

glossaries-extra.sty v1.36: documented code

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2018-08-18

Abstract

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

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

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

1.1 Package Initialisation and Options

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{glossaries-extra}[2018/08/18 v1.36 (NLCT)]
```

Requires `xkeyval` to define package options.

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

Requires `etoolbox` package.

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

Has `glossaries` already been loaded?

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

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

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

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

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

Set the defaults.

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

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

```

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

```

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

```

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

```

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

```

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

```

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

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

```

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

```

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

```

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

```

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

```

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

```

f@forglsentries

```

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

```

f@forglsentries

```

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

```

```

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



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

```

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

```

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

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

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

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

```

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

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

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

Increment associated counter.

```
109   \glsxtr@inc@wrglossaryctr{#1}%
110   \@@do@@wrglossary
111   \fi
112 }%
113 \fi
114 \endgroup
115 }
```

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

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

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

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

label. The third argument is the key family (glslink in most cases, glossadd for \glsadd).

```
120 \newcommand*{\@glsxtr@record}[3]{%
121   \ifglsentryexists{#2}{}{%
122     {%
123       \@@glsxtrwrglossmark
124     \begingroup
```

Save the label in case it's needed.

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

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

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

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

```
132   \gls@setdefault@glslink@opts
```

Implement any pre-key settings.

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

Assign keys.

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

Implement any post-key settings.

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

Increment associated counter.

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

Check if noindex option has been used.

```
137   \ifKV@glslink@noindex
138   \else
139     \glswriteentry{#2}%
140   {%
```

Check if thevalue has been set.

```
141   \ifdefempty{\@glsxtr@thevalue}%
142   {}%
```

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

```
143   \ifx\@glsxtr@org@theHvalue\@glsxtr@theHvalue
144   \else
145     \let\theHglsentrycounter\@glsxtr@theHvalue
146   \fi
```

Save the entry counter.

```
147   \glsxtr@saveentrycounter
```

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

```
148      \let\@do@wrglossary\glsxtr@dorecord
149      }%
150      {%
151          \let\theglsentrycounter\glsxtr@thevalue
152          \let\theHglsentrycounter\glsxtr@theHvalue
153          \let\@do@wrglossary\glsxtr@dorecordnodefer
154          }%
155          \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
156              \glsxtr@do@wrglossary{#2}%
157          \else
158      \fi
159  }%
160  \fi
161  \endgroup
162 }%
163 }%
164 }
```

No need to escape special characters.

```
158      \@do@wrglossary
159      \fi
160  }%
161  \fi
162  \endgroup
163 }%
164 }
```

`glslink@prekeys`

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

`lalink@postkeys`

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

`lossadd@prekeys`

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

`ossadd@postkeys`

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

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

```
169 \newcommand*\glsxtr@dorecord{%
170     \global\let\glsrecordlocref\theglsentrycounter
171     \let@glsxtr@orgprefix@glo@counterprefix
172     \ifx\theglsentrycounter\theHglsentrycounter
173         \def@glo@counterprefix{}%
174     \else
175         \edef@do@gls@getcounterprefix{\noexpand@gls@getcounterprefix
176             {\theglsentrycounter}{\theHglsentrycounter}}%
177     }%
178     \@do@gls@getcounterprefix
179 }%
```

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.

```
180   \protected@write\@auxout{}{\string\glsxtr@record
181     {\@gls@label}{\@glo@counterprefix}{\@gls@counter}{\@glsnumberformat}%
182     {\@glsrecordlocref}}%
183   \glsxtr@counterrecordhook
184   \let\@glo@counterprefix\glsxtr@orgprefix
185 }
```

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

```
186 \newcommand*\glsxtr@dorecordnodefer{%
187   \ifx\theglsentrycounter\theHglsentrycounter
188     \protected@write\@auxout{}{\string\glsxtr@record
189       {\@gls@label}{\@gls@counter}{\@glsnumberformat}%
190       {\theglsentrycounter}}%
191   \else
192     \edef\@do@gls@getcounterprefix{\noexpand\gls@getcounterprefix
193       {\theglsentrycounter}{\theHglsentrycounter}}%
194   }%
195   \@do@gls@getcounterprefix
196   \protected@write\@auxout{}{\string\glsxtr@record
197     {\@gls@label}{\@glo@counterprefix}{\@gls@counter}{\@glsnumberformat}%
198     {\theglsentrycounter}}%
199   \fi
200   \glsxtr@counterrecordhook
201 }
```

r@recordcounter

```
202 \newcommand*{\@glsxtr@recordcounter}{%
203   \glsxtr@noop@recordcounter
204 }
```

p@recordcounter

```
205 \newcommand*{\@glsxtr@noop@recordcounter}[1]{%
206   \PackageError{glossaries-extra}{\string\GlsXtrRecordCounter\space
207     requires record=only or record=alsoindex package option}{}%
208 }
```

p@recordcounter

```
209 \newcommand*{\@glsxtr@op@recordcounter}[1]{%
210   \eappto\glsxtr@counterrecordhook{\noexpand\glsxtr@docounterrecord{\#1}}%
211 }
```

lsxtr@recordsee Deal with \glssee in record mode. (This doesn't increment the associated counter.)

```

212 \newcommand*{\@glsxtr@recordsee}[2]{%
213   \@@glsxtrwrglossmark
214   \def\@gls@xref{#2}%
215   \onelevel@sanitize\@gls@xref
216   \protected@write\@auxout{}{\string\glsxtr@recordsee{#1}{\@gls@xref}}%
217 }

srtglossaryunit
218 \newcommand{\printunsrtglossaryunit}{%
219   \print@noop@unsrtglossaryunit
220 }

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

aveentrycounter Only store the entry counter information if the indexing is on.
222 \newcommand*{\glsxtr@indexonly@saveentrycounter}{%
223   \ifKV@glslink@noindex
224   \else
225     \glsxtr@saveentrycounter
226   \fi
227 }

addloclistfield
228 \newcommand*{\glsxtr@addloclistfield}{%
229   \key@ifundefined{glossentry}{loclist}%
230   {%
231     \define@key{glossentry}{loclist}{\def\@glo@loclist{##1}}%
232     \appto\@gls@keymap{, {loclist}{loclist}}%
233     \appto\@newglossaryentryprehook{\def\@glo@loclist{}}%
234     \appto\@newglossaryentryposthook{%
235       \gls@assign@field{}{\@glo@label}{loclist}{\@glo@loclist}%
236     }%
237     \glssetnoexpandfield{loclist}%
238   }%
239 }

The loclist field is just a comma-separated list. The location field is the formatted list.
240 \key@ifundefined{glossentry}{location}%
241 {%
242   \define@key{glossentry}{location}{\def\@glo@location{##1}}%
243   \appto\@gls@keymap{, {location}{location}}%
244   \appto\@newglossaryentryprehook{\def\@glo@location{}}%
245   \appto\@newglossaryentryposthook{%
246     \gls@assign@field{}{\@glo@label}{location}{\@glo@location}%
247   }%
248   \glssetnoexpandfield{location}%
249 }%
250 }

```

Add a key to store the group heading.

```
251 \key@ifundefined{glossentry}{group}%
252 {%
253   \define@key{glossentry}{group}{\def\@glo@group{##1}}%
254   \appto\@gls@keymap{, {group}{group}}%
255   \appto\@newglossaryentryprehook{\def\@glo@group{}}%
256   \appto\@newglossaryentryposthook{%
257     \gls@assign@field{}{\@glo@label}{group}{\@glo@group}}%
258   }%
259   \glssetnoexpandfield{group}%
260 }%
261 {}%
262 }
```

record@setting Keep track of the record package option.

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

etting@alsoindex

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

rd@setting@only

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

ord@setting@off

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

record Now define the record package option.

```
267 \define@choicekey{glossaries-extra.sty}{record}%
268   [\@glsxtr@record@setting\glsxtr@record@nr]%
269   {off,only,alsoindex}%
270   [only]%
271   {%
272     \ifcase\glsxtr@record@nr\relax
        Don't record.
273     \def\glsxtr@setup@record{%
274       \renewcommand*{\@do@seeglossary}{\@glsxtr@doseeglossary}%
275       \renewcommand*{\@glsxtr@record}[3]{}%
276       \let\@do@wrglossary\glsxtr@do@wrglossary
277       \let\@gls@saveentrycounter\glsxtr@indexonly@saveentrycounter
278       \let\glsxtrundefaction\glsxtr@err@undefaction
279       \let\glsxtr@warnonexistsordo\@gobble
280       \let\@glsxtr@recordcounter\glsxtr@noop@recordcounter
281       \def\printunsrtglossaryunit{\print@noop@unsrtglossaryunit}%
282       \undef\glsxtrsetaliasnoindex
283     }%
284     \or
```

Only record (don't index).

```
285      \def\glsxtr@setup@record{%
286          \@glsxtr@autosee@indexfalse
287          \let\@do@seeglossary\@glsxtr@recordsee
288          \let\@glsxtr@record\@glsxtr@record
289          \let\@do@wrglossary\@glsxtr@do@record@wrglossary
290          \let\@gls@saveentrycounter\relax
291          \let\glsxtrundefaction\@glsxtr@warn@undefaction
292          \let\glsxtr@warnnonexistsordo\@glsxtr@warn@onexistsordo
293          \glsxtr@addloclistfield
294          \renewcommand*\{\@glsxtr@autoindexcrossrefs}\}%
295          \let\@glsxtr@recordcounter\@glsxtr@op@recordcounter
296          \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}\%
```

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

```
297      \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.

```
298      \ifdef\gls@setupsort@none{\gls@setupsort@none}\}%
```

Warn about using `\printglossary`:

```
299      \def\glsxtrNoGlossaryWarning{\glsxtr@record@noglossarywarning}\%
```

Load `glossaries-extra-bib2gls`:

```
300      \RequirePackage{glossaries-extra-bib2gls}%
301      }%
302      \or
```

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

```
303      \def\glsxtr@setup@record{%
304          \renewcommand*\{\@do@seeglossary}\{\glsxtr@dosee@alsoindex@glossary}\%
305          \let\@glsxtr@record\@glsxtr@record
306          \let\@do@wrglossary\glsxtr@do@alsoindex@wrglossary
307          \let\@gls@saveentrycounter\glsxtr@indexonly@saveentrycounter
308          \let\glsxtrundefaction\@glsxtr@warn@undefaction
309          \let\glsxtr@warnnonexistsordo\@glsxtr@warn@onexistsordo
310          \glsxtr@addloclistfield
311          \let\@glsxtr@recordcounter\@glsxtr@op@recordcounter
312          \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}\%
313          \undef\glsxtrsetaliasnoindex
314      }%
315      \fi
316 }
```

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

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

Need to provide conditional commands that are backward compatible:

```
if@glsxtrdocdef  
318 \newcommand*{\if@glsxtrdocdef}{\ifnum\glsxtr@docdefval>0 }  
  
lsxtrdocdeftrue  
319 \newcommand*{\@glsxtrdocdeftrue}{\def\glsxtr@docdefval{1}}  
  
sxtrdocdeffalse  
320 \newcommand*{\@glsxtrdocdeffalse}{\def\glsxtr@docdefval{0}}
```

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

```
321 \define@choicekey{glossaries-extra.sty}{docdef}  
322 [\glsxtr@docdefsetting\glsxtr@docdefval] %  
323 {false,true,restricted,atom}[true] %  
324 {  
325 \ifnum\glsxtr@docdefval>1\relax  
326 \renewcommand*{\glsdoifexistsorwarn}{\glsdoifexists} %  
327 \else  
328 \renewcommand*{\glsdoifexistsorwarn}{\glsdoifexistsorwarn} %  
329 \fi  
330 }
```

ocdefrestricted
331 \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).

```
332 \newcommand*{\glsdoifexistsorwarn}{\glsdoifexistsorwarn}
```

indexcrossrefs Automatically index cross references at the end of the document

```
333 \define@boolkey{glossaries-extra.sty}[@glsxtr]{indexcrossrefs}[true]{%  
334 \if@glsxtrindexcrossrefs  
335 \else  
336 \renewcommand*{\glsxtr@autoindexcrossrefs}{}%  
337 \fi  
338 }
```

Switch off since this can increase the build time.

```
339 \glsxtrindexcrossrefsfalse
```

But allow see key to switch it on automatically.

```

oindexcrossrefs
 340 \newcommand*{\@glsxtr@autoindexcrossrefs}{\@glsxtr@indexcrossreftrue}

autoseeindex Provide a boolean option to allow the user to prevent the automatic indexing of the cross-
 341 referencing keys see, seealso and alias.
 342 %
 343 \glsxtr@autoseeindextrue

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

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

 347 \glsxtr@declareoption{nowarn}{%
 348   \let\GlossariesExtraWarning\gobble
 349   \let\GlossariesExtraWarningNoLine\gobble
 350   \glsxtr@dooption{nowarn}%
 351 }

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

postdot Shortcut for nopostdot=false
 353 \glsxtr@declareoption{postdot}{%
 354   \glsxtr@dooption{nopostdot=false}%
 355   \renewcommand*{\@glsxtr@defpostpunc}{%
 356     \renewcommand*{\glspostdescription}{%
 357       \ifglsnopostdot\else.\spacefactor\sfcode`\!. \fi}%
 358   }%
 359 }

nopostdot Needs to redefine \glsxtr@defpostpunc
 360 \define@choicekey{glossaries-extra.sty}{nopostdot}{true, false}[true]{%
 361   \glsxtr@dooption{nopostdot=#1}%
 362   \renewcommand*{\@glsxtr@defpostpunc}{%
 363     \renewcommand*{\glspostdescription}{%
 364       \ifglsnopostdot\else.\spacefactor\sfcode`\!. \fi}%
 365   }%
 366 }

postpunc Set the post-description punctuation. This also sets the \ifglsnopostdot conditional,
  which now indicates if the post-description punctuation has been suppressed.
 367 \define@key{glossaries-extra.sty}{postpunc}{%
 368   \glsxtr@dooption{nopostdot=false}%

```

```

369 \ifstrequal{#1}{dot}%
370 {%
371     \renewcommand*{\@glsxtr@defpostpunc}{%
372         \renewcommand*{\glspostdescription}{.\spacefactor\sfcodespace}%
373     }%
374 }%
375 {%
376     \ifstrequal{#1}{comma}%
377     {%
378         \renewcommand*{\@glsxtr@defpostpunc}{%
379             \renewcommand*{\glspostdescription}{,}%
380         }%
381     }%
382     {%
383         \ifstrequal{#1}{none}%
384     {%
385         \glsxtr@dooption{nopostrdot=true}%
386         \renewcommand*{\@glsxtr@defpostpunc}{%
387             \renewcommand*{\glspostdescription}{}%
388         }%
389     }%
390     {%
391         \renewcommand*{\@glsxtr@defpostpunc}{%
392             \renewcommand*{\glspostdescription}{#1}%
393         }%
394     }%
395     }%
396 }%
397 }

```

`glsxtrabbrvtype` Glossary type for abbreviations.

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

`bbreviationsdef` Set by `abbreviations` option.

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

`bbreviationsdef`

```

400 \newcommand*{\@glsxtr@doabbreviationsdef}{%
401     \@ifpackageloaded{babel}%
402     {\providecommand{\abbreviationsname}{\acronymname}}%
403     {\providecommand{\abbreviationsname}{Abbreviations}}%
404     \newglossary[glg-abr]{abbreviations}{gls-abr}{glo-abr}{\abbreviationsname}%
405     \renewcommand*{\glsxtrabbrvtype}{abbreviations}%
406     \newcommand*{\printabbreviations}[1][]{%
407         \printglossary[type=\glsxtrabbrvtype,##1]%
408     }%
409     \disable@keys{glossaries-extra.sty}{abbreviations}%

```

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

```

410 \ifglsacronym
411 \else
412   \renewcommand*{\acronymtype}{\glsxtrabbrvtype}%
413 \fi
414 }%

```

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

```

415 @glsxtr@declareoption{abbreviations}{%
416   \let@glsxtr@abbreviationsdef@glsxtr@doabbreviationsdef
417 }

```

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`).

```

418 \newcommand*{\GlsXtrDefineAbbreviationShortcuts}{%
419   \newcommand*{\ab}{\cglsls}%
420   \newcommand*{\abp}{\cglspl}%
421   \newcommand*{\as}{\glsxtrshort}%
422   \newcommand*{\asp}{\glsxtrshortpl}%
423   \newcommand*{\al}{\glsxtrlong}%
424   \newcommand*{\alp}{\glsxtrlongpl}%
425   \newcommand*{\af}{\glsxtrfull}%
426   \newcommand*{\afp}{\glsxtrfullpl}%
427   \newcommand*{\Ab}{\cGls}%
428   \newcommand*{\Abp}{\cGlspl}%
429   \newcommand*{\As}{\Glsxtrshort}%
430   \newcommand*{\Asp}{\Glsxtrshortpl}%
431   \newcommand*{\Al}{\Glsxtrlong}%
432   \newcommand*{\Alp}{\Glsxtrlongpl}%
433   \newcommand*{\Af}{\Glsxtrfull}%
434   \newcommand*{\Afp}{\Glsxtrfullpl}%
435   \newcommand*{\AB}{\cGLS}%
436   \newcommand*{\ABP}{\cGLSpl}%
437   \newcommand*{\AS}{\GLSxtrshort}%
438   \newcommand*{\ASP}{\GLSxtrshortpl}%
439   \newcommand*{\AL}{\GLSxtrlong}%
440   \newcommand*{\ALP}{\GLSxtrlongpl}%
441   \newcommand*{\AF}{\GLSxtrfull}%
442   \newcommand*{\AFP}{\GLSxtrfullpl}%
443   \providecommand*{\newabbr}{\newabbreviation}%

```

Disable this command after it's been used.

```

444 \let\GlsXtrDefineAbbreviationShortcuts\relax
445 }

```

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

```

446 \newcommand*{\GlsXtrDefineAcShortcuts}{%

```

```

447 \newcommand*{\ac}{\ccls}%
448 \newcommand*{\acp}{\cclspl}%
449 \newcommand*{\acs}{\glsxtrshort}%
450 \newcommand*{\acsp}{\glsxtrshortpl}%
451 \newcommand*{\acl}{\glsxtrlong}%
452 \newcommand*{\aclp}{\glsxtrlongpl}%
453 \newcommand*{\acf}{\glsxtrfull}%
454 \newcommand*{\acfp}{\glsxtrfullpl}%
455 \newcommand*{\Ac}{\cGls}%
456 \newcommand*{\Acp}{\cGlspl}%
457 \newcommand*{\Acs}{\Glsxtrshort}%
458 \newcommand*{\Acsp}{\Glsxtrshortpl}%
459 \newcommand*{\Acl}{\Glsxtrlong}%
460 \newcommand*{\Aclp}{\Glsxtrlongpl}%
461 \newcommand*{\Acf}{\Glsxtrfull}%
462 \newcommand*{\Acfp}{\Glsxtrfullpl}%
463 \newcommand*{\AC}{\cGLS}%
464 \newcommand*{\ACP}{\cGLSpl}%
465 \newcommand*{\ACS}{\GLSxtrshort}%
466 \newcommand*{\ACSP}{\GLSxtrshortpl}%
467 \newcommand*{\ACL}{\GLSxtrlong}%
468 \newcommand*{\ACLP}{\GLSxtrlongpl}%
469 \newcommand*{\ACF}{\GLSxtrfull}%
470 \newcommand*{\ACFP}{\GLSxtrfullpl}%

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

```

Disable this command after it's been used.

```

472 \let\GlsXtrDefineAcShortcuts\relax
473 }

```

`e0therShortcuts` Similarly provide shortcut versions for the commands provided by the symbols and numbers options.

```

474 \newcommand*{\GlsXtrDefine0therShortcuts}%
475 \newcommand*{\newentry}{\newglossaryentry}%
476 \ifdef\printsymbols
477 {%
478   \newcommand*{\newsym}{\glsxtrnewsymbol}%
479 }{%
480 \ifdef\printnumbers
481 {%
482   \newcommand*{\newnum}{\glsxtrnewnumber}%
483 }{%
484 \let\GlsXtrDefine0therShortcuts\relax
485 }

```

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.

```

486 \newcommand*{\@glsxtr@setupshortcuts}{}}

tr@shortcutsval Store the value of the shortcuts option. (Needed by bib2gls.)
487 \newcommand*{\@glsxtr@shortcutsval}{\ifglsacrchshortcuts 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).
488 \define@choicekey{glossaries-extra.sty}{shortcuts}%
489 [\@glsxtr@shortcutsval\@glsxtr@shortcutsnr]\%
490 {acronyms,acro,abbreviations,abbr,other,all,true,ac,none,false}[true]\%
491 \ifcase\@glsxtr@shortcutsnr\relax % acronyms
492     \renewcommand*{\@glsxtr@setupshortcuts}{%
493         \glsacrchshortcutstrue
494         \DefineAcronymSynonyms
495     }\%
496 \or % acro
497     \renewcommand*{\@glsxtr@setupshortcuts}{%
498         \glsacrchshortcutstrue
499         \DefineAcronymSynonyms
500     }\%
501 \or % abbreviations
502     \renewcommand*{\@glsxtr@setupshortcuts}{%
503         \GlsXtrDefineAbbreviationShortcuts
504     }\%
505 \or % abbr
506     \renewcommand*{\@glsxtr@setupshortcuts}{%
507         \GlsXtrDefineAbbreviationShortcuts
508     }\%
509 \or % other
510     \renewcommand*{\@glsxtr@setupshortcuts}{%
511         \GlsXtrDefineOtherShortcuts
512     }\%
513 \or % all
514     \renewcommand*{\@glsxtr@setupshortcuts}{%
515         \glsacrchshortcutstrue
516         \GlsXtrDefineAcShortcuts
517         \GlsXtrDefineAbbreviationShortcuts
518         \GlsXtrDefineOtherShortcuts
519     }\%
520 \or % true
521     \renewcommand*{\@glsxtr@setupshortcuts}{%
522         \glsacrchshortcutstrue
523         \GlsXtrDefineAcShortcuts
524         \GlsXtrDefineAbbreviationShortcuts

```

```

525     \GlsXtrDefineOtherShortcuts
526 }
527 \or % ac
528 \renewcommand*{\@glsxtr@setupshortcuts}{%
529     \glsacrshortcutstrue
530     \GlsXtrDefineAcShortcuts
531 }

```

Leave none and false as last option.

```

532 \else % none, false
533 \renewcommand*{\@glsxtr@setupshortcuts}{}%
534 \fi
535 }

```

`lsxtr@doaccsupp`

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

`accsupp` If `accsupp`, load `glossaries-accsupp` package.

```

537 \@glsxtr@declareoption{accsupp}{%
538 \renewcommand*{\@glsxtr@doaccsupp}{\RequirePackage{glossaries-accsupp}}}

```

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

```

539 \newcommand{\glsxtrNoGlossaryWarning}[1]{%
540     \GlossariesExtraWarning{Glossary '#1' is missing}%
541     \@glsxtr@defaultnoglossarywarning{#1}%
542 }

```

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

```

543 \define@choicekey{glossaries-extra.sty}{nomissingglstext}
544 [\@glsxtr@nomissingglstextval\@glsxtr@nomissingglstextnr]%
545 {true,false}[true]{%
546     \ifcase\@glsxtr@nomissingglstextnr\relax % true
547         \renewcommand{\glsxtrNoGlossaryWarning}[1]{\null}%
548     \else % false
549         \renewcommand{\glsxtrNoGlossaryWarning}[1]{%
550             \@glsxtr@defaultnoglossarywarning{#1}%
551         }%
552     \fi
553 }

```

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

`xtr@redefstyles`

```
554 \newcommand*{\@glsxtr@redefstyles}{}%
```

```

stylemods
555 \define@key{glossaries-extra.sty}{stylemods}[default]{%
556   \ifstreq{\#1}{default}{%
557     {%
558       \renewcommand*{\@glsxtr@redefstyles}{%
559         \RequirePackage{glossaries-extra-stylemods}}%
560     }%
561     {%
562       \ifstreq{\#1}{all}{%
563         {%
564           \renewcommand*{\@glsxtr@redefstyles}{%
565             \PassOptionsToPackage{all}{glossaries-extra-stylemods}}%
566           \RequirePackage{glossaries-extra-stylemods}}%
567         }%
568       }%
569     {%
570       \renewcommand*{\@glsxtr@redefstyles}{}%
571       \@for\@glsxtr@tmp:=\#1\do{%
572         \IfFileExists{glossary-\@glsxtr@tmp.sty}{%
573           {%
574             \appto{\@glsxtr@redefstyles}{%
575               \noexpand\RequirePackage{glossary-\@glsxtr@tmp}}%
576           }%
577         {%
578           \PackageError{glossaries-extra}{%
579             {Glossaries style package ‘glossary-\@glsxtr@tmp.sty’
580              doesn’t exist (did you mean to use the ‘style’ key?)}%
581             {The list of values (#1) in the ‘stylemods’ key should
582              match the glossary-xxx.sty files provided with
583              glossaries.sty}}%
584         }%
585       }%
586       \appto{\@glsxtr@redefstyles}{\RequirePackage{glossaries-extra-stylemods}}%
587     }%
588   }%
589 }

```

```

glsxtr@do@style
590 \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.

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

Defer actual style change:

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

Set this as the default style:

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

Set this style:

```
594     \setglossarystyle{#1}%
595 }%
596 }
```

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.

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

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

The first two arguments are always control sequences.

```
598 \newcommand*{\GlsXtrInternalLocationHyperlink}[3]{%
599     \glsxtrhyperlink{#1#2#3}{#3}%
600 }
```

cationhyperlink

```
601 \newcommand*{\@glsxtr@wrglossary@locationhyperlink}[3]{%
602     \pageref{wrglossary.#3}%
603 }
```

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.

```
604 \@glsxtr@declareoption{indexcounter}{%
605     \glsxtr@dooption{counter=wrglossary}%
606     \ifundef\c@wrglossary
607     {%
608         \newcounter{wrglossary}%
609         \renewcommand{\thewrglossary}{\arabic{wrglossary}}%
610     }%
611     {}%
612     \renewcommand*{\glsxtr@inc@wrglossaryctr}[1]{%
```

Only increment if the current counter is wrglossary.

```
613     \ifdefstring@gls@counter{wrglossary}%
614     {%
615         \refstepcounter{wrglossary}%
616         \label{wrglossary.\thewrglossary}%
617     }%
```

```

618     {}%
619   }%
620 \renewcommand*{\GlsXtrInternalLocationHyperlink}[3]{%
621   \ifdefined\glsentrycounter{wrglossary}{%
622     {}%
623     \glsxtr@wrglossary@locationhyperlink{##1}{##2}{##3}%
624   }%
625   {\glsxtrhyperlink{##1##2##3}{##3}}%
626 }%
627 }

```

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

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

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

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

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

`sxtrwrglossmark` Does nothing by default.

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

`debug` Provide extra debug options.

```

632 \define@choicekey{glossaries-extra.sty}{debug}%
633   [ \glsxtr@debugval \glsxtr@debugnr ]%
634   {true, false, showtargets, showwrgloss, all}[true]{%
635     \ifcase\glsxtr@debugnr\relax % true
636       \glsxtr@dooption{debug=true}%
637       \renewcommand*{\@glsxtrwrglossmark}{}%
638     \or % false
639       \glsxtr@dooption{debug=false}%
640       \renewcommand*{\@glsxtrwrglossmark}{}%
641     \or % showtargets
642       \glsxtr@dooption{debug=showtargets}%
643     \or % showwrgloss
644       \glsxtr@dooption{debug=true}%
645       \renewcommand*{\@glsxtrwrglossmark}{\glsxtrwrglossmark}%
646     \or % all
647       \glsxtr@dooption{debug=showtargets}%
648       \renewcommand*{\@glsxtrwrglossmark}{\glsxtrwrglossmark}%
649     \fi
650 }

```

Pass all other options to glossaries.

```

651 \DeclareOptionX*{%
652   \expandafter\glsxtr@dooption\expandafter{\CurrentOption}}

```

Process options.

```
653 \ProcessOptionsX
```

```

Load glossaries if not already loaded.
654 \RequirePackage{glossaries}

Load the glossaries-accsupp package if required.
655 \@glsxtr@doaccsupp

Redefine \glspostdescription if required.
656 \@glsxtr@defpostpunc

\glsshowtarget This command was introduced to glossaries v4.32 so it may not be defined. Therefore it's
defined here using \def.
657 \def\glsshowtarget#1{%
658   \glsxtrtitleorpdforheading
659   {%
660     \ifmmode
661       \texttt{\small [#1]}%
662     \else
663       \ifinner
664         \texttt{\small [#1]}%
665       \else
666         \marginpar{\texttt{\small #1}}%
667       \fi
668     \fi
669   }%
670   {[#1]}%
671   {\texttt{\small [#1]}}%
672 }

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

r@doseeglossary This doesn't increment the associated counter.
674 \newcommand*{\@glsxtr@doseeglossary}[2]{%
675   \glsdoifexists{#1}%
676   {%
677     \@@glsxtrwrglossmark
678     \glsxtr@org@doseeglossary{#1}{#2}%
679   }%
680 }

oindex@glossary
681 \newcommand*{\@glsxtr@dosee@alsoindex@glossary}[2]{%
682   \glsxtr@recordsee{#1}{#2}%
683   \glsxtr@doseeglossary{#1}{#2}%
684 }

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

```

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

```
686 \if@glsxtr@autoseeindex
687 \else
688   \ifdef\@glsxtr@org@gloautosee
689   {}%
690   {\PackageError{glossaries-extra}{‘autoseeindex=false’ package
691     option requires at least v4.30 of glossaries.sty}%
692   {You need to update the glossaries.sty package}%
693 }
694 \fi
```

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

```
695 \ifdef\@glo@autosee
696 {}%
697   \renewcommand*\@glo@autosee{}%
698   \if@glsxtr@autoseeindex\@glsxtr@org@gloautosee\fi}%
699 }%
700 {}
```

checkseeallowed Don't prohibit the use of the see key before the indexing files have been opened if the automatic see indexing has been disabled, since it's no longer an issue.

```
701 \renewcommand*\@gls@checkseeallowed}{%
702   \if@glsxtr@autoseeindex\@gls@see@noindex\fi
703 }
```

Define abbreviations glossaries if required.

```
704 \@glsxtr@abbreviationsdef
705 \let\@glsxtr@abbreviationsdef\relax
```

Setup shortcuts if required.

```
706 \@glsxtr@setupshortcuts
```

Redefine \@glsxtr@redef@forglsentries if required.

```
707 \@glsxtr@redef@forglsentries
```

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

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

Now define the user command:

```
709 \newcommand*\@glossariesextrasetup[1]{%
710   \let\@glsxtr@setup@record\relax
711   \let\@glsxtr@setupshortcuts\relax
712   \let\@glsxtr@redef@forglsentries\relax
713   \setkeys{glossaries-extra.sty}{#1}%
714   \@glsxtr@abbreviationsdef
715   \let\@glsxtr@abbreviationsdef\relax
716   \@glsxtr@setupshortcuts
```

```

717 \glsxstr@setup@record
718 \glsxstr@redef@forglsentries
719 }

@@do@wrglossary Save original definition of \@@do@wrglossary.
720 \let\glsxstr@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.
721 \newcommand*\glsxstr@@do@wrglossary[1]{%
722 \glsxstrwrglossmark
723 \glsxstr@inc@wrglossaryctr{#1}%
724 \glsxstr@org@@do@wrglossary{#1}%
725 }

aveentrycounter Save original definition of \gls@saveentrycounter.
726 \let\glsxstr@saveentrycounter@gls@saveentrycounter

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

Provide script dialect hook (does nothing unless redefined by glossaries-extra-bib2gls).
sxtrdialecthook
728 \newcommand*\glsxtrdialecthook[]

Set up record option if required.
729 \glsxstr@setup@record

Disable preamble-only options and switch on the undefined tag at the start of the document.
730 \AtBeginDocument{%
731 \disable@keys{glossaries-extra.sty}{abbreviations,docdef,record}%
732 \def\glsxtrundeftag{\glsxtrundeftag}%
733 }

```

1.2 Extra Utilities

nusedOrUndefined	\GlsXtrIfUnusedOrUndefined{\langle label \rangle}{\langle true \rangle}{\langle false \rangle}
------------------	--

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

```

734 \newcommand*\GlsXtrIfUnusedOrUndefined[3]{%
735 \ifglsentryexists{#1}%

```

```

736  {\ifboolelse{\glsdetoklabel{#1}{\flag}}{\#3}{\#2}}%
737  {\#2}%
738 }

```

\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.)

```

739 \newcommand{\glsxtrifemptyglossary}[3]{%
740   \ifcsdef{glolist@#1}{%
741     {}%
742     \ifcsstring{glolist@#1}{,}{%
743       {}%
744       \glsxtrunedefaction{Glossary type '#1' doesn't exist}{}%
745     }%
746     #2%
747   }%
748 }

```

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

```

749 \newcommand*\glsxtrifkeydefined[3]{%
750   \key@ifundefined{glossentry}{#1}{#3}{#2}%
751 }

```

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

```

752 \newcommand*\glsxtrprovidestoragekey{%
753   \cstar@glsxtr@provide@storagekey@glsxtr@provide@storagekey%
754 }

```

vide@storagekey Unstarred version.

```

755 \newcommand*\glsxtr@provide@storagekey[3]{%
756   \key@ifundefined{glossentry}{#1}{%
757     {}%
758     \definekey{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
759     \appto{\gls@keymap}{, #1 #1}%
760     \appto{\newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
761     \appto{\newglossaryentryposthook}{%
762       \letcs{\glo@tmp}{@glo@#1}%
763       \gls@assign@field{#2}{\glo@label}{#1}{\glo@tmp}%
764     }%

```

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

```

765   \ifblank{#3}
766   {}%
767   {%
768     \newcommand*{#3}[1]{\@gls@entry@field{##1}{#1}}%
769   }%
770 }%
771 {%

```

Provide the no-link command if not already defined.

```

772   \ifblank{#3}
773   {}%
774   {%
775     \providecommand*{#3}[1]{\@gls@entry@field{##1}{#1}}%
776   }%
777 }%
778 }

```

`\vide@storagekey` Starred version.

```

779 \newcommand*{\s@glsxtr@provide@storagekey}[1]{%
780   \key@ifundefined{glossentry}{#1}%
781   {%
782     \expandafter\newcommand\expandafter*\expandafter
783     {\csname gls@assign@#1@field\endcsname}[2]{%
784       \@@gls@expand@field{##1}{#1}{##2}}%
785   }%
786 }%
787 {%
788   \glsxtr@provide@addstoragekey{#1}%
789 }

```

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`

```
790 \newcommand{\GlsXtrFmtField}{useri}
```

`\DefaultOptions`

```
791 \newcommand{\GlsXtrFmtDefaultOptions}{noindex}
```

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

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

`\@glsxtrfmt` Unstarred form.

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

\s@glsxtrfmt Starred form.

```
794 \newcommand*{\s@glsxtrfmt}[3] []{%
795   \new@ifnextchar [{\s@glsxtrfmt{\#1}{\#2}{\#3}}{%
796     {\@glsxtrfmt{\#1}{\#2}{\#3}{}}{}}{%
797   }}
```

\s@@glsxtrfmt Pick up final optional argument.

```
798 \def\s@@glsxtrfm#1#2#3[#4]{\@glsxtrfm{\#1}{\#2}{\#3}{\#4}}
```

\@glsxtrfmt Actual inner working.

```
799 \newcommand*{\@glsxtrfm}[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).

```
800 \begingroup
801   \def\glslabel{\#2}%
802   \glsdoifexistsord{\#2}%
803   {%
804     \ifglshasfield{\GlsXtrFmtField}{\#2}%
805     {%
806       \let\do@gls@link@checkfirsthyper\relax
807       \expandafter\gls@link\expandafter[\GlsXtrFmtDefaultOptions,\#1]{\#2}%
808       {\glsxtrfmtdisplay{\glscurrentfieldvalue}{\#3}{\#4}}{}}%
809     }%
810     {\glsxtrfmtdisplay{@firstofone}{\#3}{\#4}}{}}%
811   {%
812     {%
```

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

```
813 \begingroup
814   @gls@setdefault@glslink@opts
815   \setkeys{glslink}{\GlsXtrFmtDefaultOptions,\#1}%
816   \ifKV@glslink@noindex\else\glsadd{\#2}\fi
817   \endgroup
818   \glsxtrfmtdisplay{@firstofone}{\#3}{\#4}}{}}%
819 {%
820 \endgroup
821 }
```

xtrfmtdisplay The command used internally by `\glsxtrfm` 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).

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

lxsentryfmt No link or indexing.

```
823 \ifdef\texorpdfstring
824 {
825   \newcommand*{\glsxtrentryfmt}[2]{%
```

```

826     \texorpdfstring{@glsxtreentryfmt{#1}{#2}}{#2}%
827 }
828 }
829 {
830 \newcommand*{\glsxtreentryfmt}{\glsxtreentryfmt}
831 }

```

`@glsxtreentryfmt`

```

832 \newrobustcmd*{\glsxtreentryfmt}[2]{%
833 \glsdoifexistsord{#1}%
834 {%
835 \ifglshasfield{\GlsXtrFmtField}{#1}%
836 {%
837 \csuse{\glscurrentfieldvalue}{#2}%
838 }%
839 {#2}%
840 }%
841 {#2}%
842 }

```

`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.

```

843 \newcommand*{\glsxtrfieldlistadd}[3]{%
844 \listcsadd{glo@\glsdetoklabel{#1}@#2}{#3}%
845 }

```

`trfieldlistgadd` Similarly but uses `\listcsgadd`.

```

846 \newcommand*{\glsxtrfieldlistgadd}[3]{%
847 \listcsgadd{glo@\glsdetoklabel{#1}@#2}{#3}%
848 }

```

`trfieldlisteadd` Similarly but uses `\listcseadd`.

```

849 \newcommand*{\glsxtrfieldlisteadd}[3]{%
850 \listcseadd{glo@\glsdetoklabel{#1}@#2}{#3}%
851 }

```

`trfieldlistxadd` Similarly but uses `\listcsxadd`.

```

852 \newcommand*{\glsxtrfieldlistxadd}[3]{%
853 \listcsxadd{glo@\glsdetoklabel{#1}@#2}{#3}%
854 }

```

Now provide commands to iterate over these lists.

`fielddolistloop`

```

855 \newcommand*{\glsxtrfielddolistloop}[2]{%
856 \dolistcsloop{glo@\glsdetoklabel{#1}@#2}%
857 }

```

```

fieldforlistloop
858 \newcommand*{\glsxtrfieldforlistloop}[3]{%
859   \forlistcsloop{#3}{glo@\glsdetoklabel{#1}@#2}%
860 }

List element tests:

trfieldifinlist First argument label, second argument field, third argument item, fourth true part and fifth
false part.
861 \newcommand*{\glsxtrfieldifinlist}[5]{%
862   \ifinlistcs{#3}{glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
863 }

rfieldxifinlist Expands item.
864 \newcommand*{\glsxtrfieldxifinlist}[5]{%
865   \xifinlistcs{#3}{glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
866 }

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

867 \newcommand*{\glsxtrforcsvfield}[3]{%
868   @_glsxtrifhasfield{#2}{#1}%
869   {%
870     \let\glsxtrendfor\@endfortrue
871     \@for\@glsxtr@label:=\glscurrentfieldvalue\do
872       {\expandafter#3\expandafter{\@glsxtr@label}}%
873   }%
874 }

lsxtrifhasfield A simpler alternative to \ifglshasfield that doesn't complain if the entry or the field
doesn't exist. (No mapping is used.) Grouping is added to the unstarred version allow for
nested use.
875 \newrobustcmd{\glsxtrifhasfield}{%
876   \@ifstar{\s@glsxtrifhasfield}{\@glsxtrifhasfield}%
877 }

lsxtrifhasfield Unstarred version adds grouping.
878 \newcommand{\@glsxtrifhasfield}[4]{%
879   {\s@glsxtrifhasfield{#1}{#2}{#3}{#4}}%
880 }

lsxtrifhasfield Starred version omits grouping.
881 \newcommand{\s@glsxtrifhasfield}[4]{%
882   \letcs{\glscurrentfieldvalue}{glo@\glsdetoklabel{#2}@#1}%
883   \ifundefined{\glscurrentfieldvalue}

```

```

884 {#4}%
885 {%
886 \ifdefempty\glscurrentfieldvalue{#4}{#3}%
887 }%
888 }

```

rIfFieldNonZero Designed for numeric fields.

```

889 \newcommand{\GlsXtrIfFieldNonZero}[4]{%
890 \GlsXtrIfFieldCmpNum{#1}{#2}{=}{0}{#4}{#3}%
891 }

```

\GlsXtrIfFieldEqNum{\langle field \rangle}{\langle label \rangle}{\langle value \rangle}{\langle true \rangle}{\langle false \rangle}

Designed for numeric fields.

```

892 \newcommand{\GlsXtrIfFieldEqNum}[5]{%
893 \GlsXtrIfFieldCmpNum{#1}{#2}{=}{#3}{#4}{#5}%
894 }

```

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

Designed for numeric fields.

```

895 \newcommand{\GlsXtrIfFieldCmpNum}[6]{%
896 {%
897 \letcs{\glscurrentfieldvalue}{glo@\glscurrentlabel{#2}@#1}%
898 \ifundefined\glscurrentfieldvalue
899 {\def\glscurrentfieldvalue{0}}%
900 {%
901 \ifdefempty\glscurrentfieldvalue
902 {\def\glscurrentfieldvalue{0}}%
903 {}%
904 }%
905 \ifnum\glscurrentfieldvalue#3#4\relax #5\else #6\fi
906 {}%
907 }

```

\GlsXtrIfFieldUndef{\langle field \rangle}{\langle label \rangle}{\langle true \rangle}{\langle false \rangle}

Just uses \ifcsundef.

```

908 \newcommand{\GlsXtrIfFieldUndef}[2]{%
909 \ifcsundef{glo@\glscurrentlabel{#2}@#1}%
910 }

```

```

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

The second argument is the field label.  

911 \newcommand*{\glsxtruefield}[2]{%  

912   \@gls@entry@field{#1}{#2}%  

913 }

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

914 \newcommand*{\Glsxtruefield}[2]{%  

915   \@gls@entry@field{#1}{#2}%  

916 }

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

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

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

etfieldifexists

```

919 \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.
920 \newrobustcmd*{\GlsXtrSetField}[3]{%
921 \glsxtrsetfieldifexists{#1}{#2}%
922 {\csdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
923 }

\GlsXtrLetField Uses \cslet instead. Third argument should be a macro.
924 \newrobustcmd*{\GlstrLetField}[3]{%
925 \glsxtrsetfieldifexists{#1}{#2}%
926 {\cslet{glo@\glsdetoklabel{#1}@#2}{#3}}%
927 }

\GlsXtrLetField Uses \csletcs instead. Third argument should be a control sequence name.
928 \newrobustcmd*{\csGlsXtrLetField}[3]{%
929 \glsxtrsetfieldifexists{#1}{#2}%
930 {\csletcs{glo@\glsdetoklabel{#1}@#2}{#3}}%
931 }

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.
932 \newrobustcmd*{\GlsXtrLetFieldToField}[4]{%
933 \glsxtrsetfieldifexists{#1}{#2}%
934 {\csletcs{glo@\glsdetoklabel{#1}@#2}{glo@\glsdetoklabel{#3}@#4}}%
935 }

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

```

936 \newrobustcmd*\glsXtrSetField}[3]{%
937   \glsxtrsetfieldifexists{#1}{#2}%
938   {\csgdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
939 }
```

xGlsXtrSetField

```

940 \newrobustcmd*\xGlsXtrSetField}[3]{%
941   \glsxtrsetfieldifexists{#1}{#2}%
942   {\protected@csxdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
943 }
```

eGlsXtrSetField

```

944 \newrobustcmd*\eGlsXtrSetField}[3]{%
945   \glsxtrsetfieldifexists{#1}{#2}%
946   {\protected@csedef{glo@\glsdetoklabel{#1}@#2}{#3}}%
947 }
```

XtrIfFieldEqStr

```

948 \newrobustcmd*\GlsXtrIfFieldEqStr}[5]{%
949   \glsxtrifhasfield{#1}{#2}%
950   {%
951     \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}%
952   }%
953   {#5}%
954 }
```

rIfFieldEqXpStr Like the above but first expands the string.

```

955 \newrobustcmd*\GlsXtrIfFieldEqXpStr}[5]{%
956   \glsxtrifhasfield{#1}{#2}%
957   {%
958     \protected@edef{\gls@tmp}{#3}%
959     \ifdefequal{\glscurrentfieldvalue}{\gls@tmp}{#4}{#5}%
960   }%
961   {#5}%
962 }
```

fXpFieldEqXpStr Like the above but also expands the field value.

```

963 \newrobustcmd*\GlsXtrIfXpFieldEqXpStr}[5]{%
964   \glsxtrifhasfield{#1}{#2}%
965   {%
966     \protected@edef{\gls@tmp}{\glscurrentfieldvalue}%
967     \let{\glscurrentfieldvalue}{\gls@tmp}%
968     \protected@edef{\gls@tmp}{#3}%
969     \ifdefequal{\glscurrentfieldvalue}{\gls@tmp}{#4}{#5}%
970   }%
971   {#5}%
972 }
```

```
lsXtrForeignText \GlsXtrForeignText{\entry_label}{\text}
```

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

```
973 \ifdef\foreignlanguage
974 {
975   \ifdef\GetTrackedDialectFromLanguageTag
976   {
977     \newcommand{\GlsXtrForeignText}[2]{%
```

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

```
978   \let\@glsxtr@org@currentfieldvalue\glscurrentfieldvalue
979   \glsxtrifhasfield{\GlsXtrForeignTextField}{#1}%
980   {%
981     \expandafter\GetTrackedDialectFromLanguageTag\expandafter
982       {\glscurrentfieldvalue}{\@glsxtr@dialect}%
983     \let\@glsxtr@locale\glscurrentfieldvalue
984     \let\glscurrentfieldvalue\@glsxtr@org@currentfieldvalue
985     \ifdefempty\@glsxtr@dialect
986     {%
```

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

```
987   \ifdef\TrackedDialectClosestSubMatch
988   {%
989     \GlossariesExtraWarning{Can't obtain dialect label
990       (tracklang v1.3.6+ required)}%
991   }%
992   {\let\@glsxtr@dialect\TrackedDialectClosestSubMatch}%
993 }%
994 {%
995 \ifdefempty\@glsxtr@dialect
996 {%
```

No tracked dialect found for the root language.

```
997 }%
998 {%
```

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

```
999 \ifcsundef{captions\@glsxtr@dialect}{}%
1000 {%
```

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

```
1001 \IfTrackedDialectHasMapping{\@glsxtr@dialect}%
1002 {%
1003   \edef\@glsxtr@dialect{%
1004     \GetTrackedDialectToMapping{\@glsxtr@dialect}}%
```

Does a caption hook exist for this?

```
1005      \ifcsundef{captions@\glsxtr@dialect}{}%
1006      {%
```

No mapping. Try root language label instead.

```
1007      \ifcsundef{captions@\tracklang@lang}{}%
1008      {%
1009          \let@\glsxtr@dialect@\tracklang@lang
1010      }%
1011      }%
1012      }%
1013      {%
```

No mapping. Try root language label instead.

```
1014      \ifcsundef{captions@\tracklang@lang}{}%
1015      {%
1016          \let@\glsxtr@dialect@\tracklang@lang
1017      }%
1018      }%
1019      }%
1020      }%
1021      \ifdefempty@\glsxtr@dialect
1022      {%
1023          \GlsXtrUnknownDialectWarning{\@glsxtr@locale}{\@tracklang@lang}%
1024          #2%
1025      }%
1026      {\foreignlanguage{\glsxtr@dialect}{#2}}%
1027      }%
1028      {#2% key not set
1029  }
1030 }
1031 {
1032 \newcommand{\GlsXtrForeignText}[2]{%
1033     \GlossariesExtraWarning{Can't encapsulate foreign text:
1034         tracklang v1.3.6+ required}%
1035     #2%
1036 }
1037 }
1038 }
1039 {
\foreignlanguage isn't defined so just do <text>.
1040 \newcommand{\GlsXtrForeignText}[2]{#2}
1041 }
```

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

```
1042 \newcommand*{\GlsXtrForeignTextField}{userii}
```

`nDialectWarning`

```
1043 \newcommand*{\GlsXtrUnknownDialectWarning}[2]{%
```

```

1044 \GlossariesExtraWarning{Can't determine valid dialect label
1045   for locale '#1' (root language: #2)}%
1046 }

```

\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.

```

1047 \ifdef{\GlsEntryCounterLabelPrefix}
1048 {%
1049   \newcommand*{\glsxtrpageref}[1]{%
1050     \ifglsentrycounter
1051       \pageref{\GlsEntryCounterLabelPrefix\glsdetoklabel{#1}}%
1052     \else
1053       \ifglssubentrycounter
1054         \pageref{\GlsEntryCounterLabelPrefix\glsdetoklabel{#1}}%
1055       \else
1056         \gls{#1}%
1057       \fi
1058     \fi
1059   }
1060 }%
1061 {%
1062   \newcommand*{\glsxtrpageref}[1]{%
1063     \ifglsentrycounter
1064       \pageref{glsentry-\glsdetoklabel{#1}}%
1065     \else
1066       \ifglssubentrycounter
1067         \pageref{glsentry-\glsdetoklabel{#1}}%
1068       \else
1069         \gls{#1}%
1070       \fi
1071     \fi
1072   }
1073 }%

```

glossarypreamble

```

1074 \newcommand{\apptoglossarypreamble}[2][\glsdefaulttype]{%
1075   \ifcsdef{glolist@#1}{%
1076     {%
1077       \ifcsundef{@glossarypreamble@#1}{%
1078         {\csdef{@glossarypreamble@#1}{}{}}%
1079       {}%
1080       \csappto{@glossarypreamble@#1}{#2}{%
1081     }%
1082     {%
1083       \GlossariesExtraWarning{Glossary '#1' is not defined}%
1084     }%
1085   }%

```

```

lossarypreamble
1086 \newcommand{\preglossarypreamble}[2][\glsdefaulttype]{%
1087   \ifcsdef{glolist@\#1}{%
1088     {}%
1089     \ifcsundef{@glossarypreamble@\#1}{%
1090       {\csdef{@glossarypreamble@\#1}{}{}}%
1091       {}%
1092       \cspreto{@glossarypreamble@\#1}{\#2}{%
1093     }%
1094     {}%
1095     \GlossariesExtraWarning{Glossary '#1' is not defined}%
1096   }%
1097 }

```

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.

```

1098 \renewcommand*{\ifglsused}[3]{%
1099   \glsdoifexists{#1}{\ifbool{glo@{\glsdetoklabel{#1}@flag}}{\#2}{\#3}}{%
1100 }

```

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
1101 \renewcommand*{\longnewglossaryentry}{%
1102   @ifstar@glsxtr@s@longnewglossaryentry@glsxtr@longnewglossaryentry{%
1103 }

```

`ewglossaryentry` Starred version.

```

1104 \newcommand{@glsxtr@s@longnewglossaryentry}[3]{%
1105   \glsdoifnoexists{#1}{%
1106     {}%
1107     \bgroup%
1108       \let@org@newglossaryentryprehook@newglossaryentryprehook

```

```

1109     \long\def\@newglossaryentryprehook{%
1110         \long\def\@glo@desc{\#3}%
1111         \org@newglossaryentryprehook
1112     }%
1113     \renewcommand*{\gls@assign@desc}[1]{%
1114         \global\cslet{\glo@\glsdetoklabel{\#1}@desc}{\@glo@desc}%
1115         \global\cslet{\glo@\glsdetoklabel{\#1}@descplural}{\@glo@descplural}%
1116     }%
1117     \gls@defglossaryentry{\#1}{\#2}%
1118     \egroup
1119 }%
1120 }

```

`newglossaryentry` Unstarred version.

```

1121 \newcommand{\glsxtr@longnewglossaryentry}[3]{%
1122     \glsdoifnoexists{\#1}%
1123     {%
1124         \bgroup
1125             \let\org@newglossaryentryprehook\@newglossaryentryprehook
1126             \long\def\@newglossaryentryprehook{%
1127                 \long\def\@glo@desc{\#3\glsxtrpostlongdescription}%
1128                 \org@newglossaryentryprehook
1129             }%
1130             \renewcommand*{\gls@assign@desc}[1]{%
1131                 \global\cslet{\glo@\glsdetoklabel{\#1}@desc}{\@glo@desc}%

```

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

```

1132         \global\cslet{\glo@\glsdetoklabel{\#1}@descplural}{\@glo@descplural}%
1133     }%
1134     \gls@defglossaryentry{\#1}{\#2}%
1135     \egroup
1136 }%
1137 }

```

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

```
1138 \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.

```

1139 \renewcommand{\newignoredglossary}{%
1140     \ifstar\glsxtr@s@newignoredglossary\glsxtr@org@newignoredglossary
1141 }

```

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

```

1142 \newcommand*{\glsxtr@org@newignoredglossary}[1]{%
1143     \ifcsdef{glolist@\#1}%
1144     {%

```

```

1145     \glsxtrundefaction{Glossary type '#1' already exists}{}%
1146 }%
1147 {%
1148     \ifdefempty{@ignored@glossaries}%
1149     {%
1150         \edef{@ignored@glossaries{#1}}%
1151     }%
1152     {%
1153         \eappto{@ignored@glossaries{, #1}}%
1154     }%
1155     \csgdef{glolist@#1}{,}%
1156     \ifcsundef{gls@#1@entryfmt}%
1157     {%
1158         \defglsentryfmt[#1]{\glsentryfmt}%
1159     }%
1160     {}%
1161     \ifdefempty{@gls@nohyperlist}%
1162     {%
1163         \renewcommand*{\gls@nohyperlist}{#1}%
1164     }%
1165     {}%
1166     \eappto{@gls@nohyperlist{, #1}}%
1167     {}%
1168 }%
1169 }

```

ignoredglossary Starred form.

```

1170 \newcommand*{\glsxtr@s@newignoredglossary}[1]{%
1171     \ifcsdef{glolist@#1}%
1172     {%
1173         \glsxtrundefaction{Glossary type '#1' already exists}{}%
1174     }%
1175     {%
1176         \ifdefempty{@ignored@glossaries}%
1177         {%
1178             \edef{@ignored@glossaries{#1}}%
1179         }%
1180         {%
1181             \eappto{@ignored@glossaries{, #1}}%
1182         }%
1183         \csgdef{glolist@#1}{,}%
1184         \ifcsundef{gls@#1@entryfmt}%
1185         {%
1186             \defglsentryfmt[#1]{\glsentryfmt}%
1187         }%
1188         {}%
1189     }%
1190 }

```

\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.

```
1191 \glsifusetranslator
1192 {%
1193   \renewcommand*{\glssettoctitle}[1]{%
1194     \ifcsdef{gls@tr@set@#1@toctitle}{%
1195       {%
1196         \csuse{gls@tr@set@#1@toctitle}{%
1197       }%
1198     }%
1199     \ifcsdef{@glotype@#1@title}{%
1200       {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1201       {\def\glossarytoctitle{\glossarytitle}}%
1202     }%
1203   }%
1204 }
1205 {%
1206   \renewcommand*{\glssettoctitle}[1]{%
1207     \ifcsdef{@glotype@#1@title}{%
1208       {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1209       {\def\glossarytoctitle{\glossarytitle}}%
1210     }%
1211 }
```

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

```
1212 \newcommand{\provideignoredglossary}{%
1213   @ifstar\glsxtr@s\provideignoredglossary\glsxtr@provideignoredglossary
1214 }
```

ignoredglossary Unstarred version.

```
1215 \newcommand*{\glsxtr@provideignoredglossary}[1]{%
1216   \ifcsdef{glolist@#1}{%
1217     {}%
1218   }{%
1219     \ifdefempty{@ignored@glossaries}{%
1220       {}%
1221       \edef{@ignored@glossaries}{#1}%
1222     }%
1223     {}%
1224     \eappto{@ignored@glossaries}{,#1}%
1225   }%
1226   \csgdef{glolist@#1}{,}%
1227   \ifcsundef{gls@#1@entryfmt}{%
1228     {}%
1229     \def\glsentryfmt[#1]{\glsentryfmt}%
1230   }%
1231   {}%
1232   \ifdefempty{@gls@nohyperlist}{%
1233     {}%
```

```

1234     \renewcommand*{\@gls@nohyperlist}{#1}%
1235   }%
1236   {%
1237     \eappto{\@gls@nohyperlist}{, #1}%
1238   }%
1239 }%
1240 }

```

`ignoredglossary` Starred form.

```

1241 \newcommand*{\glsxtr@s@provideignoredglossary}[1]{%
1242   \ifcsdef{glolist@#1}%
1243   {}%
1244   {%
1245     \ifdefempty{\ignores@glossaries}%
1246     {}%
1247     \edef{\ignores@glossaries}{#1}%
1248   }%
1249   {}%
1250   \eappto{\ignores@glossaries}{, #1}%
1251 }%
1252 \csgdef{glolist@#1}{,}%
1253 \ifcsundef{gls@#1@entryfmt}%
1254   {}%
1255   \def{\glsentryfmt}{\glsentryfmt}%
1256 }%
1257 {}%
1258 }%
1259 }

```

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

```

1260 \newcommand*{\glsxtrcopytogglossary}[2]{%
1261   \glsdoifexists{#1}%
1262   {}%
1263   \ifcsdef{glolist@#2}%
1264   {}%
1265   \cseappto{glolist@#2}{#1,}%
1266 }%
1267 {}%
1268 \glsxtrundefinedaction{Glossary type '#2' doesn't exist}{}%
1269 }%
1270 }%
1271 }

```

1.3.1 Existence Checks

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

```

1272 \renewcommand{\glsdoifexists}[2]{%
1273   \if{\glsentryexists}{#1}{#2}%

```

```
1274  {%
  Define \glslabel in case it's needed after this command (for example in the post-link hook).
```

```
1275  \edef\glslabel{\glsdetoklabel{#1}}%
1276  \glsxtrundefaction{Glossary entry ‘\glslabel’
1277  has not been defined}{You need to define a glossary entry before
1278  you can reference it.}%
1279 }%
1280 }
```

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

```
1281 \renewcommand{\glsdoifnoexists}[2]{%
1282  \ifglsentryexists{#1}{%
1283    \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’
1284    has already been defined}{}{#2}}%
1285 }
```

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

```
1286 \ifdef\glsdoifexistsordo
1287 {%
1288  \renewcommand{\glsdoifexistsordo}[3]{%
1289    \ifglsentryexists{#1}{#2}{%
1290      \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’
1291      has not been defined}{You need to define a glossary entry
1292      before you can use it.}%
1293      #3}%
1294    }%
1295  }%
1296 }%
1297 }%
1298 {%
1299  \glsxtr@warnnonexistsordo\glsdoifexistsordo
1300  \newcommand{\glsdoifexistsordo}[3]{%
1301    \ifglsentryexists{#1}{#2}{%
1302      \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’
1303      has not been defined}{You need to define a glossary entry
1304      before you can use it.}%
1305      #3}%
1306    }%
1307  }%
1308 }%
1309 }
```

arynoexistsordo Similarly for \doifglossarynoexistsordo.

```
1310 \ifdef\doifglossarynoexistsordo
1311 {%
1312  \renewcommand{\doifglossarynoexistsordo}[3]{%
```

```

1313     \ifglossaryexists{#1}%
1314     {%
1315         \glsxtrundefinedaction{Glossary type '#1' already exists}{}
1316         #3%
1317     }%
1318     {#2}%
1319 }%
1320 }
1321 {%
1322 \glsxtr@warnnonexistsordo\doifglossarynoexistsordo
1323 \newcommand{\doifglossarynoexistsordo}[3]{%
1324     \ifglossaryexists{#1}%
1325     {%
1326         \glsxtrundefinedaction{Glossary type '#1' already exists}{}
1327         #3%
1328     }%
1329     {#2}%
1330 }%
1331 }
1332

```

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.

```

1333 \appto{@newglossaryentryposthook}{%
1334     \ifdefvoid{@glo@see}%
1335     {\csxdef{glo@}{@glo@label @see}{}{}}%
1336     {%
1337         \csxdef{glo@}{@glo@label @see}{\glo@see}%
1338         \if@glsxtr@autoseeindex
1339             @glsxtr@autoindexcrossrefs
1340         \fi
1341     }%
1342 }
1343 \appto{@gls@keymap}{, {see}{see}}

```

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

```

1344 \newcommand*{\glsxtrusesee}[1]{%
1345     \glsdoifexists{#1}{%
1346     {%
1347         \letcs{\glo@see}{glo@\glsdetoklabel{#1}@see}%
1348         \ifdefempty{@glo@see}%
1349         {}{%
1350             \expandafter\glsxtr@usesee@glo@see@end@glsxtr@usesee
1351         }%
1352     }%
1353 }

```

```

1354 }

\glsxstr@usesee
1355 \newcommand*{\glsxstr@usesee}[1] [\\seename]{%
1356   \\glsxstr@usesee[#1]%
1357 }

@\glsxstr@usesee
1358 \def\\glsxstr@usesee[#1]#2\\end@glsxstr@usesee{%
1359   \\glsxtruseseeformat[#1]{#2}%
1360 }

```

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

```

1361 \newcommand*{\glsxtruseseeformat}[2]{%
1362   \\glsseeformat[#1]{#2}{}}%
1363 }

```

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

```

1364 \renewcommand*{\glsseeitemformat}[1]{%
1365   \\ifglslabel{\\glslabel}{\\glsaccesstext[#1]}{\\glsaccessname[#1]}%
1366 }

```

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

```

1367 \newcommand*{\glsxtruseseealso}[1]{%
1368   \\glsdoifexists[#1]%
1369   {%
1370     \\letcs{\\glo@see}{\\glo@\\glsdetoklabel[#1]@seealso}%
1371     \\ifdefempty\\glo@see
1372     {}%
1373     {%
1374       \\expandafter\\glsxtruseseealsoformat\\expandafter{\\glo@see}%
1375     }%
1376   }%
1377 }

```

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

```

1378 \newcommand*{\glsxtruseseealsoformat}[1]{%
1379   \\glsseeformat[\\seealsoname]{#1}{}}%
1380 }

```

```

\glsxtrseelist Fully expands argument before passing to \glsseelist. (The argument to \glsseelist
must be a comma-separated list of entry labels.)
1381 \newrobustcmd{\glsxtrseelist}[1]{%
1382   \edef@glo@tmp{\noexpand\glsseelist{#1}}\glo@tmp
1383 }

\seealso In case this command hasn't been defined. (Should be provided by language packages.)
1384 \providecommand{\seealso}{see also}

xtrindexseealso If \xdycrossrefhook is defined, provide a seealso crossref class. Otherwise this just does
\glssee with \seealso as the tag. The hook is only defined if both xindy and glossaries
v4.30+ are being used.
1385 \ifdef\xdycrossrefhook
1386 {

  Add the cross-reference class definition to the hook.

1387 \appto\xdycrossrefhook{%
1388   \write\glswrite{(define-crossref-class \string"seealso\string"
1389     :unverified )}%
1390   \write\glswrite{(markup-crossref-list
1391     :class \string"seealso\string"^\space\space\space
1392     :open \string"\string\glsxtruseealsoformat\glsopenbrace\string"
1393     :close \string"\glsclosebrace\string")}%
1394 }

  Append to class list.

1395 \appto\xdylocationclassorder{\space\string"seealso\string"}

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

1396 \newrobustcmd*\glsxtrindexseealso[2]{%
1397   \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
1398     \glsxtr@recordsee{#1}{#2}%
1399   \fi
1400   \glsdoifexists{#1}%
1401   {%
1402     \glsxtrwrglossmark
1403     \def\gls@xref{#2}%
1404     \onelevel@sanitize@gls@xref
1405     \gls@checkmkidxchars@gls@xref
1406     \gls@glossary{\csname glo@#1@type\endcsname}{%
1407       (indexentry
1408         :tkey (\csname glo@#1@index\endcsname)
1409         :xref (\string"\gls@xref\string")
1410         :attr \string"seealso\string"
1411       )
1412     }%
1413   }%
1414 }

```

```

1415 }
1416 {
    xindy not in use or glossaries version too old to support this.
1417   \newrobustcmd*{\glsxtrindexseealso}{\glssee[\seealso]}
1418 }
```

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

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

```

1419 \ifdef\gls@set@xr@key
1420 {
```

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

```

1421 \define@key{glossentry}{alias}{%
1422   \gls@set@xr@key{alias}{\glo@alias}{#1}%
1423 }
1424 \define@key{glossentry}{seealso}{%
1425   \gls@set@xr@key{seealso}{\glo@seealso}{#1}%
1426 }
```

Add to the key mappings.

```
1427 \appto\gls@keymap{, {alias}{alias}, {seealso}{seealso}}
```

Set the default value.

```
1428 \appto\newglossaryentryprehook{\def\glo@alias{} \def\glo@seealso{}}
```

Assign the field values.

```

1429 \appto\newglossaryentryposthook{%
1430   \ifdefvoid\glo@seealso
1431     {\csxdef{\glo@\glo@label}{\seealso}{}}
1432   {}
1433     \csxdef{\glo@\glo@label}{\glo@seealso}{\glo@seealso}%
1434     \if@glsxtr@autoseealso
1435       \glsxtr@autoindexcrossrefs
1436     \fi
1437 }
```

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

```

1438 \ifdefvoid\glo@alias
1439   {\csxdef{\glo@\glo@label}{\alias}{}}
1440   {}
1441     \csxdef{\glo@\glo@label}{\alias}{\glo@alias}%
1442   }
1443 }
```

Provide user-level commands to access the values.

```
\glsxtralias
1444 \newcommand*{\glsxtralias}[1]{\@gls@entry@field{#1}{alias}}
trseealsolabels
1445 \newcommand*{\glsxtrseealsolabels}[1]{\@gls@entry@field{#1}{seealso}}
```

Add to the \@glo@autosee hook.

```
1446 \appto{\glo@autoseehook}{%
1447   \ifdefvoid{\glo@alias}{%
1448     {%
1449       \ifdefvoid{\glo@seealso}{%
1450         {}{%
1451           {%
1452             \edef{\do@glssee}{\noexpand\glsxtrindexseealso}%
1453             {\glo@label}{\glo@seealso}}{%
1454               \do@glssee}}{%
1455             {}{%
1456               {}{%
1457                 {}{}}}}}}}}{%
1458 \ifdefvoid{\glo@see}{%
1459   {%
1460     \edef{\do@glssee}{\noexpand\glssee{\glo@label}{\glo@alias}}{%
1461       \do@glssee}}{%
1462     {}{%
1463       {}{%
1464         {}{%
1465           {}{%
1466         }}}}}}}{%
1467 {
```

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

```
1458 \ifdefvoid{\glo@see}{%
1459   {%
1460     \edef{\do@glssee}{\noexpand\glssee{\glo@label}{\glo@alias}}{%
1461       \do@glssee}}{%
1462     {}{%
1463       {}{%
1464         {}{%
1465           {}{%
1466         }}}}}}}{%
1465 }{%
1466 }{%
1467 {
```

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

```
\glsxtralias
1468 \glsaddstoragekey*{alias}{}{\glsxtralias}
trseealsolabels
1469 \glsaddstoragekey*{seealso}{}{\glsxtrseealsolabels}
```

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

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

```
1470 \appto{\newglossaryentryposthook}{%
1471   \ifcsvvoid{\glo@label}{\glo@alias}{%
1472     {%
1473       \ifcsvvoid{\glo@label}{\glo@seealso}{%
1474         {}{}}}}}}{%
```

```

1475      {%
1476          \edef\@do@glssee{\noexpand\glsxtrindexseealso
1477              {\@glo@label}{\csuse{glo@\@glo@label}{\@glo@label}}}{}
1478          \@do@glssee
1479      }%
1480  }%
1481  {%

```

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

```

1482      \ifdefvoid\@glo@see
1483      {%
1484          \edef\@do@glssee{\noexpand\glssee
1485              {\@glo@label}{\csuse{glo@\@glo@label}{\@alias}}}{}
1486          \@do@glssee
1487      }%
1488  {}%
1489  }%
1490  }

```

```
1491 }
```

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

```
1492 \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.

```

1493 \newcommand*{\glsxtraddallcrossrefs}{%
1494     \forallglossaries{\@glo@type}{%
1495         {%
1496             \forglsentries[\@glo@type]{\@glo@label}{%
1497                 {%
1498                     \ifglsused{\@glo@label}{%
1499                         \expandafter\glsxtr@addunusedxrefs\expandafter{\@glo@label}}{}}{%
1500                 }%
1501             }%
1502         }%
1503     }

```

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

```

1503 \newcommand*{\glsxtr@addunusedxrefs}[1]{%
1504     \letcs{\@glo@see}{glo@\glsdetoklabel{\#1}@see}{%
1505     \ifdefvoid\@glo@see
1506     {}%
1507     {%
1508         \expandafter\glsxtr@addunused\@glo@see\@end@glsxtr@addunused
1509     }%
1510     \letcs{\@glo@see}{glo@\glsdetoklabel{\#1}@seealso}{%
1511     \ifdefvoid\@glo@see
1512     {}%
1513     {%

```

```

1514     \expandafter\glsxtr@addunused\@glo@see\@end@glsxtr@addunused
1515   }%
1516 }

\lsxtr@addunused Adds all the entries if they haven't been used.
1517 \newcommand*{\glsxtr@addunused}[1][]{%
1518   \glsxtr@addunused
1519 }

\lsxtr@addunused Adds all the entries if they haven't been used.
1520 \def\@glsxtr@addunused#1\@end@glsxtr@addunused{%
1521   \@for\@glsxtr@label:=#1\do
1522   {%
1523     \ifglsused{\@glsxtr@label}{}
1524   {%
1525     \glsadd[format=glsxtrunusedformat]{\@glsxtr@label}%
1526     \glsunset{\@glsxtr@label}%
1527     \expandafter\@glsxtr@addunusedxrefs\expandafter{\@glsxtr@label}%
1528   }%
1529 }
1530 }

\xtrunusedformat
1531 \newcommand*{\glsxtrunusedformat}[1]{\unskip}

```

1.3.2 Document Definitions

\begin{docdefs} 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.

```

1532 \ifdef\gls@begindocdefs
1533 {%
1534   \renewcommand*{\gls@begindocdefs}{%
1535     \ifnum\glsxtr@docdefval=1\relax
1536       \gls@enablesavenonumberlist
1537       \edef\gls@restoreat{%
1538         \noexpand\catcode`\noexpand\@=\number\catcode`\@}%
1539       \makeatletter
1540       \InputIfFileExists{\jobname.glsdefs}{}{%
1541         \gls@restoreat
1542         \undef\gls@restoreat
1543         \gls@defdocnewglossaryentry
1544       }%
1545     \else
1546       \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.

```

1546       \gls@enablesavenonumberlist

```

```

1547     \let\gls@checkseeallowed\relax
1548     \let\newglossaryentry\new@atom@glossaryentry
1549     \global\newwrite\@gls@deffile
1550     \immediate\openout\@gls@deffile=\jobname.glsdefs

    Write all currently defined entries.

1551     \forallglsentries{\@glsentry}{\@gls@writedef{\@glsentry}}%
1552     \fi
1553     \fi
1554 }
1555 }
1556 {%
1557 \ifnum\glsxtr@docdefval=3\relax
1558   \PackageError{glossaries-extra}{Package option
1559     'docdef=\glsxtr@docdefsetting' requires at least version 4.37
1560     of the base glossaries.sty package}{}%
1561 \fi
1562 }

```

m@glossaryentry

```

1563 \newrobustcmd{\new@atom@glossaryentry}[2]{%
1564   \gls@defglossaryentry{#1}{#2}%
1565   \gls@writedef{#1}%
1566 }

```

`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.

```

1567 \let\glsxtr@orgmakenoidxglossaries\makenoidxglossaries
1568 \renewcommand{\makenoidxglossaries}{%
1569   \ifdefequal\glsxtr@record@setting\glsxtr@record@setting@off
1570   {%
1571     \glsxtr@orgmakenoidxglossaries

```

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

```

1572 \renewcommand{\@do@seeglossary}[2]{%
1573   \@@glsxtrwrglossmark
1574   \edef\gls@label{\glsdetoklabel{\##1}}%
1575   \protected@write\auxout{}{%
1576     \string\gls@reference
1577     {\csname glo@\gls@label\type\endcsname}%
1578     {\gls@label}%
1579     {%
1580       \string\glsseeformat##2{}%
1581     }%
1582   }%
1583 }

```

Check for `docdefs=restricted`:

```
1584 \if@glsxtrdocdefrestricted
```

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

```
1585 \renewcommand*{\@gls@reference}[3]{%
1586   \ifcsundef{glsref##1}{\csgdef{glsref##1}{}{}}{%
1587     \ifinlistcs##2{@glsref##1}{%
1588       {}{%
1589         {\listcsgadd{@glsref##1}{##2}}{%
1590           \ifcsundef{glo@\glsdetoklabel##2@loclist}{%
1591             {\csgdef{glo@\glsdetoklabel##2@loclist}{}{}}{%
1592               {}{%
1593                 {\listcsgadd{glo@\glsdetoklabel##2@loclist}{##3}}{%
1594                   {}{%
1595                     \else
```

Disable document definitions.

```
1596   \@glsxtrdocdeffalse
1597   \fi
1598   \disable@keys{glossaries-extra.sty}{docdef}{%
1599   }{%
1600   }{%
1601     \PackageError{glossaries-extra}{\string\makenoidxglossaries\space
1602       not permitted\MessageBreak
1603       with record=\@glsxtr@record@setting\space package option}{%
1604       {You may only use \string\makenoidxglossaries\ space with the
1605        record=off option}}{%
1606   }{%
1607 }
```

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

```
1608 \renewcommand*{\gls@defdocnewglossaryentry}{%
1609   \ifcase\@glsxtr@docdefval
1610     docdef=false:
1611     \renewcommand*{\newglossaryentry}[2]{%
1612       \PackageError{glossaries-extra}{Glossary entries must
1613         be \MessageBreak defined in the preamble with \MessageBreak
1614         package option 'docdef=false'\MessageBreak(consider using
1615         'docdef=restricted')}{Move your glossary definitions to
1616         the preamble. You can also put them in a \MessageBreak separate file
1617         and load them with \string\loadglsentries.}{%
1618     }{%
1619     \or
1620       (docdef=true case.) Since the see value is now saved in a field, it can be used by entries that
1621       have been defined in the document.
1622       \let\gls@checkseeallowed\relax
1623       \let\newglossaryentry\new@glossaryentry
1624     }{%
1625       \else
```

Restricted mode just needs to allow the see value.

```

1622     \let\gls@checkseeallowed\relax
1623     \fi
1624 }%

```

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

```

1625 \newcommand*{\GlsXtrEnableOnTheFly}{%
1626   \@ifstar@sGlsXtrEnableOnTheFly@GlsXtrEnableOnTheFly
1627 }

```

`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.)

```

1628 \newcommand*{\@sGlsXtrEnableOnTheFly}{%
1629   \renewcommand*{\glsdetoklabel}[1]{%
1630     \expandafter@glsxtr@ifcsstart$string##1 \@glsxtr@end@
1631   }%
1632   \expandafter\detokenize\expandafter{##1}%
1633 }%
1634 {\detokenize{##1}}%
1635 }%
1636 \@GlsXtrEnableOnTheFly
1637 }%
1638 \def@glsxtr@ifcsstart#1#2@glsxtr@end@#3#4{%
1639   \expandafter\if\glsbackslash#1%
1640     #3%
1641   \else
1642     #4%
1643   \fi
1644 }

```

sxtrstarflywarn

```

1645 \newcommand*{\glsxtrstarflywarn}{%
1646   \GlossariesExtraWarning{Experimental starred version of
1647   \string\GlsXtrEnableOnTheFly\space in use (please ensure you have
1648   read the warnings in the glossaries-extra user manual)}%
1649 }

```

rEnableOnTheFly

```

1650 \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
1651 \newcommand*{\glsxtrcat}{general}

\glsxtr
1652 \newcommand*{\glsxtr}[1][]{%
1653   \def\glsxtr@keylist{##1}%
1654   \glsxtr
1655 }

\glsxtr
1656 \newcommand*{\glsxtr}[2][]{%
1657   \ifglsentryexists{##2}%
1658   {%
1659     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1660   }%
1661   {%
1662     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1663       description={\nopostdesc},##1}%
1664   }%
1665   \expandafter\gls\expandafter[\glsxtr@keylist]{##2}%
1666 }

\Glsxtr
1667 \newcommand*{\Glsxtr}[1][]{%
1668   \def\glsxtr@keylist{##1}%
1669   \glsxtr
1670 }

\glsxtr
1671 \newcommand*{\glsxtr}[2][]{%
1672   \ifglsentryexists{##2}%
1673   {%
1674     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1675   }%
1676   {%
1677     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1678       description={\nopostdesc},##1}%
1679   }%
1680   \expandafter\Gls\expandafter[\glsxtr@keylist]{##2}%
1681 }

\glsxtrpl
1682 \newcommand*{\glsxtrpl}[1][]{%
1683   \def\glsxtr@keylist{##1}%
1684   \glsxtrpl
1685 }

\glsxtrpl

```

```

1686 \newcommand*{\@glsxtrpl}[2][]{%
1687   \ifglsentryexists{##2}%
1688   {%
1689     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1690   }%
1691   {%
1692     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1693       description={\nopostdesc},##1}%
1694   }%
1695   \expandafter\glspl\expandafter[\glsxtr@keylist]{##2}%
1696 }

\Glsxtrpl
1697 \newcommand*{\Glsxtrpl}[1][]{%
1698   \def\glsxtr@keylist{##1}%
1699   \@Glsxtrpl
1700 }

@Glsxtrpl
1701 \newcommand*{@Glsxtrpl}[2][]{%
1702   \ifglsentryexists{##2}%
1703   {%
1704     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1705   }%
1706   {%
1707     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1708       description={\nopostdesc},##1}%
1709   }%
1710   \expandafter\Glspl\expandafter[\glsxtr@keylist]{##2}%
1711 }

\GlsXtrWarning
1712 \newcommand*{\GlsXtrWarning}[2]{%
1713   \def\@glsxtr@optlist{##1}%
1714   \onelevel@sanitize\@glsxtr@optlist
1715   \GlossariesExtraWarning{The options ‘@glsxtr@optlist’ have
1716   been ignored for entry ‘##2’ as it has already been defined}%
1717 }

```

Disable commands after the glossary:

```

1718 \renewcommand{\printglossary}[2]{%
1719   \def\@glsxtr@printglossopts{##1}%
1720   \def\@glsxtr@orgprintglossary{##1}{##2}%
1721   \def\@glsxtr{\@glsxtr@disabledflycommand\glsxtr}%
1722   \def\@glsxtrpl{\@glsxtr@disabledflycommand\glsxtrpl}%
1723   \def\@Glsxtr{\@glsxtr@disabledflycommand\Glsxtr}%
1724   \def\@Glsxtrpl{\@glsxtr@disabledflycommand\Glsxtrpl}%
1725 }

```

```

abledflycommand
1726 \newcommand*{\@glsxstr@disabledflycommand}[1]{%
1727   \PackageError{glossaries-extra}{%
1728     {\string##1\space can't be used after any of the \MessageBreak
1729       glossaries have been displayed}%
1730     {The on-the-fly commands enabled by
1731       \string\GlsXtrEnableOnTheFly\space may only be used \MessageBreak
1732       before the glossaries. If you want to use any entries \MessageBreak
1733       after any of the glossaries, you must use the standard \MessageBreak
1734       method of first defining the entry and then using the \MessageBreak
1735       entry with commands like \string\gls}%
1736     \@@glsxstr@disabledflycommand
1737   }%
1738 \newcommand*{\@glsxstr@disabledflycommand}[2][]{##2}

```

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

```

1739 \let\GlsXtrEnableOnTheFly\relax
1740 }
1741 \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.

```
1742 \newcommand*{\@glsxtr@current@style}{\@glossary@default@style}
```

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

etglossarystyle

```

1743 \renewcommand*{\setglossarystyle}[1]{%
1744   \ifcsundef{@glsstyle##1}%
1745   {%
1746     \PackageError{glossaries-extra}{Glossary style '#1' undefined}{}%
1747   }%
1748   {%
1749     \csname @glsstyle##1\endcsname

```

Only set the current style if it exists.

```

1750   \protected@edef\@glsxtr@current@style{##1}%
1751   }%
1752   \ifx\@glossary@default@style\relax
1753     \protected@edef\@glossary@default@style{##1}%
1754   \fi
1755 }

```

In case we have an old version of glossaries:

```
1756 \ifdef\@glossary@default@style
1757 {}
```

```

1758 {%
1759   \let\@glossary@default@style\relax
1760 }

listdottedwidth If \glslistdottedwidth has been defined and is currently equal to .5\hsize then make
the modification suggested in bug report #92
1761 \ifdef\glslistdottedwidth
1762 {%
1763   \ifdim\glslistdottedwidth=.5\hsize
1764     \setlength{\glslistdottedwidth}{-\dimexpr\maxdimen-1sp\relax}
1765     \AtBeginDocument{%
1766       \ifdim\glslistdottedwidth=-\dimexpr\maxdimen-1sp\relax
1767         \setlength{\glslistdottedwidth}{.5\columnwidth}%
1768       \fi
1769     }%
1770   \fi
1771 }
1772 {}%

```

Similarly for \glsdescwidth:

\glsdescwidth

```

1773 \ifdef\glsdescwidth
1774 {%
1775   \ifdim\glsdescwidth=.6\hsize
1776     \setlength{\glsdescwidth}{-\dimexpr\maxdimen-1sp\relax}
1777     \AtBeginDocument{%
1778       \ifdim\glsdescwidth=-\dimexpr\maxdimen-1sp\relax
1779         \setlength{\glsdescwidth}{.6\columnwidth}%
1780       \fi
1781     }%
1782   \fi
1783 }
1784 {}%

```

and for \glspagelistwidth:

\glspagelistwidth

```

1785 \ifdef\glspagelistwidth
1786 {%
1787   \ifdim\glspagelistwidth=.1\hsize
1788     \setlength{\glspagelistwidth}{-\dimexpr\maxdimen-1sp\relax}
1789     \AtBeginDocument{%
1790       \ifdim\glspagelistwidth=-\dimexpr\maxdimen-1sp\relax
1791         \setlength{\glspagelistwidth}{.1\columnwidth}%
1792       \fi
1793     }%
1794   \fi
1795 }
1796 {}%

```

aryentrynumbers Has the nonumberlist option been used?

```
1797 \def\org@glossaryentrynumbers{\#1{\gls@save@numberlist{\#1}}%  
1798 \ifx\org@glossaryentrynumbers\glossaryentrynumbers  
1799   \glsnonumberlistfalse  
1800   \renewcommand*\glossaryentrynumbers[1]{%  
1801     \ifglsentryexists{\glscurrententrylabel}{%  
1802       {}%  
1803       \@glsxtrpreloctag  
1804       \GlsXtrFormatLocationList{\#1}%  
1805       \@glsxtrpostloctag  
1806       \gls@save@numberlist{\#1}%  
1807     }{}}%  
1808   }%  
1809 \else  
1810   \glsnonumberlisttrue  
1811   \renewcommand*\glossaryentrynumbers[1]{%  
1812     \ifglsentryexists{\glscurrententrylabel}{%  
1813       {}%  
1814       \gls@save@numberlist{\#1}%  
1815     }{}}%  
1816   }%  
1817 \fi
```

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

```
1818 \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

```
1819 \newcommand*\GlsXtrEnablePreLocationTag[2]{%  
1820   \let@\glsxtrpreloctag\@glsxtrpreloctag  
1821   \let@\glsxtrpostloctag\@glsxtrpostloctag  
1822   \renewcommand*\glsxtr@pagetag{\#1}{%  
1823   \renewcommand*\glsxtr@pagestag{\#2}{%  
1824   \renewcommand*\glsxtr@savepreloctag[2]{%  
1825     \csgdef{\glsxtr@preloctag##1}{##2}{%  
1826   }{}}%  
1827   \renewcommand*\glsxtr@doloctag{%%  
1828     \ifcsundef{\glsxtr@preloctag@\glscurrententrylabel}{%  
1829       {}%  
1830       \GlossariesWarning{Missing pre-location tag for '\glscurrententrylabel'.}  
1831       Rerun required}{}}%  
1832   }{}}%  
1833   {}%
```

```
1834     \csuse{@glsxtr@preloctag@\glscurrententrylabel}%
1835     }%
1836   }%
1837 }
1838 \only\GlsXtrEnablePreLocationTag
```

glsxtrpreloctag

```
1839 \newcommand*{\@@glsxtrpreloctag}{%
1840   \let\@glsxtr@org@delimN\delimN
1841   \let\@glsxtr@org@delimR\delimR
1842   \let\@glsxtr@org@glsignore\glsignore
    \gdef is required as the delimiters may occur inside a scope.
1843   \gdef\@glsxtr@thisloctag{\@glsxtr@pagetag}%
1844   \renewcommand*{\delimN}{%
1845     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
1846     \@glsxtr@org@delimN}%
1847   \renewcommand*{\delimR}{%
1848     \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
1849     \@glsxtr@org@delimR}%
1850   \renewcommand*{\glsignore}[1]{%
1851     \gdef\@glsxtr@thisloctag{\relax}%
1852     \@glsxtr@org@glsignore{##1}}%
1853   \glsxtr@doloctag
1854 }
```

glsxtrpreloctag

```
1855 \newcommand*{\@glsxtrpreloctag}{}%
```

@glsxtr@pagetag

```
1856 \newcommand*{\@glsxtr@pagetag}{}%
```

glsxtr@pagestag

```
1857 \newcommand*{\@glsxtr@pagestag}{}%
```

lsxtrpostloctag

```
1858 \newcommand*{\@@glsxtrpostloctag}{%
1859   \let\delimN\@glsxtr@org@delimN
1860   \let\delimR\@glsxtr@org@delimR
1861   \let\glsignore\@glsxtr@org@glsignore
1862   \protected@write\@auxout{%
1863     {\string\@glsxtr@savepreloctag{\glscurrententrylabel}\{\@glsxtr@thisloctag\}}%
1864 }
```

lsxtrpostloctag

```
1865 \newcommand*{\@glsxtrpostloctag}{}%
```

```

lsxtr@preloctag
1866 \newcommand*{\glsxtr@savepreloctag}[2]{}
1867 \protected@write\@auxout{}{%
1868   \string\providecommand\string{\glsxtr@savepreloctag}[2]{}}

glsxtr@doloctag
1869 \newcommand*{\glsxtr@doloctag}{}}

ss@nonumberlist  Modify the nonumberlist key to use \GlsXtrFormatLocationList (and also save the number
list):
1870 \renewcommand*{\KV@printgloss@nonumberlist}[1]{%
1871   \XKV@plfalse
1872   \XKV@sttrue
1873   \XKV@checkchoice[\XKV@resa]{#1}{true,false}%
1874 {%
1875     \csname glsnonumberlist\XKV@resa\endcsname
1876     \ifglsnonumberlist
1877       \def\glossaryentrynumbers##1{\gls@save@numberlist{##1}}%
1878     \else
1879       \def\glossaryentrynumbers##1{%
1880         \glsxtrpreloctag
1881         \GlsXtrFormatLocationList{##1}%
1882         \glsxtrpostloctag
1883         \gls@save@numberlist{##1}}%
1884     \fi
1885 }%
1886 }

```

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.

```

1887 \renewcommand*{\glsentryfmt}{%
1888   \ifglshasshort{\glslabel}{\glssetabrvfmt{\glscategory{\glslabel}}}{}%
1889   \glsifregular{\glslabel}%
1890   {\glsxtrregularfont{\glsentryfmt}}%
1891 {%
1892   \ifglshasshort{\glslabel}%
1893   {\glsxtrabbreviationfont{\glsxtrgenabrvfmt}}%
1894   {\glsxtrregularfont{\glsentryfmt}}%
1895 }%
1896 }

```

`sxtrregularfont` Font used for regular entries.
1897 `\newcommand*{\glsxtrregularfont}[1]{#1}`

`bbrevglossaryfont` Font used for abbreviation entries.
1898 `\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.
1899 `\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).
1900 `\@glsxtr@record{#2}{#3}{glslink}%`
1901 `\glsdoifexists{#3}%`
1902 `{%`

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).
1903 `\let\glsxtrorg@ifKV@glslink@hyper\ifKV@glslink@hyper`
1904 `\let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper`
1905 `\def\glscustomtext{#4}%`
1906 `\@glsxtr@field@linkdefs`
1907 `#1%`
1908 `\@gls@link[#2]{#3}{#4}%`
1909 `\let\ifKV@glslink@hyper\glsxtrorg@ifKV@glslink@hyper`
1910 `}%`
1911 `\glspostlinkhook`
1912 `}`

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.
1913 `\let\@glsxtr@org@gls@\@gls@`
1914 `\def\@gls@#1#2{%`
1915 `\@glsxtr@record{#1}{#2}{glslink}%`
1916 `\@glsxtr@org@gls@{#1}{#2}%`
1917 `}%`

`\@glspl@` Save the original definition and redefine.
1918 `\let\@glsxtr@org@glspl@\@glspl@`
1919 `\def\@glspl@#1#2{%`

```
1920  \@glsxtr@record{#1}{#2}{glslink}%
1921  \glsxtr@org@glspl@{#1}{#2}%
1922 }%
```

\@Gls@ Save the original definition and redefine.

```
1923 \let\glsxtr@org@Gls@\@Gls@
1924 \def\@Gls@#1#2{%
1925  \@glsxtr@record{#1}{#2}{glslink}%
1926  \glsxtr@org@Gls@{#1}{#2}%
1927 }%
```

\@Glspl@ Save the original definition and redefine.

```
1928 \let\glsxtr@org@Glspl@\@Glspl@
1929 \def\@Glspl@#1#2{%
1930  \@glsxtr@record{#1}{#2}{glslink}%
1931  \glsxtr@org@Glspl@{#1}{#2}%
1932 }%
```

\@GLS@ Save the original definition and redefine.

```
1933 \let\glsxtr@org@GLS@\@GLS@
1934 \def\@GLS@#1#2{%
1935  \@glsxtr@record{#1}{#2}{glslink}%
1936  \glsxtr@org@GLS@{#1}{#2}%
1937 }%
```

\@GLSpl@ Save the original definition and redefine.

```
1938 \let\glsxtr@org@GLSpl@\@GLSpl@
1939 \def\@GLSpl@#1#2{%
1940  \@glsxtr@record{#1}{#2}{glslink}%
1941  \glsxtr@org@GLSpl@{#1}{#2}%
1942 }%
```

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

```
1943 \renewcommand*{\@glsdisp}[3][]{%
1944  \@glsxtr@record{#1}{#2}{glslink}%
1945  \glsdoifexists{#2}{%
1946    \let\do@gls@link@checkfirsthyper@gls@link@checkfirsthyper
1947    \let\glsifplural@\secondoftwo
1948    \let\glscapscase@\firstofthree
1949    \def\glscustomtext{#3}%
1950    \def\glsinsert{}%
1951    \def\@glo@text{\csname gls@\glstype @entryfmt\endcsname}%
1952    \gls@link[#1]{#2}{\@glo@text}%
1953    \ifKV@glslink@local
1954      \glslocalunset{#2}%
1955    \else
1956      \glsunset{#2}%
1957  }%
```

```

1957     \fi
1958   }%
1959   \glspostlinkhook
1960 }

\@gls@@link@ Redefine to include \@glsxtr@record
1961 \renewcommand*{\@gls@@link}[3] []{%
1962   \@glsxtr@record[#1]{#2}{glslink}%
1963   \glsdoifexistsodo{#2}%
1964   {%
1965     \let\do@gls@link@checkfirsthyper\relax
Post-link hook commands need initialising.
1966   \def\glscustomtext{#3}%
1967   \@glsxtr@field@linkdefs
1968   \@gls@link[#1]{#2}{#3}%
1969   }%
1970   {%
1971     \glstextformat{#3}%
1972   }%
1973   \glspostlinkhook
1974 }

```

sxtrinitwrgloss Set the default if the wrgloss is omitted.

```

1975 \newcommand*{\glsxtrinitwrgloss}{%
1976   \glsifattribute{\glslabel}{wrgloss}{after}%
1977   {%
1978     \glsxtrinitwrglossbeforefalse
1979   }%
1980   {%
1981     \glsxtrinitwrglossbeforetrue
1982   }%
1983 }

```

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

```

1984 \newif\ifglsxtrinitwrglossbefore
1985 \glsxtrinitwrglossbeforetrue

```

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

```

1986 \define@choicekey{glslink}{wrgloss}%
1987 [ \glsxtr@wrglossval \glsxtr@wrglossnr ]%
1988 {before,after}%
1989 {%
1990   \ifcase\glsxtr@wrglossnr\relax
1991     \glsxtrinitwrglossbeforetrue
1992   \or
1993     \glsxtrinitwrglossbeforefalse
1994   \fi
1995 }

```

```

1996 \define@key{glslink}{thevalue}{\def\@glsxtr@thevalue{\#1}}
1997 \define@key{glslink}{theHvalue}{\def\@glsxtr@theHvalue{\#1}}
tr@hyperoutside Define a hyperoutside key to determine whether \hyperlink should be outside \glstextformat.
1998 \define@boolkey{glslink}[\glsxtr@]{hyperoutside}[true]{}
1999 \glsxtr@hyperoutsidetrue

local@textformat Provide a key to locally change the text format.
2000 \define@key{glslink}{textformat}{%
2001   \ifcsdef{\#1}{%
2002     {%
2003       \letcs{\@glsxtr@local@textformat}{\#1}{%
2004     }%
2005   {%
2006     \PackageError{glossaries-extra}{Unknown control sequence name '#1'}{}{%
2007   }%
2008 }%
2009 \define@key{glslink}{prefix}{\def\glolinkprefix{\#1}}
nithyperoutside Set the default if the hyperoutside is omitted.
2010 \newcommand*{\glsxtrinithyperoutside}{%
2011   \glsifattribute{\glslabel}{hyperoutside}{false}{%
2012   {%
2013     \glsxtr@hyperoutsidefalse
2014   }%
2015   {%
2016     \glsxtr@hyperoutsidetrue
2017   }%
2018 }

r@inc@linkcount Does nothing by default.
2019 \newcommand*{\glsxtr@inc@linkcount}{}

slinkpresetkeys User hook performed immediately before options are set. Does nothing by default.
2020 \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.
2021 \newrobustcmd*{\GlsXtrExpandedFmt}[2]{%
2022   \protected@edef{\glsxtr@tmp{\#2}}{%
2023     \expandafter{\expandafter{\glsxtr@tmp}}{%
2024   }
}@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.

```

```

2025 \def\@gls@link[#1]#2#3{%
2026   \leavevmode
2027   \edef\glslabel{\glsdetoklabel{#2}}%
2028   \def\@gls@link@opts{#1}%
2029   \let\@gls@link@label\glslabel
2030   \let\@glsnumberformat\glsxtr@defaultnumberformat
2031   \edef\@gls@counter{\csname glo@\glslabel @counter\endcsname}%
2032   \edef\glstype{\csname glo@\glslabel @type\endcsname}%
2033   \let\org@ifKV@glslink@hyper\ifKV@glslink@hyper

    Save current value of \glolinkprefix:
2034   \let\@glsxtr@org@glolinkprefix\glolinkprefix
    Initialise \@glsxtr@local@textformat
2035   \let\@glsxtr@local@textformat\relax
    Initialise thevalue and theHvalue (v1.19).
2036   \def\@glsxtr@thevalue{}%
2037   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
    Initialise when indexing should occur (new to v1.14).
2038   \glsxtrinitwrgloss
    Initialise whether \hyperlink should be outside \glstextformat (new to v1.21).
2039   \glsxtrinithyperoutside
    Note that the default link options may override \glsxtrinitwrgloss.
2040   \gls@setdefault@glslink@opts
    Increment link counter if enabled (new to v1.26).
2041   \glsxtr@inc@linkcount
    As the original definition.
2042   \do@glsdisablehyperinlist
2043   \do@gls@link@checkfirsthyper
    User hook before options are set (new to v1.26):
2044   \glslinkpresetkeys
    Set options.
2045   \setkeys{glslink}{#1}%
    User hook after options are set:
2046   \glslinkpostsetkeys
    Check thevalue and theHvalue before saving (v1.19).
2047   \ifdefempty{\@glsxtr@thevalue}%
2048   {%
2049     \gls@saveentrycounter
2050   }%
2051   {%
2052     \let\theglsentrycounter\@glsxtr@thevalue
2053     \def\theHglsentrycounter{\@glsxtr@theHvalue}%
2054   }%
2055   \gls@setsort{\glslabel}%

```

Check if the textformat key has been used.

```
2056 \ifx\@glsxtr@local@textformat\relax
```

Check textformat attribute (new to v1.21).

```
2057 \glshasattribute{\glslabel}{textformat}%
2058 {%
2059   \edef\@glsxtr@attrval{\glsgetattribute{\glslabel}{textformat}}%
2060   \ifcsdef{\@glsxtr@attrval}%
2061   {%
2062     \letcs{\@glsxtr@textformat}{\@glsxtr@attrval}%
2063   }%
2064   {%
2065     \GlossariesExtraWarning{Unknown control sequence name
2066       '\@glsxtr@attrval' supplied in textformat attribute
2067       for entry '\glslabel'. Reverting to default \string\glstextformat}%
2068     \let\@glsxtr@textformat\glstextformat
2069   }%
2070 }%
2071 {%
2072   \let\@glsxtr@textformat\glstextformat
2073 }%
2074 \else
2075   \let\@glsxtr@textformat\@glsxtr@local@textformat
2076 \fi
```

Do write if it should occur before the link text:

```
2077 \ifglsxtrinitwrglossbefore
2078   \do@wrglossary{#2}%
2079 \fi
```

Do the link text:

```
2080 \ifKV@glslink@hyper
2081   \ifglsxtr@hyperoutside
2082     \glslink{\glolinkprefix\glslabel}{\@glsxtr@textformat{#3}}%
2083   \else
2084     \glsxtr@textformat{\glslink{\glolinkprefix\glslabel}{#3}}%
2085   \fi
2086 \else
2087   \ifglsxtr@hyperoutside
2088     \glsdonohyperlink{\glolinkprefix\glslabel}{\@glsxtr@textformat{#3}}%
2089   \else
2090     \glsxtr@textformat{\glsdonohyperlink{\glolinkprefix\glslabel}{#3}}%
2091   \fi
2092 \fi
```

Do write if it should occur after the link text:

```
2093 \ifglsxtrinitwrglossbefore
2094 \else
2095   \do@wrglossary{#2}%
2096 \fi
```

Restore original value of \glolinkprefix:

```
2097 \let\glolinkprefix\@glsxtr@org@glolinkprefix
```

As the original definition:

```
2098 \let\ifKV@glslink@hyper\org@ifKV@glslink@hyper
2099 }
```

```
2100 \define@key{glossadd}{thevalue}{\def\@glsxtr@thevalue{\#1}}
2101 \define@key{glossadd}{theHvalue}{\def\@glsxtr@theHvalue{\#1}}
```

`lsaddpresetkeys`

```
2102 \newcommand*{\glsaddpresetkeys}{}%
```

`saddpostsetkeys`

```
2103 \newcommand*{\glsaddpostsetkeys}{}%
```

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

```
2104 \renewrobustcmd*{\glsadd}[2][]{%
2105   \@glsxtrifinmark
2106   {}%
2107   {}%
2108   \@gls@adjustmode
2109   \@glsxtr@record{\#1}{\#2}{glossadd}%
2110   \glsdoifexists{\#2}%
2111   {}%
2112   \let\@glsnumberformat\@glsxtr@defaultnumberformat
2113   \edef\@gls@counter{\csname glo@\glsdetoklabel{\#2}@counter\endcsname}%
2114   \def\@glsxtr@thevalue{}%
2115   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
}
```

Implement any default settings (before options are set)

```
2116 \glsaddpresetkeys
2117 \setkeys{glossadd}{#1}%
```

Implement any default settings (after options are set)

```
2118 \glsaddpostsetkeys
2119 \ifdefempty{\@glsxtr@thevalue}%
2120   {}%
2121   \@gls@saveentrycounter
2122   {}%
2123   {}%
2124   \let\theglsentrycounter\@glsxtr@thevalue
2125   \def\theHglsentrycounter{\@glsxtr@theHvalue}%
2126   {}%
```

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

```
2127 \@gls@setsort{\#2}%
2128 \@@do@wrglossary{\#2}%
2129 }%
```

```
2130  }%
2131 }
```

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

```
2132 \newrobustcmd{\glsaddeach}[2][]{%
2133   \@for\@gls@thislabel:=#2\do{\glsadd[#1]{\@gls@thislabel}}%
2134 }
```

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

```
2135 \newcommand*{\@glsxtr@field@linkdefs}{%
2136   \let\glsxtrifwasfirstuse\@secondoftwo
2137   \let\glsifplural\@secondoftwo
2138   \let\glscapscase\@firstofthree
2139   \let\glsinsert\@empty
2140 }
```

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

assignfieldfont

```
2141 \newcommand*{\glsxtrassignfieldfont}[1]{%
2142   \ifglsentryexists{#1}{%
2143     {%
2144       \ifglshasshort{#1}{%
2145         {%
2146           \glssetabbrvfmt{\glscategory{#1}}%
2147           \glsifregular{#1}{%
2148             {\let\@gls@field@font\glsxtrregularfont}%
2149             {\let\@gls@field@font\@firstofone}%
2150           }%
2151         {%
2152           \glsifnotregular{#1}{%
2153             {\let\@gls@field@font\@firstofone}%
2154             {\let\@gls@field@font\glsxtrregularfont}%
2155           }%
2156         }%
2157       {%
2158         \let\@gls@field@font@gobble
2159       }%
2160     }%
2161 }
```

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

```
2161 \def\@glstext@#1#2[#3]{%
2162   \glsxtrassignfieldfont{#2}%
2163   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccesstext{#2}{#3}}{}}%
2164 }
```

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

```
2165 \def\@GLStext@#1#2[#3]{%
```

```

2166 \glsxtrassignfieldfont{#2}%
2167 \@gls@field@link[\let\glscapscase\@thirdofthree]{#1}{#2}%
2168 {\@gls@field@font{\GLSaccessstext{#2}\mfirstucMakeUppercase{#3}}}{}
2169 }

```

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

```

2170 \def\@Glstext@#1#2[#3]{%
2171   \glsxtrassignfieldfont{#2}%
2172   \@gls@field@link[\let\glscapscase\@secondofthree]{#1}{#2}%
2173   {\@gls@field@font{\Glsaccessstext{#2}#3}}{%
2174 }

```

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

```

2175 \newcommand*\glsxtrchecknohyperfirst}[1]{%
2176   \glsifattribute{#1}{nohyperfirst}{true}{\KV@glslink@hyperfalse}{}{%
2177 }

```

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

```

2178 \def\@glsfirst@#1#2[#3]{%
2179   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirst honours the nohyperfirst attribute.

```

2180   \@gls@field@link
2181   [\let\glsxtrifwasfirstuse\@firstoftwo
2182     \glsxtrchecknohyperfirst{#2}%
2183   ]{#1}{#2}%
2184   {\@gls@field@font{\glsaccessfirst{#2}#3}}{%
2185 }

```

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

```

2186 \def\@Glsfirst@#1#2[#3]{%
2187   \glsxtrassignfieldfont{#2}%

```

Ensure that \Glsfirst honours the nohyperfirst attribute.

```

2188   \@gls@field@link
2189   [\let\glsxtrifwasfirstuse\@firstoftwo
2190     \let\glscapscase\@secondofthree
2191     \glsxtrchecknohyperfirst{#2}%
2192   ]%
2193   {#1}{#2}{\@gls@field@font{\Glsaccessfirst{#2}#3}}{%
2194 }

```

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

```

2195 \def\@GLSfirst@#1#2[#3]{%
2196   \glsxtrassignfieldfont{#2}%

```

Ensure that \GLSfirst honours the nohyperfirst attribute.

```
2197  \@gls@field@link
2198  [\let\glsxtrifwasfirstuse\@firstoftwo
2199  \let\glscapscase\@thirdofthree
2200  \glsxtrchecknohyperfirst{#2}%
2201 ]%
2202  {#1}{#2}{\@gls@field@font{\GLSaccessfirst{#2}\mfirstucMakeUppercase{#3}}}}%
2203 }
```

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

```
2204 \def\@glsplural@#1#2[#3]{%
2205  \glsxtrassignfieldfont{#2}%
2206  \@gls@field@link[\let\glsifplural\@firstoftwo]{#1}{#2}%
2207  {\@gls@field@font{\glsaccessplural{#2}#3}}%
2208 }
```

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

```
2209 \def\@Glsplural@#1#2[#3]{%
2210  \glsxtrassignfieldfont{#2}%
2211  \@gls@field@link
2212  [\let\glsifplural\@firstoftwo
2213  \let\glscapscase\@secondofthree
2214 ]%
2215  {#1}{#2}{\@gls@field@font{\Glsaccessplural{#2}#3}}%
2216 }
```

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

```
2217 \def\@GLSplural@#1#2[#3]{%
2218  \glsxtrassignfieldfont{#2}%
2219  \@gls@field@link
2220  [\let\glsifplural\@firstoftwo
2221  \let\glscapscase\@thirdofthree
2222 ]%
2223  {#1}{#2}{\@gls@field@font{\GLSaccessplural{#2}\mfirstucMakeUppercase{#3}}}}%
2224 }
```

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

```
2225 \def\@glsfirstplural@#1#2[#3]{%
2226  \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2227  \@gls@field@link
2228  [\let\glsxtrifwasfirstuse\@firstoftwo
2229  \let\glsifplural\@firstoftwo
2230  \glsxtrchecknohyperfirst{#2}%
2231 ]%
2232  {#1}{#2}{\@gls@field@font{\glsaccessfirstplural{#2}#3}}%
2233 }
```

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

```
2234 \def\@Glsfirstplural[#1#2[#3]{%
2235   \glsxtrassignfieldfont{#2}%
2236   Ensure that \glsxtrfirstplural honours the nohyperfirst attribute.
2237   \@gls@field@link
2238   [\let\glsxtrifwasfirstuse\@firstoftwo
2239   \let\glsifplural\@firstoftwo
2240   \let\glscapscase\@secondofthree
2241   \glsxtrchecknohyperfirst{#2}%
2242   ]%
2243   {#1}{#2}{\@gls@field@font{\Glsaccessfirstplural{#2}#3}}%
2244 }
```

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

```
2244 \def\@GLSfirstplural[#1#2[#3]{%
2245   \glsxtrassignfieldfont{#2}%
2246   Ensure that \glsxtrfirstplural honours the nohyperfirst attribute.
2247   \@gls@field@link
2248   [\let\glsxtrifwasfirstuse\@firstoftwo
2249   \let\glsifplural\@firstoftwo
2250   \let\glscapscase\@thirdofthree
2251   \glsxtrchecknohyperfirst{#2}%
2252   ]%
2253   {#1}{#2}%
2254   {\@gls@field@font{\GLSaccessfirstplural{#2}\mfirstrucMakeUppercase{#3}}}%
2255 }
```

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

```
2255 \def\@glsname[#1#2[#3]{%
2256   \glsxtrassignfieldfont{#2}%
2257   \@gls@field@link{#1}{#2}{\@gls@field@font{\glsaccessname{#2}#3}}%
2258 }
```

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

```
2259 \def\@Glsname[#1#2[#3]{%
2260   \glsxtrassignfieldfont{#2}%
2261   \@gls@field@link
2262   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2263   {\@gls@field@font{\Glsaccessname{#2}#3}}%
2264 }
```

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

```
2265 \def\@GLSname[#1#2[#3]{%
2266   \glsxtrassignfieldfont{#2}%
2267   \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2268   {#1}{#2}%
2269   {\@gls@field@font{\GLSaccessname{#2}\mfirstrucMakeUppercase{#3}}}%
2270 }
```

```

\@glsdesc@  

2271 \def\@glsdesc@#1#2[#3]{%  

2272   \glsxtrassignfieldfont{#2}%
2273   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccessdesc{#2}#3}}%
2274 }  

  

\@Glsdesc@ First letter uppercase version.  

2275 \def\@Glsdesc@#1#2[#3]{%  

2276   \glsxtrassignfieldfont{#2}%
2277   \gls@field@link
2278   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2279   {\gls@field@font{\Glsaccessdesc{#2}#3}}%
2280 }  

  

\@GLSdesc@ All uppercase version.  

2281 \def\@GLSdesc@#1#2[#3]{%  

2282   \glsxtrassignfieldfont{#2}%
2283   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2284   {#1}{#2}{\gls@field@font{\GLSaccessdesc{#2}\mfirstucMakeUppercase{#3}}}%
2285 }  

  

@glsdescplural@ No case-changing version.  

2286 \def\@glsdescplural@#1#2[#3]{%  

2287   \glsxtrassignfieldfont{#2}%
2288   \gls@field@link
2289   [\let\glscapscase\@secondoftwo
2290   \let\glsifplural\@firstoftwo
2291 ]{#1}{#2}{\gls@field@font{\glsaccessdescplural{#2}#3}}%
2292 }  

  

@Glsdescplural@ First letter uppercase version.  

2293 \def\@Glsdescplural@#1#2[#3]{%  

2294   \glsxtrassignfieldfont{#2}%
2295   \gls@field@link
2296   [\let\glscapscase\@secondoftwo
2297   \let\glsifplural\@firstoftwo
2298 ]{#1}{#2}{\gls@field@font{\Glsaccessdescplural{#2}#3}}%
2299 }  

  

@GLSdescplural@ All uppercase version.  

2300 \def\@GLSdesc@#1#2[#3]{%  

2301   \glsxtrassignfieldfont{#2}%
2302   \gls@field@link
2303   [\let\glscapscase\@thirdoftwo
2304   \let\glsifplural\@firstoftwo
2305 ]%
2306   {#1}{#2}%
2307   {\gls@field@font{\GLSaccessdescplural{#2}\mfirstucMakeUppercase{#3}}}%
2308 }

```

```

\@glssymbol@  

2309 \def\@glssymbol@#1#2[#3]{%  

2310   \glsxtrassignfieldfont{#2}%
2311   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccesssymbol{#2}#3}}%
2312 }  

  

\@Glssymbol@ First letter uppercase version.  

2313 \def\@Glssymbol@#1#2[#3]{%
2314   \glsxtrassignfieldfont{#2}%
2315   \gls@field@link
2316   [\let\glscapscase\@secondoftwo]%
2317   {#1}{#2}{\gls@field@font{\Glsaccesssymbol{#2}#3}}%
2318 }  

  

\@GLSsymbol@ All uppercase version.  

2319 \def\@GLSsymbol@#1#2[#3]{%
2320   \glsxtrassignfieldfont{#2}%
2321   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2322   {#1}{#2}{\gls@field@font{\GLSaccesssymbol{#2}\mfirstucMakeUppercase{#3}}}%
2323 }  

  

lssymbolplural@ No case-changing version.  

2324 \def\@lssymbolplural@#1#2[#3]{%
2325   \glsxtrassignfieldfont{#2}%
2326   \gls@field@link
2327   [\let\glscapscase\@secondoftwo
2328   \let\glsifplural\@firstoftwo
2329   ]{#1}{#2}{\gls@field@font{\glsaccesssymbolplural{#2}#3}}%
2330 }  

  

lssymbolplural@ First letter uppercase version.  

2331 \def\@Glssymbolplural@#1#2[#3]{%
2332   \glsxtrassignfieldfont{#2}%
2333   \gls@field@link
2334   [\let\glscapscase\@secondoftwo
2335   \let\glsifplural\@firstoftwo
2336   ]{#1}{#2}{\gls@field@font{\Glsaccesssymbolplural{#2}#3}}%
2337 }  

  

LSsymbolplural@ All uppercase version.  

2338 \def\@GLSsymbol@#1#2[#3]{%
2339   \glsxtrassignfieldfont{#2}%
2340   \gls@field@link
2341   [\let\glscapscase\@thirdoftwo
2342   \let\glsifplural\@firstoftwo
2343   ]%
2344   {#1}{#2}%
2345   {\gls@field@font{\GLSaccesssymbolplural{#2}\mfirstucMakeUppercase{#3}}}%
2346 }

```

\@Glsuseri@ First letter uppercase version.

```
2347 \def \@Glsuseri@#1#2[#3]{%
2348   \glsxtrassignfieldfont{#2}%
2349   \gls@field@link
2350   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2351   {\gls@field@font{\Glsentryuseri{#2}{#3}}}{%
2352 }
```

\@GLSuseri@ All uppercase version.

```
2353 \def \@GLSuseri@#1#2[#3]{%
2354   \glsxtrassignfieldfont{#2}%
2355   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2356   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuseri{#2}{#3}}}}{%
2357 }
```

\@Glsuserii@ First letter uppercase version.

```
2358 \def \@Glsuserii@#1#2[#3]{%
2359   \glsxtrassignfieldfont{#2}%
2360   \gls@field@link
2361   [\let\glscapscase\@secondoftwo]%
2362   {#1}{#2}{\gls@field@font{\Glsentryuserii{#2}{#3}}}{%
2363 }
```

\@GLSuserii@ All uppercase version.

```
2364 \def \@GLSuserii@#1#2[#3]{%
2365   \glsxtrassignfieldfont{#2}%
2366   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2367   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuserii{#2}{#3}}}}{%
2368 }
```

\@Glsuseriii@ First letter uppercase version.

```
2369 \def \@Glsuseriii@#1#2[#3]{%
2370   \glsxtrassignfieldfont{#2}%
2371   \gls@field@link
2372   [\let\glscapscase\@secondoftwo]%
2373   {#1}{#2}{\gls@field@font{\Glsentryuseriii{#2}{#3}}}{%
2374 }
```

\@GLSuseriii@ All uppercase version.

```
2375 \def \@GLSuseriii@#1#2[#3]{%
2376   \glsxtrassignfieldfont{#2}%
2377   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2378   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuseriii{#2}{#3}}}}{%
2379 }
```

\@Glsuseriv@ First letter uppercase version.

```
2380 \def \@Glsuseriv@#1#2[#3]{%
2381   \glsxtrassignfieldfont{#2}%

```

```

2382  \@gls@field@link
2383  [\let\glscapscase\@secondoftwo]%
2384  {#1}{#2}{\@gls@field@font{\Glsentryuseriv{#2}{#3}}}{%
2385 }

\@GLSuseriv@ All uppercase version.

2386 \def\@GLSuseriv#1#2[#3]{%
2387  \glsxtrassignfieldfont{#2}%
2388  \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2389  {#1}{#2}{%
2390  {\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseriv{#2}{#3}}}}{%
2391 }

```

\@Glsuserv@ First letter uppercase version.

```

2392 \def\@Glsuserv#1#2[#3]{%
2393  \glsxtrassignfieldfont{#2}%
2394  \@gls@field@link
2395  [\let\glscapscase\@secondoftwo]%
2396  {#1}{#2}{\@gls@field@font{\Glsentryuserv{#2}{#3}}}{%
2397 }

```

\@GLSuserv@ All uppercase version.

```

2398 \def\@GLSuserv#1#2[#3]{%
2399  \glsxtrassignfieldfont{#2}%
2400  \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2401  {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuserv{#2}{#3}}}}{%
2402 }

```

\@Glsuservi@ First letter uppercase version.

```

2403 \def\@Glsuservi#1#2[#3]{%
2404  \glsxtrassignfieldfont{#2}%
2405  \@gls@field@link
2406  [\let\glscapscase\@secondoftwo]%
2407  {#1}{#2}{\@gls@field@font{\Glsentryuservi{#2}{#3}}}{%
2408 }

```

\@GLSuservi@ All uppercase version.

```

2409 \def\@GLSuservi#1#2[#3]{%
2410  \glsxtrassignfieldfont{#2}%
2411  \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2412  {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuservi{#2}{#3}}}}{%
2413 }

```

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

\@acrshort No case change.

```

2414 \def\@acrshort#1#2[#3]{%

```

```

2415 \glsdoifexists{#2}%
2416 {%
2417   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2418   \let\glsxtrifwasfirstuse\@secondoftwo
2419   \let\glsifplural\@secondoftwo
2420   \let\glscapscase\@firstofthree
2421   \let\glsinsert\@empty
2422   \def\glscustomtext{%
2423     \acronymfont{\glsaccessshort{#2}}#3%
2424   }%
2425   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2426 }%
2427 \glspostlinkhook
2428 }

```

\@Acrshort First letter uppercase.

```

2429 \def\@Acrshort#1#2[#3]{%
2430   \glsdoifexists{#2}%
2431 {%
2432   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2433   \let\glsxtrifwasfirstuse\@secondoftwo
2434   \let\glsifplural\@secondoftwo
2435   \let\glscapscase\@secondofthree
2436   \let\glsinsert\@empty
2437   \def\glscustomtext{%
2438     \acronymfont{\Glsaccessshort{#2}}#3%
2439   }%
2440   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2441 }%
2442 \glspostlinkhook
2443 }

```

\@ACRshort All uppercase.

```

2444 \def\@ACRshort#1#2[#3]{%
2445   \glsdoifexists{#2}%
2446 {%
2447   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2448   \let\glsxtrifwasfirstuse\@secondoftwo
2449   \let\glsifplural\@secondoftwo
2450   \let\glscapscase\@thirdofthree
2451   \let\glsinsert\@empty
2452   \def\glscustomtext{%
2453     \mfirstrucMakeUppercase{\acronymfont{\glsaccessshort{#2}}#3}%
2454   }%
2455   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2456 }%
2457 \glspostlinkhook
2458 }

```

\@acrshortpl No case change.

```
2459 \def\@acrshortpl#1#2[#3]{%
2460   \glsdoifexists{#2}%
2461 {%
2462   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2463   \let\glsxtrifwasfirstuse\@secondoftwo
2464   \let\glsifplural\@firstoftwo
2465   \let\glscapscase\@firstofthree
2466   \let\glsinsert\@empty
2467   \def\glscustomtext{%
2468     \acronymfont{\glsaccessshortpl{#2}}#3%
2469   }%
2470   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2471 }%
2472 \glspostlinkhook
2473 }
```

\@Acrshortpl First letter uppercase.

```
2474 \def\@Acrshortpl#1#2[#3]{%
2475   \glsdoifexists{#2}%
2476 {%
2477   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2478   \let\glsxtrifwasfirstuse\@secondoftwo
2479   \let\glsifplural\@firstoftwo
2480   \let\glscapscase\@secondofthree
2481   \let\glsinsert\@empty
2482   \def\glscustomtext{%
2483     \acronymfont{\Glsaccessshortpl{#2}}#3%
2484   }%
2485   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2486 }%
2487 \glspostlinkhook
2488 }
```

\@ACRshortpl All uppercase.

```
2489 \def\@ACRshortpl#1#2[#3]{%
2490   \glsdoifexists{#2}%
2491 {%
2492   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2493   \let\glsxtrifwasfirstuse\@secondoftwo
2494   \let\glsifplural\@firstoftwo
2495   \let\glscapscase\@thirdofthree
2496   \let\glsinsert\@empty
2497   \def\glscustomtext{%
2498     \mfirstrucMakeUppercase{\acronymfont{\glsaccessshortpl{#2}}#3}%
2499   }%
2500   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2501 }%
2502 \glspostlinkhook
```

2503 }

\@acrlong No case change.

```
2504 \def\@acrlong#1#2[#3]{%
2505   \glsdoifexists{#2}{%
2506     {%
2507       \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2508       \let\glsxtrifwasfirstuse\secondoftwo
2509       \let\glsifplural\secondoftwo
2510       \let\glscapscase\firstofthree
2511       \let\glsinsert\empty
2512       \def\glscustomtext{%
2513         \acronymfont{\glsaccesslong{#2}}#3%
2514       }%
2515       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2516     }%
2517   \glspostlinkhook
2518 }
```

\@Acrlong First letter uppercase.

```
2519 \def\@Acrlong#1#2[#3]{%
2520   \glsdoifexists{#2}{%
2521     {%
2522       \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2523       \let\glsxtrifwasfirstuse\secondoftwo
2524       \let\glsifplural\secondoftwo
2525       \let\glscapscase\secondofthree
2526       \let\glsinsert\empty
2527       \def\glscustomtext{%
2528         \acronymfont{\Glsaccesslong{#2}}#3%
2529       }%
2530       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2531     }%
2532   \glspostlinkhook
2533 }
```

\@ACRlong All uppercase.

```
2534 \def\@ACRlong#1#2[#3]{%
2535   \glsdoifexists{#2}{%
2536     {%
2537       \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2538       \let\glsxtrifwasfirstuse\secondoftwo
2539       \let\glsifplural\secondoftwo
2540       \let\glscapscase\thirdofthree
2541       \let\glsinsert\empty
2542       \def\glscustomtext{%
2543         \mfirstrucMakeUppercase{\acronymfont{\glsaccesslong{#2}}#3}%
2544       }%
2545       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%

```

```

2546 }%
2547 \glspostlinkhook
2548 }

\@acrlongpl No case change.
2549 \def\@acrlongpl#1#2[#3]{%
2550   \glsdoifexists{#2}%
2551 {%
2552   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2553   \let\glsxtrifwasfirstuse\@secondoftwo
2554   \let\glsifplural\@firstoftwo
2555   \let\glscapscase\@firstofthree
2556   \let\glsinsert\@empty
2557   \def\glscustomtext{%
2558     \acronymfont{\glsaccesslongpl{#2}}#3%
2559   }%
2560   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2561 }%
2562 \glspostlinkhook
2563 }

```

\@Acrlongpl First letter uppercase.

```

2564 \def\@Acrlongpl#1#2[#3]{%
2565   \glsdoifexists{#2}%
2566 {%
2567   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2568   \let\glsxtrifwasfirstuse\@secondoftwo
2569   \let\glsifplural\@firstoftwo
2570   \let\glscapscase\@secondofthree
2571   \let\glsinsert\@empty
2572   \def\glscustomtext{%
2573     \acronymfont{\Glsaccesslongpl{#2}}#3%
2574   }%
2575   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2576 }%
2577 \glspostlinkhook
2578 }

```

\@ACRlongpl All uppercase.

```

2579 \def\@ACRlongpl#1#2[#3]{%
2580   \glsdoifexists{#2}%
2581 {%
2582   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2583   \let\glsxtrifwasfirstuse\@secondoftwo
2584   \let\glsifplural\@firstoftwo
2585   \let\glscapscase\@thirdofthree
2586   \let\glsinsert\@empty
2587   \def\glscustomtext{%
2588     \mfirstucMakeUppercase{\acronymfont{\glsaccesslongpl{#2}}#3}%

```

```

2589    }%
2590    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2591 }%
2592 \glspostlinkhook
2593 }

```

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

\glsaddkey

```

2594 \renewcommand*{\glsaddkey}[7]{%
2595   \key@ifundefined{glossentry}{#1}{%
2596   {%
2597     \define@key{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
2598     \appto{\gls@keymap}{, #1}{#1}}%
2599     \appto{\@newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
2600     \appto{\@newglossaryentryposthook}{%
2601       \letcs{@glo@tmp}{@glo@#1}}%
2602       \gls@assign@field{#2}{\glo@label}{#1}{\glo@tmp}}%
2603   }%
2604   \newcommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
2605   \newcommand*{#4}[1]{\Gls@entry@field{##1}{#1}}%

```

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

```

2606 \ifcsdef{@gls@user@#1@}{%
2607 {%
2608   \PackageError{glossaries}{%
2609     {Can't define '\string#5' as helper command
2610     '\expandafter\string\csname @gls@user@#1@ \endcsname' already
2611     exists}}%
2612   }%
2613 }%
2614 {%
2615   \expandafter\newcommand\expandafter*\expandafter
2616     {\csname @gls@user@#1\endcsname}[2][]{%
2617       \new@ifnextchar[%
2618         {\csuse{@gls@user@#1@}{##1}{##2}}%
2619         {\csuse{@gls@user@#1@}{##1}{##2}}[]}}%
2620   \csdef{@gls@user@#1@}{##1##2}[##3]{%
2621     \gls@field@link{##1}{##2}{##3}{##2}{##3}}%
2622   }%
2623   \newrobustcmd*{#5}{%
2624     \expandafter\gls@hyp@opt\csname @gls@user@#1\endcsname}%
2625 }

```

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

```

2626 \ifcsdef{@Gls@user@#1@}{%
2627 {%
2628   \PackageError{glossaries}{%
2629     {Can't define '\string#6' as helper command

```

```

2630      '\expandafter\string\csname @Gls@user@#1@\endcsname' already
2631      exists}%
2632  {}%
2633 }%
2634 {%
2635 \expandafter\newcommand\expandafter*\expandafter
2636 {\csname @Gls@user@#1\endcsname}[2] []{%
2637     \new@ifnextchar[%
2638         {\csuse{@Gls@user@#1@}{##1}{##2}}%
2639         {\csuse{@Gls@user@#1@}{##1}{##2}[]}}%
2640 \csdef{@Gls@user@#1@}##1##2[##3]{%
2641     \@gls@field@link[\let\glscaps@case\@secondofthree]%
2642     {##1}{##2}{##4{##2}##3}}%
2643 }%
2644 \newrobustcmd*{#6}{%
2645     \expandafter\@gls@hyp@opt\csname @Gls@user@#1\endcsname}%
2646 }%

```

Finally the all caps version (modified):

```

2647 \ifcsdef{@GLS@user@#1@}%
2648 {%
2649     \PackageError{glossaries}%
2650     {Can't define '\string#7' as helper command}
2651     '\expandafter\string\csname @GLS@user@#1@\endcsname' already
2652     exists}%
2653 {}%
2654 }%
2655 {%
2656 \expandafter\newcommand\expandafter*\expandafter
2657 {\csname @GLS@user@#1\endcsname}[2] []{%
2658     \new@ifnextchar[%
2659         {\csuse{@GLS@user@#1@}{##1}{##2}}%
2660         {\csuse{@GLS@user@#1@}{##1}{##2}[]}}%
2661 \csdef{@GLS@user@#1@}##1##2[##3]{%
2662     \@gls@field@link[\let\glscaps@case\@thirdofthree]%
2663     {##1}{##2}{\mfirstuc@MakeUppercase{##3{##2}##3}}}}%
2664 }%
2665 \newrobustcmd*{#7}{%
2666     \expandafter\@gls@hyp@opt\csname @GLS@user@#1\endcsname}%
2667 }%
2668 }%
2669 {%
2670     \PackageError{glossaries-extra}{Key '#1' already exists}{}%
2671 }%
2672 }

```

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

```
2673 \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.

```
2674 \let\@glsxtr@org@checkfirsthyper\@gls@link@checkfirsthyper
2675 \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).

```
2676 \ifglsused{\glslabel}%
2677   {\let\glsxtrifwasfirstuse\@secondoftwo}
2678   {\let\glsxtrifwasfirstuse\@firstoftwo}%
```

Store the category label for convenience.

```
2679 \edef\glscategorylabel{\glscategory{\glslabel}}%
2680 \ifglsused{\glslabel}%
2681 {%
2682   \glsifcategoryattribute{\glscategorylabel}{nohypernext}{true}%
2683   {\KV@glslink@hyperfalse}{}%
2684 }%
2685 {%
2686   \glsifcategoryattribute{\glscategorylabel}{nohyperfirst}{true}%
2687   {\KV@glslink@hyperfalse}{}%
2688 }%
2689 \glslinkcheckfirsthyperhook
2690 }
```

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.

```
2691 \ifdef\do@glsdisablehyperinlist
2692 {%
2693   \let\@glsxtr@do@glsdisablehyperinlist\do@glsdisablehyperinlist
2694   \renewcommand*\{@do@glsdisablehyperinlist}{%
2695     \glsxtr@do@glsdisablehyperinlist
2696     \glsifattribute{\glslabel}{nohyper}{true}{\KV@glslink@hyperfalse}{}%
2697   }
2698 }
2699 {}
```

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

```
2700 \define@boolkey{glslink}{noindex}[true]{}
2701 \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

```
2702 \ifdef\@gls@setdefault@glslink@opts
```

```

2703 {
2704   \renewcommand*{\@gls@setdefault@glslink@opts}{%
2705     \KV@glslink@noindexfalse
2706     \@glsxtrsetaliasnoindex
2707   }
2708 }
2709 {
  Not defined so prepend it to \do@glsdisablehyperinlist to achieve the same effect.
2710 \newcommand*{\@gls@setdefault@glslink@opts}{%
2711   \KV@glslink@noindexfalse
2712   \@glsxtrsetaliasnoindex
2713 }
2714 \preto\do@glsdisablehyperinlist{\@gls@setdefault@glslink@opts}
2715 }

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.)
2716 \providecommand*{\glsxtrsetaliasnoindex}{%
2717   \KV@glslink@noindextrue
2718 }

setaliasnoindex
2719 \newcommand*{\glsxtrsetaliasnoindex}{%
2720   \glsxtrifhasfield{alias}{\glslabel}%
2721   {%
2722     \let\glsxtrindexaliased\glsxtrindexaliased
2723     \glsxtrsetaliasnoindex
2724     \let\glsxtrindexaliased\@no@glsxtrindexaliased
2725   }%
2726 {}%
2727 }

xtrindexaliased
2728 \newcommand{\glsxtrindexaliased}{%
2729   \ifKV@glslink@noindex
2730   \else
2731     \begingroup
2732     \let\glsnumberformat\glsxtr@defaultnumberformat
2733     \edef\@gls@counter{\csname glo@\glsdetoklabel{\glslabel}@counter\endcsname}%
2734     \glsxtr@saveentrycounter
2735     \@@do@wrglossary{\glsxtralias{\glslabel}}%
2736     \endgroup
2737   \fi
2738 }

xtrindexaliased
2739 \newcommand{\@no@glsxtrindexaliased}{%

```

```

2740 \PackageError{glossaries-extra}{\string\glsxtrindexaliased\space
2741 not permitted outside definition of \string\glsxtrsetaliasnoindex}%
2742 {}%
2743 }

xtrindexaliased Provide a command to redirect alias indexing, but only allow it to be used within \glsxtrsetaliasnoindex.
2744 \let\glsxtrindexaliased\@no@glsxtrindexaliased

tDefaultGlsOpts Set the default options for \glslink etc.
2745 \newcommand*{\GlsXtrSetDefaultGlsOpts}[1]{%
2746   \renewcommand*{\@gls@setdefault@glslink@opts}{%
2747     \setkeys{glslink}{#1}%
2748     \glsxtrsetaliasnoindex
2749   }%
2750 }

lsxtrifindexing Provide user level command to access it in \glswriteentry.
2751 \newcommand*{\glsxtrifindexing}[2]{%
2752   \ifKV@glslink@noindex #2\else #1\fi
2753 }

\glswriteentry Redefine to test for indexonlyfirst category attribute.
2754 \renewcommand*{\glswriteentry}[2]{%
2755   \glsxtrifindexing
2756   {}%
2757   \ifglsindexonlyfirst
2758     \ifglsused{#1}
2759       {\glsxtrdoautoindexname{#1}{dualindex}}%
2760       {#2}%
2761   \else
2762     \glsifattribute{#1}{indexonlyfirst}{true}%
2763     {\ifglsused{#1}
2764       {\glsxtrdoautoindexname{#1}{dualindex}}%
2765       {#2}}%
2766     {#2}%
2767   \fi
2768   {}%
2769   {}%
2770 }

@do@@wrglossary Hook into glossary indexing command so that it can also use \index at the same time if
 required and add user hook.
2771 \appto{\@do@@wrglossary}{\glsxtr@do@@wrindex
2772   \glsxtrdowrglossaryhook{\gls@label}%
2773 }

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

Similarly for the “noidx” version:

```

s@noidxglossary
2774 \appto\gls@noidxglossary{\@glsxtr@do@@wrindex
2775   \glsxtrdowrglossaryhook{\@gls@label}%
2776 }

xtr@do@@wrindex
2777 \newcommand*{\@glsxtr@do@@wrindex}{%
2778   \glsxtrdoautoindexname{\@gls@label}{dualindex}%
2779 }

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.)
2780 \newcommand*{\glsxtrdowrglossaryhook}[1]{}

gls@alt@hyp@opt Commands like \gls have a star or plus version. Provide a third symbol that the user can adapt for convenience.
2781 \newcommand*{\@gls@alt@hyp@opt}[1]{%
2782   \let\glslinkvar\@firstofthree
2783   \let\@gls@hyp@opt@cs\relax
2784   \@ifstar{\s@gls@hyp@opt}%
2785   {\@ifnextchar+{%
2786     {\@firstoftwo{\p@gls@hyp@opt}}%
2787     {%
2788       \expandafter\@ifnextchar\@gls@alt@hyp@opt@char
2789       {\@firstoftwo{\@alt@gls@hyp@opt}}%
2790       {#1}%
2791     }%
2792   }%
2793 }

alt@gls@hyp@opt User version
2794 \newcommand*{\@alt@gls@hyp@opt}[1][]{%
2795   \let\glslinkvar\@firstofthree
2796   \expandafter\gls@hyp@opt@cs\expandafter[\@gls@alt@hyp@opt@keys,#1]}

lt@hyp@opt@char Contains the character used as the command modifier.
2797 \newcommand*{\@gls@alt@hyp@opt@char}{}}

lt@hyp@opt@keys Contains the option list used as the command modifier.
2798 \newcommand*{\@gls@alt@hyp@opt@keys}{}}

rSetAltModifier
2799 \newcommand*{\GlsXtrSetAltModifier}[2]{%
2800   \let\@gls@hyp@opt\@gls@alt@hyp@opt
2801   \def\@gls@alt@hyp@opt@char{\#1}%
2802   \def\@gls@alt@hyp@opt@keys{\#2}%
2803 }

```

```

org@dohyperlink
2804 \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.

2805 \ifdef\glsnavhyperlink
2806 {
2807   \renewcommand*\glsnavhyperlink[3][\@glo@type]{%
2808     \edef\gls@grplabel{\#2}\protected@edef\gls@grptitle{\#3}%
Scope:
2809   {%
2810     \let\glsdohyperlink\glsxtr@org@dohyperlink
2811     \glslink{\glsnavhyperlinkname{\#1}{\#2}}{\#3}%
2812   }%
2813 }%
2814 }
2815 {}

\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.

2816 \renewcommand*\glsdohyperlink[2]{%
2817 \glshasattribute{\glslabel}{targeturl}%
2818 {%
2819   \glshasattribute{\glslabel}{targetname}%
2820   {%
2821     \glshasattribute{\glslabel}{targetcategory}%
2822     {%
2823       \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
2824         {\glsgetattribute{\glslabel}{targetcategory}}{%
2825           {\glsgetattribute{\glslabel}{targetname}}{%
2826             {{\glsxtrprotectlinks{\#2}}}}}}%
2827     }%
2828   {%
2829     \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
2830       {}{%
2831         {\glsgetattribute{\glslabel}{targetname}}{%
2832           {{\glsxtrprotectlinks{\#2}}}}}}%
2833   }%
2834 }%
2835 {%

```

```

2836     \href{\glsgetattribute{\glslabel}{targeturl}}%
2837     {{\glsxtrprotectlinks#2}}%
2838   }%
2839 }%
2840 {%

```

Check for alias.

```

2841   \glsfieldfetch{\glslabel}{alias}{\gloaliaslabel}%
2842   \ifdefvoid\gloaliaslabel
2843   {%
2844     \glsxtrhyperlink{\#1}{{\glsxtrprotectlinks#2}}%
2845   }%
2846   {%

```

Redirect link to the alias target.

```

2847   \glsxtrhyperlink
2848   {\glolinkprefix\glsdetoklabel{\gloaliaslabel}}%
2849   {{\glsxtrprotectlinks#2}}%
2850 }%
2851 }%
2852 }

```

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

```

2853 \ifdef{@glsshowtarget}
2854 {
2855   \newcommand{\glsxtrhyperlink}[2]{%
2856     @_glsshowtarget{\#1}%
2857     \hyperlink{\#1}{\#2}%
2858   }%
2859 }
2860 {
2861   \newcommand{\glsxtrhyperlink}[2]{\hyperlink{\#1}{\#2}}%
2862 }

```

`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.

```

2863 \renewrobustcmd*{\glshyperlink}[2][\glsentrytext{@glo@label}]{%
2864   \glsdoifexists{\#2}%
2865   {%
2866     \def@glo@label{\#2}%
2867     \edef\glslabel{\#2}%
2868     @_glslink{\glolinkprefix\glslabel}{\#1}}%
2869   }%
2870 }

```

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

```
2871 \renewcommand{\glsdisablehyper}{%
2872   \KV@glslink@hyperfalse
2873   \def\@glslink{\glsdonohyperlink}%
2874   \let\@glstarget\@secondoftwo
2875 }
```

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

```
2876 \renewcommand{\glsenablehyper}{%
2877   \KV@glslink@hypertrue
2878   \def\@glslink{\glsdohyperlink}%
2879   \def\@glstarget{\glsdohypertarget}%
2880 }
```

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

```
2881 \def\glsdonohyperlink#1#2{{\glsxtrprotectlinks #2}}
```

\@glslink Reset \@glslink with patched versions:

```
2882 \ifcsundef{hyperlink}%
2883 {%
2884   \def\@glslink{\glsdonohyperlink}%
2885 }%
2886 {%
2887   \def\@glslink{\glsdohyperlink}%
2888 }
```

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

```
2889 \newcommand*{\glsxtrprotectlinks}{%
2890   \KV@glslink@hyperfalse
2891   \KV@glslink@noindextrue
2892   \let\@gls@\@glsxtr@p@text@
2893   \let\@Gls@\@Glsxtr@p@text@
2894   \let\@GLS@\@GLSxtr@p@text@
2895   \let\@glspl@\@glsxtr@p@plural@
2896   \let\@Glspl@\@Glsxtr@p@plural@
2897   \let\@GLSpl@\@GLSxtr@p@plural@
2898   \let\@glsxtrshort\@glsxtr@p@short@
2899   \let\@Glsxtrshort\@Glsxtr@p@short@
2900   \let\@GLSxtrshort\@GLSxtr@p@short@
2901   \let\@glsxtrlong\@glsxtr@p@long@
2902   \let\@Glsxtrlong\@Glsxtr@p@long@
2903   \let\@GLSxtrlong\@GLSxtr@p@long@
2904   \let\@glsxtrshortpl\@glsxtr@p@shortpl@
2905   \let\@Glsxtrshortpl\@Glsxtr@p@shortpl@}
```

```

2906 \let\@GLSxtrshortpl\@GLSxtr@p@shortpl@
2907 \let\@glsxtrlongpl\@glsxtr@p@longpl@
2908 \let\@Glsxtrlongpl\@Glsxtr@p@longpl@
2909 \let\@GLSxtrlongpl\@GLSxtr@p@longpl@
2910 \let\@acrshort\@glsxtr@p@acrshort@
2911 \let\@Acrshort\@Glsxtr@p@acrshort@
2912 \let\@ACRshort\@GLSxtr@p@acrshort@
2913 \let\@acrshortpl\@glsxtr@p@acrshortpl@
2914 \let\@Acrshortpl\@Glsxtr@p@acrshortpl@
2915 \let\@ACRshortpl\@GLSxtr@p@acrshortpl@
2916 \let\@acrlong\@glsxtr@p@acrlong@
2917 \let\@Acrlong\@Glsxtr@p@acrlong@
2918 \let\@ACRLong\@GLSxtr@p@acrlong@
2919 \let\@acrlongpl\@glsxtr@p@acrlongpl@
2920 \let\@Acrlongpl\@Glsxtr@p@acrlongpl@
2921 \let\@ACRLongpl\@GLSxtr@p@acrlongpl@
2922 }

```

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

```

@glsxtr@p@text@
2923 \def\@glsxtr@p@text@#1#2[#3]{{{\@glstext@{#1}{#2}}[#3]}}
@Glsxtr@p@text@
2924 \def\@Glsxtr@p@text@#1#2[#3]{{{\@Glstext@{#1}{#2}}[#3]}}
@GLSxtr@p@text@
2925 \def\@GLSxtr@p@text@#1#2[#3]{{{\@GLStext@{#1}{#2}}[#3]}}
lsxtr@p@plural@
2926 \def\@glsxtr@p@plural@#1#2[#3]{{{\@glsplural@{#1}{#2}}[#3]}}
lsxtr@p@plural@
2927 \def\@Glsxtr@p@plural@#1#2[#3]{{{\@Glsplural@{#1}{#2}}[#3]}}
LSxtr@p@plural@
2928 \def\@GLSxtr@p@plural@#1#2[#3]{{{\@GLSplural@{#1}{#2}}[#3]}}
glsxtr@p@short@
2929 \def\@glsxtr@p@short@#1#2[#3]{%
2930 {%
2931 \glssetabbrvfmt{\glscategory{#2}}%
2932 \glsabbrvfont{\glsentryshort{#2}}#3%
2933 }%
2934 }
Glsxtr@p@short@
2935 \def\@Glsxtr@p@short@#1#2[#3]{%

```

```

2936  {%
2937    \glssetabrvfmt{\glscategory{#2}}%
2938    \glsabbrvfont{\Glsentryshort{#2}}#3%
2939  }%
2940 }

GLSxtr@p@short@

2941 \def\@GLSxtr@p@short@#1#2[#3]{%
2942  {%
2943    \glssetabrvfmt{\glscategory{#2}}%
2944    \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshort{#2}}#3}%
2945  }%
2946 }

sxtr@p@shortpl@

2947 \def\@glsxtr@p@shortpl@#1#2[#3]{%
2948  {%
2949    \glssetabrvfmt{\glscategory{#2}}%
2950    \glsabbrvfont{\glsentryshortpl{#2}}#3%
2951  }%
2952 }

sxtr@p@shortpl@

2953 \def\@Glsxtr@p@shortpl@#1#2[#3]{%
2954  {%
2955    \glssetabrvfmt{\glscategory{#2}}%
2956    \glsabbrvfont{\Glsentryshortpl{#2}}#3%
2957  }%
2958 }

Sxtr@p@shortpl@

2959 \def\@GLSxtr@p@shortpl@#1#2[#3]{%
2960  {%
2961    \glssetabrvfmt{\glscategory{#2}}%
2962    \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshortpl{#2}}#3}%
2963  }%
2964 }

@glsxtr@p@long@

2965 \def\@glsxtr@p@long@#1#2[#3]{{{\glsentrylong{#2}}#3}}


@Glsxtr@p@long@

2966 \def\@Glsxtr@p@long@#1#2[#3]{{{\Glsentrylong{#2}}#3}}


@GLSxtr@p@long@

2967 \def\@GLSxtr@p@long@#1#2[#3]{%
2968  {\mfirstucMakeUppercase{\glslongfont{\glsentrylong{#2}}#3}}}

```

```

lsxtr@p@longpl@
2969 \def\@glsxtr@p@longpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}

lsxtr@p@longpl@
2970 \def\@Glsxtr@p@longpl@#1#2[#3]{{\glslongfont{\Glsentrylongpl{#2}}#3}}

Lsxtr@p@longpl@
2971 \def\@GLSxtr@p@longpl@#1#2[#3] {%
2972   {\mfirstucMakeUppercase{\glslongfont{\glsentrylongpl{#2}}#3}}}

xtr@p@acrshort@
2973 \def\@glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\glsentryshort{#2}}#3}}

xtr@p@acrshort@
2974 \def\@Glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\Glsentryshort{#2}}#3}}

xtr@p@acrshort@
2975 \def\@GLSxtr@p@acrshort@#1#2[#3] {%
2976   {\mfirstucMakeUppercase{\acronymfont{\glsentryshort{#2}}#3}}}

r@p@acrshortpl@
2977 \def\@glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\glsentryshortpl{#2}}#3}}

r@p@acrshortpl@
2978 \def\@Glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\Glsentryshortpl{#2}}#3}}

r@p@acrshortpl@
2979 \def\@GLSxtr@p@acrshortpl@#1#2[#3] {%
2980   {\mfirstucMakeUppercase{\acronymfont{\glsentryshortpl{#2}}#3}}}

sxtr@p@acrlong@
2981 \def\@glsxtr@p@acrlong@#1#2[#3]{{\glsentrylong{#2}}#3}

sxtr@p@acrlong@
2982 \def\@Glsxtr@p@acrlong@#1#2[#3]{{\Glsentrylong{#2}}#3}

Sxtr@p@acrlong@
2983 \def\@GLSxtr@p@acrlong@#1#2[#3] {%
2984   {\mfirstucMakeUppercase{\glsentrylong{#2}}#3}}}

tr@p@acrlongpl@
2985 \def\@glsxtr@p@acrlongpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}

tr@p@acrlongpl@
2986 \def\@Glsxtr@p@acrlongpl@#1#2[#3]{{\Glsentrylongpl{#2}}#3}

```

```

tr@p@acrlongpl@
2987 \def\@GLSxtr@p@acrlongpl@#1#2[#3]{%
2988   {\mfirstucMakeUppercase{\glsentrylongpl{#2}#3}}}

Commands to minimise conflict.

\@glsxtrp@opt
2989 \newcommand*{\@glsxtrp@opt}{hyper=false,noindex}

\glsxtrsetpopts Used in glossary to switch hyperlinks on for the \glsxtrp type of commands.
2990 \newcommand*{\glsxtrsetpopts}[1]{%
2991   \renewcommand*{\@glsxtrp@opt}{#1}%
2992 }

\lossxtrsetpopts Used in glossary to switch hyperlinks on for the \glsxtrp type of commands.
2993 \newcommand*{\glossxtrsetpopts}{%
2994   \glsxtrsetpopts{noindex}%
2995 }

\@@glsxtrp
2996 \newrobustcmd*{\@@glsxtrp}[2]{%
  Add scope.
2997  {%
2998    \let\glspostlinkhook\relax
2999    \csname#1\expandafter\endcsname\expandafter[\@glsxtrp@opt]{#2}[]%
3000  }%
3001 }

\@glsxtrp
3002 \newrobustcmd*{\@glsxtrp}[2]{%
3003   \ifcsdef{gls#1}{%
3004     {%
3005       \@@glsxtrp{gls#1}{#2}%
3006     }%
3007     {%
3008       \ifcsdef{glsxtr#1}{%
3009         {%
3010           \@@glsxtrp{glsxtr#1}{#2}%
3011         }%
3012         {%
3013           \PackageError{glossaries-extra}{‘#1’ not recognised by
3014             \string\glsxtrp{}{}}%
3015         }%
3016       }%
3017     }%
3018 }

\@Glsxtrp
3018 \newrobustcmd*{\@Glsxtrp}[2]{%

```

```

3019 \ifcsdef{Gls#1}%
3020 {%
3021   \@@glsxtrp{Gls#1}{#2}%
3022 }%
3023 {%
3024   \ifcsdef{Glsxtr#1}%
3025   {%
3026     \@@glsxtrp{Glsxtr#1}{#2}%
3027   }%
3028   {%
3029     \PackageError{glossaries-extra}{‘#1’ not recognised by
3030       \string\Glsxtrp{}}
3031   }%
3032 }%
3033 }

\@GLSxtrp
3034 \newrobustcmd*\{@GLSxtrp}[2]{%
3035   \ifcsdef{GLS#1}%
3036   {%
3037     \@@glsxtrp{GLS#1}{#2}%
3038   }%
3039   {%
3040     \ifcsdef{GLSxtr#1}%
3041     {%
3042       \@@glsxtrp{GLSxtr#1}{#2}%
3043     }%
3044     {%
3045       \PackageError{glossaries-extra}{‘#1’ not recognised by
3046         \string\GLSxtrp{}}
3047     }%
3048   }%
3049 }

\glsxtr@entry@p
3050 \newrobustcmd*\glsxtr@headentry@p}[2]{%
3051   \glsifattribute{#1}{headuc}{true}%
3052   {%
3053     \mfirstucMakeUppercase{\@gls@entry@field{#1}{#2}}%
3054   }%
3055   {%
3056     \@gls@entry@field{#1}{#2}%
3057   }%
3058 }

\glsxtrp Not robust as it needs to expand somewhat.
3059 \ifdef\texorpdfstring
3060 {
3061   \newcommand{\glsxtrp}[2]{%

```

```

3062 \protect\NoCaseChange
3063 {%
3064   \protect\texorpdfstring
3065   {%
3066     \protect\glsxtrifinmark
3067     {%
3068       \ifcsdef{glsxtrhead#1}%
3069       {%
3070         {\protect\csuse{glsxtrhead#1}{#2}}%
3071       }%
3072       {%
3073         \glsxtr@headentry@p{#2}{#1}%
3074       }%
3075     }%
3076     {%
3077       \glsxtrp{#1}{#2}%
3078     }%
3079   }%
3080   {%
3081     \protect\@gls@entry@field{#2}{#1}%
3082   }%
3083 }
3084 }
3085 }
3086 {
3087 \newcommand{\glsxtrp}[2]{%
3088   \protect\NoCaseChange
3089   {%
3090     \protect\glsxtrifinmark
3091     {%
3092       \ifcsdef{glsxtrhead#1}%
3093       {%
3094         {\protect\csuse{glsxtrhead#1}}%
3095       }%
3096       {%
3097         \glsxtr@headentry@p{#2}{#1}%
3098       }%
3099     }%
3100     {%
3101       \glsxtrp{#1}{#2}%
3102     }%
3103   }%
3104 }
3105 }

```

Provide short synonyms for the most common option.

```
\glsps
3106 \newcommand*{\glsps}{\glsxtrp{short}}
```

```

\glspt
3107 \newcommand*{\glspt}{\glsxtrp{text}}


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

3108 \ifdef\texorpdfstring
3109 {
3110   \newcommand{\Glsxtrp}[2]{%
3111     \protect\NoCaseChange
3112     {%
3113       \protect\texorpdfstring
3114       {%
3115         \protect\glsxtrifinmark
3116         {%
3117           \ifcsdef{Glsxtrhead#1}{%
3118             {%
3119               {\protect\csuse{Glsxtrhead#1}{#2}}%
3120             }%
3121             {%
3122               \protect{@Gls@entry@field{#2}{#1}}%
3123             }%
3124             }%
3125             {%
3126               \protect{@Gls@entry@field{#1}{#2}}%
3127             }%
3128             }%
3129             {%
3130               \protect{@gls@entry@field{#2}{#1}}%
3131             }%
3132             }%
3133   }%
3134 }
3135 {
3136   \newcommand{\Glsxtrp}[2]{%
3137     \protect\NoCaseChange
3138     {%
3139       \protect\glsxtrifinmark
3140       {%
3141         \ifcsdef{Glsxtrhead#1}{%
3142           {%
3143             {\protect\csuse{Glsxtrhead#1}}%
3144           }%
3145           {%
3146             \protect{@Gls@entry@field{#2}{#1}}%
3147             }%
3148             }%
3149             {%
3150               \protect{@Gls@entry@field{#1}{#2}}%
3151             }%

```

```
3152     }%
3153 }
3154 }
```

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

```
3155 \ifdef\textorpdfstring
3156 {
3157   \newcommand{\GLSxtrp}[2]{%
3158     \protect\NoCaseChange
3159     {%
3160       \protect\textorpdfstring
3161       {%
3162         \protect\glsxtrifinmark
3163         {%
3164           \ifcsdef{GLSxtr#1}%
3165           {%
3166             {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}}%
3167           }%
3168           {%
3169             \protect\mfirstrucMakeUppercase
3170             {%
3171               \protect@gls@entry@field{#2}{#1}}%
3172             }%
3173             }%
3174           }%
3175           {%
3176             \glsxtrp{#1}{#2}%
3177             }%
3178           }%
3179           {%
3180             \protect@gls@entry@field{#2}{#1}}%
3181             }%
3182             }%
3183   }%
3184 }
3185 {
3186   \newcommand{\GLSxtrp}[2]{%
3187     \protect\NoCaseChange
3188     {%
3189       \protect\glsxtrifinmark
3190       {%
3191         \ifcsdef{GLSxtr#1}%
3192           {%
3193             {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}}%
3194           }%
3195           {%
3196             \protect\mfirstrucMakeUppercase
3197             {%
3198               \protect@gls@entry@field{#2}{#1}}%
```

```

3199      }%
3200      }%
3201      }%
3202      {%
3203      \GLSxtrp{#1}{#2}%
3204      }%
3205      }%
3206  }
3207 }

```

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 `\cglss` instead. This form of entry counting is provided to adjust the formatting if the number of times an entry has been used (through commands that unset the first use flag) doesn't exceed the specified threshold. For link counting, see Section 1.4.

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

```

\@glsxtr@unset Global unset.
3208 \newcommand*\@glsxtr@unset[1]{%
3209   \@@glsunset{#1}%
3210   \glsxtrpostunset{#1}%
3211 }%

\@glsunset Global unset.
3212 \let\@glsunset\@glsxtr@unset

glsxtrpostunset
3213 \newcommand*\glsxtrpostunset[1]{}}

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

tUnsetBuffering
3214 \newcommand*\GlsXtrStartUnsetBuffering{}%
3215   \@ifstar\s@GlsXtrStartUnsetBuffering\@GlsXtrStartUnsetBuffering
3216 }

tUnsetBuffering Unstarred version doesn't check for duplicates.
3217 \newcommand*\@GlsXtrStartUnsetBuffering{}%
3218   \let\@glsxtr@org@unset@buffer\@glsxtr@unset@buffer

```

```
3219 \def\@glsxtr@unset@buffer{}%
3220 \let\@glsunset\@glsxtrbuffer@unset
3221 }
```

tUnsetBuffering Starred version checks for duplicates.

```
3222 \newcommand*{\s@GlsXtrStartUnsetBuffering}{%
3223 \let\@glsxtr@org@unset@buffer\@glsxtr@unset@buffer
3224 \def\@glsxtr@unset@buffer{}%
3225 \let\@glsunset\@glsxtrbuffer@nodup@unset
3226 }
```

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

```
3227 \newcommand*{\@glsxtrbuffer@unset}[1]{%
3228 \listxadd\@glsxtr@unset@buffer{#1}%
3229 }
```

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.)

```
3230 \newcommand*{\@glsxtrbuffer@nodup@unset}[1]{%
3231 \expandafter\ifinlist\expandafter{\#1}{\@glsxtr@unset@buffer}{}%
3232 {\listxadd\@glsxtr@unset@buffer{#1}}%
3233 }
```

pUnsetBuffering

```
3234 \newcommand*{\GlsXtrStopUnsetBuffering}{%
3235 \c@ifstar\s@GlsXtrStopUnsetBuffering\@GlsXtrStopUnsetBuffering
3236 }
```

pUnsetBuffering Unstarred form (global unset).

```
3237 \newcommand*{\@GlsXtrStopUnsetBuffering}{%
3238 \let\@glsunset\@glsxtr@unset
3239 \forlistloop\@glsunset\@glsxtr@unset@buffer
3240 \let\@glsxtr@unset@buffer\@glsxtr@org@unset@buffer
3241 }
```

pUnsetBuffering Starred form (local unset).

```
3242 \newcommand*{\s@GlsXtrStopUnsetBuffering}{%
3243 \forlistloop\@glslocalunset\@glsxtr@unset@buffer
3244 \let\@glsunset\@glsxtr@unset
3245 }
```

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

```
3246 \newcommand*{\GlsXtrForUnsetBufferedList}[1]{%
3247 \forlistloop#1\@glsxtr@unset@buffer
3248 }
```

```

\@glslocalunset Local unset.
3249 \renewcommand*\@glslocalunset}[1]{%
3250   \@@glslocalunset{#1}%
3251   \glsxtrpostlocalunset{#1}%
3252 }%

rpostlocalunset
3253 \newcommand*\glsxtrpostlocalunset}[1]{}}

\@glsreset Global reset.
3254 \renewcommand*\@glsreset}[1]{%
3255   \@@glsreset{#1}%
3256   \glsxtrpostreset{#1}%
3257 }%

glsxtrpostreset
3258 \newcommand*\glsxtrpostreset}[1]{}}

\@glslocalreset Local reset.
3259 \renewcommand*\@glslocalreset}[1]{%
3260   \@@glslocalreset{#1}%
3261   \glsxtrpostlocalreset{#1}%
3262 }%

rpostlocalreset
3263 \newcommand*\glsxtrpostlocalreset}[1]{}}

slocalreseteach Locally reset a list of entries.
3264 \newcommand*\glslocalreseteach}[1]{%
3265   \gls@ifnotmeasuring
3266   {%
3267     \@for\gls@thislabel:=#1\do{%
3268       \glsdoifexists{\gls@thislabel}%
3269       {%
3270         \glslocalreset{\gls@thislabel}%
3271       }%
3272     }%
3273   }%
3274 }

slocalunseteach Locally unset a list of entries.
3275 \newcommand*\glslocalunseteach}[1]{%
3276   \gls@ifnotmeasuring
3277   {%
3278     \@for\gls@thislabel:=#1\do{%
3279       \glsdoifexists{\gls@thislabel}%
3280       {%
3281         \glslocalunset{\gls@thislabel}%

```

```
3282      }%
3283    }%
3284  }%
3285 }
```

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

```
3286 \newcommand*{\GlsXtrEnableEntryCounting}[2]{%
```

 Enable entry counting:

```
3287   \glsenableentrycount
```

 Redefine `\gls` etc:

```
3288   \renewcommand*{\gls}{\cgls}%
3289   \renewcommand*{\Gls}{\cGls}%
3290   \renewcommand*{\glspol}{\cgglspol}%
3291   \renewcommand*{\Glspol}{\cGlspol}%
3292   \renewcommand*{\GLS}{\cGLS}%
3293   \renewcommand*{\GLSpol}{\cGLSpol}%
```

 Set the `entrycount` attribute:

```
3294   @glsxtr@setentrycountunsetattr{#1}{#2}%
```

 In case this command is used again:

```
3295   \let\GlsXtrEnableEntryCounting@glsxtr@setentrycountunsetattr
3296   \renewcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
3297     \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryUnitCounting\space
3298       can't be used with \string\GlsXtrEnableEntryCounting}%
3299     {Use one or other but not both commands}}%
3300 }
```

`ycountunsetattr`

```
3301 \newcommand*{@glsxtr@setentrycountunsetattr}[2]{%
3302   @for@glsxtr@cat:=#1\do
3303   {%
3304     \ifdefempty{@glsxtr@cat}{}%
3305     {%
3306       \glssetcategoryattribute{@glsxtr@cat}{entrycount}{#2}%
3307     }%
3308   }%
3309 }
```

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

`nableentrycount`

```
3310 \renewcommand*{\glsenableentrycount}{%
```

 Enable new fields:

```
3311   \appto@newglossaryentry@defcounters{@@newglossaryentry@defcounters}%
```

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

```
3312 \renewcommand*\gls@defdocnewglossaryentry}{%
3313   \renewcommand*\newglossaryentry[2]{%
3314     \PackageError{glossaries}{\string\newglossaryentry\space%
3315       may only be used in the preamble when entry counting has%
3316       been activated}{If you use \string\glsenableentrycount\space%
3317       you must place all entry definitions in the preamble not in%
3318       the document environment}%
3319   }%
3320 }%
```

New commands to access new fields:

```
3321 \newcommand*\glsentrycurrcount}[1]{%
3322   \ifcsundef{glo@\glsdetoklabel{\##1}@currcount}%
3323   {0}{\gls@entry@field{\##1}{currcount}}%
3324 }%
3325 \newcommand*\glsentryprevcount}[1]{%
3326   \ifcsundef{glo@\glsdetoklabel{\##1}@prevcount}%
3327   {0}{\gls@entry@field{\##1}{prevcount}}%
3328 }%
```

Adjust post unset and reset:

```
3329 \let\glsxtr@entrycount@org@unset\glsxtrpostunset
3330 \renewcommand*\glsxtrpostunset}[1]{%
3331   \glsxtr@entrycount@org@unset{\##1}%
3332   \gls@increment@currcount{\##1}%
3333 }%
3334 \let\glsxtr@entrycount@org@localunset\glsxtrpostlocalunset
3335 \renewcommand*\glsxtrpostlocalunset}[1]{%
3336   \glsxtr@entrycount@org@localunset{\##1}%
3337   \gls@local@increment@currcount{\##1}%
3338 }%
3339 \let\glsxtr@entrycount@org@reset\glsxtrpostreset
3340 \renewcommand*\glsxtrpostreset}[1]{%
3341   \glsxtr@entrycount@org@reset{\##1}%
3342   \csgdef{glo@\glsdetoklabel{\##1}@currcount}{0}%
3343 }%
3344 \let\glsxtr@entrycount@org@localreset\glsxtrpostlocalreset
3345 \renewcommand*\glsxtrpostlocalreset}[1]{%
3346   \glsxtr@entrycount@org@localreset{\##1}%
3347   \csdef{glo@\glsdetoklabel{\##1}@currcount}{0}%
3348 }%
```

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

```
3349 \let\cglso\cglso
3350 \let\cglsplo\cglsplo
3351 \let\cGls\cGls
3352 \let\cGlspl\cGlspl
3353 \let\cGLS\cGLS
```

```
3354 \let\cGLSp1@\cGLSp1@
```

The rest is as the original definition.

```
3355 \AtEndDocument{\gls@write@entrycounts}%
3356 \renewcommand*{\gls@entry@count}[2]{%
3357   \csgdef{glo@\glsdetoklabel{##1}@prevcount}{##2}%
3358 }%
3359 \let\glsenableentrycount\relax
3360 \renewcommand*{\glsenableentryunitcount}{%
3361   \PackageError{glossaries-extra}{\string\glsenableentryunitcount\space
3362     can't be used with \string\glsenableentrycount}%
3363   {Use one or other but not both commands}%
3364 }%
3365 }
```

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.

```
3366 \renewcommand*{\gls@write@entrycounts}%
3367   \immediate\write\auxout
3368   {\string\providecommand*{\string@gls@entry@count}[2]{}}
3369 \count@=0\relax
3370 \forallglsentries{\glsentry}{%
3371   \glshasattribute{\glsentry}{entrycount}%
3372   {%
3373     \ifglsused{\glsentry}%
3374     {%
3375       \immediate\write\auxout
3376       {\string@gls@entry@count{\glsentry}{\glsentrycurrcount{\glsentry}}}
3377     }%
3378     {}%
3379     \advance\count@ by \one
3380   }%
3381   {}%
3382 }%
3383 \ifnum\count@=0
3384   \GlossariesExtraWarningNoLine{Entry counting has been enabled
3385     \MessageBreak with \string\glsenableentrycount\space but the
3386     \MessageBreak attribute 'entrycount' hasn't
3387     \MessageBreak been assigned to any of the defined
3388     \MessageBreak entries}%
3389 \fi
3390 }
```

```
\glsxtrifcounttrigger{\label}{\trigger format}{\normal}
```

```
3391 \newcommand*{\glsxtrifcounttrigger}[3]{%
```

```

3392 \glshasattribute{#1}{entrycount}%
3393 {%
3394   \ifnum\glsentryprevcount{#1}>\glsgetattribute{#1}{entrycount}\relax
3395     #3%
3396   \else
3397     #2%
3398   \fi
3399 }%
3400 {#3}%
3401 }

```

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

\@cglss@

```

3402 \def\@cglss@#1#2[#3]{%
3403   \glsxtrifcounttrigger{#2}%
3404   {%
3405     \cglssformat{#2}{#3}%
3406     \glsunset{#2}%
3407   }%
3408   {%
3409     \gls@{#1}{#2}[#3]%
3410   }%
3411 }%

```

\@cglspl@

```

3412 \def\@cglspl@#1#2[#3]{%
3413   \glsxtrifcounttrigger{#2}%
3414   {%
3415     \cglsplformat{#2}{#3}%
3416     \glsunset{#2}%
3417   }%
3418   {%
3419     \glspl@{#1}{#2}[#3]%
3420   }%
3421 }%

```

\@cGls@

```

3422 \def\@cGls@#1#2[#3]{%
3423   \glsxtrifcounttrigger{#2}%
3424   {%
3425     \cGlsformat{#2}{#3}%
3426     \glsunset{#2}%
3427   }%
3428   {%
3429     \Gls@{#1}{#2}[#3]%
3430   }%
3431 }%

```

```
\@@cGlsp1@
3432 \def\@@cGlsp1@#1#2[#3]{%
3433   \glsxtrifcounttrigger{#2}%
3434   {%
3435     \cGlsp1format{#2}{#3}%
3436     \glsunset{#2}%
3437   }%
3438   {%
3439     \cGlsp1@{#1}{#2}[#3]%
3440   }%
3441 }%
```

```
\@@cGLS@
3442 \def\@@cGLS@#1#2[#3]{%
3443   \glsxtrifcounttrigger{#2}%
3444   {%
3445     \cGLSformat{#2}{#3}%
3446     \glsunset{#2}%
3447   }%
3448   {%
3449     \cGLS@{#1}{#2}[#3]%
3450   }%
3451 }%
```

```
\@@cGLSp1@
3452 \def\@@cGLSp1@#1#2[#3]{%
3453   \glsxtrifcounttrigger{#2}%
3454   {%
3455     \cGLSp1format{#2}{#3}%
3456     \glsunset{#2}%
3457   }%
3458   {%
3459     \cGLSp1@{#1}{#2}[#3]%
3460   }%
3461 }%
```

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

```
\@cgl@  

3462 \def\@cgl@#1#2[#3]{\@gl@{#1}{#2}[#3]}  

\@cGls@  

3463 \def\@cGls@#1#2[#3]{\@Gls@{#1}{#2}[#3]}  

\@cglspl@  

3464 \def\@cglspl@#1#2[#3]{\@glsp1@{#1}{#2}[#3]}
```

```

\@cGlspl@

3465 \def\@cGlspl#1#2[#3]{\@Glspl{#1}{#2}[#3]}

Add all upper case versions not provided by glossaries.

\cGLS

3466 \newrobustcmd*\cGLS{\gls@hyp@opt\cGLS}

\@cGLS Defined the un-starred form. Need to determine if there is a final optional argument
3467 \newcommand*\@cGLS[2][]%
3468 \new@ifnextchar[\@cGLS{#1}{#2}]{\cGLS{#1}{#2}[]}%%
3469 }

\@cGLS@

3470 \def\@cGLS#1#2[#3]{\@GLS{#1}{#2}[#3]}

\cGLSformat Format used by \cGLS if entry only used once on previous run. The first argument is the label,
the second argument is the insert text.
3471 \newcommand*\cGLSformat[2]{%
3472 \expandafter\mfirstuc\expandafter{\cGLSformat{#1}{#2}}%
3473 }

\cGLSp1

3474 \newrobustcmd*\cGLSp1{\gls@hyp@opt\cGLSp1}

\@cGLSp1 Defined the un-starred form. Need to determine if there is a final optional argument
3475 \newcommand*\@cGLSp1[2][]%
3476 \new@ifnextchar[\@cGLSp1{#1}{#2}]{\cGLSp1{#1}{#2}[]}%%
3477 }

\@cGLSp1@

3478 \def\@cGLSp1#1#2[#3]{\@GLSp1{#1}{#2}[#3]}

\cGLSp1format Format used by \cGLSp1 if entry only used once on previous run. The first argument is the
label, the second argument is the insert text.
3479 \newcommand*\cGLSp1format[2]{%
3480 \expandafter\mfirstuc\expandafter{\cGLSp1format{#1}{#2}}%
3481 }

Modify the trigger formats to check for the regular attribute.

\cglformat

3482 \renewcommand*\cglformat[2]{%
3483 \glsifregular{#1}%
3484 {\glsentryfirst{#1}}%%
3485 {\ifglslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
3486 }

```

```

\cGlsformat
 3487 \renewcommand*{\cGlsformat}[2]{%
 3488   \glsifregular{#1}%
 3489   {\Glsentryfirst{#1}}%
 3490   {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
 3491 }

\cglsplformat
 3492 \renewcommand*{\cglsplformat}[2]{%
 3493   \glsifregular{#1}%
 3494   {\glsentryfirstplural{#1}}%
 3495   {\ifglshaslong{#1}{\glsentrylongpl{#1}}{\glsentryfirstplural{#1}}}#2%
 3496 }

\cGlspformat
 3497 \renewcommand*{\cGlspformat}[2]{%
 3498   \glsifregular{#1}%
 3499   {\Glsentryfirstplural{#1}}%
 3500   {\ifglshaslong{#1}{\Glsentrylongpl{#1}}{\Glsentryfirstplural{#1}}}#2%
 3501 }

```

New code similar to above for unit counting.

```

defunitcounters
 3502 \newcommand*{\@newglossaryentry@defunitcounters}{%
 3503   \edef\@glo@countunit{\csuse{@glsxtr@categoryattr@@\@glo@category @unitcount}}%
 3504   \ifdefvoid\@glo@countunit
 3505   {}%
 3506   {%
 3507     \@glsxtr@ifunitcounter{\@glo@countunit}%
 3508     {}%
 3509     {\expandafter\@glsxtr@addunitcounter\expandafter{\@glo@countunit}}%
 3510   }%
 3511 }

r@unitcountlist List to keep track of which counters are being used by the entry unit count facility.
 3512 \newcommand*{\@glsxtr@unitcountlist}{}

@addunitcounter
 3513 \newcommand*{\@glsxtr@addunitcounter}[1]{%
 3514   \listadd{\@glsxtr@unitcountlist}{#1}%
 3515   \ifcsundef{glsxtr@theunit@#1}
 3516   {}%
 3517   \ifcsdef{theH#1}%
 3518   {\csdef{glsxtr@theunit@#1}{\csuse{theH#1}}}%
 3519   {\csdef{glsxtr@theunit@#1}{\csuse{the#1}}}%
 3520   {}%
 3521   {}%
 3522 }

```

```

r@ifunitcounter
3523 \newcommand*{\@glsxtr@ifunitcounter}[3]{%
3524   \xifinlist{#1}{\@glsxtr@unitcountlist}{#2}{#3}%
3525 }

urrentunitcount
3526 \newcommand*{\glsxtr@currentunitcount}[1]{%
3527   glo@\glsdetoklabel{#1}@currunit@\glsgetattribute{#1}{unitcount}.%
3528   \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3529 }

eviousunitcount
3530 \newcommand*{\glsxtr@previousunitcount}[1]{%
3531   glo@\glsdetoklabel{#1}@prevunit@\glsgetattribute{#1}{unitcount}.%
3532   \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3533 }

t@currunitcount
3534 \newcommand*{\@gls@increment@currunitcount}[1]{%
3535   \glshasattribute{#1}{unitcount}%
3536   {%
3537     \edef{\glsxtr@csname}{\glsxtr@currentunitcount{#1}}%
3538     \ifcsundef{\glsxtr@csname}%
3539     {%
3540       \csgdef{\glsxtr@csname}{1}%
3541       \listcsxadd{%
3542         {glo@\glsdetoklabel{#1}@unitlist}%
3543         {\glsgetattribute{#1}{unitcount}.%
3544           \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%}
3545       }%
3546     }%
3547     {%
3548       \csxdef{\glsxtr@csname}{%
3549         \number\numexpr\csname@glsxtr@csname\endcsname+1}%
3550     }%
3551   }%
3552   {}%
3553 }

t@currunitcount
3554 \newcommand*{\@gls@local@increment@currunitcount}[1]{%
3555   \glshasattribute{#1}{unitcount}%
3556   {%
3557     \edef{\glsxtr@csname}{\glsxtr@currentunitcount{#1}}%
3558     \ifcsundef{\glsxtr@csname}%
3559     {%
3560       \csdef{\glsxtr@csname}{1}%
3561       \listcseadd{%
3562         {glo@\glsdetoklabel{#1}@unitlist}%

```

```

3563     {\glsgetattribute{#1}{unitcount}.%
3564      \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3565    }%
3566  }%
3567  {%
3568    \csedef{\@glsxtr@csname}%
3569    {\number\numexpr\csname@glsxtr@csname\endcsname+1}%
3570  }%
3571 }%
3572 {}%
3573 }

```

r@currunitcount

```

3574 \newcommand*{\@glsxtr@currunitcount}[2]{%
3575   \ifcsundef
3576     {\glo@\glsdetoklabel{#1}@currunit@#2}%
3577     {0}%
3578   {\csuse{\glo@\glsdetoklabel{#1}@currunit@#2}}%
3579 }

```

r@prevunitcount

```

3580 \newcommand*{\@glsxtr@prevunitcount}[2]{%
3581   \ifcsundef
3582     {\glo@\glsdetoklabel{#1}@prevunit@#2}%
3583     {0}%
3584   {\csuse{\glo@\glsdetoklabel{#1}@prevunit@#2}}%
3585 }

```

eentryunitcount

```
3586 \newcommand*{\glsenableentryunitcount}{%
```

Enable new fields:

```
3587 \appto{\newglossaryentry@defcounters}{\@newglossaryentry@defunitcounters}%

```

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

```

3588 \renewcommand*{\gls@defdocnewglossaryentry}{%
3589   \renewcommand*{\newglossaryentry}[2]{%
3590     \PackageError{glossaries}{\string\newglossaryentry\space
3591       may only be used in the preamble when entry counting has
3592       been activated}{If you use \string\glsenableentryunitcount\space
3593       you must place all entry definitions in the preamble not in
3594       the document environment}%
3595   }%
3596 }

```

New commands to access new fields:

```

3597 \newcommand*{\glsentrycurrcount}[1]{%
3598   \@glsxtr@currunitcount{##1}{\glsgetattribute{##1}{unitcount}.%
3599   \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}}%
3600 }

```

```

3601 \newcommand*{\glsentryprevcount}[1]{%
3602   \@glsxtr@prevunitcount{##1}{\glsgetattribute{##1}{unitcount}}.%
3603   \csuse{\glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
3604 }%
3605 \newcommand*{\glsentryprevtotalcount}[1]{%
3606   \ifcsundef{\glo@\glsdetoklabel{##1}@prevunittotal}%
3607   {0}%
3608   {%
3609     \number\csuse{\glo@\glsdetoklabel{##1}@prevunittotal}%
3610   }%
3611 }%
3612 \newcommand*{\glsentryprevmaxcount}[1]{%
3613   \ifcsundef{\glo@\glsdetoklabel{##1}@prevunitmax}%
3614   {0}%
3615   {%
3616     \number\csuse{\glo@\glsdetoklabel{##1}@prevunitmax}%
3617   }%
3618 }%
3619 \let\@glsxtr@entryunitcount@org@unset\glsxtrpostunset
3620 \renewcommand*{\glsxtrpostunset}[1]{%
3621   \@glsxtr@entryunitcount@org@unset{##1}%
3622   \@gls@increment@currunitcount{##1}%
3623 }%
3624 \let\@glsxtr@entryunitcount@org@localunset\glsxtrpostlocalunset
3625 \renewcommand*{\glsxtrpostlocalunset}[1]{%
3626   \@glsxtr@entryunitcount@org@localunset{##1}%
3627   \@gls@local@increment@currunitcount{##1}%
3628 }%
3629 \let\@glsxtr@entryunitcount@org@reset\glsxtrpostreset
3630 \renewcommand*{\glsxtrpostreset}[1]{%
3631   \glshasattribute{##1}{unitcount}%
3632   {%
3633     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%
3634     \ifcsundef{\@glsxtr@csname}%
3635     {}%
3636     {\csgdef{\@glsxtr@csname}{0}}%
3637   }%
3638   {}%
3639 }%
3640 \let\@glsxtr@entryunitcount@org@localreset\glsxtrpostlocalreset
3641 \renewcommand*{\glsxtrpostlocalreset}[1]{%
3642   \@glsxtr@entryunitcount@org@localreset{##1}%
3643   \glshasattribute{##1}{unitcount}%
3644   {%
3645     \edef\@glsxtr@csname{\@glsxtr@currentunitcount{##1}}%

```

```

3646     \ifcsundef{\@glsxtr@csname}%
3647     {}%
3648     {\csdef{\@glsxtr@csname}{0}}%
3649   }%
3650   {}%
3651 }%

```

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

```

3652 \let\@cgl@{\@cgl@%
3653 \let\@cglsp@{\@cglsp@%
3654 \let\@cGls@{\@cGls@%
3655 \let\@cGlspl@{\@cGlspl@%
3656 \let\@cGLS@{\@cGLS@%
3657 \let\@cGLSpl@{\@cGLSpl@%

```

Write information to the aux file.

```

3658 \AtEndDocument{\@gls@write@entryunitcounts}%
3659 \renewcommand*{\@gls@entry@unitcount}[3]{%
3660   \csgdef{glo@\glsdetoklabel{##1}@prevunit@##3}{##2}%
3661   \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
3662   {\csgdef{glo@\glsdetoklabel{##1}@prevunittotal}{##2}}%
3663   {}%
3664   \csxdef{glo@\glsdetoklabel{##1}@prevunittotal}{%
3665     \number\numexpr\csuse{glo@\glsdetoklabel{##1}@prevunittotal}+##2}%
3666   }%
3667   \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
3668   {\csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}}%
3669   {}%
3670   \ifnum\csuse{glo@\glsdetoklabel{##1}@prevunitmax}<##2
3671     \csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}%
3672   \fi
3673 }%
3674 }%
3675 \let\glsenableentryunitcount\relax
3676 \renewcommand*{\glsenableentrycount}{%
3677   \PackageError{glossaries-extra}{\string\glsenableentrycount\space
3678   can't be used with \string\glsenableentryunitcount}%
3679   {Use one or other but not both commands}}%
3680 }%
3681 }%
3682 \onlypreamble\glsenableentryunitcount

```

```
entry@unitcount
3683 \newcommand*{\@gls@entry@unitcount}[3]{}%
```

```
ryunitcounts@do
3684 \newcommand*{\@gls@write@entryunitcounts@do}[1]{%
3685   \immediate\write\@auxout
```

```

3686   {\string\@gls@entry@unitcount
3687     {\@glsentry}%
3688     {\@glsxtr@currunitcount{\@glsentry}{#1}%
3689     }%
3690   {#1}}%
3691 }

entryunitcounts
3692 \newcommand*{\@gls@write@entryunitcounts}{%
3693   \immediate\write\auxout
3694     {\string\providetcommand*{\string\@gls@entry@unitcount}[3]{}{}}%
3695   \count@=0\relax
3696   \forallglsentries{\@glsentry}{%
3697     \glshasattribute{\@glsentry}{unitcount}%
3698   }%
3699     \ifglsused{\@glsentry}%
3700   }%
3701     \forlistcsloop
3702       {\@gls@write@entryunitcounts@do}%
3703       {\glo@\glsdetoklabel{\@glsentry}@unitlist}%
3704   }%
3705   {}%
3706   \advance\count@ by \cne
3707 }%
3708 {}%
3709 }%
3710 \ifnum\count@=0
3711   \GlossariesExtraWarningNoLine{Entry counting has been enabled
3712     \MessageBreak with \string\glsenableentryunitcount\space but the
3713     \MessageBreak attribute ‘unitcount’ hasn’t
3714     \MessageBreak been assigned to any of the defined
3715     \MessageBreak entries}%
3716 \fi
3717 }

```

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.

```
3718 \newcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
```

Enable entry counting:

```
3719 \glsenableentryunitcount
```

Redefine \gls etc:

```
3720 \renewcommand*{\gls}{\cgls}%
3721 \renewcommand*{\Gls}{\cGls}%
3722 \renewcommand*{\glspl}{\cglspl}%
3723 \renewcommand*{\Glspl}{\cGlspl}%
3724 \renewcommand*{\GLS}{\cGLS}%
3725 \renewcommand*{\GLSpl}{\cGLSpl}%
```

Set the entrycount attribute:

```
3726  \glsxtr@setentryunitcountunsetattr{#1}{#2}{#3}%
```

In case this command is used again:

```
3727  \let\GlsXtrEnableEntryUnitCounting\glsxtr@setentryunitcountunsetattr
3728  \renewcommand*\GlsXtrEnableEntryCounting[2]{%
3729    \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryCounting\space
3730      can't be used with \string\GlsXtrEnableEntryUnitCounting}%
3731    {Use one or other but not both commands}}%
3732 }
```

tcountunsetattr

```
3733 \newcommand*\glsxtr@setentryunitcountunsetattr[3]{%
3734  @for\glsxtr@cat:=#1\do
3735  {%
3736    \ifdefempty{\glsxtr@cat}{}{%
3737      {%
3738        \glssetcategoryattribute{\glsxtr@cat}{entrycount}{#2}%
3739        \glssetcategoryattribute{\glsxtr@cat}{unitcount}{#3}%
3740      }%
3741    }%
3742 }
```

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

```
3743 \renewcommand*\SetGenericNewAcronym{%
3744  \let\@Gls@entryname\@Gls@acrentryname
3745  \renewcommand*\newacronym[4][]{%
3746    \ifdefempty{\glsacronymlists}{%
3747      {%
3748        \def\@glo@type{\acronymtype}%
3749        \setkeys{glossentry}{##1}%
3750        \DeclareAcronymList{\@glo@type}%
3751      }%
3752    }%
3753    \glskeylisttok{##1}%
3754    \glslabeltok{##2}%
3755    \glsshorttok{##3}%
3756    \glslongtok{##4}%
3757    \newacronymhook
```

```

3758 \protected@edef\@do@newglossaryentry{%
3759   \noexpand\newglossaryentry{\the\glslabeltok}%
3760   {%
3761     type=\acronymtype,%
3762     name={\expandonce{\acronymentry{##2}}},%
3763     sort={\acronymsort{\the\glsshorttok}{\the\glslongtok}},%
3764     text={\the\glsshorttok},%
3765     short={\the\glsshorttok},%
3766     shortplural={\the\glsshorttok\noexpand\acrpluralsuffix},%
3767     long={\the\glslongtok},%
3768     longplural={\the\glslongtok\noexpand\acrpluralsuffix},%
3769     category=acronym,
3770     \GenericAcronymFields,%
3771     \the\glskeylisttok
3772   }%
3773 }%
3774 \@do@newglossaryentry
3775 }%
3776 \renewcommand*\acrfullfmt}[3]{%
3777   \glslink[##1]{##2}{\genacrfullformat{##2}{##3}}}%
3778 \renewcommand*\Acrfullfmt}[3]{%
3779   \glslink[##1]{##2}{\Genacrfullformat{##2}{##3}}}%
3780 \renewcommand*\ACRfullfmt}[3]{%
3781   \glslink[##1]{##2}{%
3782     \mfirstucMakeUppercase{\genacrfullformat{##2}{##3}}}%
3783 \renewcommand*\acrfullplfmt}[3]{%
3784   \glslink[##1]{##2}{\genplacrfullformat{##2}{##3}}}%
3785 \renewcommand*\Acrfullplfmt}[3]{%
3786   \glslink[##1]{##2}{\Genplacrfullformat{##2}{##3}}}%
3787 \renewcommand*\ACRfullplfmt}[3]{%
3788   \glslink[##1]{##2}{%
3789     \mfirstucMakeUppercase{\genplacrfullformat{##2}{##3}}}%
3790 \renewcommand*\glsentryfull}[1]{\genacrfullformat{##1}{}}%
3791 \renewcommand*\Glsentryfull}[1]{\Genacrfullformat{##1}{}}%
3792 \renewcommand*\glsentryfullpl}[1]{\genplacrfullformat{##1}{}}%
3793 \renewcommand*\Glsentryfullpl}[1]{\Genplacrfullformat{##1}{}}%
3794 }

```

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:

```

3795 \let\@glsxtr@org@setacronymstyle\setacronymstyle
3796 \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`.

```

3797 \newcommand*\{ \MakeAcronymsAbbreviations\}%
3798   \renewcommand*\{ \newacronym\} [4] [] {%

```

```

3799     \glsxtr@newabbreviation{type=\acronymtype,category=acronym,##1}{##2}{##3}{##4}%
3800   }%
3801   \renewcommand*{\firstacronymfont}[1]{\glsfirstabbrvfont{##1}}%
3802   \renewcommand*{\acronymfont}[1]{\glsabbrvfont{##1}}%
3803   \renewcommand*{\setacronymstyle}[1]{%
3804     \PackageError{glossaries-extra}{\string\setacronymstyle{##1}%
3805       unavailable.%
3806       Use \string\setabbreviationstyle\space instead.%
3807       The original acronym interface can be restored with%
3808       \string\RestoreAcronyms}{}}%
3809   }%
3810   \renewcommand*{\newacronymstyle}[1]{%
3811     \GlossariesExtraWarning{New acronym style ‘##1’ won’t be%
3812       available unless you restore the original acronym interface with%
3813       \string\RestoreAcronyms}%
3814     \glsxtr@org@newacronymstyle{##1}}%
3815   }%
3816 }

```

Switch acronyms to abbreviations:

```
3817 \MakeAcronymsAbbreviations
```

`RestoreAcronyms` Restore acronyms to glossaries interface.

```

3818 \newcommand*{\RestoreAcronyms}{%
3819   \SetGenericNewAcronym
3820   \renewcommand{\firstacronymfont}[1]{\acronymfont{##1}}%
3821   \renewcommand{\acronymfont}[1]{##1}%
3822   \let\setacronymstyle\glsxtr@org@setacronymstyle
3823   \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.

```

3824   \renewcommand*{\gls@link@checkfirsthyper}{%
3825     \ifglsused{\glslabel}{%
3826       \let\glsxtrifwasfirstuse\secondoftwo
3827       \let\glsxtrifwasfirstuse\firstoftwo}%
3828     \glsxtr@org@checkfirsthyper
3829   }%
3830   \glssetcategoryattribute{acronym}{regular}{false}%
3831   \setacronymstyle{long-short}%
3832 }

```

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

```

3833 \renewcommand*{\glsacspace}[1]{%
3834   \settowidth{\dimen@}{(\firstacronymfont{\glsentryshort{#1}})}%
3835   \ifdim\dimen@<\glsacspacemax\else\space\fi
3836 }

```

`\glsacspacemax` Value used in the above.

```
3837 \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

3838 \newcommand*{\@glsxtr@reg@glosslist}{}{}

Save the original definition of `\makeglossaries`:

3839 \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

3840 \renewcommand*{\makeglossaries}[1] [] {%

3841 \ifx\@glsxtr@record@setting\@glsxtr@record@setting@only

3842 \PackageError{glossaries-extra}{\string\makeglossaries\space

3843 not permitted\MessageBreak with record=only package option} %

3844 {You may only use \string\makeglossaries\space with

3845 record=off or record=alsoindex options} %

3846 \else

3847 \ifblank{#1} %

3848 {\@glsxtr@org@makeglossaries} %

3849 {%

3850 \ifx\@glsxtr@record@setting\@glsxtr@record@setting@alsoindex

3851 \PackageError{glossaries-extra}{\string\makeglossaries[#1]\space

3852 not permitted\MessageBreak with record=alsoindex package option} %

3853 {You may only use the hybrid \string\makeglossaries[...]\space with

3854 record=off option} %

3855 \else

3856 \edef\@glsxtr@reg@glosslist{#1} %

3857 \ifundef{\glswrite}{\newwrite\glswrite} {} %

3858 \protected@write\@auxout{}{\string\providecommand

3859 \string\@glsorder[1]} {}

3860 \protected@write\@auxout{}{\string\providecommand

3861 \string\@istfilename[1]} {}

3862 \protected@write\@auxout{}{\string\@istfilename{\istfilename}} %

3863 \protected@write\@auxout{}{\string\@glsorder{\glsorder}}

3864 \protected@write\@auxout{}{\string\glsxtr@makeglossaries{#1}}

3865 \write\@auxout{\string\providecommand\string\@gls@reference[3]} %

Iterate through each supplied glossary type and activate it.

3866 \for\@glo@type:=#1\do{%

3867 \ifdefempty{\@glo@type}{}{\@makeglossary{\@glo@type}} %

3868 }%

New glossaries must be created before \makeglossaries:

```
3869      \renewcommand*\newglossary[4] []{%
3870          \PackageError{glossaries}{New glossaries
3871          must be created before \string\makeglossaries}{You need
3872          to move \string\makeglossaries\space after all your
3873          \string\newglossary\space commands}}%
```

Any subsequent instances of this command should have no effect

```
3874      \let\@makeglossary\relax
3875      \let\makeglossary\relax
3876      \renewcommand\makeglossaries[1] []{}%
```

Disable all commands that have no effect after \makeglossaries

```
3877      \@disable@onlypremakeg
```

Allow see key:

```
3878      \let\gls@checkseeallowed\relax
```

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

```
3879      \renewcommand*{\do@seeglossary}[2]{%
3880          \glsdoifexists{##1}%
3881          {%
3882              \edef\@gls@label{\glsdetoklabel{##1}}%
3883              \edef\@gls@type{\csname glo@\@gls@label \type\endcsname}%
3884              \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
3885              {\@glsxtr@org@doseeglossary{##1}{##2}}%
3886              {%
3887                  \@@glsxtrwrglossmark
3888                  \protected@write\auxout{}{%
3889                      \string\@gls@reference
3890                      {\gls@type}{\@gls@label}{\string\glsseeformat##2{}}%
3891                  }%
3892                  {%
3893                      {%
3894                  }%
3895              }%
3896          }%
3897      }%
```

Adjust \do@wrglossary

```
3895      \let\glsxtr@do@wrglossary\do@wrglossary
3896      \def\do@wrglossary{%
3897          \edef\@gls@type{\csname glo@\@gls@label \type\endcsname}%
3898          \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
3899          {\@glsxtr@do@wrglossary}%
3900          {\gls@noidxglossary}%
3901      }%
```

Suppress warning about no \makeglossaries

```
3902      \let\warn@nomakeglossaries\relax
3903      \def\warn@noprintglossary{%
3904          \GlossariesWarningNoLine{No \string\printglossary\space
3905          or \string\printglossaries\space}
```

```

3906     found.^^J(Remove \string\makeglossaries\space if you don't want
3907     any glossaries.)^^JThis document will not have a glossary}%
3908 }%

```

Only warn for glossaries not listed.

```

3909     \renewcommand{\@gls@noref@warn}[1]{%
3910         \edef\@gls@type{##1}%
3911         \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
3912     }%
3913         \GlossariesExtraWarning{Can't use
3914             \string\printnoidxglossary[type={\@gls@type}]
3915             when '\@gls@type' is listed in the optional argument of
3916             \string\makeglossaries}%
3917     }%
3918 }%
3919     \GlossariesWarning{Empty glossary for
3920         \string\printnoidxglossary[type={##1}].
3921         Rerun may be required (or you may have forgotten to use
3922             commands like \string\gls)}%
3923     }%
3924 }%

```

Adjust display number list to check for type:

```

3925     \renewcommand*{\glsdisplaynumberlist}[1]{%
3926         \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3927         {\@glsxtr@idx@displaynumberlist{##1}}%
3928         {\@glsxtr@noidx@displaynumberlist{##1}}%
3929     }%

```

Adjust entry list:

```

3930     \renewcommand*{\glsentrynumberlist}[1]{%
3931         \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3932         {\@glsxtr@idx@entrynumberlist{##1}}%
3933         {\@glsxtr@noidx@entrynumberlist{##1}}%
3934     }%

```

Adjust number list loop

```

3935     \renewcommand*{\glsnumberlistloop}[2]{%
3936         \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3937     }%
3938         \PackageError{glossaries-extra}{\string\glsnumberlistloop\space
3939             not available for glossary '##1'}{}%
3940     }%
3941     {\@glsxtr@noidx@numberlistloop{##1}{##2}}%
3942 }%

```

Only sanitize sort for normal indexing glossaries.

```

3943     \renewcommand*{\glsprestandardsort}[3]{%
3944         \expandafter\DTLifinlist\expandafter{##2}{\@glsxtr@reg@glosslist}%
3945     }%
3946         \glsdosanitizesort

```

```

3947      }%
3948      {%
3949          \ifglssanitize@sort
3950              \gls@noidx@sanitizesort
3951          \else
3952              \gls@noidx@nosanitizesort
3953          \fi
3954      }%
3955  }%

```

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

```

3956      \renewcommand*{\new@glossaryentry}[2]{%
3957          \PackageError{glossaries-extra}{Glossary entries must be defined
3958              in the preamble\MessageBreak when you use the optional argument
3959              of \string\makeglossaries}{Either move your definitions to the
3960              preamble or don't use the optional argument of
3961              \string\makeglossaries}%
3962      }%

```

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).

```

3963      \let\@glo@assign@sortkey\glsxtr@mixed@assign@sortkey
3964      \renewcommand*{\@printgloss@setsort}{%

```

Need to extract just the type value.

```

3965      \expandafter\glsxtr@gettype\expandafter,\glsxtr@printglossopts,%
3966          type=\glsdefaulttype,\end@glsxtr@gettype
3967      \def\@glo@sorttype{\@glo@default@sorttype}%
3968  }%

```

Check automake setting:

```

3969      \ifglsautomake
3970          \renewcommand*{\@gls@doautomake}{%
3971              \@for\@gls@type:=\glsxtr@reg@glosslist\do{%
3972                  \ifdefempty{\@gls@type}{}{\@gls@automake{\@gls@type}}%
3973              }%
3974          }%
3975      \fi

```

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

```

3976      \ifdef{\@glo@check@sortallowed}{\@glo@check@sortallowed\makeglossaries}{}%
3977      \fi
3978  }%
3979 \fi
3980 }%

```

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

`rgprintglossary` This no longer simply saves `\@printglossary` with `\let` but is actually defined to check for the existence of the title, since ignored glossaries don't have a title assigned. (`bib2gls` writes

\provideignoreglossary to the glstex file for some settings, so the glossary might not have been defined.) (This command is also used for on-the-fly setting.)

```
3981 \newcommand{\@glsxtr@orgprintglossary}[2]{%
3982   \def\@glo@type{\glsdefaulttype}%

```

Add check here.

```
3983   \def\glossarytitle{%
3984     \ifcsdef{@glotype@\@glo@type}{%
3985       {\@csuse{@glotype@\@glo@type}{\title}}{%
3986         {\glossaryname}}{%
3987       \def\glossarytoctitle{\glossarytitle}{%
3988         \let\org@glossarytitle\glossarytitle
3989         \def\@glossarystyle{%
3990           \ifx\@glossary@default@style\relax
3991             \GlossariesWarning{No default glossary style provided \MessageBreak
3992               for the glossary '\@glo@type'. \MessageBreak
3993               Using deprecated fallback. \MessageBreak
3994               To fix this set the style with \MessageBreak
3995               \string\setglossarystyle\space or use the \MessageBreak
3996               style key=value option}{%
3997             \fi
3998           }{%
3999             \def\gls@dotocitle{\glssettoctitle{\@glo@type}}{%
4000               \let\@org@glossaryentrynumbers\glossaryentrynumbers
4001               \bgroup
4002                 \@printgloss@setsort
4003                 \setkeys{printgloss}{#1}{%
4004                   \ifx\glossarytitle\org@glossarytitle
4005                     \else
4006                       \cslet{@glotype@\@glo@type}{\title}{\glossarytitle}{%
4007                     \fi
4008                     \let\currentglossary\@glo@type
4009                     \let\org@glossaryentrynumbers\glossaryentrynumbers
4010                     \let\glsnonextpages\glsnonextpages
4011                     \let\glsnextpages\glsnextpages
4012                     \glsxtractivenopost
4013                     \gls@dotocitle
4014                     \@glossarystyle
4015                     \let\gls@org@glossaryentryfield\glossentry
4016                     \let\gls@org@glossarysubentryfield\subglossentry
4017                     \renewcommand{\glossentry}[1]{%
4018                       \xdef\glscurrententrylabel{\glsdetoklabel{##1}}{%
4019                         \gls@org@glossaryentryfield{##1}{%
4020                           }{%
4021                           \renewcommand{\subglossentry}[2]{%
4022                             \xdef\glscurrententrylabel{\glsdetoklabel{##2}}{%
4023                               \gls@org@glossarysubentryfield{##1}{##2}{%
4024                                 }{%
4025                               \@gls@preglossaryhook

```

```

4026      #2%
4027      \egroup
4028      \global\let\glossaryentrynumbers\@org@glossaryentrynumbers
4029      \global\let\warn@noprintglossary\relax
4030 }

ractivatenopost Change \nopostrdesc and \glsxtrnopostrpunc to behave as they do in the glossary.
4031 \newcommand*{\glsxtrnopostrpunc}{%
4032   \let\nopostrdesc\nopostrdesc
4033   \let\glsxtrnopostrpunc\glsxtr@nopostrpunc
4034 }

lsxtrnopostrpunc
4035 \newrobustcmd*{\glsxtrnopostrpunc}{}}

sxtr@nopostrpunc Provide a command that works like \nopostrdesc but only switches off the punctuation without suppressing the post-description hook.
4036 \newcommand{\@glsxtr@nopostrpunc}{%
4037   \let\@glsxtr@org@postdescription\glspostdescription
4038   \ifglsnopostrdot
4039     \renewcommand{\glspostdescription}{%
4040       \glsnopostrdottrue
4041       \let\glspostdescription\@glsxtr@org@postdescription
4042       \let\glsxtrrestorerepostpunc\glsxtr@restore@postpunc
4043       \glsxtrpostdescription
4044       \glsxtr@nopostrpunc@postdesc}%
4045   \else
4046     \renewcommand{\glspostdescription}{%
4047       \let\glspostdescription\@glsxtr@org@postdescription
4048       \let\glsxtrrestorerepostpunc\glsxtr@restore@postpunc
4049       \glsxtrpostdescription
4050       \glsxtr@nopostrpunc@postdesc}%
4051   \fi
4052   \glsnopostrdotfalse
4053 }

stpunc@postdesc
4054 \newcommand*{\@glsxtr@nopostrpunc@postdesc}{}}

estore@postpunc
4055 \newcommand{\@glsxtr@restore@postpunc}{%
4056   \def\@glsxtr@nopostrpunc@postdesc{%
4057     \glsxtr@org@postdescription
4058     \let\@glsxtr@nopostrpunc@postdesc\empty
4059     \let\glsxtrrestorerepostpunc\empty
4060   }%
4061 }

```

```
restorepostpunc Does nothing outside of glossary.  
4062 \newcommand*{\glsxtrrestorepostpunc}{}  
4063 \renewcommand{\@printglossary}[2]{%
```

```
\@printglossary Redefine.  
4064 \def\@glsxtr@printglossopts{\#1}%  
4065 \@glsxtr@orgprintglossary{\#1}{\#2}%  
4066 }  
4067 \define@choicekey{printgloss}{target}{%
```

Add a key that switches off the entry targets:

```
4068 [\@glsxtr@printglossval\@glsxtr@printglossnr]%
```

4069 {true, false}[true]%

```
4070 %
```

```
4071 \ifcase\@glsxtr@printglossnr  
4072 \def\@glstarget{\glsdohypertarget}%  
4073 \else  
4074 \let\@glstarget\@secondoftwo  
4075 \fi  
4076 }
```

```
hypernameprefix  
4077 \newcommand{\@glsxtrhypernameprefix}{}  
4078 \define@key{printgloss}{targetnameprefix}{%
```

New to v1.20:

```
4079 \renewcommand{\@glsxtrhypernameprefix}{\#1}%  
4080 }  
4081 \define@key{printgloss}{prefix}{%
```

```
4082 \renewcommand{\glolinkprefix}{\#1}%  
4083 }
```

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

```
4084 \let\@glsxtr@org@glsdohypertarget\glsdohypertarget  
4085 \renewcommand{\glsdohypertarget}[2]{%  
4086 \@glsxtr@org@glsdohypertarget{\@glsxtrhypernameprefix\#1}{\#2}%  
4087 }  
4088 \ifx\@glstarget\@glsxtr@org@glsdohypertarget
```

Update \@glstarget to use \def instead being assigned with \let so that it can pick up the new definition and allow any further redefinitions:

```
4089 \def\@glstarget{\glsdohypertarget}%  
4090 \fi  
4091 \%\\end{macro}
```

```
@makeglossaries For the benefit of makeglossaries  
4092 \newcommand*{\glsxtr@makeglossaries}[1]{}  
4093 \renewcommand{\glsxtr@makeglossaries}[1]{%
```

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

```
4093 \def\@glsxtr@gettype#1,type=#2,#3@end@glsxtr@gettype{%
4094   \def\@glo@type{\#2}%
4095 }
```

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

```
4096 \newcommand\@glsxtr@mixed@assign@sortkey[1]{%
4097   \edef\@glo@type{\@glo@type}%
4098   \expandafter\DTLifinlist\expandafter{\@glo@type}{\@glsxtr@reg@glosslist}%
4099   {%
4100     \@glo@no@assign@sortkey{\#1}%
4101   }%
4102   {%
4103     \@@glo@assign@sortkey{\#1}%
4104   }%
4105 }
```

Display number list for the regular version:

```
splaynumberlist
```

```
4106 \let\@glsxtr@idx@displaynumberlist\glsdisplaynumberlist
```

Display number list for the “noidx” version:

```
splaynumberlist
```

```
4107 \newcommand*\@glsxtr@noidx@displaynumberlist[1]{%
4108   \letcs{\@gls@loclist}{\glsdetoklabel{\#1}@loclist}%
4109   \ifdef\@gls@loclist
4110   {%
4111     \def\@gls@noidxloclist@sep{%
4112       \def\@gls@noidxloclist@sep{%
4113         \def\@gls@noidxloclist@sep{%
4114           \glsnumlistsep
4115         }%
4116         \def\@gls@noidxloclist@finalsep{\glsnumlistlastsep}%
4117       }%
4118     }%
4119     \def\@gls@noidxloclist@finalsep{}%
4120     \def\@gls@noidxloclist@prev{}%
4121     \forlistloop{\glsnoidxdisplayloclisthandler}{\@gls@loclist}%
4122     \gls@noidxloclist@finalsep
4123     \gls@noidxloclist@prev
4124   }%
4125   {%
4126     \glsxtrundeftag
4127     \glsdoifexists{\#1}%
4128   }%
4129   \GlossariesWarning{Missing location list for '#1'. Either
4130     a rerun is required or you haven't referenced the entry.}%
}
```

```

4131      }%
4132  }%
4133 }%
4134

```

And for the number list loop:

@numberlistloop

```

4135 \newcommand*{\@glsxtr@noidx@numberlistloop}[3]{%
4136   \let\cs{\@gls@locist}{\gls@detoklabel{#1}@locist}%
4137   \let\let@{\gls@org@glsnoidxdisplayloc\glsnoidxdisplayloc}%
4138   \let\let@{\gls@org@glsseefORMAT\glsseefORMAT}%
4139   \let\let@{\glsnoidxdisplayloc#2\relax}%
4140   \let\let@{\glsseefORMAT#3\relax}%
4141   \ifdef{\gls@locist}%
4142   {%
4143     \forlistloop{\glsnoidxnumberlistloophandler}{\@gls@locist}%
4144   }%
4145   {%
4146     \glsxtrundeftag
4147     \glsdoifexists{#1}%
4148     {%
4149       \GlossariesWarning{Missing location list for ‘##1’. Either
4150         a rerun is required or you haven’t referenced the entry.}%
4151     }%
4152   }%
4153   \let\let@{\glsnoidxdisplayloc\gls@org@glsnoidxdisplayloc}%
4154   \let\let@{\glsseefORMAT\gls@org@glsseefORMAT}%
4155 }%

```

Same for entry number list.

entrynumberlist

```

4156 \newcommand*{\@glsxtr@noidx@entrynumberlist}[1]{%
4157   \let\cs{\@gls@locist}{\gls@detoklabel{#1}@locist}%
4158   \ifdef{\gls@locist}%
4159   {%
4160     \glsnoidxlocist{\@gls@locist}%
4161   }%
4162   {%
4163     \glsxtrundeftag
4164     \glsdoifexists{#1}%
4165     {%
4166       \GlossariesWarning{Missing location list for ‘#1’. Either
4167         a rerun is required or you haven’t referenced the entry.}%
4168     }%
4169   }%
4170 }%

```

```
entrynumberlist
4171 \newcommand*{\@glsxtr@idx@entrynumberlist}[1]{\glsentrynumberlist{#1}}
```

x@getgroup title Patch.

```
4172 \renewcommand*{\@gls@noidx@getgroup title}[2]{%
4173   \protected@edef{\glsxtr@titlelabel{#1}}{%
4174     \ifdefvoid{\glsxtr@titlelabel}{}{%
4175       {}{%
4176         \protected@edef{\glsxtr@titlelabel}{\csuse{\glsxtr@grouptitle@#1}}{%
4177       }{%
4178       \ifdefvoid{\glsxtr@titlelabel}{}{%
4179         {}{%
4180           \DTLifint{#1}{%
4181             {}{%
4182               \ifnum#1<256\relax
4183                 \edef#2{\char#1\relax}{%
4184               \else
4185                 \edef#2{#1}{%
4186               \fi
4187             }{%
4188           }{%
4189           \ifcsundef{#1groupname}{%
4190             {\def#2{#1}}{%
4191               {\letcs{#2}{#1groupname}}{%
4192             }{%
4193           }{%
4194         }{%
4195         \let#2{\glsxtr@titlelabel}{%
4196       }{%
4197     }{%
4198   }}
```

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

```
4199 \let\glsxtr@org@getgroup title\gls@getgroup title
```

trgetgroup title Provide a user-level command to fetch the group title. The first argument is the group label.
The second argument is a control sequence in which to store the title.

```
4200 \newrobustcmd{\glsxtrgetgroup title}[2]{%
4201   \protected@edef{\glsxtr@titlelabel{\glsxtr@grouptitle@#1}}{%
4202     \onelevel@sanitize{\glsxtr@titlelabel}{%
4203       \ifcsdef{\glsxtr@titlelabel}{%
4204         {\letcs{#2}{\glsxtr@titlelabel}}{%
4205           {\glsxtr@org@getgroup title{#1}{#2}}{%
4206         }{%
4207       \let\gls@getgroup title\glsxtrgetgroup title{%
4208 }
```

trsetgroup title Sets the title for the given group label.

```
4208 \newcommand{\glsxtrsetgroup title}[2]{%
```

```

4209 \protected@edef\@glsxtr@titlelabel{\glsxtr@grouptitle@#1}%
4210 \@onelvel@sanitize\@glsxtr@titlelabel
4211 \protected@csxdef{\@glsxtr@titlelabel}{#2}%
4212 }

```

`\setgrouptitle` As above put only locally defines the title.

```

4213 \newcommand{\glsxtrlocalsetgrouptitle}[2]{%
4214 \protected@edef\@glsxtr@titlelabel{\glsxtr@grouptitle@#1}%
4215 \@onelvel@sanitize\@glsxtr@titlelabel
4216 \protected@csedef{\@glsxtr@titlelabel}{#2}%
4217 }

```

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

```

4218 \renewcommand*{\glsnavigation}{%
4219 \def\@gls@between{}%
4220 \ifcsundef{@gls@hypergroupelist@\@glo@type}%
4221 {}%
4222 \def\@gls@list{}%
4223 }%
4224 {}%
4225 \expandafter\let\expandafter\@gls@list
4226 \csname @gls@hypergroupelist@\@glo@type\endcsname
4227 }%
4228 \for\@gls@tmp:=\@gls@list\do{%
4229 \@gls@between
4230 \glsxtrgetgrouptitle{\@gls@tmp}{\@gls@grptitle}%
4231 \glsnavhyperlink{\@gls@tmp}{\@gls@grptitle}%
4232 \let\@gls@between\glshypernavsep
4233 }%
4234 }

```

`@noidx@glossary`

```

4235 \renewcommand*{\@print@noidx@glossary}{%
4236 \ifcsdef{@glsref@\@glo@type}%
4237 {}%
4238 \ifcsdef{@glo@sortmacro@\@glo@sorttype}%
4239 {}%
4240 \csuse{@glo@sortmacro@\@glo@sorttype}{\@glo@type}%
4241 }%
4242 {}%
4243 \PackageError{glossaries}{Unknown sort handler '\@glo@sorttype'}{}%
4244 }%
4245 \glossarysection[\glossarytoctitle]{\glossarytitle}%
4246 \glossarypreamble

```

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

```

4247 \def\@gls@currentlettergroup{}%
4248 \begin{theglossary}%

```

```

4249     \glossaryheader
4250     \glsresetentrylist
4251     \forlistcsloop{\@gls@noidx@do}{\@glsref@\@glo@type}%
4252     \end{theglossary}%
4253     \glossarypostamble
4254 }%
4255 {%

```

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

```

4256     \glsxtrifemptyglossary{\@glo@type}%
4257     {}%
4258     {\glossarysection[\glossarytoctitle]{\glossarytitle}}%
4259     \@gls@noref@warn{\@glo@type}%
4260 }%
4261 }

```

`noidxdisplayloc` Patch to check for range formations.

```

4262 \renewcommand*{\glsnoidxdisplayloc}[4]{%
4263   \setentrycounter[#1]{#2}%
4264   \@glsxtr@display@loc#3\empty\end@glsxtr@display@loc{#4}%
4265 }

```

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

```

4266 \def\@glsxtr@display@loc#1#2\end@glsxtr@display@loc#3{%
4267   \ifx#1(\relax
4268     \glsxtrdisplaystartloc{#2}{#3}%
4269   \else
4270     \ifx#1)\relax
4271       \glsxtrdisplayendloc{#2}{#3}%
4272     \else
4273       \glsxtrdisplaysingleloc{#1#2}{#3}%
4274     \fi
4275   \fi
4276 }

```

`isplaysingleloc` Single location.

```

4277 \newcommand*{\glsxtrdisplaysingleloc}[2]{%
4278   \csuse{#1}{#2}%
4279 }

```

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.

```

4280 \newcommand*{\glsxtrdisplaystartloc}[2]{%
4281   \edef\glsxtrlocrengefmt{#1}%
4282   \ifx\glsxtrlocrengefmt\empty
4283     \def\glsxtrlocrengefmt{\glsnumberformat}%

```

```

4284 \fi
4285 \expandafter\glsxtrdisplaysingleloc
4286   \expandafter{\glsxtrlocregfmt}{#2}%
4287 }

trdisplayendloc End of a location range.
4288 \newcommand*{\glsxtrdisplayendloc}[2]{%
4289   \edef\@glsxtr@tmp{#1}%
4290   \ifdefempty{\@glsxtr@tmp}{\def\@glsxtr@tmp{\glsnumberformat}{}}
4291   \ifx\glsxtrlocregfmt\@glsxtr@tmp
4292   \else
4293     \GlossariesExtraWarning{Mismatched end location range
4294       (start=\glsxtrlocregfmt, end=\@glsxtr@tmp)}%
4295   \fi
4296   \expandafter\glsxtrdisplayendlohook\expandafter{\@glsxtr@tmp}{#2}%
4297   \expandafter\glsxtrdisplaysingleloc
4298   \expandafter{\glsxtrlocregfmt}{#2}%
4299   \def\glsxtrlocregfmt{}%
4300 }

splayendlohook Allow the user to hook into the end of range command.
4301 \newcommand*{\glsxtrdisplayendlohook}[2]{}

sxtrlocregfmt Current range format. Empty if not in a range.
4302 \newcommand*{\glsxtrlocregfmt}{} 

setentrycounter Adjust \setentrycounter to save the original prefix.
4303 \renewcommand*{\setentrycounter}[2][]{%
4304   \def\glsxtrcounterprefix{#1}%
4305   \ifx\glsxtrcounterprefix\empty
4306     \def\@glo@counterprefix{.}%
4307   \else
4308     \def\@glo@counterprefix{.#1.}%
4309   \fi
4310   \def\glsentrycounter{#2}%
4311 }

ls@removespaces Redefine to allow adjustments to location hyperlink.
4312 \def\@gls@removespaces#1 #2@nil{%
4313   \toks@=\expandafter{\the\toks@#1}%
4314   \ifx\#2\%
4315     \edef\x{\the\toks@}%
4316     \ifx\x\empty
4317     \else
4318       \expandafter\glsxtrlocationhyperlink\expandafter
4319         \glsentrycounter\expandafter\@glo@counterprefix\expandafter{\the\toks@}%
4320     \fi

```

```

4321 \else
4322   \gls@ReturnAfterFi{%
4323     \gls@removespaces#2\@nil
4324   }%
4325 \fi
4326 }

```

cationhyperlink

```

4327 \newcommand*{\glsxtrlocationhyperlink}[3]{%
4328   \ifdefvoid{\glsxtrsupplocationurl}
4329   {%
4330     \GlsXtrInternalLocationHyperlink{#1}{#2}{#3}%
4331   }%
4332   {%
4333     \hyperref{\glsxtrsupplocationurl}{}{#1#2#3}{#3}%
4334   }%
4335 }

```

suphypernumber

```

4336 \newcommand*{\glsxtrsupphypernumber}[1]{%
4337 {%
4338   \glshasattribute{\glscurrententrylabel}{externalallocation}%
4339   {%
4340     \def{\glsxtrsupplocationurl}{%
4341       \glsetattribute{\glscurrententrylabel}{externalallocation}{}%
4342     }%
4343   {%
4344     \def{\glsxtrsupplocationurl}{}%
4345   }%
4346   \glshypernumber{#1}%
4347 }%
4348 }

```

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

@print@glossary

```

4349 \renewcommand{\@print@glossary}{%
4350   \makeatletter
4351   \input{\jobname.\csname \glotype@\glo@type @in\endcsname}%
4352   \IfFileExists{\jobname.\csname \glotype@\glo@type @in\endcsname}%
4353   {}%
4354   {\glsxtrNoGlossaryWarning{\glo@type}}%
4355   \ifglsxindy
4356     \ifcsundef{\xdy@\glo@type @language}%
4357     {}%
4358     \edef{\do@auxoutstuff}{%
4359       \noexpand\AtEndDocument{%
4360         \noexpand\immediate\noexpand\write\auxout{%

```

```

4361         \string\providetcommand\string\xdylanguage[2]{}}%
4362         \noexpand\immediate\noexpand\write\@auxout{%
4363             \string\xdylanguage{\@glo@type}{\xdy@main@language}}%
4364         }%
4365     }%
4366 }%
4367 {%
4368     \edef\@do@auxoutstuff{%
4369         \noexpand\AtEndDocument{%
4370             \noexpand\immediate\noexpand\write\@auxout{%
4371                 \string\providetcommand\string\xdylanguage[2]{}}%
4372             \noexpand\immediate\noexpand\write\@auxout{%
4373                 \string\xdylanguage{\@glo@type}{\csname \xdy@\@glo@type
4374                     @language\endcsname}}%
4375             }%
4376         }%
4377     }%
4378     \@do@auxoutstuff
4379     \edef\@do@auxoutstuff{%
4380         \noexpand\AtEndDocument{%
4381             \noexpand\immediate\noexpand\write\@auxout{%
4382                 \string\providetcommand\string@gls@codepage[2]{}}%
4383             \noexpand\immediate\noexpand\write\@auxout{%
4384                 \string@gls@codepage{\@glo@type}{\gls@codepage}}%
4385             }%
4386         }%
4387     \@do@auxoutstuff
4388 \fi
4389 \renewcommand*\@warn@nomakeglossaries{%
4390     \GlossariesWarningNoLine{\string\makeglossaries\space
4391     hasn't been used, ^J the glossaries will not be updated}%
4392 }%
4393 }

```

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

`oGlsWarningHead` Header message.

```

4394 \newcommand{\GlsXtrNoGlsWarningHead}[2]{%
4395 This document is incomplete. The external file associated with
4396 the glossary '#1' (which should be called \texttt{\#2})
4397 hasn't been created.%
4398 }

```

`rningEmptyStart` No entries have been added to the glossary.

```

4399 \newcommand{\GlsXtrNoGlsWarningEmptyStart}{%
4400 This has probably happened because there are no entries defined
4401 in this glossary.%
4402 }

```

`arningEmptyMain` The default “main” glossary is empty.

```
4403 \newcommand{\GlsXtrNoGlsWarningEmptyMain}{%
4404 If you don't want this glossary,
4405 add \texttt{nomain} to your package option list when you load
4406 \texttt{glossaries-extra.sty}. For example:%
4407 }
```

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

```
4408 \newcommand{\GlsXtrNoGlsWarningEmptyNotMain}[1]{%
4409 Did you forget to use \texttt{type=#1} when you defined your
4410 entries? If you tried to load entries into this glossary with
4411 \texttt{\string\loadglsentries} did you remember to use
4412 \texttt{\string[#1]} as the optional argument? If you did, check that
4413 the definitions in the file you loaded all had the type set
4414 to \texttt{\string\glsdefaulttype}.%
4415 }
```

arningCheckFile Advisory message to check the file contents.

```
4416 \newcommand{\GlsXtrNoGlsWarningCheckFile}[1]{%
4417 Check the contents of the file \texttt{\#1}. If
4418 it's empty, that means you haven't indexed any of your entries in this
4419 glossary (using commands like \texttt{\string\gls} or
4420 \texttt{\string\glsadd}) so this list can't be generated.
4421 If the file isn't empty, the document build process hasn't been
4422 completed.%
```

```
4423 }
```

WarningAutoMake Message when automake option has been used.

```
4424 \newcommand{\GlsXtrNoGlsWarningAutoMake}[1]{%
4425 You may need to rerun \LaTeX. If you already have, it may be that
4426 \TeX's shell escape doesn't allow you to run
4427 \texttt{\ifglsxindy xindy\else makeindex\fi}. Check the
4428 transcript file \texttt{\jobname.log}. If the shell escape is
4429 disabled, try one of the following:
4430
4431 \begin{itemize}
4432   \item Run the external (Lua) application:
4433
4434     \texttt{makeglossaries-lite.lua \string"\jobname\string"}
4435
4436   \item Run the external (Perl) application:
4437
4438     \texttt{makeglossaries \string"\jobname\string"}
4439 \end{itemize}
4440
4441 Then rerun \LaTeX\ on this document.
4442 \GlossariesExtraWarning{Rerun required to build the
4443 glossary '#1' or check \TeX's shell escape allows
4444 you to run \texttt{\ifglsxindy xindy\else makeindex\fi}}%
4445 }
```

WarningMisMatch Mismatching \makenoidxglossaries.

```
4446 \newcommand{\GlsXtrNoGlsWarningMisMatch}{%
4447   You need to either replace \texttt{\string\makenoidxglossaries}
4448   with \texttt{\string\makeglossaries} or replace
4449   \texttt{\string\printglossary} (or \texttt{\string\printglossaries}) with
4450   \texttt{\string\printnoidxglossary}
4451   (or \texttt{\string\printnoidxglossaries}) and then rebuild
4452   this document.%
```

```
4453 }
```

arningBuildInfo Build advice.

```
4454 \newcommand{\GlsXtrNoGlsWarningBuildInfo}{%
4455   Try one of the following:
4456   \begin{itemize}
4457     \item Add \texttt{automake} to your package option list when you load
4458       \texttt{glossaries-extra.sty}. For example:
4459
4460       \texttt{\string\usepackage[automake]%
4461         \glsopenbrace glossaries-extra\glsclosebrace}
4462
4463     \item Run the external (Lua) application:
4464
4465       \texttt{\string\makeglossaries-lite.lua \string"\jobname\string"}
4466
4467     \item Run the external (Perl) application:
4468
4469       \texttt{\string\makeglossaries \string"\jobname\string"}
4470   \end{itemize}
4471
4472 Then rerun \LaTeX\ on this document.%
```

```
4473 }
```

trRecordWarning Paragraph for record=only.

```
4474 \newcommand{\GlsXtrRecordWarning}[1]{%
4475   \texttt{\string\printglossary} doesn't work
4476   with the \texttt{record=only} package option
4477   use\par\texttt{\string\printunsrtglossary[type=\#1]}\par
4478   instead (or change the package option).%
4479 }
```

oGlsWarningTail Final paragraph.

```
4480 \newcommand{\GlsXtrNoGlsWarningTail}{%
4481 This message will be removed once the problem has been fixed.%
```

```
4482 }
```

GlsWarningNoOut No out file created. Build advice.

```
4483 \newcommand{\GlsXtrNoGlsWarningNoOut}[1]{%
4484   The file \texttt{\#1} doesn't exist. This most likely means you haven't used
4485   \texttt{\string\makeglossaries} or you have used
```

```

4486 \texttt{\string\nofiles}. If this is just a draft version of the
4487 document, you can suppress this message using the
4488 \texttt{nomissingglstext} package option.%  

4489 }

glossarywarning
4490 \newcommand*{\@glsxstr@defaultnoglossarywarning}[1]{%
4491   \glossarysection[\glossarytoctitle]{\glossarytitle}
4492   \GlsXtrNoGlsWarningHead{\#1}{\jobname.\csname @glotype@\glo@type @in\endcsname}
4493   \par
4494   \glsxtrifemptyglossary{\#1}%
4495 {%
4496   \GlsXtrNoGlsWarningEmptyStart\space
4497   \ifthenelse{\equal{\#1}{main}}{\GlsXtrNoGlsWarningEmptyMain\par
4498   \medskip
4499   \noindent\texttt{\string\usepackage[nomain\ifglsacronym ,acronym\fi]}%
4500   \glsopenbrace glossaries-extra\glsclosebrace}
4501   \medskip
4502 }%
4503 {\GlsXtrNoGlsWarningEmptyNotMain{\#1}}%
4504 }%
4505 {%
4506 \IfFileExists{\jobname.\csname @glotype@\glo@type @out\endcsname}
4507 {%
4508   \GlsXtrNoGlsWarningCheckFile
4509   {\jobname.\csname @glotype@\glo@type @out\endcsname}
4510
4511 \ifglsautomake
4512
4513   \GlsXtrNoGlsWarningAutoMake{\#1}
4514
4515 \else
4516
4517   \ifthenelse{\equal{\#1}{main}}{%
4518 {%
4519   \GlsXtrNoGlsWarningEmptyMain\par
4520   \medskip
4521   \noindent\texttt{\string\usepackage[nomain]}%
4522   \glsopenbrace glossaries-extra\glsclosebrace}
4523   \medskip
4524 }%
4525 {}%
4526
4527 \ifdefequal{\makeglossaries}{no@makeglossaries}
4528 {%
4529   \GlsXtrNoGlsWarningMisMatch
4530 }%
4531 {%
4532   \GlsXtrNoGlsWarningBuildInfo

```

```

4533      }%
4534      \fi
4535  }%
4536  {%
4537      \GlsXtrNoGlsWarningNoOut
4538      {\jobname.\csname \glototype@\glo@type \out\endcsname}%
4539  }%
4540 }%
4541 \par
4542 \GlsXtrNoGlsWarningTail
4543 }

```

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

```

4544 \newcommand*{\glsxtr@record@noglossarywarning}[1]{%
4545     \GlossariesExtraWarning{\string\printglossary\space doesn't work\MessageBreak
4546     with record=only package option\MessageBreak(use
4547     \string\printunsrtglossary[type=#1])\MessageBreak
4548     instead (or change the package option)}%
4549     \glossarysection[\glossarytoctitle]{\glossarytitle}%
4550     \GlsXtrRecordWarning{#1}%
4551     \GlsXtrNoGlsWarningTail
4552 }

```

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.

```
4553 \newcommand*{\glsxtrresourcefile}[2][]{%
```

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

```

4554 \disable@keys{glossaries-extra.sty}{record}%
4555 \glsxtr@writefields
4556 \protected@write\auxout{\glsxtrresourceinit}{\string\glsxtr@resource{#1}{#2}}%
4557 \let\glsxtr@org@see@noindex\gls@see@noindex
4558 \let\gls@see@noindex\relax
4559 \IfFileExists{#2.glstex}%
4560 {%

```

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

```

4561 \edef\@bibgls@restoreat{\noexpand\catcode\noexpand`\noexpand\@=\number\catcode`\@}%
4562 \makeatletter
4563 \@input{#2.glstex}%
4564 \@bibgls@restoreat
4565 }%
4566 {%
4567 \GlossariesExtraWarning{No file '#2.glstex'}%
4568 }%
4569 \let\gls@see@noindex\glsxtr@org@see@noindex
4570 }

```

```

4571 \onlypreamble\glsxtrresourcefile

xtrresourceinit  Code used during the protected write operation.
4572 \newcommand*\{\glsxtrresourceinit\}{}

trresourcecount
4573 \newcount\glsxtrresourcecount

trLoadResources  Short cut that uses \glsxtrresourcefile with \jobname as the mandatory argument.
4574 \newcommand*\{\GlsXtrLoadResources\}[1] []{%
4575   \ifnum\glsxtrresourcecount=0\relax
4576     \glsxtrresourcefile[#1]{\jobname}%
4577   \else
4578     \glsxtrresourcefile[#1]{\jobname-\the\glsxtrresourcecount}%
4579   \fi
4580   \advance\glsxtrresourcecount by 1\relax
4581 }

glsxtr@resource
4582 \newcommand*\{\glsxtr@resource\}[2]{}

\glsxtr@fields
4583 \newcommand*\{\glsxtr@fields\}[1]{}

xtr@texencoding
4584 \newcommand*\{\glsxtr@texencoding\}[1]{}

\glsxtr@langtag
4585 \newcommand*\{\glsxtr@langtag\}[1]{}

@pluralsuffixes
4586 \newcommand*\{\glsxtr@pluralsuffixes\}[4]{}

tr@shortcutsval
4587 \newcommand*\{\glsxtr@shortcutsval\}[1]{}

sxtr@linkprefix
4588 \newcommand*\{\glsxtr@linkprefix\}[1]{}

xtr@writefields  This information only needs to be written once, so disable it after it's been used.
4589 \newcommand*\{\glsxtr@writefields\}{%
4590   \protected@write\@auxout{}{%
4591     {\string\providetoggle*{\string\glsxtr@fields\string}[1]\{}}%
4592   \protected@write\@auxout{}{%
4593     {\string\providetoggle*{\string\glsxtr@resource\string}[2]\{}}%
4594   \protected@write\@auxout{}{%
4595     {\string\providetoggle*{\string\glsxtr@pluralsuffixes\string}[4]\{}}%

```

```

4596 \protected@write\@auxout{%
4597   {\string\providecommand*{\string\glsxtr@shortcutsval}[1]{}}%
4598 \protected@write\@auxout{%
4599   {\string\providecommand*{\string\glsxtr@linkprefix}[1]{}}%
4600 \protected@write\@auxout{}{\string\glsxtr@fields{\@gls@keymap}}%
```

```

4601 \protected@write\@auxout{%
4602   {\string\providecommand*{\string\glsxtr@record}[5]{}}%
```

If any languages have been loaded, the language tag will be available in \CurrentTrackedLanguageTag (provided by tracklang). For multilingual documents, the required locale will have to be indicated in the sort key when using \glsxtrresourcefile.

```

4603 \ifdef\CurrentTrackedLanguageTag
4604 {%
4605   \protected@write\@auxout{}{%
4606     \string\glsxtr@langtag{\CurrentTrackedLanguageTag}}%
4607 }%
4608 {}%
4609 \protected@write\@auxout{}{\string\glsxtr@pluralsuffixes
4610   {\glspluralsuffix}{\abbrvpluralsuffix}{\acrpluralsuffix}}%
4611   {\glsxtrabbrvpluralsuffix}}%
4612 \ifdef\inputencodingname
4613 {%
4614   \protected@write\@auxout{}{\string\glsxtr@texencoding{\inputencodingname}}%
4615 }%
4616 {}%
```

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.)

```

4617   \@ifpackageloaded{fontspec}%
4618     {\protected@write\@auxout{}{\string\glsxtr@texencoding{utf8}}}}%
4619   {}%
4620 }%
4621 \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.

```

4622 \AtBeginDocument
4623   {\protected@write\@auxout{}{\string\glsxtr@linkprefix{\glolinkprefix}}}}%
4624 \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.

```

4625 \ifglsautomake
4626   \IfFileExists{\jobname.aux}{%
4627     {\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.

```

4628     \ifx\@gls@doautomake\@gls@doautomake@err
4629         \let\@gls@doautomake\relax
4630     \fi
4631 \fi
4632 }

do@automake@err
4633 \newcommand*{\@gls@doautomake@err}{%
4634   \PackageError{glossaries}{You must use
4635   \string\makeglossaries\space with automake=true}
4636   {%
4637     Either remove the automake=true setting or
4638     add \string\makeglossaries\space to your document preamble.%
4639   }%
4640 }

```

Allow locations specific to a particular counter to be recorded.

\glsxtr@record

```

4641 \newcommand*{\glsxtr@record}[5]{}

```

r@counterrecord Aux file command.

```

4642 \newcommand*{\glsxtr@counterrecord}[3]{%
4643   \glsxtrfieldlistgadd{#1}{record.#2}{#3}%
4644 }

```

unterrecordhook Hook used by \@glsxtr@dorecord.

```

4645 \newcommand*{\@glsxtr@counterrecordhook}{}

```

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

```

4646 \newcommand*{\GlsXtrRecordCounter}[1]{%
4647   \@@glsxtr@recordcounter{#1}%
4648 }
4649 \onlypreamble\GlsXtrRecordCounter

```

docounterrecord

```

4650 \newcommand*{\@glsxtr@docounterrecord}[1]{%
4651   \protected@write\auxout{}{\string\glsxtr@counterrecord
4652     {\@gls@label}{#1}{\csuse{the#1}}}}
4653 }

```

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.

```

4654 \newcommand*{\glsxtrglossentry}[1]{%

```

```

4655 \glsxtrtitleorpdforheading
4656 {\@glsxtrglossentry{#1}%
4657 {\glsentryname{#1}}%
4658 {\glsxtrheadname{#1}}%
4659 }

```

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

```

4660 \newrobustcmd*\{@glsxtrglossentry}[1]{%
4661   \glsxtrtitleorpdforheading
4662   {%
4663     \glsdoifexists{#1}%
4664     {%
4665       \begingroup
4666         \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
4667         \edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
4668         \ifglshasparent{#1}%
4669           {\GlsXtrStandaloneSubEntryItem{#1}}%
4670           {\glsentryitem{#1}}%
4671           \glstarget{#1}{\glossentryname{#1}}%
4672         \endgroup
4673       }%
4674     }%
4675     {\glsentryname{#1}}%
4676     {\glsxtrheadname{#1}}%
4677 }

```

`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.)

```
4678 \newcommand{\GlsXtrStandaloneGlossaryType}{\glsentrytype{\glscurrententrylabel}}
```

`oneSubEntryItem` Used for sub-entries in standalone format. The argument is the entry's label.

```

4679 \newcommand*{\GlsXtrStandaloneSubEntryItem}[1]{%
4680   \GlsXtrIfFieldEqNum{level}{#1}{1}{\glssubentryitem{#1}}{}%
4681 }

```

`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.

```

4682 \newcommand*{\glsxtrglossentryother}[3]{%
4683   \ifstrempty{#1}%
4684   {%
4685     \ifcsdef{glsxtrhead#3}%
4686     {%
4687       \glsxtrtitleorpdforheading
4688       {\@glsxtrglossentryother{#2}{#3}{#1}}%

```

```

4689      {\@gls@entry@field{#2}{#3}}%
4690      {\csuse{glsxtrhead#3}{#2}}%
4691  }%
4692  {%
4693      \glsxtrtitleorpdforheading
4694      {\@glsxtrglossentryother{#2}{#3}{#1}}%
4695      {\@gls@entry@field{#2}{#3}}%
4696      {\@gls@entry@field{\NoCaseChange{#2}}{#3}}%
4697  }%
4698 }%
4699 {%
4700     \glsxtrtitleorpdforheading
4701     {\@glsxtrglossentryother{#2}{#3}{#1}}%
4702     {\@gls@entry@field{#2}{#3}}%
4703     {#1}%
4704 }%
4705 }

```

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

```

4706 \newrobustcmd*{\@glsxtrglossentryother}[3]{%
4707     \glsxtrtitleorpdforheading
4708  {%
4709      \glsdoifexists{#1}%
4710      {%
4711          \begingroup
4712              \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
4713              \edef\currentglossary{\GlsXtrStandaloneGlossaryType}%
4714              \ifglshasparent{#1}%
4715                  {\GlsXtrStandaloneSubEntryItem{#1}}%
4716                  {\glsentryitem{#1}}%
4717                  \glstarget{#1}{\glossentrynameother{#1}{#2}}%
4718          \endgroup
4719      }%
4720  }%
4721  {\@gls@entry@field{#1}{#2}}%
4722  {#3}%
4723 }

```

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

```

4724 \newcommand*{\printunsrtglossary}{%
4725     \@ifstar\s@printunsrtglossary\@printunsrtglossary
4726 }

```

`ntunsrtglossary` Unstarred version.

```

4727 \newcommand*{\@printunsrtglossary}[1][]{%
4728     \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%
4729 }

```

ntunsrtglossary Starred version.

```

4730 \newcommand*{\s@printunsrtglossary}[2] [] {%
4731   \begingroup
4732   #2%
4733   \@printglossary{type=\glsdefaulttype,#1}{\@print@unsrt@glossary}%
4734   \endgroup
4735 }

```

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

```

4736 \newcommand*{\printunsrtglossaries}{%
4737   \forallglossaries{\@glo@type}{\printunsrtglossary[type=\@glo@type]}%
4738 }

```

@unsrt@glossary

```

4739 \newcommand*{\@print@unsrt@glossary}{%
4740   \glossarysection[\glossarytoctitle]{\glossarytitle}%
4741   \glossarypreamble
      check for empty list
4742   \glsxtrifemptyglossary{\@glo@type}%
4743   {%
4744     \GlossariesExtraWarning{No entries defined in glossary '\@glo@type'}%
4745   }%
4746   {%
4747     \key@ifundefined{glossentry}{group}%
4748     {\let\@gls@getgroupname\@gls@noidx@getgroupname}%
4749     {\let\@gls@getgroupname\@glsxtr@unsrt@getgroupname}%
4750     \def\@gls@currentlettergroup{}%

```

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

```

4751 \def\@glsxtr@doglossary{%
4752   \begin{theglossary}%
4753   \glossaryheader
4754   \glsresetentrylist
4755 }%
4756 \expandafter\@for\expandafter\glscurrententrylabel\expandafter
4757   :\expandafter=\csname glolist@\@glo@type\endcsname\do{%
4758   \ifdefempty{\glscurrententrylabel}%
4759   {}%
4760   {}%

```

Provide a hook (for example to measure width).

```

4761 \let\glsxtr@process@firstofone
4762 \let\printunsrtglossaryskipentry
4763   \glsxtr@printunsrtglossaryskipentry
4764   \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%

```

Don't check group for child entries.

```
4765      \glsxstr@process
4766      {%
4767          \ifglshasparent{\glscurrententrylabel}{}%
4768          {%
4769              \glsxstr@checkgroup\glscurrententrylabel
4770              \expandafter\appto\expandafter\@glsxstr@doglossary\expandafter
4771                  {\@glsxstr@groupheading}%
4772          }%
4773          \eappto\@glsxstr@doglossary{%
4774              \noexpand\@printunsrt@glossary@handler{\glscurrententrylabel}}%
4775          }%
4776      }%
4777  }%
4778  \appto\@glsxstr@doglossary{\end{theglossary}}%
4779  \printunsrtglossarypredoglossary
4780  \@glsxstr@doglossary
4781 }%
4782 \glossarypostamble
4783 }
```

ntryprocesshook

```
4784 \newcommand*{\printunsrtglossaryentryprocesshook}[1]{}
```

ossaryskipentry

```
4785 \newcommand*{\printunsrtglossaryskipentry}{%
4786   \PackageError{glossaries-extra}{\string\printunsrtglossaryskipentry\space
4787 can only be used within \string\printunsrtglossaryentryprocesshook}{}%
4788 }
```

ntryprocesshook

```
4789 \newcommand*{\@glsxstr@printunsrtglossaryskipentry}{%
4790   \let\glsxstr@process\@gobble
4791 }
```

rypredoglossary

```
4792 \newcommand*{\printunsrtglossarypredoglossary}{}
```

lossary@handler

```
4793 \newcommand{\@printunsrt@glossary@handler}[1]{%
4794   \xdef\glscurrententrylabel{\#1}%
4795   \printunsrtglossaryhandler\glscurrententrylabel
4796 }
```

glossaryhandler

```
4797 \newcommand{\printunsrtglossaryhandler}[1]{%
4798   \glsxtrunsrtdo{\#1}%
4799 }
```

```
\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.

```
4800 \newrobustcmd*\glsxtriflabelinlist[4]{%
4801   \protected@edef@glsxtr@doiflabelinlist{\noexpand@gls@ifinlist[#1]{#2}}{%
4802     @glsxtr@doiflabelinlist[#3]{#4}}{%
4803   }}
```

srtglossaryunit

```
4804 \newcommand{\print@op@unsrtglossaryunit}[2][]{%
4805   \s@printunsrtglossary[type=\glsdefaulttype,#1]{%
4806     \printunsrtglossaryunitsetup[#2]}{%
4807   }}{%
4808 }
```

ossaryunitsetup

```
4809 \newcommand*\printunsrtglossaryunitsetup[1]{%
4810   \renewcommand*\printunsrtglossaryhandler[1]{%
4811     \glsxtrfieldxifinlist{##1}{record.#1}{\csuse{the#1}}{%
4812       {\glsxtrunsrtdo{##1}}}{%
4813       {}}}{%
4814   }}
```

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

```
4815 \ifcsundef{theH#1}{%
4816   {%
4817     \renewcommand*\@glsxtrhypernameprefix{record.#1.\csuse{the#1}.\@gobble}{%
4818   }{%
4819   {%
4820     \renewcommand*\@glsxtrhypernameprefix{record.#1.\csuse{theH#1}.\@gobble}{%
4821   }{%
4822     \renewcommand*\glossarysection[2][]{%
4823       \appto\glossarypostamble{\glspar\medskip\glspar}{%
4824     }}
```

srtglossaryunit

```
4825 \newcommand{\print@noop@unsrtglossaryunit}[2][]{%
4826   \PackageError{glossaries-extra}{\string\printunsrtglossaryunit\space
4827     requires the record=only or record=alsoindex package option}{}}{%
4828 }
```

t@getgroupitle

```
4829 \newrobustcmd*\@glsxtr@unsrt@getgroupitle[2]{%
4830   \protected@edef@glsxtr@titlelabel{\glsxtr@groupitle@#1}{}}
```

```

4831  \@onellevel@sanitize\@glsxtr@titlelabel
4832  \ifcsdef{\@glsxtr@titlelabel}
4833  {\letcs{\#2}{\@glsxtr@titlelabel}}%
4834  {\def#2{#1}}%
4835 }

```

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

```

4836 \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).

```

4837 \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@grouphheading, which will be empty if no heading is required.

```

4838 \newcommand*\glsxtr@checkgroup[1]{%
4839  \def\glsxtr@grouphheading{}%
4840  \key@ifundefined{glossentry}{group}{%
4841  {%
4842    \letcs{\gls@sort}{\glsdetoklabel{\#1}@sort}%
4843    \expandafter\glo@grabfirst\gls@sort{}{}\@nil
4844  }%
4845  {%
4846    \protected@edef\glo@thislettergrp{%
4847      \csuse{\glo@glsdetoklabel{\#1}@glsxtrgroupfield}}%
4848  }%
4849  \ifeq{\glo@thislettergrp}{\gls@currentlettergroup}%
4850  {}%
4851  {%
4852    \ifdefempty{\gls@currentlettergroup}{%
4853      \def\glsxtr@grouphading{\gls@groupskip}%
4854      \eappto\glsxtr@grouphading{%
4855        \noexpand\gls@groupheading{\expandonce\glo@thislettergrp}%
4856      }%
4857    }%
4858    \let\gls@currentlettergroup\glo@thislettergrp
4859 }

```

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.

```

4860 \newcommand{\@glsxtr@noidx@do}[1]{%
4861   \ifglsentryexists{#1}%
4862   {%
4863     \global\letcs{\@gls@loclist}{glo@\glsdetoklabel{#1}@loclist}%
4864     \global\letcs{\@gls@location}{glo@\glsdetoklabel{#1}@location}%
4865     \ifglshasparent{#1}%
4866     {%
4867       \gls@level=\csuse{glo@\glsdetoklabel{#1}@level}\relax
4868       \ifdefvoid{\@gls@location}%
4869       {%
4870         \ifdefvoid{\@gls@loclist}%
4871         {%
4872           \subglossentry{\gls@level}{#1}{}%
4873         }%
4874         {%
4875           \subglossentry{\gls@level}{#1}%
4876           {%
4877             \glossaryentrynumbers{\glsnoidxloclist{@gls@loclist}}%
4878           }%
4879         }%
4880       }%
4881       {%
4882         \subglossentry{\gls@level}{#1}{\glossaryentrynumbers{@gls@location}}%
4883       }%
4884     }%
4885   }%
4886   \ifdefvoid{\@gls@location}%
4887   {%
4888     \ifdefvoid{\@gls@loclist}%
4889     {%
4890       \glossentry{#1}{}%
4891     }%
4892     {%
4893       \glossentry{#1}%
4894       {%
4895         \glossaryentrynumbers{\glsnoidxloclist{@gls@loclist}}%
4896       }%
4897     }%
4898   }%
4899   {%
4900     \glossentry{#1}%
4901     {%
4902       \glossaryentrynumbers{@gls@location}}%
4903     }%
4904   }%
4905 }%
4906 }%
4907 {}%
4908 }

```

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
4909 \newcount\@glsxtrnewgls@inner
```

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

```
\glsxtrnewgls[<options>]{<prefix>}{<cs>}{<inner cs name>}
```

```
4910 \newcommand*\@glsxtrnewgls[4]{%
4911   \ifdef{\#3}{%
4912     {%
4913       \PackageError{glossaries-extra}{Command \string#3\space already
4914 defined}{}{}}%
4915   }%
4916   {%
4917     \ifcsdef{\#4like\#2}{%
4918       {%
4919         \advance\@glsxtrnewgls@inner by \cne
4920         \def\@glsxtrnewgls@innercsname{\#4like\number\@glsxtrnewgls@inner \#2}%
4921       }%
4922       {\def\@glsxtrnewgls@innercsname{\#4like\#2}}%
4923       \expandafter\newrobustcmd\expandafter*\expandafter
4924       #3\expandafter{\expandafter\@gls@hyp@opt\csname\@glsxtrnewgls@innercsname\endcsname}%
4925       \ifstrempty{\#1}{%
4926         {%
4927           \expandafter\newcommand\expandafter*\csname\@glsxtrnewgls@innercsname\endcsname[2] [] {%
4928             \new@ifnextchar[%
4929               {\csname \#4@\endcsname{\#1}{\#2\#2}}%
4930               {\csname \#4@\endcsname{\#1}{\#2\#2}[] }%
4931             }%
4932           }%
4933         {%
4934           \expandafter\newcommand\expandafter*\csname\@glsxtrnewgls@innercsname\endcsname[2] [] {%
4935             \new@ifnextchar[%
4936               {\csname \#4@\endcsname{\#1,\#1}{\#2\#2}}%
4937               {\csname \#4@\endcsname{\#1,\#1}{\#2\#2}[] }%
4938             }%
4939           }%
4940         }%
4941     }%
```

```
\glsxtrnewgls \glsxtrnewgls[<options>]{<prefix>}{<cs>}
```

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

```
4942 \newrobustcmd*\{\glsxtrnewgls\}[3] [] {%
4943   \@glsxtrnewgls{\#1}{\#2}{\#3}{gls}%
4944 }
```

`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.

```
4945 \newrobustcmd*\{\glsxtrnewglslike\}[6] [] {%
4946   \@glsxtrnewgls{\#1}{\#2}{\#3}{gls}%
4947   \@glsxtrnewgls{\#1}{\#2}{\#4}{glspl}%
4948   \@glsxtrnewgls{\#1}{\#2}{\#5}{Gls}%
4949   \@glsxtrnewgls{\#1}{\#2}{\#6}{Glspl}%
4950 }
```

`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.

```
4951 \newrobustcmd*\{\glsxtrnewGLSlike\}[4] [] {%
4952   \@glsxtrnewgls{\#1}{\#2}{\#3}{GLS}%
4953   \@glsxtrnewgls{\#1}{\#2}{\#4}{GLSpl}%
4954 }
```

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

```
4955 \newrobustcmd*\{\glsxtrnewrgls\}[3] [] {%
4956   \@glsxtrnewgls{\#1}{\#2}{\#3}{rgls}%
4957 }
```

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

```
4958 \newrobustcmd*\{\glsxtrnewrglslike\}[6] [] {%
4959   \@glsxtrnewgls{\#1}{\#2}{\#3}{rgls}%
4960   \@glsxtrnewgls{\#1}{\#2}{\#4}{rglspl}%
4961   \@glsxtrnewgls{\#1}{\#2}{\#5}{rGls}%
4962   \@glsxtrnewgls{\#1}{\#2}{\#6}{rGspl}%
4963 }
```

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

```
4964 \newrobustcmd*\{\glsxtrnewrGLSlike\}[4] [] {%
4965   \@glsxtrnewgls{\#1}{\#2}{\#3}{rGLS}%
4966   \@glsxtrnewgls{\#1}{\#2}{\#4}{rGLSpl}%
4967 }
```

Provide easy access to record count fields.

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

```

4968 \newcommand*\GlsXtrTotalRecordCount}[1]{%
4969  \ifcsdef{glo@\glsdetoklabel{\#1}@recordcount}{%
4970  {\cscname glo@\glsdetoklabel{\#1}@recordcount\endcscname}%
4971  {0}%
4972 }

```

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

```

4973 \newcommand*\GlsXtrRecordCount}[2]{%
4974  \ifcsdef{glo@\glsdetoklabel{\#1}@recordcount.\#2}{%
4975  {\cscname glo@\glsdetoklabel{\#1}@recordcount.\#2\endcscname}%
4976  {0}%
4977 }

```

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.

```

4978 \newcommand*\GlsXtrLocationRecordCount}[3]{%
4979  \ifcsdef{glo@\glsdetoklabel{\#1}@recordcount.\#2.\glsxtrdetoklocation{\#3}}{%
4980  {\cscname glo@\glsdetoklabel{\#1}@recordcount.\#2.\glsxtrdetoklocation{\#3}\endcscname}%
4981  {0}%
4982 }

```

trdetoklocation

```

4983 \newcommand*\glsxtrdetoklocation}[1]{#1}

```

ablerecordcount

```

4984 \newcommand*\glsxtrenablerecordcount}{%
4985  \renewcommand*\gls}{\rgls}%
4986  \renewcommand*\Gls}{\rGls}%
4987  \renewcommand*\glsp1}{\rglsp1}%
4988  \renewcommand*\Glp1}{\rGlp1}%
4989  \renewcommand*\GLS}{\rGLS}%
4990  \renewcommand*\GLSp1}{\rGLSp1}%
4991 }

```

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

```

4992 \newcommand*\glsxtrrecordtriggervalue}[1]{%
4993  \GlsXtrTotalRecordCount{\#1}%
4994 }

```

dCountAttribute

```

4995 \newcommand*\GlsXtrSetRecordCountAttribute}[2]{%
4996  \@for\glsxtr@cat:=#1\do
4997  {%
4998    \ifdefempty{\glsxtr@cat}{%

```

```

4999   {%
5000     \glssetcategoryattribute{\@glsxtr@cat}{recordcount}{#2}%
5001   }%
5002 }%
5003 }

```

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

```

5004 \newcommand*{\glsxtrifrecordtrigger}[3]{%
5005   \glshasattribute{#1}{recordcount}%
5006   {%
5007     \ifnum\glsxtrrecordtriggervalue{#1}>\glsgetattribute{#1}{recordcount}\relax
5008       #3%
5009     \else
5010       #2%
5011     \fi
5012   }%
5013   {#3}%
5014 }

```

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

```

5015 \newcommand*{\@glsxtr@rglstrigger@record}[3]{%
5016   \edef\glslabel{\glsdetoklabel{#2}}%
5017   \let\@gls@link@label\glslabel
5018   \def\@glsxtr@thevalue{}%
5019   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
5020   \def\@glsnumberformat{\glstriggerrecordformat}%
5021   \edef\@gls@counter{\csname glo@\glslabel @counter\endcsname}%
5022   \edef\glstype{\csname glo@\glslabel @type\endcsname}%
5023   \def\@glsxtr@thevalue{}%
5024   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
5025   \glsxtrinitwrgloss
5026   \glslinkpresetkeys
5027   \setkeys{glslink}{#1}%
5028   \glslinkpostsetkeys
5029   \ifdefempty{\@glsxtr@thevalue}%
5030   {%
5031     \gls@saveentrycounter
5032   }%
5033   {%
5034     \let\theglsentrycounter\@glsxtr@thevalue
5035     \def\theHglsentrycounter{\@glsxtr@theHvalue}%
5036   }%
5037   \ifglsxtrinitwrglossbefore
5038     \do@wrglossary{#2}%
5039   \fi

```

```

5040 #3%
5041 \ifglsxtrinitwrglossbefore
5042 \else
5043   \do@wrglossary{#2}%
5044 \fi
5045 \ifKV@glslink@local
5046   \glslocalunset{#2}%
5047 \else
5048   \glsunset{#2}%
5049 \fi
5050 }

gerrecordformat  Typically won't be used as it should be recognised as a special type of ignored location by
bib2gls.
5051 \newcommand*\glstriggerrecordformat[1] {}

\rgls
5052 \newrobustcmd*\rgls{\gls@hyp@opt\rgls}

\@rgls
5053 \newcommand*\@rgls[2] []{%
5054   \new@ifnextchar[\{@rgls@{\#1}{\#2}\}{\@rgls@{\#1}{\#2}[]}}%
5055 }

\@rgls@
5056 \def\@rgls@#1#2[#3]{%
5057   \glsxtrifrecordtrigger{#2}%
5058   {%
5059     \glsxtr@rglstrigger@record{#1}{#2}{\rglsformat{#2}{#3}}%
5060   }%
5061   {%
5062     \gls@{\#1}{\#2}[#3]%
5063   }%
5064 }%

\rglspl
5065 \newrobustcmd*\rglspl{\gls@hyp@opt\rglspl}

\@rglspl
5066 \newcommand*\@rglspl[2] []{%
5067   \new@ifnextchar[\{@rglspl@{\#1}{\#2}\}{\@rglspl@{\#1}{\#2}[]}}%
5068 }

\@rglspl@
5069 \def\@rglspl@#1#2[#3]{%
5070   \glsxtrifrecordtrigger{#2}%
5071   {%
5072     \glsxtr@rglstrigger@record{#1}{#2}{\rglsplformat{#2}{#3}}%

```

```

5073 }%
5074 {%
5075 \glspl@{#1}{#2}[#3]%
5076 }%
5077 }%


\rGls
5078 \newrobustcmd*\rGls{\gls@hyp@opt\rGls}

\@rGls
5079 \newcommand*\@rGls[2][]{%
5080   \new@ifnextchar[\@rGls@{#1}{#2}]{\@rGls@{#1}{#2}[]}{%
5081 }

\@rGls@
5082 \def\@rGls@#1#2[#3]{%
5083   \glsxtrifrecordtrigger{#2}%
5084 {%
5085   \glsxtr@rglstrigger@record{#1}{#2}{\rGlsformat{#2}{#3}}%
5086 }%
5087 {%
5088   \Gls@{#1}{#2}[#3]%
5089 }%
5090 }%


\rGlspl
5091 \newrobustcmd*\rGlspl{\gls@hyp@opt\rGlspl}

\@rGlspl
5092 \newcommand*\@rGlspl[2][]{%
5093   \new@ifnextchar[\@rGlspl@{#1}{#2}]{\@rGlspl@{#1}{#2}[]}{%
5094 }

\@rGlspl@
5095 \def\@rGlspl@#1#2[#3]{%
5096   \glsxtrifrecordtrigger{#2}%
5097 {%
5098   \glsxtr@rglstrigger@record{#1}{#2}{\rGlsplformat{#2}{#3}}%
5099 }%
5100 {%
5101   \Glspl@{#1}{#2}[#3]%
5102 }%
5103 }%


\rGLS
5104 \newrobustcmd*\rGLS{\gls@hyp@opt\rGLS}

```

```

\@rGLS
5105 \newcommand*{\@rGLS}[2] []{%
5106   \new@ifnextchar[{\@rGLS@{#1}{#2}}{\@rGLS@{#1}{#2}}[]}%
5107 }

\@rGLS@
5108 \def\@rGLS@#1#2[#3]{%
5109   \glsxtrifrecordtrigger{#2}%
5110   {%
5111     \glsxtr@rglstrigger@record{#1}{#2}{\rGLSformat{#2}{#3}}%
5112   }%
5113   {%
5114     \@GLS@{#1}{#2} [#3]%
5115   }%
5116 }%

\rGLSpl
5117 \newrobustcmd*{\rGLSpl}{\gls@hyp@opt\@rGLSpl}

\@rGLSpl
5118 \newcommand*{\@rGLSpl}[2] []{%
5119   \new@ifnextchar[{\@rGLSpl@{#1}{#2}}{\@rGLSpl@{#1}{#2}}[]}%
5120 }

\@rGLSpl@
5121 \def\@rGLSpl@#1#2[#3]{%
5122   \glsxtrifrecordtrigger{#2}%
5123   {%
5124     \glsxtr@rglstrigger@record{#1}{#2}{\rGLSplformat{#2}{#3}}%
5125   }%
5126   {%
5127     \@GLSpl@{#1}{#2} [#3]%
5128   }%
5129 }%

\rglsformat
5130 \newcommand*{\rglsformat}[2]{%
5131   \glsifregular{#1}%
5132   {\glsentryfirst{#1}}%
5133   {\ifglshaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
5134 }

\rglspformat
5135 \newcommand*{\rglspformat}[2]{%
5136   \glsifregular{#1}%
5137   {\glsentryfirstplural{#1}}%
5138   {\ifglshaslong{#1}{\glsentrylongplural{#1}}{\glsentryfirstplural{#1}}}#2%
5139 }

```

```

\rGlsformat
 5140 \newcommand*{\rGlsformat}[2]{%
 5141   \glsifregular{#1}%
 5142   {\Glsentryfirst{#1}}%
 5143   {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
 5144 }

\rGlsplformat
 5145 \newcommand*{\rGlsplformat}[2]{%
 5146   \glsifregular{#1}%
 5147   {\Glsentryfirstplural{#1}}%
 5148   {\ifglshaslong{#1}{\Glsentrylongplural{#1}}{\Glsentryfirstplural{#1}}}#2%
 5149 }

\rGLSformat
 5150 \newcommand*{\rGLSformat}[2]{%
 5151   \expandafter\mfirstrucMakeUppercase\expandafter{\rglsformat{#1}{#2}}%
 5152 }

\rGLSplformat
 5153 \newcommand*{\rGLSplformat}[2]{%
 5154   \expandafter\mfirstrucMakeUppercase\expandafter{\rglsplformat{#1}{#2}}%
 5155 }

```

1.4 Link Counting

This is different to the entry counting provided by the base package (which counts the number of times the first use flag is unset). Instead, this method hooks into `\@gls@link` (through `\glsxtr@inc@linkcount`) to increment an associated counter. To preserve resources, the counter is only defined if it needs to be incremented. This method is independent of the presence of hyperlinks. (The “link” part of the name refers to `\@gls@link` not `\hyperlink`.)

`\o@inc@linkcount` This performs the actual incrementing and counter definition. The counter is given by `\c@glsxtr@linkcount@<label>` where `<label>` is the entry’s label. Since this is performed within `\@gls@link` the label can be accessed with `\glslabel`.

```
5156 \newcommand{\@glsxtr@do@inc@linkcount}{%
```

Does this entry have the `linkcount` attribute set?

```
5157 \glsifattribute{\glslabel}{linkcount}{true}%
5158 {%
```

Does the counter exist?

```
5159 \ifcsdef{c@glsxtr@linkcount@\glslabel}{}%
5160 {%
```

Counter doesn’t exist, so define it.

```
5161 \newcounter{glsxtr@linkcount@\glslabel}%
```

If linkcountmaster is set, add to counter reset.

```
5162     \glshasattribute{\glslabel}{linkcountmaster}%
5163     {%
```

Need to ensure values are fully expanded.

```
5164     \begingroup
5165         \edef\x{\endgroup\noexpand\@addtoreset{glsxtr@linkcount@\glslabel}%
5166             {\glsgetattribute{\glslabel}{linkcountmaster}}}
5167         \x
5168     }%
5169     {}%
5170 }
```

Increment counter:

```
5171     \glsxtrinlinkcounter{glsxtr@linkcount@\glslabel}%
5172 }%
5173 {}%
5174 }
```

`rinlinkcounter` May be redefined to use `\refstepcounter` if required.

```
5175 \newcommand*{\glsxtrinlinkcounter}[1]{\stepcounter{#1}}
```

`inkCounterValue` Expands to the associated link counter register or 0 if not defined.

```
5176 \newcommand*{\GlsXtrLinkCounterValue}[1]{%
5177     \ifcsundef{c@glsxtr@linkcount@#1}{0}{\csname c@glsxtr@linkcount@#1\endcsname}%
5178 }
```

`rTheLinkCounter` Expands to the display value of the associated link counter or 0 if not defined.

```
5179 \newcommand*{\GlsXtrTheLinkCounter}[1]{%
5180     \ifcsundef{theglsxtr@linkcount@#1}{0}%
5181     {\csname theglsxtr@linkcount@#1\endcsname}%
5182 }
```

`fLinkCounterDef` Tests if the counter has been defined

```
5183 \newcommand*{\GlsXtrIfLinkCounterDef}[3]{%
5184     \ifcsundef{theglsxtr@linkcount@#1}{#3}{#2}%
5185 }
```

`LinkCounterName` Expands to the associated link counter name. (No check for existence.)

```
5186 \newcommand*{\GlsXtrLinkCounterName}[1]{glsxtr@linkcount@#1}
```

`ableLinkCounting`

```
\GlsXtrEnableLinkCounting[<master counter>]{<categories>}
```

Enable link counting for the given categories.

```
5187 \newcommand*{\GlsXtrEnableLinkCounting}[2][]{%
5188     \let\glsxtr@inc@linkcount\glsxtr@do@inc@linkcount
```

```

5189 \@for\@glsxstr@label:=#2\do
5190 {%
5191   \glssetcategoryattribute{\@glsxstr@label}{linkcount}{true}%
5192   \ifstrempty{#1}{%
5193     {%
5194       \ifcsundef{c@#1}{%
5195         {\@nocounterr{#1}}%
5196         {\glssetcategoryattribute{\@glsxstr@label}{linkcountmaster}{#1}}%
5197       }%
5198     }%
5199   }%
5200 \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.

```

5201 \@ifpackageloaded{glossaries-accsupp}%
5202 {

```

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

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

```

5203   \newcommand*{\glsaccessname}[1]{%
5204     \glsnameaccessdisplay
5205     {%
5206       \glsentryname{#1}%
5207     }%
5208     {#1}%
5209   }

```

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

```

5210   \newcommand*{\Glsaccessname}[1]{%
5211     \glsnameaccessdisplay
5212     {%
5213       \Glsentryname{#1}%
5214     }%
5215     {#1}%
5216   }

```

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

```

5217   \newcommand*{\GLSaccessname}[1]{%
5218     \glsnameaccessdisplay
5219     {%
5220       \mfirstucMakeUppercase{\glsentryname{#1}}%

```

```
5221     }%
5222     {#1}%
5223 }
```

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

```
5224 \newcommand*{\glsaccesstext}[1]{%
5225   \glstextaccessdisplay
5226   {%
5227     \glsentrytext{#1}%
5228   }%
5229   {#1}%
5230 }
```

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

```
5231 \newcommand*{\Glsaccesstext}[1]{%
5232   \glstextaccessdisplay
5233   {%
5234     \Glsentrytext{#1}%
5235   }%
5236   {#1}%
5237 }
```

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

```
5238 \newcommand*{\GLSaccesstext}[1]{%
5239   \glstextaccessdisplay
5240   {%
5241     \mfirstucMakeUppercase{\glsentrytext{#1}}%
5242   }%
5243   {#1}%
5244 }
```

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

```
5245 \newcommand*{\glsaccessplural}[1]{%
5246   \glspluralaccessdisplay
5247   {%
5248     \glsentryplural{#1}%
5249   }%
5250   {#1}%
5251 }
```

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

```
5252 \newcommand*{\Glsaccessplural}[1]{%
5253   \glspluralaccessdisplay
5254   {%
5255     \Glsentryplural{#1}%
5256   }%
```

```
5257     {#1}%
5258 }
```

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

```
5259 \newcommand*{\GLSaccessplural}[1]{%
5260     \glspluralaccessdisplay
5261     {%
5262         \mfirstucMakeUppercase{\glsentryplural{#1}}%
5263     }%
5264     {#1}%
5265 }
```

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

```
5266 \newcommand*{\glsaccessfirst}[1]{%
5267     \glsfirstaccessdisplay
5268     {%
5269         \glsentryfirst{#1}%
5270     }%
5271     {#1}%
5272 }
```

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

```
5273 \newcommand*{\Glsaccessfirst}[1]{%
5274     \glsfirstaccessdisplay
5275     {%
5276         \Glsentryfirst{#1}%
5277     }%
5278     {#1}%
5279 }
```

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

```
5280 \newcommand*{\GLSaccessfirst}[1]{%
5281     \glsfirstaccessdisplay
5282     {%
5283         \mfirstucMakeUppercase{\glsentryfirst{#1}}%
5284     }%
5285     {#1}%
5286 }
```

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

```
5287 \newcommand*{\glsaccessfirstplural}[1]{%
5288     \glsfirstpluralaccessdisplay
5289     {%
5290         \glsentryfirstplural{#1}%
5291     }%
5292     {#1}%
5293 }
```

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

```
5294 \newcommand*{\Glsaccessfirstplural}[1]{%
5295   \glsfirstpluralaccessdisplay
5296   {%
5297     \Glsentryfirstplural{#1}%
5298   }%
5299   {#1}%
5300 }
```

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

```
5301 \newcommand*{\GLSaccessfirstplural}[1]{%
5302   \glsfirstpluralaccessdisplay
5303   {%
5304     \mfirstucMakeUppercase{\glsentryfirstplural{#1}}%
5305   }%
5306   {#1}%
5307 }
```

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

```
5308 \newcommand*{\glsaccesssymbol}[1]{%
5309   \glssymbolaccessdisplay
5310   {%
5311     \glsentrysymbol{#1}%
5312   }%
5313   {#1}%
5314 }
```

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

```
5315 \newcommand*{\Glsaccesssymbol}[1]{%
5316   \glssymbolaccessdisplay
5317   {%
5318     \Glsentrysymbol{#1}%
5319   }%
5320   {#1}%
5321 }
```

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

```
5322 \newcommand*{\GLSaccesssymbol}[1]{%
5323   \glssymbolaccessdisplay
5324   {%
5325     \mfirstucMakeUppercase{\glsentrysymbol{#1}}%
5326   }%
5327   {#1}%
5328 }
```

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

```
5329 \newcommand*{\glsaccesssymbolplural}[1]{%
5330   \glssymbolpluralaccessdisplay
5331   {%
5332     \glsentrysymbolplural{#1}%
5333   }%
5334   {#1}%
5335 }
```

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

```
5336 \newcommand*{\Glsaccesssymbolplural}[1]{%
5337   \glssymbolpluralaccessdisplay
5338   {%
5339     \Glsentrysymbolplural{#1}%
5340   }%
5341   {#1}%
5342 }
```

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

```
5343 \newcommand*{\GLSaccesssymbolplural}[1]{%
5344   \glssymbolpluralaccessdisplay
5345   {%
5346     \mfirstucMakeUppercase{\glsentrysymbolplural{#1}}%
5347   }%
5348   {#1}%
5349 }
```

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

```
5350 \newcommand*{\glsaccessdesc}[1]{%
5351   \glsdescriptionaccessdisplay
5352   {%
5353     \glsentrydesc{#1}%
5354   }%
5355   {#1}%
5356 }
```

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

```
5357 \newcommand*{\Glsaccessdesc}[1]{%
5358   \glsdescriptionaccessdisplay
5359   {%
5360     \Glsentrydesc{#1}%
5361   }%
5362   {#1}%
5363 }
```

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

```
5364 \newcommand*{\GLSaccessdesc}[1]{%
```

```

5365     \glsdescriptionaccessdisplay
5366     {%
5367         \mfirstucMakeUppercase{\glsentrydesc{\#1}}%
5368     }%
5369     {\#1}%
5370 }

```

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

```

5371 \newcommand*{\glsaccessdescplural}[1]{%
5372     \glsdescriptionpluralaccessdisplay
5373     {%
5374         \glsentrydescplural{\#1}%
5375     }%
5376     {\#1}%
5377 }

```

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

```

5378 \newcommand*{\Glsaccessdescplural}[1]{%
5379     \glsdescriptionpluralaccessdisplay
5380     {%
5381         \Glsentrydescplural{\#1}%
5382     }%
5383     {\#1}%
5384 }

```

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

```

5385 \newcommand*{\GLSaccessdescplural}[1]{%
5386     \glsdescriptionpluralaccessdisplay
5387     {%
5388         \mfirstucMakeUppercase{\glsentrydescplural{\#1}}%
5389     }%
5390     {\#1}%
5391 }

```

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

```

5392 \newcommand*{\glsaccessshort}[1]{%
5393     \glsshortaccessdisplay
5394     {%
5395         \glsentryshort{\#1}%
5396     }%
5397     {\#1}%
5398 }

```

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

```

5399 \newcommand*{\Glsaccessshort}[1]{%
5400     \glsshortaccessdisplay

```

```

5401   {%
5402     \Glsentryshort{#1}%
5403   }%
5404   {#1}%
5405 }

\GLSaccessshort Display the short value (no link and no check for existence) converted to upper case.
5406 \newcommand*{\GLSaccessshort}[1]{%
5407   \glsshortaccessdisplay
5408   {%
5409     \mfirstucMakeUppercase{\glsentryshort{#1}}%
5410   }%
5411   {#1}%
5412 }

lsaccessshortpl Display the short plural form (no link and no check for existence).
5413 \newcommand*{\lsaccessshortpl}[1]{%
5414   \glsshortpluralaccessdisplay
5415   {%
5416     \glsentryshortpl{#1}%
5417   }%
5418   {#1}%
5419 }

lsaccessshortpl1 Display the short plural form with first letter converted to uppercase (no link and no check for existence).
5420 \newcommand*{\lsaccessshortpl1}[1]{%
5421   \glsshortpluralaccessdisplay
5422   {%
5423     \Glsentryshortpl{#1}%
5424   }%
5425   {#1}%
5426 }

LSaccessshortpl1 Display the shortplural value (no link and no check for existence) converted to upper case.
5427 \newcommand*{\LSaccessshortpl1}[1]{%
5428   \glsshortpluralaccessdisplay
5429   {%
5430     \mfirstucMakeUppercase{\glsentryshortpl{#1}}%
5431   }%
5432   {#1}%
5433 }

\glsaccesslong Display the long form (no link and no check for existence).
5434 \newcommand*{\glsaccesslong}[1]{%
5435   \glslongaccessdisplay{\glsentrylong{#1}}{#1}%
5436 }

```

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

```
5437 \newcommand*{\Glsaccesslong}[1]{%
5438   \glslongaccessdisplay{\Glsentrylong{#1}}{#1}%
5439 }
5440 }
```

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

```
5441 \newcommand*{\GLSaccesslong}[1]{%
5442   \glslongaccessdisplay
5443   {%
5444     \mfirstucMakeUppercase{\glsentrylong{#1}}%
5445   }%
5446   {#1}%
5447 }
```

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

```
5448 \newcommand*{\glsaccesslongpl}[1]{%
5449   \glslongpluralaccessdisplay{\glsentrylongpl{#1}}{#1}%
5450 }
```

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

```
5451 \newcommand*{\Glsaccesslongpl}[1]{%
5452   \glslongpluralaccessdisplay{\Glsentrylongpl{#1}}{#1}%
5453 }
5454 }
```

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

```
5455 \newcommand*{\GLSaccesslongpl}[1]{%
5456   \glslongpluralaccessdisplay
5457   {%
5458     \mfirstucMakeUppercase{\glsentrylongpl{#1}}%
5459   }%
5460   {#1}%
5461 }
```

Keys for accessibility support.

```
5462 \define@key{glsxtrabbrv}{access}{%
5463   \def\@gls@nameaccess{#1}%
5464 }
5465 \define@key{glsxtrabbrv}{textaccess}{%
5466   \def\@gls@textaccess{#1}%
5467 }
5468 \define@key{glsxtrabbrv}{firstaccess}{%
5469   \def\@gls@firstaccess{#1}%
5470 }
5471 \define@key{glsxtrabbrv}{shortaccess}{%
5472   \def\@gls@shortaccess{#1}%
5473 }
```

```

5474 \define@key{glsxtrabbrv}{shortpluralaccess}{%
5475   \def\@gls@shortaccesspl{\#1}%
5476 }

@initaccesskeys
5477 \newcommand*{\@gls@initaccesskeys}{%
5478   \def\@gls@nameaccess{}%
5479   \def\@gls@textaccess{}%
5480   \def\@gls@firstaccess{}%
5481   \def\@gls@shortaccess{}%
5482   \def\@gls@shortaccesspl{}%
5483 }

```



```

essattribute@set \gls@ifaccessattribute@set{\<attribute>}{\<true>}{\<false>}

```



```

5484 \newcommand*{\@gls@ifaccessattribute@set}[3]{%
5485   \glsifcategoryattribute{\glscategorylabel}{access#1}{true}%
5486   {#2}%
5487   {%
5488     \glsifcategoryattribute{\glscategorylabel}{access#1}{false}%
5489     {#3}%
5490     {%
5491       \glsifcategoryattribute{\glscategorylabel}{#1}{true}%
5492       {#2}%
5493       {#3}%
5494     }%
5495   }%
5496 }

```

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

```

5497 \newcommand{\@gls@setup@default@short@access}[1]{%

```

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

```

5498 \ifdefempty\@gls@shortaccess
5499 {%
5500   \glsifcategoryattribute{\glscategorylabel}{accessinsertdots}{true}%
5501   {%
5502     \glsxtr@insertdots\@gls@shortaccess{\#1}%
5503     \eappto\ExtraCustomAbbreviationFields{%
5504       shortaccess={\expandonce\@gls@shortaccess},}%
5505     }%
5506   {}%
5507 }%
5508 {}%

```

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

```
5509  \ifdefempty{@gls@shortaccess
5510  {}%
5511  {}%
5512  \ifdefempty{@gls@shortaccesspl
5513  {}%
5514  \@gls@ifaccessattribute@set{aposplural}%
5515  {}%
5516  \expandafter\def\expandafter\@gls@shortaccesspl\expandafter{%
5517  \@gls@shortaccess'\abrvpluralsuffix}%
5518  {}%
5519  {}%
5520  \@gls@ifaccessattribute@set{noshortplural}%
5521  {}%
5522  \let\@gls@shortaccesspl\@gls@shortaccess
5523  {}%
5524  {}%
5525  \expandafter\def\expandafter\@gls@shortaccesspl\expandafter{%
5526  \@gls@shortaccess\abrvpluralsuffix}%
5527  {}%
5528  {}%
5529  \eappto\ExtraCustomAbbreviationFields{%
5530  shortpluralaccess={\expandonce\@gls@shortaccesspl},}%
5531  {}%
5532  {}%
5533  }%
```

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

```
5534  \ifdefempty{@gls@nameaccess
5535  {}%
5536  \@glsifcategoryattribute{\glscategorylabel}{nameshortaccess}{true}%
5537  {}%
```

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

```
5538  \ifdefempty{@gls@shortaccess
5539  {}%
5540  {}%
5541  \eappto\ExtraCustomAbbreviationFields{%
5542  access={\expandonce\@gls@shortaccess},}%
5543  {}%
5544  {}%
5545  {}%
5546  {}%
5547  {}%
5548  {}%
```

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

```
5549  \ifdefempty{@gls@textaccess
5550  {}%
5551  \@glsifcategoryattribute{\glscategorylabel}{textshortaccess}{true}%
5552  {}%
```

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

```
5553     \ifdefempty{@gls@shortaccess}
5554     {}%
5555     {%
5556         \eappto\ExtraCustomAbbreviationFields{%
5557             textaccess={\expandonce@gls@shortaccess},%
5558         }%
5559     }%
5560 }%
5561 {}%
5562 }%
5563 {}%
```

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

```
5564     \ifdefempty{@gls@firstaccess}
5565     {}%
5566     \glscategoryattribute{\glscategorylabel}{firstshortaccess}{true}%
5567     {}%
```

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

```
5568     \ifdefempty{@gls@shortaccess}
5569     {}%
5570     {%
5571         \eappto\ExtraCustomAbbreviationFields{%
5572             firstaccess={\expandonce@gls@shortaccess},%
5573         }%
5574     }%
5575 }%
5576 {}%
5577 }%
5578 {}%
5579 }
```

End of if accsupp part

```
5580 }
5581 {
```

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

```
\glsaccessname Display the name value (no link and no check for existence).
5582 \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.
5583 \newcommand*{\Glsaccessname}[1]{\Glsentryname{#1}}
```



```
\GLSaccessname Display the name value (no link and no check for existence). converted to upper case.
5584 \newcommand*{\GLSaccessname}[1]{%
5585     \protect\mfirstucMakeUppercase{\glsentryname{#1}}}
```

```

\glsaccesstext Display the text value (no link and no check for existence).
5586 \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.
5587 \newcommand*{\Glsaccesstext}[1]{\Glsentrytext{#1}}


\GLSaccesstext Display the text value (no link and no check for existence). converted to upper case.
5588 \newcommand*{\GLSaccesstext}[1]{%
5589 \protect\mfirstucMakeUppercase{\glsentrytext{#1}}}

glsaccessplural Display the plural value (no link and no check for existence).
5590 \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.
5591 \newcommand*{\Glsaccessplural}[1]{\Glsentryplural{#1}}


GLSaccessplural Display the plural value (no link and no check for existence). converted to upper case.
5592 \newcommand*{\GLSaccessplural}[1]{%
5593 \protect\mfirstucMakeUppercase{\glsentryplural{#1}}}

\glsaccessfirst Display the first value (no link and no check for existence).
5594 \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.
5595 \newcommand*{\Glsaccessfirst}[1]{\Glsentryfirst{#1}}


\GLSaccessfirst Display the first value (no link and no check for existence). converted to upper case.
5596 \newcommand*{\GLSaccessfirst}[1]{%
5597 \protect\mfirstucMakeUppercase{\glsentryfirst{#1}}}

cessfirstplural Display the firstplural value (no link and no check for existence).
5598 \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.
5599 \newcommand*{\Glsaccessfirstplural}[1]{\Glsentryfirstplural{#1}}


cessfirstplural Display the firstplural value (no link and no check for existence). converted to upper case.
5600 \newcommand*{\GLSaccessfirstplural}[1]{%
5601 \protect\mfirstucMakeUppercase{\glsentryfirstplural{#1}}}

glsaccesssymbol Display the symbol value (no link and no check for existence).
5602 \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.
5603 \newcommand*{\Glsaccesssymbol}[1]{\Glsentrysymbol{\#1}}

GLSaccesssymbol Display the symbol value (no link and no check for existence). converted to upper case.
5604 \newcommand*{\GLSaccesssymbol}[1]{%
5605 \protect\mfirstucMakeUppercase{\glsentrysymbol{\#1}}}

esssymbolplural Display the symbolplural value (no link and no check for existence).
5606 \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.
5607 \newcommand*{\Glsaccesssymbolplural}[1]{\Glsentrysymbolplural{\#1}}

esssymbolplural Display the symbolplural value (no link and no check for existence). converted to upper case.
5608 \newcommand*{\GLSaccesssymbolplural}[1]{%
5609 \protect\mfirstucMakeUppercase{\glsentrysymbolplural{\#1}}}

\glsaccessdesc Display the desc value (no link and no check for existence).
5610 \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.
5611 \newcommand*{\Glsaccessdesc}[1]{\Glsentrydesc{\#1}}

\GLSaccessdesc Display the desc value (no link and no check for existence). converted to upper case.
5612 \newcommand*{\GLSaccessdesc}[1]{%
5613 \protect\mfirstucMakeUppercase{\glsentrydesc{\#1}}}

ccessdescplural Display the descplural value (no link and no check for existence).
5614 \newcommand*{\glsaccessdescplural}[1]{\glsentrydescplural{\#1}}

ccessdescplural Display the descplural value (no link and no check for existence) with the first letter converted to upper case.
5615 \newcommand*{\Glsaccessdescplural}[1]{\Glsentrydescplural{\#1}}

ccessdescplural Display the descplural value (no link and no check for existence). converted to upper case.
5616 \newcommand*{\GLSaccessdescplural}[1]{%
5617 \protect\mfirstucMakeUppercase{\glsentrydescplural{\#1}}}

\glsaccessshort Display the short form (no link and no check for existence).
5618 \newcommand*{\glsaccessshort}[1]{\glsentryshort{\#1}}

```

\Glsaccessshort  Display the short form with first letter converted to uppercase (no link and no check for existence).
5619  \newcommand*{\Glsaccessshort}[1]{\Glsentryshort{\#1}}


\GLSaccessshort  Display the short value (no link and no check for existence). converted to upper case.
5620  \newcommand*{\GLSaccessshort}[1]{%
5621    \protect\mfirstucMakeUppercase{\glsentryshort{\#1}}}

\lsaccessshortpl  Display the short plural form (no link and no check for existence).
5622  \newcommand*{\lsaccessshortpl}[1]{\glsentryshortpl{\#1}}


\lsaccessshortpl  Display the short plural form with first letter converted to uppercase (no link and no check for existence).
5623  \newcommand*{\GLSaccessshortpl}[1]{\Glsentryshortpl{\#1}}


\LSaccessshortpl  Display the shortplural value (no link and no check for existence). converted to upper case.
5624  \newcommand*{\LSaccessshortpl}[1]{%
5625    \protect\mfirstucMakeUppercase{\glsentryshortpl{\#1}}}

\glsaccesslong  Display the long form (no link and no check for existence).
5626  \newcommand*{\glsaccesslong}[1]{\glsentrylong{\#1}}


\Glsaccesslong  Display the long form (no link and no check for existence).
5627  \newcommand*{\Glsaccesslong}[1]{\Glsentrylong{\#1}}


\GLSaccesslong  Display the long value (no link and no check for existence). converted to upper case.
5628  \newcommand*{\GLSaccesslong}[1]{%
5629    \protect\mfirstucMakeUppercase{\glsentrylong{\#1}}}

\glsaccesslongpl  Display the long plural form (no link and no check for existence).
5630  \newcommand*{\glsaccesslongpl}[1]{\glsentrylongpl{\#1}}


\Glsaccesslongpl  Display the long plural form (no link and no check for existence).
5631  \newcommand*{\Glsaccesslongpl}[1]{\Glsentrylongpl{\#1}}


\GLSaccesslongpl  Display the longplural value (no link and no check for existence). converted to upper case.
5632  \newcommand*{\GLSaccesslongpl}[1]{%
5633    \protect\mfirstucMakeUppercase{\glsentrylongpl{\#1}}}

@initaccesskeys  This does nothing if there's no accessibility support.
5634  \newcommand*{\@gls@initaccesskeys}{}

lt@short@access  This does nothing if there's no accessibility support.
5635  \newcommand{\@gls@setup@default@short@access}[1]{}%


End of else part
5636 }

```

1.6 Categories

\glscategory Add a new storage key that can be used to indicate a category. The default category is general.
5637 \glsaddstoragekey{category}{general}{\glscategory}

\glsifcategory Convenient shortcut to determine if an entry has the given category.
5638 \newcommand{\glsifcategory}[4]{%
5639 \ifglsfieldeq{\#1}{category}{\#2}{\#3}{\#4}}%
5640 }

Categories can have attributes.

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

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

5641 \newcommand*\glssetcategoryattribute[3]{%
5642 \csdef{@glsxtr@categoryattr@@#1@#2}{\#3}}%
5643 }

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

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

5644 \newcommand*\glsgetcategoryattribute[2]{%
5645 \csuse{@glsxtr@categoryattr@@#1@#2}}%
5646 }

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

Tests if the category has the given attribute set.

5647 \newcommand*\glshascategoryattribute[4]{%
5648 \ifcvoid{@glsxtr@categoryattr@@#1@#2}{\#4}{\#3}}%
5649 }

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

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

5650 \newcommand*\glssetattribute[3]{%

```
5651 \glssetcategoryattribute{\glscategory{#1}{#2}{#3}}%  
5652 }
```

```
\glsgetattribute{\<entry label>}{\<attribute-label>}
```

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

```
5653 \newcommand*\glsgetattribute[2]{%  
5654 \glsgetcategoryattribute{\glscategory{#1}{#2}}%  
5655 }
```

```
\glshasattribute{\<entry label>}{\<attribute-label>}{\<true>}{\<false>}
```

Short cut to test if the given attribute has been set where the category label is obtained from the entry information.

```
5656 \newcommand*\glshasattribute[4]{%  
5657 \ifglsentryexists{#1}{%  
5658 \glshascategoryattribute{\glscategory{#1}{#2}{#3}{#4}}%  
5659 {#4}}%  
5660 }
```

```
\glsifcategoryattribute{\<category>}{\<attribute-label>}{\<value>}{\<true part>}{\<false part>}
```

True if category has the attribute with the given value.

```
5661 \newcommand{\glsifcategoryattribute}[5]{%  
5662 \ifcsundef{@glsxtr@categoryattr@@#1@#2}{%  
5663 {#5}}%  
5664 \ifcsstring{@glsxtr@categoryattr@@#1@#2}{#3}{#4}{#5}}%  
5665 }
```

```
\glsifattribute{\<entry label>}{\<attribute-label>}{\<value>}{\<true part>}{\<false part>}
```

Short cut to determine if the given entry has a category with the given attribute set.

```
5666 \newcommand{\glsifattribute}[5]{%  
5667 \ifglsentryexists{#1}{%  
5668 \glsifcategoryattribute{\glscategory{#1}{#2}{#3}{#4}{#5}}%  
5669 {#5}}%  
5670 }
```

Set attributes for the default general category:

```
5671 \glssetcategoryattribute{general}{regular}{true}
```

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

```
5672 \glssetcategoryattribute{acronym}{regular}{true}
```

`regularcategory` Convenient shortcut to create add the regular attribute.

```
5673 \newcommand*\glssetregularcategory[1]{%
5674   \glssetcategoryattribute{\#1}{regular}{true}%
5675 }
```

```
\glsifregularcategory{\category}{(true part)}{(false part)}
```

Short cut to determine if a category has the regular attribute explicitly set to true.

```
5676 \newcommand{\glsifregularcategory}[3]{%
5677   \glsifcategoryattribute{\#1}{regular}{true}{\#2}{\#3}%
5678 }
```

```
\glsifnotregularcategory{\category}{(true part)}{(false part)}
```

Short cut to determine if a category has the regular attribute explicitly set to false.

```
5679 \newcommand{\glsifnotregularcategory}[3]{%
5680   \glsifcategoryattribute{\#1}{regular}{false}{\#2}{\#3}%
5681 }
```

```
\glsifregular \glsifregular{\entrylabel}{(true part)}{(false part)}
```

Short cut to determine if an entry has a regular attribute set to true.

```
5682 \newcommand{\glsifregular}[3]{%
5683   \glsifregularcategory{\glscategory{\#1}}{\#2}{\#3}%
5684 }
```

```
\glsifnotregular \glsifnotregular{\entrylabel}{(true part)}{(false part)}
```

Short cut to determine if an entry has a regular attribute set to false.

```
5685 \newcommand{\glsifnotregular}[3]{%
5686   \glsifnotregularcategory{\glscategory{\#1}}{\#2}{\#3}%
5687 }
```

```

oreachincategory \glsforeachincategory[<glossary labels>]{<category-label>}
{<glossary-cs>}{{<label-cs>}}{<body>}

```

Iterates through all entries in all the glossaries (or just those listed in *<glossary labels>*) and does *<body>* if the category matches *<category-label>*. The control sequences *<glossary-cs>* and *<label-cs>* may be used in *<body>* to access the glossary label and entry label for the current iteration.

```

5688 \newcommand{\glsforeachincategory}[5][\@glo@types]{%
5689   \forallglossaries[#1]{#3}%
5690   {%
5691     \forglsentries[#3]{#4}%
5692     {%
5693       \glsifcategory{#4}{#2}{#5}{}}%
5694     }%
5695   }%
5696 }

```

```

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.

```

5697 \newcommand{\glsforeachwithattribute}[6][\@glo@types]{%
5698   \forallglossaries[#1]{#4}%
5699   {%
5700     \forglsentries[#4]{#5}%
5701     {%
5702       \glsifattribute{#5}{#2}{#3}{#6}{}}%
5703     }%
5704   }%
5705 }

```

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

```

5706 \ifdef\newterm
5707 {%
\newterm
5708 \renewcommand*\newterm[2][]{%
5709   \newglossaryentry{#2}{%
5710     {type={index},category=index,name={#2}},%

```

```
5711     description={\glsxtrpostdescription\nopostdesc},#1}%
5712 }
```

Indexed terms are regular by default.

```
5713 \glssetcategoryattribute{index}{regular}{true}
```

trpostdescindex

```
5714 \newcommand*\glsxtrpostdescindex{}%
5715 %
5716 {}
```

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.

```
5717 \ifdef\printsymbols
5718 {%
```

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

```
5719 \newcommand*\glsxtrnewsymbol[3][]{%
5720 \newglossaryentry{#2}{name={#3},sort={#2},type=symbols,category=symbol,#1}%
5721 }%
```

Symbols are regular by default.

```
5722 \glssetcategoryattribute{symbol}{regular}{true}
```

rpostdescsymbol

```
5723 \newcommand*\glsxtrpostdescsymbol{}%
5724 %
5725 {}
```

Similar for the numbers option.

```
5726 \ifdef\printnumbers
5727 {%
```

glsxtrnewnumber

```
5728 \ifdef\printnumbers
5729 \newcommand*\glsxtrnewnumber[3][]{%
5730 \newglossaryentry{#2}{name={#3},sort={#2},type=numbers,category=number,#1}%
5731 }%
```

Numbers are regular by default.

```
5732 \glssetcategoryattribute{number}{regular}{true}
```

rpostdescnumber

```
5733 \newcommand*\glsxtrpostdescnumber{}%
```

```
5734 }  
5735 {}
```

sxtrsetcategory Set the category for all listed labels. The first argument is the list of entry labels and the second argument is the category label.

```
5736 \newcommand*{\glsxtrsetcategory}[2]{%  
5737   \cfor@glsxtr@label:=#1\do  
5738   {  
5739     \glsfieldxdef{\@glsxtr@label}{category}{#2}%  
5740   }%  
5741 }
```

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.

```
5742 \newcommand*{\glsxtrsetcategoryforall}[2]{%  
5743   \forallglossaries[#1]{\@glsxtr@type}{%  
5744     \forglsentries[\@glsxtr@type]{\@glsxtr@label}{%  
5745       {  
5746         \glsfieldxdef{\@glsxtr@label}{category}{#2}%  
5747       }%  
5748     }%  
5749 }
```

trfieldtitlecase `\glsxtrfieldtitlecase{<label>}{<field>}`

Apply title casing to the contents of the given field.

```
5750 \newcommand*{\glsxtrfieldtitlecase}[2]{%  
5751   \expandafter\glsxtrfieldtitlecasecs\expandafter  
5752     {\csname glo@\glsdetoklabel{#1}@#2\endcsname}{%  
5753 }
```

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

```
5754 \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.

```
5755 \@ifpackageloaded{glossaries-accsupp}  
5756 {  
5757   \renewcommand*{\glossentrydesc}[1]{%  
5758     \glsdoifexistsorwarn{#1}{%  
5759       {  
5760         \glssetabbrvfmt{\glscategory{#1}}{%
```

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

```
5761     \glshasattribute{#1}{glossdescfont}%
5762     {%
5763         \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%
5764         \ifcsdef{\@glsxtr@attrval}%
5765             {%
5766                 \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}%
5767             }%
5768             {%
5769                 \GlossariesExtraWarning{Unknown control sequence name
5770                     '\@glsxtr@attrval' supplied in glossdescfont attribute
5771                     for entry '#1'. Ignoring}%
5772                     \let\@glsxtr@glossdescfont\@firstofone
5773             }%
5774         }%
5775         {\let\@glsxtr@glossdescfont\@firstofone}%
5776         \glsifattribute{#1}{glossdesc}{firstuc}%
5777         {%
5778             \@glsxtr@glossdescfont{\Glsaccessdesc{#1}}%
5779         }%
5780         {%
5781             \glsifattribute{#1}{glossdesc}{title}%
5782             {%
5783                 \@glsxtr@do@titlecaps@warn
5784                 \glsdescriptionaccessdisplay
5785                 {%
5786                     \@glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
5787                 }%
5788                 {#1}%
5789             }%
5790             {%
5791                 \@glsxtr@glossdescfont{\glsaccessdesc{#1}}%
5792             }%
5793         }%
5794     }%
5795 }
5796 }
5797 {
5798 \renewcommand*\glossentrydesc[1]{%
5799     \glsdoifexistsorwarn{#1}%
5800     {%
5801         \glssetabbrvfmt{\glscategory{#1}}%
5802         \glshasattribute{#1}{glossdescfont}%
5803     }%
5804     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%
5805     \ifcsdef{\@glsxtr@attrval}%
5806         {%
5807             \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}%
5808         }%
```

```

5809      {%
5810          \GlossariesExtraWarning{Unknown control sequence name
5811              '\@glsxtr@attrval' supplied in glossdescfont attribute
5812              for entry '#1'. Ignoring}%
5813          \let\@glsxtr@glossdescfont\@firstofone
5814      }%
5815  }%
5816  {\let\@glsxtr@glossdescfont\@firstofone}%
5817  \glsifattribute{#1}{glossdesc}{firstuc}%
5818  {%
5819      \@glsxtr@glossdescfont{\Glsentrydesc{#1}}%
5820  }%
5821  {%
5822      \glsifattribute{#1}{glossdesc}{title}%
5823  {%
5824      \@glsxtr@do@titlecaps@warn
5825      \@glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
5826  }%
5827  {%
5828      \@glsxtr@glossdescfont{\glsentrydesc{#1}}%
5829  }%
5830  }%
5831 }%
5832 }%
5833 }

```

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

```

5834 \@ifpackageloaded{glossaries-accsupp}
5835 {
5836     \renewcommand*\glossentryname[1]{%
5837         \@glsdoifexistsorwarn{#1}%
5838     {%
5839         \glssetabbrvfmt{\glscategory{#1}}%

```

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

```

5840     \glshasattribute{#1}{glossnamefont}%
5841     {%
5842         \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5843         \ifcsdef{\@glsxtr@attrval}%
5844             {%
5845                 \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5846             }%
5847             {%
5848                 \GlossariesExtraWarning{Unknown control sequence name
5849                     '\@glsxtr@attrval' supplied in glossnamefont attribute
5850                     for entry '#1'. Reverting to default \string\glsnamefont}%
5851                 \let\@glsxtr@glossnamefont\glsnamefont
5852             }%
5853         }%

```

```

5854     {\let\@glsxstr@glossnamefont\glsnamefont}%
5855     \glsifattribute{#1}{glossname}{firstuc}%
5856     {%
5857         \glsnameaccessdisplay
5858         {%
5859             \glsxtr@glossnamefont{\Glsentryname{#1}}%
5860         }%
5861         {#1}%
5862     }%
5863     {%
5864         \glsifattribute{#1}{glossname}{title}%
5865     }%
5866         \glsxtr@do@titlecaps@warn
5867         \glsnameaccessdisplay
5868         {%
5869             \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
5870         }%
5871         {#1}%
5872     }%
5873     {%
5874         \glsifattribute{#1}{glossname}{uc}%
5875     }%
5876         \glsnameaccessdisplay
5877     }%

```

Hide the label from the upper-casing command.

```

5878     \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5879     \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
5880     {%
5881         {#1}%
5882     }%
5883     {%
5884         \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5885         \glsnameaccessdisplay
5886         {%
5887             \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
5888         }%
5889         {#1}%
5890     }%
5891     {%
5892 }%

```

Do post-name hook:

```

5893     \glsxtrpostnamehook{#1}%
5894     }%
5895 }
5896 }
5897 {
5898 \renewcommand*\glossentryname[1]{%
5899     \glsdoifexistsorwarn{#1}%

```

```

5900  {%
5901    \glssetabrvfmt{\glscategory{#1}}%
5902    \glshasattribute{#1}{glossnamefont}%
5903    {%
5904      \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5905      \ifcsdef{\@glsxtr@attrval}%
5906      {%
5907        \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5908      }%
5909      {%
5910        \GlossariesExtraWarning{Unknown control sequence name
5911          '\@glsxtr@attrval' supplied in glossnamefont attribute
5912          for entry '#1'. Reverting to default \string\glsnamefont}%
5913        \let\@glsxtr@glossnamefont\glsnamefont
5914      }%
5915    }%
5916    {\let\@glsxtr@glossnamefont\glsnamefont}%
5917    \glsifattribute{#1}{glossname}{firstuc}%
5918    {%
5919      \glsxtr@glossnamefont{\Glsentryname{#1}}%
5920    }%
5921    {%
5922      \glsifattribute{#1}{glossname}{title}%
5923      {%
5924        \glsxtr@do@titlecaps@warn
5925        \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
5926      }%
5927      {%
5928        \glsifattribute{#1}{glossname}{uc}%
5929      }%

```

Hide the label from the upper-casing command.

```

5930      \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5931      \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
5932    }%
5933    {%

```

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.

```

5934      \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5935      \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
5936    }%
5937  }%
5938 }%

```

Do post-name hook.

```

5939      \glsxtrpostnamehook{#1}%
5940    }%
5941  }
5942 }%

```

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

```
5943 \@ifpackageloaded{glossaries-accsupp}
5944 {
5945   \renewcommand*\{\Glossentryname}[1]{%
5946     \@glsdoifexistsorwarn{\#1}%
5947     {%
5948       \glssetabbrvfmt{\glscategory{\#1}}%
```

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

```
5949   \glshasattribute{\#1}{glossnamefont}%
5950   {%
5951     \edef\@glsxtr@attrval{\glsgetattribute{\#1}{glossnamefont}}%
5952     \ifcsdef{\@glsxtr@attrval}%
5953     {%
5954       \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5955     }%
5956     {%
5957       \GlossariesExtraWarning{Unknown control sequence name
5958         '\@glsxtr@attrval' supplied in glossnamefont attribute
5959         for entry '#1'. Reverting to default \string\glsnamefont}%
5960       \let\@glsxtr@glossnamefont\glsnamefont
5961     }%
5962   }%
5963   {\let\@glsxtr@glossnamefont\glsnamefont}%
5964   \glsnameaccessdisplay
5965   {%
5966     \@glsxtr@glossnamefont{\Glossentryname{\#1}}%
5967   }%
5968   {\#1}%
```

Do post-name hook:

```
5969   \glsxtrpostnamehook{\#1}%
5970   }%
5971 }
5972 }
5973 {
5974 \renewcommand*\{\Glossentryname}[1]{%
5975   \@glsdoifexistsorwarn{\#1}%
5976   {%
5977     \glssetabbrvfmt{\glscategory{\#1}}%
5978     \glshasattribute{\#1}{glossnamefont}%
5979   }%
5980   \edef\@glsxtr@attrval{\glsgetattribute{\#1}{glossnamefont}}%
5981   \ifcsdef{\@glsxtr@attrval}%
5982   {%
5983     \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5984   }%
5985   {%
5986     \GlossariesExtraWarning{Unknown control sequence name
5987       '\@glsxtr@attrval' supplied in glossnamefont attribute}
```

```

5988     for entry '#1'. Reverting to default \string\glsnamefont}%
5989     \let\@glsxtr@glossnamefont\glsnamefont
5990   }%
5991 }%
5992 {\let\@glsxtr@glossnamefont\glsnamefont}%
5993 \@glsxtr@glossnamefont{\Glsentryname{#1}}%
5994
5995 Do post-name hook:
5996   \glsxtrpostnamehook{#1}%
5997 }%
5998

```

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.

```

5998 \newcommand*\glsxtrpostnamehook}[1]{%
5999   \let\@glsnumberformat\@glsxtr@defaultnumberformat
6000   \glsxtrdoautoindexname{#1}{indexname}%
6001
6002 Allow additional code regardless of category:
6003   \glsextrapostnamehook{#1}%
6004
6005 Allow categories to hook in here.
6006   \csuse{glsxtrpostname}\glscategory{#1}%
6007 }

```

trapostnamehook

```
6004 \newcommand*\glsextrapostnamehook}[1]{}%
```

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

```

6005 \newcommand*\glsdefpostname}[2]{%
6006   \csdef{glsxtrpostname#1}{#2}%
6007 }
```

etaccessdisplay

```

6008 @ifpackageloaded{glossaries-accsupp}
6009 {
6010   \newcommand*\glsxtr@setaccessdisplay}[1]{%
6011     \ifcsdef{gls#1accessdisplay}%
6012       {\letcs\glsxtr@accessdisplay{gls#1accessdisplay}}%
6013     {}%

```

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.

```

6014   \edef\gls@thisval{#1}%
6015   \gls@for\gls@map:=\gls@keymap\do{%
```

```

6016     \edef\@this@key{\expandafter\@secondoftwo\@gls@map}%
6017     \ifdefequal{\@this@key}{\@gls@thisval}%
6018     {%
6019         \edef\@gls@thisval{\expandafter\@firstoftwo\@gls@map}%
6020         \@endfortrue
6021     }%
6022     {}%
6023 }%
6024 \ifcsdef{gls@\gls@thisval accessdisplay}%
6025   {\letcs\@glsxtr@accessdisplay{gls@\gls@thisval accessdisplay}}%
6026   {\let\@glsxtr@accessdisplay\@firstoftwo}%
6027 }%
6028 }
6029 }
6030 {%
6031 \newcommand*{\glsxtr@setaccessdisplay}[1]{%
6032   \let\@glsxtr@accessdisplay\@firstoftwo}
6033 }

```

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

```

6034 \newrobustcmd*{\glossentrynameother}[2]{%
6035   \glsdoifexistsorwarn{#1}%
6036   {}%

```

Accessibility support:

```
6037   \glsxtr@setaccessdisplay{#2}%

```

Set the abbreviation format:

```

6038   \glssetabbrvfmt{\glscategory{#1}}%
6039   \glshasattribute{#1}{glossnamefont}%
6040   {}%
6041   \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
6042   \ifcsdef{\@glsxtr@attrval}%
6043   {}%
6044   \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
6045   {}%
6046   {}%
6047   \GlossariesExtraWarning{Unknown control sequence name
6048   '@glsxtr@attrval' supplied in glossnamefont attribute
6049   for entry '#1'. Reverting to default \string\glsnamefont}%
6050   \let\@glsxtr@glossnamefont\glsnamefont
6051   {}%
6052 }%
6053 {\let\@glsxtr@glossnamefont\glsnamefont}%
6054 \glsifattribute{#1}{glossname}{firstuc}%
6055 {}%
6056   \@glsxtr@accessdisplay
6057   {\@glsxtr@glossnamefont{\@Gls@entry@field{#1}{#2}}}%
6058   {#1}%

```

```

6059  }%
6060  {%
6061    \glsifattribute{#1}{glossname}{title}%
6062    {%
6063      \glsxtr@do@titlecaps@warn
6064      \glsxtr@accessdisplay
6065      {\glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{#2}}{}}%
6066      {#1}%
6067    }%
6068    {%
6069      \glsifattribute{#1}{glossname}{uc}%
6070      {%
6071        \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
6072        \glsxtr@accessdisplay
6073        {\glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}{}}%
6074        {#1}%
6075      }%
6076      {%
6077        \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
6078        \glsxtr@accessdisplay
6079        {\expandafter\glsxtr@glossnamefont\expandafter{\glo@name}}{}}%
6080        {#1}%
6081      }%
6082    }%
6083  }%

```

Do post-name hook.

```

6084    \glsxtrpostnamehook{#1}%
6085  }%
6086 }

```

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

```

6087 \newif\if@glsxtr@format@Override
6088 \@glsxtr@format@Overridefalse

```

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

`xFormatOverride`

```

6089 \@ifpackageloaded{hyperref}
6090 {

```

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

```

6091 \ifHy@hyperindex
6092   \newcommand*\GlsXtrEnableIndexFormatOverride{%
6093     \@glsxtr@format@Overridetrue
6094     \appto\theindex{\let\glshypernumber\@firstofone}%
6095   }
6096 \else

```

```

6097   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
6098     \@glsxtr@format@overridetrue
6099     \appto\theindex{\let\glshypernumber\hyperpage}%
6100   }
6101 \fi
6102 }
6103 {
6104 \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
6105   \@glsxtr@format@overridetrue
6106 }
6107 }
6108 \onlypreamble\GlsXtrEnableIndexFormatOverride

doautoindexname
6109 \newcommand*{\glsxtrdoautoindexname}[2]{%
6110   \glshasattribute{#1}{#2}%
6111   {%
6112     \@glsxtr@autoindex@setname{#1}%
6113     If the attribute value is simply “true” don’t add an encap, otherwise use the value as the encap.
6114     \protected@edef\@glsxtr@attrval{\glsgetattribute{#1}{#2}}%
6115     \if@glsxtr@format@override
6116       \ifx\@glsnumberformat\@glsxtr@defaultnumberformat
6117         \else
6118           \let\@glsxtr@attrval\@glsnumberformat
6119         \fi
6120         \ifdefstring{\@glsxtr@attrval}{true}%
6121         {}%
6122         {\eappto\@glo@name{\@glsxtr@autoindex@encap\@glsxtr@attrval}}%
6123         \expandafter\glsxtrautoindex\expandafter{\@glo@name}%
6124     }%
6125     {}%
6126   }%
6127 \newcommand*{\glsxtrautoindex}{\index}

xtrautoindexesc
6128 \newcommand{\glsxtrautoindexesc}{%
6129   \@gls@checkmkidxchars\@glo@sort
6130   \glsxtr@autoindex@doextra@esc\@glo@sort
6131 }

toindex@setname Assign \@glo@name for use with indexname attribute.
6132 \newcommand*{\@glsxtr@autoindex@setname}[1]{%

```

```

6133 \protected@edef{\glsxtrautoindexentry{#1}}%
6134 \glsxtrautoindexassignsort{\glo@sort}{#1}%
6135 \glsxtrautoindexesc
6136 \epreto{\glo@name{\glo@sort\glsxtr@autoindex@at}}%
6137 }

```

`rautoindexentry` Command used for the actual part when auto-indexing.

```
6138 \newcommand*{\glsxtrautoindexentry}[1]{\string\glsentryname{#1}}
```

`indexassignsort` Used to assign the sort value when auto-indexing.

```

6139 \newcommand*{\glsxtrautoindexassignsort}[2]{%
6140   \glsletentryfield{#1}{#2}{sort}%
6141 }

```

`dex@doextra@esc`

```
6142 \newcommand*{\glsxtr@autoindex@doextra@esc}[1]{%
```

Escape the escape character unless it has already been escaped.

```

6143 \ifx\@glsxtr@autoindex@esc\@gls@quotechar
6144 \else
6145 \def\@gls@checkedmkidx{}%
6146 \edef\@glsxtr@checkspch{%
6147   \noexpand\@glsxtr@autoindex@esc\expandonce{#1}%
6148   \noexpand\@empty\@glsxtr@autoindex@esc\noexpand\@nnil
6149   \glsxtr@autoindex@esc\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6150 \@@glsxtr@checkspch
6151 \let#1\@gls@checkedmkidx\relax
6152 \fi

```

Escape actual character unless it has already been escaped.

```

6153 \ifx\@glsxtr@autoindex@at\@gls@actualchar
6154 \else
6155 \def\@gls@checkedmkidx{}%
6156 \edef\@glsxtr@checkspch{%
6157   \noexpand\@glsxtr@autoindex@escat\expandonce{#1}%
6158   \noexpand\@empty\@glsxtr@autoindex@at\noexpand\@nnil
6159   \glsxtr@autoindex@at\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6160 \@@glsxtr@checkspch
6161 \let#1\@gls@checkedmkidx\relax
6162 \fi

```

Escape level character unless it has already been escaped.

```

6163 \ifx\@glsxtr@autoindex@level\@gls@levelchar
6164 \else
6165 \def\@gls@checkedmkidx{}%
6166 \edef\@glsxtr@checkspch{%
6167   \noexpand\@glsxtr@autoindex@esclevel\expandonce{#1}%
6168   \noexpand\@empty\@glsxtr@autoindex@level\noexpand\@nnil
6169   \glsxtr@autoindex@level\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6170 \@@glsxtr@checkspch

```

```

6171     \let#1\@gls@checkedmkidx\relax
6172 \fi
    Escape encapsulation character unless it has already been escaped.
6173 \ifx\@glsxtr@autoindex@encap\@gls@encapchar
6174 \else
6175     \def\@gls@checkedmkidx{}%
6176     \edef\@@glsxtr@checkspch{}%
6177         \noexpand\@glsxtr@autoindex@escencap\expandonce{#1}%
6178             \noexpand\@empty\@glsxtr@autoindex@encap\noexpand\@nnil
6179                 \@glsxtr@autoindex@encap\noexpand\@empty\noexpand\@glsxtr@endescspch}%
6180     \@@glsxtr@checkspch
6181     \let#1\@gls@checkedmkidx\relax
6182 \fi
6183 }

```

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`.

```
6184 \newcommand*{\@glsxtr@autoindex@at}{}%
```

`trSetActualChar` Set the actual character.

```

6185 \newcommand*{\GlsXtrSetActualChar}[1]{%
6186     \gdef\@glsxtr@autoindex@at{#1}%
6187     \def\@glsxtr@autoindex@escat##1#1##2#1##3\@glsxtr@endescspch{%
6188         \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escat}{##1}{##2}{##3}%
6189     }%
6190 }
6191 \@onlypreamble\GlsXtrSetActualChar
6192 \makeatother
6193 \GlsXtrSetActualChar{@}
6194 \makeatletter

```

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

```
6195 \newcommand*{\@glsxtr@autoindex@encap}{}%
```

`XtrSetEncapChar` Set the encapsulation character.

```

6196 \newcommand*{\GlsXtrSetEncapChar}[1]{%
6197     \gdef\@glsxtr@autoindex@encap{#1}%
6198     \def\@glsxtr@autoindex@escencap##1#1##2#1##3\@glsxtr@endescspch{%
6199         \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escencap}{##1}{##2}{##3}%
6200     }%
6201 }
6202 \GlsXtrSetEncapChar{|
6203 \@onlypreamble\GlsXtrSetEncapChar

```

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

```
6204 \newcommand*{\@glsxtr@autoindex@level}{}%
```

```

XtrSetLevelChar Set the encap character.
6205 \newcommand*{\GlsXtrSetLevelChar}[1]{%
6206   \gdef\@glsxtr@autoindex@level{#1}%
6207   \def\@glsxtr@autoindex@esclevel##1##2##3\@glsxtr@endescspch{%
6208     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@esclevel}{##1}{##2}{##3}%
6209   }%
6210 }
6211 \GlsXtrSetLevelChar{!}
6212 \onlypreamble\GlsXtrSetLevelChar

r@autoindex@esc Escape character for use with \index.
6213 \newcommand*{\@glsxtr@autoindex@esc}{"}

lsXtrSetEscChar Set the escape character.
6214 \newcommand*{\GlsXtrSetEscChar}[1]{%
6215   \gdef\@glsxtr@autoindex@esc{#1}%
6216   \def\@glsxtr@autoindex@escquote##1##2##3\@glsxtr@endescspch{%
6217     \@@glsxtr@autoindex@escspch{#1}{\@glsxtr@autoindex@escquote}{##1}{##2}{##3}%
6218   }%
6219 }
6220 \GlsXtrSetEscChar{"}
6221 \onlypreamble\GlsXtrSetEscChar

      Set if defined. (For example, if doc package has been loaded.) Actual character \actualchar:
6222 \ifdef\actualchar
6223   {\expandafter\GlsXtrSetActualChar\expandafter{\actualchar}}
6224 {}

      Quote character \quotechar:
6225 \ifdef\quotechar
6226   {\expandafter\GlsXtrSetEscChar\expandafter{\quotechar}}
6227 {}

      Level character \levelchar:
6228 \ifdef\levelchar
6229   {\expandafter\GlsXtrSetLevelChar\expandafter{\levelchar}}
6230 {}

      Encap character \encapchar:
6231 \ifdef\encapchar
6232   {\expandafter\GlsXtrSetEncapChar\expandafter{\encapchar}}
6233 {}

leto@endescspch
6234 \def\@glsxtr@gobbleto@endescspch#1\@glsxtr@endescspch{}
```

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

```

6235 \newcommand*{\@glsxtr@autoindex@escspch}[5]{%
6236   \gls@tmpb=\expandafter{\gls@checkedmidx}%
6237   \toks@={#3}%
6238   \ifx\@nnil#3\relax
6239     \def\@glsxtr@checkspch{\glsxtr@gobbleto@endescspch#5\glsxtr@endescspch}%
6240   \else
6241     \ifx\@nnil#4\relax
6242       \edef\@gls@checkedmidx{\the\gls@tmpb\the\toks@}%
6243       \def\@glsxtr@checkspch{\glsxtr@gobbleto@endescspch
6244         #4#5\glsxtr@endescspch}%
6245     \else
6246       \edef\@gls@checkedmidx{\the\gls@tmpb\the\toks@%
6247         \glsxtr@autoindex@esc#1}%
6248       \def\@glsxtr@checkspch{#2#5#1\@nnil#1\glsxtr@endescspch}%
6249     \fi
6250   \fi
6251 \glsxtr@checkspch
6252 }

```

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

```

6253 \renewcommand*{\Glossentrydesc}[1]{%
6254   \glsdoifexistsorwarn{#1}%
6255   {%
6256     \glssetabbrvfmt{\glscategory{#1}}%
6257     \Glsaccessdesc{#1}%
6258   }%
6259 }

```

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

```

6260 \renewcommand*{\lossentrysymbol}[1]{%
6261   \glsdoifexistsorwarn{#1}%
6262   {%
6263     \glssetabbrvfmt{\glscategory{#1}}%
6264     \glsaccesssymbol{#1}%
6265   }%
6266 }

```

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

```

6267 \renewcommand*{\lossentrysymbol}[1]{%
6268   \glsdoifexistsorwarn{#1}%
6269   {%
6270     \glssetabbrvfmt{\glscategory{#1}}%
6271     \Glsaccesssymbol{#1}%
6272   }%
6273 }

```

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.

```
6274 \newcommand*{\GlsXtrEnableInitialTagging}{%
6275   \@ifstar\s@glsxtr@enabletagging\@glsxtr@enabletagging
6276 }
6277 \@onlypreamble\GlsXtrEnableInitialTagging
```

r@enabletagging Starred version undefines command.

```
6278 \newcommand*{\s@glsxtr@enabletagging}[2]{%
6279   \undef#2%
6280   \@glsxtr@enabletagging{#1}{#2}%
6281 }
```

r@enabletagging Internal command.

```
6282 \newcommand*{\@glsxtr@enabletagging}[2]{%
  Set attributes for categories given in the first argument.
```

```
6283 \@for\@glsxtr@cat:=#1\do
6284 {%
6285   \ifdefempty\@glsxtr@cat
6286   {}%
6287   {\glssetcategoryattribute{\@glsxtr@cat}{tagging}{true}}%
6288 }%
6289 \newrobustcmd*#2[1]{##1}%
6290 \def\@glsxtr@taggingcs{#2}%
6291 \renewcommand*{\@glsxtr@activate@initialtagging}{%
6292   \let#2\@glsxtr@tag
6293 }%
6294 \ifundefined\gls@preglossaryhook
6295 {\GlossariesExtraWarning{Initial tagging requires at least
6296 glossaries.sty v4.19 to work correctly}}%
6297 {}%
6298 }
```

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

```
6299 \ifundefined\mfu@checkword@do
6300 {
6301   \newcommand*{\mfu@checkword@do}[1]{%
6302     \ifdefstring{\mfu@checkword@arg}{#1}%
6303     {}%
6304     \let\@mfu@domakefirstuc\@firstofone
6305     \listbreak
6306   }%
6307   {}%
6308 }
```

```

\mfu@checkword \capitalisewords was introduced in mfirstuc v1.06. If \mfu@checkword hasn't been de-
fined mfirstuc is too old to support the title case attribute.

6309  \ifundef\mfu@checkword
6310  {
6311    \newcommand{\glsxtr@do@titlecaps@warn}{%
6312      \GlossariesExtraWarning{mfirstuc.sty too old. Title Caps
6313        support not available}%
6314
One warning should suffice.

6314      \let\glsxtr@do@titlecaps@warn\relax
6315    }
6316  }
6317  {
6318    \renewcommand*\mfu@checkword[1]{%
6319      \def\mfu@checkword@arg{#1}%
6320      \let\mfu@domakefirstuc\makefirstuc
6321      \forlistloop\mfu@checkword@do\mfu@nocaplist
6322    }
6323  }
6324 }
6325 {}% no patch required

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

6326 \newcommand*\glsxtr@do@titlecaps@warn[]

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

6327 \newcommand*\glsxtr@activate@initialtagging[]

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

6328 \newrobustcmd*\glsxtr@tag[1]{%
6329   \glsifattribute{\glscurrententrylabel}{tagging}{true}%
6330   {\glsxtrtagfont{#1}}{#1}%
6331 }

\glsxtrtagfont Used in the glossary.

6332 \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.

6333 \ifdef\gls@preglossaryhook
6334 {
6335   \renewcommand*\gls@preglossaryhook{%
6336     \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.

```

```

6337 \ifundefined@glsxtr@org@postdescription
6338 {%
6339   \let@glsxtr@org@postdescription\glspostdescription
6340   \renewcommand*\glspostdescription{%
6341     \ifglsentryexists{\glscurrententrylabel}{%
6342       {%
6343         \glsxtrpostdescription
6344         \glsxtr@org@postdescription
6345       }%
6346       {}%
6347     }%
6348   }%
6349 }

```

Enable the options used by \@@glsxtrp:

```

6350   \glossxtrsetopts
6351 }%
6352 }
6353 {}

```

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.

```

6354 \newcommand*\glsxtrpostdescription{%
6355   \csuse{glsxtrpostdesc\glscategory}{\glscurrententrylabel}}%
6356 }

```

postdescgeneral

```
6357 \newcommand*\glsxtrpostdescgeneral{}
```

xtrpostdescterm

```
6358 \newcommand*\glsxtrpostdescterm{}
```

postdescacronym

```
6359 \newcommand*\glsxtrpostdescacronym{}
```

escabbreviation

```
6360 \newcommand*\glsxtrpostdescabbreviation{}
```

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

```

6361 \newcommand*\glsdefpostdesc}[2]{%
6362   \csdef{glsxtrpostdesc#1}{#2}%
6363 }

```

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.

```
6364 \renewcommand*{\glspostlinkhook}{%
6365 \ifglsentryexists{\glslabel}{\glsxtrpostlinkhook}{}%
6366 }
```

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

```
6367 \newcommand*{\glsxtrpostlinkhook}{%
6368 \glsxtrdiscardperiod{\glslabel}%
6369 {\glsxtrpostlinkendsentence}%
6370 {\glsxtrifcustomdiscardperiod
6371 {\glsxtrifperiod{\glsxtrpostlinkendsentence}{\glsxtrpostlink}}%
6372 {\glsxtrpostlink}%
6373 }%
6374 }
```

omdiscardperiod Allow user to provide a custom check. Should expand to #2 if no check is required otherwise expand to #1.

```
6375 \newcommand*{\glsxtrifcustomdiscardperiod}[2]{#2}
```

\glsxtrpostlink

```
6376 \newcommand*{\glsxtrpostlink}{%
6377 \csuse{glsxtrpostlink}\glscategory{\glslabel}%
6378 }
```

\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.

```
6379 \newcommand*{\glsdefpostlink}[2]{%
\ifthenelse{\equal{#1}{}}{%
  \PackageError{glossaries-extra}{%
    Invalid empty category label in \string\glsdefpostlink{}%
  }%
  \csdef{glsxtrpostlink#1}{#2}%
}%
6384 }
```

linkendsentence Done by \glsxtrpostlinkhook if a full stop is discarded.

```
6385 \newcommand*{\glsxtrpostlinkendsentence}{%
6386 \ifcsdef{glsxtrpostlink}\glscategory{\glslabel}%
6387 {%
6388 \csuse{glsxtrpostlink}\glscategory{\glslabel}%
Put the full stop back.
6389 .\spacefactor\sfcodes`.\relax
6390 }%
6391 {%
```

Assume the full stop was discarded because the entry ends with a period, so adjust the space-factor.

```
6392   \spacefactor\sfcode`\.\relax
6393 }%
6394 }
```

`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.

```
6395 \newcommand*\glsxtrpostlinkAddDescOnFirstUse}{%
6396   \glsxtrifwasfirstuse{\space\glsxtrparen{\glsaccessdesc{\glslabel}}}}{}}%
6397 }
```

`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.

```
6398 \newcommand*\glsxtrpostlinkAddSymbolOnFirstUse}{%
6399   \glsxtrifwasfirstuse
6400 }%
6401   \ifglshassymbol{\glslabel}%
6402     {\space\glsxtrparen{\glsaccesssymbol{\glslabel}}}}{}}%
6403 }%
6404 }%
6405 }%
6406 }
```

`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.

```
6407 \newcommand*\glsxtrpostlinkAddSymbolDescOnFirstUse}{%
6408   \glsxtrifwasfirstuse
6409 }%
6410   \space\glsxtrparen
6411 }%
6412   \ifglshassymbol{\glslabel}%
6413     {\glsaccesssymbol{\glslabel}, }{}}%
6414 }%
6415   \glsaccessdesc{\glslabel}}{}}%
6416 }%
6417 }%
6418 }%
6419 }
```

`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).

```
6420 \newcommand*\glsxtrdiscardperiod}[3]{%
6421   \glsxtrifwasfirstuse
6422 }%
6423   \glsifattribute{#1}{retainfirstuseperiod}{true}{}
```

```

6424 {#3}%
6425 {%
6426   \glsifattribute{#1}{discardperiod}{true}%
6427   {%
6428     \glsifplural
6429     {%
6430       \glsifattribute{#1}{pluraldiscardperiod}{true}%
6431       {\glsxtrifperiod{#2}{#3}}%
6432       {#3}%
6433     }%
6434     {%
6435       \glsxtrifperiod{#2}{#3}%
6436     }%
6437   }%
6438   {#3}%
6439 }
6440 }%
6441 {%
6442   \glsifattribute{#1}{discardperiod}{true}%
6443   {%
6444     \glsifplural
6445     {%
6446       \glsifattribute{#1}{pluraldiscardperiod}{true}%
6447       {\glsxtrifperiod{#2}{#3}}%
6448       {#3}%
6449     }%
6450     {%
6451       \glsxtrifperiod{#2}{#3}%
6452     }%
6453   }%
6454   {#3}%
6455 }%
6456 }

```

`\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`

```
6457 \newcommand*{\glsxtrifperiod}[1]{\new@ifnextchar.{\@firstoftwo{#1}}}
```

Sometimes it's useful to test if there's a punctuation character following the glossary entry.

`glsxtr@punclist` List of characters identified as punctuation marks. (Be careful of babel shorthands!) This doesn't allow for punctuation marks made up from multiple characters (such as ' ').

```
6458 \newcommand*{\glsxtr@punclist}{.,;?!}
```

`punctuationmark` Add character to punctuation list.

```
6459 \newcommand*{\glsxtraddpunctuationmark}[1]{\appto\glsxtr@punclist{#1}}
```

`unctuationmarks` Reset the punctuation list.

```
6460 \newcommand*{\glsxtrsetpunctuationmarks}[1]{\def\glsxtr@punclist{#1}}
```

```
\glsxtrifpunc \glsxtrifnextpunc{(true part)}{(false part)}
```

Test if this is followed by a punctuation mark. (Adapted from `\new@ifnextchar`.)

```
6461 \newcommand*\glsxtrifnextpunc[2]{%
6462   \def\reserved@a{\#1}%
6463   \def\reserved@b{\#2}%
6464   \futurelet\glspunc@token\glsxtr@ifnextpunc
6465 }
```

`xstr@ifnextpunc`

```
6466 \newcommand*\glsxtr@ifnextpunc{%
6467   \glsxtr@ifpunctoken{\glspunc@token}{\let\reserved@b\reserved@a}{}%
6468   \reserved@b
6469 }
```

`xtr@ifpunctoken` Test if the token given in the first argument is in the punctuation list.

```
6470 \newcommand*\glsxtr@ifpunctoken[1]{%
6471   \expandafter\glsxtr@ifpunctoken\expandafter#1\glsxtr@punclist\@nnil
6472 }
```

`xtr@ifpunctoken`

```
6473 \def\glsxtr@ifpunctoken#1#2{%
6474   \let\reserved@d=#2%
6475   \ifx\reserved@d\@nnil
6476     \let\glsxtr@next\glsxtr@notfoundinlist
6477   \else
6478     \ifx#1\reserved@d
6479       \let\glsxtr@next\glsxtr@foundinlist
6480     \else
6481       \let\glsxtr@next\glsxtr@ifpunctoken
6482     \fi
6483   \fi
6484   \glsxtr@next#1%
6485 }
```

`xtr@foundinlist`

```
6486 \def\glsxtr@foundinlist#1\@nnil{\@firstoftwo}
```

`@notfoundinlist`

```
6487 \def\glsxtr@notfoundinlist#1{\@secondoftwo}
```

```
\glsxtrdopostpunc{\code}
```

If this is followed be a punctuation character, do `<code>` after the character otherwise do `<code>` before whatever comes next.

```
6488 \newcommand{\glsxtrdopostpunc}[1]{%
6489   \glsxtrifnextpunc{@glsxtr@swaptwo{#1}}{#1}%
6490 }
```

@glsxtr@swaptwo

```
6491 \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.

```
6492 \define@key{glsxtrabbrv}{category}{%
6493   \edef\glscategorylabel{#1}%
6494   \ifcsdef{@glsabbrv@current@#1}%
6495 }
```

Warning should already have been issued.

```
6496   \let\@glsxtr@orgwarndep\GlsXtrWarnDeprecatedAbbrStyle
6497   \let\GlsXtrWarnDeprecatedAbbrStyle\@gobbletwo
6498   \glsxtr@applyabbrvstyle{\csname@glsabbrv@current@#1\endcsname}%
6499   \let\GlsXtrWarnDeprecatedAbbrStyle\@glsxtr@orgwarndep
6500 }%
6501 }%
6502 }
```

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

```
6503 \define@key{glsxtrabbrv}{shortplural}{%
6504   \def\@gls@shortpl{#1}%
6505 }
```

Similarly for the long plural form.

```
6506 \define@key{glsxtrabbrv}{longplural}{%
6507   \def\@gls@longpl{#1}%
6508 }
```

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

```
\glsshortpltok
6509 \newtoks\glsshortpltok

\glslongpltok
6510 \newtoks\glslongpltok
```

xstr@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.

```
6511 \newcommand*{\@glsxtr@insertdots}[2]{%
6512   \def#1{}%
6513   \@glsxtr@insert@dots#1#2\@nnil
6514 }
```

xtr@insert@dots

```
6515 \newcommand*{\@glsxtr@insert@dots}[2]{%
6516   \ifx\@nnil#2\relax
6517     \let\@glsxtr@insert@dots@next\@gobble
6518   \else
6519     \ifx\relax#2\relax
6520     \else
6521       \appto{#1}{#2.}%
6522     \fi
6523     \let\@glsxtr@insert@dots@next\@glsxtr@insert@dots
6524   \fi
6525   \@glsxtr@insert@dots@next#1%
6526 }
```

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

\glsxtrwordsep

```
6527 \newcommand*{\glsxtrwordsep}{\space}
```

Each word is marked with

\glsxtrword

```
6528 \newcommand*{\glsxtrword}[1]{#1}
```

tr@markwordseps

```
6529 \newcommand*{\@glsxtr@markwordseps}[2]{%
6530   \def#1{}%
6531   \@glsxtr@mark@wordseps#1#2 \@nnil
6532 }
```

r@mark@wordseps

```
6533 \def\@glsxtr@mark@wordseps#1#2 #3{%
6534   \ifdefempty{#1}{%
6535     {\def#1{\protect\glsxtrword{#2}}}{%
6536       {\appto{#1}{\protect\glsxtrwordsep\protect\glsxtrword{#2}}}{%
6537         \ifx\@nnil#3\relax
```

```

6538   \let\@glsxstr@mark@wordseps@next\relax
6539   \else
6540     \def\@glsxstr@mark@wordseps@next{%
6541       \@glsxstr@mark@wordseps#1#3}%
6542   \fi
6543   \@glsxstr@mark@wordseps@next
6544 }

```

`newabbreviation` Define a new generic abbreviation.

```

6545 \newcommand*{\newabbreviation}[4] []{%
6546   \@glsxstr@newabbreviation{#1}{#2}{#3}{#4}%
6547 }

```

`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.)

```

6548 \newcommand*{\glsxstr@newabbreviation}[4] {%
6549   \glskeylisttok{#1}%
6550   \glslabeltok{#2}%
6551   \glosshorttok{#3}%
6552   \glosslongtok{#4}%

```

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

```

6553 \def\glsxtrorgshort{#3}%
6554 \def\glsxtrorglong{#4}%

```

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

```

6555 \def\ExtraCustomAbbreviationFields{}%

```

Initialise accessibility settings if required.

```

6556 \@gls@initaccesskeys

```

Get the category.

```

6557 \def\glscategorylabel{abbreviation}%
6558 \glsxtr@applyabbrvstyle{\@glsabbrv@current@abbreviation}%

```

Ignore the shortplural and longplural keys.

```

6559 \setkeys*{\glsxtrabbrv}[shortplural,longplural]{#1}%

```

Set the default long plural

```

6560 \def\@gls@longpl{#4\glspluralsuffix}%
6561 \let\@gls@default@longpl\@gls@longpl

```

Has the markwords attribute been set?

```

6562 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
6563 {%
6564   \@glsxtr@markwordseps\@gls@long{#4}%
6565   \expandafter\def\expandafter\@gls@longpl\expandafter
6566     {\@gls@long\glspluralsuffix}%
6567   \let\@gls@default@longpl\@gls@longpl

```

Update \glslongtok.

```
6568     \expandafter\glslongtok\expandafter{\@gls@long}%
6569 }%
6570 {}%
```

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

```
6571 \glsifcategoryattribute{\glscategorylabel}{markshortwords}{true}%
6572 {%
6573     \@glsxtr@markwordseps\@gls@short{#3}%
6574 }%
6575 {}%
```

Has the insertdots attribute been set?

```
6576 \glsifcategoryattribute{\glscategorylabel}{insertdots}{true}%
6577 {%
6578     \@glsxtr@insertdots\@gls@short{#3}%
6579     \expandafter\glsshorttok\expandafter{\@gls@short\spacefactor1000 \relax}%
6580 }%
6581 {\def\@gls@short{#3}}%
6582 }%
```

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

```
6583 \glsifcategoryattribute{\glscategorylabel}{aposplural}{true}%
6584 {%
6585     \expandafter\def\expandafter@\gls@shortpl\expandafter{\@gls@short
6586         \abrvpluralsuffix}%
6587 }%
6588 {}%
```

Has the noshortplural attribute been set?

```
6589 \glsifcategoryattribute{\glscategorylabel}{noshortplural}{true}%
6590 {%
6591     \let\@gls@shortpl\@gls@short
6592 }%
6593 {}%
6594 \expandafter\def\expandafter@\gls@shortpl\expandafter{\@gls@short
6595     \abrvpluralsuffix}%
6596 }%
6597 }%
```

Update \glsshorttok:

```
6598 \expandafter\glsshorttok\expandafter{\@gls@short}%
```

Hook for further customisation if required:

```
6599 \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).

```
6600 \setkeys*{\glsxtrabrv}[category]{#1}%
```

Has the plural been explicitly set?

```
6601 \ifx\@gls@default@longpl\@gls@longpl
6602 \else
```

Has the markwords attribute been set?

```
6603  \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
6604  {%
6605    \expandafter\glsxtr@markwordseps\expandafter\gls@longpl\expandafter
6606    {\gls@longpl}%
6607  }%
6608  {}%
6609 \fi
```

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

```
6610 \expandafter\glsshortpltok\expandafter{\gls@shortpl}%
6611 \expandafter\glslongpltok\expandafter{\gls@longpl}%
```

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

```
6612 \gls@setup@default@short@access{#3}%
```

Do any extra setup provided by hook:

```
6613 \newabbreviationhook
```

Define this entry:

```
6614 \protected@edef@\do@newglossaryentry{%
6615   \noexpand\newglossaryentry{\the\glslabeltok}%
6616   {%
6617     type=\glsxtrabbrvtype,%
6618     category=abbreviation,%
6619     short={\the\glsshorttok},%
6620     shortplural={\the\glsshortpltok},%
6621     long={\the\glslongtok},%
6622     longplural={\the\glslongpltok},%
6623     name={\the\glsshorttok},%
6624     \CustomAbbreviationFields,%
6625   }%
6626 }
```

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

```
6625 \ExtraCustomAbbreviationFields
```

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

```
6626 \the\glskeylisttok
6627 }%
6628 }%
6629 \do@newglossaryentry
6630 \GlsXtrPostNewAbbreviation
6631 }
```

evpresetkeyhook Hook for extra stuff in \newabbreviation

```
6632 \newcommand*\glsxtrnewabbrevresetkeyhook[3]{}%
```

NewAbbreviation Hook used by abbreviation styles.

```
6633 \newcommand*\GlsXtrPostNewAbbreviation{}%
```

bbreviationhook Hook for use with \newabbreviation.

```
6634 \newcommand*\newabbreviationhook{}%
```

```

reviationFields
 6635 \newcommand*{\CustomAbbreviationFields}{}

\glsxtrparen For the parenthetical styles.
 6636 \newcommand*{\glsxtrparen}[1]{(#1)}

lsxtrfullformat Full format without case change.
 6637 \newcommand*{\glsxtrfullformat}[2]{%
 6638   \glsfirstlongfont{\glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
 6639   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
 6640 }

lsxtrfullformat Full format with case change.
 6641 \newcommand*{\Glsxtrfullformat}[2]{%
 6642   \glsfirstlongfont{\Glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
 6643   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
 6644 }

xtrfullplformat Plural full format without case change.
 6645 \newcommand*{\glsxtrfullplformat}[2]{%
 6646   \glsfirstlongfont{\glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
 6647   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}%
 6648 }

xtrfullplformat Plural full format with case change.
 6649 \newcommand*{\Glsxtrfullplformat}[2]{%
 6650   \glsfirstlongfont{\Glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
 6651   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}%
 6652 }

\glsxtrfullsep Separator used by full format is a space by default. The argument is the entry's label.
 6653 \newcommand*{\glsxtrfullsep}[1]{\space}

In-line formats in case first use isn't compatible with \glsentryfull (for example, first use suppresses the long form or uses a footnote).

nlinefullformat Full format without case change.
 6654 \newcommand*{\glsxtrinelinefullformat}{\glsxtrfullformat}

nlinefullformat Full format with case change.
 6655 \newcommand*{\Glsxtrinelinefullformat}{\Glsxtrfullformat}

xtrfullplformat Plural full format without case change.
 6656 \newcommand*{\glsxtrinelinefullplformat}{\glsxtrfullplformat}

inefullplformat Plural full format with case change.
 6657 \newcommand*{\Glsxtrinelinefullplformat}{\Glsxtrfullplformat}

```

Redefine \glsentryfull etc to use the inline format. Since these commands as supposed to be expandable, they can only use the currently applied style. If there are mixed styles, you'll need to use the \glsxtrfull set of commands instead.

```
\glsentryfull
6658 \renewcommand*{\glsentryfull}[1]{\glsxtrinlinefullformat{#1}{}}
```

```
\Glsentryfull
6659 \renewcommand*{\Glsentryfull}[1]{\Glsxtrinlinefullformat{#1}{}}
```

```
\glsentryfullpl
6660 \renewcommand*{\glsentryfullpl}[1]{\glsxtrinlinefullplformat{#1}{}}
```

```
\Glsentryfullpl
6661 \renewcommand*{\Glsentryfullpl}[1]{\Glsxtrinlinefullplformat{#1}{}}
```

sfirstabbrvfont Font changing command used for the abbreviation on first use or in the full format.
6662 \newcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{#1}}

bbrvdefaultfont Font changing command used for the abbreviation on first use or in the full format.
6663 \newcommand*{\glsfirstabbrvdefaultfont}[1]{\glsabbrvfont{#1}}

\glsabbrvfont Font changing command used for the abbreviation on subsequent use.
6664 \newcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{#1}}

bbrvdefaultfont
6665 \newcommand*{\glsabbrvdefaultfont}[1]{#1}

\glslongfont Font changing command used for the long form in commands like \glsxtrlong.
6666 \newcommand*{\glslongfont}[1]{\glslongdefaultfont{#1}}

longdefaultfont Default font changing command used for the long form in commands like \glsxtrlong.
6667 \newcommand*{\glslongdefaultfont}[1]{#1}

lsfirstlongfont Font changing command used for the long form on first use or in the full format.
6668 \newcommand*{\glsfirstlongfont}[1]{\glslongfont{#1}}

longdefaultfont
6669 \newcommand*{\glsfirstlongdefaultfont}[1]{\glslongdefaultfont{#1}}

brvpluralsuffix Default plural suffix. Allow an alternative default suffix for abbreviations.
6670 \newcommand*{\glsxtrabbrvpluralsuffix}{\glspluralsuffix}

brvpluralsuffix Default plural suffix.
6671 \newcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}

```
\glsxtrfull Full form (no case-change).
```

```
6672 \newrobustcmd*\glsxtrfull{\gls@hyp@opt\ns@glsxtrfull}
6673 \newcommand*\ns@glsxtrfull[2][]{%
6674   \new@ifnextchar[\glsxtr@full{#1}{#2}]{%
6675     \glsxtr@full{#1}{#2}[] }%
6676 }
```

```
\@glsxtr@full Low-level macro:
```

```
6677 \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).

```
6678 \@glsxtr@record{#1}{#2}{glslink}%
6679 \glsdoifexists{#2}%
6680 {%
6681   \glssetabrvfmt{\glscategory{#2}}%
6682   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6683   \let\glsifplural\secondoftwo
6684   \let\glscapscase\firstofthree
6685   \let\glsinsert\empty
6686   \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.

```
6687 \glsxtrsetupfulldefs
6688 \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6689 }%
6690 \glspostlinkhook
6691 }
```

```
trsetupfulldefs
```

```
6692 \newcommand*\glsxtrsetupfulldefs{%
6693   \let\glsxtrifwasfirstuse\firstoftwo
6694 }
```

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

```
6695 \newrobustcmd*\Glsxtrfull{\gls@hyp@opt\ns@Glsxtrfull}
6696 \newcommand*\ns@Glsxtrfull[2][]{%
6697   \new@ifnextchar[\Glsxtr@full{#1}{#2}]{%
6698     \Glsxtr@full{#1}{#2}[] }%
6699 }
```

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

```
6700 \def\@Glsxtr@full#1#2[#3]{%
6701   \glsdoifexists{#2}%
6702   {%
6703     \glssetabrvfmt{\glscategory{#2}}%
```

```

6704   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6705   \let\glsifplural\@secondoftwo
6706   \let\glscapscase\@secondofthree
6707   \let\glsinsert\@empty
6708   \def\glscustomtext{\Glsxtrinlinefullformat{#2}{#3}}%
6709   \glsxtrsetupfulldefs
6710   \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6711 }%
6712 \glspostlinkhook
6713 }

```

\GLSxtrfull Full form (all uppercase).

```

6714 \newrobustcmd*\GLSxtrfull{\@gls@hyp@opt\ns@GLSxtrfull}
6715 \newcommand*\ns@GLSxtrfull[2][]{%
6716   \new@ifnextchar[\{\@GLSxtr@full{#1}{#2}}%
6717     {\@GLSxtr@full{#1}{#2}}[]}%
6718 }

```

\@GLSxtr@full Low-level macro:

```

6719 \def\@GLSxtr@full#1#2[#3]{%
6720   \glsdoifexists{#2}%
6721   {%
6722     \glssetabbrvfmt{\glscategory{#2}}%
6723     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6724     \let\glsifplural\@secondoftwo
6725     \let\glscapscase\@thirdofthree
6726     \let\glsinsert\@empty
6727     \def\glscustomtext{\mfirstucMakeUppercase{\glsxtrinlinefullformat{#2}{#3}}}}%
6728     \glsxtrsetupfulldefs
6729     \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6730   }%
6731   \glspostlinkhook
6732 }

```

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

```

6733 \newrobustcmd*\glsxtrfullpl{\@gls@hyp@opt\ns@glsxtrfullpl}
6734 \newcommand*\ns@glsxtrfullpl[2][]{%
6735   \new@ifnextchar[\{\@glsxtr@fullpl{#1}{#2}}%
6736     {\@glsxtr@fullpl{#1}{#2}}[]}%
6737 }

```

\@glsxtr@fullpl Low-level macro:

```
6738 \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).

```

6739   \@glsxtr@record{#1}{#2}{glslink}%
6740   \glsdoifexists{#2}%
6741   {%

```

```

6742 \glssetabrvfmt{\glscategory{#2}}%
6743 \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6744 \let\glsifplural\@firstoftwo
6745 \let\glscapscase\@firstofthree
6746 \let\glsinsert\@empty
6747 \def\glscustomtext{\glsxtrinlinefullplformat{#2}{#3}}%
6748 \glsxtrsetupfulldefs
6749 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6750 }%
6751 \glspostlinkhook
6752 }

```

\Glsxtrfullpl Plural full form (first letter uppercase).

```

6753 \newrobustcmd*{\Glsxtrfullpl}{\gls@hyp@opt\ns@Glsxtrfullpl}
6754 \newcommand*\ns@Glsxtrfullpl[2][]{%
6755   \new@ifnextchar[\{@Glsxtr@fullpl{#1}{#2}}%
6756     {\@Glsxtr@fullpl{#1}{#2}[]}}%
6757 }

```

\@Glsxtr@fullpl Low-level macro:

```
6758 \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).

```

6759 \glsxtr@record{#1}{#2}{\glslink}%
6760 \glsdoifexists{#2}%
6761 {%
6762 \glssetabrvfmt{\glscategory{#2}}%
6763 \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6764 \let\glsifplural\@firstoftwo
6765 \let\glscapscase\@secondofthree
6766 \let\glsinsert\@empty
6767 \def\glscustomtext{\Glsxtrinlinefullplformat{#2}{#3}}%
6768 \glsxtrsetupfulldefs
6769 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6770 }%
6771 \glspostlinkhook
6772 }

```

\GLSxtrfullpl Plural full form (all upper case).

```

6773 \newrobustcmd*{\GLSxtrfullpl}{\gls@hyp@opt\ns@GLSxtrfullpl}
6774 \newcommand*\ns@GLSxtrfullpl[2][]{%
6775   \new@ifnextchar[\{@GLSxtr@fullpl{#1}{#2}}%
6776     {\@GLSxtr@fullpl{#1}{#2}[]}}%
6777 }

```

\@GLSxtr@fullpl Low-level macro:

```
6778 \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).

```

6779  \glsxtr@record{#1}{#2}{\glslink}%
6800  \glsdoifexists{#2}%
6801  {%
6802    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6803    \let\glsifplural\firstoftwo
6804    \let\glscapscase\thirdofthree
6805    \let\glsinsert\empty
6806    \def\glscustomtext{%
6807      \mfirstucMakeUppercase{\glsxtrinlinefullplformat{#2}{#3}}%
6808      \glsxtrsetupfulldefs
6809      \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6810    }%
6811    \glspostlinkhook
6812  }%

```

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

\glsxtrshort

```
6793 \newrobustcmd*\glsxtrshort{\gls@hyp@opt\ns@glsxtrshort}
```

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

```

6794 \newcommand*\ns@glsxtrshort[2][]{%
6795   \new@ifnextchar[\glsxtrshort{#1}{#2}]{\glsxtrshort{#1}{#2}[]}{%
6796 }
```

Read in the final optional argument:

```
6797 \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).

```

6798  \glsxtr@record{#1}{#2}{\glslink}%
6799  \glsdoifexists{#2}%
6800  {%
```

Need to make sure \glsabrvfont is set correctly.

```

6801  \glssetabrvfmt{\glscategory{#2}}%
6802  \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6803  \let\glsxtrifwasfirstuse\secondoftwo
6804  \let\glsifplural\secondoftwo
6805  \let\glscapscase\firstofthree
6806  \let\glsinsert\empty
6807  \def\glscustomtext{%
6808    \glsabrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
6809    \ifglsxtrinsertinside\else#3\fi
6810  }%
6811  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6812 }%
6813 \glspostlinkhook
6814 }
```

```

\Glsxtrshort
6815 \newrobustcmd*{\Glsxtrshort}{\gls@hyp@opt\ns@Glsxtrshort}
    Define the un-starred form. Need to determine if there is a final optional argument
6816 \newcommand*{\ns@Glsxtrshort}[2][]{%
6817   \new@ifnextchar[{\ns@Glsxtrshort[#1]{#2}}{\ns@Glsxtrshort[#1]{#2}}[]}{%
6818 }

    Read in the final optional argument:
6819 \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).
6820 \glsxtr@record{#1}{#2}{glslink}%
6821 \glsdoifexists{#2}%
6822 {%
6823   \glssetabrvfmt{\glscategory{#2}}%
6824   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6825   \let\glsxtrifwasfirstuse@secondoftwo
6826   \let\glsifplural@secondoftwo
6827   \let\glscapscase@secondofthree
6828   \let\glsinsert@\empty
6829   \def\glscustomtext{%
6830     \glsabbrvfont{\Glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
6831     \ifglsxtrinsertinside\else#3\fi
6832   }%
6833   \gls@link[#1]{#2}{\csname gls@\glisttype @entryfmt\endcsname}%
6834 }%
6835 \glspostlinkhook
6836 }

\GLSxtrshort
6837 \newrobustcmd*{\GLSxtrshort}{\gls@hyp@opt\ns@GLSxtrshort}
    Define the un-starred form. Need to determine if there is a final optional argument
6838 \newcommand*{\ns@GLSxtrshort}[2][]{%
6839   \new@ifnextchar[{\ns@GLSxtrshort[#1]{#2}}{\ns@GLSxtrshort[#1]{#2}}[]}{%
6840 }

    Read in the final optional argument:
6841 \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).
6842 \glsxtr@record{#1}{#2}{glslink}%
6843 \glsdoifexists{#2}%
6844 {%
6845   \glssetabrvfmt{\glscategory{#2}}%
6846   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6847   \let\glsxtrifwasfirstuse@secondoftwo
6848   \let\glsifplural@secondoftwo

```

```

6849   \let\glscapscase\@thirdofthree
6850   \let\glsinsert\@empty
6851   \def\glscustomtext{%
6852     \mfirstucMakeUppercase
6853     {\glsabbrvfont{\glsaccessshort{\#2}\ifglsxtrinsertinside\#3\fi}%
6854      \ifglsxtrinsertinside\else\#3\fi
6855    }%
6856  }%
6857  \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
6858 }%
6859 \glspostlinkhook
6860 }

```

\glsxtrlong

```
6861 \newrobustcmd*{\glsxtrlong}{\gls@hyp@opt\ns@glsxtrlong}
```

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

```

6862 \newcommand*{\ns@glsxtrlong}[2][]{%
6863   \new@ifnextchar[{\glsxtrlong{\#1}{\#2}}{\glsxtrlong{\#1}{\#2}[]}}%
6864 }

```

Read in the final optional argument:

```
6865 \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).

```

6866  \glsxtr@record{\#1}{\#2}{\glslink}%
6867  \glsdoifexists{\#2}%
6868  {%
6869    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6870    \let\glsxtrifwasfirstuse\@secondoftwo
6871    \let\glsifplural\@secondoftwo
6872    \let\glscapscase\@firstofthree
6873    \let\glsinsert\@empty
6874    \def\glscustomtext{%
6875      \glslongfont{\glsaccesslong{\#2}\ifglsxtrinsertinside\#3\fi}%
6876      \ifglsxtrinsertinside\else\#3\fi
6877    }%
6878    \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
6879  }%
6880  \glspostlinkhook
6881 }

```

\Glsxtrlong

```
6882 \newrobustcmd*{\Glsxtrlong}{\gls@hyp@opt\ns@Glsxtrlong}
```

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

```

6883 \newcommand*{\ns@Glsxtrlong}[2][]{%
6884   \new@ifnextchar[{\Glsxtrlong{\#1}{\#2}}{\Glsxtrlong{\#1}{\#2}[]}}%
6885 }

```

Read in the final optional argument:

```
6886 \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).

```
6887  \@glsxtr@record{#1}{#2}{glslink}%
6888  \glsdoifexists{#2}%
6889  {%
6890    \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6891    \let\glsxtrifwasfirstuse\@secondoftwo
6892    \let\glsifplural\@secondoftwo
6893    \let\glscapscase\@secondofthree
6894    \let\glsinsert\@empty
6895    \def\glscustomtext{%
6896      \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
6897      \ifglsxtrinsertinside\else#3\fi
6898    }%
6899    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6900  }%
6901  \glspostlinkhook
6902 }
```

\GLSxtrlong

```
6903 \newrobustcmd*\@GLSxtrlong{\gls@hyp@opt\ns@GLSxtrlong}
```

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

```
6904 \newcommand*\ns@GLSxtrlong[2][]{%
6905   \new@ifnextchar[\{@GLSxtrlong{#1}{#2}\}{\@GLSxtrlong{#1}{#2}[]}%
6906 }
```

Read in the final optional argument:

```
6907 \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).

```
6908  \@glsxtr@record{#1}{#2}{glslink}%
6909  \glsdoifexists{#2}%
6910  {%
6911    \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6912    \let\glsxtrifwasfirstuse\@secondoftwo
6913    \let\glsifplural\@secondoftwo
6914    \let\glscapscase\@thirdofthree
6915    \let\glsinsert\@empty
6916    \def\glscustomtext{%
6917      \mfirstucMakeUppercase
6918      \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
6919      \ifglsxtrinsertinside\else#3\fi
6920    }%
6921  }%
6922  \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%

```

```

6923  }%
6924  \glspostlinkhook
6925 }

```

Plural short forms:

\glsxtrshortpl

```

6926 \newrobustcmd*{\glsxtrshortpl}{\gls@hyp@opt\ns@glsxtrshortpl}
Define the un-starred form. Need to determine if there is a final optional argument
6927 \newcommand*{\ns@glsxtrshortpl}[2][]{%
6928   \new@ifnextchar[{\glsxtrshortpl[#1]{#2}}{\glsxtrshortpl[#1]{#2}}[]}{%
6929 }

```

Read in the final optional argument:

```
6930 \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).

```

6931  \glsxtr@record[#1]{#2}{glslink}%
6932  \glsdoifexists{#2}%
6933  {%
6934    \glssetabbrvfmt{\glscategory{#2}}%
6935    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6936    \let\glsxtrifwasfirstuse\secondoftwo
6937    \let\glsifplural\firstoftwo
6938    \let\glscapscase\firstofthree
6939    \let\glsinsert\empty
6940    \def\glscustomtext{%
6941      \glsabbrvfont{\glsaccessshortpl[#2]\ifglsxtrinsertinside#3\fi}%
6942      \ifglsxtrinsertinside\else#3\fi
6943    }%
6944    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6945  }%
6946  \glspostlinkhook
6947 }

```

\Glsxtrshortpl

```

6948 \newrobustcmd*{\Glsxtrshortpl}{\gls@hyp@opt\ns@Glsxtrshortpl}
Define the un-starred form. Need to determine if there is a final optional argument
6949 \newcommand*{\ns@Glsxtrshortpl}[2][]{%
6950   \new@ifnextchar[{\Glsxtrshortpl[#1]{#2}}{\Glsxtrshortpl[#1]{#2}}[]}{%
6951 }

```

Read in the final optional argument:

```
6952 \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).

```
6953  \glsxtr@record[#1]{#2}{glslink}%
```

```

6954 \glsdoifexists{#2}%
6955 {%
6956   \glssetabrvfmt{\glscategory{#2}}%
6957   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6958   \let\glsxtrifwasfirstuse@\secondoftwo
6959   \let\glsifplural@\firstoftwo
6960   \let\glscapscase@\secondofthree
6961   \let\glsinsert@\empty
6962   \def\glscustomtext{%
6963     \glsabbrvfont{\Glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
6964     \ifglsxtrinsertinside\else#3\fi
6965   }%
6966   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6967 }%
6968 \glspostlinkhook
6969 }

```

\GLSxtrshortpl

```

6970 \newrobustcmd*\GLSxtrshortpl{\gls@hyp@opt\ns@GLSxtrshortpl}
Define the un-starred form. Need to determine if there is a final optional argument
6971 \newcommand*\ns@GLSxtrshortpl[2][]{%
6972   \new@ifnextchar[\ns@GLSxtrshortpl{#1}{#2}]{\ns@GLSxtrshortpl{#1}{#2}[]}{%
6973 }

```

Read in the final optional argument:

```
6974 \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).

```

6975 \glsxtr@record{#1}{#2}{glslink}%
6976 \glsdoifexists{#2}%
6977 {%
6978   \glssetabrvfmt{\glscategory{#2}}%
6979   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6980   \let\glsxtrifwasfirstuse@\secondoftwo
6981   \let\glsifplural@\firstoftwo
6982   \let\glscapscase@\thirdofthree
6983   \let\glsinsert@\empty
6984   \def\glscustomtext{%
6985     \mfirstucMakeUppercase
6986     \glsabbrvfont{\Glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
6987     \ifglsxtrinsertinside\else#3\fi
6988   }%
6989 }%
6990   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6991 }%
6992 \glspostlinkhook
6993 }

```

Plural long forms:

```
\glsxtrlongpl
```

```
6994 \newrobustcmd*{\glsxtrlongpl}{\gls@hyp@opt\ns@glsxtrlongpl}
```

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

```
6995 \newcommand*{\ns@glsxtrlongpl}[2][]{%
```

```
6996   \new@ifnextchar[{\@glsxtrlongpl{#1}{#2}}{\@glsxtrlongpl{#1}{#2}}[]]{%
```

```
6997 }
```

Read in the final optional argument:

```
6998 \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).

```
6999  \@glsxtr@record{#1}{#2}{glslink}{%
```

```
7000  \glsdoifexists{#2}{%
```

```
7001  {%
```

```
7002    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
```

```
7003    \let\glsxtrifwasfirstuse\secondoftwo
```

```
7004    \let\glsifplural\firstoftwo
```

```
7005    \let\glscapscase\firstofthree
```

```
7006    \let\glsinsert\empty
```

```
7007    \def\glscustomtext{%
```

```
7008      \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}{%
```

```
7009      \ifglsxtrinsertinside\else#3\fi
```

```
7010    }{%
```

```
7011    \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}{%
```

```
7012  }{%
```

```
7013  \glspostlinkhook
```

```
7014 }
```

```
\Glsxtrlongpl
```

```
7015 \newrobustcmd*{\Glsxtrlongpl}{\gls@hyp@opt\ns@Glsxtrlongpl}
```

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

```
7016 \newcommand*{\ns@Glsxtrlongpl}[2][]{%
```

```
7017   \new@ifnextchar[{\@Glsxtrlongpl{#1}{#2}}{\@Glsxtrlongpl{#1}{#2}}[]]{%
```

```
7018 }
```

Read in the final optional argument:

```
7019 \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).

```
7020  \@glsxtr@record{#1}{#2}{glslink}{%
```

```
7021  \glsdoifexists{#2}{%
```

```
7022  {%
```

```
7023    \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
```

```
7024    \let\glsxtrifwasfirstuse\secondoftwo
```

```
7025    \let\glsifplural\firstoftwo
```

```
7026    \let\glscapscase\secondofthree
```

```
7027    \let\glsinsert\empty
```

```

7028   \def\glscustomtext{%
7029     \glslongfont{\Glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7030     \ifglsxtrinsertinside\else#3\fi
7031   }%
7032   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7033 }%
7034 \glspostlinkhook
7035 }

```

\GLSxtrlongpl
 7036 \newrobustcmd*\{\GLSxtrlongpl\}{\gls@hyp@opt\ns@GLSxtrlongpl}

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

```

7037 \newcommand*{\ns@GLSxtrlongpl}[2][]{%
7038   \new@ifnextchar[{\@GLSxtrlongpl{#1}{#2}}{\@GLSxtrlongpl{#1}{#2}[]}}%
7039 }

```

Read in the final optional argument:

```
7040 \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).

```

7041 \glsxtr@record{#1}{#2}{\glslink}%
7042 \glsdoifexists{#2}%
7043 {%
7044   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
7045   \let\glsxtrifwasfirstuse\@secondoftwo
7046   \let\glsifplural\@firstoftwo
7047   \let\glscapscase\@thirdofthree
7048   \let\glsinsert\@empty
7049   \def\glscustomtext{%
7050     \mfirstrucMakeUppercase
7051     \glslongfont{\glsaccesslongpl{#2}\ifglsxtrinsertinside#3\fi}%
7052     \ifglsxtrinsertinside\else#3\fi
7053   }%
7054 }%
7055 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
7056 }%
7057 \glspostlinkhook
7058 }

```

\glssetabbrvfmt Set the current format for the given category (or the abbreviation category if unset).

```

7059 \newcommand*{\glssetabbrvfmt}[1]{%
7060   \ifcsdef{@glsabrv@current@#1}%
7061     {\glsxtr@applyabbrvfmt{\csname@glsabrv@current@#1\endcsname}}%
7062     {\glsxtr@applyabbrvfmt{\glsabrv@current@abbreviation}}%
7063 }

```

\glsuseabbrvfont Provide a way to use the abbreviation font for a given category for arbitrary text.

```
7064 \newrobustcmd*\{\glsuseabbrvfont\}[2]{{\glssetabbrvfmt{#2}\glsabrvfont{#1}}}
```

`\glsuseelongfont` Provide a way to use the long font for a given category for arbitrary text.

7065 \newrobustcmd*{\glsuselongfont}[2]{\glssetabrvfmt{\#2}\glslongfont{\#1}}

`sxtrgenabbrvfmt` Similar to `\glsgenacfmt`, but for abbreviations.

```
7066 \newcommand*{\glsxtrgenabbrvfmt}{%
7067   \ifdefempty\glscustomtext
7068   {%
7069     \ifglsused\glslabel
7070     {%
```

Subsequent use:

7071 \glsifplural
7072 {%

Subsequent plural form:

7073 \glscapscase
7074 {%

Subsequent plural form, don't adjust case:

```
7075          \glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
7076      }%
7077  {%
```

Subsequent plural form, make first letter upper case:

```
7078      \Glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
7079  }%
7080 {%
```

Subsequent plural form, all caps:

```
7081     \mfirstucMakeUppercase
7082     {\glsxtrsubsequentplfmt{\glslabel}{\glsinsert}}%
7083 }
7084 }%
7085 {%
```

Subsequent singular form

7086 \glscapscase
7087 {%

Subsequent singular form, don't adjust case:

```
7088     \glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
7089     }%
7090     {%
```

Subsequent singular form, make first letter upper case:

```
7091           \Glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
7092       }%
7093   {%
```

Subsequent singular form, all caps:

```
7094     \mfirstucMakeUppercase  
7095     {\glsxtrsubsequentfmt{\glslabel}{\glsinsert}}%
```

```
7096      }%
7097      }%
7098      }%
7099      {%
```

First use:

```
7100      \glsifplural
7101      {%
```

First use plural form:

```
7102      \glscapscase
7103      {%
```

First use plural form, don't adjust case:

```
7104      \glsxtrfullplformat{\glslabel}{\glsinsert}%
7105      }%
7106      {%
```

First use plural form, make first letter upper case:

```
7107      \Glsxtrfullplformat{\glslabel}{\glsinsert}%
7108      }%
7109      {%
```

First use plural form, all caps:

```
7110      \mfirstucMakeUppercase
7111      {\glsxtrfullplformat{\glslabel}{\glsinsert}}%
7112      }%
7113      }%
7114      {%
```

First use singular form

```
7115      \glscapscase
7116      {%
```

First use singular form, don't adjust case:

```
7117      \glsxtrfullformat{\glslabel}{\glsinsert}%
7118      }%
7119      {%
```

First use singular form, make first letter upper case:

```
7120      \Glsxtrfullformat{\glslabel}{\glsinsert}%
7121      }%
7122      {%
```

First use singular form, all caps:

```
7123      \mfirstucMakeUppercase
7124      {\glsxtrfullformat{\glslabel}{\glsinsert}}%
7125      }%
7126      }%
7127      }%
7128      }%
7129      {%
```

User supplied text.

```
7130     \glscustomtext
7131   }%
7132 }
```

trsubsequentfmt Subsequent use format (singular no case change).

```
7133 \newcommand*{\glsxtrsubsequentfmt}[2]{%
7134   \glsabbrvfont{\glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
7135   \ifglsxtrinsertinside \else#2\fi
7136 }
7137 \let\glsxtrdefaultsubsequentfmt\glsxtrsubsequentfmt
```

subsequentplfmt Subsequent use format (plural no case change).

```
7138 \newcommand*{\glsxtrsubsequentplfmt}[2]{%
7139   \glsabbrvfont{\glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
7140   \ifglsxtrinsertinside \else#2\fi
7141 }
7142 \let\glsxtrdefaultsubsequentplfmt\glsxtrsubsequentplfmt
```

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

```
7143 \newcommand*{\Glsxtrsubsequentfmt}[2]{%
7144   \glsabbrvfont{\Glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
7145   \ifglsxtrinsertinside \else#2\fi
7146 }
7147 \let\Glsxtrdefaultsubsequentfmt\Glsxtrsubsequentfmt
```

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

```
7148 \newcommand*{\Glsxtrsubsequentplfmt}[2]{%
7149   \glsabbrvfont{\Glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
7150   \ifglsxtrinsertinside \else#2\fi
7151 }
7152 \let\Glsxtrdefaultsubsequentplfmt\Glsxtrsubsequentplfmt
```

1.7.1 Abbreviation Styles Setup

breviationstyle

```
7153 \newcommand*{\setabbreviationstyle}[2][abbreviation]{%
7154   \ifcsundef{@glsabbrv@dispstyle@setup@#2}%
7155   {%
7156     \PackageError{glossaries-extra}{Undefined abbreviation style '#2'}{}%
7157   }%
7158   {%
```

Have abbreviations already been defined for this category?

```
7159   \ifcsstring{@glsabbrv@current@#1}{#2}%
7160   {%
```

Style already set.

```
7161      }%
7162      {%
7163          \def\@glsxstr@dostylewarn{}%
7164          \glsforeachincategory{#1}{\@gls@type}{\@gls@label}%
7165          {%
7166              \def\@glsxstr@dostylewarn{\GlossariesWarning{Abbreviation
7167                  style has been switched \MessageBreak
7168                  for category '#1', \MessageBreak
7169                  but there have already been entries \MessageBreak
7170                  defined for this category. Unwanted \MessageBreak
7171                  side-effects may result}}%
7172              \@endfortrue
7173          }%
7174      \@glsxstr@dostylewarn
```

Set up the style for the given category.

```
7175      \csdef{@glsabbrv@current@#1}{#2}%
7176      \glsxstr@applyabbrvstyle{#2}%
7177      {%
7178  }%
7179 }
```

`applyabbrvstyle` Apply the abbreviation style without existence check.

```
7180 \newcommand*{\glsxstr@applyabbrvstyle}[1]{%
7181     \csuse{@glsabbrv@dispstyle@setup@#1}%
7182     \csuse{@glsabbrv@dispstyle@fmts@#1}%
7183 }
```

`r@applyabbrvfmt` Only apply the style formats.

```
7184 \newcommand*{\glsxstr@applyabbrvfmt}[1]{%
7185     \csuse{@glsabbrv@dispstyle@fmts@#1}%
7186 }
```

`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.

```
7187 \newcommand*{\newabbreviationstyle}[3]{%
7188     \ifcsdef{@glsabbrv@dispstyle@setup@#1}%
7189     {%
7190         \PackageError{glossaries-extra}{Abbreviation style '#1' already
7191             defined}{}%
7192     }%
7193     {%
7194         \csdef{@glsabbrv@dispstyle@setup@#1}{%
```

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

```
7195     \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
7196     #2}%
7197     \csdef{@glsabbrv@dispstyle@fmts@#1}{%
```

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

```
7198 \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}%
7199 \renewcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}%
7200 \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}%
7201 \renewcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}%
```

Reset \glsxtrsubsequentfmt etc in case a style changes this.

```
7202 \let\glsxtrsubsequentfmt\glsxtrdefaultsubsequentfmt
7203 \let\glsxtrsubsequentplfmt\glsxtrdefaultsubsequentplfmt
7204 \let\Glsxtrsubsequentfmt\Glsxtrdefaultsubsequentfmt
7205 \let\Glsxtrsubsequentplfmt\Glsxtrdefaultsubsequentplfmt
7206 #3}%
7207 }%
7208 }
```

abbreviationstyle

```
7209 \newcommand*{\renewabbreviationstyle}[3]{%
7210 \ifcsundef{@glsabbrv@dispstyle@setup@#1}%
7211 {%
7212 \PackageError{glossaries-extra}{Abbreviation style '#1' not defined}{}%
7213 }%
7214 {%
7215 \csdef{@glsabbrv@dispstyle@setup@#1}{%
```

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

```
7216 \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
7217 #2}%
7218 \csdef{@glsabbrv@dispstyle@fmcts@#1}{%
```

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

```
7219 \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}%
7220 \renewcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}%
7221 \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}%
7222 \renewcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}%
7223 #3}%
7224 }%
7225 }
```

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

```
7226 \newcommand*{\letabbreviationstyle}[2]{%
7227 \csletcs{@glsabbrv@dispstyle@setup@#1}{@glsabbrv@dispstyle@setup@#2}%
7228 \csletcs{@glsabbrv@dispstyle@fmcts@#1}{@glsabbrv@dispstyle@fmcts@#2}%
7229 }
```

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

Define a synonym for a deprecated abbreviation style.

```
7230 \newcommand*{\@glsxtr@deprecated@abbrstyle}[2]{%
7231   \csdef{@glsabrv@dispstyle@setup@#1}{%
7232     \GlsXtrWarnDeprecatedAbbrStyle{#1}{#2}%
7233   \csuse{@glsabrv@dispstyle@setup@#2}%
7234 }%
7235 \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
7236 }
```

ecatedAbbrStyle Generate warning for deprecated style use.

```
7237 \newcommand*{\GlsXtrWarnDeprecatedAbbrStyle}[2]{%
7238   \GlossariesExtraWarning{Deprecated abbreviation style name '#1',
7239   use '#2' instead}%
7240 }
```

eAbbrStyleSetup

```
7241 \newcommand*{\GlsXtrUseAbbrStyleSetup}[1]{%
7242   \ifcsundef{@glsabrv@dispstyle@setup@#1}%
7243   {%
7244     \PackageError{glossaries-extra}%
7245     {Unknown abbreviation style definitions '#1'}{}%
7246   }%
7247   {%
7248     \csname @glsabrv@dispstyle@setup@#1\endcsname
7249   }%
7250 }
```

seAbbrStyleFmts

```
7251 \newcommand*{\GlsXtrUseAbbrStyleFmts}[1]{%
7252   \ifcsundef{@glsabrv@dispstyle@fmts@#1}%
7253   {%
7254     \PackageError{glossaries-extra}%
7255     {Unknown abbreviation style formats '#1'}{}%
7256   }%
7257   {%
7258     \csname @glsabrv@dispstyle@fmts@#1\endcsname
7259   }%
7260 }
```

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.

```
7261 \newif\ifglsxtrinsertinside  
7262 \glsxtrinsertinsidefalse
```

trlongshortname

```
7263 \newcommand*{\glsxtrlongshortname}{%  
7264   \protect\glsabbrvfont{\the\glsshorttok}-%  
7265 }
```

long-short

```
7266 \newabbreviationstyle{long-short}{%  
7267 {%-  
7268   \renewcommand*{\CustomAbbreviationFields}{%  
7269     name={\glsxtrlongshortname},  
7270     sort={\the\glsshorttok},  
7271     first={\protect\glsfirstlongfont{\the\glslongtok}-%  
7272       \protect\glsxtrfullsep{\the\glslabeltok}-%  
7273       \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%  
7274     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}-%  
7275       \protect\glsxtrfullsep{\the\glslabeltok}-%  
7276       \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%  
7277     plural={\protect\glsabbrvfont{\the\glsshortpltok}},%  
7278     description={\the\glslongtok}}%
```

Unset the regular attribute if it has been set.

```
7279 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  
7280   \glshasattribute{\the\glslabeltok}{regular}-%  
7281   {%-  
7282     \glssetattribute{\the\glslabeltok}{regular}{false}-%  
7283   }-%  
7284   {}-%  
7285 }-%  
7286 }-%  
7287 {%-
```

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

```
7288 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%  
7289 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%  
7290 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%  
7291 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%  
7292 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

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

```
7293 \renewcommand*{\glsxtrfullformat}[2]{%-  
7294   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}-%  
7295   \ifglsxtrinsertinside\else##2\fi  
7296   \glsxtrfullsep{##1}-%
```

```

7297     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
7298 }%
7299 \renewcommand*{\glsxtrfullplformat}[2]{%
7300     \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7301     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7302     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
7303 }%
7304 \renewcommand*{\Glsxtrfullformat}[2]{%
7305     \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7306     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7307     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
7308 }%
7309 \renewcommand*{\Glsxtrfullplformat}[2]{%
7310     \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7311     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7312     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
7313 }%
7314 }

```

Set this as the default style for general abbreviations:

```
7315 \setabbreviationstyle{long-short}
```

ngshortdescsort

```

7316 \newcommand*{\glsxtrlongshortdescsort}{%
7317 \expandonce\glsxtrorglong\space (\expandonce\glsxtrorgshort)%
7318 }

```

ngshortdescname

```

7319 \newcommand*{\glsxtrlongshortdescname}{%
7320 \protect\glslongfont{\the\glslongtok}%
7321 \glsxtrparen{\protect\glsabbrvfont{\the\glsshorttok}}%
7322 }

```

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

```

7323 \newabbreviationstyle{long-short-desc}%
7324 {%
7325 \renewcommand*{\CustomAbbreviationFields}{%
7326     name={\glsxtrlongshortdescname},%
7327     sort={\glsxtrlongshortdescsort},%
7328     first={\protect\glsfirstlongfont{\the\glslongtok}}%
7329     \protect\glsxtrfullsep{\the\glslabeltok}%
7330     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
7331     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}}%
7332     \protect\glsxtrfullsep{\the\glslabeltok}%
7333     \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%

```

The text key should only have the short form.

```
7334     text={\protect\glsabbrvfont{\the\glsshorttok}},%
```

```
7335     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
7336 }
```

Unset the regular attribute if it has been set.

```
7337 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7338   \glshasattribute{\the\glslabeltok}{regular}%
7339   {%
7340     \glssetattribute{\the\glslabeltok}{regular}{false}%
7341   }%
7342   {}%
7343 }%
7344 }%
7345 {%
7346 \GlsXtrUseAbbrStyleFmts{long-short}%
7347 }
```

trshortlongname

```
7348 \newcommand*{\glsxtrshortlongname}{%
7349   \protect\glsabbrvfont{\the\glsshorttok}%
7350 }
```

short-long Short form followed by long form in parenthesis on first use.

```
7351 \newabbreviationstyle{short-long}%
7352 {%
7353 \renewcommand*{\CustomAbbreviationFields}{%
7354   name={\glsxtrshortlongname},
7355   sort={\the\glsshorttok},
7356   description={\the\glslongtok},%
7357   first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
7358     \protect\glsxtrfullsep{\the\glslabeltok}%
7359     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
7360   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
7361     \protect\glsxtrfullsep{\the\glslabeltok}%
7362     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
7363   plural={\protect\glsabbrvfont{\the\glsshortpltok}}}}
```

Unset the regular attribute if it has been set.

```
7364 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7365   \glshasattribute{\the\glslabeltok}{regular}%
7366   {%
7367     \glssetattribute{\the\glslabeltok}{regular}{false}%
7368   }%
7369   {}%
7370 }%
7371 }%
7372 {%
```

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

```
7373 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
```

```

7374 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7375 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
7376 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7377 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

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

```

7378 \renewcommand*\glsxtrfullformat[2]{%
7379   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7380   \ifglsxtrinsertinside\else##2\fi
7381   \glsxtrfullsep{##1}%
7382   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7383 }%
7384 \renewcommand*\glsxtrfullplformat[2]{%
7385   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7386   \ifglsxtrinsertinside\else##2\fi
7387   \glsxtrfullsep{##1}%
7388   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7389 }%
7390 \renewcommand*\Glsxtrfullformat[2]{%
7391   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7392   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7393   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7394 }%
7395 \renewcommand*\Glsxtrfullplformat[2]{%
7396   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7397   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7398   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7399 }%
7400 }

```

ortlongdescsort

```
7401 \newcommand*\glsxtrshortlongdescsort{\the\glsshorthtok}
```

ortlongdescname

```

7402 \newcommand*\glsxtrshortlongdescname{%
7403   \protect\glsabbrvfont{\the\glsshorthtok}%
7404   \glsxtrparen{\protect\glslongfont{\the\glslongtok}}}%
7405 }

```

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

```

7406 \newabbreviationstyle{short-long-desc}%
7407 {%
7408   \renewcommand*\CustomAbbreviationFields{%
7409     name={\glsxtrshortlongdescname},%
7410     sort={\glsxtrshortlongdescsort},%
7411     first={\protect\glsfirstabbrvfont{\the\glsshorthtok}}%
7412     \protect\glsxtrfullsep{\the\glslabeltok}%
7413     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}},%
7414     firstplural={\protect\glsfirstabbrvfont{\the\glsshorthpltok}}%

```

```

7415     \protect\glsxtrfullsep{\the\glslabeltok}%
7416     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
7417     text={\protect\glsabbrvfont{\the\glsshorttok}},%
7418     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
7419 }%

```

Unset the regular attribute if it has been set.

```

7420 \renewcommand*\GlsXtrPostNewAbbreviation{%
7421   \glshasattribute{\the\glslabeltok}{regular}%
7422   {%
7423     \glssetattribute{\the\glslabeltok}{regular}{false}%
7424   }%
7425   {}%
7426 }%
7427 }%
7428 {%
7429 \GlsXtrUseAbbrStyleFmts{short-long}%
7430 }%

```

`ongfootnotefont` Only used by the “footnote” styles.

```
7431 \newcommand*\glsfirstlongfootnotefont}[1]{\glslongfootnotefont{#1}}%
```

`ongfootnotefont` Only used by the “footnote” styles.

```
7432 \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 `\langle long \rangle` 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`).

```
7433 \newcommand*\glsxtrabbrvfootnote}[2]{\footnote{#2}}
```

`xtrfootnotename`

```

7434 \newcommand*\glsxtrfootnotename}{%
7435   \protect\glsabbrvfont{\the\glsshorttok}%
7436 }%

```

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

```

7437 \newabbreviationstyle{footnote}{%
7438 {%
7439   \renewcommand*\CustomAbbreviationFields{%
7440     name={\glsxtrfootnotename},%
7441     sort={\the\glsshorttok},%
7442     description={\the\glslongtok},%

```

```

7443   first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
7444     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7445       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
7446   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
7447     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7448       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
7449   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.

7450 \renewcommand*\GlsXtrPostNewAbbreviation{%
7451   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
7452   \glshasattribute{\the\glslabeltok}{regular}%
7453   {%
7454     \glssetattribute{\the\glslabeltok}{regular}{false}%
7455   }%
7456   {}%
7457 }%
7458 }%
7459 {%

```

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

```

7460 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
7461 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7462 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
7463 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
7464 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%

```

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

```

7465 \renewcommand*\glsxtrfullformat[2]{%
7466   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7467   \ifglsxtrinsertinside\else##2\fi
7468   \protect\glsxtrabbrvfootnote{##1}%
7469   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7470 }%
7471 \renewcommand*\glsxtrfullplformat[2]{%
7472   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7473   \ifglsxtrinsertinside\else##2\fi
7474   \protect\glsxtrabbrvfootnote{##1}%
7475   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7476 }%
7477 \renewcommand*\Glsxtrfullformat[2]{%
7478   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7479   \ifglsxtrinsertinside\else##2\fi
7480   \protect\glsxtrabbrvfootnote{##1}%
7481   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7482 }%
7483 \renewcommand*\Glsxtrfullplformat[2]{%
7484   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

7485     \ifglsxtrinsertinside\else##2\fi
7486     \protect\glsxtrabrvfootnote{##1}%
7487     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7488 }%

```

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

```

7489 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7490   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7491   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7492   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7493 }%
7494 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7495   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7496   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7497   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7498 }%
7499 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7500   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7501   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7502   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7503 }%
7504 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7505   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7506   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7507   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7508 }%
7509 }

```

short-footnote

```
7510 \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.

```

7511 \newabbreviationstyle{postfootnote}%
7512 {%
7513   \renewcommand*{\CustomAbbreviationFields}{%
7514     name={\glsxtrfootnotename},
7515     sort={\the\glsshorttok},
7516     description={\the\glslongtok},%
7517     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
7518     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
7519     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.

```

7520 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7521   \csdef{glsxtrpostlink\glscategorylabel}{%
7522     \glsxtrifwasfirstuse

```

```
7523     {%
```

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

```
7524     \glsxtrdopostpunc{\protect\glsxtrabrvfootnote{\glslabel}}%
7525     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}%
7526     }%
7527     {}%
7528     }%
7529     \glshasattribute{\the\glslabeltok}{regular}%
7530     {}%
7531     \glssetattribute{\the\glslabeltok}{regular}{false}%
7532     }%
7533     {}%
7534 }%
```

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

```
7535 \renewcommand*{\glsxtrsetupfulldefs}{%
7536   \let\glsxtrifwasfirstuse\@secondoftwo
7537 }%
7538 }%
7539 {%
```

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

```
7540 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabrvpluralsuffix}%
7541 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
7542 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
7543 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
7544 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

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

```
7545 \renewcommand*{\glsxtrfullformat}[2]{%
7546   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7547   \ifglsxtrinsertinside\else##2\fi
7548 }%
7549 \renewcommand*{\glsxtrfullplformat}[2]{%
7550   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7551   \ifglsxtrinsertinside\else##2\fi
7552 }%
7553 \renewcommand*{\Glsxtrfullformat}[2]{%
7554   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7555   \ifglsxtrinsertinside\else##2\fi
7556 }%
7557 \renewcommand*{\Glsxtrfullplformat}[2]{%
7558   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7559   \ifglsxtrinsertinside\else##2\fi
7560 }%
```

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

```
7561 \renewcommand*{\glsxtrinlinefullformat}[2]{%
```

```

7562 \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7563 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7564 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7565 }%
7566 \renewcommand*\glsxtrinlinefullplformat}[2]{%
7567 \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7568 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7569 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7570 }%
7571 \renewcommand*\Glsxtrinlinefullformat}[2]{%
7572 \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7573 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7574 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7575 }%
7576 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
7577 \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7578 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7579 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7580 }%
7581 }

```

rt-postfootnote

```
7582 \letabbreviationstyle{short-postfootnote}{postfootnote}
```

shortnolongname

```

7583 \newcommand*\glsxtrshortnolongname}{%
7584 \protect\glsabbrvfont{\the\glsshorttok}%
7585 }

```

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.

```

7586 \newabbreviationstyle{short}{%
7587 }%
7588 \renewcommand*\CustomAbbreviationFields}{%
7589 name={\glsxtrshortnolongname},%
7590 sort={\the\glsshorttok},%
7591 first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
7592 firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
7593 text={\protect\glsabbrvfont{\the\glsshorttok}},%
7594 plural={\protect\glsabbrvfont{\the\glsshortpltok}},%
7595 description={\the\glslongtok}}%
7596 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7597 \glssetattribute{\the\glslabeltok}{regular}{true}}%
7598 }%
7599 }%

```

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

```

7600 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7601 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
7602 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
7603 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7604 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

7605 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7606   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
7607   \ifglsxtrinsertinside##2\fi}%
7608   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7609   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7610 }%
7611 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7612   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
7613   \ifglsxtrinsertinside##2\fi}%
7614   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7615   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7616 }%
7617 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7618   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
7619   \ifglsxtrinsertinside##2\fi}%
7620   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7621   \glsxtrparen{\glsfirstlongfont{\Glsaccesslong{##1}}}%
7622 }%
7623 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7624   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
7625   \ifglsxtrinsertinside##2\fi}%
7626   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7627   \glsxtrparen{\glsfirstlongfont{\Glsaccesslongpl{##1}}}%
7628 }%

```

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.

```

7629 \renewcommand*{\glsxtrfullformat}[2]{%
7630   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7631   \ifglsxtrinsertinside\else##2\fi
7632 }%
7633 \renewcommand*{\glsxtrfullplformat}[2]{%
7634   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7635   \ifglsxtrinsertinside\else##2\fi
7636 }%
7637 \renewcommand*{\Glsxtrfullformat}[2]{%
7638   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7639   \ifglsxtrinsertinside\else##2\fi
7640 }%
7641 \renewcommand*{\Glsxtrfullplformat}[2]{%
7642   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7643   \ifglsxtrinsertinside\else##2\fi
7644 }%

```

```
7645 }
```

Set this as the default style for acronyms:

```
7646 \setabbreviationstyle[acronym]{short}
```

`short-nolong`

```
7647 \letabbreviationstyle{short-nolong}{short}
```

`short-nolong-noreg` Like `short-nolong` but doesn't set the `regular` attribute.

```
7648 \newabbreviationstyle{short-nolong-noreg}{%
```

```
7649 {%
```

```
7650 \GlsXtrUseAbbrStyleSetup{short-nolong}{%
```

Unset the `regular` attribute if it has been set.

```
7651 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
```

```
7652 \glshasattribute{\the\glslabeltok}{regular}{%
```

```
7653 {%
```

```
7654 \glssetattribute{\the\glslabeltok}{regular}{false}{%
```

```
7655 }{%
```

```
7656 {}{%
```

```
7657 }{%
```

```
7658 }{%
```

```
7659 {%
```

```
7660 \GlsXtrUseAbbrStyleFmts{short-nolong}{%
```

```
7661 }
```

`trshortdescname`

```
7662 \newcommand*{\glsxtrshortdescname}{%
```

```
7663 \protect\glsabbrvfont{\the\glsshorttok}{%
```

```
7664 }
```

`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.

```
7665 \newabbreviationstyle{short-desc}{%
```

```
7666 {%
```

```
7667 \renewcommand*{\CustomAbbreviationFields}{%
```

```
7668 name={\glsxtrshortdescname},
```

```
7669 sort={\the\glsshorttok},
```

```
7670 first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
```

```
7671 firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
```

```
7672 text={\protect\glsabbrvfont{\the\glsshorttok}},
```

```
7673 plural={\protect\glsabbrvfont{\the\glsshortpltok}},
```

```
7674 description={\the\glslongtok}}{%
```

```
7675 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
```

```
7676 \glssetattribute{\the\glslabeltok}{regular}{true}{%
```

```
7677 }{%
```

```
7678 {%
```

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

```
7679 \renewcommand*\abrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
7680 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7681 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
7682 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7683 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short format followed by the long form in parentheses.

```
7684 \renewcommand*\glsxtrinlinefullformat[2]{%
7685   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7686   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7687   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7688 }%
7689 \renewcommand*\glsxtrinlinefullplformat[2]{%
7690   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7691   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7692   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7693 }%
7694 \renewcommand*\Glsxtrinlinefullformat[2]{%
7695   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7696   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7697   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7698 }%
7699 \renewcommand*\Glsxtrinlinefullplformat[2]{%
7700   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7701   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7702   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7703 }%
```

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.

```
7704 \renewcommand*\glsxtrfullformat[2]{%
7705   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7706   \ifglsxtrinsertinside\else##2\fi
7707 }%
7708 \renewcommand*\glsxtrfullplformat[2]{%
7709   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7710   \ifglsxtrinsertinside\else##2\fi
7711 }%
7712 \renewcommand*\Glsxtrfullformat[2]{%
7713   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7714   \ifglsxtrinsertinside\else##2\fi
7715 }%
7716 \renewcommand*\Glsxtrfullplformat[2]{%
7717   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7718   \ifglsxtrinsertinside\else##2\fi
7719 }%
7720 }
```

ort-nolong-desc

```
7721 \let\abbreviationstyle{\short-nolong-desc}{\short-desc}
```

`long-desc-noreg` Like `short-nolong-desc` but doesn't set the regular attribute.

```
7722 \newabbreviationstyle{\short-nolong-desc-noreg}{%
```

```
7723 {%
```

```
7724 \GlsXtrUseAbbrStyleSetup{\short-nolong-desc}{%
```

Unset the regular attribute if it has been set.

```
7725 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
```

```
7726 \glshasattribute{\the\glslabeltok}{regular}{%
```

```
7727 {%
```

```
7728 \glssetattribute{\the\glslabeltok}{regular}{false}{%
```

```
7729 }{%
```

```
7730 {}{%
```

```
7731 }{%
```

```
7732 }{%
```

```
7733 {%
```

```
7734 \GlsXtrUseAbbrStyleFmts{\short-nolong-desc}{%
```

```
7735 }
```

`nolong-short` Similar to `short-nolong` but the full form shows the long form followed by the short form in parentheses.

```
7736 \newabbreviationstyle{\nolong-short}{%
```

```
7737 {%
```

```
7738 \GlsXtrUseAbbrStyleSetup{\short-nolong}{%
```

```
7739 }{%
```

```
7740 {%
```

```
7741 \GlsXtrUseAbbrStyleFmts{\short-nolong}{%
```

The inline full form displays the long form followed by the short form in parentheses.

```
7742 \renewcommand*{\glsxtrinlinefullformat}[2]{%
```

```
7743 \protect\glsfirstlongfont{\glsaccesslong{##1}}{%
```

```
7744 \ifglsxtrinsertinside##2\fi}{%
```

```
7745 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{%
```

```
7746 \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}{}}
```

```
7747 }{%
```

```
7748 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
```

```
7749 \protect\glsfirstlongfont{\glsaccesslongpl{##1}}{%
```

```
7750 \ifglsxtrinsertinside##2\fi}{%
```

```
7751 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{%
```

```
7752 \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}{}}
```

```
7753 }{%
```

```
7754 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
```

```
7755 \protect\glsfirstlongfont{\glsaccesslong{##1}}{%
```

```
7756 \ifglsxtrinsertinside##2\fi}{%
```

```
7757 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{%
```

```
7758 \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshort{##1}}}{}}
```

```
7759 }{%
```

```
7760 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
```

```
7761 \protect\glsfirstlongfont{\glsaccesslongpl{##1}}{%
```

```

7762     \ifglsxtrinsertinside##2\fi}%
7763     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7764     \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshortpl{##1}}}%
7765 }%
7766 }

```

`nong-short-noreg` Like `nolong-short` but doesn't set the `regular` attribute.

```

7767 \newabbreviationstyle{nolong-short-noreg}{%
7768 {%
7769   \GlsXtrUseAbbrStyleSetup{nolong-short}%

```

Unset the `regular` attribute if it has been set.

```

7770 \renewcommand*\GlsXtrPostNewAbbreviation{%
7771   \glshasattribute{\the\glslabeltok}{regular}%
7772   {%
7773     \glssetattribute{\the\glslabeltok}{regular}{false}%
7774   }%
7775   {}%
7776 }%
7777 }%
7778 {%
7779   \GlsXtrUseAbbrStyleFmts{nolong-short}%
7780 }

```

`noshortdescname`

```

7781 \newcommand*\glsxtrlongnoshortdescname{%
7782   \protect\glslongfont{\the\glslongtok}%
7783 }

```

`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.

```

7784 \newabbreviationstyle{long-desc}{%
7785 {%
7786   \renewcommand*\CustomAbbreviationFields{%
7787     name={\glsxtrlongnoshortdescname},
7788     sort={\the\glslongtok},
7789     first={\protect\glsfirstlongfont{\the\glslongtok}},
7790     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
7791     text={\glslongfont{\the\glslongtok}},
7792     plural={\glslongfont{\the\glslongpltok}}}%
7793 }%
7794 \renewcommand*\GlsXtrPostNewAbbreviation{%
7795   \glssetattribute{\the\glslabeltok}{regular}{true}%
7796 }%
7797 {%

```

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

```

7798 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%

```

```

7799 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7800 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
7801 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7802 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

7803 \renewcommand*\glsxtrsubsequentfmt[2]{%
7804   \glslongfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7805   \ifglsxtrinsertinside \else##2\fi
7806 }%
7807 \renewcommand*\glsxtrsubsequentplfmt[2]{%
7808   \glslongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7809   \ifglsxtrinsertinside \else##2\fi
7810 }%
7811 \renewcommand*\Glsxtrsubsequentfmt[2]{%
7812   \glslongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7813   \ifglsxtrinsertinside \else##2\fi
7814 }%
7815 \renewcommand*\Glsxtrsubsequentplfmt[2]{%
7816   \glslongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7817   \ifglsxtrinsertinside \else##2\fi
7818 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

7819 \renewcommand*\glsxtrinlinefullformat[2]{%
7820   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7821   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7822   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
7823 }%
7824 \renewcommand*\glsxtrinlinefullplformat[2]{%
7825   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7826   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7827   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
7828 }%
7829 \renewcommand*\Glsxtrinlinefullformat[2]{%
7830   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7831   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7832   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
7833 }%
7834 \renewcommand*\Glsxtrinlinefullplformat[2]{%
7835   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7836   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7837   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
7838 }%

```

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.

```

7839 \renewcommand*\glsxtrfullformat[2]{%
7840   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7841   \ifglsxtrinsertinside\else##2\fi
7842 }%

```

```

7843 \renewcommand*{\glsxtrfullplformat}[2]{%
7844   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7845   \ifglsxtrinsertinside\else##2\fi
7846 }%
7847 \renewcommand*{\Glsxtrfullformat}[2]{%
7848   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7849   \ifglsxtrinsertinside\else##2\fi
7850 }%
7851 \renewcommand*{\Glsxtrfullplformat}[2]{%
7852   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7853   \ifglsxtrinsertinside\else##2\fi
7854 }%
7855 }

```

`ng-noshort-desc` Provide a synonym that matches similar styles.

```
7856 \letabbreviationstyle{long-noshort-desc}{long-desc}
```

`hort-desc-noreg` Like `long-noshort-desc` but doesn't set the regular attribute.

```

7857 \newabbreviationstyle{long-noshort-desc-noreg}%
7858 {%
7859   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%

```

Unset the regular attribute if it has been set.

```

7860 \renewcommand*{\GlsXtrPostNewAbbreviation}%
7861   \glshasattribute{\the\glslabeltok}{regular}%
7862   {%
7863     \glssetattribute{\the\glslabeltok}{regular}{false}%
7864   }%
7865   {}%
7866 }%
7867 }%
7868 {%
7869   \GlsXtrUseAbbrStyleFmts{long-noshort-desc}%
7870 }

```

`longnoshortname`

```

7871 \newcommand*{\glsxtrlongnoshortname}%
7872   \protect\glsabbrvfont{\the\glsshorttok}%
7873 }

```

`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.

```

7874 \newabbreviationstyle{long}%
7875 {%
7876   \renewcommand*{\CustomAbbreviationFields}%
7877     name={\glsxtrlongnoshortname},%
7878     sort={\the\glsshorttok},%
7879     first={\protect\glsfirstlongfont{\the\glslongtok}},%

```

```

7880     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}\},
7881     text={\glslongfont{\the\glslongtok}\},
7882     plural={\glslongfont{\the\glslongpltok}\},%
7883     description={\the\glslongtok}\}%
7884 }%
7885 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7886   \glssetattribute{\the\glslabeltok}{regular}{true}}%
7887 }%
7888 {%
7889   \GlsXtrUseAbbrStyleFmts{long-desc}%
7890 }

```

`long-noshort` Provide a synonym that matches similar styles.

```
7891 \letabbreviationstyle{long-noshort}{long}
```

`g-noshort-noreg` Like `long-noshort` but doesn't set the `regular` attribute.

```

7892 \newabbreviationstyle{long-noshort-noreg}{%
7893 {%
7894   \GlsXtrUseAbbrStyleSetup{long-noshort}}%
```

Unset the `regular` attribute if it has been set.

```

7895 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7896   \glshasattribute{\the\glslabeltok}{regular}}%
7897 {%
7898   \glssetattribute{\the\glslabeltok}{regular}{false}}%
7899 }%
7900 {()}%
7901 }%
7902 }%
7903 {%
7904 \GlsXtrUseAbbrStyleFmts{long-noshort}}%
7905 }
```

1.7.3 Predefined Styles (Small Capitals)

These styles use `\textsc` for the short form.

`\glsxtrscfont` Maintained for backward-compatibility.

```
7906 \newcommand*\glsxtrscfont[1]{\textsc{#1}}
```

`\glsabbrvscfont` Added for consistent naming.

```
7907 \newcommand*\glsabbrvscfont{\glsxtrscfont}
```

`sxtrfirstscfont` Maintained for backward-compatibility.

```
7908 \newcommand*\sxtrfirstscfont[1]{\glsabbrvscfont{#1}}
```

`irstabbrvscfont` Added for consistent naming.

```
7909 \newcommand*\glsfirstabbrvscfont{\sxtrfirstscfont}
```

and for the default short form suffix:

```
\glsxtrscsuffix
7910 \newcommand*{\glsxtrscsuffix}{\glstextup{\glsxtrabbrvpluralsuffix}}
long-short-sc
7911 \newabbreviationstyle{long-short-sc}%
7912 {%
7913   \renewcommand*{\CustomAbbreviationFields}{%
7914     name={\glsxtrlongshortname},
7915     sort={\the\glsshorttok},
7916     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
7917       \protect\glsxtrfullsep{\the\glslabeltok}%
7918       \glsxtrparen{\protect\glsfirstabrvscfont{\the\glsshorttok}}},%
7919     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
7920       \protect\glsxtrfullsep{\the\glslabeltok}%
7921       \glsxtrparen{\protect\glsfirstabrvscfont{\the\glsshortpltok}}},%
7922     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%
7923     description={\the\glslongtok}}%
7924   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7925     \glshasattribute{\the\glslabeltok}{regular}%
7926     {%
7927       \glssetattribute{\the\glslabeltok}{regular}{false}%
7928     }%
7929     {}%
7930   }%
7931 }%
7932 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
7933 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7934 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7935 \renewcommand*\glsfirstabrvfont[1]{\glsfirstabrvscfont{##1}}%
```

Use the default long fonts.

```
7936 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7937 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

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

```
7938 \renewcommand*{\glsxtrfullformat}[2]{%
7939   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7940   \ifglsxtrinsertinside\else##2\fi
7941   \glsxtrfullsep{##1}%
7942   \glsxtrparen{\glsfirstabrvscfont{\glsaccessshort{##1}}}}%
7943 }%
7944 \renewcommand*{\glsxtrfullplformat}[2]{%
7945   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7946   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7947   \glsxtrparen{\glsfirstabrvscfont{\glsaccessshortpl{##1}}}}%
7948 }%
7949 \renewcommand*{\Glsxtrfullformat}[2]{%
```

```

7950   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7951   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7952   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7953 }%
7954 \renewcommand*\Glsxtrfullplformat}[2]{%
7955   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7956   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7957   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7958 }%
7959 }

```

g-short-sc-desc

```

7960 \newabbreviationstyle{long-short-sc-desc}%
7961 {%
7962   \renewcommand*\CustomAbbreviationFields}{%
7963     name={\glsxtrlongshortdescname},%
7964     sort={\glsxtrlongshortdescsort},%
7965     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
7966       \protect\glsxtrfullsep{\the\glslabeltok}%
7967       \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
7968     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
7969       \protect\glsxtrfullsep{\the\glslabeltok}%
7970       \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
7971     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
7972     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
7973 }%

```

Unset the regular attribute if it has been set.

```

7974 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7975   \glshasattribute{\the\glslabeltok}{regular}%
7976   {%
7977     \glssetattribute{\the\glslabeltok}{regular}{false}%
7978   }%
7979   {}%
7980 }%
7981 }%
7982 {%

```

As long-short-sc style:

```

7983 \GlsXtrUseAbbrStyleFmts{long-short-sc}%
7984 }

```

Now the short (long) version

```

7985 \newabbreviationstyle{short-sc-long}%
7986 {%
7987   \renewcommand*\CustomAbbreviationFields}{%
7988     name={\glsxtrshortlongname},%
7989     sort={\the\glsshorttok},%
7990     description={\the\glslongtok},%
7991     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}}%

```

```

7992 \protect\glsxtrfullsep{\the\glslabeltok}%
7993 \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
7994 firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
7995 \protect\glsxtrfullsep{\the\glslabeltok}%
7996 \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
7997 plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%

    Unset the regular attribute if it has been set.

7998 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7999 \glshasattribute{\the\glslabeltok}{regular}%
8000 {%
8001 \glssetattribute{\the\glslabeltok}{regular}{false}%
8002 }%
8003 {}%
8004 }%
8005 }%
8006 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8007 \renewcommand*\abbrvpluralsuffix{\protect\glsxtrscsuffix}%
8008 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8009 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
8010 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8011 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

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

```

8012 \renewcommand*\glsxtrfullformat}[2]{%
8013 \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8014 \ifglsxtrinsertinside\else##2\fi
8015 \glsxtrfullsep{##1}%
8016 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8017 }%
8018 \renewcommand*\glsxtrfullplformat}[2]{%
8019 \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8020 \ifglsxtrinsertinside\else##2\fi
8021 \glsxtrfullsep{##1}%
8022 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8023 }%
8024 \renewcommand*\GlsXtrfullformat}[2]{%
8025 \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8026 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8027 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8028 }%
8029 \renewcommand*\GlsXtrfullplformat}[2]{%
8030 \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8031 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8032 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8033 }%
8034 }

```

As before but user provides description

```

8035 \newabbreviationstyle{short-sc-long-desc}%
8036 {%
8037   \renewcommand*{\CustomAbbreviationFields}{%
8038     name={\glsxtrshortlongdescname},
8039     sort={\glsxtrshortlongdescsort},
8040     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}}%
8041       \protect\glsxtrfullsep{\the\glslabeltok}%
8042         \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8043     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}}%
8044       \protect\glsxtrfullsep{\the\glslabeltok}%
8045         \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8046     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8047     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
8048 }%

```

Unset the regular attribute if it has been set.

```

8049 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8050   \glshasattribute{\the\glslabeltok}{regular}%
8051   {%
8052     \glssetattribute{\the\glslabeltok}{regular}{false}%
8053   }%
8054   {}%
8055 }%
8056 }%
8057 {%

```

As short-sc-long style:

```

8058 \GlsXtrUseAbbrStyleFmts{short-sc-long}%
8059 }

```

short-sc

```

8060 \newabbreviationstyle{short-sc}%
8061 {%
8062   \renewcommand*{\CustomAbbreviationFields}{%
8063     name={\glsxtrshortnolongname},
8064     sort={\the\glsshorttok},
8065     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
8066     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
8067     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
8068     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%
8069     description={\the\glslongtok}}%
8070   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8071     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8072 }%
8073 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8074 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8075 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\#1}}%
8076 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\#1}}%

```

```
8077 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8078 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short form followed by the long form in parentheses.

```
8079 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8080   \protect\glsfirstabbrvscfont{\glsaccessshort{##1}}%
8081   \ifglsxtrinsertinside##2\fi}%
8082 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8083 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8084 }%
8085 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8086   \protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}%
8087   \ifglsxtrinsertinside##2\fi}%
8088 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8089 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8090 }%
8091 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8092   \protect\glsfirstabbrvscfont{\Glsaccessshort{##1}}%
8093   \ifglsxtrinsertinside##2\fi}%
8094 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8095 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8096 }%
8097 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8098   \protect\glsfirstabbrvscfont{\Glsaccessshortpl{##1}}%
8099   \ifglsxtrinsertinside##2\fi}%
8100 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8101 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8102 }%
```

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.

```
8103 \renewcommand*{\glsxtrfullformat}[2]{%
8104   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8105   \ifglsxtrinsertinside\else##2\fi
8106 }%
8107 \renewcommand*{\glsxtrfullplformat}[2]{%
8108   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8109   \ifglsxtrinsertinside\else##2\fi
8110 }%
8111 \renewcommand*{\Glsxtrfullformat}[2]{%
8112   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8113   \ifglsxtrinsertinside\else##2\fi
8114 }%
8115 \renewcommand*{\Glsxtrfullplformat}[2]{%
8116   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8117   \ifglsxtrinsertinside\else##2\fi
8118 }%
8119 }
```

```

short-sc-nolong
8120 \letabbreviationstyle{short-sc-nolong}{short-sc}

short-sc-desc
8121 \newabbreviationstyle{short-sc-desc}%
8122 {%
8123   \renewcommand*{\CustomAbbreviationFields}{%
8124     name={\glsxtrshortdescname},
8125     sort={\the\glsshorttok},
8126     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
8127     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
8128     text={\protect\glsabbrvscfont{\the\glsshorttok}},
8129     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},
8130     description={\the\glslongtok}}%
8131   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8132     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8133 }%
8134 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8135 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8136 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\#1}}%
8137 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\#1}}%
8138 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\#1}}%
8139 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{\#1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

8140 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8141   \glsfirstabbrvscfont{\glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
8142   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
8143   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
8144 }%
8145 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8146   \glsfirstabbrvscfont{\glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
8147   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
8148   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
8149 }%
8150 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8151   \glsfirstabbrvscfont{\Glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
8152   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
8153   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
8154 }%
8155 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8156   \glsfirstabbrvscfont{\Glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
8157   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
8158   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
8159 }%

```

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.

```

8160 \renewcommand*{\glsxtrfullformat}[2]{%
8161   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8162   \ifglsxtrinsertinside\else##2\fi
8163 }%
8164 \renewcommand*{\glsxtrfullplformat}[2]{%
8165   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8166   \ifglsxtrinsertinside\else##2\fi
8167 }%
8168 \renewcommand*{\Glsxtrfullformat}[2]{%
8169   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8170   \ifglsxtrinsertinside\else##2\fi
8171 }%
8172 \renewcommand*{\Glsxtrfullplformat}[2]{%
8173   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8174   \ifglsxtrinsertinside\else##2\fi
8175 }%
8176 }

```

-sc-nolong-desc

```
8177 \letabbreviationstyle{short-sc-nolong-desc}{short-sc-desc}
```

nolong-short-sc

```

8178 \newabbreviationstyle{nolong-short-sc}%
8179 {%
8180   \GlsXtrUseAbbrStyleSetup{short-sc-nolong}%
8181 }%
8182 {%
8183   \GlsXtrUseAbbrStyleFmts{short-sc-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

8184 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8185   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
8186   \ifglsxtrinsertinside##2\fi}%
8187   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8188   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8189 }%
8190 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8191   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
8192   \ifglsxtrinsertinside##2\fi}%
8193   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8194   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8195 }%
8196 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8197   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
8198   \ifglsxtrinsertinside##2\fi}%
8199   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8200   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8201 }%
8202 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8203   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%

```

```

8204     \ifglsxtrinsertinside##2\fi}%
8205     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8206     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8207 }%
8208 }

```

`long-noshort-sc` The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsxtrshort`.

```

8209 \newabbreviationstyle{long-noshort-sc}%
8210 {%
8211   \renewcommand*{\CustomAbbreviationFields}{%
8212     name={\glsxtrlongnoshortname},
8213     sort={\the\glsshorttok},
8214     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
8215     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
8216     text={\protect\glslongdefaultfont{\the\glslongtok}},
8217     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
8218     description={\the\glslongtok}%
8219 }%
8220   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8221     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8222 }%
8223 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8224   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8225   \renewcommand*{\glsabbrvfont[1]}{\glsabbrvscfont{##1}}%
8226   \renewcommand*{\glsfirstabbrvfont[1]}{\glsfirstabbrvscfont{##1}}%
8227   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8228   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8229   \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8230     \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8231     \ifglsxtrinsertinside \else##2\fi
8232 }%
8233   \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8234     \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8235     \ifglsxtrinsertinside \else##2\fi
8236 }%
8237   \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8238     \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8239     \ifglsxtrinsertinside \else##2\fi
8240 }%
8241   \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8242     \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8243     \ifglsxtrinsertinside \else##2\fi
8244 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8245 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8246   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8247   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8248   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8249 }%
8250 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8251   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8252   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8253   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8254 }%
8255 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8256   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8257   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8258   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
8259 }%
8260 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8261   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8262   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8263   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
8264 }%

```

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.

```

8265 \renewcommand*{\glsxtrfullformat}[2]{%
8266   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8267   \ifglsxtrinsertinside\else##2\fi
8268 }%
8269 \renewcommand*{\glsxtrfullplformat}[2]{%
8270   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8271   \ifglsxtrinsertinside\else##2\fi
8272 }%
8273 \renewcommand*{\Glsxtrfullformat}[2]{%
8274   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8275   \ifglsxtrinsertinside\else##2\fi
8276 }%
8277 \renewcommand*{\Glsxtrfullplformat}[2]{%
8278   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8279   \ifglsxtrinsertinside\else##2\fi
8280 }%
8281 }

```

long-sc Backward compatibility:

```
8282 @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`.

```

8283 \newabbreviationstyle{long-noshort-sc-desc}%
8284 {%
8285   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%

```

```
8286 }%
8287 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
8288 \renewcommand*\abbrrvpluralsuffix}{\protect\glsxtrscsuffix}%
8289 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8290 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
8291 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8292 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
8293 \renewcommand*\glsxtrsubsequentfmt}[2]{%
8294   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8295   \ifglsxtrinsertinside \else##2\fi
8296 }%
8297 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
8298   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8299   \ifglsxtrinsertinside \else##2\fi
8300 }%
8301 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
8302   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8303   \ifglsxtrinsertinside \else##2\fi
8304 }%
8305 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
8306   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8307   \ifglsxtrinsertinside \else##2\fi
8308 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
8309 \renewcommand*\glsxtrinlinefullformat}[2]{%
8310   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8311   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8312   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8313 }%
8314 \renewcommand*\glsxtrinlinefullplformat}[2]{%
8315   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8316   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8317   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8318 }%
8319 \renewcommand*\Glsxtrinlinefullformat}[2]{%
8320   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8321   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8322   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
8323 }%
8324 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
8325   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8326   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8327   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
8328 }%
```

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.

```
8329 \renewcommand*{\glsxtrfullformat}[2]{%
8330   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8331   \ifglsxtrinsertinside\else##2\fi
8332 }%
8333 \renewcommand*{\glsxtrfullplformat}[2]{%
8334   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8335   \ifglsxtrinsertinside\else##2\fi
8336 }%
8337 \renewcommand*{\Glsxtrfullformat}[2]{%
8338   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8339   \ifglsxtrinsertinside\else##2\fi
8340 }%
8341 \renewcommand*{\Glsxtrfullplformat}[2]{%
8342   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8343   \ifglsxtrinsertinside\else##2\fi
8344 }%
8345 }
```

long-desc-sc Backward compatibility:

```
8346 \glsxtr@deprecated@abbrstyle{long-desc-sc}{long-noshort-sc-desc}
```

short-sc-footnote

```
8347 \newabbreviationstyle{short-sc-footnote}%
8348 {%
8349 \renewcommand*{\CustomAbbreviationFields}{%
8350   name={\glsxtrfootnotename},
8351   sort={\the\glsshorthttok},
8352   description={\the\glslongtok},%
8353   first={\protect\glsfirstabbrvscfont{\the\glsshorthttok}%
8354     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8355       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8356   firstplural={\protect\glsfirstabbrvscfont{\the\glsshorthplttok}%
8357     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8358       {\protect\glsfirstlongfootnotefont{\the\glslongplttok}}},%
8359   plural={\protect\glsabbrvscfont{\the\glsshorthplttok}}}}
```

Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute if it has been set.

```
8360 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8361   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8362   \glssetattribute{\the\glslabeltok}{regular}%
8363 {%
8364   \glssetattribute{\the\glslabeltok}{regular}{false}%
8365 }%
8366 {}%
8367 }%
8368 }%
8369 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
8370 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8371 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
8372 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
8373 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8374 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

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

```
8375 \renewcommand*{\glsxtrfullformat}[2]{%
8376   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8377   \ifglsxtrinsertinside\else##2\fi
8378   \protect\glsxtrabbrvfootnote{##1}%
8379   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8380 }%
8381 \renewcommand*{\glsxtrfullplformat}[2]{%
8382   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8383   \ifglsxtrinsertinside\else##2\fi
8384   \protect\glsxtrabbrvfootnote{##1}%
8385   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8386 }%
8387 \renewcommand*{\Glsxtrfullformat}[2]{%
8388   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8389   \ifglsxtrinsertinside\else##2\fi
8390   \protect\glsxtrabbrvfootnote{##1}%
8391   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8392 }%
8393 \renewcommand*{\Glsxtrfullplformat}[2]{%
8394   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8395   \ifglsxtrinsertinside\else##2\fi
8396   \protect\glsxtrabbrvfootnote{##1}%
8397   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8398 }%
```

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

```
8399 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8400   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8401   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8402   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8403 }%
8404 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8405   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8406   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8407   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8408 }%
8409 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8410   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8411   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8412   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8413 }%
8414 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
```

```

8415     \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8416     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8417     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8418 }%
8419 }

```

`footnote-sc` Backward compatibility:

```
8420 @glsxtr@deprecated@abbrstyle{footnote-sc}{short-sc-footnote}
```

`sc-postfootnote`

```

8421 \newabbreviationstyle{short-sc-postfootnote}%
8422 {%
8423   \renewcommand*{\CustomAbbreviationFields}{%
8424     name={\glsxtrfootnotename},
8425     sort={\the\glsshorttok},
8426     description={\the\glslongtok},%
8427     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
8428     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
8429     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.

```

8430 \renewcommand*{\GlsXtrPostNewAbbreviation}%
8431   \csdef{glsxtrpostlink\glscategorylabel}{%
8432     \glsxtrifwasfirstuse
8433   }%

```

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

```

8434   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8435   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
8436 }%
8437 {}%
8438 }%
8439 \glshasattribute{\the\glslabeltok}{regular}%
8440 {}%
8441   \glssetattribute{\the\glslabeltok}{regular}{false}%
8442 }%
8443 {}%
8444 }%

```

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

```

8445 \renewcommand*{\glsxtrsetupfulldefs}%
8446   \let\glsxtrifwasfirstuse\@secondoftwo
8447 }%
8448 }%
8449 {}%

```

Use `smallcaps` and adjust the plural suffix to revert to upright.

```

8450 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8451 \renewcommand*\glsabbrvfont[1]{\glsabbrvcfont{##1}}%
8452 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvcfont{##1}}%
8453 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8454 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

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

```

8455 \renewcommand*{\glsxtrfullformat}[2]{%
8456   \glsfirstabbrvcfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8457   \ifglsxtrinsertinside\else##2\fi
8458 }%
8459 \renewcommand*{\glsxtrfullplformat}[2]{%
8460   \glsfirstabbrvcfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8461   \ifglsxtrinsertinside\else##2\fi
8462 }%
8463 \renewcommand*{\Glsxtrfullformat}[2]{%
8464   \glsfirstabbrvcfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8465   \ifglsxtrinsertinside\else##2\fi
8466 }%
8467 \renewcommand*{\Glsxtrfullplformat}[2]{%
8468   \glsfirstabbrvcfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8469   \ifglsxtrinsertinside\else##2\fi
8470 }%

```

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

```

8471 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8472   \glsfirstabbrvcfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8473   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8474   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8475 }%
8476 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8477   \glsfirstabbrvcfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8478   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8479   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8480 }%
8481 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8482   \glsfirstabbrvcfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8483   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8484   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8485 }%
8486 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8487   \glsfirstabbrvcfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8488   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8489   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8490 }%
8491 }%

```

`postfootnote-sc` Backward compatibility:

```
8492 @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.

8493 `\newcommand*{\glsxtrsmfont}[1]{\textsmaller{#1}}`

`\glsabbrvsmfont` Added for consistent naming.

8494 `\newcommand*{\glsabbrvsmfont}{\glsxtrsmfont}`

`\sxtrfirstsmfont` Maintained for backward compatibility.

8495 `\newcommand*{\sxtrfirstsmfont}[1]{\glsabbrvsmfont{#1}}`

`\irstabbrvsmfont` Added for consistent naming.

8496 `\newcommand*{\irstabbrvsmfont}{\sxtrfirstsmfont}`

and for the default short form suffix:

`\glsxtrsmsuffix`

8497 `\newcommand*{\glsxtrsmsuffix}{\glsxtrabbrvpluralsuffix}`

`long-short-sm`

8498 `\newabbreviationstyle{long-short-sm}{%`
8499 `}%`
8500 `\renewcommand*{\CustomAbbreviationFields}{%`
8501 `name={\glsxtrlongshortname},`
8502 `sort={\the\glsshorttok},`
8503 `first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%`
8504 `\protect\glsxtrfullsep{\the\glslabeltok}%`
8505 `\glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%`
8506 `firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%`
8507 `\protect\glsxtrfullsep{\the\glslabeltok}%`
8508 `\glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%`
8509 `plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},%`
8510 `description={\the\glslongtok}}%`
8511 `\renewcommand*{\GlsXtrPostNewAbbreviation}{%`
8512 `\glshasattribute{\the\glslabeltok}{regular}%`
8513 `{%`
8514 `\glssetattribute{\the\glslabeltok}{regular}{false}%`
8515 `}%`
8516 `{}}%`
8517 `}%`
8518 `}%`
8519 `{%`
8520 `\renewcommand*{\glsabbrvfont}[1]{\glsabbrvsmfont{##1}}%`
8521 `\renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvsmfont{##1}}%`
8522 `\renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsmsuffix}%`

Use the default long fonts.

```
8523 \renewcommand*\{\glsfirstlongfont\}[1]{\glsfirstlongdefaultfont{##1}}%
8524 \renewcommand*\{\glslongfont\}[1]{\glslongdefaultfont{##1}}%
```

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

```
8525 \renewcommand*\{\glsxtrfullformat\}[2]{%
8526   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8527   \ifglsxtrinsertinside\else##2\fi
8528   \glsxtrfullsep{##1}%
8529   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
8530 }%
8531 \renewcommand*\{\glsxtrfullplformat\}[2]{%
8532   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8533   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8534   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8535 }%
8536 \renewcommand*\{\Glsxtrfullformat\}[2]{%
8537   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8538   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8539   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}}%
8540 }%
8541 \renewcommand*\{\Glsxtrfullplformat\}[2]{%
8542   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8543   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8544   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8545 }%
8546 }
```

g-short-sm-desc

```
8547 \newabbreviationstyle{long-short-sm-desc}{%
8548 }%
8549 \renewcommand*\{\CustomAbbreviationFields\}{%
8550   name={\glsxtrlongshortdescname},%
8551   sort={\glsxtrlongshortdescsort},%
8552   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
8553     \protect\glsxtrfullsep{\the\glslabeltok}%
8554     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
8555   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
8556     \protect\glsxtrfullsep{\the\glslabeltok}%
8557     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
8558   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8559   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}%
8560 }%
```

Unset the regular attribute if it has been set.

```
8561 \renewcommand*\{\GlsXtrPostNewAbbreviation\}{%
8562   \glshasattribute{\the\glslabeltok}{regular}%
8563 }%
8564   \glssetattribute{\the\glslabeltok}{regular}{false}%
8565 }%
```

```

8566     {}%
8567   }%
8568 }%
8569 {%

```

As long-short-sm style:

```

8570 \GlsXtrUseAbbrStyleFmts{long-short-sm}%
8571 }

```

short-sm-long Now the short (long) version

```

8572 \newabbreviationstyle{short-sm-long}{%
8573 {%
8574   \renewcommand*{\CustomAbbreviationFields}{%
8575     name={\glsxtrshortlongname},
8576     sort={\the\glsshorttok},
8577     description={\the\glslongtok},%
8578     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}}%
8579       \protect\glsxtrfullsep{\the\glslabeltok}%
8580       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}},%
8581     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}%
8582       \protect\glsxtrfullsep{\the\glslabeltok}%
8583       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}},%
8584     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

8585   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8586     \glshasattribute{\the\glslabeltok}{regular}%
8587     {%
8588       \glssetattribute{\the\glslabeltok}{regular}{false}%
8589     }%
8590   {}%
8591 }%
8592 }%
8593 {%
8594   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8595   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8596   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmsuffix}%
8597   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8598   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

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

```

8599   \renewcommand*{\glsxtrfullformat}[2]{%
8600     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8601     \ifglsxtrinsertinside\else##2\fi
8602     \glsxtrfullsep{##1}%
8603     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8604   }%
8605   \renewcommand*{\glsxtrfullplformat}[2]{%
8606     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8607     \ifglsxtrinsertinside\else##2\fi

```

```

8608   \glsxtrfullsep{##1}%
8609   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8610 }%
8611 \renewcommand*{\Glsxtrfullformat}[2]{%
8612   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8613   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8614   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8615 }%
8616 \renewcommand*{\Glsxtrfullplformat}[2]{%
8617   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8618   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8619   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8620 }%
8621 }

```

rt-sm-long-desc As before but user provides description

```

8622 \newabbreviationstyle{short-sm-long-desc}%
8623 }%
8624 \renewcommand*{\CustomAbbreviationFields}{%
8625   name={\glsxtrshortlongdescname},
8626   sort={\glsxtrshortlongdescsort},
8627   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
8628     \protect\glsxtrfullsep{\the\glslabeltok}%
8629     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8630   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
8631     \protect\glsxtrfullsep{\the\glslabeltok}%
8632     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8633   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8634   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}%
8635 }%

```

Unset the regular attribute if it has been set.

```

8636 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8637   \glshasattribute{\the\glslabeltok}{regular}%
8638 }%
8639   \glssetattribute{\the\glslabeltok}{regular}{false}%
8640 }%
8641 {}%
8642 }%
8643 }%
8644 }%

```

As short-sm-long style:

```

8645 \GlsXtrUseAbbrStyleFmts{short-sm-long}%
8646 }

```

short-sm

```

8647 \newabbreviationstyle{short-sm}%
8648 }%
8649 \renewcommand*{\CustomAbbreviationFields}{%

```

```

8650     name={\glsxtrshortnolongname},
8651     sort={\the\glsshorttok},
8652     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
8653     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
8654     text={\protect\glsabbrvsmfont{\the\glsshorttok}},
8655     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
8656     description={\the\glslongtok}}%
8657 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8658   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8659 }%
8660 {%
8661   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8662   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8663   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmsuffix}%
8664   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8665   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

8666 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8667   \protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}%
8668   \ifglsxtrinsertinside##2\fi}%
8669   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8670   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8671 }%
8672 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8673   \protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}%
8674   \ifglsxtrinsertinside##2\fi}%
8675   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8676   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8677 }%
8678 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8679   \protect\glsfirstabbrvsmfont{\Glsaccessshort{##1}}%
8680   \ifglsxtrinsertinside##2\fi}%
8681   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8682   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8683 }%
8684 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8685   \protect\glsfirstabbrvsmfont{\Glsaccessshortpl{##1}}%
8686   \ifglsxtrinsertinside##2\fi}%
8687   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8688   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8689 }%

```

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.

```

8690 \renewcommand*{\glsxtrfullformat}[2]{%
8691   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8692   \ifglsxtrinsertinside\else##2\fi
8693 }%

```

```

8694 \renewcommand*{\glsxtrfullplformat}[2]{%
8695   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8696   \ifglsxtrinsertinside\else##2\fi
8697 }%
8698 \renewcommand*{\Glsxtrfullformat}[2]{%
8699   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8700   \ifglsxtrinsertinside\else##2\fi
8701 }%
8702 \renewcommand*{\Glsxtrfullplformat}[2]{%
8703   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8704   \ifglsxtrinsertinside\else##2\fi
8705 }%
8706 }

```

short-sm-nolong

```
8707 \letabbreviationstyle{short-sm-nolong}{short-sm}
```

short-sm-desc

```

8708 \newabbreviationstyle{short-sm-desc}%
8709 {%
8710   \renewcommand*{\CustomAbbreviationFields}{%
8711     name={\glsxtrshortdescname},
8712     sort={\the\glsshorttok},
8713     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
8714     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
8715     text={\protect\glsabbrvsmfont{\the\glsshorttok}},
8716     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
8717     description={\the\glslongtok}}%
8718   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8719     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8720 }%
8721 {%
8722   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8723   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8724   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmsuffix}%
8725   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8726   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

8727 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8728   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8729   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8730   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8731 }%
8732 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8733   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8734   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8735   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8736 }%
8737 \renewcommand*{\Glsxtrinlinefullformat}[2]{%

```

```

8738     \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8739     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8740     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8741 }%
8742 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
8743     \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8744     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8745     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8746 }%

```

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.

```

8747 \renewcommand*\{\glsxtrfullformat}[2]{%
8748     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8749     \ifglsxtrinsertinside\else##2\fi
8750 }%
8751 \renewcommand*\{\glsxtrfullplformat}[2]{%
8752     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8753     \ifglsxtrinsertinside\else##2\fi
8754 }%
8755 \renewcommand*\{\Glsxtrfullformat}[2]{%
8756     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8757     \ifglsxtrinsertinside\else##2\fi
8758 }%
8759 \renewcommand*\{\Glsxtrfullplformat}[2]{%
8760     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8761     \ifglsxtrinsertinside\else##2\fi
8762 }%
8763 }

```

-sm-nolong-desc

```
8764 \letabbreviationstyle{short-sm-nolong-desc}{short-sm-desc}
```

nolong-short-sm

```

8765 \newabbreviationstyle{nolong-short-sm}%
8766 {%
8767     \GlsXtrUseAbbrStyleSetup{short-sm-nolong}%
8768 }%
8769 {%
8770     \GlsXtrUseAbbrStyleFmts{short-sm-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

8771 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
8772     \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}}%
8773     \ifglsxtrinsertinside##2\fi}%
8774 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8775     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8776 }%
8777 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
8778     \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}%

```

```

8779     \ifglsxtrinsertinside##2\fi}%
8780     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8781     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8782 }%
8783 \renewcommand*\Glsxtrinlinefullformat[2]{%
8784     \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}}%
8785     \ifglsxtrinsertinside##2\fi}%
8786     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8787     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8788 }%
8789 \renewcommand*\Glsxtrinlinefullplformat[2]{%
8790     \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
8791     \ifglsxtrinsertinside##2\fi}%
8792     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8793     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8794 }%
8795 }

```

`long-noshort-sm` The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

8796 \newabbreviationstyle{long-noshort-sm}{%
8797 }%
8798 \renewcommand*\CustomAbbreviationFields{%
8799     name={\glsxtrlongnoshortname},
8800     sort={\the\glsshorttok},
8801     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
8802     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
8803     text={\protect\glslongdefaultfont{\the\glslongtok}},
8804     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
8805     description={\the\glslongtok}%
8806 }%
8807 \renewcommand*\GlsXtrPostNewAbbreviation{%
8808     \glssetattribute{\the\glslabeltok}{regular}{true}%
8809 }%
8810 }%
8811 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8812 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8813 \renewcommand*\abbrvpluralsuffix{\protect\glsxtrsmsuffix}%
8814 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8815 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8816 \renewcommand*\glsxtrsubsequentfmt[2]{%
8817     \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8818     \ifglsxtrinsertinside \else##2\fi
8819 }%
8820 \renewcommand*\glsxtrsubsequentplfmt[2]{%
8821     \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8822     \ifglsxtrinsertinside \else##2\fi
8823 }%

```

```

8824 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8825   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8826   \ifglsxtrinsertinside \else##2\fi
8827 }%
8828 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8829   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8830   \ifglsxtrinsertinside \else##2\fi
8831 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8832 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8833   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8834   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8835   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8836 }%
8837 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8838   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8839   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8840   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8841 }%
8842 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8843   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8844   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8845   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8846 }%
8847 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8848   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8849   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8850   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8851 }%

```

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.

```

8852 \renewcommand*{\glsxtrfullformat}[2]{%
8853   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8854   \ifglsxtrinsertinside\else##2\fi
8855 }%
8856 \renewcommand*{\glsxtrfullplformat}[2]{%
8857   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8858   \ifglsxtrinsertinside\else##2\fi
8859 }%
8860 \renewcommand*{\Glsxtrfullformat}[2]{%
8861   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8862   \ifglsxtrinsertinside\else##2\fi
8863 }%
8864 \renewcommand*{\Glsxtrfullplformat}[2]{%
8865   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8866   \ifglsxtrinsertinside\else##2\fi
8867 }%
8868 }

```

long-sm Backward compatibility:

```
8869 \@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.

```
8870 \newabbreviationstyle{long-noshort-sm-desc}%
8871 {%
8872   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
8873 }%
8874 {%
8875   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{\#1}}%
8876   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{\#1}}%
8877   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmsuffix}%
8878   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\#1}}%
8879   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{\#1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
8880 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8881   \glslongdefaultfont{\glsaccesslong{\#1}\ifglsxtrinsertinside##2\fi}%
8882   \ifglsxtrinsertinside \else##2\fi
8883 }%
8884 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8885   \glslongdefaultfont{\glsaccesslongpl{\#1}\ifglsxtrinsertinside##2\fi}%
8886   \ifglsxtrinsertinside \else##2\fi
8887 }%
8888 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8889   \glslongdefaultfont{\Glsaccesslong{\#1}\ifglsxtrinsertinside##2\fi}%
8890   \ifglsxtrinsertinside \else##2\fi
8891 }%
8892 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8893   \glslongdefaultfont{\Glsaccesslongpl{\#1}\ifglsxtrinsertinside##2\fi}%
8894   \ifglsxtrinsertinside \else##2\fi
8895 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
8896 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8897   \glsfirstlongdefaultfont{\glsaccesslong{\#1}\ifglsxtrinsertinside##2\fi}%
8898   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
8899   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{\#1}}}%
8900 }%
8901 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8902   \glsfirstlongdefaultfont{\glsaccesslongpl{\#1}\ifglsxtrinsertinside##2\fi}%
8903   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
8904   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{\#1}}}%
8905 }%
8906 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8907   \glsfirstlongdefaultfont{\Glsaccesslong{\#1}\ifglsxtrinsertinside##2\fi}%
8908   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
8909   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{\#1}}}%
8910 }%
```

```

8911 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8912   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8913   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8914   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8915 }%

```

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.

```

8916 \renewcommand*{\glsxtrfullformat}[2]{%
8917   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8918   \ifglsxtrinsertinside\else##2\fi
8919 }%
8920 \renewcommand*{\glsxtrfullplformat}[2]{%
8921   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8922   \ifglsxtrinsertinside\else##2\fi
8923 }%
8924 \renewcommand*{\Glsxtrfullformat}[2]{%
8925   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8926   \ifglsxtrinsertinside\else##2\fi
8927 }%
8928 \renewcommand*{\Glsxtrfullplformat}[2]{%
8929   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8930   \ifglsxtrinsertinside\else##2\fi
8931 }%
8932 }

```

long-desc-sm Backward compatibility:

```
8933 \glsxtr@deprecated@abbrstyle{long-desc-sm}{long-noshort-sm-desc}
```

short-sm-footnote

```

8934 \newabbreviationstyle{short-sm-footnote}%
8935 {%
8936   \renewcommand*{\CustomAbbreviationFields}{%
8937     name={\glsxtrfootnotename},
8938     sort={\the\glsshorthttok},
8939     description={\the\glslongtok},%
8940     first={\protect\glsfirstabbrvsmfont{\the\glsshorthttok}%
8941       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8942         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8943     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshorthplttok}%
8944       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8945         {\protect\glsfirstlongfootnotefont{\the\glslongplttok}}},%
8946     plural={\protect\glsabbrvsmfont{\the\glsshorthplttok}}}}%

```

Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute if it has been set.

```

8947 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8948   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8949   \glsresetattribute{\the\glslabeltok}{regular}%
8950 }%

```

```

8951     \glssetattribute{\the\glslabeltok}{regular}{false}%
8952   }%
8953   {}%
8954 }%
8955 }%
8956 {%
8957   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8958   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8959   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsnsuffix}%
8960   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8961   \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

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

```

8962   \renewcommand*{\glsxtrfullformat}[2]{%
8963     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8964     \ifglsxtrinsertinside\else##2\fi
8965     \protect\glsxtrabrvfootnote{##1}%
8966     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8967   }%
8968   \renewcommand*{\glsxtrfullplformat}[2]{%
8969     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8970     \ifglsxtrinsertinside\else##2\fi
8971     \protect\glsxtrabrvfootnote{##1}%
8972     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8973   }%
8974   \renewcommand*{\Glsxtrfullformat}[2]{%
8975     \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8976     \ifglsxtrinsertinside\else##2\fi
8977     \protect\glsxtrabrvfootnote{##1}%
8978     {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8979   }%
8980   \renewcommand*{\Glsxtrfullplformat}[2]{%
8981     \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8982     \ifglsxtrinsertinside\else##2\fi
8983     \protect\glsxtrabrvfootnote{##1}%
8984     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8985   }%

```

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

```

8986   \renewcommand*{\glsxtrinlinefullformat}[2]{%
8987     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8988     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8989     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8990   }%
8991   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8992     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8993     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8994     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8995   }%
8996   \renewcommand*{\Glsxtrinlinefullformat}[2]{%

```

```

8997 \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8998 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8999 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9000 }%
9001 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9002 \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9003 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9004 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9005 }%
9006 }

```

footnote-sm Backward compatibility:

```
9007 \@glsxtr@deprecated@abbrstyle{footnote-sm}{short-sm-footnote}
```

sm-postfootnote

```

9008 \newabbreviationstyle{short-sm-postfootnote}%
9009 {%
9010 \renewcommand*{\CustomAbbreviationFields}{%
9011   name={\glsxtrfootnotename},
9012   sort={\the\glsshorttok},
9013   description={\the\glslongtok},%
9014   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
9015   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
9016   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.

```

9017 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9018   \csdef{glsxtrpostlink\glscategorylabel}{%
9019     \glsxtrifwasfirstuse
9020   }%

```

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

```

9021   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9022   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
9023 }%
9024 {}%
9025 }%
9026 \glshasattribute{\the\glslabeltok}{regular}%
9027 {}%
9028   \glssetattribute{\the\glslabeltok}{regular}{false}%
9029 }%
9030 {}%
9031 }%

```

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

```

9032 \renewcommand*{\glsxtrsetupfulldefs}{%
9033   \let\glsxtrifwasfirstuse\secondoftwo

```

```

9034  }%
9035 }%
9036 {%
9037 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
9038 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
9039 \renewcommand*\{\abrvpluralsuffix}{\protect\glsxtrsmssuffix}%
9040 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
9041 \renewcommand*\{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

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

```

9042 \renewcommand*\{\glsxtrfullformat}[2]{%
9043   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9044   \ifglsxtrinsertinside\else##2\fi
9045 }%
9046 \renewcommand*\{\glsxtrfullplformat}[2]{%
9047   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9048   \ifglsxtrinsertinside\else##2\fi
9049 }%
9050 \renewcommand*\{\Glsxtrfullformat}[2]{%
9051   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9052   \ifglsxtrinsertinside\else##2\fi
9053 }%
9054 \renewcommand*\{\Glsxtrfullplformat}[2]{%
9055   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9056   \ifglsxtrinsertinside\else##2\fi
9057 }%

```

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

```

9058 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
9059   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9060   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9061   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9062 }%
9063 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
9064   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9065   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9066   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9067 }%
9068 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
9069   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9070   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9071   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9072 }%
9073 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
9074   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9075   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9076   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9077 }%
9078 }

```

```
postfootnote-sm Backward compatibility:  
9079 \@glsxtr@deprecated@abbrstyle{postfootnote-sm}{short-sm-postfootnote}
```

1.7.5 Predefined Styles (Emphasized)

These styles use \emph for the short form.

```
\glsabbrvemfont  
9080 \newcommand*\glsabbrvemfont[1]{\emph{#1}}%  
  
\firstabbrvemfont  
9081 \newcommand*\glsfirstabbrvemfont[1]{\glsabbrvemfont{#1}}%
```

The default short form suffix:

```
\glsxtremsuffix  
9082 \newcommand*\glsxtremsuffix{\glsxtrabbrvpluralsuffix}
```

```
\firstlongemfont Only used by the “long-em” styles.  
9083 \newcommand*\glsfirstlongemfont[1]{\glslongemfont{#1}}%
```

```
\glslongemfont Only used by the “long-em” styles.  
9084 \newcommand*\glslongemfont[1]{\emph{#1}}%
```

```
\long-short-em The long form is just set in the default long font.  
9085 \newabbreviationstyle{long-short-em}{%  
9086 {  
9087   \renewcommand*\CustomAbbreviationFields{  
9088     name={\glsxtrlongshortname},  
9089     sort={\the\glsshorttok},  
9090     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%  
9091     \protect\glsxtrfullsep{\the\glslabeltok}}%  
9092     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%  
9093     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%  
9094     \protect\glsxtrfullsep{\the\glslabeltok}}%  
9095     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%  
9096     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%  
9097     description={\the\glslongtok}}%  
9098   \renewcommand*\GlsXtrPostNewAbbreviation{}%  
9099     \glshasattribute{\the\glslabeltok}{regular}}%  
9100   {  
9101     \glssetattribute{\the\glslabeltok}{regular}{false}}%  
9102   }%  
9103   {}%  
9104 }%  
9105 }%  
9106 {  
9107   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%  
9108   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%  
9109   \renewcommand*\abbrvpluralsuffix{\protect\glsxtremsuffix}%
```

Use the default long fonts.

```
9110 \renewcommand*\{glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9111 \renewcommand*\{glslongfont}[1]{\glslongdefaultfont{##1}}%
```

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

```
9112 \renewcommand*\{glsxtrfullformat}[2]{%
9113   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9114   \ifglsxtrinsertinside\else##2\fi
9115   \glsxtrfullsep{##1}%
9116   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9117 }%
9118 \renewcommand*\{glsxtrfullplformat}[2]{%
9119   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9120   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9121   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9122 }%
9123 \renewcommand*\{Glsxtrfullformat}[2]{%
9124   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9125   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9126   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9127 }%
9128 \renewcommand*\{Glsxtrfullplformat}[2]{%
9129   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9130   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9131   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9132 }%
9133 }
```

g-short-em-desc

```
9134 \newabbreviationstyle{long-short-em-desc}{%
9135 }%
9136 \renewcommand*\{CustomAbbreviationFields}{%
9137   name={\glsxtrlongshortdescname},%
9138   sort={\glsxtrlongshortdescsort},%
9139   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
9140     \protect\glsxtrfullsep{\the\glslabeltok}%
9141     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
9142   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
9143     \protect\glsxtrfullsep{\the\glslabeltok}%
9144     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
9145   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
9146   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
9147 }%
```

Unset the regular attribute if it has been set.

```
9148 \renewcommand*\{GlsXtrPostNewAbbreviation}{%
9149   \glshasattribute{\the\glslabeltok}{regular}%
9150   {%
9151     \glssetattribute{\the\glslabeltok}{regular}{false}%
9152   }%
```

```
9153     {}%
9154   }%
9155 }%
9156 {%
```

As long-short-em style:

```
9157 \GlsXtrUseAbbrStyleFmts{long-short-em}%
9158 }
```

long-em-short-em

```
9159 \newabbreviationstyle{long-em-short-em}%
9160 {%
```

\glslongemfont is used in the description since \glsdesc doesn't set the style.

```
9161 \renewcommand*{\CustomAbbreviationFields}{%
9162   name={\glsxtrlongshortname},
9163   sort={\the\glsshorttok},
9164   first={\protect\glsfirstlongemfont{\the\glslongtok}%
9165     \protect\glsxtrfullsep{\the\glslabeltok}%
9166     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
9167   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
9168     \protect\glsxtrfullsep{\the\glslabeltok}%
9169     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
9170   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
9171   description={\protect\glslongemfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
9172 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9173   \glshasattribute{\the\glslabeltok}{regular}%
9174   {%
9175     \glssetattribute{\the\glslabeltok}{regular}{false}%
9176   }%
9177   {}%
9178 }%
9179 }%
9180 {%
9181 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9182 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
9183 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9184 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
9185 \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%
```

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

```
9186 \renewcommand*{\glsxtrfullformat}[2]{%
9187   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9188   \ifglsxtrinsertinside\else##2\fi
9189   \glsxtrfullsep{##1}%
9190   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9191 }%
9192 \renewcommand*{\glsxtrfullplformat}[2]{%
```

```

9193   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9194   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9195   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9196 }%
9197 \renewcommand*\Glsxtrfullformat[2]{%
9198   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9199   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9200   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9201 }%
9202 \renewcommand*\Glsxtrfullplformat[2]{%
9203   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9204   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9205   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9206 }%
9207 }

```

m-short-em-desc

```

9208 \newabbreviationstyle{long-em-short-em-desc}{%
9209 {%
9210   \renewcommand*\CustomAbbreviationFields{%
9211     name={\glsxtrlongshortdescname},%
9212     sort={\glsxtrlongshortdescsort},%
9213     first={\protect\glsfirstlongemfont{\the\glslongtok}}%
9214     \protect\glsxtrfullsep{\the\glslabeltok}%
9215     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
9216     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}}%
9217     \protect\glsxtrfullsep{\the\glslabeltok}%
9218     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
9219     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
9220     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
9221 }%

```

Unset the regular attribute if it has been set.

```

9222 \renewcommand*\GlsXtrPostNewAbbreviation{%
9223   \glshasattribute{\the\glslabeltok}{regular}%
9224   {}%
9225   \glssetattribute{\the\glslabeltok}{regular}{false}%
9226   {}%
9227   {}%
9228 }%
9229 }%
9230 {%
9231   \GlsXtrUseAbbrStyleFmts{long-em-short-em}%
9232 }

```

short-em-long Now the short (long) version

```

9233 \newabbreviationstyle{short-em-long}{%
9234 {%
9235   \renewcommand*\CustomAbbreviationFields{%
9236     name={\glsxtrshortlongname},%

```

```

9237     sort={\the\glsshorttok},
9238     description={\the\glslongtok},%
9239     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
9240       \protect\glsxtrfullsep{\the\glslabeltok}%
9241       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9242     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
9243       \protect\glsxtrfullsep{\the\glslabeltok}%
9244       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9245     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}

```

Unset the regular attribute if it has been set.

```

9246 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9247   \glshasattribute{\the\glslabeltok}{regular}%
9248   {%
9249     \glssetattribute{\the\glslabeltok}{regular}{false}%
9250   }%
9251   {}%
9252 }%
9253 }%
9254 {%

```

Mostly as short-long style:

```

9255 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9256 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9257 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
9258 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
9259 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

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

```

9260 \renewcommand*\glsxtrfullformat}[2]{%
9261   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9262   \ifglsxtrinsertinside\else##2\fi
9263   \glsxtrfullsep{##1}%
9264   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%
9265 }%
9266 \renewcommand*\glsxtrfullplformat}[2]{%
9267   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9268   \ifglsxtrinsertinside\else##2\fi
9269   \glsxtrfullsep{##1}%
9270   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%
9271 }%
9272 \renewcommand*\Glsxtrfullformat}[2]{%
9273   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9274   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9275   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%
9276 }%
9277 \renewcommand*\Glsxtrfullplformat}[2]{%
9278   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9279   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9280   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%
9281 }%

```

```
9282 }
```

rt-em-long-desc As before but user provides description

```
9283 \newabbreviationstyle{short-em-long-desc}{%
9284 {%
9285   \renewcommand*{\CustomAbbreviationFields}{%
9286     name={\glsxtrshortlongdescname},
9287     sort={\glsxtrshortlongdescsort},
9288     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%
9289       \protect\glsxtrfullsep{\the\glslabeltok}%
9290       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
9291     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}%
9292       \protect\glsxtrfullsep{\the\glslabeltok}%
9293       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
9294     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
9295     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
9296 }%
```

Unset the regular attribute if it has been set.

```
9297 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9298   \glshasattribute{\the\glslabeltok}{regular}}%
9299 {%
9300   \glssetattribute{\the\glslabeltok}{regular}{false}}%
9301 }%
9302 {%
9303 }%
9304 }%
9305 {%
9306 \GlsXtrUseAbbrStyleFmts{short-em-long}}%
9307 }
```

hort-em-long-em

```
9308 \newabbreviationstyle{short-em-long-em}{%
9309 {%
```

\glslongemfont is used in the description since \glsdesc doesn't set the style.

```
9310 \renewcommand*{\CustomAbbreviationFields}{%
9311   name={\glsxtrshortlongname},
9312   sort={\the\glsshorttok},
9313   description={\protect\glslongemfont{\the\glslongtok}},%
9314   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%
9315     \protect\glsxtrfullsep{\the\glslabeltok}%
9316     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
9317   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}%
9318     \protect\glsxtrfullsep{\the\glslabeltok}%
9319     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
9320   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```

9321 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9322   \glshasattribute{\the\glslabeltok}{regular}{%
9323     {%
9324       \glssetattribute{\the\glslabeltok}{regular}{false}{%
9325     }%
9326   }%
9327 }%
9328 }%
9329 {%
9330 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtremsuffix}{%
9331 \renewcommand*\glsabbrvfont}[1]{\glsabbrvemfont{##1}}{%
9332 \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}{%
9333 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}{%
9334 \renewcommand*\glslongfont}[1]{\glslongemfont{##1}}{%

```

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

```

9335 \renewcommand*\glsxtrfullformat}[2]{%
9336   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}{%
9337     \ifglsxtrinsertinside\else##2\fi
9338     \glsxtrfullsep{##1}%
9339     \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}%
9340   }%
9341 \renewcommand*\glsxtrfullplformat}[2]{%
9342   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}{%
9343     \ifglsxtrinsertinside\else##2\fi
9344     \glsxtrfullsep{##1}%
9345     \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}%
9346   }%
9347 \renewcommand*\Glsxtrfullformat}[2]{%
9348   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}{%
9349     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9350     \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}%
9351   }%
9352 \renewcommand*\Glsxtrfullplformat}[2]{%
9353   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}{%
9354     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9355     \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}%
9356   }%
9357 }

```

em-long-em-desc

```

9358 \newabbreviationstyle{short-em-long-em-desc}{%
9359 }%
9360 \renewcommand*\CustomAbbreviationFields}{%
9361   name={\glsxtrshortlongdescname},%
9362   sort={\glsxtrshortlongdescsort},%
9363   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}{%
9364     \protect\glsxtrfullsep{\the\glslabeltok}}{%
9365     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
9366   firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}{%

```

```

9367     \protect\glsxtrfullsep{\the\glslabeltok}%
9368     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
9369     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
9370     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
9371 }%

```

Unset the regular attribute if it has been set.

```

9372 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9373   \glshasattribute{\the\glslabeltok}{regular}%
9374   {%
9375     \glssetattribute{\the\glslabeltok}{regular}{false}%
9376   }%
9377   {}%
9378 }%
9379 }%
9380 {%
9381   \GlsXtrUseAbbrStyleFmts{short-em-long-em}%
9382 }%

```

short-em

```

9383 \newabbreviationstyle{short-em}%
9384 {%
9385   \renewcommand*\CustomAbbreviationFields}{%
9386     name={\glsxtrshortnolongname},
9387     sort={\the\glsshorttok},
9388     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
9389     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
9390     text={\protect\glsabbrvemfont{\the\glsshorttok}},
9391     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},
9392     description={\the\glslongtok}}%
9393   \renewcommand*\GlsXtrPostNewAbbreviation}{%
9394     \glssetattribute{\the\glslabeltok}{regular}{true}%
9395 }%
9396 {%
9397   \renewcommand*\abrvpluralsuffix}{\protect\glsxtremsuffix}%
9398   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
9399   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{\##1}}%
9400   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\##1}}%
9401   \renewcommand*\glslongfont[1]{\glslongdefaultfont{\##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

9402 \renewcommand*\glsxtrinlinefullformat}[2]{%
9403   \protect\glsfirstabbrvemfont{\glsaccessshort{\##1}}%
9404   \ifglsxtrinsertinside{\fi}%
9405   \ifglsxtrinsertinside{\else{\glsxtrfullsep{\##1}}%
9406   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}}%
9407 }%
9408 \renewcommand*\glsxtrinlinefullplformat}[2]{%
9409   \protect\glsfirstabbrvemfont{\glsaccessshortpl{\##1}}%
9410   \ifglsxtrinsertinside{\fi}%

```

```

9411     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9412     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9413 }%
9414 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9415     \protect\glsfirstabbrvemfont{\Glsaccessshort{##1}%
9416         \ifglsxtrinsertinside##2\fi}%
9417     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9418     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
9419 }%
9420 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9421     \protect\glsfirstabbrvemfont{\Glsaccessshortpl{##1}%
9422         \ifglsxtrinsertinside##2\fi}%
9423     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9424     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
9425 }%

```

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.

```

9426 \renewcommand*{\glsxtrfullformat}[2]{%
9427     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9428     \ifglsxtrinsertinside\else##2\fi
9429 }%
9430 \renewcommand*{\glsxtrfullplformat}[2]{%
9431     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9432     \ifglsxtrinsertinside\else##2\fi
9433 }%
9434 \renewcommand*{\Glsxtrfullformat}[2]{%
9435     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9436     \ifglsxtrinsertinside\else##2\fi
9437 }%
9438 \renewcommand*{\Glsxtrfullplformat}[2]{%
9439     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9440     \ifglsxtrinsertinside\else##2\fi
9441 }%
9442 }

```

short-em-nolong

```
9443 \letabbreviationstyle{short-em-nolong}{short-em}
```

short-em-desc

```

9444 \newabbreviationstyle{short-em-desc}%
9445 {%
9446 \renewcommand*{\CustomAbbreviationFields}{%
9447     name={\glsxtrshortdescname},
9448     sort={\the\glsshorttok},
9449     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
9450     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
9451     text={\protect\glsabbrvemfont{\the\glsshorttok}},
```

```

9452     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},  

9453     description={\the\glslongtok}}%  

9454 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  

9455   \glssetattribute{\glslabeltok}{regular}{true}}%  

9456 }%  

9457 {  

9458 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%  

9459 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%  

9460 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%  

9461 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%  

9462 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

9463 \renewcommand*{\glsxtrinlinefullformat}[2]{%  

9464   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

9465   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

9466   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%  

9467 }%  

9468 \renewcommand*{\glsxtrinlinefullplformat}[2]{%  

9469   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

9470   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

9471   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%  

9472 }%  

9473 \renewcommand*{\Glsxtrinlinefullformat}[2]{%  

9474   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

9475   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

9476   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%  

9477 }%  

9478 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%  

9479   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

9480   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

9481   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%  

9482 }%

```

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.

```

9483 \renewcommand*{\glsxtrfullformat}[2]{%  

9484   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

9485   \ifglsxtrinsertinside\else##2\fi  

9486 }%  

9487 \renewcommand*{\glsxtrfullplformat}[2]{%  

9488   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

9489   \ifglsxtrinsertinside\else##2\fi  

9490 }%  

9491 \renewcommand*{\Glsxtrfullformat}[2]{%  

9492   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

9493   \ifglsxtrinsertinside\else##2\fi  

9494 }%  

9495 \renewcommand*{\Glsxtrfullplformat}[2]{%  

9496   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%

```

```

9497     \ifglsxtrinsertinside\else##2\fi
9498 }%
9499 }

-em-nolong-desc
9500 \letabbreviationstyle{short-em-nolong-desc}{short-em-desc}

```

nolong-short-em

```

9501 \newabbreviationstyle{nolong-short-em}%
9502 {%
9503   \GlsXtrUseAbbrStyleSetup{short-em-nolong}%
9504 }%
9505 {%
9506   \GlsXtrUseAbbrStyleFmts{short-em-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

9507 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
9508   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
9509     \ifglsxtrinsertinside##2\fi}%
9510   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9511   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9512 }%
9513 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
9514   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
9515     \ifglsxtrinsertinside##2\fi}%
9516   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9517   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9518 }%
9519 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
9520   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
9521     \ifglsxtrinsertinside##2\fi}%
9522   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9523   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9524 }%
9525 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
9526   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
9527     \ifglsxtrinsertinside##2\fi}%
9528   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9529   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9530 }%
9531 }

```

long-noshort-em

The short form is explicitly invoked through commands like `\glsshort`.

```

9532 \newabbreviationstyle{long-noshort-em}%
9533 {%
9534   \renewcommand*\{\CustomAbbreviationFields}{%
9535     name={\glsxtrlongnoshortname},
9536     sort={\the\glsshorttok},
9537     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},

```

```

9538     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},  

9539     text={\protect\glslongdefaultfont{\the\glslongtok}},  

9540     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%  

9541     description={\the\glslongtok}%
9542 }%
9543 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9544   \glssetattribute{\the\glslabeltok}{regular}{true}%
9545 }%
9546 {%
9547   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9548   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9549   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9550   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9551   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9552 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9553   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9554   \ifglsxtrinsertinside \else##2\fi
9555 }%
9556 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9557   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9558   \ifglsxtrinsertinside \else##2\fi
9559 }%
9560 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9561   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9562   \ifglsxtrinsertinside \else##2\fi
9563 }%
9564 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9565   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9566   \ifglsxtrinsertinside \else##2\fi
9567 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9568 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9569   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9570   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9571   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9572 }%
9573 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9574   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9575   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9576   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9577 }%
9578 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9579   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9580   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9581   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9582 }%
9583 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%

```

```

9584   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9585     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9586     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9587 }%

```

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.

```

9588 \renewcommand*\glsxtrfullformat[2]{%
9589   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9590   \ifglsxtrinsertinside\else##2\fi
9591 }%
9592 \renewcommand*\glsxtrfullplformat[2]{%
9593   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9594   \ifglsxtrinsertinside\else##2\fi
9595 }%
9596 \renewcommand*\Glsxtrfullformat[2]{%
9597   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9598   \ifglsxtrinsertinside\else##2\fi
9599 }%
9600 \renewcommand*\Glsxtrfullplformat[2]{%
9601   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9602   \ifglsxtrinsertinside\else##2\fi
9603 }%
9604 }

```

`long-em` Backward compatibility:

```
9605 @glsxtr@deprecated@abbrstyle{long-em}{long-noshort-em}
```

`g-em-noshort-em` The short form is explicitly invoked through commands like `\glsshort`.

```

9606 \newabbreviationstyle{long-em-noshort-em}%
9607 {%
9608   \renewcommand*\CustomAbbreviationFields{%
9609     name={\glsxtrlongnoshortname},
9610     sort={\the\glsshorttok},
9611     first={\protect\glsfirstlongemfont{\the\glslongtok}},
9612     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
9613     text={\protect\glslongemfont{\the\glslongtok}},
9614     plural={\protect\glslongemfont{\the\glslongpltok}},%
9615     description={\protect\glslongemfont{\the\glslongtok}}%
9616   }%
9617   \renewcommand*\GlsXtrPostNewAbbreviation{%
9618     \glssetattribute{\the\glslabeltok}{regular}{true}%
9619   }%
9620 }%
9621   \renewcommand*\abbrvpluralsuffix{\protect\glsxtremsuffix}%
9622   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9623   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
9624   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongemfont{##1}}%
9625   \renewcommand*\glslongfont[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```
9626 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9627   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9628   \ifglsxtrinsertinside \else##2\fi
9629 }%
9630 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9631   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9632   \ifglsxtrinsertinside \else##2\fi
9633 }%
9634 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9635   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9636   \ifglsxtrinsertinside \else##2\fi
9637 }%
9638 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9639   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9640   \ifglsxtrinsertinside \else##2\fi
9641 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9642 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9643   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9644   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9645   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9646 }%
9647 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9648   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9649   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9650   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9651 }%
9652 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9653   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9654   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9655   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9656 }%
9657 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9658   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9659   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9660   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9661 }%
```

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.

```
9662 \renewcommand*{\glsxtrfullformat}[2]{%
9663   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9664   \ifglsxtrinsertinside\else##2\fi
9665 }%
9666 \renewcommand*{\glsxtrfullplformat}[2]{%
9667   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9668   \ifglsxtrinsertinside\else##2\fi
9669 }%
```

```

9670 \renewcommand*{\Glsxtrfullformat}[2]{%
9671   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9672   \ifglsxtrinsertinside\else##2\fi
9673 }%
9674 \renewcommand*{\Glsxtrfullplformat}[2]{%
9675   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9676   \ifglsxtrinsertinside\else##2\fi
9677 }%
9678 }

```

`oshort-em-noreg` Like `long-em-noshort-em` but doesn't set the `regular` attribute.

```

9679 \newabbreviationstyle{long-em-noshort-em-noreg}{%
9680 {%
9681   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em}{%

```

Unset the `regular` attribute if it has been set.

```

9682 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9683   \glshasattribute{\the\glslabeltok}{regular}{%
9684   }%
9685   \glssetattribute{\the\glslabeltok}{regular}{false}{%
9686   }%
9687   {}{%
9688 }{%
9689 }{%
9690 }{%
9691   \GlsXtrUseAbbrStyleFmts{long-em-noshort-em}{%
9692 }

```

`noshort-em-desc` The emphasized font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

9693 \newabbreviationstyle{long-noshort-em-desc}{%
9694 {%
9695   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}{%
9696 }{%
9697 }{%
9698 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}{%
9699 \renewcommand*{\glsabbrvfont[1]}{\glsabbrvemfont{##1}}{%
9700 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}{%
9701 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}{%
9702 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}{%

```

The format for subsequent use (not used when the `regular` attribute is set).

```

9703 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9704   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}{%
9705   \ifglsxtrinsertinside \else##2\fi
9706 }{%
9707 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9708   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}{%
9709   \ifglsxtrinsertinside \else##2\fi
9710 }{%

```

```

9711 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
9712   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9713   \ifglsxtrinsertinside \else##2\fi
9714 }%
9715 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
9716   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9717   \ifglsxtrinsertinside \else##2\fi
9718 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9719 \renewcommand*\glsxtrinlinefullformat}[2]{%
9720   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9721   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9722   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9723 }%
9724 \renewcommand*\glsxtrinlinefullplformat}[2]{%
9725   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9726   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9727   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9728 }%
9729 \renewcommand*\Glsxtrinlinefullformat}[2]{%
9730   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9731   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9732   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9733 }%
9734 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
9735   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9736   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9737   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9738 }%

```

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.

```

9739 \renewcommand*\glsxtrfullformat}[2]{%
9740   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9741   \ifglsxtrinsertinside\else##2\fi
9742 }%
9743 \renewcommand*\glsxtrfullplformat}[2]{%
9744   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9745   \ifglsxtrinsertinside\else##2\fi
9746 }%
9747 \renewcommand*\Glsxtrfullformat}[2]{%
9748   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9749   \ifglsxtrinsertinside\else##2\fi
9750 }%
9751 \renewcommand*\Glsxtrfullplformat}[2]{%
9752   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9753   \ifglsxtrinsertinside\else##2\fi
9754 }%
9755 }

```

long-desc-em Backward compatibility:

```
9756 \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.

```
9757 \newabbreviationstyle{long-em-noshort-em-desc}%
9758 {%
9759   \renewcommand*{\CustomAbbreviationFields}{%
9760     name={\glsxtrlongnoshortdescname},
9761     sort={\the\glslongtok},
9762     first={\protect\glsfirstlongemfont{\the\glslongtok}},
9763     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
9764     text={\glslongemfont{\the\glslongtok}},
9765     plural={\glslongemfont{\the\glslongpltok}}%
9766   }%
9767   \renewcommand*{\GlsXtrPostNewAbbreviation}%
9768     {\glssetattribute{\the\glslabeltok}{regular}{true}}%
9769 }%
9770 {%
9771   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9772   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
9773   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9774   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
9775   \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
9776 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9777   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9778   \ifglsxtrinsertinside \else##2\fi
9779 }%
9780 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9781   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9782   \ifglsxtrinsertinside \else##2\fi
9783 }%
9784 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9785   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9786   \ifglsxtrinsertinside \else##2\fi
9787 }%
9788 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9789   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9790   \ifglsxtrinsertinside \else##2\fi
9791 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9792 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9793   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9794   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9795   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9796 }%
9797 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
```

```

9798   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9799   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9800   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9801 }%
9802 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9803   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9804   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9805   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9806 }%
9807 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9808   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9809   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9810   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9811 }%

```

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.

```

9812 \renewcommand*{\glsxtrfullformat}[2]{%
9813   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9814   \ifglsxtrinsertinside\else##2\fi
9815 }%
9816 \renewcommand*{\glsxtrfullplformat}[2]{%
9817   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9818   \ifglsxtrinsertinside\else##2\fi
9819 }%
9820 \renewcommand*{\Glsxtrfullformat}[2]{%
9821   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9822   \ifglsxtrinsertinside\else##2\fi
9823 }%
9824 \renewcommand*{\Glsxtrfullplformat}[2]{%
9825   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9826   \ifglsxtrinsertinside\else##2\fi
9827 }%
9828 }

```

t-em-desc-noreg Like long-em-noshort-em-desc but doesn't set the regular attribute.

```

9829 \newabbreviationstyle{long-em-noshort-em-desc-noreg}{%
9830 {%
9831   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em-desc}%

```

Unset the regular attribute if it has been set.

```

9832 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9833   \glshasattribute{\the\glslabeltok}{regular}%
9834   {%
9835     \glssetattribute{\the\glslabeltok}{regular}{false}%
9836   }%
9837   {}%
9838 }%
9839 }%
9840 {%

```

```

9841 \GlsXtrUseAbbrStyleFmts{long-em-noshort-em-desc}%
9842 }

ort-em-footnote
9843 \newabbreviationstyle{short-em-footnote}{%
9844 {%
9845 \renewcommand*{\CustomAbbreviationFields}{%
9846 name={\glsxtrfootnotename},
9847 sort={\the\glsshorttok},
9848 description={\the\glslongtok},%
9849 first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
9850 \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9851 {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9852 firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
9853 \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9854 {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9855 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.
9856 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9857 \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9858 \glshasattribute{\the\glslabeltok}{regular}%
9859 {%
9860 \glssetattribute{\the\glslabeltok}{regular}{false}%
9861 }%
9862 {}%
9863 }%
9864 }%
9865 {%
9866 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9867 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
9868 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{\##1}}%
9869 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{\##1}}%
9870 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{\##1}}%


The full format displays the short form followed by the long form as a footnote.
9871 \renewcommand*{\glsxtrfullformat}[2]{%
9872 \glsfirstabbrvemfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
9873 \ifglsxtrinsertinside\else##2\fi
9874 \protect\glsxtrabbrvfootnote{\##1}%
9875 {\glsfirstlongfootnotefont{\glsaccesslong{\##1}}}%
9876 }%
9877 \renewcommand*{\glsxtrfullplformat}[2]{%
9878 \glsfirstabbrvemfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside##2\fi}%
9879 \ifglsxtrinsertinside\else##2\fi
9880 \protect\glsxtrabbrvfootnote{\##1}%
9881 {\glsfirstlongfootnotefont{\glsaccesslongpl{\##1}}}%
9882 }%
9883 \renewcommand*{\Glsxtrfullformat}[2]{%

```

```

9884 \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9885 \ifglsxtrinsertinside\else##2\fi
9886 \protect\glsxtrabbrvfootnote{##1}%
9887 {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9888 }%
9889 \renewcommand*{\Glsxtrfullplformat}[2]{%
9890 \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9891 \ifglsxtrinsertinside\else##2\fi
9892 \protect\glsxtrabbrvfootnote{##1}%
9893 {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9894 }%

```

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

```

9895 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9896 \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9897 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9898 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9899 }%
9900 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9901 \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9902 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9903 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9904 }%
9905 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9906 \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9907 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9908 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9909 }%
9910 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9911 \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9912 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9913 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9914 }%
9915 }

```

footnote-em Backward compatibility:

```
9916 @glsxtr@deprecated@abbrstyle{footnote-em}{short-em-footnote}
```

em-postfootnote

```

9917 \newabbreviationstyle{short-em-postfootnote}%
9918 {%
9919 \renewcommand*{\CustomAbbreviationFields}{%
9920 name={\glsxtrfootnotename},
9921 sort={\the\glsshorttok},
9922 description={\the\glslongtok},%
9923 first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
9924 firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
9925 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.

```
9926 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9927   \csdef{glsxtrpostlink\glscategorylabel}{%
9928     \glsxtrifwasfirstuse
9929   }%
```

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

```
9930   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9931   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
9932 }%
9933 {}%
9934 }%
9935 \glshasattribute{\the\glslabeltok}{regular}%
9936 {}%
9937   \glssetattribute{\the\glslabeltok}{regular}{false}%
9938 }%
9939 {}%
9940 }%
```

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

```
9941 \renewcommand*{\glsxtrsetupfulldefs}{%
9942   \let\glsxtrifwasfirstuse\@secondoftwo
9943 }%
9944 }%
9945 {}%
9946 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9947 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
9948 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9949 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
9950 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

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

```
9951 \renewcommand*{\glsxtrfullformat}[2]{%
9952   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9953   \ifglsxtrinsertinside\else##2\fi
9954 }%
9955 \renewcommand*{\glsxtrfullplformat}[2]{%
9956   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9957   \ifglsxtrinsertinside\else##2\fi
9958 }%
9959 \renewcommand*{\GlsXtrfullformat}[2]{%
9960   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9961   \ifglsxtrinsertinside\else##2\fi
9962 }%
9963 \renewcommand*{\Glsxtrfullplformat}[2]{%
9964   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9965   \ifglsxtrinsertinside\else##2\fi
```

```

9966 }%
The first use full form and the inline full form use the short (long) style.
9967 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9968   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9969   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9970   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9971 }%
9972 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9973   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9974   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9975   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9976 }%
9977 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9978   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9979   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9980   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9981 }%
9982 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9983   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9984   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9985   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9986 }%
9987 }

```

`postfootnote-em` Backward compatibility:

```
9988 \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.

```
9989 \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.

```

9990 \ifdef\glscurrentfieldvalue
9991 {
9992   \newcommand*{\glsxtruserparen}[2]{%
9993     \glsxtrfullsep{##2}%
9994     \glsxtrparen
9995     {##1\ifglshasfield{\glsxtruserfield}{##2}{, \glscurrentfieldvalue}{}%}
9996   }
9997 }
9998 {
9999   \newcommand*{\glsxtruserparen}[2]{%

```

```

10000 \glsxtrfullsep{#2}%
10001 \glsxtrparen
10002 {#1\ifglshasfield{\glsxtruserfield}{#2}{, \glo@thisvalue}{}}
10003 }
10004 }
```

Font used for short form:

```
lsabbrvuserfont
10005 \newcommand*{\glsabbrvuserfont}[1]{\glsabbrvdefaultfont{#1}}
```

Font used for short form on first use:

```
stabbrvuserfont
10006 \newcommand*{\glsfirststabbrvuserfont}[1]{\glsabbrvuserfont{#1}}
```

Font used for long form:

```
glslonguserfont
10007 \newcommand*{\glslonguserfont}[1]{\glslongdefaultfont{#1}}
```

Font used for long form on first use:

```
rstlonguserfont
10008 \newcommand*{\glsfirstlonguserfont}[1]{\glslonguserfont{#1}}
```

The default short form suffix:

```
lsxtrusersuffix
10009 \newcommand*{\glsxtrusersuffix}{\glsxtrabbrvpluralsuffix}
```

Description encapsulator.

userdescription The first argument is the description. The second argument is the label.
10010 \newcommand*{\glsuserdescription}[2]{\glslonguserfont{#1}}

```
long-short-user
10011 \newabbreviationstyle{long-short-user}%
10012 {%
10013 \renewcommand*{\CustomAbbreviationFields}{%
10014 name={\glsxtrlongshortname},
10015 sort={\the\glsshorttok},
10016 first={\protect\glsfirstlonguserfont{\the\glslongtok}%
10017 \protect\glsxtruserparen{\protect\glsfirststabbrvuserfont{\the\glsshorttok}}%
10018 {\the\glslabeltok}},%
10019 firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}%
10020 \protect\glsxtruserparen
10021 {\protect\glsfirststabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%
10022 plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
10023 description={\protect\glsuserdescription{\the\glslongtok}%
10024 {\the\glslabeltok}}}%
```

Unset the regular attribute if it has been set.

```
10025 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10026   \glshasattribute{\the\glslabeltok}{regular}%
10027   {%
10028     \glssetattribute{\the\glslabeltok}{regular}{false}%
10029   }%
10030   {}%
10031 }%
10032 }%
10033 {%
```

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

```
10034 \renewcommand*\abbrvpluralsuffix}{\glsxtrusersuffix}%
10035 \renewcommand*\glsabrvfont}[1]{\glsabrvuserfont{##1}}%
10036 \renewcommand*\glsfirstabrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
10037 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
10038 \renewcommand*\glslongfont}[1]{\glslonguserfont{##1}}%
```

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

```
10039 \renewcommand*\glsxtrfullformat}[2]{%
10040   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10041   \ifglsxtrinsertinside\else##2\fi
10042   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
10043 }%
10044 \renewcommand*\glsxtrfullplformat}[2]{%
10045   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10046   \ifglsxtrinsertinside\else##2\fi
10047   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
10048 }%
10049 \renewcommand*\Glsxtrfullformat}[2]{%
10050   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10051   \ifglsxtrinsertinside\else##2\fi
10052   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
10053 }%
10054 \renewcommand*\Glsxtrfullplformat}[2]{%
10055   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10056   \ifglsxtrinsertinside\else##2\fi
10057   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
10058 }%
10059 }
```

-postshort-user Like long-short-user but defers the parenthetical matter to after the link.

```
10060 \newabbreviationstyle{long-postshort-user}%
10061 {%
10062   \renewcommand*\CustomAbbreviationFields}{%
10063     name={\glsxtrlongshortname},
10064     sort={\the\glsshorttok},
10065     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
10066     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
```

```

10067     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
10068     description={\protect\glsuserdescription{\the\glslongtok}%
10069       {\the\glslabeltok}}}%
10070 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10071   \csdef{glsxtrpostlink\glscategorylabel}{%
10072     \glsxtrifwasfirstuse
10073     {%
10074       \glsxtruserparen
10075         {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}%
10076         {\glslabel}%
10077     }%
10078     {}%
10079   }%
10080   \glshasattribute{\the\glslabeltok}{regular}%
10081   {%
10082     \glssetattribute{\the\glslabeltok}{regular}{false}%
10083   }%
10084   {}%
10085 }%
10086 }%
10087 {%

```

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

```

10088 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
10089 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{\##1}}%
10090 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{\##1}}%
10091 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{\##1}}%
10092 \renewcommand*{\glslongfont}[1]{\glslonguserfont{\##1}}%

```

First use full form:

```

10093 \renewcommand*{\glsxtrfullformat}[2]{%
10094   \glsfirstlonguserfont{\glsaccesslong{\##1}\ifglsxtrinsertinside##2\fi}%
10095   \ifglsxtrinsertinside\else##2\fi
10096 }%
10097 \renewcommand*{\glsxtrfullplformat}[2]{%
10098   \glsfirstlonguserfont{\glsaccesslongpl{\##1}\ifglsxtrinsertinside##2\fi}%
10099   \ifglsxtrinsertinside\else##2\fi
10100 }%
10101 \renewcommand*{\Glsxtrfullformat}[2]{%
10102   \glsfirstlonguserfont{\Glsaccesslong{\##1}\ifglsxtrinsertinside##2\fi}%
10103   \ifglsxtrinsertinside\else##2\fi
10104 }%
10105 \renewcommand*{\Glsxtrfullplformat}[2]{%
10106   \glsfirstlonguserfont{\Glsaccesslongpl{\##1}\ifglsxtrinsertinside##2\fi}%
10107   \ifglsxtrinsertinside\else##2\fi
10108 }%

```

In-line format:

```

10109 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10110   \glsfirstlonguserfont{\glsaccesslong{\##1}\ifglsxtrinsertinside##2\fi}%

```

```

10111 \ifglsxtrinsertinside\else##2\fi
10112 \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
10113 }%
10114 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10115   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10116   \ifglsxtrinsertinside\else##2\fi
10117   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
10118 }%
10119 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10120   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10121   \ifglsxtrinsertinside\else##2\fi
10122   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
10123 }%
10124 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10125   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10126   \ifglsxtrinsertinside\else##2\fi
10127   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
10128 }%
10129 }

```

ortuserdescname

```

10130 \newcommand*{\glsxtrlongshortuserdescname}{%
10131   \protect\glslonguserfont{\the\glslongtok}%
10132   \protect\glsxtruserparen
10133   {\protect\glsabbrvuserfont{\the\glsshorttok}}{\the\glslabeltok}%
10134 }

```

short-user-desc Like **long-postshort-user** but the user supplies the description.

```

10135 \newabbreviationstyle{long-postshort-user-desc}{%
10136 }%
10137 \renewcommand*{\CustomAbbreviationFields}{%
10138   name={\glsxtrlongshortuserdescname},
10139   sort={\the\glslongtok},
10140   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
10141   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
10142   text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
10143   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
10144 }%
10145 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10146   \csdef{glsxtrpostlink\glscategorylabel}{%
10147     \glsxtrifwasfirstuse
10148     {%
10149       \glsxtruserparen
10150       {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}}%
10151       {\glslabel}%
10152     }%
10153   {}%
10154 }

```

```

10155     \glshasattribute{\the\glslabeltok}{regular}%
10156     {%
10157         \glssetattribute{\the\glslabeltok}{regular}{false}%
10158     }%
10159     {}%
10160 }%
10161 }%
10162 {%
10163     \GlsXtrUseAbbrStyleFmts{long-postshort-user}%
10164 }

```

`t-postlong-user` Like short-long-user but defers the parenthetical matter to after the link.

```

10165 \newabbreviationstyle{short-postlong-user}%
10166 {%
10167     \renewcommand*{\CustomAbbreviationFields}{%
10168         name={\glsxtrshortlongname},
10169         sort={\the\glsshorttok},
10170         first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
10171         firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
10172         plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
10173         description={\protect\glsuserdescription{\the\glslongtok}%
10174             {\the\glslabeltok}}}%
10175     \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10176         \csdef{glsxtrpostlink}{\glscategorylabel}{%
10177             \glsxtrifwasfirstuse
10178             {%
10179                 \glsxtruserparen
10180                 {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}%
10181                 {\glslabel}
10182             }%
10183             {}%
10184         }%
10185         \glshasattribute{\the\glslabeltok}{regular}%
10186         {%
10187             \glssetattribute{\the\glslabeltok}{regular}{false}%
10188         }%
10189         {}%
10190     }%
10191 }%
10192 {%

```

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

```

10193 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
10194 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{\##1}}%
10195 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{\##1}}%
10196 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{\##1}}%
10197 \renewcommand*{\glslongfont}[1]{\glslonguserfont{\##1}}%

```

First use full form:

```

10198 \renewcommand*{\glsxtrfullformat}[2]{%
10199   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10200   \ifglsxtrinsertinside\else##2\fi
10201 }%
10202 \renewcommand*{\glsxtrfullplformat}[2]{%
10203   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10204   \ifglsxtrinsertinside\else##2\fi
10205 }%
10206 \renewcommand*{\Glsxtrfullformat}[2]{%
10207   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10208   \ifglsxtrinsertinside\else##2\fi
10209 }%
10210 \renewcommand*{\Glsxtrfullplformat}[2]{%
10211   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10212   \ifglsxtrinsertinside\else##2\fi
10213 }%

```

In-line format:

```

10214 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10215   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10216   \ifglsxtrinsertinside\else##2\fi
10217   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
10218 }%
10219 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10220   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10221   \ifglsxtrinsertinside\else##2\fi
10222   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
10223 }%
10224 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10225   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10226   \ifglsxtrinsertinside\else##2\fi
10227   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
10228 }%
10229 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10230   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10231   \ifglsxtrinsertinside\else##2\fi
10232   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
10233 }%
10234 }

```

onguserdescname

```

10235 \newcommand*{\glsxtrshortlonguserdescname}{%
10236   \protect\glsabbrvuserfont{\the\glsshorttok}%
10237 \protect\glsxtruserparen
10238   {\protect\glslonguserfont{\the\glslongpltok}}%
10239   {\the\glslabeltok}%
10240 }

```

tlong-user-desc Like short-postlong-user but leaves the user to specify the description.

```

10241 \newabbreviationstyle{short-postlong-user-desc}%
10242 {%
10243   \renewcommand*{\CustomAbbreviationFields}{%
10244     name={\glsxtrshortlonguserdescname},
10245     sort={\the\glsshorttok},
10246     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
10247     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
10248     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
10249     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
10250 }%
10251 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10252   \csdef{glsxtrpostlink}{\glscategorylabel}{%
10253     \glsxtrifwasfirstuse
10254   }%
10255   \glsxtruserparen
10256     {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}%
10257     {\glslabel}%
10258   }%
10259   {}%
10260 }%
10261 \glshasattribute{\the\glslabeltok}{regular}%
10262 {}%
10263   \glssetattribute{\the\glslabeltok}{regular}{false}%
10264 }%
10265   {}%
10266 }%
10267 }%
10268 {}%
10269 \GlsXtrUseAbbrStyleFmts{short-postlong-user}%
10270 }

```

short-user-desc

```

10271 \newabbreviationstyle{long-short-user-desc}%
10272 {%
10273   \renewcommand*{\CustomAbbreviationFields}{%
10274     name={\glsxtrlongshortuserdescname},
10275     sort={\glsxtrlongshortdescsort},%
10276     first={\protect\glsfirstlonguserfont{\the\glslongtok}}%
10277       \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
10278       {\the\glslabeltok}},%
10279     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}}%
10280       \protect\glsxtruserparen
10281       {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%
10282     text={\protect\glsabbrvfont{\the\glsshorttok}},%
10283     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
10284 }%

```

Unset the regular attribute if it has been set.

```

10285 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10286   \glshasattribute{\the\glslabeltok}{regular}%
10287   {%
10288     \glssetattribute{\the\glslabeltok}{regular}{false}%
10289   }%
10290   {}%
10291 }%
10292 }%
10293 {}%
10294 \GlsXtrUseAbbrStyleFmts{long-short-user}%
10295 }

```

`short-long-user`

```

10296 \newabbreviationstyle{short-long-user}%
10297 {}%
  \glslonguserfont is used in the description since \glsdesc doesn't set the style. (Now in
  \glsuserdescription.)%
10298 \renewcommand*{\CustomAbbreviationFields}{%
10299   name={\glsxtrshortlongname},
10300   sort={\the\glsshorttok},
10301   description={\protect\glsuserdescription{\the\glslongtok}%
10302     {\the\glslabeltok}},%
10303   first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
10304     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
10305     {\the\glslabeltok}},%
10306   firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
10307     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
10308     {\the\glslabeltok}},%
10309   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

10310 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10311   \glshasattribute{\the\glslabeltok}{regular}%
10312   {%
10313     \glssetattribute{\the\glslabeltok}{regular}{false}%
10314   }%
10315   {}%
10316 }%
10317 }%
10318 {}%

```

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

```

10319 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
10320 \renewcommand*\glsabbrvfont[1]{\glsabbrvuserfont{\#\#1}}%
10321 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{\#\#1}}%
10322 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{\#\#1}}%
10323 \renewcommand*{\glslongfont}[1]{\glslonguserfont{\#\#1}}%

```

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

```
10324 \renewcommand*{\glsxtrfullformat}[2]{%
10325   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10326   \ifglsxtrinsertinside\else##2\fi
10327   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
10328 }%
10329 \renewcommand*{\glsxtrfullplformat}[2]{%
10330   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10331   \ifglsxtrinsertinside\else##2\fi
10332   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
10333 }%
10334 \renewcommand*{\Glsxtrfullformat}[2]{%
10335   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
10336   \ifglsxtrinsertinside\else##2\fi
10337   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
10338 }%
10339 \renewcommand*{\Glsxtrfullplformat}[2]{%
10340   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
10341   \ifglsxtrinsertinside\else##2\fi
10342   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
10343 }%
10344 }
```

-long-user-desc

```
10345 \newabbreviationstyle{short-long-user-desc}%
10346 {%
10347 \renewcommand*{\CustomAbbreviationFields}{%
10348   name={\glsxtrshortlonguserdescname},
10349   sort={\glsxtrshortlongdescsort},%
10350   first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
10351     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
10352       {\the\glslabeltok}},%
10353   firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
10354     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
10355       {\the\glslabeltok}},%
10356   text={\protect\glsabbrvfont{\the\glsshorttok}},%
10357   plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
10358 }%
```

Unset the regular attribute if it has been set.

```
10359 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10360   \glshasattribute{\the\glslabeltok}{regular}%
10361   {%
10362     \glssetattribute{\the\glslabeltok}{regular}{false}%
10363   }%
10364   {}%
10365 }%
10366 }%
10367 {%
```

```

10368 \GlsXtrUseAbbrStyleFmts{short-long-user}%
10369 }

```

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.

```

10370 \newrobustcmd*\{\glsxtrifhyphenstart\}[3] {%
10371   \ifx\glsinsert#1\relax
10372     \expandafter\@glsxtrifhyphenstart#1\relax\relax
10373     \end\@glsxtrifhyphenstart{#2}{#3}%
10374   \else
10375     \glsxtrifhyphenstart#1\relax\relax\end\glsxtrifhyphenstart{#2}{#3}%
10376   \fi
10377 }

```

`trifhyphenstart`

```

10378 \def\@glsxtrifhyphenstart#1#2\end\glsxtrifhyphenstart#3#4{%
10379   \ifx-#1\relax#3\else #4\fi
10380 }

```

`rlonghyphenshort`

`\glsxtrlonghyphenshort{\langle label \rangle}{\langle long \rangle}{\langle short \rangle}{\langle insert \rangle}`

The `\langle long \rangle` and `\langle short \rangle` arguments may be the plural form. The `\langle long \rangle` argument may also be the first letter uppercase form.

```
10381 \newcommand*\{\glsxtrlonghyphenshort\}[4] {%
```

Grouping is needed to localise the redefinitions.

```
10382 {%
```

If `\langle insert \rangle` 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 `\langle insert \rangle` doesn't start with a hyphen.

```

10383   \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
10384   \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#4}\fi}%
10385   \ifglsxtrinsertinside\else{#4}\fi
10386   \glsxtrfullsep{#1}%
10387   \glsxtrparen{\glsfirstabbrvhyphenfont{#3\ifglsxtrinsertinside{#4}\fi}%
10388   \ifglsxtrinsertinside\else{#4}\fi}%
10389 }%
10390 }

```

```

abbrvhypenfont
10391 \newcommand*{\glsabbrvhypenfont}{\glsabbrvdefaultfont}%

abbrvhypenfont
10392 \newcommand*{\glsfirstabbrvhypenfont}{\glsabbrvhypenfont}%

slonghypenfont
10393 \newcommand*{\glslonghypenfont}{\glslongdefaultfont}%

tlonghypenfont
10394 \newcommand*{\glsfirstlonghypenfont}{\glslonghypenfont}%

```

The default short form suffix:

```

xtrhyphensuffix
10395 \newcommand*{\glsxtrhyphensuffix}{\glsxtrabbrvpluralsuffix}

```

en-short-hyphen Designed for use with the markwords attribute.

```

10396 \newabbreviationstyle{long-hyphen-short-hyphen}%
10397 {%
10398   \renewcommand*{\CustomAbbreviationFields}{%
10399     name={\glsxtrlongshortname},
10400     sort={\the\glsshorttok},
10401     first={\protect\glsfirstlonghypenfont{\the\glslongtok}%
10402       \protect\glsxtrfullsep{\the\glslabeltok}%
10403       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshorttok}}},%
10404     firstplural={\protect\glsfirstlonghypenfont{\the\glslongpltok}%
10405       \protect\glsxtrfullsep{\the\glslabeltok}%
10406       \glsxtrparen{\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}}},%
10407     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10408     description={\protect\glslonghypenfont{\the\glslongtok}}}}

```

Unset the regular attribute if it has been set.

```

10409   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10410     \glshasattribute{\the\glslabeltok}{regular}%
10411     {%
10412       \glssetattribute{\the\glslabeltok}{regular}{false}%
10413     }%
10414     {}%
10415   }%
10416 }%
10417 {%
10418   \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
10419   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10420   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10421   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10422   \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

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

```
10423 \renewcommand*\glsxtrfullformat[2]{%
10424   \glsxtrlonghyphenshort{##1}{\glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
10425 }%
10426 \renewcommand*\glsxtrfullplformat[2]{%
10427   \glsxtrlonghyphenshort{##1}{\glsaccesslongpl{##1}}%
10428   {\glsaccessshortpl{##1}}{##2}%
10429 }%
10430 \renewcommand*\Glsxtrfullformat[2]{%
10431   \glsxtrlonghyphenshort{##1}{\Glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
10432 }%
10433 \renewcommand*\Glsxtrfullplformat[2]{%
10434   \glsxtrlonghyphenshort{##1}{\Glsaccesslongpl{##1}}%
10435   {\glsaccessshortpl{##1}}{##2}%
10436 }%
10437 }
```

ort-hyphen-desc Like long-hyphen-short-hyphen but the description must be supplied by the user.

```
10438 \newabbreviationstyle{long-hyphen-short-hyphen-desc}{%
10439 }%
10440 \renewcommand*\CustomAbbreviationFields{%
10441   name={\glsxtrlongshortdescname},
10442   sort={\glsxtrlongshortdescsort},
10443   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}}%
10444   \protect\glsxtrfullsep{\the\glslabeltok}%
10445   \glsxtrparen{\protect\glsfirstabbrvhyphenfont{\the\glsshorttok}},%
10446   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}}%
10447   \protect\glsxtrfullsep{\the\glslabeltok}%
10448   \glsxtrparen{\protect\glsfirstabbrvhyphenfont{\the\glsshortpltok}},%
10449   text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
10450   plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}}%
10451 }%
```

Unset the regular attribute if it has been set.

```
10452 \renewcommand*\GlsXtrPostNewAbbreviation{%
10453   \glshasattribute{\the\glslabeltok}{regular}%
10454   {%
10455     \glssetattribute{\the\glslabeltok}{regular}{false}%
10456   }%
10457   {}%
10458 }%
10459 }%
10460 {%
10461   \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%
10462 }
```

\glsxtrlonghyphennoshort{\label}{\long}{\insert}

```

10463 \newcommand*{\glsxtrlonghyphennoshort}[3]{%
  Grouping is needed to localise the redefinitions.
10464  {%
  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.
10465  \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
10466  \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#3}\fi}%
10467  \ifglsxtrinsertinside\else{#3}\fi
10468 }%
10469 }

```

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.

```

10470 \newabbreviationstyle{long-hyphen-noshort-desc-noreg}{%
10471  {%
10472  \renewcommand*{\CustomAbbreviationFields}{%
10473    name={\glsxtrlongnoshortdescname},
10474    sort={\expandonce\glsxtrorglong},
10475    first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10476    firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10477    plural={\protect\glslonghyphenfont{\the\glslongpltok}}%
10478 }%

```

Unset the regular attribute if it has been set.

```

10479 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10480   \glshasattribute{\the\glslabeltok}{regular}%
10481   {%
10482     \glssetattribute{\the\glslabeltok}{regular}{false}%
10483   }%
10484   {}%
10485 }%
10486 }%
10487 {%
10488 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%

```

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

```

10489 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
10490 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
10491 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
10492 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
10493 \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10494 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10495   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
10496 }%

```

```

10497 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
10498   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
10499 }%
10500 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10501   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10502 }%
10503 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10504   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10505 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

10506 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10507   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
10508   \glsxtrfullsep{##1}%
10509   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
10510 }%
10511 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10512   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
10513   \glsxtrfullsep{##1}%
10514   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
10515 }%
10516 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10517   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10518   \glsxtrfullsep{##1}%
10519   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
10520 }%
10521 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10522   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10523   \glsxtrfullsep{##1}%
10524   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
10525 }%

```

The first use full form only displays the long form.

```

10526 \renewcommand*{\glsxtrfullformat}[2]{%
10527   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
10528 }%
10529 \renewcommand*{\glsxtrfullplformat}[2]{%
10530   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
10531 }%
10532 \renewcommand*{\Glsxtrfullformat}[2]{%
10533   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10534 }%
10535 \renewcommand*{\Glsxtrfullplformat}[2]{%
10536   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10537 }%
10538 }

```

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.

```

10539 \newabbreviationstyle{long-hyphen-noshort-noreg}%
10540 {%
10541   \renewcommand*{\CustomAbbreviationFields}{%
10542     name={\glsxtrlongnoshortname},
10543     sort={\the\glsshorthtok},
10544     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10545     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10546     text={\protect\glslonghyphenfont{\the\glslongtok}},%
10547     plural={\protect\glslonghyphenfont{\the\glslongpltok}},%
10548     description={\the\glslongtok}%
10549 }%

```

Unset the regular attribute if it has been set.

```

10550 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10551   \glshasattribute{\the\glslabeltok}{regular}%
10552   {%
10553     \glssetattribute{\the\glslabeltok}{regular}{false}%
10554   }%
10555   {}%
10556 }%
10557 }%
10558 {%
10559   \GlsXtrUseAbbrStyleFmts{long-desc}%
10560 }

```

`\glsxtrlonghyphen{<long>}{<label>}{<insert>}`

Used by long-hyphen-postshort-hyphen. The *<insert>* is check to determine if it starts with a hyphen but isn't used here as it's moved to the post-link hook.

```
10561 \newcommand*{\glsxtrlonghyphen}[3]{%
```

Grouping is needed to localise the redefinitions.

```

10562 {%
10563   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
10564   \glsfirstlonghyphenfont{#1}%
10565 }%
10566 }

```

`\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.

```

10567 \newcommand*{\glsxtrposthyphenshort}[2]{%
10568 {%

```

```

10569 \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
10570 \ifglsxtrinsertinside{\glsfirstlonghyphenfont{#2}}\else{#2}\fi
10571 \glsxtrfullsep{#1}%
10572 \glsxtrparens
10573 {\glsfirstabbrvhyphenfont{\glsentryshort{#1}\ifglsxtrinsertinside{#2}\fi}%
10574 \ifglsxtrinsertinside\else{#2}\fi
10575 }%
10576 }%
10577 }

```

\glsxtrposthyphensubsequent{\label}{\insert}

Format in the post-link hook for subsequent use. The label is ignored by default.

```

10578 \newcommand*{\glsxtrposthyphensubsequent}[2]{%
10579   \glsabrvfont{\ifglsxtrinsertinside {#2}\fi}%
10580   \ifglsxtrinsertinside \else{#2}\fi
10581 }

```

ostshort-hyphen Like long-hyphen-short-hyphen but shifts the insert and parenthetical material to the post-link hook.

```

10582 \newabbreviationstyle{long-hyphen-postshort-hyphen}{%
10583 }%
10584 \renewcommand*{\CustomAbbreviationFields}{%
10585   name={\glsxtrlongshortname},
10586   sort={\the\glsshorttok},
10587   first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10588   firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10589   plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}},%
10590   description={\protect\glslonghyphenfont{\the\glslongtok}}}%
10591 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10592   \csdef{glsxtrpostlink\glscategorylabel}{%
10593     \glsxtrifwasfirstuse
10594     {%
10595       \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
10596     }%
10597   }%

```

Put the insertion into the post-link:

```

10598   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10599   }%
10600 }%
10601 \glshasattribute{\the\glslabeltok}{regular}%
10602 {%
10603   \glssetattribute{\the\glslabeltok}{regular}{false}%
10604 }%
10605 {}%
10606 }%

```

```
10607 }%
10608 {%
```

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

```
10609 \renewcommand*\{\abbrvpluralsuffix\}{\glsxtrabbrvpluralsuffix}%
10610 \renewcommand*\{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10611 \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbvhypenfont{##1}}%
10612 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10613 \renewcommand*\{\glslongfont}[1]{\glslonghypenfont{##1}}%
```

Subsequent use needs to omit the insertion:

```
10614 \renewcommand*\{\glsxtrsubsequentfmt}[2]{%
10615   \glsabbrvfont{\glsaccessshort{##1}}%
10616 }%
10617 \renewcommand*\{\glsxtrsubsequentplfmt}[2]{%
10618   \glsabbrvfont{\glsaccessshortpl{##1}}%
10619 }%
10620 \renewcommand*\{\Glsxtrsubsequentfmt}[2]{%
10621   \glsabbrvfont{\Glsaccessshort{##1}}%
10622 }%
10623 \renewcommand*\{\Glsxtrsubsequentplfmt}[2]{%
10624   \glsabbrvfont{\Glsaccessshortpl{##1}}%
10625 }%
```

First use full form:

```
10626 \renewcommand*\{\glsxtrfullformat}[2]{%
10627   \glsxtrlonghypen{\glsaccesslong{##1}{##1}{##2}}%
10628 }%
10629 \renewcommand*\{\glsxtrfullplformat}[2]{%
10630   \glsxtrlonghypen{\glsaccesslongpl{##1}{##1}{##2}}%
10631 }%
10632 \renewcommand*\{\Glsxtrfullformat}[2]{%
10633   \glsxtrlonghypen{\Glsaccesslong{##1}{##1}{##2}}%
10634 }%
10635 \renewcommand*\{\Glsxtrfullplformat}[2]{%
10636   \glsxtrlonghypen{\Glsaccesslongpl{##1}{##1}{##2}}%
10637 }%
```

In-line format.

```
10638 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
10639   \glsfirstlonghypenfont{\glsaccesslong{##1}}%
10640     \ifglsxtrinsertinside{##2}\fi}%
10641   \ifglsxtrinsertinside \else{##2}\fi
10642 }%
10643 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
10644   \glsfirstlonghypenfont{\glsaccesslongpl{##1}}%
10645     \ifglsxtrinsertinside{##2}\fi}%
10646   \ifglsxtrinsertinside \else{##2}\fi
10647 }%
10648 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
10649   \glsfirstlonghypenfont{\Glsaccesslong{##1}}%
```

```

10650      \ifglsxtrinsertinside{##2}\fi}%
10651      \ifglsxtrinsertinside \else{##2}\fi
10652  }%
10653  \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
10654      \glsfirstlonghyphenfont{\Glsaccesslongpl{##1}}%
10655      \ifglsxtrinsertinside{##2}\fi}%
10656      \ifglsxtrinsertinside \else{##2}\fi
10657  }%
10658 }

```

`ort-hyphen-desc` Like `long-hyphen-postshort-hyphen` but the description must be supplied by the user.

```

10659 \newabbreviationstyle{long-hyphen-postshort-hyphen-desc}%
10660 {%
10661  \renewcommand*\{\CustomAbbreviationFields}{%
10662      name={\glsxtrlongshortdescname},%
10663      sort={\glsxtrlongshortdescsort},%
10664      first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10665      firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10666      text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10667      plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10668 }%
10669 \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
10670     \csdef{glsxtrpostlink\glscategorylabel}{%
10671         \glsxtrifwasfirstuse
10672         {%
10673             \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
10674         }%
10675     }%

```

Put the insertion into the post-link:

```

10676     \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10677     }%
10678 }%
10679 \glshasattribute{\the\glslabeltok}{regular}%
10680 {%
10681     \glssetattribute{\the\glslabeltok}{regular}{false}%
10682 }%
10683 {}%
10684 }%
10685 }%
10686 {%
10687 \GlsXtrUseAbbrStyleFmts{long-hyphen-postshort-hyphen}%
10688 }

```

`rshorthypenlong` \glsxtrshorthypenlong{\label}{\short}{\long}{\insert}

The `\short` and `\long` arguments may be the plural form. The `\long` argument may also be

the first letter uppercase form.

```
10689 \newcommand*{\glsxtrshorthypenlong}[4]{%
```

Grouping is needed to localise the redefinitions.

```
10690 {%
```

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.)

```
10691 \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}%
10692 \glsfirstabbrvhypenfont{#2\ifglsxtrinsertinside{#4}\fi}%
10693 \ifglsxtrinsertinside\else{#4}\fi
10694 \glsxtrfullsep{#1}%
10695 \glsxtrparen{\glsfirstlonghypenfont{#3\ifglsxtrinsertinside{#4}\fi}%
10696 \ifglsxtrinsertinside\else{#4}\fi}%
10697 }%
10698 }
```

hen-long-hyphen Designed for use with the `markwords` attribute.

```
10699 \newabbreviationstyle{short-hyphen-long-hyphen}%
10700 {%
10701 \renewcommand*{\CustomAbbreviationFields}{%
10702   name={\glsxtrshortlongname},
10703   sort={\the\glsshorttok},
10704   first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
10705     \protect\glsxtrfullsep{\the\glslabeltok}%
10706     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
10707   firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
10708     \protect\glsxtrfullsep{\the\glslabeltok}%
10709     \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
10710   plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10711   description={\protect\glslonghypenfont{\the\glslongtok}}}%

```

Unset the `regular` attribute if it has been set.

```
10712 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10713   \glshasattribute{\the\glslabeltok}{regular}%
10714   {%
10715     \glssetattribute{\the\glslabeltok}{regular}{false}%
10716   }%
10717   {}%
10718 }%
10719 }%
10720 {%
10721 \renewcommand*{\abbrvpluralsuffix}{\glsxtrhypensuffix}%
10722 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10723 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10724 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10725 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%
```

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

```

10726 \renewcommand*{\glsxtrfullformat}[2]{%
10727   \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\glsaccesslong{##1}}{##2}%
10728 }%
10729 \renewcommand*{\glsxtrfullplformat}[2]{%
10730   \glsxtrshorthypenlong{##1}%
10731   {\glsaccessshortpl{##1}}{\glsaccesslongpl{##1}}{##2}%
10732 }%
10733 \renewcommand*{\Glsxtrfullformat}[2]{%
10734   \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\Glsaccesslong{##1}}{##2}%
10735 }%
10736 \renewcommand*{\Glsxtrfullplformat}[2]{%
10737   \glsxtrshorthypenlong{##1}%
10738   {\glsaccessshortpl{##1}}{\Glsaccesslongpl{##1}}{##2}%
10739 }%
10740 }

```

`ong-hyphen-desc` Like short-hyphen-long-hyphen but the description must be supplied by the user.

```

10741 \newabbreviationstyle{short-hyphen-long-hyphen-desc}{%
10742 {%
10743   \renewcommand*{\CustomAbbreviationFields}{%
10744     name={\glsxtrshortlongdescname},
10745     sort={\glsxtrshortlongdescsort},
10746     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
10747       \protect\glsxtrfullsep{\the\glslabeltok}%
10748       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
10749     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
10750       \protect\glsxtrfullsep{\the\glslabeltok}%
10751       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
10752     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10753     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10754   }%

```

Unset the regular attribute if it has been set.

```

10755 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10756   \glshasattribute{\the\glslabeltok}{regular}%
10757   {%
10758     \glssetattribute{\the\glslabeltok}{regular}{false}%
10759   }%
10760   {}%
10761 }%
10762 }%
10763 {%
10764   \GlsXtrUseAbbrStyleFmts{short-hyphen-long-hyphen}%
10765 }

```

lsxtrshorthypen	<code>\glsxtrshorthypen{<short>}{{<label>}}{<insert>}</code>
-----------------	--

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.

```
10766 \newcommand*{\glsxtrshorthypen}[3]{%
```

Grouping is needed to localise the redefinitions.

```
10767 {%
10768   \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
10769   \glsfirstabbrvhypenfont{#1}%
10770 }%
10771 }
```

```
\glsxtrposthyphenlong{\label}{<insert>}
```

Used in the post-link hook for the short-hyphen-postlong-hyphen style. Much like `\glsxtrshorthypenlong` but omits the *<short>* part. This always uses the singular long form.

```
10772 \newcommand*{\glsxtrposthyphenlong}[2]{%
10773 {%
10774   \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
10775   \ifglsxtrinsertinside{\glsfirstabbrvhypenfont{#2}}\else{#2}\fi
10776   \glsxtrfullsep{#1}%
10777   \glsxtrparen
10778   {\glsfirstlonghypenfont{\glsentrylong{#1}\ifglsxtrinsertinside{#2}\fi}%
10779     \ifglsxtrinsertinside\else{#2}\fi
10780   }%
10781 }%
10782 }
```

`postlong-hyphen` Like short-hyphen-long-hyphen but shifts the insert and parenthetical material to the post-link hook.

```
10783 \newabbreviationstyle{short-hyphen-postlong-hyphen}%
10784 {%
10785   \renewcommand*{\CustomAbbreviationFields}{%
10786     name={\glsxtrshortlongname},
10787     sort={\the\glsshorttok},
10788     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
10789     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
10790     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10791     description={\protect\glslonghypenfont{\the\glslongtok}}}%
10792   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10793     \csdef{\glsxtrpostlink\glscategorylabel}{%
10794       \glsxtrifwasfirstuse
10795       {%
10796         \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
10797       }%
10798     }%
```

Put the insertion into the post-link:

```
10799      \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10800      }%
10801      }%
10802      \glshasattribute{\the\glslabeltok}{regular}%
10803      {%
10804      \glssetattribute{\the\glslabeltok}{regular}{false}%
10805      }%
10806      {}%
10807      }%
10808 }%
10809 {%
```

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

```
10810 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
10811 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10812 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10813 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10814 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%
```

Subsequent use needs to omit the insertion:

```
10815 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10816     \glsabbrvfont{\glsaccessshort{##1}}%
10817 }%
10818 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
10819     \glsabbrvfont{\glsaccessshortpl{##1}}%
10820 }%
10821 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10822     \glsabbrvfont{\Glsaccessshort{##1}}%
10823 }%
10824 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10825     \glsabbrvfont{\Glsaccessshortpl{##1}}%
10826 }%
```

First use full form:

```
10827 \renewcommand*{\glsxtrfullformat}[2]{%
10828     \glsxtrshorthypen{\glsaccessshort{##1}{##1}{##2}}%
10829 }%
10830 \renewcommand*{\glsxtrfullplformat}[2]{%
10831     \glsxtrshorthypen{\glsaccessshortpl{##1}{##1}{##2}}%
10832 }%
10833 \renewcommand*{\Glsxtrfullformat}[2]{%
10834     \glsxtrshorthypen{\Glsaccessshort{##1}{##1}{##2}}%
10835 }%
10836 \renewcommand*{\Glsxtrfullplformat}[2]{%
10837     \glsxtrshorthypen{\Glsaccessshortpl{##1}{##1}{##2}}%
10838 }%
```

In-line format. Commands like \glsxtrfull set \glsinsert to empty. The entire link-text (provided by the following commands) is stored in \glscustomtext.

```
10839 \renewcommand*{\glsxtrinlinefullformat}[2]{%
```

```

10840     \glsfirstabbrvhypenfont{\glsaccessshort{##1}%
10841         \ifglsxtrinsertinside{##2}\fi}%
10842         \ifglsxtrinsertinside \else{##2}\fi
10843     }%
10844     \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
10845         \glsfirstabbrvhypenfont{\glsaccessshortpl{##1}%
10846             \ifglsxtrinsertinside{##2}\fi}%
10847             \ifglsxtrinsertinside \else{##2}\fi
10848     }%
10849     \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
10850         \glsfirstabbrvhypenfont{\Glsaccessshort{##1}%
10851             \ifglsxtrinsertinside{##2}\fi}%
10852             \ifglsxtrinsertinside \else{##2}\fi
10853     }%
10854     \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
10855         \glsfirstabbrvhypenfont{\Glsaccessshortpl{##1}%
10856             \ifglsxtrinsertinside{##2}\fi}%
10857             \ifglsxtrinsertinside \else{##2}\fi
10858     }%
10859 }

```

`ong-hyphen-desc` Like short-hyphen-postlong-hyphen but the description must be supplied by the user.

```

10860 \newabbreviationstyle{short-hyphen-postlong-hyphen-desc}{%
10861 {%
10862     \renewcommand*\{\CustomAbbreviationFields}{%
10863         name={\glsxtrshortlongdescname},
10864         sort={\glsxtrshortlongdescsort},%
10865         first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
10866         firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
10867         text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10868         plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10869     }%
10870     \renewcommand*\{\GlsXtrPostNewAbbreviation}{%
10871         \csdef{glsxtrpostlink\glscategorylabel}{%
10872             \glsxtrifwasfirstuse
10873             {%
10874                 \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
10875             }%
10876         }%

```

Put the insertion into the post-link:

```

10877         \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10878     }%
10879 }%
10880 \glshasattribute{\the\glslabeltok}{regular}%
10881 {%
10882     \glssetattribute{\the\glslabeltok}{regular}{false}%
10883 }%
10884 {()}%
10885 }%

```

```

10886 }%
10887 {%
10888 \GlsXtrUseAbbrStyleFmts{short-hyphen-postlong-hyphen}%
10889 }

```

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
10890 \newcommand*\{\glsabbrvonlyfont\}{\glsabbrvdefaultfont}%

stabbrvonlyfont
10891 \newcommand*\{\glsfirstabbrvonlyfont\}{\glsabbrvonlyfont}%

glslongonlyfont
10892 \newcommand*\{\glslongonlyfont\}{\glslongdefaultfont}%

rstlongonlyfont
10893 \newcommand*\{\glsfirstlongonlyfont\}{\glslongonlyfont}%

```

The default short form suffix:

```

lsxtronlysuffix
10894 \newcommand*\{\glsxtronlysuffix\}{\glsxtrabbrvpluralsuffix}%

\glsxtronlyname The default name format for this style.
10895 \newcommand*\{\glsxtronlyname\}{%
10896 \protect\glsabbrvonlyfont{\the\glsshorttok}%
10897 }

only-short-only
10898 \newabbreviationstyle{long-only-short-only}%
10899 {%
10900 \renewcommand*\{\CustomAbbreviationFields\}{%
10901 name=\{\glsxtronlyname\},%
10902 sort=\{\the\glsshorttok\},%
10903 first=\{\protect\glsfirstlongonlyfont{\the\glslongtok}\},%
10904 firstplural=\{\protect\glsfirstlongonlyfont{\the\glslongpltok}\},%
10905 plural=\{\protect\glsabbrvonlyfont{\the\glsshortpltok}\},%
10906 description=\{\protect\glslongonlyfont{\the\glslongtok}\}}%}

Unset the regular attribute if it has been set.
10907 \renewcommand*\{\GlsXtrPostNewAbbreviation\}{%
10908 \glshasattribute{\the\glslabeltok}{regular}%
10909 {%
10910 \glssetattribute{\the\glslabeltok}{regular}{false}%
10911 }%
10912 {}%

```

```

10913  }%
10914 }%
10915 {%
10916 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtronlysuffix}%
10917 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvonlyfont{##1}}%
10918 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvonlyfont{##1}}%
10919 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongonlyfont{##1}}%
10920 \renewcommand*{\glslongfont}[1]{\glslongonlyfont{##1}}%

```

The first use full form doesn't show the short form.

```

10921 \renewcommand*{\glsxtrfullformat}[2]{%
10922   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10923   \ifglsxtrinsertinside\else##2\fi
10924 }%
10925 \renewcommand*{\glsxtrfullplformat}[2]{%
10926   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10927   \ifglsxtrinsertinside\else##2\fi
10928 }%
10929 \renewcommand*{\Glsxtrfullformat}[2]{%
10930   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10931   \ifglsxtrinsertinside\else##2\fi
10932 }%
10933 \renewcommand*{\Glsxtrfullplformat}[2]{%
10934   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10935   \ifglsxtrinsertinside\else##2\fi
10936 }%

```

The inline full form does show the short form.

```

10937 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10938   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10939   \ifglsxtrinsertinside\else##2\fi
10940   \glsxtrfullsep{##1}%
10941   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshort{##1}}}%
10942 }%
10943 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10944   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10945   \ifglsxtrinsertinside\else##2\fi
10946   \glsxtrfullsep{##1}%
10947   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
10948 }%
10949 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10950   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10951   \ifglsxtrinsertinside\else##2\fi
10952   \glsxtrfullsep{##1}%
10953   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
10954 }%
10955 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10956   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10957   \ifglsxtrinsertinside\else##2\fi
10958   \glsxtrfullsep{##1}%

```

```

10959     \glsxtrparen{\protect\glsfirstabbrvonlyfont{\Glsaccessshortpl{##1}}}}%
10960   }%
10961 }

xtronlydescsort
10962 \newcommand*{\glsxtronlydescsort}{\the\glslongtok}

xtronlydescname
10963 \newcommand*{\glsxtronlydescname}{%
10964   \protect\glslongfont{\the\glslongtok}%
10965 }

short-only-desc
10966 \newabbreviationstyle{long-only-short-only-desc}{%
10967 {%
10968   \renewcommand*{\CustomAbbreviationFields}{%
10969     name={\glsxtronlydescname},%
10970     sort={\glsxtronlydescsort},%
10971     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
10972     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
10973     text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
10974     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}}%
10975   }%
10976   Unset the regular attribute if it has been set.
10977   \glshasattribute{\the\glslabeltok}{regular}%
10978   {%
10979     \glssetattribute{\the\glslabeltok}{regular}{false}%
10980   }%
10981   {}%
10982   }%
10983 }%
10984 {%
10985   \GlsXtrUseAbbrStyleFmts{long-only-short-only}%
10986 }

```

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 `hyperref`'s `\texorpdfstring` which can simply use the expandable command in the PDF string case. The `TEX` string case can now

use `\glsxtrshort` with the `noindex` key set, which prevents the unwanted additions to the location list, and the `hyper` key set to false, which prevents the problem of nested links. This just leaves one thing left that needs to be dealt with, and that's what to do if the heading style uses `\MakeUppercase`.

Note that glossaries automatically loads `textcase`, so the label can be protected from case change with `textcase`'s `\NoCaseChange`. This means that we don't have a problem provided the page style uses `\MakeTextUppercase`, but the default heading page style uses `\MakeUppercase`.

To get around this, save the original definition of `\markboth` and `\markright` and adjust it so that `\MakeUppercase` is temporarily redefined to `\MakeTextUppercase`. Some packages or classes redefine these commands, so we can't just assume they still have the original kernel definition.

`\markright` Save original definition:

```
10987 \let\@glsxtr@org@markright\markright
```

Redefine (grouping not added in case it interferes with the original code):

```
10988 \renewcommand*{\markright}[1]{%
10989   \glsxtrmarkhook
10990   \@glsxtr@org@markright{\@glsxtrinmark#1\@glsxtrnotinmark}%
10991   \glsxtrrestoremarkhook
10992 }
```

`\markboth` Save original definition:

```
10993 \let\@glsxtr@org@markboth\markboth
```

Redefine (grouping not added in case it interferes with the original code):

```
10994 \renewcommand*{\markboth}[2]{%
10995   \glsxtrmarkhook
10996   \@glsxtr@org@markboth
10997   {\@glsxtrinmark#1\@glsxtrnotinmark}%
10998   {\@glsxtrinmark#2\@glsxtrnotinmark}%
10999   \glsxtrrestoremarkhook
11000 }
```

Also do this for `\@starttoc`

`\@starttoc` Save original definition:

```
11001 \let\@glsxtr@org@\@starttoc\@starttoc
```

Redefine:

```
11002 \renewcommand*{\@starttoc}[1]{%
11003   \glsxtrmarkhook
11004   \@glsxtrinmark
11005   \@glsxtr@org@@@starttoc{#1}%
11006   \@glsxtrnotinmark
11007   \glsxtrrestoremarkhook
11008 }
```

If this causes a problem provide a simple way of switching back to the original definitions:

sxtrRevertMarks

```
11009 \newcommand*{\glsxtrRevertMarks}{%
11010   \let\markright\@glsxtr@org@markright
11011   \let\markboth\@glsxtr@org@markboth
11012   \let\@starttoc\@glsxtr@org@@starttoc
11013 }
```

rRevertTocMarks Just restores \@starttoc.

```
11014 \newcommand*{\glsxtrRevertTocMarks}{%
11015   \let\@starttoc\@glsxtr@org@@starttoc
11016 }
```

\glsxtrifinmark

```
11017 \newcommand*{\glsxtrifinmark}[2]{#2}
```

\@glsxtrinmark

```
11018 \newrobustcmd*{\@glsxtrinmark}{%
11019   \let\glsxtrifinmark\@firstoftwo
11020 }
```

glsxtrnotinmark

```
11021 \newrobustcmd*{\@glsxtrnotinmark}{%
11022   \let\glsxtrifinmark\@secondoftwo
11023 }
```

eorpdforheading

```
11024 \ifdef\texorpdfstring
11025 {
11026   \newcommand*{\glsxtrtitleorpdforheading}[3]{\texorpdfstring{#1}{#2}}
11027 }
11028 {
11029   \newcommand*{\glsxtrtitleorpdforheading}[3]{#1}
11030 }
```

\glsxtrmarkhook Hook used in new definition of \markboth and \markright to make some changes to apply to the marks:

```
11031 \newcommand*{\glsxtrmarkhook}{%
```

Save current definitions:

```
11032   \let\@glsxtr@org@MakeUppercase\MakeUppercase
11033   \let\@glsxtr@org@glsxtrtitleorpdforheading\glsxtrtitleorpdforheading
11034   \let\@glsxtr@org@glsxtrtitleshort\glsxtrtitleshort
11035   \let\@glsxtr@org@glsxtrtitleshortpl\glsxtrtitleshortpl
11036   \let\@glsxtr@org@Glsxtrtitleshort\Glsxtrtitleshort
11037   \let\@glsxtr@org@Glsxtrtitleshortpl\Glsxtrtitleshortpl
11038   \let\@glsxtr@org@glsxtrtitlename\glsxtrtitlename
11039   \let\@glsxtr@org@Glsxtrtitlename\Glsxtrtitlename
```

```

11040 \let\@glsxtr@org@glsxrttitletext\glsxrttitletext
11041 \let\@glsxtr@org@Glsxrttitletext\Glsxrttitletext
11042 \let\@glsxtr@org@glsxrttitleplural\glsxrttitleplural
11043 \let\@glsxtr@org@Glsxrttitleplural\Glsxrttitleplural
11044 \let\@glsxtr@org@glsxrttitlefirst\glsxrttitlefirst
11045 \let\@glsxtr@org@Glsxrttitlefirst\Glsxrttitlefirst
11046 \let\@glsxtr@org@glsxrttitlefirstplural\glsxrttitlefirstplural
11047 \let\@glsxtr@org@Glsxrttitlefirstplural\Glsxrttitlefirstplural
11048 \let\@glsxtr@org@glsxrttitlelong\glsxrttitlelong
11049 \let\@glsxtr@org@glsxrttitlelongpl\glsxrttitlelongpl
11050 \let\@glsxtr@org@Glsxrttitlelong\Glsxrttitlelong
11051 \let\@glsxtr@org@Glsxrttitlelongpl\Glsxrttitlelongpl
11052 \let\@glsxtr@org@glsxrttitlefull\glsxrttitlefull
11053 \let\@glsxtr@org@glsxrttitlefullpl\glsxrttitlefullpl
11054 \let\@glsxtr@org@Glsxrttitlefull\Glsxrttitlefull
11055 \let\@glsxtr@org@Glsxrttitlefullpl\Glsxrttitlefullpl

```

New definitions

```

11056 \let\glsxtrinmark\@firstoftwo
11057 \let\MakeUppercase\MakeTextUppercase
11058 \let\glsxrttitleorpdforheading\@thirdofthree
11059 \let\glsxrttitleshort\glsxtrheadshort
11060 \let\glsxrttitleshortpl\glsxtrheadshortpl
11061 \let\Glsxrttitleshort\Glsxtrheadshort
11062 \let\Glsxrttitleshortpl\Glsxtrheadshortpl
11063 \let\glsxrttitlename\glsxtrheadname
11064 \let\Glsxrttitlename\Glsxtrheadname
11065 \let\glsxrttitletext\glsxtrheadtext
11066 \let\Glsxrttitletext\Glsxtrheadtext
11067 \let\glsxrttitleplural\glsxtrheadplural
11068 \let\Glsxrttitleplural\Glsxtrheadplural
11069 \let\glsxrttitlefirst\glsxtrheadfirst
11070 \let\Glsxrttitlefirst\Glsxtrheadfirst
11071 \let\glsxrttitlefirstplural\glsxtrheadfirstplural
11072 \let\Glsxrttitlefirstplural\Glsxtrheadfirstplural
11073 \let\glsxrttitlelong\glsxtrheadlong
11074 \let\glsxrttitlelongpl\glsxtrheadlongpl
11075 \let\Glsxrttitlelong\Glsxtrheadlong
11076 \let\Glsxrttitlelongpl\Glsxtrheadlongpl
11077 \let\glsxrttitlefull\glsxtrheadfull
11078 \let\glsxrttitlefullpl\glsxtrheadfullpl
11079 \let\Glsxrttitlefull\Glsxtrheadfull
11080 \let\Glsxrttitlefullpl\Glsxtrheadfullpl
11081 }

```

`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.)

```

11082 \newcommand*{\glsxtrrestoremarkhook}{%
11083   \let\glsxtrifinmark\@secondoftwo
11084   \let\MakeUppercase\@glsxtr@org@MakeUppercase
11085   \let\glsxtrtitleorpdforheading\@glsxtr@org@glsxtrtitleorpdforheading
11086   \let\glsxtrtitleshort\@glsxtr@org@glsxtrtitleshort
11087   \let\glsxtrtitleshortpl\@glsxtr@org@glsxtrtitleshortpl
11088   \let\Glsxtrtitleshort\@glsxtr@org@Glsxtrtitleshort
11089   \let\Glsxtrtitleshortpl\@glsxtr@org@Glsxtrtitleshortpl
11090   \let\glsxtrtitlename\@glsxtr@org@glsxtrtitlename
11091   \let\Glsxtrtitlename\@glsxtr@org@Glsxtrtitlename
11092   \let\glsxtrtitletext\@glsxtr@org@glsxtrtitletext
11093   \let\Glsxtrtitletext\@glsxtr@org@Glsxtrtitletext
11094   \let\glsxtrtitleplural\@glsxtr@org@glsxtrtitleplural
11095   \let\Glsxtrtitleplural\@glsxtr@org@Glsxtrtitleplural
11096   \let\glsxtrtitlefirst\@glsxtr@org@glsxtrtitlefirst
11097   \let\Glsxtrtitlefirst\@glsxtr@org@Glsxtrtitlefirst
11098   \let\glsxtrtitlefirstplural\@glsxtr@org@glsxtrtitlefirstplural
11099   \let\Glsxtrtitlefirstplural\@glsxtr@org@Glsxtrtitlefirstplural
11100   \let\glsxtrtitlelong\@glsxtr@org@glsxtrtitlelong
11101   \let\glsxtrtitlelongpl\@glsxtr@org@glsxtrtitlelongpl
11102   \let\Glsxtrtitlelong\@glsxtr@org@Glsxtrtitlelong
11103   \let\Glsxtrtitlelongpl\@glsxtr@org@Glsxtrtitlelongpl
11104   \let\glsxtrtitlefull\@glsxtr@org@glsxtrtitlefull
11105   \let\glsxtrtitlefullpl\@glsxtr@org@glsxtrtitlefullpl
11106   \let\Glsxtrtitlefull\@glsxtr@org@Glsxtrtitlefull
11107   \let\Glsxtrtitlefullpl\@glsxtr@org@Glsxtrtitlefullpl
11108 }

```

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.

```

11109 \newcommand*{\glsxtrheadshort}[1]{%
11110   \protect\NoCaseChange
11111   {%
11112     \glsifattribute{#1}{headuc}{true}{%
11113       {%
11114         \GLSxtrshort [noindex,hyper=false]{#1}[]%
11115       }%
11116       {%
11117         \glsxtrshort [noindex,hyper=false]{#1}[]%
11118       }%
11119     }%
11120 }

```

`glsxtrtitleshort` Command to display short form of abbreviation in section title and table of contents.

```

11121 \newrobustcmd*{\glsxtrtitleshort}[1]{%
11122   \glsxtrshort [noindex,hyper=false]{#1}[]%
11123 }

```

`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.

```
11124 \newcommand*{\glsxtrheadshortpl}[1]{%
11125   \protect\NoCaseChange
11126   {%
11127     \glsifattribute{#1}{headuc}{true}%
11128     {%
11129       \GLSxtrshortpl[noindex,hyper=false]{#1}[]%
11130     }%
11131   {%
11132     \glsxtrshortpl[noindex,hyper=false]{#1}[]%
11133   }%
11134 }%
11135 }
```

`xtrtitleshortpl` Command to display plural short form of abbreviation in section title and table of contents.

```
11136 \newrobustcmd*{\glsxtrtitleshortpl}[1]{%
11137   \glsxtrshortpl[noindex,hyper=false]{#1}[]%
11138 }
```

`Glsxtrheadshort` Command used to display short form in the page header with the first letter converted to upper case.

```
11139 \newcommand*{\Glsxtrheadshort}[1]{%
11140   \protect\NoCaseChange
11141   {%
11142     \glsifattribute{#1}{headuc}{true}%
11143     {%
11144       \GLSxtrshort[noindex,hyper=false]{#1}[]%
11145     }%
11146   {%
11147     \Glsxtrshort[noindex,hyper=false]{#1}[]%
11148   }%
11149 }%
11150 }
```

`Glsxtrtitleshort` Command to display short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
11151 \newrobustcmd*{\Glsxtrtitleshort}[1]{%
11152   \Glsxtrshort[noindex,hyper=false]{#1}[]%
11153 }
```

`sxtrheadshortpl` Command used to display plural short form in the page header with the first letter converted to upper case.

```
11154 \newcommand*{\Glsxtrheadshortpl}[1]{%
11155   \protect\NoCaseChange
11156   {%
11157     \glsifattribute{#1}{headuc}{true}%
```

```

11158  {%
11159    \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
11160  }%
11161  {%
11162    \Glsxtrshortpl [noindex,hyper=false]{#1}[]%
11163  }%
11164 }%
11165 }

```

`xtrtitleshortpl` Command to display plural short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

11166 \newrobustcmd*\{\Glsxtrtitleshortpl\}[1]{%
11167   \Glsxtrshortpl [noindex,hyper=false]{#1}[]%
11168 }

```

`\glsxtrheadname` As above but for the name value.

```

11169 \newcommand*\{\glsxtrheadname\}[1]{%
11170   \protect\NoCaseChange
11171  {%
11172    \glsifattribute{#1}{headuc}{true}%
11173    {%
11174      \GLSname [noindex,hyper=false]{#1}[]%
11175    }%
11176    {%
11177      \glsname [noindex,hyper=false]{#1}[]%
11178    }%
11179  }%
11180 }

```

`glsxtrtitlename` Command to display name value in section title and table of contents.

```

11181 \newrobustcmd*\{\glsxtrtitlename\}[1]{%
11182   \glsname [noindex,hyper=false]{#1}[]%
11183 }

```

`\Glsxtrheadname` First letter converted to upper case

```

11184 \newcommand*\{\Glsxtrheadname\}[1]{%
11185   \protect\NoCaseChange
11186  {%
11187    \glsifattribute{#1}{headuc}{true}%
11188    {%
11189      \GLSname [noindex,hyper=false]{#1}[]%
11190    }%
11191    {%
11192      \Glsname [noindex,hyper=false]{#1}[]%
11193    }%
11194  }%
11195 }

```

`\Glsxtrtitlename` Command to display name value in section title and table of contents with the first letter changed to upper case.

```
11196 \%changes{1.21}{2017-11-03}{new}
11197 \newrobustcmd*\{\Glsxtrtitlename\}[1]{%
11198   \Glsname[noindex,hyper=false]{#1}[]%
11199 }
```

`\glsxtrheadtext` As above but for the text value.

```
11200 \newcommand*\{\glsxtrheadtext\}[1]{%
11201   \protect\NoCaseChange
11202   {%
11203     \glsifattribute{#1}{headuc}{true}%
11204     {%
11205       \GLStext[noindex,hyper=false]{#1}[]%
11206     }%
11207     {%
11208       \glstext[noindex,hyper=false]{#1}[]%
11209     }%
11210   }%
11211 }
```

`\glsxtrtitletext` Command to display text value in section title and table of contents.

```
11212 \newrobustcmd*\{\glsxtrtitletext\}[1]{%
11213   \glstext[noindex,hyper=false]{#1}[]%
11214 }
```

`\Glsxtrheadtext` First letter converted to upper case

```
11215 \newcommand*\{\Glsxtrheadtext\}[1]{%
11216   \protect\NoCaseChange
11217   {%
11218     \glsifattribute{#1}{headuc}{true}%
11219     {%
11220       \GLStext[noindex,hyper=false]{#1}[]%
11221     }%
11222     {%
11223       \Glstext[noindex,hyper=false]{#1}[]%
11224     }%
11225   }%
11226 }
```

`\Glsxtrtitletext` Command to display text value in section title and table of contents with the first letter changed to upper case.

```
11227 \newrobustcmd*\{\Glsxtrtitletext\}[1]{%
11228   \Glstext[noindex,hyper=false]{#1}[]%
11229 }
```

`\sxtrheadplural` As above but for the plural value.

```
11230 \newcommand*\{\glsxtrheadplural\}[1]{%
```

```

11231 \protect\NoCaseChange
11232 {%
11233   \glsifattribute{#1}{headuc}{true}%
11234   {%
11235     \GLSplural [noindex,hyper=false]{#1}[]%
11236   }%
11237   {%
11238     \glsplural [noindex,hyper=false]{#1}[]%
11239   }%
11240 }%
11241 }

```

`sxtrtitleplural` Command to display plural value in section title and table of contents.

```

11242 \newrobustcmd*\{\glsxtrtitleplural}[1]{%
11243   \glsplural [noindex,hyper=false]{#1}[]%
11244 }

```

`lsxtrheadplural` Convert first letter to upper case.

```

11245 \newcommand*\{\Glsxtrheadplural}[1]{%
11246   \protect\NoCaseChange
11247 {%
11248   \glsifattribute{#1}{headuc}{true}%
11249   {%
11250     \GLSplural [noindex,hyper=false]{#1}[]%
11251   }%
11252   {%
11253     \Glsplural [noindex,hyper=false]{#1}[]%
11254   }%
11255 }%
11256 }

```

`sxtrtitleplural` Command to display plural value in section title and table of contents with the first letter changed to upper case.

```

11257 \newrobustcmd*\{\Glsxtrtitleplural}[1]{%
11258   \Glsplural [noindex,hyper=false]{#1}[]%
11259 }

```

`glsxtrheadfirst` As above but for the first value.

```

11260 \newcommand*\{\glsxtrheadfirst}[1]{%
11261   \protect\NoCaseChange
11262 {%
11263   \glsifattribute{#1}{headuc}{true}%
11264   {%
11265     \GLSfirst [noindex,hyper=false]{#1}[]%
11266   }%
11267   {%
11268     \glsfirst [noindex,hyper=false]{#1}[]%
11269   }%
11270 }%

```

```

11271 }

lsxtrtitlefirst Command to display first value in section title and table of contents.
11272 \newrobustcmd*\{\glsxtrtitlefirst\}[1]{%
11273   \glsfirst[noindex,hyper=false]{#1}[]%
11274 }

Glsxtrheadfirst First letter converted to upper case
11275 \newcommand*\{\Glsxtrheadfirst\}[1]{%
11276   \protect\NoCaseChange
11277   {%
11278     \glsifattribute{#1}{headuc}{true}%
11279     {%
11280       \GLSfirst[noindex,hyper=false]{#1}[]%
11281     }%
11282     {%
11283       \Glsfirst[noindex,hyper=false]{#1}[]%
11284     }%
11285   }%
11286 }

lsxtrtitlefirst Command to display first value in section title and table of contents with the first letter
changed to upper case.
11287 \newrobustcmd*\{\Glsxtrtitlefirst\}[1]{%
11288   \Glsfirst[noindex,hyper=false]{#1}[]%
11289 }

headfirstplural As above but for the firstplural value.
11290 \newcommand*\{\glsxtrheadfirstplural\}[1]{%
11291   \protect\NoCaseChange
11292   {%
11293     \glsifattribute{#1}{headuc}{true}%
11294     {%
11295       \GLSfirstplural[noindex,hyper=false]{#1}[]%
11296     }%
11297     {%
11298       \glsfirstplural[noindex,hyper=false]{#1}[]%
11299     }%
11300   }%
11301 }

titlefirstplural Command to display firstplural value in section title and table of contents.
11302 \newrobustcmd*\{\glsxtrtitlefirstplural\}[1]{%
11303   \glsfirstplural[noindex,hyper=false]{#1}[]%
11304 }

headfirstplural First letter converted to upper case
11305 \newcommand*\{\Glsxtrheadfirstplural\}[1]{%

```

```

11306 \protect\NoCaseChange
11307 {%
11308   \glsifattribute{#1}{headuc}{true}%
11309   {%
11310     \GLSfirstplural[noindex,hyper=false]{#1}[]%
11311   }%
11312   {%
11313     \Glsfirstplural[noindex,hyper=false]{#1}[]%
11314   }%
11315 }%
11316 }

```

`\titlefirstplural` Command to display first value in section title and table of contents with the first letter changed to upper case.

```

11317 \newrobustcmd*\{\Glsxrttitlefirstplural}[1]{%
11318   \Glsfirstplural[noindex,hyper=false]{#1}[]%
11319 }

```

`\glsxtrheadlong` Command used to display long form in the page header.

```

11320 \newcommand*\{\glsxtrheadlong}[1]{%
11321   \protect\NoCaseChange
11322 {%
11323   \glsifattribute{#1}{headuc}{true}%
11324   {%
11325     \GLSxtrlong[noindex,hyper=false]{#1}[]%
11326   }%
11327   {%
11328     \glsxtrlong[noindex,hyper=false]{#1}[]%
11329   }%
11330 }%
11331 }

```

`\glsxrttitlelong` Command to display long form of abbreviation in section title and table of contents.

```

11332 \newrobustcmd*\{\glsxrttitlelong}[1]{%
11333   \glsxtrlong[noindex,hyper=false]{#1}[]%
11334 }

```

`\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.

```

11335 \newcommand*\{\glsxtrheadlongpl}[1]{%
11336   \protect\NoCaseChange
11337 {%
11338   \glsifattribute{#1}{headuc}{true}%
11339   {%
11340     \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
11341   }%
11342   {%

```

```
11343     \glsxtrlongpl [noindex,hyper=false]{#1}[]%
11344   }%
11345 }%
11346 }
```

sxttitlelongpl Command to display plural long form of abbreviation in section title and table of contents.

```
11347 \newrobustcmd*{\glsxtrtitlelongpl}[1]{%
11348   \glsxtrlongpl [noindex,hyper=false]{#1}[]%
11349 }
```

\Glsxtrheadlong Command used to display long form in the page header with the first letter converted to upper case.

```
11350 \newcommand*{\Glsxtrheadlong}[1]{%
11351   \protect\NoCaseChange
11352 }%
11353   \glsifattribute{#1}{headuc}{true}%
11354 }%
11355   \GLSxtrlong [noindex,hyper=false]{#1}[]%
11356 }%
11357 }%
11358   \Glsxtrlong [noindex,hyper=false]{#1}[]%
11359 }%
11360 }%
11361 }
```

Glsxtrtitlelong Command to display long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
11362 \newrobustcmd*{\Glsxtrtitlelong}[1]{%
11363   \Glsxtrlong [noindex,hyper=false]{#1}[]%
11364 }
```

lsxtrheadlongpl Command used to display plural long form in the page header with the first letter converted to upper case.

```
11365 \newcommand*{\Glsxtrheadlongpl}[1]{%
11366   \protect\NoCaseChange
11367 }%
11368   \glsifattribute{#1}{headuc}{true}%
11369 }%
11370   \GLSxtrlongpl [noindex,hyper=false]{#1}[]%
11371 }%
11372 }%
11373   \Glsxtrlongpl [noindex,hyper=false]{#1}[]%
11374 }%
11375 }%
11376 }
```

sxttitlelongpl Command to display plural long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
11377 \newrobustcmd*\{\Glsxtrtitlelongpl\}[1]{%
11378   \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
11379 }
```

\glsxtrheadfull Command used to display full form in the page header.

```
11380 \newcommand*\{\glsxtrheadfull\}[1]{%
11381   \protect\NoCaseChange
11382   {%
11383     \glsifattribute{#1}{headuc}{true}{%
11384       {%
11385         \GLSxtrfull[noindex,hyper=false]{#1}[]%
11386       }%
11387     {%
11388       \glsxtrfull[noindex,hyper=false]{#1}[]%
11389     }%
11390   }%
11391 }
```

\glsxtrtitlefull Command to display full form of abbreviation in section title and table of contents.

```
11392 \newrobustcmd*\{\glsxtrtitlefull\}[1]{%
11393   \glsxtrfull[noindex,hyper=false]{#1}[]%
11394 }
```

\sxtrheadfullpl Command used to display plural full form in the page header. If you want the text converted to upper case, this needs to be redefined to use \GLSxtrfullpl instead. If you are using a smallcaps style, the default fonts don't provide italic smallcaps.

```
11395 \newcommand*\{\glsxtrheadfullpl\}[1]{%
11396   \protect\NoCaseChange
11397   {%
11398     \glsifattribute{#1}{headuc}{true}{%
11399       {%
11400         \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
11401       }%
11402     {%
11403       \glsxtrfullpl[noindex,hyper=false]{#1}[]%
11404     }%
11405   }%
11406 }
```

\sxtrtitlefullpl Command to display plural full form of abbreviation in section title and table of contents.

```
11407 \newrobustcmd*\{\glsxtrtitlefullpl\}[1]{%
11408   \glsxtrfullpl[noindex,hyper=false]{#1}[]%
11409 }
```

\Glsxtrheadfull Command used to display full form in the page header with the first letter converted to upper case.

```
11410 \newcommand*\{\Glsxtrheadfull\}[1]{%
11411   \protect\NoCaseChange
```

```

11412 {%
11413   \glsifattribute{#1}{headuc}{true}%
11414   {%
11415     \GLSxtrfull[noindex,hyper=false]{#1}[]%
11416   }%
11417   {%
11418     \Glsxtrfull[noindex,hyper=false]{#1}[]%
11419   }%
11420 }%
11421 }

```

`Glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

11422 \newrobustcmd*\Glsxtrtitlefull[1]{%
11423   \Glsxtrfull[noindex,hyper=false]{#1}[]%
11424 }

```

`lsxtrheadfullpl` Command used to display plural full form in the page header with the first letter converted to upper case.

```

11425 \newcommand*\Glsxtrheadfullpl[1]{%
11426   \protect\NoCaseChange
11427   {%
11428     \glsifattribute{#1}{headuc}{true}%
11429   }%
11430     \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
11431   }%
11432   {%
11433     \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
11434   }%
11435 }%
11436 }

```

`sxtrttitlefullpl` Command to display plural full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```

11437 \newrobustcmd*\Glsxtrtitlefullpl[1]{%
11438   \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
11439 }

```

`\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.

```

11440 \ifdef\texorpdfstring
11441 {
11442   \newcommand*\glsfmtshort[1]{%
11443     \texorpdfstring
11444       {\glsxtrtitleshort{#1}}%
11445       {\glsentryshort{#1}}%
11446   }
11447 }

```

```

11448 {
11449   \newcommand*{\glsfmtshort}[1]{%
11450     \glsxtrtitleshort{#1}%
11451 }

```

Similarly for the plural version.

```
\glsfmtshortpl
11452 \ifdef\textorpdfstring
11453 {
11454   \newcommand*{\glsfmtshortpl}[1]{%
11455     \textorpdfstring
11456       {\glsxtrtitleshortpl{#1}}%
11457       {\glsentryshortpl{#1}}%
11458   }
11459 }
11460 {
11461   \newcommand*{\glsfmtshortpl}[1]{%
11462     \glsxtrtitleshortpl{#1}%
11463 }
```

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).

```

11464 \ifdef\textorpdfstring
11465 {
11466   \newcommand*{\Glsfmtshort}[1]{%
11467     \textorpdfstring
11468       {\Glsxtrtitleshort{#1}}%
11469       {\glsentryshort{#1}}%
11470   }
11471 }
11472 {
11473   \newcommand*{\Glsfmtshort}[1]{%
11474     \Glsxtrtitleshort{#1}%
11475 }
```

\Glsfmtshortpl Plural form (first letter uppercase).

```

11476 \ifdef\textorpdfstring
11477 {
11478   \newcommand*{\Glsfmtshortpl}[1]{%
11479     \textorpdfstring
11480       {\Glsxtrtitleshortpl{#1}}%
11481       {\glsentryshortpl{#1}}%
11482   }
11483 }
11484 {
11485   \newcommand*{\Glsfmtshortpl}[1]{%
11486     \Glsxtrtitleshortpl{#1}}
```

```
11487 }
```

\glsfmtname As above but for the name value.

```
11488 \ifdef\textorpdfstring
11489 {
11490   \newcommand*\glsfmtname[1]{%
11491     \textorpdfstring
11492     {\glsxtrtitlename{#1}}%
11493     {\glsentryname{#1}}%
11494   }
11495 }
11496 {
11497   \newcommand*\glsfmtname[1]{%
11498     \glsxtrtitlename{#1}}
11499 }
```

\Glsfmtname First letter converted to upper case.

```
11500 \ifdef\textorpdfstring
11501 {
11502   \newcommand*\Glsfmtname[1]{%
11503     \textorpdfstring
11504     {\Glsxtrtitlename{#1}}%
11505     {\glsentryname{#1}}%
11506   }
11507 }
11508 {
11509   \newcommand*\Glsfmtname[1]{%
11510     \Glsxtrtitlename{#1}}
11511 }
```

\glsfmttext As above but for the text value.

```
11512 \ifdef\textorpdfstring
11513 {
11514   \newcommand*\glsfmttext[1]{%
11515     \textorpdfstring
11516     {\glsxtrtitletext{#1}}%
11517     {\glsentrytext{#1}}%
11518   }
11519 }
11520 {
11521   \newcommand*\glsfmttext[1]{%
11522     \glsxtrtitletext{#1}}
11523 }
```

\Glsfmttext First letter converted to upper case.

```
11524 \ifdef\textorpdfstring
11525 {
11526   \newcommand*\Glsfmttext[1]{%
11527     \textorpdfstring
```

```

11528     {\Glsxtrtitletext{\#1}}%
11529     {\glsentrytext{\#1}}%
11530 }
11531 }
11532 {
11533 \newcommand*{\Glsfmttext}[1]{%
11534   \Glsxtrtitletext{\#1}%
11535 }

```

\glsfmtplural As above but for the plural value.

```

11536 \ifdef\textorpdfstring
11537 {
11538   \newcommand*{\glsfmtplural}[1]{%
11539     \textorpdfstring
11540     {\glsxtrtitleplural{\#1}}%
11541     {\glsentryplural{\#1}}%
11542 }
11543 }
11544 {
11545   \newcommand*{\glsfmtplural}[1]{%
11546     \glsxtrtitleplural{\#1}%
11547 }

```

\Glsfmtplural First letter converted to upper case.

```

11548 \ifdef\textorpdfstring
11549 {
11550   \newcommand*{\Glsfmtplural}[1]{%
11551     \textorpdfstring
11552     {\Glsxtrtitleplural{\#1}}%
11553     {\glsentryplural{\#1}}%
11554 }
11555 }
11556 {
11557   \newcommand*{\Glsfmtplural}[1]{%
11558     \Glsxtrtitleplural{\#1}%
11559 }

```

\glsfmtfirst As above but for the first value.

```

11560 \ifdef\textorpdfstring
11561 {
11562   \newcommand*{\glsfmtfirst}[1]{%
11563     \textorpdfstring
11564     {\glsxtrtitlefirst{\#1}}%
11565     {\glsentryfirst{\#1}}%
11566 }
11567 }
11568 {
11569   \newcommand*{\glsfmtfirst}[1]{%
11570     \glsxtrtitlefirst{\#1}}

```

```
11571 }
```

\Glsfmtfirst First letter converted to upper case.

```
11572 \ifdef\textorpdfstring
11573 {
11574   \newcommand*\Glsfmtfirst[1]{%
11575     \textorpdfstring
11576     {\Glsxrttitlefirst{\#1}}%
11577     {\glsentryfirst{\#1}}%
11578   }
11579 }
11580 {
11581   \newcommand*\Glsfmtfirst[1]{%
11582     \Glsxrttitlefirst{\#1}}
11583 }
```

\glsfmtfirstpl As above but for the firstplural value.

```
11584 \ifdef\textorpdfstring
11585 {
11586   \newcommand*\glsfmtfirstpl[1]{%
11587     \textorpdfstring
11588     {\Glsxrttitlefirstplural{\#1}}%
11589     {\glsentryfirstplural{\#1}}%
11590   }
11591 }
11592 {
11593   \newcommand*\glsfmtfirstpl[1]{%
11594     \Glsxrttitlefirstplural{\#1}}
11595 }
```

\Glsfmtfirstpl First letter converted to upper case.

```
11596 \ifdef\textorpdfstring
11597 {
11598   \newcommand*\Glsfmtfirstpl[1]{%
11599     \textorpdfstring
11600     {\Glsxrttitlefirstplural{\#1}}%
11601     {\glsentryfirstplural{\#1}}%
11602   }
11603 }
11604 {
11605   \newcommand*\Glsfmtfirstpl[1]{%
11606     \Glsxrttitlefirstplural{\#1}}
11607 }
```

\glsfmtlong As above but for the long value.

```
11608 \ifdef\textorpdfstring
11609 {
11610   \newcommand*\glsfmtlong[1]{%
11611     \textorpdfstring
```

```

11612     {\glsxtrtitlelong{\#1}}%
11613     {\glsentrylong{\#1}}%
11614 }
11615 }
11616 {
11617 \newcommand*{\glsfmtlong}[1]{%
11618   \glsxtrtitlelong{\#1}%
11619 }
```

\Glsfmtlong First letter converted to upper case.

```

11620 \ifdef\texorpdfstring
11621 {
11622   \newcommand*{\Glsfmtlong}[1]{%
11623     \texorpdfstring
11624     {\Glsxtrtitlelong{\#1}}%
11625     {\glsentrylong{\#1}}%
11626   }
11627 }
11628 {
11629   \newcommand*{\Glsfmtlong}[1]{%
11630     \Glsxtrtitlelong{\#1}%
11631 }
```

\glsfmtlongpl As above but for the longplural value.

```

11632 \ifdef\texorpdfstring
11633 {
11634   \newcommand*{\glsfmtlongpl}[1]{%
11635     \texorpdfstring
11636     {\glsxtrtitlelongpl{\#1}}%
11637     {\glsentrylongpl{\#1}}%
11638   }
11639 }
11640 {
11641   \newcommand*{\glsfmtlongpl}[1]{%
11642     \glsxtrtitlelongpl{\#1}%
11643 }
```

\Glsfmtlongpl First letter converted to upper case.

```

11644 \ifdef\texorpdfstring
11645 {
11646   \newcommand*{\Glsfmtlongpl}[1]{%
11647     \texorpdfstring
11648     {\Glsxtrtitlelongpl{\#1}}%
11649     {\glsentrylongpl{\#1}}%
11650   }
11651 }
11652 {
11653   \newcommand*{\Glsfmtlongpl}[1]{%
11654     \Glsxtrtitlelongpl{\#1}}
```

```
11655 }
```

\glsfmtfull In-line full format.

```
11656 \ifdef\textorpdfstring
11657 {
11658   \newcommand*\glsfmtfull[1]{%
11659     \textorpdfstring
11660     {\glsxtrtitlefull{#1}}%
11661     {\glsxtrinlinefullformat{#1}{}}%
11662   }
11663 }
11664 {
11665   \newcommand*\glsfmtfull[1]{%
11666     \glsxtrtitlefull{#1}}
11667 }
```

\Glsfmtfull First letter converted to upper case.

```
11668 \ifdef\textorpdfstring
11669 {
11670   \newcommand*\Glsfmtfull[1]{%
11671     \textorpdfstring
11672     {\Glsxtrtitlefull{#1}}%
11673     {\Glsxtrinlinefullformat{#1}{}}%
11674   }
11675 }
11676 {
11677   \newcommand*\Glsfmtfull[1]{%
11678     \Glsxtrtitlefull{#1}}
11679 }
```

\glsfmtfullpl In-line full plural format.

```
11680 \ifdef\textorpdfstring
11681 {
11682   \newcommand*\glsfmtfullpl[1]{%
11683     \textorpdfstring
11684     {\glsxtrtitlefullpl{#1}}%
11685     {\glsxtrinlinefullplformat{#1}{}}%
11686   }
11687 }
11688 {
11689   \newcommand*\glsfmtfullpl[1]{%
11690     \glsxtrtitlefullpl{#1}}
11691 }
```

\Glsfmtfullpl First letter converted to upper case.

```
11692 \ifdef\textorpdfstring
11693 {
11694   \newcommand*\Glsfmtfullpl[1]{%
11695     \textorpdfstring
```

```

11696     {\Glsxtrtitlefullpl{#1}}%
11697     {\Glsxtrinlinefullplformat{#1}{}}
11698 }
11699 }
11700 {
11701 \newcommand*{\Glsfmtfullpl}[1]{%
11702   \Glsxtrtitlefullpl{#1}}
11703 }

```

1.9 Multi-Lingual Support

Add the facility to load language modules, if they are installed, but none are provided with this package.

sariesExtraLang

```

11704 \newcommand*{\RequireGlossariesExtraLang}[1]{%
11705   \@ifundefined{ver@glossariesxtr-#1.ldf}{\input{glossariesxtr-#1.ldf}}{}}
11706 }

```

sariesExtraLang

```

11707 \newcommand*{\ProvidesGlossariesExtraLang}[1]{%
11708   \ProvidesFile{glossariesxtr-#1.ldf}}
11709 }

```

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.

```

11710 \newcommand{\glsxtr@loaddialect}{%
11711   \IfTrackedLanguageFileExists{\this@dialect}%
11712   {glossariesxtr-}%
11713   {.ldf}%
11714   {}%
11715   \RequireGlossariesExtraLang{\CurrentTrackedTag}%
11716 }%
11717 {}%

```

If `glossaries-extra-bib2gls` has been loaded, `\@glsxtrdialecthook` will check for the associated script, otherwise it will do nothing.

```

11718   \@glsxtrdialecthook
11719 }

11720 \@ifpackageloaded{tracklang}%
11721 {}%
11722   \AnyTrackedLanguages
11723   {}%

```

```
11724     \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
11725   }%
11726   {}%
11727 }
11728 {}
```

Load `glossaries-extra-stylemods` if required.

```
11729 \@glsxtr@redefstyles
and set the style:
11730 \@glsxtr@do@style
```

1.10 `glossaries-extra-bib2gls.sty`

This package provides additional support for `bib2gls` and is automatically loaded by the `record` option.

```
11731 \NeedsTeXFormat{LaTeX2e}
11732 \ProvidesPackage{glossaries-extra-bib2gls}[2018/08/18 v1.36 (NLCT)]
```

These are some convenient macros for use with custom rules.

```
\glshex
11733 \newcommand*\glshex{\string\u}
```

```
\lscapturedgroup
11734 \newcommand*\lscapturedgroup{\string\$}
```

`nZeroChildCount` For use with `bib2gls`'s `save-child-count` resource option.

```
11735 \newcommand*\GlsXtrIfHasNonZeroChildCount[3]{%
11736   \GlsXtrIfFieldNonZero{childcount}{#1}{#2}{#3}%
11737 }
```

`rprovidecommand` For use in `@preamble`, this behaves like `\providecommand` in the document but like `\renewcommand` in `bib2gls`.

```
11738 \newcommand*\glsxtrprovidecommand{\providecommand}
```

`lossarylocation` For use with `indexcounter` and `bib2gls`.

```
11739 \newcommand*\glsxtr@wrglossarylocation[2]{#1}
```

```
\GlsXtrIndexCounterLink{\text}{\label}
```

For use with `indexcounter` and `bib2gls`.

```
11740 \ifdef\hyperref
11741 {%
11742   \newcommand*\GlsXtrIndexCounterLink[2]{%
```

```

11743     \glsxtrifhasfield{indexcounter}{#2}%
11744     {\hyperref[wrglossary.\glscurrentfieldvalue]{#1}}%
11745     {#1}%
11746 }
11747 }
11748 {
11749 \newcommand*{\GlsXtrIndexCounterLink}[2]{#1}
11750 }

```

\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.

```
11751 \newcommand*{\GlsXtrDualField}{dual}
```

\GlsXtrDualBackLink{<text>}{<label>}

Adds a hyperlink to the dual entry.

```

11752 \newcommand*{\GlsXtrDualBackLink}[2]{%
11753     \glsxtrifhasfield{\GlsXtrDualField}{#2}%
11754     {\glshyperlink[#1]{\glscurrentfieldvalue}}%
11755     {#2}%
11756 }

```

`\TeXEntryAliases` Convenient shortcut for use with entry-type-aliases to alias standard BIBTEX entry types to `@bibtexentry`.

```

11757 \newcommand*{\GlsXtrBibTeXEntryAliases}{%
11758     article=bibtexentry,
11759     book=bibtexentry,
11760     booklet=bibtexentry,
11761     conference=bibtexentry,
11762     inbook=bibtexentry,
11763     incollection=bibtexentry,
11764     inproceedings=bibtexentry,
11765     manual=bibtexentry,
11766     mastersthesis=bibtexentry,
11767     misc=bibtexentry,
11768     phdthesis=bibtexentry,
11769     proceedings=bibtexentry,
11770     techreport=bibtexentry,
11771     unpublished=bibtexentry
11772 }

```

`ideBibTeXFields` Convenient shortcut to define the standard BIBTeX fields.

```
11773 \newcommand*\GlsXtrProvideBibTeXFields{}{%
11774   \glsaddstoragekey{address}{}{\glsxtrbibaddress}%
11775   \glsaddstoragekey{author}{}{\glsxtrbibauthor}%
11776   \glsaddstoragekey{booktitle}{}{\glsxtrbibbooktitle}%
11777   \glsaddstoragekey{chapter}{}{\glsxtrbibchapter}%
11778   \glsaddstoragekey{edition}{}{\glsxtrbibedition}%
11779   \glsaddstoragekey{howpublished}{}{\glsxtrbibhowpublished}%
11780   \glsaddstoragekey{institution}{}{\glsxtrbibinstitution}%
11781   \glsaddstoragekey{journal}{}{\glsxtrbibjournal}%
11782   \glsaddstoragekey{month}{}{\glsxtrbibmonth}%
11783   \glsaddstoragekey{note}{}{\glsxtrbibnote}%
11784   \glsaddstoragekey{number}{}{\glsxtrbibnumber}%
11785   \glsaddstoragekey{organization}{}{\glsxtrbiborganization}%
11786   \glsaddstoragekey{pages}{}{\glsxtrbibpages}%
11787   \glsaddstoragekey{publisher}{}{\glsxtrbibpublisher}%
11788   \glsaddstoragekey{school}{}{\glsxtrbibschool}%
11789   \glsaddstoragekey{series}{}{\glsxtrbibseries}%
11790   \glsaddstoragekey{title}{}{\glsxtrbibtitle}%
11791   \glsaddstoragekey{bibtexttype}{}{\glsxtrbibtype}%
11792   \glsaddstoragekey{volume}{}{\glsxtrbibvolume}%
11793 }
```

Multiple supplementary references are only supported with `bib2gls`.

`ltisuplocation` This is like `\glsxtrsupphypernumber` 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.

```
11794 \newcommand*\glsxtrmultisuplocation[3]{%
11795 {%
11796   \def\glsxtrsuplocationurl{\#2}%
11797   \glshypernumber{\#1}%
11798 }%
11799 }
```

```
\glsxtrdisplaysupploc{\prefix}{\counter}{\format}{\src}{\location}
```

This is like `\glsnoidxdisplayloc` but is used for supplementary locations and so requires an extra argument.

```
11800 \newcommand*\glsxtrdisplaysupploc[5]{%
11801   \setentrycounter[\#1]{\#2}%
11802   \glsxtrmultisuplocation{\#5}{\#4}{\#3}%
11803 }
```

Provide missing Greek letters for use in maths mode. These commands are recognised by `bib2gls` and will be mapped to the Mathematical Greek Italic letters. This ensures that the

Greek letters that have the same shape as Latin letters are kept with the other mathematical Greek letters for sorting purposes. The L^AT_EX version of these commands (provided here) use an upright font for capitals and italic for lower case to provide a better match with the other Greek symbols provided by the kernel.

```
\Alpha  
11804 \providecommand*\Alpha{\mathrm{A}}  
  
\Beta  
11805 \providecommand*\Beta{\mathrm{B}}  
  
\Epsilon  
11806 \providecommand*\Epsilon{\mathrm{E}}  
  
\Zeta  
11807 \providecommand*\Zeta{\mathrm{Z}}  
  
\Eta  
11808 \providecommand*\Eta{\mathrm{H}}  
  
\Iota  
11809 \providecommand*\Iota{\mathrm{I}}  
  
\Kappa  
11810 \providecommand*\Kappa{\mathrm{K}}  
  
\Mu  
11811 \providecommand*\Mu{\mathrm{M}}  
  
\Nu  
11812 \providecommand*\Nu{\mathrm{N}}  
  
\Omicron  
11813 \providecommand*\Omicron{\mathrm{O}}  
  
\Rho  
11814 \providecommand*\Rho{\mathrm{P}}  
  
\Tau  
11815 \providecommand*\Tau{\mathrm{T}}  
  
\Chi  
11816 \providecommand*\Chi{\mathrm{X}}  
  
\Digamma  
11817 \providecommand*\Digamma{\mathrm{F}}
```

```

\omicron
11818 \providecommand*\omicron{\mathit{o}}
      Provide corresponding upright characters if upgreek has been loaded. (The upper case
      characters are the same as above.)
11819 \@ifpackageloaded{upgreek}%
11820 {

\Upsilon
11821 \providecommand*\Upsilon{\mathrm{A}}
\Upsilon
11822 \providecommand*\Upsilon{\mathrm{B}}
\Upsilon
11823 \providecommand*\Upsilon{\mathrm{E}}
\Upsilon
11824 \providecommand*\Upsilon{\mathrm{Z}}
\Upsilon
11825 \providecommand*\Upsilon{\mathrm{H}}
\Upsilon
11826 \providecommand*\Upsilon{\mathrm{I}}
\Upsilon
11827 \providecommand*\Upsilon{\mathrm{K}}
\Upsilon
11828 \providecommand*\Upsilon{\mathrm{M}}
\Upsilon
11829 \providecommand*\Upsilon{\mathrm{N}}
\Upsilon
11830 \providecommand*\Upsilon{\mathrm{O}}
\Upsilon
11831 \providecommand*\Upsilon{\mathrm{P}}
\Upsilon
11832 \providecommand*\Upsilon{\mathrm{T}}
\Upsilon
11833 \providecommand*\Upsilon{\mathrm{X}}

```

```
\upomicron
11834 \providecommand*\upomicron{\mathrm{o}}
11835 }%
11836 {}% upgreek.sty not loaded
```

This package provides some basic rules, but it's not intended for complete coverage of all locales. The CLDR should provide the appropriate locale-sensitive rules. These macros are primarily to help construct custom rules to include, for example, Greek maths symbols mixed with Latin. For the full rule syntax, see the Java API for [RuleBaseCollator](#)

If you want to provide a rule-block for a particular locale to allow for customization within that locale, create a file called `glossariesxtr-<tag>.1df` (where `<tag>` identifies the locale) and add similar commands. See the description of `\IfTrackedLanguageFileExists` in the `tracklang` manual for the allowed forms of `<tag>`. The simplest is to just use the root language label or ISO code. The file will then be automatically loaded by `glossaries-extra` if the document has support for that language.

When combining these blocks of rules, remember to separate them with the appropriate character. For example:

```
sort-rule={\glsxtrcontrolrules
;\glsxtrspacerules
;\glsxtrnonprintablerules
;\glsxtrcombiningdiacriticrules
,\glsxtrhyphenrules
<\glsxtrgeneralpuncrules
<\glsxtrdigirules
<\glsxtrfractionrules
<\glsxtrGeneralLatinIVrules
<\glsxtrMathItalicGreekIRules
}
```

`xtrcontrolrules` These are control characters that are usually placed at the start of a rule in the ‘ignored characters’ section. These control characters are unlikely to appear in any entry fields but are provided for completeness. `\string` is used for punctuation characters in case they’ve been made active.

```
11837 \newcommand*\glsxtrcontrolrules}{%
11838 \string'\glshex 200B\string'\string=\glshex 200C\string=\glshex 200D
11839 \string=\glshex 200E\string=\glshex 200F\string=\glshex 0000\string=\glshex 0001
11840 \string=\glshex 0002\string=\glshex 0003\string=\glshex 0004\string=\glshex 0005
11841 \string=\glshex 0006\string=\glshex 0007\string=\glshex 0008
11842 \string=\string'\glshex 0009\string'\string=\string'\glshex 000B\string'
11843 \string=\glshex 000E\string=\glshex 000F\string=\string'\glshex
11844 0010\string'\string=\glshex 0011
11845 \string=\glshex 0012\string=\glshex 0013\string=\glshex 0014\string=\glshex 0015
11846 \string=\glshex 0016\string=\glshex 0017\string=\glshex 0018\string=\glshex 0019
11847 \string=\glshex 001A\string=\glshex 001B\string=\glshex 001C\string=\glshex 001D
11848 \string=\glshex 001E\string=\glshex 001F\string=\glshex 007F\string=\glshex 0080
11849 \string=\glshex 0081\string=\glshex 0082\string=\glshex 0083\string=\glshex 0084
```

```

11850 \string=\glshex 0085\string=\glshex 0086\string=\glshex 0087\string=\glshex 0088
11851 \string=\glshex 0089\string=\glshex 008A\string=\glshex 008B\string=\glshex 008C
11852 \string=\glshex 008D\string=\glshex 008E\string=\glshex 008F\string=\glshex 0090
11853 \string=\glshex 0091\string=\glshex 0092\string=\glshex 0093\string=\glshex 0094
11854 \string=\glshex 0095\string=\glshex 0096\string=\glshex 0097\string=\glshex 0098
11855 \string=\glshex 0099\string=\glshex 009A\string=\glshex 009B\string=\glshex 009C
11856 \string=\glshex 009D\string=\glshex 009E\string=\glshex 009F
11857 }

```

`lsxtrspacerules` These are space characters.

```

11858 \newcommand*{\glsxtrspacerules}{%
11859 \string' \string'\string;
11860 \string'\glshex 00A0\string'\string;
11861 \string'\glshex 2000\string'\string;
11862 \string'\glshex 2001\string'\string;
11863 \string'\glshex 2002\string'\string;
11864 \string'\glshex 2003\string'\string;
11865 \string'\glshex 2004\string'\string;
11866 \string'\glshex 2005\string'\string;
11867 \string'\glshex 2006\string'\string;
11868 \string'\glshex 2007\string'\string;
11869 \string'\glshex 2008\string'\string;
11870 \string'\glshex 2009\string'\string;
11871 \string'\glshex 200A\string'\string;
11872 \string'\glshex 3000\string'
11873 }

```

`nprintablerules` These are non-printable characters (BOM, tabs, line feed and carriage return).

```

11874 \newcommand*{\glsxtrnonprintablerules}{%
11875 \string'\glshex FFFF\string'\string;
11876 \string'\glshex 000A\string'\string;
11877 \string'\glshex 0009\string'\string;
11878 \string'\glshex 000C\string'\string;
11879 \string'\glshex 000B\string'
11880 }

```

`gdiacriticrules` Combining diacritic marks. This is split into multiple macros.

```

11881 \newcommand*{\glsxtrcombiningdiacriticrules}{%
11882 \glsxtrcombiningdiacriticIrules\string;
11883 \glsxtrcombiningdiacriticIIrules\string;
11884 \glsxtrcombiningdiacriticIIIrules\string;
11885 \glsxtrcombiningdiacriticIVrules
11886 }

```

`diacriticIrules` First set of combining diacritic marks.

```

11887 \newcommand*{\glsxtrcombiningdiacriticIrules}{%
11888 \glshex 0301\string;% combining acute
11889 \glshex 0300\string;% combining grave
11890 \glshex 0306\string;% combining breve

```

```

11891 \glshex 0302\string;% combining circumflex
11892 \glshex 030C\string;% combining caron
11893 \glshex 030A\string;% combining ring
11894 \glshex 030D\string;% combining vertical line above
11895 \glshex 0308\string;% combining diaeresis
11896 \glshex 030B\string;% combining double acute
11897 \glshex 0303\string;% combining tilde
11898 \glshex 0307\string;% combining dot above
11899 \glshex 0304% combining macron
11900 }

```

iacriticIIrules Second set of combining diacritic marks.

```

11901 \newcommand*\{glsxtrcombiningdiacriticIIrules}\{%
11902 \glshex 0337\string;% combining short solidus overlay
11903 \glshex 0327\string;% combining cedilla
11904 \glshex 0328\string;% combining ogonek
11905 \glshex 0323\string;% combining dot below
11906 \glshex 0332\string;% combining low line
11907 \glshex 0305\string;% combining overline
11908 \glshex 0309\string;% combining hook above
11909 \glshex 030E\string;% combining double vertical line above
11910 \glshex 030F\string;% combining double grave accent
11911 \glshex 0310\string;% combining candrabindu
11912 \glshex 0311\string;% combining inverted breve
11913 \glshex 0312\string;% combining turned comma above
11914 \glshex 0313\string;% combining comma above
11915 \glshex 0314\string;% combining reversed comma above
11916 \glshex 0315\string;% combining comma above right
11917 \glshex 0316\string;% combining grave accent below
11918 \glshex 0317% combining acute accent below
11919 }

```

acriticIIIrules Third set of combining diacritic marks.

```

11920 \newcommand*\{glsxtrcombiningdiacriticIIIrules}\{%
11921 \glshex 0318\string;% combining left tack below
11922 \glshex 0319\string;% combining right tack below
11923 \glshex 031A\string;% combining left angle above
11924 \glshex 031B\string;% combining horn
11925 \glshex 031C\string;% combining left half ring below
11926 \glshex 031D\string;% combining up tack below
11927 \glshex 031E\string;% combining down tack below
11928 \glshex 031F\string;% combining plus sign below
11929 \glshex 0320\string;% combining minus sign below
11930 \glshex 0321\string;% combining palatalized hook below
11931 \glshex 0322\string;% combining retroflex hook below
11932 \glshex 0324\string;% combining diaresis below
11933 \glshex 0325\string;% combining ring below
11934 \glshex 0326\string;% combining comma below
11935 \glshex 0329\string;% combining vertical line below

```

```

11936 \glshex 032A\string;% combining bridge below
11937 \glshex 032B\string;% combining inverted double arch below
11938 \glshex 032C\string;% combining caron below
11939 \glshex 032D\string;% combining circumflex accent below
11940 \glshex 032E\string;% combining breve below
11941 \glshex 032F\string;% combining inverted breve below
11942 \glshex 0330\string;% combining tilde below
11943 \glshex 0331\string;% combining macron below
11944 \glshex 0333\string;% combining double low line
11945 \glshex 0334\string;% combining tilde overlay
11946 \glshex 0335\string;% combining short stroke overlay
11947 \glshex 0336\string;% combining long stroke overlay
11948 \glshex 0338\string;% combining long solidus overlay
11949 \glshex 0339\string;% combining combining right half ring below
11950 \glshex 033A\string;% combining inverted bridge below
11951 \glshex 033B\string;% combining square below
11952 \glshex 033C\string;% combining seagull below
11953 \glshex 033D\string;% combining x above
11954 \glshex 033E\string;% combining vertical tilde
11955 \glshex 033F\string;% combining double overline
11956 \glshex 0342\string;% combining Greek perispomeni
11957 \glshex 0344\string;% combining Greek dialytika tonos
11958 \glshex 0345\string;% combining Greek ypogegrammeni
11959 \glshex 0360\string;% combining double tilde
11960 \glshex 0361\string;% combining double inverted breve
11961 \glshex 0483\string;% combining Cyrillic titlo
11962 \glshex 0484\string;% combining Cyrillic palatalization
11963 \glshex 0485\string;% combining Cyrillic dasia pneumata
11964 \glshex 0486% combining Cyrillic psili pneumata
11965 }

```

iacriticIVrules Fourth set of combining diacritic marks.

```

11966 \newcommand*\{\glsxtrcombiningdiacriticIVrules\}{%
11967 \glshex 20D0\string;% combining left harpoon above
11968 \glshex 20D1\string;% combining right harpoon above
11969 \glshex 20D2\string;% combining long vertical line overlay
11970 \glshex 20D3\string;% combining short vertical line overlay
11971 \glshex 20D4\string;% combining anticlockwise arrow above
11972 \glshex 20D5\string;% combining clockwise arrow above
11973 \glshex 20D6\string;% combining left arrow above
11974 \glshex 20D7\string;% combining right arrow above
11975 \glshex 20D8\string;% combining ring overlay
11976 \glshex 20D9\string;% combining clockwise ring overlay
11977 \glshex 20DA\string;% combining anticlockwise ring overlay
11978 \glshex 20DB\string;% combining three dots above
11979 \glshex 20DC\string;% combining four dots above
11980 \glshex 20DD\string;% combining enclosing circle
11981 \glshex 20DE\string;% combining enclosing square
11982 \glshex 20DF\string;% combining enclosing diamond

```

```
11983 \glshex 20E0\string;% combining enclosing circle backslash
11984 \glshex 20E1% combining left right arrow above
11985 }
```

sxtrhyphenrules Hyphens.

```
11986 \newcommand*{\glsxtrhyphenrules}{%
11987   \string'\string-\string'\string;\% ASCII hyphen
11988   \glshex 00AD\string;% soft hyphen
11989   \glshex 2010\string;% hyphen
11990   \glshex 2011\string;% non-breaking hyphen
11991   \glshex 2012\string;% figure dash
11992   \glshex 2013\string;% en dash
11993   \glshex 2014\string;% em dash
11994   \glshex 2015\string;% horizontal bar
11995   \glshex 2212\string=\glshex 207B\string=\glshex 208B% minus sign
11996 }
```

eneralpuncrules General punctuation.

```
11997 \newcommand*{\glsxtrgeneralpuncrules}{%
11998   \glsxtrgeneralpuncIrules
11999   \string<\glsxtrcurrentrules
12000   \string<\glsxtrgeneralpuncIIrules
12001 }
```

eneralpuncIrules First set of general punctuation.

```
12002 \newcommand*{\glsxtrgeneralpuncIrules}{%
12003   \string'\glshex 005F\string'% underscore
12004   \string<\glshex 00AF% macron
12005   \string<\string'\glshex 002C\string'% comma
12006   \string<\string'\glshex 003B\string'% semi-colon
12007   \string<\string'\glshex 003A\string'% colon
12008   \string<\string'\glshex 0021\string'% exclamation mark
12009   \string<\glshex 00A1% inverted exclamation mark
12010   \string<\string'\glshex 003F\string'% question mark
12011   \string<\glshex 00BF% inverted question mark
12012   \string<\string'\glshex 002F\string'% solidus
12013   \string<\string'\glshex 002E\string'% full stop
12014   \string<\glshex 00B4% acute accent
12015   \string<\string'\glshex 0060\string'% grave accent
12016   \string<\string'\glshex 005E\string'% circumflex accent
12017   \string<\glshex 00A8% diaersis
12018   \string<\string'\glshex 007E\string'% tilde
12019   \string<\glshex 00B7% middle dot
12020   \string<\glshex 00B8% cedilla
12021   \string<\string'\glshex 0027\string'% straight apostrophe
12022   \string<\string'\glshex 0022\string'% straight double quote
12023   \string<\glshex 00AB% left guillemet
12024   \string<\glshex 00BB% right guillemet
12025   \string<\string'\glshex 0028\string'% left parenthesis
```

```

12026 \string=\glshex 207D\string=\glshex 208D% super/subscript left parenthesis
12027 \string<\string'\glshex 0029\string'% right parenthesis
12028 \string=\glshex 207E\string=\glshex 208E% super/subscript right parenthesis
12029 \string<\string'\glshex 005B\string'% left square bracket
12030 \string<\string'\glshex 005D\string'% right square bracket
12031 \string<\string'\glshex 007B\string'% left curly bracket
12032 \string<\string'\glshex 007D\string'% right curly bracket
12033 \string<\glshex 00A7% section sign
12034 \string<\glshex 00B6% pilcrow sign
12035 \string<\glshex 00A9% copyright sign
12036 \string<\glshex 00AE% registered sign
12037 \string<\string'\glshex 0040\string'% at sign
12038 }

```

trcurrencyrules General punctuation.

```

12039 \newcommand*\glsxtrcurrencyrules}{%
12040 \glshex 00A4% currency sign
12041 \string<\glshex 0E3F% Thai currency symbol baht
12042 \string<\glshex 00A2% cent sign
12043 \string<\glshex 20A1% colon sign
12044 \string<\glshex 20A2% cruzeiro sign
12045 \string<\string'\glshex 0024\string'% dollar sign
12046 \string<\glshex 20AB% dong sign
12047 \string<\glshex 20AC% euro sign
12048 \string<\glshex 20A3% French franc sign
12049 \string<\glshex 20A4% lira sign
12050 \string<\glshex 20A5% mill sign
12051 \string<\glshex 20A6% naira sign
12052 \string<\glshex 20A7% peseta sign
12053 \string<\glshex 00A3% pound sign
12054 \string<\glshex 20A8% rupee sign
12055 \string<\glshex 20AA% new sheqel sign
12056 \string<\glshex 20A9% won sign
12057 \string<\glshex 00A5% yen sign
12058 }

```

eralpuncIIrules Second set of general punctuation.

```

12059 \newcommand*\glsxtrgeneralpuncIIrules}{%
12060 \string'\glshex 002A\string'% asterisk
12061 \string<\string'\glshex 005C\string'% backslash
12062 \string<\string'\glshex 0026\string'% ampersand
12063 \string<\string'\glshex 0023\string'% hash sign
12064 \string<\string'\glshex 0025\string'% percent sign
12065 \string<\string'\glshex 002B\string'% plus sign
12066 \string=\glshex 207A\string=\glshex 208A% super/subscript plus sign
12067 \string<\glshex 00B1% plus-minus sign
12068 \string<\glshex 00F7% division sign
12069 \string<\glshex 00D7% multiplication sign
12070 \string<\string'\glshex 003C\string'% less-than sign

```

```

12071 \string<\string'\glshex 003D\string'% equals sign
12072 \string<\string'\glshex 003E\string'% greater-than sign
12073 \string<\glshex 00AC% not sign
12074 \string<\string'\glshex 007C\string'% vertical bar (pipe)
12075 \string<\glshex 00A6% broken bar
12076 \string<\glshex 00B0% degree sign
12077 \string<\glshex 00B5% micron sign
12078 }

```

eralLatinIrules Basic Latin alphabet.

```

12079 \newcommand*\glsxtrGeneralLatinIrules}{%
12080 \glsxtrLatinA
12081 \string<{b,B%
12082 \string<{c,C%
12083 \string<{d,D%
12084 \string<\glsxtrLatinE
12085 \string<{f,F%
12086 \string<{g,G%
12087 \string<\glsxtrLatinH
12088 \string<\glsxtrLatinI
12089 \string<{j,J%
12090 \string<\glsxtrLatinK
12091 \string<\glsxtrLatinL
12092 \string<\glsxtrLatinM
12093 \string<\glsxtrLatinN
12094 \string<\glsxtrLatinO
12095 \string<\glsxtrLatinP
12096 \string<{q,Q%
12097 \string<{r,R%
12098 \string<\glsxtrLatinS
12099 \string<\glsxtrLatinT
12100 \string<{u,U%
12101 \string<{v,V%
12102 \string<{w,W%
12103 \string<\glsxtrLatinX
12104 \string<{y,Y%
12105 \string<{z,Z
12106 }

```

ralLatinIIrules General Latin alphabet (eth between D and E, ß treated as SS).

```

12107 \newcommand*\glsxtrGeneralLatinIIrules}{%
12108 \glsxtrLatinA
12109 \string<{b,B%
12110 \string<{c,C%
12111 \string<{d,D%
12112 \string<\glsxtrLatinEth
12113 \string<\glsxtrLatinE
12114 \string<{f,F%
12115 \string<{g,G%

```

```

12116 \string<\glsxtrLatinH
12117 \string<\glsxtrLatinI
12118 \string<j,J%
12119 \string<\glsxtrLatinK
12120 \string<\glsxtrLatinL
12121 \string<\glsxtrLatinM
12122 \string<\glsxtrLatinN
12123 \string<\glsxtrLatinO
12124 \string<\glsxtrLatinP
12125 \string<q,Q%
12126 \string<r,R%
12127 \string<\glsxtrLatinS
12128 \string& SS \string, \glsxtrLatinEszettSs
12129 \string<\glsxtrLatinT
12130 \string<u,U%
12131 \string<v,V%
12132 \string<w,W%
12133 \string<\glsxtrLatinX
12134 \string<y,Y%
12135 \string<z,Z%
12136 }

```

`allLatinIIIrules` General Latin alphabet (eth between D and E, ß treated as SZ).

```

12137 \newcommand*{\glsxtrGeneralLatinIIIrules}{%
12138 \glsxtrLatinA
12139 \string<b,B%
12140 \string<c,C%
12141 \string<d,D%
12142 \string<\glsxtrLatinEth
12143 \string<\glsxtrLatinE
12144 \string<f,F%
12145 \string<g,G%
12146 \string<\glsxtrLatinH
12147 \string<\glsxtrLatinI
12148 \string<j,J%
12149 \string<\glsxtrLatinK
12150 \string<\glsxtrLatinL
12151 \string<\glsxtrLatinM
12152 \string<\glsxtrLatinN
12153 \string<\glsxtrLatinO
12154 \string<\glsxtrLatinP
12155 \string<q,Q%
12156 \string<r,R%
12157 \string<\glsxtrLatinS
12158 \string& SZ, \glsxtrLatinEszettSz
12159 \string<\glsxtrLatinT
12160 \string<u,U%
12161 \string<v,V%
12162 \string<w,W%

```

```
12163 \string<\glsxtrLatinX
12164 \string<y,Y%
12165 \string<z,Z%
12166 }
```

ralLatinIVrules General Latin alphabet (Æ treated as AE andŒtreated as OE, Þtreated as TH, ß treated as SS, eth between D and E).

```
12167 \newcommand*\glsxtrGeneralLatinIVrules}{%
12168 \glsxtrLatinA
12169 \string& AE , \glsxtrLatinAELigature
12170 \string<b,B%
12171 \string<c,C%
12172 \string<d,D%
12173 \string<\glsxtrLatinEth
12174 \string<\glsxtrLatinE
12175 \string<f,F%
12176 \string<g,G%
12177 \string<\glsxtrLatinH
12178 \string<\glsxtrLatinI
12179 \string<j,J%
12180 \string<\glsxtrLatinK
12181 \string<\glsxtrLatinL
12182 \string<\glsxtrLatinM
12183 \string<\glsxtrLatinN
12184 \string<\glsxtrLatinO
12185 \string& OE , \glsxtrLatinOELigature
12186 \string<\glsxtrLatinP
12187 \string<q,Q%
12188 \string<r,R%
12189 \string<\glsxtrLatinS
12190 \string& SS , \glsxtrLatinEszettSs
12191 \string<\glsxtrLatinT
12192 \string& th =\glshex 00DE
12193 \string& TH =\glshex 00FE
12194 \string<u,U%
12195 \string<v,V%
12196 \string<w,W%
12197 \string<\glsxtrLatinX
12198 \string<y,Y%
12199 \string<z,Z%
12200 }
```

eralLatinVrules General Latin alphabet (eth between D and E, ß treated as SS, Þ treated as TH).

```
12201 \newcommand*\glsxtrGeneralLatinVrules}{%
12202 \glsxtrLatinA
12203 \string<b,B%
12204 \string<c,C%
12205 \string<d,D%
12206 \string<\glsxtrLatinEth
```

```

12207 \string<\glsxtrLatinE
12208 \string<f,F%
12209 \string<g,G%
12210 \string<\glsxtrLatinH
12211 \string<\glsxtrLatinI
12212 \string<j,J%
12213 \string<\glsxtrLatinK
12214 \string<\glsxtrLatinL
12215 \string<\glsxtrLatinM
12216 \string<\glsxtrLatinN
12217 \string<\glsxtrLatinO
12218 \string<\glsxtrLatinP
12219 \string<q,Q%
12220 \string<r,R%
12221 \string<\glsxtrLatinS
12222 \string& SS , \glsxtrLatinEszettSS
12223 \string<\glsxtrLatinT
12224 \string& th =\glshex 0ODE
12225 \string& TH =\glshex 0OFE
12226 \string<u,U%
12227 \string<v,V%
12228 \string<w,W%
12229 \string<\glsxtrLatinX
12230 \string<y,Y%
12231 \string<z,Z%
12232 }

```

ralLatinVIrules General Latin alphabet (eth between D and E, ß treated as SZ, Þ treated as TH).

```

12233 \newcommand*\glsxtrGeneralLatinVIrules}{%
12234 \glsxtrLatinA
12235 \string<b,B%
12236 \string<c,C%
12237 \string<d,D%
12238 \string<\glsxtrLatinEth
12239 \string<\glsxtrLatinE
12240 \string<f,F%
12241 \string<g,G%
12242 \string<\glsxtrLatinH
12243 \string<\glsxtrLatinI
12244 \string<j,J%
12245 \string<\glsxtrLatinK
12246 \string<\glsxtrLatinL
12247 \string<\glsxtrLatinM
12248 \string<\glsxtrLatinN
12249 \string<\glsxtrLatinO
12250 \string<\glsxtrLatinP
12251 \string<q,Q%
12252 \string<r,R%
12253 \string<\glsxtrLatinS

```

```

12254 \string& SZ , \glsxtrLatinEszettSz
12255 \string<\glsxtrLatinT
12256 \string& th =\glshex 00DE
12257 \string& TH =\glshex 00FE
12258 \string<u,U%
12259 \string<v,V%
12260 \string<w,W%
12261 \string<\glsxtrLatinX
12262 \string<y,Y%
12263 \string<z,Z%
12264 }

```

allLatinVIIrules General Latin alphabet (Æ between A and B, eth between D and E, insular G as G, œ between O and P, long S equivalent to S, Þ between T and U and wynn as W).

```

12265 \newcommand*\{\glsxtrGeneralLatinVIIrules\}{%
12266 \glsxtrLatinA
12267 \string<\glsxtrLatinAEligature
12268 \string<b,B%
12269 \string<c,C%
12270 \string<d,D%
12271 \string<\glsxtrLatinEth
12272 \string<\glsxtrLatinE
12273 \string<f,F%
12274 \string<\glsxtrLatinInsularG
12275 \string<\glsxtrLatinH
12276 \string<\glsxtrLatinI
12277 \string<j,J%
12278 \string<\glsxtrLatinK
12279 \string<\glsxtrLatinL
12280 \string<\glsxtrLatinM
12281 \string<\glsxtrLatinN
12282 \string<\glsxtrLatinO
12283 \string<\glsxtrLatinOEligature
12284 \string<\glsxtrLatinP
12285 \string<q,Q%
12286 \string<r,R%
12287 \string<\glshex 017F=\glsxtrLatinS % s and long s
12288 \string<\glsxtrLatinT
12289 \string<\glsxtrLatinThorn
12290 \string<u,U%
12291 \string<v,V%
12292 \string< w\string=\glshex 01BF, W\string=\glshex 01F7
12293 \string<\glsxtrLatinX
12294 \string<y,Y%
12295 \string<z,Z%
12296 }

```

LatinVIIIrules General Latin alphabet (Æ treated as AE and œ treated as OE, þ treated as TH, ß treated as SS, eth treated as D, Ø treated as O, Ł treated as L).

```

12297 \newcommand*{\glsxtrGeneralLatinVIIIRules}{%
12298   \glsxtrLatinA
12299   \string& AE , \glsxtrLatinAELigature
12300   \string<b,B%
12301   \string<c,C%
12302   \string<\glshex 00F0\string;d,\glshex 00D0\string;D% D and eth
12303   \string<\glsxtrLatinE
12304   \string<f,F%
12305   \string<g,G%
12306   \string<\glsxtrLatinH
12307   \string<\glsxtrLatinI
12308   \string<j,J%
12309   \string<\glsxtrLatinK
12310   \string<\glshex 0142\string=\glsxtrLatinL\string=\glshex 0141% L and \L
12311   \string<\glsxtrLatinM
12312   \string<\glsxtrLatinN
12313   \string<\glshex 00F8\string=\glsxtrLatinO\string=\glshex 00D8% O and \O
12314   \string& OE , \glsxtrLatinOELigature
12315   \string<\glsxtrLatinP
12316   \string<q,Q%
12317   \string<r,R%
12318   \string<\glsxtrLatinS
12319   \string& SS , \glsxtrLatinEszettSs
12320   \string<\glsxtrLatinT
12321   \string& th =\glshex 00DE
12322   \string& TH =\glshex 00FE
12323   \string<u,U%
12324   \string<v,V%
12325   \string<w,W%
12326   \string<\glsxtrLatinX
12327   \string<y,Y%
12328   \string<z,Z%
12329 }

```

\glsxtrLatinA

```

12330 \newcommand*{\glsxtrLatinA}{%
12331   a\string=\glshex 00AA\string=\glshex 2090,A
12332 }

```

\glsxtrLatinE

```

12333 \newcommand*{\glsxtrLatinE}{%
12334   e\string=\glshex 2091,E
12335 }

```

\glsxtrLatinH

```

12336 \newcommand*{\glsxtrLatinH}{%
12337   h\string=\glshex 2095,H
12338 }

```

```

\glsxtrLatinI
12339 \newcommand*{\glsxtrLatinI}{%
12340   i\string=\glshex 2071,I
12341 }

\glsxtrLatinK
12342 \newcommand*{\glsxtrLatinK}{%
12343   k\string=\glshex 2096,K
12344 }

\glsxtrLatinL
12345 \newcommand*{\glsxtrLatinL}{%
12346   l\string=\glshex 2097,L
12347 }

\glsxtrLatinM
12348 \newcommand*{\glsxtrLatinM}{%
12349   m\string=\glshex 2098,M
12350 }

\glsxtrLatinN
12351 \newcommand*{\glsxtrLatinN}{%
12352   n\string=\glshex 207F\string=\glshex 2099,N
12353 }

\glsxtrLatinO
12354 \newcommand*{\glsxtrLatinO}{%
12355   o\string=\glshex 00BA\string=\glshex 2092,O
12356 }

\glsxtrLatinP
12357 \newcommand*{\glsxtrLatinP}{%
12358   p\string=\glshex 209A,P
12359 }

\glsxtrLatinS
12360 \newcommand*{\glsxtrLatinS}{%
12361   s\string=\glshex 209B,S
12362 }

\glsxtrLatinT
12363 \newcommand*{\glsxtrLatinT}{%
12364   t\string=\glshex 209C,T
12365 }

\glsxtrLatinX
12366 \newcommand*{\glsxtrLatinX}{%
12367   x\string=\glshex 2093,X
12368 }

```

`lsxtrLatinSchwa` Latin schwa (lower case, subscript and upper case).

```
12369 \newcommand*{\glsxtrLatinSchwa}{%
12370   \glshex 0259\string=\glshex 2094,\glshex 018F
12371 }
```

`trLatinEszettSs`

```
12372 \newcommand*{\glsxtrLatinEszettSs}{%
12373   \glshex 00DF% eszett
12374   \string=\glshex 017Fs % long S s
12375 }
```

`trLatinEszettSz`

```
12376 \newcommand*{\glsxtrLatinEszettSz}{%
12377   \glshex 00DF% eszett
12378   \string= \glshex 017Fz % long S z
12379 }
```

`\glsxtrLatinEth`

```
12380 \newcommand*{\glsxtrLatinEth}{%
12381   \glshex 00F0,\glshex 00D0% eth
12382 }
```

`lsxtrLatinThorn`

```
12383 \newcommand*{\glsxtrLatinThorn}{%
12384   \glshex 00FE,\glshex 00DE% thorn
12385 }
```

`LatinAELigature`

```
12386 \newcommand*{\glsxtrLatinAELigature}{%
12387   \glshex 00E6,\glshex 00C6% AE-ligature
12388 }
```

`LatinOELigature`

```
12389 \newcommand*{\glsxtrLatinOELigature}{%
12390   \glshex 0153,\glshex 0152% OE-ligature
12391 }
```

`\glsxtrLatinAA`

```
12392 \newcommand*{\glsxtrLatinAA}{%
12393   \glshex 00E5=a\glshex 030A,% \aa
12394   \glshex 00C5=A\glshex 030A% \AA
12395 }
```

`glsxtrLatinWynn`

```
12396 \newcommand*{\glsxtrLatinWynn}{%
12397   \glshex 01BF,\glshex 01F7% wynn
12398 }
```

```
trLatinInsularG
12399 \newcommand*{\glsxtrLatinInsularG}{%
12400 \glshex 1D79,\glshex A77D% insular G
12401 \string; g, G
12402 }
```

```
sxtrLatinOslash
12403 \newcommand*{\glsxtrLatinOslash}{%
12404 \glshex 00F8,\glshex 00D8% \o, \O
12405 }
```

```
sxtrLatinLslash
12406 \newcommand*{\glsxtrLatinLslash}{%
12407 \glshex 0142,\glshex 0141% \l, \L
12408 }
```

thUpGreekIrules Includes digamma between epsilon and zeta.

```
12409 \newcommand*{\glsxtrMathUpGreekIrules}{%
12410 \glsxtrUpAlpha
12411 \string<\glsxtrUpBeta
12412 \string<\glsxtrUpGamma
12413 \string<\glsxtrUpDelta
12414 \string<\glsxtrUpEpsilon
12415 \string<\glsxtrUpDigamma
12416 \string<\glsxtrUpZeta
12417 \string<\glsxtrUpEta
12418 \string<\glsxtrUpTheta
12419 \string<\glsxtrUpIota
12420 \string<\glsxtrUpKappa
12421 \string<\glsxtrUpLambda
12422 \string<\glsxtrUpMu
12423 \string<\glsxtrUpNu
12424 \string<\glsxtrUpXi
12425 \string<\glsxtrUpOmicron
12426 \string<\glsxtrUpPi
12427 \string<\glsxtrUpRho
12428 \string<\glsxtrUpSigma
12429 \string<\glsxtrUpTau
12430 \string<\glsxtrUpUpsilon
12431 \string<\glsxtrUpPhi
12432 \string<\glsxtrUpChi
12433 \string<\glsxtrUpPsi
12434 \string<\glsxtrUpOmega
12435 }
```

hUpGreekIIrules Doesn't include digamma.

```
12436 \newcommand*{\glsxtrMathUpGreekIIrules}{%
12437 \glsxtrUpAlpha
12438 \string<\glsxtrUpBeta
```

```

12439 \string<\glsxtrUpGamma
12440 \string<\glsxtrUpDelta
12441 \string<\glsxtrUpEpsilon
12442 \string<\glsxtrUpZeta
12443 \string<\glsxtrUpEta
12444 \string<\glsxtrUpTheta
12445 \string<\glsxtrUpIota
12446 \string<\glsxtrUpKappa
12447 \string<\glsxtrUpLambda
12448 \string<\glsxtrUpMu
12449 \string<\glsxtrUpNu
12450 \string<\glsxtrUpXi
12451 \string<\glsxtrUpOmicron
12452 \string<\glsxtrUpPi
12453 \string<\glsxtrUpRho
12454 \string<\glsxtrUpSigma
12455 \string<\glsxtrUpTau
12456 \string<\glsxtrUpUpsilon
12457 \string<\glsxtrUpPhi
12458 \string<\glsxtrUpChi
12459 \string<\glsxtrUpPsi
12460 \string<\glsxtrUpOmega
12461 }

```

alicGreekIrules Includes (upright) digamma between epsilon and zeta (there isn't an italic digamma), so don't mix with `\glsxtrMathUpGreekIrules` or there may be unexpected results.

```

12462 \newcommand*{\glsxtrMathItalicGreekIrules}{%
12463   \glsxtrMathItalicAlpha
12464   \string<\glsxtrMathItalicBeta
12465   \string<\glsxtrMathItalicGamma
12466   \string<\glsxtrMathItalicDelta
12467   \string<\glsxtrMathItalicEpsilon
12468   \string<\glsxtrUpDigamma
12469   \string<\glsxtrMathItalicZeta
12470   \string<\glsxtrMathItalicEta
12471   \string<\glsxtrMathItalicTheta
12472   \string<\glsxtrMathItalicIota
12473   \string<\glsxtrMathItalicKappa
12474   \string<\glsxtrMathItalicLambda
12475   \string<\glsxtrMathItalicMu
12476   \string<\glsxtrMathItalicNu
12477   \string<\glsxtrMathItalicXi
12478   \string<\glsxtrMathItalicOmicron
12479   \string<\glsxtrMathItalicPi
12480   \string<\glsxtrMathItalicRho
12481   \string<\glsxtrMathItalicSigma
12482   \string<\glsxtrMathItalicTau
12483   \string<\glsxtrMathItalicUpsilon
12484   \string<\glsxtrMathItalicPhi

```

```
12485 \string<\glsxtrMathItalicChi  
12486 \string<\glsxtrMathItalicPsi  
12487 \string<\glsxtrMathItalicOmega  
12488 }
```

licGreekIIrules Doesn't include digamma.

```
12489 \newcommand*\glsxtrMathItalicGreekIIrules}{%  
12490 \glsxtrMathItalicAlpha  
12491 \string<\glsxtrMathItalicBeta  
12492 \string<\glsxtrMathItalicGamma  
12493 \string<\glsxtrMathItalicDelta  
12494 \string<\glsxtrMathItalicEpsilon  
12495 \string<\glsxtrMathItalicZeta  
12496 \string<\glsxtrMathItalicEta  
12497 \string<\glsxtrMathItalicTheta  
12498 \string<\glsxtrMathItalicIota  
12499 \string<\glsxtrMathItalicKappa  
12500 \string<\glsxtrMathItalicLambda  
12501 \string<\glsxtrMathItalicMu  
12502 \string<\glsxtrMathItalicNu  
12503 \string<\glsxtrMathItalicXi  
12504 \string<\glsxtrMathItalicOmicron  
12505 \string<\glsxtrMathItalicPi  
12506 \string<\glsxtrMathItalicRho  
12507 \string<\glsxtrMathItalicSigma  
12508 \string<\glsxtrMathItalicTau  
12509 \string<\glsxtrMathItalicUpsilon  
12510 \string<\glsxtrMathItalicPhi  
12511 \string<\glsxtrMathItalicChi  
12512 \string<\glsxtrMathItalicPsi  
12513 \string<\glsxtrMathItalicOmega  
12514 }
```

upperGreekIrules Upper case only (includes upright digamma).

```
12515 \newcommand*\glsxtrMathItalicUpperGreekIrules}{%  
12516 \glshex 1D6E2% upper case alpha (maths italic)  
12517 \string<\glshex 1D6E3% upper case beta (maths italic)  
12518 \string<\glshex 1D6E4% upper case gamma (maths italic)  
12519 \string<\glshex 1D6E5% upper case delta (maths italic)  
12520 \string<\glshex 1D6E6% upper case epsilon (maths italic)  
12521 \string<\glshex 03DC% upper case digamma  
12522 \string<\glshex 1D6E7% upper case zeta (maths italic)  
12523 \string<\glshex 1D6E8% upper case eta (maths italic)  
12524 \string<\glshex 1D6E9% upper case theta (maths italic)  
12525 \string=\glshex 1D6F3% upper case theta variant (maths italic)  
12526 \string<\glshex 1D6EA% upper case iota (maths italic)  
12527 \string<\glshex 1D6EB% upper case kappa (maths italic)  
12528 \string<\glshex 1D6EC% upper case lambda (maths italic)  
12529 \string<\glshex 1D6ED% upper case mu (maths italic)
```

```

12530 \string<\glshex 1D6EE% upper case nu (maths italic)
12531 \string<\glshex 1D6EF% upper case xi (maths italic)
12532 \string<\glshex 1D6F0% upper case omicron (maths italic)
12533 \string<\glshex 1D6F1% upper case pi (maths italic)
12534 \string<\glshex 1D6F2% upper case rho (maths italic)
12535 \string<\glshex 1D6F4% upper case sigma (maths italic)
12536 \string<\glshex 1D6F5% upper case tau (maths italic)
12537 \string<\glshex 1D6F6% upper case upsilon (maths italic)
12538 \string<\glshex 1D6F7% upper case phi (maths italic)
12539 \string<\glshex 1D6F8% upper case chi (maths italic)
12540 \string<\glshex 1D6F9% upper case psi (maths italic)
12541 \string<\glshex 1D6FA% upper case omega (maths italic)
12542 }

```

`perGreekIIrules` Upper case only (doesn't include upright digamma).

```

12543 \newcommand*{\glsxtrMathItalicUpperGreekIIrules}{%
12544 \glshex 1D6E2% upper case alpha (maths italic)
12545 \string<\glshex 1D6E3% upper case beta (maths italic)
12546 \string<\glshex 1D6E4% upper case gamma (maths italic)
12547 \string<\glshex 1D6E5% upper case delta (maths italic)
12548 \string<\glshex 1D6E6% upper case epsilon (maths italic)
12549 \string<\glshex 1D6E7% upper case zeta (maths italic)
12550 \string<\glshex 1D6E8% upper case eta (maths italic)
12551 \string<\glshex 1D6E9% upper case theta (maths italic)
12552 \string=\glshex 1D6F3% upper case theta variant (maths italic)
12553 \string<\glshex 1D6EA% upper case iota (maths italic)
12554 \string<\glshex 1D6EB% upper case kappa (maths italic)
12555 \string<\glshex 1D6EC% upper case lambda (maths italic)
12556 \string<\glshex 1D6ED% upper case mu (maths italic)
12557 \string<\glshex 1D6EE% upper case nu (maths italic)
12558 \string<\glshex 1D6EF% upper case xi (maths italic)
12559 \string<\glshex 1D6F0% upper case omicron (maths italic)
12560 \string<\glshex 1D6F1% upper case pi (maths italic)
12561 \string<\glshex 1D6F2% upper case rho (maths italic)
12562 \string<\glshex 1D6F4% upper case sigma (maths italic)
12563 \string<\glshex 1D6F5% upper case tau (maths italic)
12564 \string<\glshex 1D6F6% upper case upsilon (maths italic)
12565 \string<\glshex 1D6F7% upper case phi (maths italic)
12566 \string<\glshex 1D6F8% upper case chi (maths italic)
12567 \string<\glshex 1D6F9% upper case psi (maths italic)
12568 \string<\glshex 1D6FA% upper case omega (maths italic)
12569 }

```

`lowerGreekIrules` Lower case only (includes upright digamma).

```

12570 \newcommand*{\glsxtrMathItalicLowerGreekIrules}{%
12571 \glshex 1D6FC% lower case alpha (maths italic)
12572 \string<\glshex 1D6FD% lower case beta (maths italic)
12573 \string<\glshex 1D6FE% lower case gamma (maths italic)
12574 \string<\glshex 1D6FF% lower case delta (maths italic)

```

```

12575 \string<\glshex 1D700% lower case epsilon (maths italic)
12576 \string=\glshex 1D716% lower case epsilon variant (maths italic)
12577 \string<\glshex 03DD% lower case digamma
12578 \string<\glshex 1D701% lower case zeta (maths italic)
12579 \string<\glshex 1D702% lower case eta (maths italic)
12580 \string<\glshex 1D703% lower case theta (maths italic)
12581 \string=\glshex 1D717% lower case theta variant (maths italic)
12582 \string<\glshex 1D704% lower case iota (maths italic)
12583 \string<\glshex 1D705% lower case kappa (maths italic)
12584 \string=\glshex 1D718% lower case kappa variant (maths italic)
12585 \string<\glshex 1D706% lower case lambda (maths italic)
12586 \string<\glshex 1D707% lower case mu (maths italic)
12587 \string<\glshex 1D708% lower case nu (maths italic)
12588 \string<\glshex 1D709% lower case xi (maths italic)
12589 \string<\glshex 1D70A% lower case omicron (maths italic)
12590 \string<\glshex 1D70B% lower case pi (maths italic)
12591 \string=\glshex 1D71B% lower case pi variant (maths italic)
12592 \string<\glshex 1D70C% lower case rho (maths italic)
12593 \string=\glshex 1D71A% lower case rho variant (maths italic)
12594 \string<\glshex 1D70D% lower case final sigma (maths italic)
12595 \string=\glshex 1D70E% lower case sigma (maths italic)
12596 \string<\glshex 1D70F% lower case tau (maths italic)
12597 \string<\glshex 1D710% lower case upsilon (maths italic)
12598 \string<\glshex 1D711% lower case phi (maths italic)
12599 \string=\glshex 1D719% lower case phi variant (maths italic)
12600 \string<\glshex 1D712% lower case chi (maths italic)
12601 \string<\glshex 1D713% lower case psi (maths italic)
12602 \string<\glshex 1D714% lower case omega (maths italic)
12603 }

```

werGreekIIrules Lower case only (doesn't includes upright digamma).

```

12604 \newcommand*{\glsxtrMathItalicLowerGreekIIrules}{%
12605 \glshex 1D6FC% lower case alpha (maths italic)
12606 \string<\glshex 1D6FD% lower case beta (maths italic)
12607 \string<\glshex 1D6FE% lower case gamma (maths italic)
12608 \string<\glshex 1D6FF% lower case delta (maths italic)
12609 \string<\glshex 1D700% lower case epsilon (maths italic)
12610 \string=\glshex 1D716% lower case epsilon variant (maths italic)
12611 \string<\glshex 1D701% lower case zeta (maths italic)
12612 \string<\glshex 1D702% lower case eta (maths italic)
12613 \string<\glshex 1D703% lower case theta (maths italic)
12614 \string=\glshex 1D717% lower case theta variant (maths italic)
12615 \string<\glshex 1D704% lower case iota (maths italic)
12616 \string<\glshex 1D705% lower case kappa (maths italic)
12617 \string=\glshex 1D718% lower case kappa variant (maths italic)
12618 \string<\glshex 1D706% lower case lambda (maths italic)
12619 \string<\glshex 1D707% lower case mu (maths italic)
12620 \string<\glshex 1D708% lower case nu (maths italic)
12621 \string<\glshex 1D709% lower case xi (maths italic)

```

```

12622 \string<\glshex 1D70A% lower case omicron (maths italic)
12623 \string<\glshex 1D70B% lower case pi (maths italic)
12624 \string=\glshex 1D71B% lower case pi variant (maths italic)
12625 \string<\glshex 1D70C% lower case rho (maths italic)
12626 \string=\glshex 1D71A% lower case rho variant (maths italic)
12627 \string<\glshex 1D70D% lower case final sigma (maths italic)
12628 \string=\glshex 1D70E% lower case sigma (maths italic)
12629 \string<\glshex 1D70F% lower case tau (maths italic)
12630 \string<\glshex 1D710% lower case upsilon (maths italic)
12631 \string<\glshex 1D711% lower case phi (maths italic)
12632 \string=\glshex 1D719% lower case phi variant (maths italic)
12633 \string<\glshex 1D712% lower case chi (maths italic)
12634 \string<\glshex 1D713% lower case psi (maths italic)
12635 \string<\glshex 1D714% lower case omega (maths italic)
12636 }

```

MathGreekIrules Includes both upright and italic with digamma between epsilon and zeta.

```

12637 \newcommand*\{ \glsxtrMathGreekIrules\}{%
12638 \glsxtrMathItalicAlpha
12639 \string; \glsxtrUpAlpha
12640 \string<\glsxtrMathItalicBeta
12641 \string; \glsxtrUpBeta
12642 \string<\glsxtrMathItalicGamma
12643 \string; \glsxtrUpGamma
12644 \string<\glsxtrMathItalicDelta
12645 \string; \glsxtrUpDelta
12646 \string<\glsxtrMathItalicEpsilon
12647 \string; \glsxtrUpEpsilon
12648 \string<\glsxtrUpDigamma
12649 \string<\glsxtrMathItalicZeta
12650 \string; \glsxtrUpZeta
12651 \string<\glsxtrMathItalicEta
12652 \string; \glsxtrUpEta
12653 \string<\glsxtrMathItalicTheta
12654 \string; \glsxtrUpTheta
12655 \string<\glsxtrMathItalicIota
12656 \string; \glsxtrUpIota
12657 \string<\glsxtrMathItalicKappa
12658 \string; \glsxtrUpKappa
12659 \string<\glsxtrMathItalicLambda
12660 \string; \glsxtrUpLambda
12661 \string<\glsxtrMathItalicMu
12662 \string; \glsxtrUpMu
12663 \string<\glsxtrMathItalicNu
12664 \string; \glsxtrUpNu
12665 \string<\glsxtrMathItalicXi
12666 \string; \glsxtrUpXi
12667 \string<\glsxtrMathItalicOmicron
12668 \string; \glsxtrUpOmicron

```

```

12669 \string<\glsxtrMathItalicPi
12670 \string; \glsxtrUpPi
12671 \string<\glsxtrMathItalicRho
12672 \string; \glsxtrUpRho
12673 \string<\glsxtrMathItalicSigma
12674 \string; \glsxtrUpSigma
12675 \string<\glsxtrMathItalicTau
12676 \string; \glsxtrUpTau
12677 \string<\glsxtrMathItalicUpsilon
12678 \string; \glsxtrUpUpsilon
12679 \string<\glsxtrMathItalicPhi
12680 \string; \glsxtrUpPhi
12681 \string<\glsxtrMathItalicChi
12682 \string; \glsxtrUpChi
12683 \string<\glsxtrMathItalicPsi
12684 \string; \glsxtrUpPsi
12685 \string<\glsxtrMathItalicOmega
12686 \string; \glsxtrUpOmega
12687 }

```

`athGreekIIrules` Includes both upright and italic (digamma not included).

```

12688 \newcommand*{\glsxtrMathGreekIIrules}{%
12689 \glsxtrMathItalicAlpha
12690 \string; \glsxtrUpAlpha
12691 \string<\glsxtrMathItalicBeta
12692 \string; \glsxtrUpBeta
12693 \string<\glsxtrMathItalicGamma
12694 \string; \glsxtrUpGamma
12695 \string<\glsxtrMathItalicDelta
12696 \string; \glsxtrUpDelta
12697 \string<\glsxtrMathItalicEpsilon
12698 \string; \glsxtrUpEpsilon
12699 \string<\glsxtrMathItalicZeta
12700 \string; \glsxtrUpZeta
12701 \string<\glsxtrMathItalicEta
12702 \string; \glsxtrUpEta
12703 \string<\glsxtrMathItalicTheta
12704 \string; \glsxtrUpTheta
12705 \string<\glsxtrMathItalicIota
12706 \string; \glsxtrUpIota
12707 \string<\glsxtrMathItalicKappa
12708 \string; \glsxtrUpKappa
12709 \string<\glsxtrMathItalicLambda
12710 \string; \glsxtrUpLambda
12711 \string<\glsxtrMathItalicMu
12712 \string; \glsxtrUpMu
12713 \string<\glsxtrMathItalicNu
12714 \string; \glsxtrUpNu
12715 \string<\glsxtrMathItalicXi

```

```

12716 \string;\glsxtrUpXi
12717 \string<\glsxtrMathItalicOmicron
12718 \string;\glsxtrUpOmicron
12719 \string<\glsxtrMathItalicPi
12720 \string;\glsxtrUpPi
12721 \string<\glsxtrMathItalicRho
12722 \string;\glsxtrUpRho
12723 \string<\glsxtrMathItalicSigma
12724 \string;\glsxtrUpSigma
12725 \string<\glsxtrMathItalicTau
12726 \string;\glsxtrUpTau
12727 \string<\glsxtrMathItalicUpsilon
12728 \string;\glsxtrUpUpsilon
12729 \string<\glsxtrMathItalicPhi
12730 \string;\glsxtrUpPhi
12731 \string<\glsxtrMathItalicChi
12732 \string;\glsxtrUpChi
12733 \string<\glsxtrMathItalicPsi
12734 \string;\glsxtrUpPsi
12735 \string<\glsxtrMathItalicOmega
12736 \string;\glsxtrUpOmega
12737 }

\glsxtrUpAlpha
12738 \newcommand*\glsxtrUpAlpha{%
12739 \glshex 03B1,% lower case alpha
12740 \glshex 0391% upper case alpha
12741 }

\glsxtrUpBeta
12742 \newcommand*\glsxtrUpBeta{%
12743 \glshex 03B2,% lower case beta
12744 \glshex 0392% upper case beta
12745 }

\glsxtrUpGamma
12746 \newcommand*\glsxtrUpGamma{%
12747 \glshex 03B3,% lower case gamma
12748 \glshex 0393% upper case gamma
12749 }

\glsxtrUpDelta
12750 \newcommand*\glsxtrUpDelta{%
12751 \glshex 03B4,% lower case delta
12752 \glshex 0394% upper case delta
12753 }

glsxtrUpEpsilon

```

```

12754 \newcommand*{\glsxtrUpEpsilon}{%
12755  \glshex{03B5}{\lowercase{\epsilon}}
12756  \string=\glshex{03F5}{\lowercase{\epsilon variant}}
12757  \glshex{0395}{\uppercase{\epsilon}}
12758 }

\glsxtrUpDigamma
12759 \newcommand*{\glsxtrUpDigamma}{%
12760  \glshex{03DD}{\lowercase{\digamma}}
12761  \glshex{03DC}{\uppercase{\digamma}}
12762 }

\glsxtrUpZeta
12763 \newcommand*{\glsxtrUpZeta}{%
12764  \glshex{03B6}{\lowercase{\zeta}}
12765  \glshex{0396}{\uppercase{\zeta}}
12766 }

\glsxtrUpEta
12767 \newcommand*{\glsxtrUpEta}{%
12768  \glshex{03B7}{\lowercase{\eta}}
12769  \glshex{0397}{\uppercase{\eta}}
12770 }

\glsxtrUpTheta
12771 \newcommand*{\glsxtrUpTheta}{%
12772  \glshex{03B8}{\lowercase{\theta}}
12773  \string=\glshex{03D1}{\lowercase{\theta variant}}
12774  \glshex{0398}{\uppercase{\theta}}
12775 }

\glsxtrUpIota
12776 \newcommand*{\glsxtrUpIota}{%
12777  \glshex{03B9}{\lowercase{\iota}}
12778  \glshex{0399}{\uppercase{\iota}}
12779 }

\glsxtrUpKappa
12780 \newcommand*{\glsxtrUpKappa}{%
12781  \glshex{03BA}{\lowercase{\kappa}}
12782  \string=\glshex{03F0}{\lowercase{\kappa variant}}
12783  \glshex{039A}{\uppercase{\kappa}}
12784 }

\glsxtrUpLambda
12785 \newcommand*{\glsxtrUpLambda}{%
12786  \glshex{03BB}{\lowercase{\lambda}}
12787  \glshex{039B}{\uppercase{\lambda}}
12788 }

```

```

\glsxtrUpMu
12789 \newcommand*{\glsxtrUpMu}{%
12790  \glshex 03BC,% lower case mu
12791  \glshex 039C% upper case mu
12792 }

\glsxtrUpNu
12793 \newcommand*{\glsxtrUpNu}{%
12794  \glshex 03BD,% lower case nu
12795  \glshex 039D% upper case nu
12796 }

\glsxtrUpXi
12797 \newcommand*{\glsxtrUpXi}{%
12798  \glshex 03BE,% lower case xi
12799  \glshex 039E% upper case xi
12800 }

glsxtrUpOmicron
12801 \newcommand*{\glsxtrUpOmicron}{%
12802  \glshex 03BF,% lower case omicron
12803  \glshex 039F% upper case omicron
12804 }

\glsxtrUpPi
12805 \newcommand*{\glsxtrUpPi}{%
12806  \glshex 03C0% lower case pi
12807  \string=\glshex 03D6,% lower case pi variant
12808  \glshex 03A0% upper case pi
12809 }

\glsxtrUpRho
12810 \newcommand*{\glsxtrUpRho}{%
12811  \glshex 03C1% lower case rho
12812  \string=\glshex 03F1,% lower case rho variant
12813  \glshex 03A1% upper case rho
12814 }

\glsxtrUpSigma
12815 \newcommand*{\glsxtrUpSigma}{%
12816  \glshex 03C2% lower case sigma
12817  \string=\glshex 03C3,% lower case sigma
12818  \glshex 03A3% upper case sigma
12819 }

\glsxtrUpTau
12820 \newcommand*{\glsxtrUpTau}{%
12821  \glshex 03C4,% lower case tau

```

```

12822 \glshex 03A4% upper case tau
12823 }

glsxtrUpUpsilon
12824 \newcommand*{\glsxtrUpUpsilon}{%
12825 \glshex 03C5,% lower case upsilon
12826 \glshex 03A5% upper case upsilon
12827 }

\glsxtrUpPhi
12828 \newcommand*{\glsxtrUpPhi}{%
12829 \glshex 03C6% lower case phi
12830 \string=\glshex 03D5,% lower case phi variant
12831 \glshex 03A6% upper case phi
12832 }

\glsxtrUpChi
12833 \newcommand*{\glsxtrUpChi}{%
12834 \glshex 03C7,% lower case chi
12835 \glshex 03A7% upper case chi
12836 }

\glsxtrUpPsi
12837 \newcommand*{\glsxtrUpPsi}{%
12838 \glshex 03C8,% lower case psi
12839 \glshex 03A8% upper case psi
12840 }

\glsxtrUpOmega
12841 \newcommand*{\glsxtrUpOmega}{%
12842 \glshex 03C9,% lower case omega
12843 \glshex 03A9% upper case omega
12844 }

MathItalicAlpha
12845 \newcommand*{\glsxtrMathItalicAlpha}{%
12846 \glshex 1D6FC,% lower case alpha (maths italic)
12847 \glshex 1D6E2% upper case alpha (maths italic)
12848 }

rMathItalicBeta
12849 \newcommand*{\glsxtrMathItalicBeta}{%
12850 \glshex 1D6FD,% lower case beta (maths italic)
12851 \glshex 1D6E3% upper case beta (maths italic)
12852 }

MathItalicGamma
12853 \newcommand*{\glsxtrMathItalicGamma}{%

```

```

12854 \glshex 1D6FE,% lower case gamma (maths italic)
12855 \glshex 1D6E4% upper case gamma (maths italic)
12856 }

MathItalicDelta
12857 \newcommand*{\glsxtrMathItalicDelta}{%
12858 \glshex 1D6FF,% lower case delta (maths italic)
12859 \glshex 1D6E5% upper case delta (maths italic)
12860 }

thItalicEpsilon
12861 \newcommand*{\glsxtrMathItalicEpsilon}{%
12862 \glshex 1D700% lower case epsilon (maths italic)
12863 \string=\glshex 1D716,% lower case epsilon variant (maths italic)
12864 \glshex 1D6E6% upper case epsilon (maths italic)
12865 }

rMathItalicZeta
12866 \newcommand*{\glsxtrMathItalicZeta}{%
12867 \glshex 1D701,% lower case zeta (maths italic)
12868 \glshex 1D6E7% upper case zeta (maths italic)
12869 }

trMathItalicEta
12870 \newcommand*{\glsxtrMathItalicEta}{%
12871 \glshex 1D702,% lower case eta (maths italic)
12872 \glshex 1D6E8% upper case eta (maths italic)
12873 }

MathItalicTheta
12874 \newcommand*{\glsxtrMathItalicTheta}{%
12875 \glshex 1D703% lower case theta (maths italic)
12876 \string=\glshex 1D717,% lower case theta variant (maths italic)
12877 \glshex 1D6E9% upper case theta (maths italic)
12878 \string=\glshex 1D6F3% upper case theta variant (maths italic)
12879 }

rMathItalicIota
12880 \newcommand*{\glsxtrMathItalicIota}{%
12881 \glshex 1D704,% lower case iota (maths italic)
12882 \glshex 1D6EA% upper case iota (maths italic)
12883 }

MathItalicKappa
12884 \newcommand*{\glsxtrMathItalicKappa}{%
12885 \glshex 1D705% lower case kappa (maths italic)
12886 \string=\glshex 1D718,% lower case kappa variant (maths italic)
12887 \glshex 1D6EB% upper case kappa (maths italic)
12888 }

```

```

athItalicLambda
12889 \newcommand*{\glsxtrMathItalicLambda}{%
12890  \glshex 1D706,% lower case lambda (maths italic)
12891  \glshex 1D6EC% upper case lambda (maths italic)
12892 }

xtrMathItalicMu
12893 \newcommand*{\glsxtrMathItalicMu}{%
12894  \glshex 1D707,% lower case mu (maths italic)
12895  \glshex 1D6ED% upper case mu (maths italic)
12896 }

xtrMathItalicNu
12897 \newcommand*{\glsxtrMathItalicNu}{%
12898  \glshex 1D708,% lower case nu (maths italic)
12899  \glshex 1D6EE% upper case nu (maths italic)
12900 }

xtrMathItalicXi
12901 \newcommand*{\glsxtrMathItalicXi}{%
12902  \glshex 1D709,% lower case xi (maths italic)
12903  \glshex 1D6EF% upper case xi (maths italic)
12904 }

thItalicOmicron
12905 \newcommand*{\glsxtrMathItalicOmicron}{%
12906  \glshex 1D70A,% lower case omicron (maths italic)
12907  \glshex 1D6F0% upper case omicron (maths italic)
12908 }

xtrMathItalicPi
12909 \newcommand*{\glsxtrMathItalicPi}{%
12910  \glshex 1D70B% lower case pi (maths italic)
12911  \string=\glshex 1D71B,% lower case pi variant (maths italic)
12912  \glshex 1D6F1% upper case pi (maths italic)
12913 }

trMathItalicRho
12914 \newcommand*{\glsxtrMathItalicRho}{%
12915  \glshex 1D70C% lower case rho (maths italic)
12916  \string=\glshex 1D71A,% lower case rho variant (maths italic)
12917  \glshex 1D6F2% upper case rho (maths italic)
12918 }

MathItalicSigma
12919 \newcommand*{\glsxtrMathItalicSigma}{%
12920  \glshex 1D70D% lower case final sigma (maths italic)
12921  \string=\glshex 1D70E,% lower case sigma (maths italic)

```

```

12922 \glshex 1D6F4% upper case sigma (maths italic)
12923 }

trMathItalicTau
12924 \newcommand*\glsxtrMathItalicTau{%
12925 \glshex 1D70F,% lower case tau (maths italic)
12926 \glshex 1D6F5% upper case tau (maths italic)
12927 }

thItalicUpsilon
12928 \newcommand*\glsxtrMathItalicUpsilon{%
12929 \glshex 1D710,% lower case upsilon (maths italic)
12930 \glshex 1D6F6% upper case upsilon (maths italic)
12931 }

trMathItalicPhi
12932 \newcommand*\glsxtrMathItalicPhi{%
12933 \glshex 1D711% lower case phi (maths italic)
12934 \string=\glshex 1D719,% lower case phi variant (maths italic)
12935 \glshex 1D6F7% upper case phi (maths italic)
12936 }

trMathItalicChi
12937 \newcommand*\glsxtrMathItalicChi{%
12938 \glshex 1D712,% lower case chi (maths italic)
12939 \glshex 1D6F8% upper case chi (maths italic)
12940 }

trMathItalicPsi
12941 \newcommand*\glsxtrMathItalicPsi{%
12942 \glshex 1D713,% lower case psi (maths italic)
12943 \glshex 1D6F9% upper case psi (maths italic)
12944 }

MathItalicOmega
12945 \newcommand*\glsxtrMathItalicOmega{%
12946 \glshex 1D714,% lower case omega (maths italic)
12947 \glshex 1D6FA% upper case omega (maths italic)
12948 }

thItalicPartial
12949 \newcommand*\glsxtrMathItalicPartial{%
12950 \glshex 1D715% partial differential (maths italic)
12951 }

MathItalicNabla
12952 \newcommand*\glsxtrMathItalicNabla{%
12953 \glshex 1D6FB% nabla (maths italic)
12954 }

```

lsxtrdigtrules Digits from the Basic Latin set and subscript and superscript digit rules.

```
12955 \newcommand*{\glsxtrdigtrules}{%
12956 0\string=\glshex 2080\string=\glshex 2070
12957 \string<1\string=\glshex 2081\string=\glshex 00B9
12958 \string<2\string=\glshex 2082\string=\glshex 00B2
12959 \string<3\string=\glshex 2083\string=\glshex 00B3
12960 \string<4\string=\glshex 2084\string=\glshex 2074
12961 \string<5\string=\glshex 2085\string=\glshex 2075
12962 \string<6\string=\glshex 2086\string=\glshex 2076
12963 \string<7\string=\glshex 2087\string=\glshex 2077
12964 \string<8\string=\glshex 2088\string=\glshex 2078
12965 \string<9\string=\glshex 2089\string=\glshex 2079
12966 }
```

BasicDigitrules Digits from the Basic Latin set.

```
12967 \newcommand*{\glsxtrBasicDigitrules}{%
12968 0\string<1\string<2\string<3\string<4%
12969 \string<5\string<6\string<7\string<8\string<9%
12970 }
```

scriptDigitrules Subscript digits.

```
12971 \newcommand*{\glsxtrSubScriptDigitrules}{%
12972 \glshex 2080% subscript 0
12973 \string<\glshex 2081% subscript 1
12974 \string<\glshex 2082% subscript 2
12975 \string<\glshex 2083% subscript 3
12976 \string<\glshex 2084% subscript 4
12977 \string<\glshex 2085% subscript 5
12978 \string<\glshex 2086% subscript 6
12979 \string<\glshex 2087% subscript 7
12980 \string<\glshex 2088% subscript 8
12981 \string<\glshex 2089% subscript 9
12982 }
```

scriptDigitrules Superscript digits.

```
12983 \newcommand*{\glsxtrSuperScriptDigitrules}{%
12984 \glshex 2070% superscript 0
12985 \string<\glshex 00B9% superscript 1
12986 \string<\glshex 00B2% superscript 2
12987 \string<\glshex 00B3% superscript 3
12988 \string<\glshex 2074% superscript 4
12989 \string<\glshex 2075% superscript 5
12990 \string<\glshex 2076% superscript 6
12991 \string<\glshex 2077% superscript 7
12992 \string<\glshex 2078% superscript 8
12993 \string<\glshex 2079% superscript 9
12994 }
```

trfractionrules Vulgar fractions.

```
12995 \newcommand{\glsxtrfractionrules}{%
12996   \glshex{215F} fraction numerator one (1/)
12997   \string<\glshex{2189} zero thirds (0/3 = 0)
12998   \string<\glshex{2152} one tenth (1/10 = 0.1)
12999   \string<\glshex{2151} one ninth (1/9 ~ 0.111)
13000   \string<\glshex{215B} one eighth (1/8 = 0.125)
13001   \string<\glshex{2150} one seventh (1/7 ~ 0.143)
13002   \string<\glshex{2159} one sixth (1/6 ~ 0.167)
13003   \string<\glshex{2155} one fifth (1/5 = 0.2)
13004   \string<\glshex{00BC} one quarter (1/4 = 0.25)
13005   \string<\glshex{2153} one third (1/3 ~ 0.333)
13006   \string<\glshex{215C} three eighths (3/8 = 0.375)
13007   \string<\glshex{2156} two fifths (2/5 = 0.4)
13008   \string<\glshex{00BD} one half (1/2 = 0.5)
13009   \string<\glshex{2157} three fifths (3/5 = 0.6)
13010   \string<\glshex{215D} five eighths (5/8 = 0.625)
13011   \string<\glshex{2154} two thirds (2/3 ~ 0.667)
13012   \string<\glshex{00BE} three quarters (3/4 = 0.75)
13013   \string<\glshex{2158} four fifths (4/5 = 0.8)
13014   \string<\glshex{215A} five sixths (5/6 ~ 0.833)
13015   \string<\glshex{215E} seven eighths (7/8 = 0.875)
13016 }%
```

sxtrdialecthook Check for scripts associated with the document dialects.

```
13017 \renewcommand{\@glsxtrdialecthook}{%
13018   \ifdef{\CurrentTrackedScript}
13019   {%
13020     \TrackLangIfHasDefaultScript{\CurrentTrackedLanguage}%
13021     {%
13022       \edef{\CurrentTrackedScript}{%
13023         \TrackLangGetDefaultScript{\CurrentTrackedLanguage}}%
13024     }%
13025     {}%
13026   }%
13027   {}%
13028 \ifdef{\CurrentTrackedScript}
13029 {%
13030   \let{\gls@orgTrackLangRequireDialectPrefix}{\TrackLangRequireDialectPrefix}
13031   \def{\TrackLangRequireDialectPrefix}{\glossariesxtr-}%
13032   \let{\CurrentTrackedTag}{\CurrentTrackedScript}
13033   \IfExists{\TrackLangRequireDialectPrefix\CurrentTrackedTag.1df}
13034   {\RequireGlossariesExtraLang{\CurrentTrackedTag}}%
13035   {}%
13036   \let{\TrackLangRequireDialectPrefix}{\gls@orgTrackLangRequireDialectPrefix}
13037 }%
13038 {}%
13039 }%
```

If `\glsxtr@loaddialect` has been defined, then `glossaries-extra-bib2gls` has been loaded after `glossaries-extra`. (For example, through `\glossariesextrasetup`.) Not recommended, but if this has been done try to find the associated language resources.

```
13040 \ifdef\glsxtr@loaddialect
13041 {%
13042   \@ifpackageloaded{tracklang}%
13043   {%
13044     \AnyTrackedLanguages
13045     {%
13046       \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
13047     }%
13048     {}%
13049   }%
13050   {}%
13051 }
13052 {}
```

2 Style Adjustments (*glossaries-extra-stylemods.sty*)

This package adjusts the predefined styles so that they include the post description hook. Also, some other minor adjustments may be made to make existing styles more flexible.

2.1 Package Initialisation

First identify package:

```
13053 \NeedsTeXFormat{LaTeX2e}
13054 \ProvidesPackage{glossaries-extra-stylemods}[2018/08/13 v1.35 (NLCT)]
```

Provide package options to automatically load required predefined styles. The simplest method is to just test for the existence of the file *glossary-*option*.sty*. Packages can't be loaded whilst the options are being processed, so save the list in *\@glsxtr@loadstyles*.

```
sxtr@loadstyles
13055 \newcommand*\@glsxtr@loadstyles{}{}
```

all Provide all known styles.

```
13056 \DeclareOption{all}{%
13057   \appto\@glsxtr@loadstyles{%
13058     \RequirePackage{glossary-inline}%
13059     \RequirePackage{glossary-list}%
13060     \RequirePackage{glossary-tree}%
13061     \RequirePackage{glossary-mcols}%
13062     \RequirePackage{glossary-long}%
13063     \RequirePackage{glossary-longragged}%
13064     \RequirePackage{glossary-longbooktabs}%
13065     \RequirePackage{glossary-super}%
13066     \RequirePackage{glossary-superragged}%
13067     \RequirePackage{glossary-bookindex}%
13068 }
13069 }

13070 \DeclareOption*{%
13071   \IfFileExists{glossary-\CurrentOption.sty}%
13072   {\appto\@glsxtr@loadstyles{%
13073     \noexpand\RequirePackage{glossary-\CurrentOption}}%
13074   }%
13075   {%
13076     \PackageError{glossaries-extra-styles}{%
```

```

13077     {Unknown option '\CurrentOption'}{}%
13078   }%
13079 }

```

Process the package options:

```
13080 \ProcessOptions
```

Load the required packages:

```
13081 \@glsxtr@loadstyles
```

Adjust the styles so that they all have the post description hook. Also, instead of having a hard-coded \space before the location, use:

`sxtrprelocation` This uses `\providecommand` as the same command is also provided by `glossary-bookindex`.

```
13082 \providecommand*{\glsxtrprelocation}{\space}
```

In case we have an old version of glossaries:

`ewglossarystyle`

```

13083 \providecommand{\renewglossarystyle}[2]{%
13084   \ifcsundef{@glsstyle@#1}{%
13085     {%
13086       \PackageError{glossaries-extra}{Glossary style '#1' isn't already defined}{}%
13087     }%
13088     {%
13089       \csdef{@glsstyle@#1}{#2}%
13090     }%
13091   }

```

2.2 List-Like Styles

The list-like styles mostly already use the post description hook. Only the `listdotted` style need modifying to add this.

```

13092 \ifdef{\@glsstyle@listdotted}{%
13093 {%
13094   \renewglossarystyle{listdotted}{%
13095     \setglossarystyle{list}{%
13096       \renewcommand*{\glossentry}[2]{%
13097         \item[]\makebox[\glslistdottedwidth][l]{%
13098           \glsentryitem{##1}%
13099           \glstarget{##1}{\glossentryname{##1}}%
13100           \unskip\leaders\hbox to 2.9mm{\hss.}\hfill\strut}%
13101           \glossentrydesc{##1}\glspostdescription}%
13102       \renewcommand*{\subglossentry}[3]{%
13103         \item[]\makebox[\glslistdottedwidth][l]{%
13104           \glssubentryitem{##2}%
13105           \glstarget{##2}{\glossentryname{##2}}%
13106           \unskip\leaders\hbox to 2.9mm{\hss.}\hfill\strut}%
13107           \glossentrydesc{##2}\glspostdescription}%
13108   }

```

```
13109 }  
13110 {%
```

Assume the style isn't required if it hasn't already been defined.

```
13111 }
```

The sublistdotted style doesn't display the description for top-level entries. Sub-level entries use the listdottedstyle.

The other list styles would be easier to adapt if the space before the number list wasn't hard coded.

```
13112 \ifdef{@glsstyle@list}  
13113 {%
```

listprelocation Space before number list for top-level entries.

```
13114 \newcommand{\glslistprelocation}{\glsxtrprelocation}
```

childprelocation Space before number list for child entries.

```
13115 \newcommand{\glslistchildprelocation}{\glslistprelocation}
```

childpostlocation Full stop after number list.

```
13116 \newcommand{\glslistchildpostlocation}{.}
```

\glslistdesc

```
13117 \newcommand{\glslistdesc}[1]{\glossentrydesc{#1}\glspostdescription}
```

Redefine list to use these commands.

```
13118 \renewglossarystyle{list}{%  
13119   \renewenvironment{theglossary}{%  
13120     {\begin{description}}{\end{description}}%  
13121   \renewcommand*{\glossaryheader}{}%  
13122   \renewcommand*{\glsgroupheading}[1]{}%  
13123   \renewcommand*{\glossentry}[2]{%  
13124     \item[\glsentryitem{##1}%  
13125       \glstarget{##1}{\glossentryname{##1}}]  
13126       \glslistdesc{##1}\glslistprelocation ##2}%  
13127   \renewcommand*{\subglossentry}[3]{%  
13128     \glssubentryitem{##2}%  
13129     \glstarget{##2}{\strut}\space  
13130     \glslistdesc{##2}%  
13131     \glslistchildprelocation ##3\glslistchildpostlocation}%  
13132   \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%  
13133 }  
13134 }  
13135 {}
```

Similarly for altlist. Since it requires list, the new commands should have been defined above.

```
13136 \ifdef{@glsstyle@altlist}  
13137 {  
13138   \renewglossarystyle{altlist}{%
```

```

13139   \setglossarystyle{list}%
13140   \renewcommand*{\glossentry}[2]{%
13141     \item[\glsentryitem{##1}%
13142       \glstarget{##1}{\glossentryname{##1}}]%
13143       \mbox{}\par\nobreak\@afterheading%
13144       \glslistdesc{##1}\glslistprelocation ##2}%
13145   \renewcommand{\subglossentry}[3]{%
13146     \par
13147     \glssubentryitem{##2}%
13148     \glstarget{##2}{\strut}\glslistdesc{##2}%
13149     \glslistchildprelocation ##3}%
13150   }
13151 }
13152 {}

```

Redefine `listgroup` so that it discourages a break after group headings.

```

13153 \ifdef{@glsstyle@listgroup}%
13154 {%
13155   \renewglossarystyle{listgroup}{%
13156     \setglossarystyle{list}%
13157     \renewcommand*{\glsgroupheading}[1]{%
13158       \item[\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}]%
13159       \mbox{}\par\nobreak\@afterheading%
13160     }%
13161   }
13162 }
13163 {}

```

Similarly for `listhypergroup`.

```

13164 \ifdef{@glsstyle@listhypergroup}%
13165 {%
13166   \renewglossarystyle{listhypergroup}{%
13167     \setglossarystyle{list}%
13168     \renewcommand*{\glossaryheader}{%
13169       \glslistnavigationitem{\glsnavigation}}%
13170     \renewcommand*{\glsgroupheading}[1]{%
13171       \item[\glslistgroupheaderfmt
13172         {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}]%
13173       \mbox{}\par\nobreak\@afterheading%
13174     }%
13175   }
13176 }
13177 {}

```

Similarly for `altlistgroup`.

```

13178 \ifdef{@glsstyle@altlistgroup}%
13179 {%
13180   \renewglossarystyle{altlistgroup}{%
13181     \setglossarystyle{altlist}%
13182     \renewcommand*{\glsgroupheading}[1]{%
13183       \item[\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}]%

```

```

13184     \mbox{}\par\nobreak\@afterheading
13185   }%
13186 }
13187 }
13188 {}

Similarly for altlisthypergroup.
13189 \ifdef{@glsstyle@altlisthypergroup}
13190 {%
13191   \renewglossarystyle{altlisthypergroup}{%
13192     \setglossarystyle{altlist}{%
13193       \renewcommand*\glossaryheader{%
13194         \glslistnavigationitem{\glsnavigation}}%
13195       \renewcommand*\glsgroupheading}[1]{%
13196         \item[\glslistgroupheaderfmt
13197           {\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}]%
13198         \mbox{}\par\nobreak\@afterheading
13199       }%
13200     }%
13201   }%
13202 }

```

2.3 Longtable Styles

The three and four column styles require adjustment to add the post-description hook. The two column styles need the hard-coded `\space` changed to `\glsxtrprelocation`.

```

13203 \ifcsdef@glsstyle@long}
13204 {%
13205   \renewglossarystyle{long}{%
13206     \renewenvironment{theglossary}{%
13207       {\begin{longtable}{lp{\glsdescwidth}}}%
13208       {\end{longtable}}%
13209     \renewcommand*\glossaryheader{%
13210       \renewcommand*\glsgroupheading}[1]{%
13211         \renewcommand{\glossentry}[2]{%
13212           \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13213           \glossentrydesc{##1}\glspostdescription
13214           \glsxtrprelocation ##2\tabularnewline
13215         }%
13216         \renewcommand{\subglossentry}[3]{%
13217           &
13218           \glssubentryitem{##2}%
13219           \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
13220           \glsxtrprelocation ##3\tabularnewline
13221         }%
13222         \ifglsnogroupskip
13223           \renewcommand*\glsgroupskip{}%
13224         \else

```

```

13225      \renewcommand*{\glsgroupskip}{ & \tabularnewline}%
13226      \fi
13227  }
13228 }
13229 {}

```

Three column style:

```

13230 \ifcsdef{@glsstyle@long3col}
13231 {%
13232   \renewglossarystyle{long3col}{%
13233     \renewenvironment{theglossary}{%
13234       {\begin{longtable}{lp{\glscdescwidth}p{\glspagelistwidth}}}%
13235       {\end{longtable}}%
13236     \renewcommand*{\glossaryheader}{}%
13237     \renewcommand*{\glsgroupheading}[1]{}%
13238     \renewcommand{\glossentry}[2]{%
13239       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13240       \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
13241     }%
13242     \renewcommand{\subglossentry}[3]{%
13243       &
13244       \glssubentryitem{##2}%
13245       \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13246       ##3\tabularnewline
13247     }%

```

Conditional needs to be outside of \glsgroupskip otherwise it can cause “Incomplete \iftrue” errors.

```

13248 \ifglsnogroupskip
13249   \renewcommand*{\glsgroupskip}{}%
13250 \else
13251   \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
13252 \fi
13253 }
13254 }
13255 {}

```

Four column style:

```

13256 \ifcsdef{@glsstyle@long4col}
13257 {%
13258   \renewglossarystyle{long4col}{%
13259     \renewenvironment{theglossary}{%
13260       {\begin{longtable}{llll}}%
13261       {\end{longtable}}%
13262     \renewcommand*{\glossaryheader}{}%
13263     \renewcommand*{\glsgroupheading}[1]{}%
13264     \renewcommand{\glossentry}[2]{%
13265       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13266       \glossentrydesc{##1}\glspostdescription &
13267       \glossentrysymbol{##1} &
13268       ##2\tabularnewline

```

```

13269 }%
13270 \renewcommand{\subglossentry}[3]{%
13271   &
13272   \glssubentryitem{##2}%
13273   \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13274   \glossentrysymbol{##2} & ##3\tabularnewline
13275 }%
13276 \ifglsnogroupskip
13277   \renewcommand*\glsgroupskip{}%
13278 \else
13279   \renewcommand*\glsgroupskip{\& & \tabularnewline}%
13280 \fi
13281 }
13282 }
13283 {}
```

The styles in `glossary-longbooktabs` are all based on the styles in `glossary-long`, so no adjustments are needed for that package.

2.4 Long Ragged Styles

The three and four column styles require adjustment for the post-description hook, but not the two column styles. However, the two-column styles need to have `\space` replaced with `\glsxtrprelocation`.

```

13284 \ifcsdef{@glsstyle@longragged}%
13285 {%
13286   \renewglossarystyle{longragged}{%
13287     \renewenvironment{theglossary}{%
13288       {\begin{longtable}{l>\raggedright p{\glsdescwidth}}}%
13289     {\end{longtable}}%
13290     \renewcommand*\glossaryheader{}%
13291     \renewcommand*\glsgroupheading[1]{}%
13292     \renewcommand{\glossentry}[2]{%
13293       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13294       \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
13295       \tabularnewline
13296     }%
13297     \renewcommand{\subglossentry}[3]{%
13298       &
13299       \glssubentryitem{##2}%
13300       \glstarget{##2}{\strut}\glossentrydesc{##2}%
13301       \glspostdescription\glsxtrprelocation ##3%
13302       \tabularnewline
13303     }%
13304     \ifglsnogroupskip
13305       \renewcommand*\glsgroupskip{}%
13306     \else
13307       \renewcommand*\glsgroupskip{\& \tabularnewline}%
13308     \fi
13309   }%
```

```

13308     \fi
13309 }
13310 }
13311 {}}

Three and four column styles don't use \glsxtrprelocation since the number list is in its
own column.

13312 \ifcsdef{@glsstyle@longragged3col}
13313 {%
13314   \renewglossarystyle{longragged3col}{%
13315     \renewenvironment{theglossary}{%
13316       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}{%
13317         >{\raggedright}p{\glspagelistwidth}}}}{%
13318       {\end{longtable}}}}{%
13319     \renewcommand*\glossaryheader{}{%
13320     \renewcommand*\glsgroupheading}[1]{}}{%
13321     \renewcommand{\glossentry}[2]{%
13322       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13323       \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
13324     }{%
13325       \renewcommand{\subglossentry}[3]{%
13326         &
13327         \glssubentryitem{##2}{%
13328           \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13329           ##3\tabularnewline
13330         }{%
13331           \ifglsnogroupskip
13332             \renewcommand*\glsgroupskip{}{%
13333           \else
13334             \renewcommand*\glsgroupskip}{\& \tabularnewline}{%
13335           \fi
13336         }{%
13337       }{%
13338     }}}}}{%

```

Four column style:

```

13339 \ifcsdef{@glsstyle@altonragged4col}
13340 {%
13341   \renewglossarystyle{altonragged4col}{%
13342     \renewenvironment{theglossary}{%
13343       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}}{%
13344         >{\raggedright}p{\glspagelistwidth}}}}{%
13345       {\end{longtable}}}}{%
13346     \renewcommand*\glossaryheader{}{%
13347     \renewcommand*\glsgroupheading}[1]{}}{%
13348     \renewcommand{\glossentry}[2]{%
13349       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13350       \glossentrydesc{##1}\glspostdescription & \glossentrysymbol{##1} &
13351       ##2\tabularnewline

```

```

13352 }%
13353 \renewcommand{\subglossentry}[3]{%
13354   &
13355   \glssubentryitem{##2}%
13356   \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13357   \glossentrysymbol{##2} & ##3\tabularnewline
13358 }%
13359 \ifglsnogroupskip
13360   \renewcommand*{\glsgroupskip}{}%
13361 \else
13362   \renewcommand*{\glsgroupskip}{\& \&\tabularnewline}%
13363 \fi
13364 }
13365 }
13366 {}

```

2.5 Supertabular Styles

The three and four column styles require adjustment to add the post-description hook. The two column styles need the hard-coded `\space` changed to `\glsxtrprelocation`.

```

13367 \ifcscdef{@glsstyle@super}%
13368 {%
13369   \renewglossarystyle{super}{%
13370     \renewenvironment{theglossary}%
13371       {\tablehead{}\tabletail{}%
13372        \begin{supertabular}{lp{\glsdescwidth}}%
13373        \end{supertabular}}%
13374     \renewcommand*{\glossaryheader}{}%
13375     \renewcommand*{\glsgroupheading}[1]{}%
13376     \renewcommand{\glossentry}[2]{%
13377       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13378       \glossentrydesc{##1}\glspostdescription
13379       \glsxtrprelocation ##2\tabularnewline
13380     }%
13381     \renewcommand{\subglossentry}[3]{%
13382       &
13383       \glssubentryitem{##2}%
13384       \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
13385       \glsxtrprelocation ##3\tabularnewline
13386     }%
13387   \ifglsnogroupskip
13388     \renewcommand*{\glsgroupskip}{}%
13389   \else
13390     \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
13391   \fi
13392 }
13393 }
13394 {}

```

Three column style:

```
13395 \ifcsdef{glsstyle@super3col}{%
13396 {%
13397   \renewglossarystyle{super3col}{%
13398     \renewenvironment{theglossary}{%
13399       {\tablehead{}\tabletail{}{%
13400         \begin{supertabular}{lp{\glscolumnwidth}p{\glspagelistwidth}}{}}{%
13401           \end{supertabular}}{%
13402             \renewcommand*\glossaryheader{}{%
13403               \renewcommand*\glsgroupheading}[1]{%
13404                 \renewcommand{\glossentry}[2]{%
13405                   \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13406                     \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
13407                 }{%
13408                   \renewcommand{\subglossentry}[3]{%
13409                     &
13410                       \glssubentryitem{##2}{%
13411                         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13412                           ##3\tabularnewline
13413                 }{%
13414                   \ifglsnogroupskip
13415                     \renewcommand*\glsgroupskip{}{%
13416                   \else
13417                     \renewcommand*\glsgroupskip{ & &\tabularnewline}{%
13418                   \fi
13419                 }{%
13420               }{%
13421             }{}}
```

Four column styles:

```
13422 \ifcsdef{glsstyle@super4col}{%
13423 {%
13424   \renewglossarystyle{super4col}{%
13425     \renewenvironment{theglossary}{%
13426       {\tablehead{}\tabletail{}{%
13427         \begin{supertabular}{llll}{%
13428           \end{supertabular}}{%
13429             \renewcommand*\glossaryheader{}{%
13430               \renewcommand*\glsgroupheading}[1]{%
13431                 \renewcommand{\glossentry}[2]{%
13432                   \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13433                     \glossentrydesc{##1}\glspostdescription &
13434                       \glossentrysymbol{##1} & ##2\tabularnewline
13435                 }{%
13436                   \renewcommand{\subglossentry}[3]{%
13437                     &
13438                       \glssubentryitem{##2}{%
13439                         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13440                           \glossentrysymbol{##2} & ##3\tabularnewline
13441             }{%
13442               }{}}
```

```

13441    }%
13442    \ifglsnogroupskip
13443        \renewcommand*\glsgroupskip{}%
13444    \else
13445        \renewcommand*\glsgroupskip{\& &\tabularnewline}%
13446    \fi
13447 }
13448 }
13449 {}

```

2.6 Super Ragged Styles

The three and four column styles require adjustment for the post-description hook, but not the two column styles. However, the two-column styles need to have `\space` replaced with `\glsxtrprelocation`.

```

13450 \ifcsdef{@glsstyle@superragged}{%
13451 }%
13452     \renewglossarystyle{superragged}{%
13453         \renewenvironment{theglossary}{%
13454             {\tablehead{}\tabletail{}%
13455                 \begin{supertabular}{l>{\raggedright}p{\glsdescwidth}}{}}%
13456             {\end{supertabular}}%
13457             \renewcommand*\glossaryheader{}%
13458             \renewcommand*\glsgroupheading[1]{%
13459                 \renewcommand{\glossentry}[2]{%
13460                     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13461                     \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
13462                     \tabularnewline
13463                 }%
13464                 \renewcommand{\subglossentry}[3]{%
13465                     &
13466                     \glssubentryitem{##2}%
13467                     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
13468                     \glsxtrprelocation ##3%
13469                     \tabularnewline
13470                 }%
13471             \ifglsnogroupskip
13472                 \renewcommand*\glsgroupskip{}%
13473             \else
13474                 \renewcommand*\glsgroupskip{\& \tabularnewline}%
13475             \fi
13476         }%
13477     }%
13478 }

```

Three column style:

```

13479 \ifcsdef{@glsstyle@superragged3col}{%
13480 }%

```

```

13481 \renewglossarystyle{superragged3col}{%
13482   \renewenvironment{theglossary}%
13483     {\tablehead{}\tabletail{}{%
13484       \begin{supertabular}{l>{\raggedright\p{\glscolumnwidth}}>{\raggedright\p{\glspagelistwidth}}}{%
13485         \end{supertabular}}{%
13486       \renewcommand*\glossaryheader{}{%
13487         \renewcommand*\glsgroupheading}[1]{}}{%
13488         \renewcommand*\glossentry}[2]{%
13489           \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13490             \glossentrydesc{##1}\glspostdescription &
13491               ##2\tabularnewline
13492             }{%
13493           }{%
13494             \renewcommand*\subglossentry}[3]{%
13495               &
13496                 \glssubentryitem{##2}{%
13497                   \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13498                     ##3\tabularnewline
13499                   }{%
13500                     }{%
13501                       \ifglsnogroupskip
13502                         \renewcommand*\glsgroupskip{}{%
13503                           \else
13504                             \renewcommand*\glsgroupskip{ & \tabularnewline}{%
13505                           \fi
13506                         }{%
13507                         }{%

```

Four columns:

```

13508 \ifcsdef{@glsstyle@altsuperragged4col}%
13509 {%
13510   \renewglossarystyle{altsuperragged4col}{%
13511     \renewenvironment{theglossary}%
13512       {\tablehead{}\tabletail{}{%
13513         \begin{supertabular}{l>{\raggedright\p{\glscolumnwidth}1}>{\raggedright\p{\glspagelistwidth}}}{%
13514           \end{supertabular}}{%
13515         \renewcommand*\glossaryheader{}{%
13516           \renewcommand*\glossentry}[2]{%
13517             \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13518               \glossentrydesc{##1}\glspostdescription &
13519                 \glossentrysymbol{##1} & ##2\tabularnewline
13520               }{%
13521             }{%
13522               \renewcommand*\subglossentry}[3]{%
13523                 &
13524                   \glssubentryitem{##2}{%
13525                     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13526                       \glossentrysymbol{##2} & ##3\tabularnewline
13527                     }{%

```

```

13528     \ifglsnogroupskip
13529         \renewcommand*\glsgroupskip{}%
13530     \else
13531         \renewcommand*\glsgroupskip{& & &\tabularnewline}%
13532     \fi
13533 }
13534 }
13535 {}

```

2.7 Inline Style

The inline style is dealt with slightly differently. The `\glspostdescription` hook is actually in `\glspostinline`, which is called at the end of the glossary. The original definition of `\glspostinline` also includes a space, which is unnecessary. Here, instead of redefining the inline style, just redefine `\glspostinline` and `\glsinlinedescformat`.

```

13536 \ifdef{\glsstyle@inline}
13537 {%
13538     \renewcommand*\glspostinline{.\spacefactor\sfcode`\.}
Just use \glsxtrpostdescription instead of \glspostdescription.
13539     \renewcommand*\glsinlinedescformat[3]{%
13540         \space#1\glsxtrpostdescription}
13541     \renewcommand*\glsinlinesubdescformat[3]{%
13542         #1\glsxtrpostdescription}

```

The default settings don't show the location lists, so there's no adjustment for `\glsxtrprelocation`.

```

13543 }
13544 {}

```

2.8 Tree Styles

Redefine both `\glstreenamefmt` and `\glstreegroupheaderfmt` in terms of `\glstreedefaultnamefmt` to make it easier to change both at the same time or only change one without affecting the other.

```

13545 \ifdef\glstreenamefmt
13546 {
edefaultnamefmt
13547     \newcommand{\glstreedefaultnamefmt}[1]{\textbf{#1}}
\glstreenamefmt
13548     \renewcommand{\glstreenamefmt}[1]{\glstreedefaultnamefmt{#1}}

```

`\glstreegroupheaderfmt` This command was only introduced to glossary-tree v4.22, so it may not be defined.

```

13549     \def\glstreegroupheaderfmt#1{\glstreedefaultnamefmt{#1}}

```

`eenavigationfmt` This command was only introduced to glossary-tree v4.22, so it may not be defined.

```
13550 \def\glstreenavigationfmt{\glstreedefaultnamefmt{#1}}  
13551 }  
13552 {}
```

The index style is redefined so that the space before the number list isn't hard coded.

```
13553 \ifdef{\glsstyle@index}{  
13554 {
```

`treeprelocation` The space before the number list for top-level entries. This is shared by the other tree styles.

```
13555 \newcommand*{\glstreeprelocation}{\glsxtrprelocation}
```

`childprelocation` The space before the number list for child entries. This is shared by the other tree styles.

```
13556 \newcommand*{\glstreechildprelocation}{\glstreeprelocation}
```

Modify the index style.

```
13557 \renewglossarystyle[index]{%  
13558   \renewenvironment{theglossary}{%  
13559     \setlength{\parindent}{0pt}%  
13560     \setlength{\parskip}{0pt plus 0.3pt}%  
13561     \let\item\glstreeitem  
13562     \let\subitem\glstreesubitem  
13563     \let\subsubitem\glstreesubsubitem  
13564   }%  
13565   {\par}-%  
13566   \renewcommand*{\glossaryheader}{%  
13567     \renewcommand*{\glsgroupheading}[1]{%  
13568       \renewcommand*{\glossentry}[2]{%  
13569         \item\glsentryitem{##1}%  
13570         \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}-%  
13571         \glstreesymbol{##1}-%  
13572         \glstreedesc{##1}-%  
13573         \glstreeprelocation ##2%  
13574       }%  
13575       \renewcommand{\subglossentry}[3]{%  
13576         \ifcase##1\relax  
13577           \item  
13578           \or  
13579             \subitem  
13580             \glssubentryitem{##2}-%  
13581           \else  
13582             \subsubitem  
13583           \fi  
13584           \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}-%  
13585           \glstreechildsymbol{##2}-%  
13586           \glstreechilddesc{##2}-%  
13587           \glstreechildprelocation ##3%  
13588       }%  
13589 }
```

```

13589     \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
13590 }
13591 }
13592 {}

```

The indexgroup style is redefined to discourage a page break after the heading.

```

13593 \ifdef{@glsstyle@indexgroup}%
13594 {%
13595     \renewglossarystyle{indexgroup}{%
13596         \setglossarystyle{index}{%
13597             \renewcommand*{\glsgroupheading}[1]{%
13598                 \item\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}{%
13599                     \nopagebreak\indexspace
13600                     \nobreak\@afterheading
13601                 }%
13602             }%
13603         }%
13604     }%

```

Similarly for indexhypergroup.

```

13605 \ifdef{@glsstyle@indexhypergroup}%
13606 {%
13607     \renewglossarystyle{indexhypergroup}{%
13608         \setglossarystyle{index}{%
13609             \renewcommand*{\glossaryheader}{%
13610                 \item\glstreenavigationfmt{\glsnavigation}{%
13611                     \nobreak\@afterheading\indexspace}%
13612             \renewcommand*{\glsgroupheading}[1]{%
13613                 \item\glstreegroupheaderfmt
13614                 {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
13615                 \nopagebreak\indexspace
13616                 \nobreak\@afterheading}%
13617             }%
13618         }%
13619     }%

```

Adjust tree style to remove hard coded space before number list.

```

13620 \ifdef{@glsstyle@tree}%
13621 {%
13622 %Provide a command for use with the \glostyle{tree} styles that displays
13623 %the pre-description separator, the
13624 %description and post-description hook.
13625 %\begin{macro}{\glstreedesc}
13626 %\changes{1.31}{2018-05-09}{new}
13627 %    \begin{macrocode}
13628     \newcommand{\glstreedesc}[1]{%
13629         \glstreepredesc\glossentrydesc{#1}\glspostdescription
13630     }%

```

Similarly for the symbol.

```
\glstreesymbol
13631 \newcommand{\glstreesymbol}[1]{%
13632   \ifglshassymbol{#1}{\space(\glossentrysymbol{#1})}{}%
13633 }%
```

And for the child entries:

```
lstreechilddesc
13634 \newcommand{\glstreechilddesc}[1]{%
13635   \glstreechildpredesc\glossentrydesc{#1}\glspostdescription
13636 }%
```

`treechildsymbol` This just behaves in the same way as the top-level.

```
13637 \newcommand{\glstreechildsymbol}[1]{%
13638   \glstreesymbol{#1}%
13639 }%
13640 \renewglossarystyle{tree}{%
13641   \renewenvironment{theglossary}{%
13642     {\setlength{\parindent}{0pt}%
13643      \setlength{\parskip}{0pt plus 0.3pt}}%
13644   }%
13645   \renewcommand*\glossaryheader{}%
13646   \renewcommand*\glsgroupheading[1]{}%
13647   \renewcommand{\glossentry}[2]{%
13648     \hangindent0pt\relax
13649     \parindent0pt\relax
13650     \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
13651     \glstreesymbol{##1}%
13652     \glstreedesc{##1}%
13653     \glstreeprelocation##2\par
13654   }%
13655   \renewcommand{\subglossentry}[3]{%
13656     \hangindent##1\glstreeindent\relax
13657     \parindent##1\glstreeindent\relax
13658     \ifnum##1=1\relax
13659       \glssubentryitem{##2}%
13660     \fi
13661     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
13662     \glstreechildsymbol{##2}%
13663     \glstreechilddesc{##2}%
13664     \glstreechildprelocation ##3\par
13665   }%
13666   \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\indexspace\fi}%
13667 }%
13668 }%
13669 {}
```

The `treegroup` style is redefined to discourage a page break after the heading.

```
13670 \ifdef{@glsstyle@treegroup}
```

```

13671 {%
13672   \renewglossarystyle{treegroup}{%
13673     \setglossarystyle{tree}%
13674     \renewcommand{\glsgroupheading}[1]{\par
13675       \noindent\glstreegroupheaderfmt{\glsgroupname}\par
13676       \nopagebreak\indexspace\nobreak\@afterheading}%
13677   }
13678 }
13679 {}
```

Similarly for treehypergroup

```

13680 \ifdef{\@glsstyle@treehypergroup}
13681 {%
13682   \renewglossarystyle{treehypergroup}{%
13683     \setglossarystyle{tree}%
13684     \renewcommand*{\glossaryheader}{%
13685       \par\noindent\glstreenavigationfmt{\glsnavigation}\par
13686       \nobreak\@afterheading\indexspace}%
13687     \renewcommand*{\glsgroupheading}[1]{%
13688       \par\noindent
13689       \glstreegroupheaderfmt
13690       {\glsnavhypertarget{\#1}{\glsgroupname}}\par
13691       \nopagebreak\indexspace\nobreak\@afterheading}%
13692   }
13693 }
13694 {}}
```

Adjust treenoname style to remove hard coded space before number list.

```

13695 \ifdef{\@glsstyle@treenoname}
13696 {%
13697 %Provide a command for use with the \glostyle{treenoname} styles that displays
13698 %the pre-description separator, the
13699 %description and post-description hook.
13700 %\begin{macro}{\glstreenonamedesc}
13701 %\changes{1.31}{2018-05-09}{new}
13702 %  \begin{macrocode}
13703  \newcommand{\glstreenonamedesc}[1]{%
13704    \glstreepredesc\glossentrydesc{\#1}\glspostdescription
13705  }%
```

Similarly for the symbol.

treenonamesymbol

```

13706  \newcommand{\glstreenonamesymbol}[1]{%
13707    \ifglshassymbol{\#1}{\space(\glossentrysymbol{\#1})}{}%
13708  }%
```

nonamechilddesc The child entry doesn't have the pre-description separator as the name isn't displayed.

```

13709  \newcommand{\glstreenonamechilddesc}[1]{%
13710    \glossentrydesc{\#1}\glspostdescription
13711  }%
```

```

13712 \renewglossarystyle{treenoname}{%
13713   \renewenvironment{theglossary}%
13714     {\setlength{\parindent}{0pt}%
13715       \setlength{\parskip}{0pt plus 0.3pt}}%
13716     {}%
13717   \renewcommand*\glossaryheader{}%
13718   \renewcommand*\glsgroupheding}[1]{}%
13719   \renewcommand{\glossentry}[2]{%
13720     \hangindent0pt\relax
13721     \parindent0pt\relax
13722     \glsgentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
13723     \glstreenonamesymbol{##1}%
13724     \glstreenonamedesc{##1}%
13725     \glstreeprelocation##2\par
13726   }%
13727   \renewcommand{\subglossentry}[3]{%
13728     \hangindent##1\glstreeindent\relax
13729     \parindent##1\glstreeindent\relax
13730     \ifnum##1=1\relax
13731       \glssubentryitem{##2}%
13732     \fi
13733     \glstarget{##2}{\strut}%
13734     \glstreenonamechilddesc{##2}%
13735     \glstreechildprelocation##3\par
13736   }%
13737   \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\indexspace\fi}%
13738 }
13739 }
13740 {}

```

The treenonamegroup style is redefined to discourage a page break after the heading.

```

13741 \ifdef{\@glsstyle@treenonamegroup}%
13742 {%
13743   \renewglossarystyle{treenonamegroup}{%
13744     \setglossarystyle{treenoname}%
13745     \renewcommand{\glsgroupheding}[1]{\par
13746       \noindent\glstreegroupheaderfmt
13747       {\glsggetgrouptitle{##1}}}%
13748       \nopagebreak\indexspace\nobreak\@afterheading
13749   }%
13750 }
13751 }
13752 {}

```

Similarly for treenonamehypergroup

```

13753 \ifdef{\@glsstyle@treenonamehypergroup}%
13754 {%
13755   \renewglossarystyle{treenonamehypergroup}{%
13756     \setglossarystyle{treenoname}%
13757     \renewcommand*\glossaryheader{}%

```

```

13758     \par\noindent\glstreenavigationfmt{\glsnavigation}\par
13759     \nobreak\@afterheading\indexspace}%
13760     \renewcommand*{\glsgroupheading}[1]{%
13761         \par\noindent
13762         \glstreegroupheaderfmt
13763         {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
13764         \nopagebreak\indexspace\nobreak\@afterheading}%
13765     }
13766 }
13767 {}

```

The alttree style is redefined to make it easier to made minor adjustments.

```

13768 \ifdef{\@glsstyle@alttree}
13769 {%

```

Only redefine this style if it's already been defined.

symbolDescLocation `\glsxtralttreeSymbolDescLocation{<label>}{<location list>}`

Layout the symbol, description and location for top-level entries.

```

13770 \newcommand{\glsxtralttreeSymbolDescLocation}[2]{%
13771 {%
13772     \let\par\glsxtrAltTreePar
13773     \ifglshassymbol{#1}{(\glossentrysymbol{#1})\space}{}%
13774     \glossentrydesc{#1}\glspostdescription\glstreeprelocation #2\par
13775 }%
13776 }

```

trAltTreeIndent Paragraph indent for subsequent paragraphs in multi-paragraph descriptions.

```

13777 \newlength\glsxtrAltTreeIndent

```

lsxtrAltTreePar Multi-paragraph descriptions need to keep the hanging indent.

```

13778 \newcommand{\glsxtrAltTreePar}{%
13779     \@@par
13780     \glsxtrAltTreeSetHangIndent
13781     \setlength{\parindent}{\dimexpr\hangindent+\glsxtrAltTreeIndent}%
13782 }

```

symbolDescLocation `\glsxtralttreeSubSymbolDescLocation{<level>}{<label>}{<location list>}`

Layout the symbol, description and location for sub-entries. Defaults to the same as the top-level.

```

13783 \newcommand{\glsxtralttreeSubSymbolDescLocation}[3]{%
13784     \glsxtralttreeSymbolDescLocation{#2}{#3}%
13785 }

```

`trtreetopindent` The original style has to keep computing the width of the name at each entry. This register allows the style to compute it once for the top-level at the start of the glossary.

```
13786 \newlength\glsxtrtreetopindent
```

`sxtralttreeInit` User-level initialisation for the `alttree` style.

```
13787 \newcommand*\glsxtralttreeInit}{%
13788   \settowidth{\glsxtrtreetopindent}{\glstreenamefmt{\glsgwidestname\space}}%
13789   \glsxtrAltTreeIndent=\parindent
13790 }
```

`\glssetwidest` The original `\glssetwidest` only uses `\def`. This uses `\gdef`.

```
13791 \newcommand*\glssetwidest}[2][0]{%
13792   \csgdef{@glswidestname\romannumeral#1}{#2}%
13793 }
```

`\eglssetwidest` The original `\glssetwidest` only uses `\def`. This uses `\protected@csedef`.

```
13794 \newcommand*\eglssetwidest}[2][0]{%
13795   \protected@csedef{@glswidestname\romannumeral#1}{#2}%
13796 }
```

`\xglssetwidest` Like the above but uses `\protected@csxdef`.

```
13797 \newcommand*\xglssetwidest}[2][0]{%
13798   \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
13799 }
```

`glsupdatewidest` Only sets if new value is wider than old value.

```
13800 \newcommand*\glsupdatewidest}[2][0]{%
13801   \ifcsundef{@glswidestname\romannumeral#1}%
13802     {\csdef{@glswidestname\romannumeral#1}{#2}}%
13803     {%
13804       \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
13805       \settowidth{\dimen@ii}{#2}%
13806       \ifdim\dimen@ii>\dimen@
13807         \csdef{@glswidestname\romannumeral#1}{#2}%
13808       \fi
13809     }%
13810 }
```

`glsupdatewidest` As above but global definition.

```
13811 \newcommand*\gglssupdatewidest}[2][0]{%
13812   \ifcsundef{@glswidestname\romannumeral#1}%
13813     {\csgdef{@glswidestname\romannumeral#1}{#2}}%
13814     {%
13815       \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
13816       \settowidth{\dimen@ii}{#2}%
13817       \ifdim\dimen@ii>\dimen@
13818         \csgdef{@glswidestname\romannumeral#1}{#2}%
13819       \fi
13820 }
```

```
13820      }%
13821  }
```

`glsupdatewidest` As `\glsupdatewidest` but expands value.

```
13822  \newcommand*{\eglsupdatewidest}[2][0]{%
13823    \ifcsundef{@glswidestname\romannumeral#1}%
13824    {\protected@csedef{@glswidestname\romannumeral#1}{#2}}%
13825    {%
13826      \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
13827      \settowidth{\dimen@ii}{#2}%
13828      \ifdim\dimen@ii>\dimen@%
13829        \protected@csedef{@glswidestname\romannumeral#1}{#2}%
13830      \fi%
13831    }%
13832  }
```

`glsupdatewidest` As above but global.

```
13833  \newcommand*{\xglsupdatewidest}[2][0]{%
13834    \ifcsundef{@glswidestname\romannumeral#1}%
13835    {\protected@csxdef{@glswidestname\romannumeral#1}{#2}}%
13836    {%
13837      \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
13838      \settowidth{\dimen@ii}{#2}%
13839      \ifdim\dimen@ii>\dimen@%
13840        \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
13841      \fi%
13842    }%
13843  }
```

`lsgetwidestname` Provide a user-level macro to obtain the widest top-level name.

```
13844  \newcommand*{\glsgetwidestname}{\@glswidestname}
```

`etwidestsubname` Provide a user-level macro to obtain the widest sub-entry name.

```
13845  \newcommand*{\glsgetwidestsubname}[1]{%
13846    \ifcsundef{@glswidestname\romannumeral#1}%
13847    {\@glswidestname}%
13848    {\csuse{@glswidestname\romannumeral#1}}%
13849  }
```

`estTopLevelName` CamelCase is easier for long command names. Provide a CamelCase synonym of `\glsfindwidesttoplevelname`.

```
13850  \let\glsFindWidestTopLevelName\glsfindwidesttoplevelname
```

`sedTopLevelName` Like `\glsfindwidesttoplevelname` but has an additional check that the entry has been used. Only useful if the glossaries occur at the end of the document, in which case this command should go at the start of the glossary. Alternatively, place at the end of the document and save for the next run.

```
13851  \newrobustcmd*{\glsFindWidestUsedTopLevelName}[1][\@glo@types]{%
13852    \dimen@=0pt\relax
```

`destUsedAnyName` Like the above but doesn't check the parent key. Useful if all levels should have the same width for the name.

```
13875 \newrobustcmd*\glsFindWidestUsedAnyName}[1][\@glo@types]{%
13876     \dimen@\z@pt\relax
13877     \gls@tmp@len=\z@pt\relax
13878     \forallglossaries[#1]{\gls@type}%
13879     {%
13880         \forglsentries[\gls@type]{\glo@label}%
13881         {%
13882             \ifglsused{\glo@label}%
13883             {%
13884                 \settowidth{\dimen@}%
13885                 {\glstreenamefmt{\glsentryname{\glo@label}}}%
13886                 \ifdim\dimen@>\gls@tmp@len
13887                     \gls@tmp@len=\dimen@
13888                     \eglssetwidest{\glsentryname{\glo@label}}%
13889                 \fi
13890             }%
13891             {}%
13892         }%
13893     }%
13894 }
```

ndWidestAnyName Like the above but doesn't check if the entry has been used.

```
13895 \newrobustcmd*{\glsFindWidestAnyName}[1][\@glo@types]{%
13896     \dimen@=0pt\relax
```

```

13897 \gls@tmp@len=0pt\relax
13898 \forall@glossaries[\#1]{\gls@type}%
13899 {%
13900   \for@glsentries[\gls@type]{\glo@label}%
13901   {%
13902     \settowidth{\dimen@}%
13903     {\glstreenamefmt{\glsentryname{\glo@label}}}%
13904     \ifdim\dimen@>\gls@tmp@len
13905       \gls@tmp@len=\dimen@
13906       \eglssetwidest{\glsentryname{\glo@label}}%
13907     \fi
13908   }%
13909 }%
13910 }

```

`\estUsedLevelTwo` This is like `\glsFindWidestUsedTopLevelName` but also sets the first two sub-levels as well.
Any entry that has a great-grandparent is ignored.

```

13911 \newrobustcmd*{\glsFindWidestUsedLevelTwo}[1][\glo@types]%
13912   \dimen@=0pt\relax
13913   \dimen@i=0pt\relax
13914   \dimen@ii=0pt\relax
13915   \forall@glossaries[\#1]{\gls@type}%
13916   {%
13917     \for@glsentries[\gls@type]{\glo@label}%
13918     {%
13919       \ifglsused{\glo@label}%
13920       {%
13921         \ifglshasparent{\glo@label}%
13922         {%
13923           \edef@glo@parent{\csuse{\glo@glsdetoklabel{\glo@label}}@\parent}%
13924           \ifglshasparent{\glo@parent}%
13925             {%
13926               \edef@glo@parent{\csuse{\glo@glsdetoklabel{\glo@parent}}@\parent}%
13927               \ifglshasparent{\glo@parent}%
13928                 {}%
13929               {%
13930                 \settowidth{\gls@tmp@len}%
13931                   {\glstreenamefmt{\glsentryname{\glo@label}}}%
13932                   \ifdim\gls@tmp@len>\dimen@ii
13933                     \dimen@ii=\gls@tmp@len
13934                     \eglssetwidest[2]{\glsentryname{\glo@label}}%
13935                   \fi
13936               }%
13937             }%
13938           {%
13939             \settowidth{\gls@tmp@len}%
13940               {\glstreenamefmt{\glsentryname{\glo@label}}}%
13941             \ifdim\gls@tmp@len>\dimen@i
13942               \dimen@i=\gls@tmp@len

```

```

13943          \eglssetwidest[1]{\glsentryname{\@glo@label}}%
13944          \fi
13945      }%
13946  }%
13947  {%
13948      \settowidth{\gls@tmp{len}}%
13949          {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13950          \ifdim\gls@tmp{len}>\dimen@%
13951              \dimen@=\gls@tmp{len}
13952              \eglssetwidest{\glsentryname{\@glo@label}}%
13953              \fi
13954          }%
13955      }%
13956      {}%
13957  }%
13958 }%
13959 }

```

dWidestLevelTwo This is like \glsFindWidestUsedLevelTwo but doesn't check if the entry has been used.

```

13960 \newrobustcmd*{\glsFindWidestLevelTwo}[1][\@glo@types]{%
13961     \dimen@=0pt\relax
13962     \dimen@i=0pt\relax
13963     \dimen@ii=0pt\relax
13964     \forallglossaries[#1]{\gls@type}%
13965     {%
13966         \forglsentries[\gls@type]{\glo@label}%
13967         {%
13968             \ifglshasparent{\glo@label}%
13969             {%
13970                 \edef\glo@parent{\csuse{\glo@\glsdetoklabel{\glo@label}@parent}}%
13971                 \ifglshasparent{\glo@parent}%
13972                 {%
13973                     \edef\glo@parent{\csuse{\glo@\glsdetoklabel{\glo@parent}@parent}}%
13974                     \ifglshasparent{\glo@parent}%
13975                     {}%
13976                     {%
13977                         \settowidth{\gls@tmp{len}}%
13978                             {\glstreenamefmt{\glsentryname{\glo@label}}}%
13979                             \ifdim\gls@tmp{len}>\dimen@i%
13980                                 \dimen@i=\gls@tmp{len}
13981                                 \eglssetwidest[2]{\glsentryname{\glo@label}}%
13982                                 \fi
13983                             }%
13984                         }%
13985                         {}%
13986                         \settowidth{\gls@tmp{len}}%
13987                             {\glstreenamefmt{\glsentryname{\glo@label}}}%
13988                             \ifdim\gls@tmp{len}>\dimen@i%
13989                                 \dimen@i=\gls@tmp{len}

```

```

13990          \eglssetwidest[1]{\glsentryname{\@glo@label}}%
13991          \fi
13992      }%
13993  }%
13994  {%
13995      \settowidth{\gls@tmpplen}%
13996      {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13997      \ifdim\gls@tmpplen>\dimen@
13998          \dimen@=\gls@tmpplen
13999          \eglssetwidest{\glsentryname{\@glo@label}}%
14000          \fi
14001      }%
14002  }%
14003  }%
14004 }

```

`edAnyNameSymbol` Like the `\glsFindWidestUsedAnyName` but also measures the symbol. The length of the widest symbol is stored in the second argument should be a length register.

```

14005 \newrobustcmd*{\glsFindWidestUsedAnyNameSymbol}[2][\@glo@types]{%
14006     \dimen@=0pt\relax
14007     \gls@tmpplen=0pt\relax
14008     #2=0pt\relax
14009     \forallglossaries[#1]{\gls@type}%
14010     {%
14011         \forglsentries[\gls@type]{\glo@label}%
14012         {%
14013             \ifglsused{\glo@label}%
14014             {%
14015                 \settowidth{\dimen@}%
14016                 {\glstreenamefmt{\glsentryname{\glo@label}}}%
14017                 \ifdim\dimen@>\gls@tmpplen
14018                     \gls@tmpplen=\dimen@
14019                     \eglssetwidest{\glsentryname{\glo@label}}%
14020                     \fi
14021                     \settowidth{\dimen@}%
14022                     {\glsentrysymbol{\glo@label}}%
14023                     \ifdim\dimen@>#2\relax
14024                         #2=\dimen@
14025                         \fi
14026                     }%
14027                     {}%
14028                 }%
14029             }%
14030 }

```

`stAnyNameSymbol` Like the above but doesn't check if the entry has been used.

```

14031 \newrobustcmd*{\glsFindWidestAnyNameSymbol}[2][\@glo@types]{%
14032     \dimen@=0pt\relax
14033     \gls@tmpplen=0pt\relax

```

```

14034     #2=0pt\relax
14035     \forallglossaries[#1]{\@gls@type}%
14036     {%
14037         \forglsentries[\@gls@type]{\@glo@label}%
14038         {%
14039             \settowidth{\dimen@}%
14040             {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
14041             \ifdim\dimen@>\gls@tmpplen
14042                 \gls@tmpplen=\dimen@
14043                 \eglssetwidest{\glsentryname{\@glo@label}}%
14044             \fi
14045             \settowidth{\dimen@}%
14046             {\glsentrysymbol{\@glo@label}}%
14047             \ifdim\dimen@>\#2\relax
14048                 #2=\dimen@
14049             \fi
14050         }%
14051     }%
14052 }

```

`\glsFindWidestUsedAnyNameSymbolLocation` Like the `\glsFindWidestUsedAnyNameSymbol` but also measures the location list. This requires `\glsentrynumberlist`. The length of the widest symbol is stored in the second argument should be a length register. The length of the widest location list is stored in the third argument, which should also be a length register.

```

14053     \newrobustcmd*{\glsFindWidestUsedAnyNameSymbolLocation}[3][\@glo@types]{%
14054         \dimen@=0pt\relax
14055         \gls@tmpplen=0pt\relax
14056         #2=0pt\relax
14057         #3=0pt\relax
14058         \forallglossaries[#1]{\@gls@type}%
14059         {%
14060             \forglsentries[\@gls@type]{\@glo@label}%
14061             {%
14062                 \ifglsused{\@glo@label}%
14063                 {%
14064                     \settowidth{\dimen@}%
14065                     {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
14066                     \ifdim\dimen@>\gls@tmpplen
14067                         \gls@tmpplen=\dimen@
14068                         \eglssetwidest{\glsentryname{\@glo@label}}%
14069                     \fi
14070                     \settowidth{\dimen@}%
14071                     {\glsentrysymbol{\@glo@label}}%
14072                     \ifdim\dimen@>\#2\relax
14073                         #2=\dimen@
14074                     \fi
14075                     \settowidth{\dimen@}%
14076                     {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}}%
14077                     \ifdim\dimen@>\#3\relax

```

```

14078      #3=\dimen@%
14079      \fi%
14080      }%
14081      {}%
14082      }%
14083      {}%
14084  }

```

`eSymbolLocation` Like the `\glsFindWidestUsedAnyNameSymbol` but doesn't check if the entry has been used.

```

14085  \newrobustcmd*\{\glsFindWidestAnyNameSymbolLocation}[3][\@glo@types]{%
14086      \dimen@=0pt\relax
14087      \gls@tmplen=0pt\relax
14088      #2=0pt\relax
14089      #3=0pt\relax
14090      \forallglossaries[#1]{\gls@type}{%
14091      {%
14092          \forglentries[\gls@type]{\glo@label}{%
14093          {%
14094              \settowidth{\dimen@}{%
14095                  \glstreenamefmt{\glsentryname{\glo@label}}}{%
14096                  \ifdim\dimen@>\gls@tmplen
14097                      \gls@tmplen=\dimen@
14098                      \eglssetwidest{\glsentryname{\glo@label}}{%
14099                      \fi
14100                      \settowidth{\dimen@}{%
14101                          \glsentrysymbol{\glo@label}}{%
14102                          \ifdim\dimen@>#2\relax
14103                              #2=\dimen@
14104                              \fi
14105                          \settowidth{\dimen@}{%
14106                              \GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}{%
14107                              \ifdim\dimen@>#3\relax
14108                                  #3=\dimen@
14109                                  \fi
14110                              }%
14111                          }%
14112                      }%
14113      }%
14114      }%
14115      }%
14116      }%
14117      }%
14118      }%
14119      \forglentries[\gls@type]{\glo@label}{%
14120      {%

```

`AnyNameLocation` Like the `\glsFindWidestUsedAnyNameSymbolLocation` but doesn't measure the symbol. The length of the widest location list is stored in the second argument, which should be a length register.

```

14113  \newrobustcmd*\{\glsFindWidestUsedAnyNameLocation}[2][\@glo@types]{%
14114      \dimen@=0pt\relax
14115      \gls@tmplen=0pt\relax
14116      #2=0pt\relax
14117      \forallglossaries[#1]{\gls@type}{%
14118      {%
14119          \forglentries[\gls@type]{\glo@label}{%
14120          {%

```

```

14121     \ifglsused{\@glo@label}%
14122     {%
14123         \settowidth{\dimen@}%
14124             {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
14125         \ifdim\dimen@>\gls@tmpplen
14126             \gls@tmpplen=\dimen@
14127             \eglssetwidest{\glsentryname{\@glo@label}}%
14128         \fi
14129         \settowidth{\dimen@}%
14130             {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}}%
14131         \ifdim\dimen@>#2\relax
14132             #2=\dimen@
14133         \fi
14134     }%
14135     {}%
14136 }%
14137 }%
14138 }

```

`AnyNameLocation` Like the `\glsFindWidestAnyNameLocation` but doesn't check the **first use** flag.

```

14139 \newrobustcmd*{\glsFindWidestAnyNameLocation}[2][\@glo@types]{%
14140     \dimen@=0pt\relax
14141     \gls@tmpplen=0pt\relax
14142     #2=0pt\relax
14143     \forallglossaries[#1]{\gls@type}%
14144     {%
14145         \forglsentries[\gls@type]{\@glo@label}%
14146         {%
14147             \settowidth{\dimen@}%
14148                 {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
14149             \ifdim\dimen@>\gls@tmpplen
14150                 \gls@tmpplen=\dimen@
14151                 \eglssetwidest{\glsentryname{\@glo@label}}%
14152             \fi
14153             \settowidth{\dimen@}%
14154                 {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}}%
14155             \ifdim\dimen@>#2\relax
14156                 #2=\dimen@
14157             \fi
14158         }%
14159     }%
14160 }

```

`computeTreeIndent` Compute the value of `\glstreeindent`. Argument is the entry label. (Ignored in default definition, but this command may be redefined to take the particular entry into account.) Note that the sub-levels modify `\glstreeindent`.

```

14161 \newcommand*{\glsxtrComputeTreeIndent}[1]{%
14162     \glstreeindent=\glsxtrtreeopindent\relax
14163 }

```

```
uteTreeSubIndent \glsxtrComputeTreeSubIndent{<level>}{<label>}{{<register>}}
```

Compute the indent for the sub-entries. The first argument is the level, the second argument is the entry label and the third argument is the length register used to store the computed indent.

```
14164 \newcommand*{\glsxtrComputeTreeSubIndent}[3]{%
14165   \ifcsundef{@glswidestname\romannumeral#1}%
14166   {%
14167     \settowidth{#3}{\glstreenamefmt{\@glswidestname\space}}%
14168   }%
14169   {%
14170     \settowidth{#3}{\glstreenamefmt{%
14171       \csname @glswidestname\romannumeral#1\endcsname\space}}%
14172   }%
14173 }
```

eeSetHangIndent Set \hangindent for top-level entries:

```
14174 \newcommand*{\glsxtrAltTreeSetHangIndent}{\hangindent\glstreeindent}
```

etSubHangIndent Set \hangindent for sub-entries:

```
14175 \newcommand*{\glsxtrAltTreeSetSubHangIndent}[1]{\hangindent\glstreeindent}
```

Redefine alttree:

```
14176 \renewglossarystyle{alttree}{%
14177   \renewenvironment{theglossary}{%
14178   {%
14179     \glsxtralttreeInit
14180     \def\@gls@prevlevel{-1}%
14181     \mbox{}\par}%
14182     \par}%
14183   \renewcommand*{\glossaryheader}{}%
14184   \renewcommand*{\glsgroupheading}[1]{}%
14185   \renewcommand{\glossentry}[2]{%
14186     \ifnum\@gls@prevlevel=0\relax
14187     \else
14188       \glsxtrComputeTreeIndent{##1}%
14189     \fi
14190     \parindent\glstreeindent
14191     \glsxtrAltTreeSetHangIndent
14192     \makebox[0pt][r]%
14193     {%
14194       \glstreenamebox{\glstreeindent}%
14195     {%
14196       \glsentryitem{##1}%
14197       \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
14198     }%
14199   }%
```

```

14200     \glsxtralldsymboldesclocation{##1}{##2}%
14201     \def\@gls@prevlevel{0}%
14202 }
14203 \renewcommand{\subglossentry}[3]{%
14204     \ifnum##1=1\relax
14205         \glssubentryitem{##2}%
14206     \fi
14207     \ifnum\@gls@prevlevel=##1\relax
14208     \else
14209         \glsxtrcomputetreesubindent{##1}{##2}{\gls@tmpplen}%
14210         \ifnum\@gls@prevlevel<##1\relax
14211             \setlength\glstreeindent\gls@tmpplen
14212             \addtolength\glstreeindent\parindent
14213             \parindent\glstreeindent
14214         \else
14215             \ifnum\@gls@prevlevel=0\relax
14216                 \glsxtrcomputeindent{##2}%
14217             \else
14218                 \glsxtrcomputetreesubindent{\@gls@prevlevel}{##2}{\glstreeindent}%
14219             \fi
14220             \addtolength\parindent{-\glstreeindent}%
14221             \setlength\glstreeindent\parindent
14222         \fi
14223     \fi
14224     \glsxtralttreeSetSubHangIndent{##1}%
14225     \makebox[0pt][r]{\glstreenamebox{\gls@tmpplen}{%
14226         \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}}}%
14227     \glsxtralldsymboldesclocation{##1}{##2}{##3}%
14228     \def\@gls@prevlevel{##1}%
14229 }%
14230 \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
14231 }%
14232 }%
14233 {%
14234 }

```

Redefine `alttreegroup` so that it discourages a break after group headings. Can't use `\@afterheading` here as it messes with the first item of the group.

```

14235 \ifdef{@glsstyle@alttreegroup}%
14236 {%
14237     \renewglossarystyle{alttreegroup}{%
14238         \setglossarystyle{alttree}%
14239         \renewcommand{\glsgroupheading}[1]{\par
14240             \def\@gls@prevlevel{-1}%
14241             \hangindent0pt\relax
14242             \parindent0pt\relax
14243             \glstreegroupheaderfmt{\glsgetgroup{##1}}%
14244             \nopagebreak\indexspace\nopagebreak
14245 }%
14246 }%

```

```

14247 }%
14248 {%
14249 }

    Similarly for alttreehypergroup.
14250 \ifdef{@glsstyle@alttreehypergroup}%
14251 {%
14252     \renewglossarystyle{alttreehypergroup}{%
14253         \setglossarystyle{alttree}{%
14254             \renewcommand*{\glossaryheader}{%
14255                 \par
14256                 \def@gls@prevlevel{-1}%
14257                 \hangindent0pt\relax
14258                 \parindent0pt\relax
14259                 \glstreenavigationfmt{\glsnavigation}\par\indexspace
14260             }%
14261             \renewcommand*{\glsgroupheading}[1]{%
14262                 \par
14263                 \def@gls@prevlevel{-1}%
14264                 \hangindent0pt\relax
14265                 \parindent0pt\relax
14266                 \glstreegroupheaderfmt
14267                 {\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}\par
14268                 \nopagebreak\indexspace\nopagebreak
14269             }%
14270         }%
14271     }%
14272 {%
14273 }

```

2.9 Multicolumn Styles

Adjust `mcolindexgroup` to discourage page breaks after the group headings.

```

14274 \ifdef{@glsstyle@mcolindexgroup}%
14275 {%
14276     \renewglossarystyle{mcolindexgroup}{%
14277         \setglossarystyle{mcolindex}{%
14278             \renewcommand*{\glsgroupheading}[1]{%
14279                 \item\glstreegroupheaderfmt{\glsgetgroupname{##1}}%
14280                 \nopagebreak\indexspace\nobreak\@afterheading
14281             }%
14282         }%
14283     }%
14284 {%
14285 }

```

Similarly for `mcolindexhypergroup`.

```

14286 \ifdef{@glsstyle@mcolindexhypergroup}%
14287 {%

```

```

14288 \renewglossarystyle{mcolindexhypergroup}{%
14289   \setglossarystyle{mcolindex}%
14290   \renewcommand*{\glossaryheader}{%
14291     \item\glstreenavigationfmt{\glsnavigation}%
14292     \indexspace
14293   }%
14294   \renewcommand*{\glsgroupheading}[1]{%
14295     \item\glstreegroupheaderfmt
14296     {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
14297     \nopagebreak\indexspace\nobreak\@afterheading
14298   }%
14299 }
14300 }%
14301 {%
14302 }

```

Similarly for mcolindexspannav.

```

14303 \ifdef{@glsstyle@mcolindexspannav}%
14304 {%
14305   \renewglossarystyle{mcolindexspannav}{%
14306     \setglossarystyle{index}%
14307     \renewenvironment{theglossary}%
14308     {%
14309       \begin{multicols}{\glsmcols}[\noindent\glstreenavigationfmt{\glsnavigation}]%
14310       \setlength{\parindent}{0pt}%
14311       \setlength{\parskip}{0pt plus 0.3pt}%
14312       \let\item\glstreeitem}%
14313     {\end{multicols}}%
14314     \renewcommand*{\glsgroupheading}[1]{%
14315       \item\glstreegroupheaderfmt
14316       {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
14317       \nopagebreak\indexspace\nobreak\@afterheading
14318     }%
14319   }
14320 }%
14321 {%
14322 }

```

Similarly for mcoltreegroup.

```

14323 \ifdef{@glsstyle@mcoltreegroup}%
14324 {%
14325   \renewglossarystyle{mcoltreegroup}{%
14326     \setglossarystyle{mcoltree}%
14327     \renewcommand{\glsgroupheading}[1]{\par
14328       \noindent\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}}%
14329       \nopagebreak\indexspace\nobreak\@afterheading
14330     }%
14331   }
14332 }%
14333 {%

```

```
14334 }
```

Similarly for mcoltreehypergroup.

```
14335 \ifdef{@glsstyle@mcoltreehypergroup}
14336 {%
14337   \renewglossarystyle{mcoltreehypergroup}{%
14338     \setglossarystyle{mcoltree}%
14339     \renewcommand*\glossaryheader{%
14340       \par\noindent\glstreenavigationfmt{\glsnavigation}\par\indexspace
14341     }%
14342     \renewcommand*\glsgroupheading[1]{%
14343       \par\noindent
14344       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
14345       \nopagebreak\indexspace\nobreak\@afterheading
14346     }%
14347   }%
14348 }%
14349 {%
14350 }
```

Similarly for mcoltreespannav.

```
14351 \ifdef{@glsstyle@mcoltreespannav}
14352 {%
14353   \renewglossarystyle{mcoltreespannav}{%
14354     \setglossarystyle{tree}%
14355     \renewenvironment{theglossary}{%
14356       {%
14357         \begin{multicols}{\glsmcols}%
14358           [\noindent\glstreenavigationfmt{\glsnavigation}]%
14359           \setlength{\parindent}{0pt}%
14360           \setlength{\parskip}{0pt plus 0.3pt}%
14361       }%
14362       {\end{multicols}}%
14363       \renewcommand*\glsgroupheading[1]{%
14364         \par\noindent
14365         \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
14366         \nopagebreak\indexspace\nobreak\@afterheading
14367       }%
14368     }%
14369 }%
14370 {%
14371 }
```

Similarly for mcoltreenonamegroup.

```
14372 \ifdef{@glsstyle@mcoltreenonamegroup}
14373 {%
14374   \renewglossarystyle{mcoltreenonamegroup}{%
14375     \setglossarystyle{mcoltreenoname}%
14376     \renewcommand{\glsgroupheading}[1]{\par
14377       \noindent\glstreegroupheaderfmt{\glsgetgroupname{##1}}}%
14378       \nopagebreak\indexspace\nobreak\@afterheading
```

```

14379      }%
14380  }
14381 }%
14382 {%
14383 }

```

Similarly for `mcoltreeonenamehypergroup`.

```

14384 \ifdef{@glsstyle@mcoltreeonenamehypergroup}%
14385 {%
14386   \renewglossarystyle{mcoltreeonenamehypergroup}{%
14387     \setglossarystyle{mcoltreeonename}{%
14388       \renewcommand*\glossaryheader{%
14389         \par\noindent\glstreenavigationfmt{\glsnavigation}\par\indexspace}%
14390       \renewcommand*\glsgroupheading[1]{%
14391         \par\noindent
14392         \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
14393         \nopagebreak\indexspace\nobreak\@afterheading}%
14394     }%
14395   }%
14396 {%
14397 }

```

Similarly for `mcoltreeonenamespannav`.

```

14398 \ifdef{@glsstyle@mcoltreeonenamespannav}%
14399 {%
14400   \renewglossarystyle{mcoltreeonenamespannav}{%
14401     \setglossarystyle{treenename}{%
14402       \renewenvironment{theglossary}{%
14403         {%
14404           \begin{multicols}{\glsncols}{%
14405             [\noindent\glstreenavigationfmt{\glsnavigation}]%
14406             \setlength{\parindent}{0pt}%
14407             \setlength{\parskip}{0pt plus 0.3pt}%
14408           }%
14409           {\end{multicols}}%
14410           \renewcommand*\glsgroupheading[1]{%
14411             \par\noindent
14412             \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
14413             \nopagebreak\indexspace\nobreak\@afterheading}%
14414         }%
14415       }%
14416     {%
14417   }

```

`mcolalttree` needs adjusting so that it uses `\glsxtralttreeInit`. This doesn't use `\mbox{}``\par` which would unbalance the top of the columns.

```

14418 \ifdef{@glsstyle@mcolalttree}%
14419 {%
14420   \renewglossarystyle{mcolalttree}{%
14421     \setglossarystyle{alttree}{%
14422       \renewenvironment{theglossary}{%

```

```

14423   {%
14424     \glsxtralttreeInit
14425     \def\@gls@prevlevel{-1}%
14426     \begin{multicols}{\glsmcols}%
14427   }%
14428   {\par\end{multicols}}%
14429 }
14430 }%
14431 {%
14432 }

```

Redefine mcolalttreegroup to discourage page breaks after the group headings.

```

14433 \ifdef{\@glsstyle@mcolalttreegroup}%
14434 {%
14435   \renewglossarystyle{mcolalttreegroup}{%
14436     \setglossarystyle{mcolalttree}%
14437     \renewcommand{\glsgroupheading}[1]{\par
14438       \def\@gls@prevlevel{-1}%
14439       \hangindent0pt\relax
14440       \parindent0pt\relax
14441       \glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
14442       \nopagebreak\indexspace\nopagebreak
14443     }%
14444   }%
14445 }%
14446 {%
14447 }

```

Similarly for mcolalttreehypergroup.

```

14448 \ifdef{\@glsstyle@mcolalttreehypergroup}%
14449 {%
14450   \renewglossarystyle{mcolalttreehypergroup}{%
14451     \setglossarystyle{mcolalttree}%
14452     \renewcommand*\glossaryheader{%
14453       \par
14454       \def\@gls@prevlevel{-1}%
14455       \hangindent0pt\relax
14456       \parindent0pt\relax
14457       \glstreenavigationfmt{\glsnavigation}%
14458       \par\indexspace
14459     }%
14460     \renewcommand*\glsgroupheading[1]{%
14461       \par
14462       \def\@gls@prevlevel{-1}%
14463       \hangindent0pt\relax
14464       \parindent0pt\relax
14465       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
14466       \nopagebreak\indexspace\nopagebreak
14467     }%
14468   }

```

```
14469 }%
14470 {%
14471 }
```

Similarly for mcolalttreesspannav.

```
14472 \ifdef{\glsstyle@mcolalttreesspannav}%
14473 {%
14474   \renewglossarystyle{mcolalttreesspannav}{%
14475     \setglossarystyle{alttree}{%
14476       \renewenvironment{theglossary}{%
14477         {%
14478           \glsxtralttreeInit
14479           \def\gls@prevlevel{-1}%
14480           \begin{multicols}{\glsmcols}%
14481             [\noindent\glstreenavigationfmt{\glsnavigation}]%
14482           }%
14483         {\end{multicols}}%
14484         \renewcommand*\glsgroupheading[1]{%
14485           \par
14486           \def\gls@prevlevel{-1}%
14487           \hangindent0pt\relax
14488           \parindent0pt\relax
14489           \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroup{##1}}}%
14490           \nopagebreak\indexspace\nopagebreak
14491         }%
14492       }%
14493     }%
14494   {%
14495 }}
```

Reset the default style

```
14496 \ifx@glossary@default@style\relax
14497 \else
14498   \setglossarystyle{\glsxtrcurrent@style}
14499 \fi
```

3 bookindex style (glossary-bookindex.sty)

3.1 Package Initialisation and Options

```
14500 \NeedsTeXFormat{LaTeX2e}
14501 \ProvidesPackage{glossary-bookindex}[2018/08/18 v1.36 (NLCT)]

    Load required packages.
14502 \RequirePackage{multicol}
14503 \RequirePackage{glossary-tree}

trbookindexcols  Number of columns.
14504 \newcommand{\glsxtrbookindexcols}{2}

trbookindexname  Format used for top-level entries. (Argument is the label.)
14505 \newcommand*{\glsxtrbookindexname}[1]{\glossentryname{\#1}}


ookindexsubname  Format used for sub entries.
14506 \newcommand*{\glsxtrbookindexsubname}[1]{\glsxtrbookindexname{\#1}}


sxtrprelocation  Provide in case glossaries-stylemods isn't loaded.
14507 \providecommand*{\glsxtrprelocation}{\space}

ndexprelocation  Separator used before location list for top-level entries. Version 1.22 has removed the
    \ifglsnopostrdot check since this style doesn't display the description.
14508 \newcommand*{\glsxtrbookindexprelocation}[1]{%
14509     \glsxtrifhasfield{location}{\#1}%
14510     {,\glsxtrprelocation}%
14511     {\glsxtrprelocation}%
14512 }
```

xsubprelocation Separator used before location list for sub-entries.

```
14513 \newcommand*{\glsxtrbookindexsubprelocation}[1]{%
14514     \glsxtrbookindexprelocation{\#1}%
14515 }
```

xparentchildsep Separator used between top-level parent and child entry.

```
14516 \newcommand{\glsxtrbookindexparentchildsep}{\nopagebreak}
```

rentsubchildsep Separator used between sub-level parent and child entry.

```
14517 \newcommand{\glsxtrbookindexparentsubchildsep}{\glsxtrbookindexparentchildsep}
```

ookindexbetween Between two top-level entries identified by the labels in the arguments.
14518 \newcommand{\glsxtrbookindexbetween}[2]{}

indexsubbetween Between two level 1 entries identified by the labels in the arguments.
14519 \newcommand{\glsxtrbookindexsubbetween}[2]{}

exsubsubbetween Between two level 2 entries identified by the labels in the arguments.
14520 \newcommand{\glsxtrbookindexsubsubbetween}[2]{}

indexatendgroup At the end of a letter group. The argument is the index of the last top-level entry.
14521 \newcommand{\glsxtrbookindexatendgroup}[1]{}

exsubatendgroup At the end of a letter group. The argument is the index of the last level 1 entry.
14522 \newcommand{\glsxtrbookindexsubatendgroup}[1]{}

ubsubatendgroup At the end of a letter group. The argument is the index of the last level 2 entry.
14523 \newcommand{\glsxtrbookindexsubsubatendgroup}[1]{}

kindexgroupskip Group separator.
14524 \newcommand{\glsxtrbookindexgroupskip}{\ifglsnogroupskip\else\indexspace\fi}
Format group title.

dexformatheader Group separator.
14525 \newcommand*{\glsxtrbookindexformatheader}[1]{%
14526 \par{\centering\glstreegroupheaderfmt{\#1}\par}%
14527 }

okindexbookmark Book mark group heading if supported.
14528 \ifdef\pdfbookmark
14529 {%
14530 \newcommand*{\glsxtrbookindexbookmark}[2]{%
14531 \ifdefstring{\@glossarysec}{chapter}%
14532 {\pdfbookmark[1]{\#1}{\#2}}%
14533 {\pdfbookmark[2]{\#1}{\#2}}%
14534 }
14535 }
14536 {%
14537 \newcommand*{\glsxtrbookindexbookmark}[2]{}
14538 }

kindexcolspread
14539 \newcommand*{\glsxtrbookindexcolspread}{}

dexmulticolsenv
14540 \newcommand*{\glsxtrbookindexmulticolsenv}{\multicols}

Define the style.

```
14541 \newglossarystyle{bookindex}{%
14542   \setglossarystyle{index}%
14543   \renewenvironment{theglossary}%
14544 {%
14545   \ifempty{\glsxtrbookindexcols}{%
14546     \expandafter\begin\expandafter{\glsxtrbookindexmulticolsenv}%
14547     {\glsxtrbookindexcols}%
14548   }%
14549   \expandafter\begin\expandafter{\glsxtrbookindexmulticolsenv}%
14550   {\glsxtrbookindexcols}[\glsxtrbookindexcols]{%
14551   }%
14552   \setlength{\parindent}{0pt}%
14553   \setlength{\parskip}{0pt plus 0.3pt}%
14554   \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
14555   \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
14556   \let\@glsxtr@bookindex@between\@gobble
14557   \let\@glsxtr@bookindex@subbetween\@gobble
14558   \let\@glsxtr@bookindex@subsubbetween\@gobble
14559   \let\@glsxtr@bookindex@atendgroup\relax
14560   \let\@glsxtr@bookindex@subatendgroup\relax
14561   \let\@glsxtr@bookindex@subsubatendgroup\relax
14562   \let\@glsxtr@bookindexgroupskip\relax
14563 }%
14564 }%
14565 }%
14566 }%
```

Do end group hooks.

```
14567 \let\@glsxtr@bookindex@subsubatendgroup
14568 \let\@glsxtr@bookindex@subatendgroup
14569 \let\@glsxtr@bookindex@atendgroup
```

End multicols environment.

```
14570 \expandafter\end\expandafter{\glsxtrbookindexmulticolsenv}%
14571 }%
```

Use ragged right as columns are likely to be narrow and indexes tend not to be fully justified.

```
14572 \renewcommand*{\glossaryheader}{\raggedright}%
```

Top level entry format.

```
14573 \renewcommand*{\glossentry}[2]{%
```

Do separator.

```
14574 \let\@glsxtr@bookindex@between{\#1}%
```

Update separators.

```
14575 \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
14576 \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
14577 \let\@glsxtr@bookindex@subbetween\@gobble
14578 \let\@glsxtr@bookindex@subsubbetween\@gobble
14579 \edef\@glsxtr@bookindex@between{%
```

```

14580      \noexpand\glsxtrbookindexbetween{##1}%
14581  }%
14582  \edef\@glsxtr@bookindex@atendgroup{%
14583      \noexpand\glsxtrbookindexatendgroup{##1}%
14584  }%
14585  \let\@glsxtr@bookindex@subatendgroup\relax
14586  \let\@glsxtr@bookindex@subsubatendgroup\relax

```

Format entry.

```

14587  \glstreeitem
14588      \glsentryitem{##1}%
14589      \glstarget{##1}{\glsxtrbookindexname{##1}}%
14590      \glsxtrbookindexprelocation{##1}##2%
14591  }%
14592  \renewcommand{\subglossentry}[3]{%
14593      \ifcase##1\relax

```

Level 0 (shouldn't happen as that's formatted with \glossentry).

```

14594      \glstreeitem
14595  \or

```

Level 1.

```

14596  \glsxtr@bookindex@sep
14597  \glsxtr@bookindex@subbetween{##2}%
14598  \let\@glsxtr@bookindex@sep\relax

```

Update separators.

```

14599  \let\@glsxtr@bookindex@subsubbetween@gobble
14600  \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
14601  \edef\@glsxtr@bookindex@subbetween{%
14602      \noexpand\glsxtrbookindexsubbetween{##2}%
14603  }%
14604  \edef\@glsxtr@bookindex@atsubendgroup{%
14605      \noexpand\glsxtrbookindexatsubendgroup{##1}%
14606  }%

```

Start sub-item.

```

14607  \glstreesubitem
14608      \glssubentryitem{##2}%
14609  \else

```

All other levels.

```

14610  \glsxtr@bookindex@subsep
14611  \glsxtr@bookindex@subsubbetween{##2}%

```

Update separators.

```

14612  \let\@glsxtr@bookindex@subsep\relax
14613  \edef\@glsxtr@bookindex@subsubbetween{%
14614      \noexpand\glsxtrbookindexsubsubbetween{##2}%
14615  }%
14616  \edef\@glsxtr@bookindex@atsubsubendgroup{%
14617      \noexpand\glsxtrbookindexatsubsubendgroup{##1}%
14618  }%

```

Start sub-sub-item.

```
14619     \glstreesubsubitem
14620     \fi
```

Format entry.

```
14621     \glstarget{##2}{\glsxtrbookindexsubname{##2}}%
14622     \glsxtrbookindexsubprelocation{##2}##3%
14623 }%
```

The group skip is moved to the group heading to avoid interfering with the end letter group hooks.

```
14624 \renewcommand*\glsgroupskip{}%
```

Group heading format.

```
14625 \renewcommand*\glsgroupheading[1]{%
```

Do end group hooks.

```
14626 \@glsxtr@bookindex@subsubatendgroup
14627 \@glsxtr@bookindex@subatendgroup
14628 \@glsxtr@bookindex@atendgroup
14629 \@glsxtr@bookindexgroupskip
```

Update separators.

```
14630 \let@\glsxtr@bookindexgroupskip\glsxtrbookindexgroupskip
14631 \let@\glsxtr@bookindex@between@\gobble
14632 \let@\glsxtr@bookindex@atendgroup\relax
14633 \let@\glsxtr@bookindex@subatendgroup\relax
14634 \let@\glsxtr@bookindex@subsubatendgroup\relax
```

Fetch the group title from the label supplied in #1.

```
14635 \glsxtrgetgrouptitle{##1}{\thisgrptitle}%
```

Do the PDF bookmark if supported.

```
14636 \glsxtrbookindexbookmark{\thisgrptitle}{index.##1}%
```

Format the group title.

```
14637 \glsxtrbookindexformatheader{\thisgrptitle}%
14638 \nopagebreak\indexspace\nopagebreak\@afterheading
14639 }%
14640 }
```

Some supplementary commands that may be useful. These store the entry label for the current page. Since the page number is needed in the control sequence, this uses \glsxtrbookindexthepage instead of \thepage in case the page numbering has been set to something that contains formatting commands.

bookindexthepage The \printglossary sets \currentglossary to the current glossary label. This is used as a prefix in case the page number is reset.

```
14641 \newcommand{\glsxtrbookindexthepage}{%
14642 \ifdef\currentglossary{\currentglossary.\arabic{page}}{\arabic{page}}%
14643 }
```

`kindexmarkentry` Writes entry information to the .aux file. The argument is the entry label.

```
14644 \newcommand*{\glsxtrbookindexmarkentry}[1]{%
14645   \protected@write\auxout{%
14646   {\let\glsxtrbookindexthepage\relax}%
14647   {\string\glsxtr@setbookindexmark{\glsxtrbookindexthepage}{#1}}%
14648 }
```

`etbookindexmark`

```
14649 \newcommand*{\glsxtr@setbookindexmark}[2]{%
14650 \ifcsundef{\glsxtr@idxfirstmark@#1}{%
14651 {\csgdef{\glsxtr@idxfirstmark@#1}{#2}}%
14652 {}%
14653 {\csgdef{\glsxtr@idxlastmark@#1}{#2}}%
14654 }
```

`dexfirstmarkfmt`

```
14655 \newcommand*{\glsxtrbookindexfirstmarkfmt}[1]{%
14656 \glsentryname{#1}%
14657 }
```

`kindexfirstmark`

```
14658 \newcommand*{\glsxtrbookindexfirstmark}{%
14659 \letcs{\glsxtr@label}{\glsxtr@idxfirstmark@\glsxtrbookindexthepage}%
14660 \ifdef{\glsxtr@label}{%
14661 {\glsxtrbookindexfirstmarkfmt{\glsxtr@label}}%
14662 {}%
14663 }
```

`ndexlastmarkfmt`

```
14664 \newcommand*{\glsxtrbookindexlastmarkfmt}[1]{%
14665 \glsentryname{#1}%
14666 }
```

`okindexlastmark`

```
14667 \newcommand*{\glsxtrbookindexlastmark}{%
14668 \letcs{\glsxtr@label}{\glsxtr@idxlastmark@\glsxtrbookindexthepage}%
14669 \ifdef{\glsxtr@label}{%
14670 {\glsxtrbookindexlastmarkfmt{\glsxtr@label}}%
14671 {}%
14672 }
```

Glossary

First use The first time a glossary entry is used (from the start of the document or after a reset) with one of the following commands: \gls, \Gls, \GLS, \glspl, \Glspl, \GLSpl or \glsdisp. *see* [First use flag](#) & [First use text](#)

First use flag A conditional that determines whether or not the entry has been used according to the rules of [first use](#).

First use text The text that is displayed on [first use](#), which is governed by the first and first-plural keys of \newglossaryentry. (May be overridden by \glsdisp.)

makeindex An indexing application.

xindy An flexible indexing application with multilingual support written in Perl.

Change History

0.1 (2015-11-22)

General: Initial experimental release 5

0.2 (2015-11-30)

\Glsfmtshort: new 324
\glsfmtshort: new 323
\Glsfmtshortpl: new 324
\glsfmtshortpl: new 324
short: switched inline full form to short
(long) 227

0.3 (2015-12-02)

\@ACRlong: added redefinition 79
\@ACRlongpl: added redefinition 80
\@ACRshort: added redefinition 77
\@ACRshortpl: added redefinition 78
\@Acrlong: added redefinition 79
\@Acrlongpl: added redefinition 80
\@Acrshort: added redefinition 77
\@Acrshortpl: added redefinition 78
\@GLSdesc@: added redefinition 73
\@GLSdescplural@: added redefinition 73
\@GLSfirst@: added redefinition 70
\@GLSfirstplural@: added redefinition 72
\@GLSname@: added redefinition 72
\@GLSplural@: added redefinition 71
\@GLSsymbol@: added redefinition 74
\@GLSsymbolplural@: added
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