsertinside \else{##2}\fi
11099 }%
11100 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11101   \glsfirstabbrvhypenfont{\Glsaccessshort{##1}}%
11102   \ifglsxtrinsertinside{##2}\fi}%
11103 \ifglsxtrinsertinside \else{##2}\fi
11104 }%
11105 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11106   \glsfirstabbrvhypenfont{\Glsaccessshortpl{##1}}%
11107   \ifglsxtrinsertinside{##2}\fi}%
11108 \ifglsxtrinsertinside \else{##2}\fi
11109 }%
```

```
11110 }
```

ong-hyphen-desc Like short-hyphen-postlong-hyphen but the description must be supplied by the user.

```
11111 \newabbreviationstyle{short-hyphen-postlong-hyphen-desc}%
11112 {%
11113   \renewcommand*{\CustomAbbreviationFields}{%
11114     name={\glsxtrshortlongdescname},
11115     sort={\glsxtrshortlongdescsort},%
11116     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
11117     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
11118     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
11119     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
11120 }%
11121 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
11122   \csdef{glsxtrpostlink}{\glscategorylabel}%
11123   \glsxtrifwasfirstuse
11124   {%
11125     \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
11126   }%
11127 }
```

Put the insertion into the post-link:

```
11128   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
11129 }%
11130 }%
11131 \glshasattribute{\the\glslabeltok}{regular}%
11132 {%
11133   \glssetattribute{\the\glslabeltok}{regular}{false}%
11134 }%
11135 {}%
11136 }%
11137 }%
11138 {%
11139 \GlsXtrUseAbbrStyleFmts{short-hyphen-postlong-hyphen}%
11140 }
```

### 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

```
11141 \newcommand*{\glsabbrvonlyfont}{\glsabbrvdefaultfont}%
```

stabbrvonlyfont

```
11142 \newcommand*{\glsfirstabbrvonlyfont}{\glsabbrvonlyfont}%
```

glslongonlyfont

```
11143 \newcommand*{\glslongonlyfont}{\glslongdefaultfont}%
```

```
rstlongonlyfont
11144 \newcommand*\glsfirstlongonlyfont{\glslongonlyfont}%
```

The default short form suffix:

```
lsxtronlysuffix
11145 \newcommand*\glsxtronlysuffix{\glsxtrabbrvpluralsuffix}
```

\glsxtronlyname The default name format for this style.

```
11146 \newcommand*\glsxtronlyname{%
11147   \protect\glsabbrvonlyfont{\the\glsshorttok}%
11148 }
```

only-short-only

```
11149 \newabbreviationstyle{long-only-short-only}{%
11150 {%
11151   \renewcommand*\CustomAbbreviationFields{%
11152     name={\glsxtronlyname},
11153     sort={\the\glsshorttok},
11154     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
11155     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
11156     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}},%
11157     description={\protect\glslongonlyfont{\the\glslongtok}}}%
11158 }
```

Unset the regular attribute if it has been set.

```
11159   \glshasattribute{\the\glslabeltok}{regular}%
11160   {%
11161     \glssetattribute{\the\glslabeltok}{regular}{false}%
11162   }%
11163   {}%
11164 }%
11165 }%
11166 {%
11167   \renewcommand*\abbrvpluralsuffix{\protect\glsxtronlysuffix}%
11168   \renewcommand*\glsabbrvfont[1]{\glsabbrvonlyfont{\#1}}%
11169   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvonlyfont{\#1}}%
11170   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongonlyfont{\#1}}%
11171   \renewcommand*\glslongfont[1]{\glslongonlyfont{\#1}}%
```

The first use full form doesn't show the short form.

```
11172   \renewcommand*\glsxtrfullformat[2]{%
11173     \glsfirstlongonlyfont{\glsaccesslong{\#1}\ifglsxtrinsertinside##2\fi}%
11174     \ifglsxtrinsertinside\else##2\fi
11175   }%
11176   \renewcommand*\glsxtrfullplformat[2]{%
11177     \glsfirstlongonlyfont{\glsaccesslongpl{\#1}\ifglsxtrinsertinside##2\fi}%
11178     \ifglsxtrinsertinside\else##2\fi
11179   }%
11180   \renewcommand*\Glsxtrfullformat[2]{%
```

```

11181   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11182   \ifglsxtrinsertinside\else##2\fi
11183 }%
11184 \renewcommand*{\Glsxtrfullplformat}[2]{%
11185   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11186   \ifglsxtrinsertinside\else##2\fi
11187 }%

```

The inline full form does show the short form.

```

11188 \renewcommand*{\glsxtrinlinefullformat}[2]{%
11189   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11190   \ifglsxtrinsertinside\else##2\fi
11191   \glsxtrfullsep{##1}%
11192   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshort{##1}}}%
11193 }%
11194 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
11195   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11196   \ifglsxtrinsertinside\else##2\fi
11197   \glsxtrfullsep{##1}%
11198   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
11199 }%
11200 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
11201   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
11202   \ifglsxtrinsertinside\else##2\fi
11203   \glsxtrfullsep{##1}%
11204   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
11205 }%
11206 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
11207   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
11208   \ifglsxtrinsertinside\else##2\fi
11209   \glsxtrfullsep{##1}%
11210   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\Glsaccessshortpl{##1}}}%
11211 }%
11212 }

```

#### xtronlydescsort

```
11213 \newcommand*{\glsxtronlydescsort}{\the\glslongtok}
```

#### xtronlydescname

```

11214 \newcommand*{\glsxtronlydescname}{%
11215   \protect\glslongfont{\the\glslongtok}%
11216 }

```

#### short-only-desc

```

11217 \newabbreviationstyle{long-only-short-only-desc}%
11218 {%
11219   \renewcommand*{\CustomAbbreviationFields}{%
11220     name={\glsxtronlydescname},
11221     sort={\glsxtronlydescsort},%

```

```

11222     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
11223     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
11224     text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
11225     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}}%
11226 }%

```

Unset the regular attribute if it has been set.

```

11227 \renewcommand*\GlsXtrPostNewAbbreviation{%
11228   \glshasattribute{\the\glslabeltok}{regular}%
11229   {%
11230     \glssetattribute{\the\glslabeltok}{regular}{false}%
11231   }%
11232   {}%
11233 }%
11234 }%
11235 {%
11236 \GlsXtrUseAbbrStyleFmts{long-only-short-only}%
11237 }%

```

## 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:

```
11238 \let\@glsxtr@org@markright\markright
```

Redefine (grouping not added in case it interferes with the original code):

```
11239 \renewcommand*{\markright}[1]{%
11240   \glsxtrmarkhook
11241   @glsxtr@org@markright{\glsxtrinmark#1\glsxtrnotinmark}%
11242   \glsxtrrestoremarkhook
11243 }
```

\markboth Save original definition:

```
11244 \let@glsxtr@org@markboth\markboth
```

Redefine (grouping not added in case it interferes with the original code):

```
11245 \renewcommand*{\markboth}[2]{%
11246   \glsxtrmarkhook
11247   @glsxtr@org@markboth
11248   {\glsxtrinmark#1\glsxtrnotinmark}%
11249   {\glsxtrinmark#2\glsxtrnotinmark}%
11250   \glsxtrrestoremarkhook
11251 }
```

Also do this for \@starttoc

\@starttoc Save original definition:

```
11252 \let@glsxtr@org@starttoc\@starttoc
```

Redefine:

```
11253 \renewcommand*{\@starttoc}[1]{%
11254   \glsxtrmarkhook
11255   @glsxtrinmark
11256   @glsxtr@org@starttoc{#1}%
11257   @glsxtrnotinmark
11258   \glsxtrrestoremarkhook
11259 }
```

If this causes a problem provide a simple way of switching back to the original definitions:

sxtrRevertMarks

```
11260 \newcommand*{\glsxtrRevertMarks}{%
11261   \let\markright\glsxtr@org@markright
11262   \let\markboth\glsxtr@org@markboth
11263   \let@starttoc\glsxtr@org@starttoc
11264 }
```

rRevertTocMarks Just restores \@starttoc.

```
11265 \newcommand*{\glsxtrRevertTocMarks}{%
11266   \let@starttoc\glsxtr@org@starttoc
11267 }
```

\glsxtrifinmark

```
11268 \newcommand*{\glsxtrifinmark}[2]{#2}
```

```

@glsxtrinmark
11269 \newrobustcmd*{\glsxtrinmark}{%
11270   \let\glsxtrifinmark\@firstoftwo
11271 }

glsxtrnotinmark
11272 \newrobustcmd*{\glsxtrnotinmark}{%
11273   \let\glsxtrifinmark\@secondoftwo
11274 }

eorpdfforheading
11275 \ifdef\texorpdfstring
11276 {
11277   \newcommand*{\glsxtrtitleorpdfforheading}[3]{\texorpdfstring{#1}{#2}}
11278 }
11279 {
11280   \newcommand*{\glsxtrtitleorpdfforheading}[3]{#1}
11281 }

\glsxtrmarkhook Hook used in new definition of \markboth and \markright to make some changes to apply
to the marks:
11282 \newcommand*{\glsxtrmarkhook}{%}

  Save current definitions:
11283 \let\glsxtr@org@MakeUppercase\MakeUppercase
11284 \let\glsxtr@org@glsxtrtitleorpdfforheading\glsxtrtitleorpdfforheading
11285 \let\glsxtr@org@glsxtrtitleshort\glsxtrtitleshort
11286 \let\glsxtr@org@glsxtrtitleshortpl\glsxtrtitleshortpl
11287 \let\glsxtr@org@Glsxtrtitleshort\Glsxtrtitleshort
11288 \let\glsxtr@org@Glsxtrtitleshortpl\Glsxtrtitleshortpl
11289 \let\glsxtr@org@glsxtrtitlename\glsxtrtitlename
11290 \let\glsxtr@org@Glsxtrtitlename\Glsxtrtitlename
11291 \let\glsxtr@org@glsxtrtitletext\glsxtrtitletext
11292 \let\glsxtr@org@Glsxtrtitletext\Glsxtrtitletext
11293 \let\glsxtr@org@glsxtrtitleplural\glsxtrtitleplural
11294 \let\glsxtr@org@Glsxtrtitleplural\Glsxtrtitleplural
11295 \let\glsxtr@org@glsxtrtitlefirst\glsxtrtitlefirst
11296 \let\glsxtr@org@Glsxtrtitlefirst\Glsxtrtitlefirst
11297 \let\glsxtr@org@glsxtrtitlefirstplural\glsxtrtitlefirstplural
11298 \let\glsxtr@org@Glsxtrtitlefirstplural\Glsxtrtitlefirstplural
11299 \let\glsxtr@org@glsxtrtitlelong\glsxtrtitlelong
11300 \let\glsxtr@org@glsxtrtitlelongpl\glsxtrtitlelongpl
11301 \let\glsxtr@org@Glsxtrtitlelong\Glsxtrtitlelong
11302 \let\glsxtr@org@Glsxtrtitlelongpl\Glsxtrtitlelongpl
11303 \let\glsxtr@org@glsxtrtitlefull\glsxtrtitlefull
11304 \let\glsxtr@org@glsxtrtitlefullpl\glsxtrtitlefullpl
11305 \let\glsxtr@org@Glsxtrtitlefull\Glsxtrtitlefull
11306 \let\glsxtr@org@Glsxtrtitlefullpl\Glsxtrtitlefullpl

```

## New definitions

```

11307 \let\glsxtrifinmark\@firstoftwo
11308 \let\MakeUppercase\MakeTextUppercase
11309 \let\glsxtrtitleorpdforheading\@thirdofthree
11310 \let\glsxtrtitleshort\glsxtrheadshort
11311 \let\glsxtrtitleshortpl\glsxtrheadshortpl
11312 \let\Glsxtrtitleshort\Glsxtrheadshort
11313 \let\Glsxtrtitleshortpl\Glsxtrheadshortpl
11314 \let\glsxtrtitlename\glsxtrheadname
11315 \let\Glsxtrtitlename\Glsxtrheadname
11316 \let\glsxtrtitletext\glsxtrheadtext
11317 \let\Glsxtrtitletext\Glsxtrheadtext
11318 \let\glsxtrtitleplural\glsxtrheadplural
11319 \let\Glsxtrtitleplural\Glsxtrheadplural
11320 \let\glsxtrtitlefirst\glsxtrheadfirst
11321 \let\Glsxtrtitlefirst\Glsxtrheadfirst
11322 \let\glsxtrtitlefirstplural\glsxtrheadfirstplural
11323 \let\Glsxtrtitlefirstplural\Glsxtrheadfirstplural
11324 \let\glsxtrtitlelong\glsxtrheadlong
11325 \let\glsxtrtitlelongpl\glsxtrheadlongpl
11326 \let\Glsxtrtitlelong\Glsxtrheadlong
11327 \let\Glsxtrtitlelongpl\Glsxtrheadlongpl
11328 \let\glsxtrtitlefull\glsxtrheadfull
11329 \let\glsxtrtitlefullpl\glsxtrheadfullpl
11330 \let\Glsxtrtitlefull\Glsxtrheadfull
11331 \let\Glsxtrtitlefullpl\Glsxtrheadfullpl
11332 }

```

`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.)

```

11333 \newcommand*{\glsxtrrestoremarkhook}{%
11334 \let\glsxtrifinmark\@secondoftwo
11335 \let\MakeUppercase\@glsxtr@org@MakeUppercase
11336 \let\glsxtrtitleorpdforheading\@glsxtr@org@glsxtrtitleorpdforheading
11337 \let\glsxtrtitleshort\@glsxtr@org@glsxtrtitleshort
11338 \let\glsxtrtitleshortpl\@glsxtr@org@glsxtrtitleshortpl
11339 \let\Glsxtrtitleshort\@glsxtr@org@Glsxtrtitleshort
11340 \let\Glsxtrtitleshortpl\@glsxtr@org@Glsxtrtitleshortpl
11341 \let\glsxtrtitlename\@glsxtr@org@glsxtrtitlename
11342 \let\Glsxtrtitlename\@glsxtr@org@Glsxtrtitlename
11343 \let\glsxtrtitletext\@glsxtr@org@glsxtrtitletext
11344 \let\Glsxtrtitletext\@glsxtr@org@Glsxtrtitletext
11345 \let\glsxtrtitleplural\@glsxtr@org@glsxtrtitleplural
11346 \let\Glsxtrtitleplural\@glsxtr@org@Glsxtrtitleplural
11347 \let\glsxtrtitlefirst\@glsxtr@org@glsxtrtitlefirst
11348 \let\Glsxtrtitlefirst\@glsxtr@org@Glsxtrtitlefirst
11349 \let\glsxtrtitlefirstplural\@glsxtr@org@glsxtrtitlefirstplural

```

```

11350 \let\Glsxtrtitlefirstplural@\glsxtr@org@Glsxtrtitlefirstplural
11351 \let\glsxtrtitlelong@\glsxtr@org@glsxtrtitlelong
11352 \let\glsxtrtitlelongpl@\glsxtr@org@glsxtrtitlelongpl
11353 \let\Glsxtrtitlelong@\glsxtr@org@Glsxtrtitlelong
11354 \let\Glsxtrtitlelongpl@\glsxtr@org@Glsxtrtitlelongpl
11355 \let\glsxtrtitlefull@\glsxtr@org@glsxtrtitlefull
11356 \let\glsxtrtitlefullpl@\glsxtr@org@glsxtrtitlefullpl
11357 \let\Glsxtrtitlefull@\glsxtr@org@Glsxtrtitlefull
11358 \let\Glsxtrtitlefullpl@\glsxtr@org@Glsxtrtitlefullpl
11359 }

```

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.

```

11360 \newcommand*\glsxtrheadshort}[1]{%
11361 \protect\NoCaseChange
11362 {%
11363 \glsifattribute{#1}{headuc}{true}%
11364 {%
11365 \GLSxtrshort [noindex,hyper=false]{#1}[]%
11366 }%
11367 {%
11368 \glsxtrshort [noindex,hyper=false]{#1}[]%
11369 }%
11370 }%
11371 }

```

`lsxtrtitleshort` Command to display short form of abbreviation in section title and table of contents.

```

11372 \newrobustcmd*\glsxtrtitleshort}[1]{%
11373 \glsxtrshort [noindex,hyper=false]{#1}[]%
11374 }

```

`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.

```

11375 \newcommand*\glsxtrheadshortpl}[1]{%
11376 \protect\NoCaseChange
11377 {%
11378 \glsifattribute{#1}{headuc}{true}%
11379 {%
11380 \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
11381 }%
11382 {%
11383 \glsxtrshortpl [noindex,hyper=false]{#1}[]%
11384 }%
11385 }%
11386 }

```

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents.

```
11387 \newrobustcmd*\{\glsxtrtitleshortpl\}[1]{%
11388   \glsxtrshortpl[noindex,hyper=false]{#1}[]%
11389 }
```

Glsxtrheadshort Command used to display short form in the page header with the first letter converted to upper case.

```
11390 \newcommand*\{\Glsxtrheadshort\}[1]{%
11391   \protect\NoCaseChange
11392   {%
11393     \glsifattribute{#1}{headuc}{true}%
11394     {%
11395       \GLSxtrshort[noindex,hyper=false]{#1}[]%
11396     }%
11397     {%
11398       \Glsxtrshort[noindex,hyper=false]{#1}[]%
11399     }%
11400   }%
11401 }
```

lsxtrtitleshort Command to display short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
11402 \newrobustcmd*\{\Glsxtrtitleshort\}[1]{%
11403   \Glsxtrshort[noindex,hyper=false]{#1}[]%
11404 }
```

sxtrheadshortpl Command used to display plural short form in the page header with the first letter converted to upper case.

```
11405 \newcommand*\{\Glsxtrheadshortpl\}[1]{%
11406   \protect\NoCaseChange
11407   {%
11408     \glsifattribute{#1}{headuc}{true}%
11409     {%
11410       \GLSxtrshortpl[noindex,hyper=false]{#1}[]%
11411     }%
11412     {%
11413       \Glsxtrshortpl[noindex,hyper=false]{#1}[]%
11414     }%
11415   }%
11416 }
```

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
11417 \newrobustcmd*\{\Glsxtrtitleshortpl\}[1]{%
11418   \Glsxtrshortpl[noindex,hyper=false]{#1}[]%
11419 }
```

\glsxtrheadname As above but for the name value.

```

11420 \newcommand*{\glsxtrheadname}[1]{%
11421   \protect\NoCaseChange
11422   {%
11423     \glsifattribute{#1}{headuc}{true}{%
11424       {%
11425         \GLSname[noindex,hyper=false]{#1}[]%
11426       }%
11427     {%
11428       \glsname[noindex,hyper=false]{#1}[]%
11429     }%
11430   }%
11431 }

```

`\glsxtrtitlename` Command to display name value in section title and table of contents.

```

11432 \newrobustcmd*{\glsxtrtitlename}[1]{%
11433   \glsname[noindex,hyper=false]{#1}[]%
11434 }

```

`\Glsxtrheadname` First letter converted to upper case

```

11435 \newcommand*{\Glsxtrheadname}[1]{%
11436   \protect\NoCaseChange
11437   {%
11438     \glsifattribute{#1}{headuc}{true}{%
11439       {%
11440         \GLSname[noindex,hyper=false]{#1}[]%
11441       }%
11442     {%
11443       \Glsname[noindex,hyper=false]{#1}[]%
11444     }%
11445   }%
11446 }

```

`\Glsxtrtitlename` Command to display name value in section title and table of contents with the first letter changed to upper case.

```

11447 \%changes{1.21}{2017-11-03}{new}
11448 \newrobustcmd*{\Glsxtrtitlename}[1]{%
11449   \Glsname[noindex,hyper=false]{#1}[]%
11450 }

```

`\glsxtrheadtext` As above but for the text value.

```

11451 \newcommand*{\glsxtrheadtext}[1]{%
11452   \protect\NoCaseChange
11453   {%
11454     \glsifattribute{#1}{headuc}{true}{%
11455       {%
11456         \GLStext[noindex,hyper=false]{#1}[]%
11457       }%
11458     {%
11459       \glstext[noindex,hyper=false]{#1}[]%

```

```
11460    }%
11461  }%
11462 }
```

`glsxtrtitletext` Command to display text value in section title and table of contents.

```
11463 \newrobustcmd*\{\glsxtrtitletext\}[1]{%
11464   \glstext[noindex,hyper=false]{#1}[]%
11465 }
```

`\Glsxtrheadtext` First letter converted to upper case

```
11466 \newcommand*\{\Glsxtrheadtext\}[1]{%
11467   \protect\NoCaseChange
11468 {%
11469   \glsifattribute{#1}{headuc}{true}%
11470   {%
11471     \GLStext[noindex,hyper=false]{#1}[]%
11472   }%
11473   {%
11474     \Glstext[noindex,hyper=false]{#1}[]%
11475   }%
11476 }%
11477 }
```

`Glsxtrtitletext` Command to display text value in section title and table of contents with the first letter changed to upper case.

```
11478 \newrobustcmd*\{\Glsxtrtitletext\}[1]{%
11479   \Glstext[noindex,hyper=false]{#1}[]%
11480 }
```

`lsxtrheadplural` As above but for the plural value.

```
11481 \newcommand*\{\glsxtrheadplural\}[1]{%
11482   \protect\NoCaseChange
11483 {%
11484   \glsifattribute{#1}{headuc}{true}%
11485   {%
11486     \GLSplural[noindex,hyper=false]{#1}[]%
11487   }%
11488   {%
11489     \glsplural[noindex,hyper=false]{#1}[]%
11490   }%
11491 }%
11492 }
```

`sxtrtitleplural` Command to display plural value in section title and table of contents.

```
11493 \newrobustcmd*\{\glsxtrtitleplural\}[1]{%
11494   \glsplural[noindex,hyper=false]{#1}[]%
11495 }
```

```

lsxtrheadplural Convert first letter to upper case.
11496 \newcommand*\Glsxtrheadplural[1]{%
11497   \protect\NoCaseChange
11498   {%
11499     \glsifattribute{#1}{headuc}{true}{%
11500       \GLSplural[noindex,hyper=false]{#1}[]%
11501     }%
11502   }%
11503   {%
11504     \Glsplural[noindex,hyper=false]{#1}[]%
11505   }%
11506 }%
11507 }

sxttitleplural Command to display plural value in section title and table of contents with the first letter
changed to upper case.
11508 \newrobustcmd*\Gsxtrtitleplural[1]{%
11509   \Glsplural[noindex,hyper=false]{#1}[]%
11510 }

glsxtrheadfirst As above but for the first value.
11511 \newcommand*\glsxtrheadfirst[1]{%
11512   \protect\NoCaseChange
11513   {%
11514     \glsifattribute{#1}{headuc}{true}{%
11515       \GLSfirst[noindex,hyper=false]{#1}[]%
11516     }%
11517   }%
11518   {%
11519     \glsfirst[noindex,hyper=false]{#1}[]%
11520   }%
11521 }%
11522 }

sxttitlefirst Command to display first value in section title and table of contents.
11523 \newrobustcmd*\glsxtrtitlefirst[1]{%
11524   \glsfirst[noindex,hyper=false]{#1}[]%
11525 }

Glsxtrheadfirst First letter converted to upper case
11526 \newcommand*\Glsxtrheadfirst[1]{%
11527   \protect\NoCaseChange
11528   {%
11529     \glsifattribute{#1}{headuc}{true}{%
11530       \GLSfirst[noindex,hyper=false]{#1}[]%
11531     }%
11532   }%
11533   {%

```

```
11534     \Glsfirst [noindex,hyper=false]{#1}[]%
11535   }%
11536 }%
11537 }
```

`lsxtrtitlefirst` Command to display `first` value in section title and table of contents with the first letter changed to upper case.

```
11538 \newrobustcmd*\{\Glsxtrtitlefirst\}[1]{%
11539   \Glsfirst [noindex,hyper=false]{#1}[]%
11540 }
```

`headfirstplural` As above but for the `firstplural` value.

```
11541 \newcommand*\{\glsxtrheadfirstplural\}[1]{%
11542   \protect\NoCaseChange
11543 }%
11544   \glsifattribute{#1}{headuc}{true}%
11545 }%
11546   \GLSfirstplural [noindex,hyper=false]{#1}[]%
11547 }%
11548 }%
11549   \glsfirstplural [noindex,hyper=false]{#1}[]%
11550 }%
11551 }%
11552 }
```

`titlefirstplural` Command to display `firstplural` value in section title and table of contents.

```
11553 \newrobustcmd*\{\glsxtrtitlefirstplural\}[1]{%
11554   \glsfirstplural [noindex,hyper=false]{#1}[]%
11555 }
```

`headfirstplural` First letter converted to upper case

```
11556 \newcommand*\{\Glsxtrheadfirstplural\}[1]{%
11557   \protect\NoCaseChange
11558 }%
11559   \glsifattribute{#1}{headuc}{true}%
11560 }%
11561   \GLSfirstplural [noindex,hyper=false]{#1}[]%
11562 }%
11563 }%
11564   \Glsfirstplural [noindex,hyper=false]{#1}[]%
11565 }%
11566 }%
11567 }
```

`titlefirstplural` Command to display `first` value in section title and table of contents with the first letter changed to upper case.

```
11568 \newrobustcmd*\{\Glsxtrtitlefirstplural\}[1]{%
11569   \Glsfirstplural [noindex,hyper=false]{#1}[]%
11570 }
```

\glsxtrheadlong Command used to display long form in the page header.

```
11571 \newcommand*\glsxtrheadlong[1]{%
11572   \protect\NoCaseChange
11573 {%
11574   \glsifattribute{#1}{headuc}{true}%
11575   {%
11576     \GLSxtrlong[noindex,hyper=false]{#1}[]%
11577   }%
11578   {%
11579     \glsxtrlong[noindex,hyper=false]{#1}[]%
11580   }%
11581 }%
11582 }
```

\glsxtrtitlelong Command to display long form of abbreviation in section title and table of contents.

```
11583 \newrobustcmd*\glsxtrtitlelong[1]{%
11584   \glsxtrlong[noindex,hyper=false]{#1}[]%
11585 }
```

\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.

```
11586 \newcommand*\glsxtrheadlongpl[1]{%
11587   \protect\NoCaseChange
11588 {%
11589   \glsifattribute{#1}{headuc}{true}%
11590   {%
11591     \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
11592   }%
11593   {%
11594     \glsxtrlongpl[noindex,hyper=false]{#1}[]%
11595   }%
11596 }%
11597 }
```

\sxtrtitlelongpl Command to display plural long form of abbreviation in section title and table of contents.

```
11598 \newrobustcmd*\glsxtrtitlelongpl[1]{%
11599   \glsxtrlongpl[noindex,hyper=false]{#1}[]%
11600 }
```

\Glsxtrheadlong Command used to display long form in the page header with the first letter converted to upper case.

```
11601 \newcommand*\Glsxtrheadlong[1]{%
11602   \protect\NoCaseChange
11603 {%
11604   \glsifattribute{#1}{headuc}{true}%
11605   {%
11606     \GLSxtrlong[noindex,hyper=false]{#1}[]%
```

```

11607   }%
11608   {%
11609     \Glsxtrlong[noindex,hyper=false]{#1}[]%
11610   }%
11611 }%
11612 }

```

`Glsxtrtitlelong` Command to display long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

11613 \newrobustcmd*\{\Glsxtrtitlelong\}[1]{%
11614   \Glsxtrlong[noindex,hyper=false]{#1}[]%
11615 }

```

`Glsxtrheadlongpl` Command used to display plural long form in the page header with the first letter converted to upper case.

```

11616 \newcommand*\{\Glsxtrheadlongpl\}[1]{%
11617   \protect\NoCaseChange
11618   {%
11619     \glsifattribute{#1}{headuc}{true}%
11620   }%
11621     \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
11622   }%
11623   {%
11624     \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
11625   }%
11626 }%
11627 }

```

`Glsxtrtitlelongpl` Command to display plural long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

11628 \newrobustcmd*\{\Glsxtrtitlelongpl\}[1]{%
11629   \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
11630 }

```

`\glsxtrheadfull` Command used to display full form in the page header.

```

11631 \newcommand*\{\glsxtrheadfull\}[1]{%
11632   \protect\NoCaseChange
11633   {%
11634     \glsifattribute{#1}{headuc}{true}%
11635   }%
11636     \GLSxtrfull[noindex,hyper=false]{#1}[]%
11637   }%
11638   {%
11639     \glsxtrfull[noindex,hyper=false]{#1}[]%
11640   }%
11641 }%
11642 }

```

`glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents.

```
11643 \newrobustcmd*\{glsxtrtitlefull\}[1]{%
11644   \glsxtrfull[noindex,hyper=false]{#1}[]%
11645 }
```

`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.

```
11646 \newcommand*\{glsxtrheadfullpl\}[1]{%
11647   \protect\NoCaseChange
11648   {%
11649     \glsifattribute{#1}{headuc}{true}%
11650     {%
11651       \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
11652     }%
11653     {%
11654       \glsxtrfullpl[noindex,hyper=false]{#1}[]%
11655     }%
11656   }%
11657 }
```

`sxttitlefullpl` Command to display plural full form of abbreviation in section title and table of contents.

```
11658 \newrobustcmd*\{glsxtrtitlefullpl\}[1]{%
11659   \glsxtrfullpl[noindex,hyper=false]{#1}[]%
11660 }
```

`\Glsxtrheadfull` Command used to display full form in the page header with the first letter converted to upper case.

```
11661 \newcommand*\{\Glsxtrheadfull\}[1]{%
11662   \protect\NoCaseChange
11663   {%
11664     \glsifattribute{#1}{headuc}{true}%
11665     {%
11666       \GLSxtrfull[noindex,hyper=false]{#1}[]%
11667     }%
11668     {%
11669       \Glsxtrfull[noindex,hyper=false]{#1}[]%
11670     }%
11671   }%
11672 }
```

`Glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
11673 \newrobustcmd*\{\Glsxtrtitlefull\}[1]{%
11674   \Glsxtrfull[noindex,hyper=false]{#1}[]%
11675 }
```

`\lsxtrheadfullpl` Command used to display plural full form in the page header with the first letter converted to upper case.

```
11676 \newcommand*{\Glsxtrheadfullpl}[1]{%
11677   \protect\NoCaseChange
11678   {%
11679     \glsifattribute{#1}{headuc}{true}{%
11680       \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
11681     }%
11682   {%
11683     \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
11684   }%
11685 }%
11686 }%
11687 }
```

`\sxttitlefullpl` Command to display plural full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
11688 \newrobustcmd*{\Glsxttitlefullpl}[1]{%
11689   \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
11690 }
```

`\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.

```
11691 \ifdef\texorpdfstring
11692 {
11693   \newcommand*{\glsfmtshort}[1]{%
11694     \texorpdfstring
11695     {\glsxttitleshort{#1}}%
11696     {\glsentryshort{#1}}%
11697   }
11698 }
11699 {
11700   \newcommand*{\glsfmtshort}[1]{%
11701     \glsxttitleshort{#1}%
11702 }
```

Similarly for the plural version.

```
\glsfmtshortpl
11703 \ifdef\texorpdfstring
11704 {
11705   \newcommand*{\glsfmtshortpl}[1]{%
11706     \texorpdfstring
11707     {\glsxttitleshortpl{#1}}%
11708     {\glsentryshortpl{#1}}%
11709   }
11710 }
11711 {
11712   \newcommand*{\glsfmtshortpl}[1]{%
```

```
11713     \glsxtrtitleshortpl{#1}%
11714 }
```

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).

```
11715 \ifdef\textorpdfstring
11716 {
11717     \newcommand*\{\Glsfmtshort}{[1]{%
11718         \textorpdfstring
11719             {\glsxtrtitleshort{#1}}%
11720             {\glsentryshort{#1}}%
11721     }
11722 }
11723 {
11724     \newcommand*\{\Glsfmtshort}{[1]{%
11725         \glsxtrtitleshort{#1}}
11726 }
```

\Glsfmtshortpl Plural form (first letter uppercase).

```
11727 \ifdef\textorpdfstring
11728 {
11729     \newcommand*\{\Glsfmtshortpl}{[1]{%
11730         \textorpdfstring
11731             {\glsxtrtitleshortpl{#1}}%
11732             {\glsentryshortpl{#1}}%
11733     }
11734 }
11735 {
11736     \newcommand*\{\Glsfmtshortpl}{[1]{%
11737         \glsxtrtitleshortpl{#1}}
11738 }
```

\glsfmtname As above but for the name value.

```
11739 \ifdef\textorpdfstring
11740 {
11741     \newcommand*\{\glsfmtname}{[1]{%
11742         \textorpdfstring
11743             {\glsxtrtitlename{#1}}%
11744             {\glsentryname{#1}}%
11745     }
11746 }
11747 {
11748     \newcommand*\{\glsfmtname}{[1]{%
11749         \glsxtrtitlename{#1}}
11750 }
```

\Glsfmtname First letter converted to upper case.

```

11751 \ifdef\textorpdfstring
11752 {
11753   \newcommand*{\Glsfmtname}[1]{%
11754     \textorpdfstring
11755     {\Glsxtrtitlename{#1}}%
11756     {\glsentryname{#1}}%
11757   }
11758 }
11759 {
11760   \newcommand*{\Glsfmtname}[1]{%
11761     \Glsxtrtitlename{#1}%
11762 }

```

\glsfmttext As above but for the text value.

```

11763 \ifdef\textorpdfstring
11764 {
11765   \newcommand*{\glsfmttext}[1]{%
11766     \textorpdfstring
11767     {\glsxtrtitletext{#1}}%
11768     {\glsentrytext{#1}}%
11769   }
11770 }
11771 {
11772   \newcommand*{\glsfmttext}[1]{%
11773     \glsxtrtitletext{#1}%
11774 }

```

\Glsfmttext First letter converted to upper case.

```

11775 \ifdef\textorpdfstring
11776 {
11777   \newcommand*{\Glsfmttext}[1]{%
11778     \textorpdfstring
11779     {\Glsxtrtitletext{#1}}%
11780     {\glsentrytext{#1}}%
11781   }
11782 }
11783 {
11784   \newcommand*{\Glsfmttext}[1]{%
11785     \Glsxtrtitletext{#1}%
11786 }

```

\glsfmtplural As above but for the plural value.

```

11787 \ifdef\textorpdfstring
11788 {
11789   \newcommand*{\glsfmtplural}[1]{%
11790     \textorpdfstring
11791     {\glsxtrtitleplural{#1}}%
11792     {\glsentryplural{#1}}%
11793 }

```

```
11794 }
11795 {
11796   \newcommand*{\glsfmtplural}[1]{%
11797     \glsxtrtitleplural{#1}}
11798 }
```

\glsfmtplural First letter converted to upper case.

```
11799 \ifdef\textorpdfstring
11800 {
11801   \newcommand*{\Glsfmtplural}[1]{%
11802     \textorpdfstring
11803       {\glsxtrtitleplural{#1}}%
11804       {\glsentryplural{#1}}%
11805   }
11806 }
11807 {
11808   \newcommand*{\Glsfmtplural}[1]{%
11809     \Glsxtrtitleplural{#1}}
11810 }
```

\glsfmtfirst As above but for the first value.

```
11811 \ifdef\textorpdfstring
11812 {
11813   \newcommand*{\glsfmtfirst}[1]{%
11814     \textorpdfstring
11815       {\glsxtrtitlefirst{#1}}%
11816       {\glsentryfirst{#1}}%
11817   }
11818 }
11819 {
11820   \newcommand*{\glsfmtfirst}[1]{%
11821     \glsxtrtitlefirst{#1}}
11822 }
```

\glsfmtfirst First letter converted to upper case.

```
11823 \ifdef\textorpdfstring
11824 {
11825   \newcommand*{\Glsfmtfirst}[1]{%
11826     \textorpdfstring
11827       {\glsxtrtitlefirst{#1}}%
11828       {\glsentryfirst{#1}}%
11829   }
11830 }
11831 {
11832   \newcommand*{\Glsfmtfirst}[1]{%
11833     \Glsxtrtitlefirst{#1}}
11834 }
```

\glsfmtfirstpl As above but for the firstplural value.

```

11835 \ifdef\textorpdfstring
11836 {
11837   \newcommand*\glsfmtfirstpl}[1]{%
11838     \textorpdfstring
11839     {\glsxrttitlefirstplural{#1}}%
11840     {\glsentryfirstplural{#1}}%
11841   }
11842 }
11843 {
11844   \newcommand*\glsfmtfirstpl}[1]{%
11845     \glsxrttitlefirstplural{#1}%
11846 }

```

\Glsfmtfirstpl First letter converted to upper case.

```

11847 \ifdef\textorpdfstring
11848 {
11849   \newcommand*\Glsfmtfirstpl}[1]{%
11850     \textorpdfstring
11851     {\Glsxrttitlefirstplural{#1}}%
11852     {\glsentryfirstplural{#1}}%
11853   }
11854 }
11855 {
11856   \newcommand*\Glsfmtfirstpl}[1]{%
11857     \Glsxrttitlefirstplural{#1}%
11858 }

```

\glsfmtlong As above but for the long value.

```

11859 \ifdef\textorpdfstring
11860 {
11861   \newcommand*\glsfmtlong}[1]{%
11862     \textorpdfstring
11863     {\glsxrttitlelong{#1}}%
11864     {\glsentrylong{#1}}%
11865   }
11866 }
11867 {
11868   \newcommand*\glsfmtlong}[1]{%
11869     \glsxrttitlelong{#1}%
11870 }

```

\Glsfmtlong First letter converted to upper case.

```

11871 \ifdef\textorpdfstring
11872 {
11873   \newcommand*\Glsfmtlong}[1]{%
11874     \textorpdfstring
11875     {\Glsxrttitlelong{#1}}%
11876     {\glsentrylong{#1}}%
11877   }

```

```
11878 }
11879 {
11880   \newcommand*{\Glsfmtlong}[1]{%
11881     \Glsxtrtitlelong{#1}}
11882 }
```

\glsfmtlongpl As above but for the longplural value.

```
11883 \ifdef\textorpdfstring
11884 {
11885   \newcommand*{\glsfmtlongpl}[1]{%
11886     \textorpdfstring
11887       {\Glsxtrtitlelongpl{#1}}%
11888       {\glsentrylongpl{#1}}%
11889   }
11890 }
11891 {
11892   \newcommand*{\glsfmtlongpl}[1]{%
11893     \Glsxtrtitlelongpl{#1}}
11894 }
```

\Glsfmtlongpl First letter converted to upper case.

```
11895 \ifdef\textorpdfstring
11896 {
11897   \newcommand*{\Glsfmtlongpl}[1]{%
11898     \textorpdfstring
11899       {\Glsxtrtitlelongpl{#1}}%
11900       {\glsentrylongpl{#1}}%
11901   }
11902 }
11903 {
11904   \newcommand*{\Glsfmtlongpl}[1]{%
11905     \Glsxtrtitlelongpl{#1}}
11906 }
```

\glsfmtfull In-line full format.

```
11907 \ifdef\textorpdfstring
11908 {
11909   \newcommand*{\glsfmtfull}[1]{%
11910     \textorpdfstring
11911       {\Glsxtrtitlefull{#1}}%
11912       {\glsxtrinlinetitleformat{#1}{} }%
11913   }
11914 }
11915 {
11916   \newcommand*{\glsfmtfull}[1]{%
11917     \Glsxtrtitlefull{#1}}
11918 }
```

\Glsfmtfull First letter converted to upper case.

```

11919 \ifdef\textorpdfstring
11920 {
11921   \newcommand*{\Glsfmtfull}[1]{%
11922     \textorpdfstring
11923     {\Glsxrttitlefull{#1}}%
11924     {\Glsxtrinlinefullformat{#1}{}}
11925   }
11926 }
11927 {
11928   \newcommand*{\Glsfmtfull}[1]{%
11929     \Glsxrttitlefull{#1}
11930 }

```

\glsfmtfullpl In-line full plural format.

```

11931 \ifdef\textorpdfstring
11932 {
11933   \newcommand*{\glsfmtfullpl}[1]{%
11934     \textorpdfstring
11935     {\glsxrttitlefullpl{#1}}%
11936     {\glsxtrinlinefullplformat{#1}{}}
11937   }
11938 }
11939 {
11940   \newcommand*{\glsfmtfullpl}[1]{%
11941     \glsxrttitlefullpl{#1}
11942 }

```

\Glsfmtfullpl First letter converted to upper case.

```

11943 \ifdef\textorpdfstring
11944 {
11945   \newcommand*{\Glsfmtfullpl}[1]{%
11946     \textorpdfstring
11947     {\Glsxrttitlefullpl{#1}}%
11948     {\Glsxtrinlinefullplformat{#1}{}}
11949   }
11950 }
11951 {
11952   \newcommand*{\Glsfmtfullpl}[1]{%
11953     \Glsxrttitlefullpl{#1}
11954 }

```

## 1.9 Multi-Lingual Support

Add the facility to load language modules, if they are installed, but none are provided with this package.

sariesExtraLang

```
11955 \newcommand*{\RequireGlossariesExtraLang}[1]{%
```

```
11956  \@ifundefined{ver@glossariesxtr-#1.ldf}{\input{glossariesxtr-#1.ldf}}{}%
11957 }
```

#### sariesExtraLang

```
11958 \newcommand*\ProvidesGlossariesExtraLang}[1]{%
11959   \ProvidesFile{glossariesxtr-#1.ldf}%
11960 }
```

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.

```
11961 \newcommand{\glsxtr@loaddialect}{%
11962   \IfTrackedLanguageFileExists{\this@dialect}%
11963   {glossariesxtr-}%
11964   {.ldf}%
11965   {}%
11966   \RequireGlossariesExtraLang{\CurrentTrackedTag}%
11967 }%
11968 {}% not found
```

If `glossaries-extra-bib2gls` has been loaded, `\@glsxtrdialechook` will check for the associated script, otherwise it will do nothing.

```
11969  \@glsxtrdialechook
11970 }
```

```
11971 \@ifpackageloaded{tracklang}%
11972 {}%
11973   \AnyTrackedLanguages
11974   {}%
11975   \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
11976 }%
11977 {}%
11978 }
11979 {}
```

Load `glossaries-extra-stylemods` if required.

```
11980 \@glsxtr@redefstyles
```

and set the style:

```
11981 \@glsxtr@do@style
```

## 1.10 glossaries-extra-bib2gls.sty

This package provides additional support for `bib2gls` and is automatically loaded by the `record` option.

```
11982 \NeedsTeXFormat{LaTeX2e}
11983 \ProvidesPackage{glossaries-extra-bib2gls}[2018/11/30 1.37 (NLCT)]
```

These are some convenient macros for use with custom rules.

```
\glshex
11984 \newcommand*\glshex{\string\u}
```

```
\lscapturedgroup
11985 \newcommand*\lscapturedgroup{\string\$}
```

nZeroChildCount For use with bib2gls's save-child-count resource option.

```
11986 \newcommand*\GlsXtrIfHasNonZeroChildCount[3]{%
11987   \GlsXtrIfFieldNonZero{childcount}{#1}{#2}{#3}%
11988 }
```

rprovidecommand For use in @preamble, this behaves like \providecommand in the document but like \renewcommand in bib2gls.

```
11989 \newcommand*\glsxtrprovidecommand{\providecommand}
```

glsrenewcommand Like \renewcommand but only generates a warning rather than an error if the command isn't defined.

```
11990 \newcommand*\glsrenewcommand{\@star@or@long\glsxtr@renewcommand}
```

tr@renewcommand

```
11991 \newcommand*\glsxtr@renewcommand[1]{%
11992   \begingroup \escapechar\m@ne\xdef\@tempa{\string#1}\endgroup
11993   \expandafter\@ifundefined\@tempa
11994   {%
11995     \GlossariesExtraWarning{can't redefine \noexpand#1(not already defined)}%
11996   }%
11997   \relax
11998   \relax
11999   \let\@ifdefinable\@rc@ifdefinable
12000   \new@command#1%
12001 }
```

lossarylocation For use with indexcounter and bib2gls.

```
12002 \newcommand*\glsxtr@wrglossarylocation[2]{#1}
```

IndexCounterLink `\GlsXtrIndexCounterLink{\text}{\label}`

For use with indexcounter and bib2gls.

```
12003 \ifdef\hyperref
12004 {%
12005   \newcommand*\GlsXtrIndexCounterLink[2]{%
```

```

12006     \glsxtrifhasfield{indexcounter}{#2}%
12007     {\hyperref[wrglossary.\glscurrentfieldvalue]{#1}}%
12008     {#1}%
12009 }
12010 }
12011 {
12012 \newcommand*\GlsXtrIndexCounterLink[2]{#1}
12013 }
```

### \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.

```
12014 \newcommand*\GlsXtrDualField{dual}
```

### \GlsXtrDualBackLink

Adds a hyperlink to the dual entry.

```

12015 \newcommand*\GlsXtrDualBackLink[2]{%
12016   \glsxtrifhasfield{\GlsXtrDualField}{#2}%
12017   {\glshyperlink[#1]{\glscurrentfieldvalue}}%
12018   {#2}%
12019 }
```

`\TeXEntryAliases` Convenient shortcut for use with entry-type-aliases to alias standard BIBTEX entry types to `@bibtexentry`.

```

12020 \newcommand*\GlsXtrBibTeXEntryAliases{%
12021   article=bibtexentry,
12022   book=bibtexentry,
12023   booklet=bibtexentry,
12024   conference=bibtexentry,
12025   inbook=bibtexentry,
12026   incollection=bibtexentry,
12027   inproceedings=bibtexentry,
12028   manual=bibtexentry,
12029   mastersthesis=bibtexentry,
12030   misc=bibtexentry,
12031   phdthesis=bibtexentry,
12032   proceedings=bibtexentry,
12033   techreport=bibtexentry,
12034   unpublished=bibtexentry
12035 }
```

`ideBibTeXFields` Convenient shortcut to define the standard BIBTeX fields.

```
12036 \newcommand*\GlsXtrProvideBibTeXFields{}{%
12037   \glsaddstoragekey{address}{}{\glsxtrbibaddress}%
12038   \glsaddstoragekey{author}{}{\glsxtrbibauthor}%
12039   \glsaddstoragekey{booktitle}{}{\glsxtrbibbooktitle}%
12040   \glsaddstoragekey{chapter}{}{\glsxtrbibchapter}%
12041   \glsaddstoragekey{edition}{}{\glsxtrbibedition}%
12042   \glsaddstoragekey{howpublished}{}{\glsxtrbibhowpublished}%
12043   \glsaddstoragekey{institution}{}{\glsxtrbibinstitution}%
12044   \glsaddstoragekey{journal}{}{\glsxtrbibjournal}%
12045   \glsaddstoragekey{month}{}{\glsxtrbibmonth}%
12046   \glsaddstoragekey{note}{}{\glsxtrbibnote}%
12047   \glsaddstoragekey{number}{}{\glsxtrbibnumber}%
12048   \glsaddstoragekey{organization}{}{\glsxtrbiborganization}%
12049   \glsaddstoragekey{pages}{}{\glsxtrbibpages}%
12050   \glsaddstoragekey{publisher}{}{\glsxtrbibpublisher}%
12051   \glsaddstoragekey{school}{}{\glsxtrbibschool}%
12052   \glsaddstoragekey{series}{}{\glsxtrbibseries}%
12053   \glsaddstoragekey{title}{}{\glsxtrbibtitle}%
12054   \glsaddstoragekey{bibtexttype}{}{\glsxtrbibtype}%
12055   \glsaddstoragekey{volume}{}{\glsxtrbibvolume}%
12056 }
```

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.

```
12057 \newcommand*\GlsXtrMultiSupLocation[3]{%
12058   {%
12059     \def\glsxtrsups locationurl{#2}%
12060     \glshypernumber{#1}%
12061   }%
12062 }
```

`trdisplaysupploc` `\glsxtrdisplaysupploc{<prefix>}{{<counter>}}{<format>}{{<src>}}{<location>}`

This is like `\glsnoidxdisplayloc` but is used for supplementary locations and so requires an extra argument.

```
12063 \newcommand*\GlsXtrDisplaySuppLoc[5]{%
12064   \setentrycounter[#1]{#2}%
12065   \glsxtrMultiSupLocation{#5}{#4}{#3}%
12066 }
```

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.

```

12067 \ifundef\hyperlink
12068 {
12069   \newcommand*\glsxtrdisplaylocnameref}[8]{%
12070     \glsnoidxdisplayloc{#1}{#2}{#3}{#4}%
12071   }
12072 }
12073 {

```

Default action uses *<hcounter>*. Equations and pages typically don't have a title, so check the counter name.

```

12074 \newcommand*\glsxtrdisplaylocnameref}[8]{%
12075   \ifstrequal{#2}{equation}%
12076     {\glsxtrnamereflink{#3}{(#4)}{#2.#7}{#8}}%
12077   {%
12078     \ifstrempty{#5}%
12079       {%

```

No title, so just use the location as the link text.

```

12080   \glsxtrnamereflink{#3}{#4}{#2.#7}{#8}%
12081   }%
12082   {%
12083     \ifstrequal{#2}{page}%
12084       {\glsxtrnamereflink{#3}{#4}{#2.#7}{#8}}%
12085       {\glsxtrnamereflink{#3}{#5}{#2.#7}{#8}}%
12086     }%
12087   }%
12088 }
12089 }

```

lsxtrnamereflink \glsxtrfmtnamereflink{\<format>}{\<title>}{\<href>}{\<external file>}

```

12090 \newcommand*\glsxtrnamereflink}[4]{%

```

Locally change \glshypernumber to \@firstofone to remove the normal location hyperlink.

```

12091 \begingroup
12092 \let\glshypernumber\@firstofone

```

If the *<external file>* argument is empty, an internal link is used, otherwise an external one is needed.

```

12093 \ifstrempty{#4}%
12094   {\glsxtrfmtinternalnameref{#3}{#1}{#2}}%

```

```

12095   {\glsxtrfmtexternalnameref{#3}{#1}{#2}{#4}}%
12096   \endgroup
12097 }

```

```
\glsxtrnamerefloalink{\prefix}{\counter}{\format}{\location}{\text}
{\externalfile}
```

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.

```

12098 \newcommand{\glsxtrnameloclink}[6]{%
12099   \begingroup
12100   \setentrycounter[#1]{#2}%
12101   \def\glsxtr@locationhypertext{#5}%
12102   \let\glshypernumber\@firstofone
12103   \def\@glsnumberformat{#3}%
12104   \def\glsxtrspplocationurl{#6}%
12105   \toks@={}%
12106   \glsxtr@bibgls@removespaces#4 \@nil
12107   \endgroup
12108 }

```

#### ls@removespaces

```

12109 \def\glsxtr@bibgls@removespaces#1 #2\@nil{%
12110   \toks@=\expandafter{\the\toks@#1}%
12111   \ifx\\#2\\%
12112     \edef\x{\the\toks@}%
12113     \ifx\x\empty
12114     \else
12115       \protected@edef\x{\glsentrycounter\@glo@counterprefix\the\toks@}%
12116       \ifdefvoid\glsxtrspplocationurl
12117       {%
12118         \expandafter\glsxtrfmtinternalnameref\expandafter{\x}%
12119         {\@glsnumberformat}{\glsxtr@locationhypertext}%
12120       }%
12121       {%
12122         \expandafter\glsxtrfmtexternalnameref\expandafter{\x}%
12123         {\@glsnumberformat}{\glsxtr@locationhypertext}{\glsxtrspplocationurl}%
12124       }%
12125     \fi
12126   \else
12127     \gls@ReturnAfterFi{%
12128       \glsxtr@bibgls@removespaces#2\@nil
12129     }%
12130   \fi
12131 }

```