

glossaries-extra.sty v1.29: documented code

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Abstract

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

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

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

1.1 Package Initialisation and Options

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{glossaries-extra}[2018/04/09 v1.29 (NLCT)]
```

Requires `xkeyval` to define package options.

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

Requires `etoolbox` package.

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

Has `glossaries` already been loaded?

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

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

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

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

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

Set the defaults.

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

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

```

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

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

```

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

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

```

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

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

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

```

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

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

```

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

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

```

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

f@forglsentries

```

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

f@forglsentries

```

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

```

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

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

```

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

\@glsxtr@record Does nothing by default.

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

\sxtr@recordsee Does nothing by default.

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

\ulnnumberformat

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

\ultNumberFormat

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

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

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

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

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
```

Increment associated counter.

```
124   \glsxtr@inc@wrglossaryctr{#2}%
125   \begingroup
```

Save the label in case it's needed.

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

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

```
132   \let\@gls@counter\glscounter
```

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

```
133   \gls@setdefault@glslink@opts
134   \setkeys{#3}{#1}%
135   \ifKV@glslink@noindex
136   \else
137     \glswriteentry{#2}%
138   {%
```

Check if thevalue has been set.

```
139   \ifempty{\@glsxtr@thevalue}%
140   {%
```

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

```
141   \ifx\@glsxtr@org@theHvalue\@glsxtr@theHvalue
142   \else
143     \let\theHglsentrycounter\@glsxtr@theHvalue
144   \fi
```

Save the entry counter.

```
145   \glsxtr@saveentrycounter
```

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

```
146   \let\do@wrglossary\glsxtr@dorecord
147   }%
148   {%
```

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

```
149   \let\theglsentrycounter\@glsxtr@thevalue
150   \let\theHglsentrycounter\@glsxtr@theHvalue
```

```

151          \let\@@do@wrglossary\glsxtr@dorecordnodefer
152      }%
153      \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
154          \glsxtr@do@wrglossary{#2}%
155      \else
156          No need to escape special characters.
157          \@@do@wrglossary
158      \fi
159  }%
160  \endgroup
161 }%
162 }

```

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

```

163 \newcommand*\glsxtr@dorecord{%
164     \global\let\glsrecordlocref\theglsentrycounter
165     \let\glsxtr@orgprefix@glo@counterprefix
166     \ifx\theglsentrycounter\theHglsentrycounter
167         \def@glo@counterprefix{}%
168     \else
169         \edef\do@gls@getcounterprefix{\noexpand@gls@getcounterprefix
170             {\theglsentrycounter}{\theHglsentrycounter}%
171         }%
172         \do@gls@getcounterprefix
173     \fi
174     \ifdefstring@gls@counter{page}%
175 }%

```

Protect the location from premature expansion.

```

176     \protected@write\auxout{\let\glsrecordlocref\relax{\string\glsxtr@record
177         {\gls@label}{\glo@counterprefix}{\gls@counter}{\glsnumberformat}%
178         {\glsrecordlocref}}%
179     }%
180 }%

```

Don't protect the location from premature expansion.

```

181     \protected@write\auxout{}{\string\glsxtr@record
182         {\gls@label}{\glo@counterprefix}{\gls@counter}{\glsnumberformat}%
183         {\glsrecordlocref}}%
184     }%
185     \glsxtr@counterrecordhook
186     \let\glo@counterprefix\glsxtr@orgprefix
187 }

```

`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.

```

188 \newcommand*{\glsxtr@dorecordnodefer}{%
189   \ifx\the\glsentrycounter\theHglsentrycounter
190     \protected@write\@auxout{}{\string\glsxtr@record
191       {@gls@label}{}{@gls@counter}{@glsnumberformat}%
192       {\the\glsentrycounter}}%
193   \else
194     \edef\do@gls@getcounterprefix{\noexpand\gls@getcounterprefix
195       {\the\glsentrycounter}{\theHglsentrycounter}}%
196   }%
197   \do@gls@getcounterprefix
198   \protected@write\@auxout{}{\string\glsxtr@record
199     {@gls@label}{\glo@counterprefix}{@gls@counter}{@glsnumberformat}%
200     {\the\glsentrycounter}}%
201 \fi
202 \glsxtr@counterrecordhook
203 }

r@recordcounter
204 \newcommand*{\@@glsxtr@recordcounter}{%
205   \glsxtr@noop@recordcounter
206 }

p@recordcounter
207 \newcommand*{\@glsxtr@noop@recordcounter}[1]{%
208   \PackageError{glossaries-extra}{\string\GlsXtrRecordCounter\space
209   requires record=only or record=alsoindex package option}{}%
210 }

p@recordcounter
211 \newcommand*{\@glsxtr@op@recordcounter}[1]{%
212   \eappto{\glsxtr@counterrecordhook}{\noexpand\glsxtr@docounterrecord{\#1}}%
213 }

lsxtr@recordsee Deal with \glssee in record mode. (This doesn't increment the associated counter.)
214 \newcommand*{\@glsxtr@recordsee}[2]{%
215   \@@glsxtrwrglossmark
216   \def\@gls@xref{\#2}%
217   \onelevel@sanitize\@gls@xref
218   \protected@write\@auxout{}{\string\glsxtr@recordsee{\#1}{\@gls@xref}}%
219 }

srtglossaryunit
220 \newcommand{\printunsrtglossaryunit}{%
221   \print@noop@unsrtglossaryunit
222 }

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

```

aveentrycounter Only store the entry counter information if the indexing is on.

```
224 \newcommand*{\glsxtr@indexonly@saveentrycounter}{%
225   \ifKV@glslink@noindex
226   \else
227     \glsxtr@saveentrycounter
228   \fi
229 }
```

```
addloclistfield
```

```
230 \newcommand*{\glsxtr@addloclistfield}{%
231   \key@ifundefined{glossentry}{loclist}%
232 {%
233   \define@key{glossentry}{loclist}{\def\@glo@loclist{##1}}%
234   \appto\@gls@keymap{,\{loclist\}\{loclist\}}%
235   \appto\@newglossaryentryprehook{\def\@glo@loclist{} }%
236   \appto\@newglossaryentryposthook{%
237     \gls@assign@field{}{\@glo@label}{loclist}{\@glo@loclist}%
238   }%
239   \glssetnoexpandfield{loclist}%
240 }%
241 {}%
```

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

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

Add a key to store the group heading.

```
253 \key@ifundefined{glossentry}{group}%
254 {%
255   \define@key{glossentry}{group}{\def\@glo@group{##1}}%
256   \appto\@gls@keymap{,\{group\}\{group\}}%
257   \appto\@newglossaryentryprehook{\def\@glo@group{} }%
258   \appto\@newglossaryentryposthook{%
259     \gls@assign@field{}{\@glo@label}{group}{\@glo@group}%
260   }%
261   \glssetnoexpandfield{group}%
262 }%
263 {}%
264 }
```

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

```

265 \newcommand*{\@glsxtr@record@setting}{off}
ting@alsoindex
266 \newcommand*{\@glsxtr@record@setting@alsoindex}{alsoindex}

rd@setting@only
267 \newcommand*{\@glsxtr@record@setting@only}{only}

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

```

Now define the record package option.

```

269 \define@choicekey{glossaries-extra.sty}{record}
270   [\@glsxtr@record@setting\glsxtr@record@nr]%
271   {off,only,alsoindex}%
272   [only]%
273   {%
274     \ifcase\glsxtr@record@nr\relax
      Don't record.
275     \def\glsxtr@setup@record{%
276       \renewcommand*{\@do@seeglossary}{\@glsxtr@doseeglossary}%
277       \renewcommand*{\@glsxtr@record}[3]{}%
278       \let{@do@wrglossary}\glsxtr@do@wrglossary
279       \let{@gls@saveentrycounter}\glsxtr@indexonly@saveentrycounter
280       \let\glsxtrundefaction@\glsxtr@err@undefaction
281       \let\glsxtr@warnnonexistsordo@\gobble
282       \let{@glsxtr@recordcounter}\glsxtr@noop@recordcounter
283       \def\printunsrtglossaryunit{\print@noop@unsrtglossaryunit}%
284       \undef\glsxtrsetaliasnoindex
285     }%
286     \or

```

Only record (don't index).

```

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

```

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

```

299   \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.

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

Load `glossaries-extra-bib2gls`:

```
301     \RequirePackage{glossaries-extra-bib2gls}%
```

```
302 }%
```

```
303 \or
```

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

```
304 \def\glsxtr@setup@record{%
305     \renewcommand*{\@do@seeglossary}{\glsxtr@dosee@alsoindex@glossary}%
306     \let@\glsxtr@record\@glsxtr@record
307     \let@\@do@wrglossary\glsxtr@do@alsoindex@wrglossary
308     \let@\gls@saveentrycounter\glsxtr@indexonly@saveentrycounter
309     \let\glsxtrundefaction\glsxtr@warn@undefaction
310     \let\glsxtr@warnnonexistsordo\glsxtr@warn@onexistsordo
311     \glsxtr@addloclistfield
312     \let@\@glsxtr@recordcounter\glsxtr@op@recordcounter
313     \def\printunsrtglossaryunit{\print@op@unsrtglossaryunit}%
314     \ undef\glsxtrsetaliasnoindex
315 }%
316 \fi
317 }
```

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

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

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

Need to provide conditional commands that are backward compatible:

`if@glsxtrdocdef`

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

`glsxtrdocdeftrue`

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

`glsxtrdocdeffalse`

```
321 \newcommand*{\@glsxtrdocdeffalse}{\def@glsxtr@docdefval{0}}
```

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

```
322 \define@choicekey{glossaries-extra.sty}{docdef}
```

```

323 [\@glsxtr@docdefsetting\@glsxtr@docdefval]%
324 {false,true,restricted}[true]%
325 {%
326 \ifnum\@glsxtr@docdefval=2\relax
327 \renewcommand*{\@glsdoifexistsorwarn}{\glsdoifexists}%
328 \fi
329 }

ocdefrestricted
330 \newcommand*{\if@glsxtrdocdefrestricted}{\ifnum\@glsxtr@docdefval=2 }

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

indexcrossrefs Automatically index cross references at the end of the document
332 \define@boolkey{glossaries-extra.sty}[@glsxtr]{indexcrossrefs}[true]{%
333 \if@glsxtrindexcrossrefs
334 \else
335 \renewcommand*{\@glsxtr@autoindexcrossrefs}{}%
336 \fi
337 }

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

But allow see key to switch it on automatically.

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

autoseeindex Provide a boolean option to allow the user to prevent the automatic indexing of the cross-referencing keys see, seealso and alias.
340 \define@boolkey{glossaries-extra.sty}[@glsxtr]{autoseeindex}[true]{%
341 }
342 \glsxtr@autoseeindextrue

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

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

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

```

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

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

postdot Shortcut for nopostdot=false

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

nopostdot Needs to redefine \glsxtr@defpostpunc

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

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

```
366 \define@key{glossaries-extra.sty}{postpunc}{%
367   \glsxtr@dooption{nopostdot=false}%
368   \ifstrequal{#1}{dot}%
369   {%
370     \renewcommand*{\glsxtr@defpostpunc}{%
371       \renewcommand*{\glspostdescription}{.\spacefactor\sfcodespace\fi}%
372     }%
373   }%
374   {%
375     \ifstrequal{#1}{comma}%
376     {%
377       \renewcommand*{\glsxtr@defpostpunc}{%
378         \renewcommand*{\glspostdescription}{,\spacefactor\sfcodespace\fi}%
379       }%
380     }%
381     {%
382       \ifstrequal{#1}{none}%
383       {%
384         \glsxtr@dooption{nopostdot=true}%
385         \renewcommand*{\glsxtr@defpostpunc}{%
386           \renewcommand*{\glspostdescription}{}%
387         }%
388       }%
389     }%
390   }%
```

```

390     \renewcommand*{\@glsxstr@defpostpunc}{%
391         \renewcommand*{\glspostdescription}{\#1}%
392     }%
393     }%
394     }%
395 }%
396 }

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

bbreviationsdef Set by abbreviations option.
398 \newcommand*{\@glsxtr@abbreviationsdef}{}

bbreviationsdef
399 \newcommand*{\@glsxtr@doabbreviationsdef}{%
400     \@ifpackageloaded{babel}{%
401         {\providecommand{\abbreviationsname}{\acronymname}}{%
402             {\providecommand{\abbreviationsname}{Abbreviations}}{%
403                 \newglossary[glg-abr]{abbreviations}{gls-abr}{glo-abr}{\abbreviationsname}{%
404                     \renewcommand*{\glsxtrabbrvtype}{abbreviations}}{%
405                         \newcommand*{\printabbreviations}[1][]{%
406                             \printglossary[type=\glsxtrabbrvtype,\#1]{%
407                                 }%
408                         \disable@keys{glossaries-extra.sty}{abbreviations}}{%
409                         If the acronym option hasn't been used, change \acronymtype to \glsxtrabbrvtype.%
410                         \ifglsacronym{%
411                             \else{%
412                                 \renewcommand*{\acronymtype}{\glsxtrabbrvtype}}{%
413                             \fi}}{%
414                         \let\@glsxtr@abbreviationsdef\@glsxtr@doabbreviationsdef}}{%
415             }%
416     }%
417 \newcommand*{\GlsXtrDefineAbbreviationShortcuts}{%
418     \newcommand*{\ab}{\cglsshortname}%
419     \newcommand*{\abp}{\cglssplname}%
420     \newcommand*{\as}{\glsxtrshort}%
421     \newcommand*{\asp}{\glsxtrshortpl}%
422     \newcommand*{\al}{\glsxtrlong}%
423     \newcommand*{\alp}{\glsxtrlongpl}%
424     \newcommand*{\af}{\glsxtrfull}%

```

```

425 \newcommand*{\afp}{\glsxtrfullpl}%
426 \newcommand*{\Ab}{\cGls}%
427 \newcommand*{\Abp}{\cGlspl}%
428 \newcommand*{\As}{\Glsxtrshort}%
429 \newcommand*{\Asp}{\Glsxtrshortpl}%
430 \newcommand*{\Al}{\Glsxtrlong}%
431 \newcommand*{\Alp}{\Glsxtrlongpl}%
432 \newcommand*{\Af}{\Glsxtrfull}%
433 \newcommand*{\Afp}{\Glsxtrfullpl}%
434 \newcommand*{\AB}{\cGLS}%
435 \newcommand*{\ABP}{\cGLSpl}%
436 \newcommand*{\AS}{\GLSxtrshort}%
437 \newcommand*{\ASP}{\GLSxtrshortpl}%
438 \newcommand*{\AL}{\GLSxtrlong}%
439 \newcommand*{\ALP}{\GLSxtrlongpl}%
440 \newcommand*{\AF}{\GLSxtrfull}%
441 \newcommand*{\AFP}{\GLSxtrfullpl}%

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

```

Disable this command after it's been used.

```

443 \let\GlsXtrDefineAbbreviationShortcuts\relax
444 } 
```

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

```

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

```

```

469 \newcommand*\ACFP{\GLSxtrfullpl}%
470 \providecommand*\newabbr{\newabbreviation}%
    Disable this command after it's been used.
471 \let\GlsXtrDefineAcShortcuts\relax
472 }

```

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

```

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

```

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.

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

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

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

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

```

487 \define@choicekey{glossaries-extra.sty}{shortcuts}%
488 [\@glsxtr@shortcutsval\@glsxtr@shortcutsnr]%
489 {acronyms,acro,abbreviations,abbr,other,all,true,ac,none,false}[true]{%
490 \ifcase\@glsxtr@shortcutsnr\relax % acronyms
491 \renewcommand*\@glsxtr@setupshortcuts{%
492 \glsacrshortcutstrue
493 \DefineAcronymSynonyms
494 }%
495 \or % acro
496 \renewcommand*\@glsxtr@setupshortcuts{%
497 \glsacrshortcutstrue

```

```

498     \DefineAcronymSynonyms
499     }%
500 \or % abbreviations
501     \renewcommand*{\@glsxtr@setupshortcuts}{%
502         \GlsXtrDefineAbbreviationShortcuts
503     }%
504 \or % abbr
505     \renewcommand*{\@glsxtr@setupshortcuts}{%
506         \GlsXtrDefineAbbreviationShortcuts
507     }%
508 \or % other
509     \renewcommand*{\@glsxtr@setupshortcuts}{%
510         \GlsXtrDefineOtherShortcuts
511     }%
512 \or % all
513     \renewcommand*{\@glsxtr@setupshortcuts}{%
514         \glsacrshortcutstrue
515             \GlsXtrDefineAcShortcuts
516             \GlsXtrDefineAbbreviationShortcuts
517             \GlsXtrDefineOtherShortcuts
518     }%
519 \or % true
520     \renewcommand*{\@glsxtr@setupshortcuts}{%
521         \glsacrshortcutstrue
522             \GlsXtrDefineAcShortcuts
523             \GlsXtrDefineAbbreviationShortcuts
524             \GlsXtrDefineOtherShortcuts
525     }%
526 \or % ac
527     \renewcommand*{\@glsxtr@setupshortcuts}{%
528         \glsacrshortcutstrue
529         \GlsXtrDefineAcShortcuts
530     }%

```

Leave none and false as last option.

```

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

```

lsxtr@doaccsupp

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

accsupp If accsupp, load glossaries-accsupp package.

```

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

```

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

```
538 \newcommand{\glsxtrNoGlossaryWarning}[1]{%
539   \@glsxtr@defaultnoglossarywarning{#1}%
540 }
```

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

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

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

xtr@redefstyles

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

stylemods

```
553 \define@key{glossaries-extra.sty}{stylemods}[default]{%
554   \ifstrequal{#1}{default}%
555   {%
556     \renewcommand*{\@glsxtr@redefstyles}{}%
557     \RequirePackage{glossaries-extra-stylemods}%
558   }%
559   {%
560     \ifstrequal{#1}{all}%
561     {%
562       \renewcommand*{\@glsxtr@redefstyles}{}%
563       \PassOptionsToPackage{all}{glossaries-extra-stylemods}%
564       \RequirePackage{glossaries-extra-stylemods}%
565     }%
566   }%
567   {%
568     \renewcommand*{\@glsxtr@redefstyles}{}%
569     \@for\@glsxtr@tmp:=#1\do{%
570       \IfFileExists{glossary-\@glsxtr@tmp.sty}%
571       {%
572         \eappto{\@glsxtr@redefstyles}{%
573           \noexpand\RequirePackage{glossary-\@glsxtr@tmp}}%
574       }%
575     }%
576     \PackageError{glossaries-extra}%
577 }
```

```

577     {Glossaries style package ‘glossary-\@glsxtr@tmp.sty’
578      doesn’t exist (did you mean to use the ‘style’ key?)}%
579      {The list of values (#1) in the ‘stylemods’ key should
580       match the glossary-xxx.sty files provided with
581       glossaries.sty}%
582   }%
583 }%
584 \appto\@glsxtr@redefstyles{\RequirePackage{glossaries-extra-stylemods}}%
585 }%
586 }%
587 }

```

glsxtr@do@style

```
588 \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.

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

Defer actual style change:

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

Set this as the default style:

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

Set this style:

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

```
593 }%
```

```
594 }
```

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.

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

ocationHyperlink

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

The first two arguments are always control sequences.

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

cationhyperlink

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

`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`.

```
602 \@glsxtr@declareoption{indexcounter}{%
603   \glsxtr@dooption{counter=wrglossary}%
604   \ifundef\c@wrglossary
605   {%
606     \newcounter{wrglossary}%
607     \renewcommand{\thewrglossary}{\arabic{wrglossary}}%
608   }%
609   {}%
610   \renewcommand*\glsxtr@inc@wrglossaryctr}[1]{%
611     \refstepcounter{wrglossary}%
612     \label{wrglossary.\thewrglossary}%
613   }%
614   \renewcommand*\GlsXtrInternalLocationHyperlink}[3]{%
615     \ifdefstring\glsentrycounter{wrglossary}%
616     {%
617       \@glsxtr@wrglossary@locationhyperlink##1##2##3}%
618     {}%
619     {\glsxtrhyperlink##1##2##3}##3}%
620   }%
621 }
```

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

```
622 \newcommand*\@glsxtrwrglossmark{}
```

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

```
623 \newcommand*\@glsxtrwrglossmark{}%
624 \AtBeginDocument{\renewcommand*\@glsxtrwrglossmark{\@glsxtrwrglossmark}}
```

`sxtrwrglossmark` Does nothing by default.

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

`debug` Provide extra debug options.

```
626 \define@choicekey{glossaries-extra.sty}{debug}
627   [\@glsxtr@debugval\@glsxtr@debugnr]%
628   {true,false,showtargets,showwrgloss,all}[true]{%
629     \ifcase\@glsxtr@debugnr\relax % true
630       \glsxtr@dooption{debug=true}%
631       \renewcommand*\@glsxtrwrglossmark{}%
632     \or % false
633       \glsxtr@dooption{debug=false}%
634       \renewcommand*\@glsxtrwrglossmark{}%
635     \or % showtargets
636       \glsxtr@dooption{debug=showtargets}%
637   }
```

```

637   \or % showwrgloss
638     \glsxtr@dooption{debug=true}%
639     \renewcommand*\{@glsxtrwrglossmark}{\glsxtrwrglossmark}%
640   \or % all
641     \glsxtr@dooption{debug=showtargets}%
642     \renewcommand*\{@glsxtrwrglossmark}{\glsxtrwrglossmark}%
643   \fi
644 }

```

Pass all other options to glossaries.

```

645 \DeclareOptionX*{%
646   \expandafter\glsxtr@dooption\expandafter{\CurrentOption}}

```

Process options.

```
647 \ProcessOptionsX
```

Load glossaries if not already loaded.

```
648 \RequirePackage{glossaries}
```

Load the glossaries-accsupp package if required.

```
649 \@glsxtr@doaccsupp
```

Redefine \glspostdescription if required.

```
650 \@glsxtr@defpostpunc
```

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

```

651 \def\glsshowtarget#1{%
652   \glsxtrtitleorpdforheading
653   {%
654     \ifmmode
655       \texttt{\small [#1]}%
656     \else
657       \ifinner
658         \texttt{\small [#1]}%
659       \else
660         \marginpar{\texttt{\small #1}}%
661       \fi
662     \fi
663   }%
664   {[#1]}%
665   {\texttt{\small [#1]}}%
666 }

```

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

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

```

668 \newcommand*{\@glsxtr@doseeglossary}[2]{%
669   \glsdoifexists{#1}%

```

```

670  {%
671    \@@glsxtrwrglossmark
672    \glsxtr@org@doseeglossary{#1}{#2}%
673  }%
674 }

oindex@glossary
675 \newcommand*{\glsxtr@dosee@alsoindex@glossary}[2]{%
676   \glsxtr@recordsee{#1}{#2}%
677   \glsxtr@doseeglossary{#1}{#2}%
678 }

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

Check if user tried autoseeindex=false when it can't be supported.
680 \if@glsxtr@autoseeindex
681 \else
682   \ifdef\glsxtr@org@gloautosee
683   {}%
684   {\PackageError{glossaries-extra}{`autoseeindex=false' package
685     option requires at least v4.30 of glossaries.sty}%
686   {You need to update the glossaries.sty package}%
687 }
688 \fi

@glo@autosee If \glo@autosee has been defined (glossaries v4.30 onwards), redefine it to test the au-
toseeindex option.
689 \ifdef@glo@autosee
690 {}%
691   \renewcommand*{\glo@autosee}{%
692     \if@glsxtr@autoseeindex\glsxtr@org@gloautosee\fi}%
693 }%
694 {}

checkseeallowed Don't prohibit the use of the see key before the indexing files have been opened if the auto-
matic see indexing has been disabled, since it's no longer an issue.
695 \renewcommand*{\gls@checkseeallowed}{%
696   \if@glsxtr@autoseeindex\gls@see@noindex\fi
697 }

Define abbreviations glossaries if required.
698 \glsxtr@abbreviationsdef
699 \let\glsxtr@abbreviationsdef\relax

Setup shortcuts if required.
700 \glsxtr@setupshortcuts

```

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

```
701 \glsxtr@redef@forglsentries
```

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

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

Now define the user command:

```
703 \newcommand*{\glossariesextrasetup}[1]{%
704   \let\glsxtr@setup@record\relax
705   \let\glsxtr@setupshortcuts\relax
706   \let\glsxtr@redef@forglsentries\relax
707   \setkeys{glossaries-extra.sty}{#1}%
708   \glsxtr@abbreviationsdef
709   \let\glsxtr@abbreviationsdef\relax
710   \glsxtr@setupshortcuts
711   \glsxtr@setup@record
712   \glsxtr@redef@forglsentries
713 }
```

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

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

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

```
715 \newcommand*{\glsxtr@@do@wrglossary}[1]{%
716   \glsxtrwrglossmark
717   \glsxtr@inc@wrglossaryctr{#1}%
718   \glsxtr@org@@do@wrglossary{#1}%
719 }
```

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

```
720 \let\glsxtr@saveentrycounter\gls@saveentrycounter
```

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

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

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

`sxtrdialecthook`

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

Set up record option if required.

```
723 \glsxtr@setup@record
```

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

```
724 \AtBeginDocument{%
725   \disable@keys{glossaries-extra.sty}{abbreviations,docdef,record}%
726   \def\@glsxtrundeftag{\glsxtrundeftag}%
727 }
```

1.2 Extra Utilities

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

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

```
728 \newcommand{\glsxtrifemptyglossary}[3]{%
729   \ifcsdef{glolist@#1}%
730   {%
731     \ifcsstring{glolist@#1}{,}{#2}{#3}%
732   }%
733   {%
734     \glsxtrundefaction{Glossary type '#1' doesn't exist}{}%
735     #2%
736   }%
737 }
```

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

```
738 \newcommand*{\glsxtrifkeydefined}[3]{%
739   \key@ifundefined{glossentry}{#1}{#3}{#2}%
740 }
```

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

```
741 \newcommand*{\glsxtrprovidestoragekey}{}%
742   \c@ifstar\sglsxtr@provide@storagekey\glsxtr@provide@storagekey
743 }
```

vide@storagekey Unstarred version.

```
744 \newcommand*{\@glsxtr@provide@storagekey}[3]{%
745   \key@ifundefined{glossentry}{#1}%
746   {%
747     \define@key{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
748     \appto{\gls@keymap}{, {#1}{#1}}%
749     \appto{\@newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
```

```

750   \appto{@newglossaryentryposthook}{%
751     \letcs{\@glo@tmp}{\@glo@#1}%
752     \gls@assign@field{#2}{\@glo@label}{#1}{\@glo@tmp}%
753   }%

```

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

```

754   \ifblank{#3}%
755   {}%
756   {}%
757   \newcommand*{#3}[1]{\@gls@entry@field{##1}{#1}}%
758   }%
759   }%
760   {}%

```

Provide the no-link command if not already defined.

```

761   \ifblank{#3}%
762   {}%
763   {}%
764   \providecommand*{#3}[1]{\@gls@entry@field{##1}{#1}}%
765   }%
766   }%
767 }

```

`\vide@storagekey` Starred version.

```

768 \newcommand*{\s@glsxtr@provide@storagekey}[1]{%
769   \key@ifundefined{glossentry}{#1}%
770   {}%
771   \expandafter\newcommand\expandafter*\expandafter
772   {\csname gls@assign@#1@field\endcsname}[2]{%
773     \@@gls@expand@field{##1}{#1}{##2}%
774   }%
775   }%
776   {}%
777   \@@glsxtr@provide@addstoragekey{#1}%
778 }

```

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
779 \newcommand{\GlsXtrFmtField}{\useri}

tDefaultOptions
780 \newcommand{\GlsXtrFmtDefaultOptions}{\noindex}

```

```

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

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

\s@glsxtrfmt Starred form.

```

783 \newcommand*\{\s@glsxtrfmt\}[3][]{%
784   \new@ifnextchar[\{\s@glsxtrfmt{\#1}{\#2}{\#3}\}%
785   {\@glsxtrfmt{\#1}{\#2}{\#3}{}}%
786 }
```

\s@@glsxtrfmt Pick up final optional argument.

```

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

\@@glsxtrfmt Actual inner working.

```

788 \newcommand*\{\@@glsxtrfmt\}[4]{%
```

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

```

789 \begingroup
790   \def\glslabel{\#2}%
791   \glsdoifexistsordof{\#2}%
792   {%
793     \ifglshasfield{\GlsXtrFmtField}{\#2}%
794     {%
795       \let\do@gls@link@checkfirsthyper\relax
796       \expandafter\gls@link\expandafter[\GlsXtrFmtDefaultOptions,\#1]{\#2}%
797       {\glsxtrfmtdisplay{\glscurrentfieldvalue}{\#3}{\#4}}%
798     }%
799     {\glsxtrfmtdisplay{@firstofone}{\#3}{\#4}}%
800   }%
801 }
```

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

```

802 \begingroup
803   \gls@setdefault@glslink@opts
804   \setkeys{glslink}{\GlsXtrFmtDefaultOptions,\#1}%
805   \ifKV@glslink@noindex\else\glsadd{\#2}\fi
806   \endgroup
807   \glsxtrfmtdisplay{@firstofone}{\#3}{\#4}%
808 }%
809 \endgroup
810 }
```

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

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

\glsxtreentryfmt No link or indexing.

```
812 \ifdef\texorpdfstring
813 {
814   \newcommand*{\glsxtreentryfmt}[2]{%
815     \texorpdfstring{@\glsxtreentryfmt{#1}{#2}}{#2}%
816   }
817 }
818 {
819   \newcommand*{\glsxtreentryfmt}{@\glsxtreentryfmt}
820 }
```

@glsxtreentryfmt

```
821 \newrobustcmd*{@\glsxtreentryfmt}[2]{%
822   \glsdoifexistsodo{#1}%
823   {%
824     \ifglshasfield{\GlsXtrFmtField}{#1}%
825     {%
826       \csuse{\glscurrentfieldvalue}{#2}%
827     }%
828     {#2}%
829   }%
830   {#2}%
831 }
```

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.

```
832 \newcommand*{\glsxtrfieldlistadd}[3]{%
833   \listcsadd{glo@\glsdetoklabel{#1}@#2}{#3}%
834 }
```

trfieldlistgadd Similarly but uses \listcsgadd.

```
835 \newcommand*{\glsxtrfieldlistgadd}[3]{%
836   \listcsgadd{glo@\glsdetoklabel{#1}@#2}{#3}%
837 }
```

trfieldliststeadd Similarly but uses \listcseadd.

```
838 \newcommand*{\glsxtrfieldliststeadd}[3]{%
839   \listcseadd{glo@\glsdetoklabel{#1}@#2}{#3}%
840 }
```

trfieldlistxadd Similarly but uses \listcsxadd.

```
841 \newcommand*{\glsxtrfieldlistxadd}[3]{%
```

```

842 \listcsxadd{glo@\glsdetoklabel{#1}@#2}{#3}%
843 }

```

Now provide commands to iterate over these lists.

`fielddolistloop`

```

844 \newcommand*{\glsxtrfielddolistloop}[2]{%
845   \dolistcsloop{glo@\glsdetoklabel{#1}@#2}%
846 }

```

`fieldforlistloop`

```

847 \newcommand*{\glsxtrfieldforlistloop}[3]{%
848   \forlistcsloop{#3}{glo@\glsdetoklabel{#1}@#2}%
849 }

```

List element tests:

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

```

850 \newcommand*{\glsxtrfieldifinlist}[5]{%
851   \ifinlistcs{#3}{glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
852 }

```

`rfieldxifinlist` Expands item.

```

853 \newcommand*{\glsxtrfieldxifinlist}[5]{%
854   \xifinlistcs{#3}{glo@\glsdetoklabel{#1}@#2}{#4}{#5}%
855 }

```

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

```

856 \newcommand*{\glsxtrforcsvfield}[3]{%
857   @_glsxtrifhasfield{#2}{#1}%
858   {%
859     \let\glsxtrtrendfor\endfortrue
860     \@for\glsxtr@label:=\glscurrentfieldvalue\do
861       {\expandafter#3\expandafter{\@glsxtr@label}}%
862   }%
863 }

```

`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.

```

864 \newrobustcmd{\glsxtrifhasfield}{%
865   \@ifstar{\s@glsxtrifhasfield}{\@glsxtrifhasfield}%
866 }

```

```

lsxtrifhasfield Unstarred version adds grouping.
867 \newcommand{\glsxtrifhasfield}[4]{%
868   {\s@glsxtrifhasfield{#1}{#2}{#3}{#4}}%
869 }

lsxtrifhasfield Starred version omits grouping.
870 \newcommand{\s@glsxtrifhasfield}[4]{%
871   \letcs{\glscurrentfieldvalue}{\glo@\glsdetoklabel{#2}@#1}%
872   \ifundef\glscurrentfieldvalue
873     {#4}%
874   {%
875     \ifdefempty\glscurrentfieldvalue{#4}{#3}%
876   }%
877 }

```

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

Just uses `\ifcsundef`.

```

878 \newcommand{\GlsXtrIfFieldUndef}[2]{%
879   \ifcsundef{\glo@\glsdetoklabel{#2}@#1}%
880 }

```

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

```

881 \newcommand*{\glsxtrusefield}[2]{%
882   \gls@entry@field{#1}{#2}%
883 }

```

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

```

884 \newcommand*{\Glsxtrusefield}[2]{%
885   \gls@entry@field{#1}{#2}%
886 }

```

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

```

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

```

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

```

888 \newcommand*{\glsxtredeffield}[2]{\protected\csedef{\glo@\glsdetoklabel{#1}@#2}}

```

etfieldifexists

```

889 \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.

```

890 \newrobustcmd*{\GlsXtrSetField}[3]{%

```

```

891 \glsxtrsetfieldifexists{#1}{#2}%
892 {\csdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
893 }

\GlsXtrLetField Uses \cslet instead. Third argument should be a macro.
894 \newrobustcmd*\{\GlsXtrLetField}[3]{%
895   \glsxtrsetfieldifexists{#1}{#2}%
896   {\cslet{glo@\glsdetoklabel{#1}@#2}{#3}}%
897 }

\GlsXtrLetField Uses \csletcs instead. Third argument should be a control sequence name.
898 \newrobustcmd*\{\csGlsXtrLetField}[3]{%
899   \glsxtrsetfieldifexists{#1}{#2}%
900   {\csletcs{glo@\glsdetoklabel{#1}@#2}{glo@\glsdetoklabel{#3}@#4}}%
901 }

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.
902 \newrobustcmd*\{\GlsXtrLetFieldToField}[4]{%
903   \glsxtrsetfieldifexists{#1}{#2}%
904   {\csletcs{glo@\glsdetoklabel{#1}@#2}{glo@\glsdetoklabel{#3}@#4}}%
905 }

\GlsXtrSetField Allow the user to set a field. First argument entry label, second argument field label, third argument value.
906 \newrobustcmd*\{\GlsXtrSetField}[3]{%
907   \glsxtrsetfieldifexists{#1}{#2}%
908   {\csgdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
909 }

\xGlsXtrSetField
910 \newrobustcmd*\{\xGlsXtrSetField}[3]{%
911   \glsxtrsetfieldifexists{#1}{#2}%
912   {\protected@csxdef{glo@\glsdetoklabel{#1}@#2}{#3}}%
913 }

\GlsXtrSetField
914 \newrobustcmd*\{\eGlsXtrSetField}[3]{%
915   \glsxtrsetfieldifexists{#1}{#2}%
916   {\protected@csedef{glo@\glsdetoklabel{#1}@#2}{#3}}%
917 }

\XtrIfFieldEqStr
918 \newrobustcmd*\{\GlsXtrIfFieldEqStr}[5]{%
919   \glsxtrifhasfield{#1}{#2}%
920   {%
921     \ifdefstring{\glscurrentfieldvalue}{#3}{#4}{#5}%
922   }%

```

```

923 {#5}%
924 }

\glsxtrpageref Like \glsrefentry but references the page number instead (if entry counting is on).
925 \ifglsentrycounter
926   \newcommand*{\glsxtrpageref}[1]{\pageref{glsentry-\glsdetoklabel{#1}}}
927 \else
928   \ifglssubentrycounter
929     \newcommand*{\glsxtrpageref}[1]{\pageref{glsentry-\glsdetoklabel{#1}}}
930   \else
931     \newcommand*{\glsxtrpageref}[1]{\gls{#1}}
932   \fi
933 \fi

lossarypreamble
934 \newcommand{\apptoglossarypreamble}[2][\glsdefaulttype]{%
935   \ifcsdef{glolist@#1}{%
936     {%
937       \ifcsundef{@glossarypreamble@#1}{%
938         {\csdef{@glossarypreamble@#1}{}{}}%
939       {}}%
940       \csappto{@glossarypreamble@#1}{#2}{%
941     }{%
942     {%
943       \GlossariesExtraWarning{Glossary '#1' is not defined}{%
944     }{%
945   }

```

lossarypreamble

```

946 \newcommand{\preglossarypreamble}[2][\glsdefaulttype]{%
947   \ifcsdef{glolist@#1}{%
948     {%
949       \ifcsundef{@glossarypreamble@#1}{%
950         {\csdef{@glossarypreamble@#1}{}{}}%
951       {}}%
952       \cspreto{@glossarypreamble@#1}{#2}{%
953     }{%
954     {%
955       \GlossariesExtraWarning{Glossary '#1' is not defined}{%
956     }{%
957   }

```

1.3 Modifications to Commands Provided by glossaries

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

Provide a starred version of `\longnewglossaryentry` that doesn't automatically insert `\leavevmode\unskip\nopostdesc` at the end of the description. The unstarred version is modified to use `\glsxtrpostlongdescription` instead.

`ewglossaryentry`

```
958 \renewcommand*{\longnewglossaryentry}{%
959   \@ifstar\@glsxtr@s@longnewglossaryentry\@glsxtr@longnewglossaryentry
960 }
```

`ewglossaryentry` Starred version.

```
961 \newcommand{\@glsxtr@s@longnewglossaryentry}[3]{%
962   \glsdoifnoexists{#1}%
963   {%
964     \bgroup
965       \let\@org@newglossaryentryprehook\@newglossaryentryprehook
966       \long\def\@newglossaryentryprehook{%
967         \long\def\@glo@desc{#3}%
968         \@org@newglossaryentryprehook
969       }%
970       \renewcommand*{\gls@assign@desc}[1]{%
971         \global\cslet{\glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%
972         \global\cslet{\glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
973       }
974       \gls@defglossaryentry{#1}{#2}%
975     \egroup
976   }%
977 }
```

`ewglossaryentry` Unstarred version.

```
978 \newcommand{\@glsxtr@longnewglossaryentry}[3]{%
979   \glsdoifnoexists{#1}%
980   {%
981     \bgroup
982       \let\@org@newglossaryentryprehook\@newglossaryentryprehook
983       \long\def\@newglossaryentryprehook{%
984         \long\def\@glo@desc{#3\glsxtrpostlongdescription}%
985         \@org@newglossaryentryprehook
986       }%
987       \renewcommand*{\gls@assign@desc}[1]{%
988         \global\cslet{\glo@\glsdetoklabel{#1}@desc}{\@glo@desc}%
989         \global\cslet{\glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
990       }
991       \gls@defglossaryentry{#1}{#2}%
992     \egroup
993   }%
994 }
```

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

```
989         \global\cslet{\glo@\glsdetoklabel{#1}@descplural}{\@glo@descplural}%
990       }
991       \gls@defglossaryentry{#1}{#2}%
992     \egroup
993   }%
994 }
```

```

longdescription Hook at the end of the description when using the unstarred \longnewglossaryentry.
995 \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.
996 \renewcommand{\newignoredglossary}{%
997   \@ifstar\glsxtr@s@newignoredglossary\glsxtr@org@newignoredglossary
998 }

ignoredglossary The original definition is patched to check for existence.
999 \newcommand*{\glsxtr@org@newignoredglossary}[1]{%
1000   \ifcsdef{glolist@\#1}{%
1001     {%
1002       \glsxtrundefaction{Glossary type '#1' already exists}{}%
1003     }%
1004     {%
1005       \ifdefempty{\@ignored@glossaries}{%
1006         {%
1007           \edef{\@ignored@glossaries}{\#1}%
1008         }%
1009         {%
1010           \eappto{\@ignored@glossaries}{,\#1}%
1011         }%
1012         \csgdef{glolist@\#1}{,}%
1013         \ifcsundef{gls@\#1@entryfmt}{%
1014           {%
1015             \def\glsentryfmt[\#1]{\glsentryfmt}%
1016           }%
1017           {}%
1018         \ifdefempty{\gls@nohyperlist}{%
1019           {%
1020             \renewcommand*{\gls@nohyperlist}{\#1}%
1021           }%
1022           {%
1023             \eappto{\gls@nohyperlist}{,\#1}%
1024           }%
1025         }%
1026       }%

```

ignoredglossary Starred form.

```

1027 \newcommand*{\glsxtr@s@newignoredglossary}[1]{%
1028   \ifcsdef{glolist@\#1}{%
1029     {%
1030       \glsxtrundefaction{Glossary type '#1' already exists}{}%
1031     }%
1032     {%
1033       \ifdefempty{\@ignored@glossaries}{%

```

```

1034  {%
1035      \edef\@ignored@glossaries{#1}%
1036  }%
1037  {%
1038      \eappto\@ignored@glossaries{,#1}%
1039  }%
1040  \csgdef{glolist@#1}{,}%
1041  \ifcsundef{gls@#1@entryfmt}%
1042  {%
1043      \def\glsentryfmt[#1]{\glsentryfmt}%
1044  }%
1045  {}%
1046 }%
1047 }

```

`\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.

```

1048 \glsifusetranslator
1049 {%
1050     \renewcommand*{\glssettoctitle}[1]{%
1051         \ifcsdef{gls@tr@set@#1@toctitle}%
1052         {%
1053             \csuse{gls@tr@set@#1@toctitle}%
1054         }%
1055         {%
1056             \ifcsdef{@glotype@#1@title}%
1057                 {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1058                 {\def\glossarytoctitle{\glossarytitle}}%
1059         }%
1060     }%
1061 }
1062 {
1063     \renewcommand*{\glssettoctitle}[1]{%
1064         \ifcsdef{@glotype@#1@title}%
1065             {\def\glossarytoctitle{\csname @glotype@#1@title\endcsname}}%
1066             {\def\glossarytoctitle{\glossarytitle}}%
1067     }
1068 }

```

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

```

1069 \newcommand{\provideignoredglossary}{%
1070     \@ifstar\glsxtr@s\provideignoredglossary\glsxtr@provideignoredglossary
1071 }

```

`ignoredglossary` Unstarred version.

```

1072 \newcommand*{\glsxtr@provideignoredglossary}[1]{%
1073     \ifcsdef{glolist@#1}%
1074     {}%
1075     {}

```

```

1076 \ifdefempty{\ignored@glossaries}
1077 {%
1078   \edef\ignored@glossaries{#1}%
1079 }%
1080 {%
1081   \eappto{\ignored@glossaries}{,#1}%
1082 }%
1083 \csgdef{glolist@#1}{,}%
1084 \ifcsundef{gls@#1@entryfmt}%
1085 {%
1086   \defglsentryfmt[#1]{\glsentryfmt}%
1087 }%
1088 {()}%
1089 \ifdefempty{\gls@nohyperlist}
1090 {%
1091   \renewcommand*{\gls@nohyperlist}{#1}%
1092 }%
1093 {%
1094   \eappto{\gls@nohyperlist}{,#1}%
1095 }%
1096 }%
1097 }

```

`ignoredglossary` Starred form.

```

1098 \newcommand*{\glsxtr@s@provideignoredglossary}[1]{%
1099   \ifcsdef{glolist@#1}
1100   {()}%
1101   {%
1102     \ifdefempty{\ignored@glossaries}
1103     {%
1104       \edef\ignored@glossaries{#1}%
1105     }%
1106     {%
1107       \eappto{\ignored@glossaries}{,#1}%
1108     }%
1109     \csgdef{glolist@#1}{,}%
1110     \ifcsundef{gls@#1@entryfmt}%
1111     {%
1112       \defglsentryfmt[#1]{\glsentryfmt}%
1113     }%
1114     {()}%
1115   }%
1116 }

```

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

```

1117 \newcommand*{\glsxtrcopytoglossary}[2]{%
1118   \glsdoifexists{#1}%
1119   {%

```

```

1120 \ifcsdef{glolist@#2}
1121 {%
1122   \cseappto{glolist@#2}{#1,}%
1123 }%
1124 {%
1125   \glsxtrundefaction{Glossary type '#2' doesn't exist}{}%
1126 }%
1127 }%
1128 }

```

1.3.1 Existence Checks

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

```

1129 \renewcommand{\glsdoifexists}[2]{%
1130   \ifglsentryexists{#1}{#2}%
1131   {%

```

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

```

1132   \edef\glslabel{\glsdetoklabel{#1}}%
1133   \glsxtrundefaction{Glossary entry '\glslabel',
1134     has not been defined}{You need to define a glossary entry before
1135     you can reference it.}%
1136 }%
1137 }

```

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

```

1138 \renewcommand{\glsdoifnoexists}[2]{%
1139   \ifglsentryexists{#1}{%
1140     \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'%
1141       has already been defined}{}{#2}%
1142 }

```

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

```

1143 \ifdef{\glsdoifexistsordo}
1144 {%
1145   \renewcommand{\glsdoifexistsordo}[3]{%
1146     \ifglsentryexists{#1}{#2}{%
1147     {%
1148       \glsxtrundefaction{Glossary entry '\glsdetoklabel{#1}'%
1149         has not been defined}{You need to define a glossary entry
1150         before you can use it.}%
1151       #3%
1152     }%
1153   }%
1154 }
1155 {%
1156   \glsxtr@warnonexistsordo\glsdoifexistsordo

```

```

1157 \newcommand{\glsdoifexistsordo}[3]{%
1158   \ifglsentryexists{#1}{#2}%
1159   {%
1160     \glsxtrundefaction{Glossary entry ‘\glsdetoklabel{#1}’}
1161     has not been defined}{You need to define a glossary entry
1162     before you can use it.}%
1163   #3%
1164 }
1165 }%
1166 }

```

`arynoexistsordo` Similarly for `\doifglossarynoexistsordo`.

```

1167 \ifdef\doifglossarynoexistsordo
1168 {%
1169   \renewcommand{\doifglossarynoexistsordo}[3]{%
1170     \ifglossaryexists{#1}%
1171     {%
1172       \glsxtrundefaction{Glossary type ‘#1’ already exists}{}%
1173     #3%
1174   }%
1175   {#2}%
1176 }%
1177 }
1178 {%
1179   \glsxtr@warnonexistsordo\doifglossarynoexistsordo
1180   \newcommand{\doifglossarynoexistsordo}[3]{%
1181     \ifglossaryexists{#1}%
1182     {%
1183       \glsxtrundefaction{Glossary type ‘#1’ already exists}{}%
1184     #3%
1185   }%
1186   {#2}%
1187 }%
1188 }
1189

```

There are now three types of cross-references: the `see` key (as original), the `alias` key (from `glossaries-extra v1.12`) and the `seealso` 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.

```

1190 \appto\@newglossaryentryposthook{%
1191   \ifdefvoid{@glo@see}%
1192   {\csxdef{glo@`@glo@label}{@see}{}{}%
1193   {%
1194     \csxdef{glo@`@glo@label}{@see}{\glo@see}%
1195     \if@glsxtr@autoseeindex
1196       \glsxtr@autoindexcrossrefs
1197     \fi

```

```

1198     }%
1199 }
1200 \appto\@gls@keymap{,{see}{see}}

\glsxtrusesee Apply \glsseefORMAT to the see key if not empty.
1201 \newcommand*{\glsxtrusesee}[1]{%
1202   \glsdoifexists{#1}{%
1203     {%
1204       \letcs{\@glo@see}{\glsdetoklabel{#1}@see}{%
1205         \ifdefempty{\@glo@see}{%
1206           {}%
1207           {%
1208             \expandafter\glsxtr@usesee@\glo@see\end@glsxtr@usesee%
1209           }%
1210         }%
1211     }%
1212 }%
1213 \glsxtr@usesee[#1]%
1214 }

\glsxtr@usesee
1215 \def\@glsxtr@usesee[#1]#2\end@glsxtr@usesee{%
1216   \glsxtruseseeformat{#1}{#2}%
1217 }

\glsxtruseseeformat 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.
1218 \newcommand*{\glsxtruseseeformat}[2]{%
1219   \glsseefORMAT[#1]{#2}{}}%
1220 }

\glsseeitemformat 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.
1221 \renewcommand*{\glsseeitemformat}[1]{%
1222   \ifglslabel{\glslabel}{\glsaccesstext{\glslabel}}{\glsaccessname{\glslabel}}%
1223 }

\glsxtruseseealso Apply \glsseefORMAT to the seealso key if not empty. There's no optional tag to worry about here.
1224 \newcommand*{\glsxtruseseealso}[1]{%
1225   \glsdoifexists{#1}{%
1226     {%
1227       \letcs{\@glo@see}{\glsdetoklabel{#1}@seealso}{%

```

```

1228     \ifempty{\glo@see}
1229     {}%
1230     {}%
1231     \expandafter\glsxtruseseealsoformat\expandafter{\glo@see}%
1232     {}%
1233     {}%
1234 }

seseealsoformat The format used by \glsxtruseseealso. The argument is the comma-separated list of cross-referenced labels.
1235 \newcommand*{\glsxtruseseealsoformat}[1]{%
1236   \glsseeformat[\seealsoname]{#1}{}%
1237 }

\glsxtrseelist Fully expands argument before passing to \glsseelist. (The argument to \glsseelist must be a comma-separated list of entry labels.)
1238 \newrobustcmd{\glsxtrseelist}[1]{%
1239   \edef\glo@tmp{\noexpand\glsseelist{#1}}\glo@tmp
1240 }

\seealsoname In case this command hasn't been defined. (Should be provided by language packages.)
1241 \providecommand{\seealsoname}{see also}

xtrindexseealso If \xdycrossrefhook is defined, provide a seealso crossref class. Otherwise this just does \glssee with \seealsoname as the tag. The hook is only defined if both xindy and glossaries v4.30+ are being used.
1242 \ifdef{\xdycrossrefhook}
1243 {
    Add the cross-reference class definition to the hook.
1244 \appto{\xdycrossrefhook}{%
1245   \write\glswrite{(define-crossref-class \string"seealso"\string"
1246   :unverified )}%
1247   \write\glswrite{(markup-crossref-list
1248   :class \string"seealso"\string"^\space\space\space
1249   :open \string"\string\glsxtruseseealsoformat\glsopenbrace\string"
1250   :close \string"\glsclosebrace\string")}%
1251 }

    Append to class list.
1252 \appto{\xdylocationclassorder}{\space\string"seealso"\string"}

This essentially works like \do@seeglossary but uses the seealso class. This doesn't increment the associated counter.
1253 \newrobustcmd{\glsxtrindexseealso}[2]{%
1254   \ifx\glsxtr@record@setting\glsxtr@record@setting@alsoindex
1255   \glsxtr@recordsee{#1}{#2}%
1256   \fi
1257   \glsdoifexists{#1}%

```

```

1258     {%
1259         \@@glsxtrwrglossmark
1260         \def\@gls@xref{\#2}%
1261         \onelevel@sanitize\@gls@xref
1262         \@gls@checkmkidxchars\@gls@xref
1263         \gls@glossary{\csname glo@\#1@type\endcsname}{%
1264             (indexentry
1265                 :tkey (\csname glo@\#1@index\endcsname)
1266                 :xref (\string"\@gls@xref\string")
1267                 :attr \string"seealso\string"
1268             )
1269         }%
1270     }%
1271 }
1272 }
1273 {

```

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

```

1274 \newrobustcmd*{\glsxtrindexseealso}{\glssee[\sealso]}
1275 }

```

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

```

1276 \ifdef\gls@set@xr@key
1277 {

```

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

```

1278 \define@key{glossentry}{alias}{%
1279     \gls@set@xr@key{alias}{\glo@alias}{#1}%
1280 }
1281 \define@key{glossentry}{seealso}{%
1282     \gls@set@xr@key{seealso}{\glo@seealso}{#1}%
1283 }

```

Add to the key mappings.

```

1284 \appto\gls@keymap{, {alias}{alias}, {seealso}{seealso}}

```

Set the default value.

```

1285 \appto\newglossaryentryprehook{\def\glo@alias{} \def\glo@seealso{}}

```

Assign the field values.

```

1286 \appto\newglossaryentryposthook{%
1287     \ifdefvoid\glo@seealso
1288     {\csxdef{\glo@\glo@label}{\glo@seealso}{}}
1289     {%
1290         \csxdef{\glo@\glo@label}{\glo@seealso}{}
1291     }

```

```

1291     \if@glsxstr@autoseeindex
1292         \glsxstr@autoindexcrossrefs
1293     \fi
1294 }%

```

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

```

1295 \ifdefvoid\@glo@alias
1296     {\csxdef{\glo@\glo@label}{\alias}{}}
1297     {%
1298         \csxdef{\glo@\glo@label}{\glo@alias}{\glo@alias}%
1299     }%
1300 }

```

Provide user-level commands to access the values.

```
\glsxtralias
1301 \newcommand*{\glsxtralias}[1]{\gls@entry@field{#1}{alias}}
```

```
trseealsolabels
1302 \newcommand*{\glsxtrseealsolabels}[1]{\gls@entry@field{#1}{seealso}}
```

Add to the \glo@autosee hook.

```

1303 \appto\@glo@autoseehook{%
1304     \ifdefvoid\@glo@alias
1305     {%
1306         \ifdefvoid\@glo@seealso
1307             {}%
1308         {%
1309             \edef\@do@glssee{\noexpand\glsxtrindexseealso
1310                 {\glo@label}{\glo@seealso}}%
1311             \glo@glsssee
1312         }%
1313     }%
1314     {%

```

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

```

1315 \ifdefvoid\@glo@see
1316     {%
1317         \edef\@do@glssee{\noexpand\glssee{\glo@label}{\glo@alias}}%
1318         \glo@glsssee
1319     }%
1320     {}%
1321 }%
1322 }%
1323 }
1324 {
```

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

```
\glsxtralias
1325 \glsaddstoragekey*{\alias}{}{\glsxtralias}
```

trseealsolabels

```
1326 \glsaddstoragekey*{seealso}{\glsxtrseealsolabels}
```

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

ryentryposthook Append to the hook to check for the alias and `seealso` keys.

```
1327 \appto{\newglossaryentryposthook}{%
1328   \ifcsvoid{\glo@\glo@label}{\alias}{%
1329     {%
1330       \ifcsvoid{\glo@\glo@label}{\seealso}{%
1331         {}{%
1332           {%
1333             \edef{\do@glssee}{\noexpand\glsxtrindexseealso}%
1334             {\glo@\label}{\csuse{\glo@\glo@label}{\seealso}}}}{%
1335               \do@glssee
1336             }{%
1337           }{%
1338         }{%
1339       }{%
1340     }{%
1341       \edef{\do@glssee}{\noexpand\glssee}%
1342         {\glo@\label}{\csuse{\glo@\glo@label}{\alias}}}}{%
1343         \do@glssee
1344       }{%
1345     }{%
1346   }{%
1347 }{%
1348 }
```

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

```
1339 \ifdefvoid{\glo@see}{%
1340   {%
1341     \edef{\do@glssee}{\noexpand\glssee}%
1342       {\glo@\label}{\csuse{\glo@\glo@label}{\alias}}}}{%
1343         \do@glssee
1344       }{%
1345     }{%
1346   }{%
1347 }{%
1348 }
```

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

```
1349 \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.

```
1350 \newcommand*{\glsxtraddallcrossrefs}{%
1351   \forallglossaries{\glo@type}{%
1352     {%
1353       \forglsentries[\glo@type]{\glo@label}{%
1354         {%
1355           \ifglsused{\glo@label}{%
1356             {\expandafter{\glsxtraddunusedxrefs}\expandafter{\glo@label}}}}{%
1357             }{%
1358           }{%
1359 }{%
1360 }}
```

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

```
1360 \newcommand*{\@glsxtr@addunusedxrefs}[1]{%
1361   \letcs{\@glo@see}{\glo@\glsdetoklabel{#1}@see}%
1362   \ifdefvoid{\@glo@see}{}%
1363   {}%
1364   {}%
1365   \expandafter\glsxtr@addunused\@glo@see\@end@glsxtr@addunused
1366 }%
1367 \letcs{\@glo@see}{\glo@\glsdetoklabel{#1}@seealso}%
1368 \ifdefvoid{\@glo@see}{}%
1369 {}%
1370 {}%
1371 \expandafter\glsxtr@addunused\@glo@see\@end@glsxtr@addunused
1372 }%
1373 }
```

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

```
1374 \newcommand*{\glsxtr@addunused}[1][]{%
1375   \glsxtr@addunused
1376 }
```

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

```
1377 \def\@glsxtr@addunused#1\@end@glsxtr@addunused{%
1378   \for\@glsxtr@label:=#1\do
1379   {}%
1380   \ifglsused{\@glsxtr@label}{}%
1381   {}%
1382   \glsadd[format=glsxtrunusedformat]{\@glsxtr@label}%
1383   \glsunset{\@glsxtr@label}%
1384   \expandafter\@glsxtr@addunusedxrefs\expandafter{\@glsxtr@label}%
1385 }%
1386 }%
1387 }
```

xtrunusedformat

```
1388 \newcommand*{\glsxtrunusedformat}[1]{\unskip}
```

1.3.2 Document Definitions

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

```
1389 \ifdef{\gls@begindocdefs}{}%
1390 {}%
1391 \renewcommand*{\gls@begindocdefs}{}%
1392 \ifnum\glsxtr@docdefval=1\relax
1393   \gls@enablesavenonumberlist
```

```

1394     \edef\@gls@restoreat{%
1395         \noexpand\catcode`\noexpand\@=\number\catcode`\@`relax}%
1396     \makeatletter
1397     \InputIfFileExists{\jobname.glsdefs}{}{%
1398     \@gls@restoreat
1399     \undef\@gls@restoreat
1400     \gls@defdocnewglossaryentry
1401     \fi
1402   }
1403 }
1404 {}
```

`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 allow with the `record` option.

```

1405 \let\glsxtr@orgmakenoidxglossaries\makenoidxglossaries
1406 \renewcommand{\makenoidxglossaries}{%
1407   \ifdefequal\@glsxtr@record@setting\@glsxtr@record@setting@off
1408   {%
1409     \glsxtr@orgmakenoidxglossaries
```

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

```

1410   \renewcommand{\@do@seeglossary}[2]{%
1411     \@@glsxtrwrglossmark
1412     \edef\@gls@label{\glsdetoklabel{\#1}}%
1413     \protected@write\auxout{}{%
1414       \string\@gls@reference
1415       {\cscname glo@\@gls@label \type\endcscname}%
1416       {\@gls@label}%
1417       {%
1418         \string\glsseeformat##2{}%
1419       }%
1420     }%
1421   }%
```

Check for `docdefs=restricted`:

```
1422 \if@glsxtrdocdefrestricted
```

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

```

1423   \renewcommand*{\@gls@reference}[3]{%
1424     \ifcsundef{@glsref##1}{\csgdef{@glsref##1}{}{}}{%
1425       \ifinlistcs##2{@glsref##1}{%
1426         {}%
1427         {\listcsgadd{@glsref##1}{##2}}%
1428         \ifcsundef{glo@\glsdetoklabel{##2}@loclist}{%
1429           {\csgdef{glo@\glsdetoklabel{##2}@loclist}{}{}}%
1430           {}%
1431           {\listcsgadd{glo@\glsdetoklabel{##2}@loclist}{##3}}%
1432         }%
1433       }%
1434     }%
```

```

1433     \else
1434         \glsxtrdocdeffalse
1435     \fi
1436     \disable@keys{glossaries-extra.sty}{docdef}%
1437 }%
1438 {%
1439     \PackageError{glossaries-extra}{\string\makenoidxglossaries\space
1440         not permitted\MessageBreak
1441         with record=\glsxtr@record@setting\space package option}%
1442     {You may only use \string\makenoidxglossaries\ space with the
1443         record=off option}%
1444 }%
1445 }

ewglossaryentry  Modify \gls@defdocnewglossaryentry so that it checks the docdef value.
1446 \renewcommand*{\gls@defdocnewglossaryentry}{%
1447     \ifcase\glsxtr@docdefval
1448         docdef=false:
1449         \renewcommand*{\newglossaryentry}[2]{%
1450             \PackageError{glossaries-extra}{Glossary entries must
1451                 be \MessageBreak defined in the preamble with \MessageBreak
1452                 package option ‘docdef=false’}\MessageBreak(consider using
1453                 ‘docdef=restricted’)\{Move your glossary definitions to
1454                 the preamble. You can also put them in a \MessageBreak separate file
1455                 and load them with \string\loadglsentries.\}%
1456     }%
1457     \or
1458         (docdef=true case.) Since the see value is now saved in a field, it can be used by entries that
1459         have been defined in the document.
1460         \let\gls@checkseeallowed\relax
1461         \let\newglossaryentry\new@glossaryentry
1462     }%
1463     Restricted mode just needs to allow the see value.
1464     \let\gls@checkseeallowed\relax
1465     \fi
1466 }%

```

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`

```

1463 \newcommand*{\GlsXtrEnableOnTheFly}{%
1464     \@ifstar\@sGlsXtrEnableOnTheFly\@GlsXtrEnableOnTheFly
1465 }

```

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.)

```
1466 \newcommand*{\@sGlsXtrEnableOnTheFly}{%
1467   \renewcommand*{\glsdetoklabel}[1]{%
1468     \expandafter\glsxtr@ifcsstart\string##1 \glsxtr@end@
1469   }%
1470   \expandafter\detokenize\expandafter{##1}%
1471 }%
1472 {\detokenize{##1}}%
1473 }%
1474 \GlsXtrEnableOnTheFly
1475 }%
1476 \def\glsxtr@ifcsstart#1#2\glsxtr@end@#3#4{%
1477   \expandafter\if\glsbackslash#1%
1478   #3%
1479   \else
1480   #4%
1481   \fi
1482 }
```

sxtrstarflywarn

```
1483 \newcommand*{\glsxtrstarflywarn}{%
1484   \GlossariesExtraWarning{Experimental starred version of
1485   \string\GlsXtrEnableOnTheFly\space in use (please ensure you have
1486   read the warnings in the glossaries-extra user manual)}%
1487 }
```

rEnableOnTheFly

```
1488 \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
1489 \newcommand*{\glsxtrcat}{general}

\glsxtr
1490 \newcommand*{\glsxtr}[1][]{%
1491   \def\glsxtr@keylist{##1}%
1492   \glsxtr
1493 }

\@glsxtr
1494 \newcommand*{\@glsxtr}[2][]{%
1495   \ifglsentryexists{##2}{%
```

```

1496  {%
1497    \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1498  }%
1499  {%
1500    \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1501      description={\nopostdesc},##1}%
1502  }%
1503  \expandafter\gls\expandafter[\glsxtr@keylist]{##2}%
1504 }

\Glsxtr
1505 \newcommand*\Glsxtr}[1] []{%
1506   \def\glsxtr@keylist{##1}%
1507   \Glsxtr
1508 }

\@Glsxtr
1509 \newcommand*\@Glsxtr}[2] []{%
1510   \ifglsentryexists{##2}%
1511   {%
1512     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1513   }%
1514   {%
1515     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1516       description={\nopostdesc},##1}%
1517   }%
1518   \expandafter\Gls\expandafter[\glsxtr@keylist]{##2}%
1519 }

\glsxtrpl
1520 \newcommand*\glsxtrpl}[1] []{%
1521   \def\glsxtr@keylist{##1}%
1522   \glsxtrpl
1523 }

\@glsxtrpl
1524 \newcommand*\@glsxtrpl}[2] []{%
1525   \ifglsentryexists{##2}%
1526   {%
1527     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1528   }%
1529   {%
1530     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1531       description={\nopostdesc},##1}%
1532   }%
1533   \expandafter\glspl\expandafter[\glsxtr@keylist]{##2}%
1534 }

```

\Glsxtrpl

```

1535 \newcommand*{\Glsxtrpl}[1] []{%
1536   \def\glsxtr@keylist{##1}%
1537   \Glsxtrpl
1538 }

\Glsxtrpl

1539 \newcommand*{\@Glsxtrpl}[2] []{%
1540   \ifglsentryexists{##2}%
1541   {%
1542     \ifblank{##1}{}{\GlsXtrWarning{##1}{##2}}%
1543   }%
1544   {%
1545     \gls@defglossaryentry{##2}{name={##2},category=\glsxtrcat,
1546       description={\nopostdesc},##1}%
1547   }%
1548   \expandafter\Glspl\expandafter[\glsxtr@keylist]{##2}%
1549 }

```

\GlsXtrWarning

```

1550 \newcommand*{\GlsXtrWarning}[2]{%
1551   \def\@glsxtr@optlist{##1}%
1552   \onelevel@sanitize\@glsxtr@optlist
1553   \GlossariesExtraWarning{The options ‘\@glsxtr@optlist’ have
1554   been ignored for entry ‘##2’ as it has already been defined}%
1555 }

```

Disable commands after the glossary:

```

1556 \renewcommand{\printglossary}[2]{%
1557   \def\@glsxtr@printglossopts{##1}%
1558   \@glsxtr@orgprintglossary{##1}{##2}%
1559   \def\@glsxtr{\@glsxtr@disabledflycommand\glsxtr}%
1560   \def\@glsxtrpl{\@glsxtr@disabledflycommand\glsxtrpl}%
1561   \def\@Glsxtr{\@glsxtr@disabledflycommand\Glsxtr}%
1562   \def\@Glsxtrpl{\@glsxtr@disabledflycommand\Glsxtrpl}%
1563 }

```

abledflycommand

```

1564 \newcommand*{\@glsxtr@disabledflycommand}[1]{%
1565   \PackageError{glossaries-extra}%
1566   {\string##1\space can't be used after any of the \MessageBreak
1567     glossaries have been displayed}%
1568   {The on-the-fly commands enabled by
1569     \string\GlsXtrEnableOnTheFly\space may only be used \MessageBreak
1570     before the glossaries. If you want to use any entries \MessageBreak
1571     after any of the glossaries, you must use the standard \MessageBreak
1572     method of first defining the entry and then using the \MessageBreak
1573     entry with commands like \string\gls}%
1574   \@@glsxtr@disabledflycommand
1575 }

```

```

1576 \newcommand*{\@glsxtr@disabledflycommand}[2] []{##2}
      End of \GlsXtrEnableOnTheFly. Disable since it can only be used once.
1577 \let\GlsXtrEnableOnTheFly\relax
1578 }
1579 \@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.

```
1580 \newcommand*{\@glsxtr@current@style}{\@glossary@default@style}
```

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

`etglossarystyle`

```

1581 \renewcommand*{\setglossarystyle}[1]{%
1582   \ifcsundef{@glsstyle@#1}%
1583   {%
1584     \PackageError{glossaries-extra}{Glossary style '#1' undefined}{}%
1585   }%
1586   {%
1587     \csname @glsstyle@#1\endcsname

```

Only set the current style if it exists.

```

1588   \protected@edef{\@glsxtr@current@style}{#1}%
1589 }%
1590 \ifx\@glossary@default@style\relax
1591   \protected@edef{\@glossary@default@style}{#1}%
1592 \fi
1593 }

```

In case we have an old version of glossaries:

```

1594 \ifdef{\glossary@default@style}
1595 {}
1596 {%
1597   \let{\glossary@default@style}\relax
1598 }

```

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

```

1599 \ifdef{\glslistdottedwidth}
1600 {%
1601   \ifdim\glslistdottedwidth=.5\hsize
1602     \setlength{\glslistdottedwidth}{-\dimexpr\maxdimen-1sp\relax}%
1603   \AtBeginDocument{%
1604     \ifdim\glslistdottedwidth=-\dimexpr\maxdimen-1sp\relax

```

```

1605      \setlength{\glslistdottedwidth}{.5\columnwidth}%
1606      \fi
1607  }%
1608 \fi
1609 }
1610 {}%

```

Similarly for `\glsdescwidth`:

```

\glsdescwidth
1611 \ifdef\glsdescwidth
1612 {%
1613   \ifdim\glsdescwidth=.6\hsize
1614     \setlength{\glsdescwidth}{-\dimexpr\maxdimen-1sp\relax}
1615   \AtBeginDocument{%
1616     \ifdim\glsdescwidth=-\dimexpr\maxdimen-1sp\relax
1617       \setlength{\glsdescwidth}{.6\columnwidth}%
1618     \fi
1619   }%
1620   \fi
1621 }
1622 {}%

```

and for `\glspagelistwidth`:

```

lspagelistwidth
1623 \ifdef\glspagelistwidth
1624 {%
1625   \ifdim\glspagelistwidth=.1\hsize
1626     \setlength{\glspagelistwidth}{-\dimexpr\maxdimen-1sp\relax}
1627   \AtBeginDocument{%
1628     \ifdim\glspagelistwidth=-\dimexpr\maxdimen-1sp\relax
1629       \setlength{\glspagelistwidth}{.1\columnwidth}%
1630     \fi
1631   }%
1632   \fi
1633 }
1634 {}%

```

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

```

1635 \def\org@glossaryentrynumbers#1{#1\gls@save@numberlist{#1}}%
1636 \ifx\org@glossaryentrynumbers\glossaryentrynumbers
1637   \glsnonumberlistfalse
1638   \renewcommand*\glossaryentrynumbers[1]{%
1639     \ifglsentryexists{\glscurrententrylabel}{%
1640       {%
1641         \@glsxtrpreloctag
1642         \GlsXtrFormatLocationList{#1}%
1643         \@glsxtrpostloctag
1644         \gls@save@numberlist{#1}%

```

```

1645     }{}}%
1646   }%
1647 \else
1648   \glsnonumberlisttrue
1649   \renewcommand*{\glossaryentrynumbers}[1]{%
1650     \ifglsentryexists{\glscurrententrylabel}{%
1651       {%
1652         \gls@save@numberlist{#1}%
1653       }{}}%
1654     }%
1655 \fi

```

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

```
1656 \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`

```

1657 \newcommand*{\GlsXtrEnablePreLocationTag}[2]{%
1658   \let\@glsxtrpreloctag\@glsxtrpreloctag
1659   \let\@glsxtrpostloctag\@glsxtrpostloctag
1660   \renewcommand*{\@glsxtr@pagetag}{#1}%
1661   \renewcommand*{\@glsxtr@pagestag}{#2}%
1662   \renewcommand*{\@glsxtr@savepreloctag}[2]{%
1663     \csgdef{@glsxtr@preloctag@##1}{##2}%
1664   }%
1665   \renewcommand*{\@glsxtr@doloctag}{%
1666     \ifcsundef{@glsxtr@preloctag@\glscurrententrylabel}{%
1667       {%
1668         \GlossariesWarning{Missing pre-location tag for '\glscurrententrylabel'.}
1669         Rerun required}%
1670       }%
1671     }%
1672     \csuse{@glsxtr@preloctag@\glscurrententrylabel}%
1673   }%
1674 }%
1675 }
1676 \onlypreamble\GlsXtrEnablePreLocationTag

```

`glsxtrpreloctag`

```

1677 \newcommand*{\@glsxtrpreloctag}{%
1678   \let\@glsxtr@org@delimN\delimN
1679   \let\@glsxtr@org@delimR\delimR
1680   \let\@glsxtr@org@glsignore\glsignore

```

```

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

1681  \gdef\@glsxtr@thisloctag{\@glsxtr@pagetag}%
1682  \renewcommand*\{\delimN}{%
1683    \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
1684    \@glsxtr@org@delimN}%
1685  \renewcommand*\{\delimR}{%
1686    \gdef\@glsxtr@thisloctag{\@glsxtr@pagestag}%
1687    \@glsxtr@org@delimR}%
1688  \renewcommand*\{\glsignore}[1]{%
1689    \gdef\@glsxtr@thisloctag{\relax}%
1690    \@glsxtr@org@glsignore{##1}}%
1691  \glsxtr@doloctag
1692 }

glsxtrpreloctag
1693 \newcommand*\{@glsxtrpreloctag}{}%

@glsxtr@pagetag
1694 \newcommand*\{@glsxtr@pagetag}{}%


glsxtr@pagestag
1695 \newcommand*\{@glsxtr@pagestag}{}%


lsxtrpostloctag
1696 \newcommand*\{@glsxtrpostloctag}{}%
1697   \let\delimN\@glsxtr@org@delimN
1698   \let\delimR\@glsxtr@org@delimR
1699   \let\glsignore\@glsxtr@org@glsignore
1700   \protected@write\@auxout{}{%
1701     {\string\@glsxtr@savepreloctag{\glscurrententrylabel}{\@glsxtr@thisloctag}}}%
1702 }

lsxtrpostloctag
1703 \newcommand*\{@glsxtrpostloctag}{}%


lsxtr@preloctag
1704 \newcommand*\{@glsxtr@savepreloctag}[2]{}%
1705 \protected@write\@auxout{}{%
1706   \string\providecommand\string\@glsxtr@savepreloctag[2]{}}

glsxtr@doloctag
1707 \newcommand*\{@glsxtr@doloctag}{}%


ss@nonumberlist  Modify the nonumberlist key to use \GlsXtrFormatLocationList (and also save the number
list):
1708 \renewcommand*\KV@printgloss@nonumberlist}[1]{%
1709   \XKV@plfalse
1710   \XKV@sttrue

```

```

1711 \XKV@checkchoice[\XKV@resa]{#1}{true,false}%
1712 {%
1713   \csname glsnonumberlist\XKV@resa\endcsname
1714   \ifglsnonumberlist
1715     \def\glossaryentrynumbers##1{\gls@save@numberlist{##1}}%
1716   \else
1717     \def\glossaryentrynumbers##1{%
1718       \@glsxtrpreloctag
1719       \GlsXtrFormatLocationList{##1}%
1720       \@glsxtrpostloctag
1721       \gls@save@numberlist{##1}}%
1722   \fi
1723 }%
1724 }

```

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.

```

1725 \renewcommand*\glsentryfmt{%
1726   \ifglshasshort{\glslabel}{\glssetabrvfmt{\glscategory{\glslabel}}}{}%
1727   \glsifregular{\glslabel}%
1728   {\glsxtrregularfont{\glsentryfmt}}%
1729 }%
1730   \ifglshasshort{\glslabel}%
1731   {\glsxtrgenabbrvfmt}%
1732   {\glsxtrregularfont{\glsentryfmt}}%
1733 }%
1734 }

```

sxtrregularfont Font used for regular entries.

```
1735 \newcommand*\glsxtrregularfont[1]{#1}
```

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

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

```
1736 \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).

```
1737  \glsxstr@record{#2}{#3}{glslink}%
1738  \glsdoifexists{#3}%
1739  {%
```

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).

```
1740  \let\glsxtrorg@ifKV@glslink@hyper\ifKV@glslink@hyper
1741  \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
1742  \def\glscustomtext{#4}%
1743  \glsxtr@field@linkdefs
1744  #1%
1745  \gls@link[#2]{#3}{#4}%
1746  \let\ifKV@glslink@hyper\glsxtrorg@ifKV@glslink@hyper
1747 }%
1748 \glspostlinkhook
1749 }
```

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.

```
1750 \let\glsxtr@org@gls@\gls@
1751 \def\gls@#1#2{%
1752  \glsxtr@record{#1}{#2}{glslink}%
1753  \glsxtr@org@gls@{#1}{#2}%
1754 }%
```

\glspl@ Save the original definition and redefine.

```
1755 \let\glsxtr@org@glspl@\glspl@
1756 \def\glspl@#1#2{%
1757  \glsxtr@record{#1}{#2}{glslink}%
1758  \glsxtr@org@glspl@{#1}{#2}%
1759 }%
```

\Gls@ Save the original definition and redefine.

```
1760 \let\glsxtr@org@Gls@\Gls@
1761 \def\Gls@#1#2{%
1762  \glsxtr@record{#1}{#2}{glslink}%
1763  \glsxtr@org@Gls@{#1}{#2}%
1764 }%
```

\Glspl@ Save the original definition and redefine.

```
1765 \let\glsxtr@org@Glspl@\Glspl@
1766 \def\Glspl@#1#2{%
1767  \glsxtr@record{#1}{#2}{glslink}%
1768  \glsxtr@org@Glspl@{#1}{#2}%
1769 }%
```

\@GLS@ Save the original definition and redefine.

```
1770 \let\@glsxtr@org@GLS@\@GLS@
1771 \def\@GLS@#1#2{%
1772   \glsxtr@record{#1}{#2}{glslink}%
1773   \glsxtr@org@GLS@{#1}{#2}%
1774 }%
```

\@GLSp1@ Save the original definition and redefine.

```
1775 \let\@glsxtr@org@GLSp1@\@GLSp1@
1776 \def\@GLSp1@#1#2{%
1777   \glsxtr@record{#1}{#2}{glslink}%
1778   \glsxtr@org@GLSp1@{#1}{#2}%
1779 }%
```

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

```
1780 \renewcommand*{\@glsdisp}[3][]{%
1781   \glsxtr@record{#1}{#2}{glslink}%
1782   \glsdoifexists{#2}{%
1783     \let\do@gls@link@checkfirsthyper\gls@link@checkfirsthyper
1784     \let\glsifplural\@secondoftwo
1785     \let\glscapscase\@firstofthree
1786     \def\glscustomtext{#3}%
1787     \def\glsinsert{}%
1788     \def\@glo@text{\csname gls@\glstype @entryfmt\endcsname}%
1789     \gls@link[#1]{#2}{\@glo@text}%
1790     \ifKV@glslink@local
1791       \glslocalunset{#2}%
1792     \else
1793       \glsunset{#2}%
1794     \fi
1795   }%
1796   \glspostlinkhook
1797 }
```

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

```
1798 \renewcommand*{\@gls@@link}[3][]{%
1799   \glsxtr@record{#1}{#2}{glslink}%
1800   \glsdoifexistsord{#2}{%
1801     {%
1802       \let\do@gls@link@checkfirsthyper\relax
1803       \gls@link[#1]{#2}{#3}%
1804     }%
1805     {%
1806       \glstextformat{#3}%
1807     }%
1808   \glspostlinkhook
1809 }
```

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

```
1810 \newcommand*{\glsxtrinitwrgloss}{%
1811   \glsifattribute{\glslabel}{wrgloss}{after}%
1812   {%
1813     \glsxtrinitwrglossbeforefalse
1814   }%
1815   {%
1816     \glsxtrinitwrglossbeforetrue
1817   }%
1818 }
```

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

```
1819 \newif\ifglsxtrinitwrglossbefore
1820 \glsxtrinitwrglossbeforetrue
```

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

```
1821 \define@choicekey{glslink}{wrgloss}{%
1822   [\@glsxtr@wrglossval@\glsxtr@wrglossnr]%
1823   {before,after}%
1824 }%
1825   \ifcase\@glsxtr@wrglossnr\relax
1826     \glsxtrinitwrglossbeforetrue
1827   \or
1828     \glsxtrinitwrglossbeforefalse
1829   \fi
1830 }

1831 \define@key{glslink}{thevalue}{\def\@glsxtr@thevalue{\#1}{}}

1832 \define@key{glslink}{theHvalue}{\def\@glsxtr@theHvalue{\#1}{}}
```

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

```
1833 \define@boolkey{glslink}[glsxtr@]{hyperoutside}[true]{}
1834 \glsxtr@hyperoutsidetrue
```

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

```
1835 \newcommand*{\glsxtrinithyperoutside}{%
1836   \glsifattribute{\glslabel}{hyperoutside}{false}%
1837   {%
1838     \glsxtr@hyperoutsidefalse
1839   }%
1840   {%
1841     \glsxtr@hyperoutsidetrue
1842   }%
1843 }
```

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

```
1844 \newcommand*{\glsxtr@inc@linkcount}{}
```

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

```
1845 \newcommand*{\glslinkpresetkeys}{}%
```

`\@gls@link` Redefine to allow the indexing to be placed after the link text. By default this is done before the link text to prevent problems that can occur from the whatsit, but there may be times when the user would like the indexing done afterwards even though it causes a whatsit.

```
1846 \def\@gls@link[#1]#2#3{%
1847   \leavevmode
1848   \edef\glslabel{\glsdetoklabel{#2}}%
1849   \def\@gls@link@opts{#1}%
1850   \let\@gls@link@label\glslabel
1851   \let\@glsnumberformat\glsxtr@defaultnumberformat
1852   \edef\@gls@counter{\csname glo@\glslabel @counter\endcsname}%
1853   \edef\glstype{\csname glo@\glslabel @type\endcsname}%
1854   \let\org@ifKV@glslink@hyper\ifKV@glslink@hyper}
```

Initialise thevalue and theHvalue (v1.19).

```
1855 \def\@glsxtr@thevalue{}%
1856 \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
```

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

```
1857 \glsxtrinitwrgloss
```

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

```
1858 \glsxtrinithyperoutside
```

Note that the default link options may override \glsxtrinitwrgloss.

```
1859 \gls@setdefault@glslink@opts
```

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

```
1860 \glsxtr@inc@linkcount
```

As the original definition.

```
1861 \do@glsdisablehyperinlist
1862 \do@gls@link@checkfirsthyper
```

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

```
1863 \glslinkpresetkeys
```

Set options.

```
1864 \setkeys{glslink}{#1}%
```

User hook after options are set:

```
1865 \glslinkpostsetkeys
```

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

```
1866 \ifdefempty{\@glsxtr@thevalue}%
1867 {%
1868   \@gls@saveentrycounter
1869 }%
1870 {%
1871   \let\theglsentrycounter\@glsxtr@thevalue
1872   \def\theHglsentrycounter{\@glsxtr@theHvalue}%
}
```

```

1873 }%
1874 \gls@setsort{\glslabel}%

    Check textformat attribute (new to v1.21).

1875 \glshasattribute{\glslabel}{textformat}%
1876 {%
1877     \edef\@glsxtr@attrval{\glsgetattribute{\glslabel}{textformat}}%
1878     \ifcsdef{\@glsxtr@attrval}%
1879     {%
1880         \let\cs{\@glsxtr@textformat}\@glsxtr@attrval}%
1881     }%
1882     {%
1883         \GlossariesExtraWarning{Unknown control sequence name
1884             '\@glsxtr@attrval' supplied in textformat attribute
1885             for entry '\glslabel'. Reverting to default \string\glstextformat}%
1886         \let\@glsxtr@textformat\glstextformat
1887     }%
1888 }%
1889 {%
1890     \let\@glsxtr@textformat\glstextformat
1891 }%

```

Do write if it should occur before the link text:

```

1892 \ifglsxtrinitwrglossbefore
1893     \do@wrglossary{#2}%
1894 \fi

```

Do the link text:

```

1895 \ifKV@glslink@hyper
1896     \ifglsxtr@hyperoutside
1897         \glslink{\globallinkprefix\glslabel}{\glsxtr@textformat{#3}}%
1898     \else
1899         \glsxtr@textformat{\glslink{\globallinkprefix\glslabel}{#3}}%
1900     \fi
1901 \else
1902     \ifglsxtr@hyperoutside
1903         \glsdonohyperlink{\globallinkprefix\glslabel}{\glsxtr@textformat{#3}}%
1904     \else
1905         \glsxtr@textformat{\glsdonohyperlink{\globallinkprefix\glslabel}{#3}}%
1906     \fi
1907 \fi

```

Do write if it should occur after the link text:

```

1908 \ifglsxtrinitwrglossbefore
1909 \else
1910     \do@wrglossary{#2}%
1911 \fi

```

As the original definition:

```

1912 \let\ifKV@glslink@hyper\org@ifKV@glslink@hyper
1913 }

```

```

1914 \define@key{glossadd}{thevalue}{\def\@glsxtr@thevalue{\#1}}
1915 \define@key{glossadd}{theHvalue}{\def\@glsxtr@theHvalue{\#1}}
\glsadd Redefine to include \@glsxtr@record and suppress in headings
1916 \renewrobustcmd*\{\glsadd\}[2] [] {%
1917   \@glsxtrifinmark
1918   {}%
1919   {}%
1920   \@gls@adjustmode
1921   \@glsxtr@record{\#1}{\#2}{glossadd}%
1922   \glsdoifexists{\#2}%
1923   {}%
1924   \let\@glsnumberformat\@glsxtr@defaultnumberformat
1925   \edef\@gls@counter{\csname glo@\glsdetoklabel{\#2}@counter\endcsname}%
1926   \def\@glsxtr@thevalue{}%
1927   \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
1928   \setkeys{glossadd}{\#1}%
1929   \ifdefempty{\@glsxtr@thevalue}%
1930   {}%
1931   \@gls@saveentrycounter
1932   {}%
1933   {}%
1934   \let\theglsentrycounter\@glsxtr@thevalue
1935   \def\theHglsentrycounter{\@glsxtr@theHvalue}%
1936   {}%
Define sort key if necessary (in case of sort=use):
1937   \@gls@setsort{\#2}%
1938   \@@do@wrglossary{\#2}%
1939   {}%
1940 }%
1941 }

@field@linkdefs Default settings for \@gls@field@link
1942 \newcommand*\{@glsxtr@field@linkdefs}{%
1943   \let\glsxtrifwasfirstuse\@secondoftwo
1944   \let\glsifplural\@secondoftwo
1945   \let\glscapscase\@firstofthree
1946   \let\glsinsert\@empty
1947 }

```

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

```

assignfieldfont
1948 \newcommand*\@glsxtrassignfieldfont}[1]{%
1949   \ifglsentryexists{\#1}%
1950   {}%
1951   \ifglshasshort{\#1}%

```

```

1952   {%
1953     \glssetabrvfmt{\glscategory{#1}}%
1954     \glsifregular{#1}%
1955     {\let\@gls@field@font\glsxtrregularfont}%
1956     {\let\@gls@field@font\@firstofone}%
1957   }%
1958   {%
1959     \glsifnotregular{#1}%
1960     {\let\@gls@field@font\@firstofone}%
1961     {\let\@gls@field@font\glsxtrregularfont}%
1962   }%
1963 }%
1964 {%
1965   \let\@gls@field@font\@gobble
1966 }%
1967 }

```

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

```

1968 \def\@glstext@#1#2[#3]{%
1969   \glsxtrassignfieldfont{#2}%
1970   \@gls@field@link{#1}{#2}{\@gls@field@font{\glsaccesstext{#2}#3}}%
1971 }

```

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

```

1972 \def\@GLStext@#1#2[#3]{%
1973   \glsxtrassignfieldfont{#2}%
1974   \@gls@field@link[\let\glscapscase\@thirdofthree]{#1}{#2}%
1975   {\@gls@field@font{\GLSaccesstext{#2}\mfirstucMakeUppercase{#3}}}%
1976 }

```

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

```

1977 \def\@Glstext@#1#2[#3]{%
1978   \glsxtrassignfieldfont{#2}%
1979   \@gls@field@link[\let\glscapscase\@secondofthree]{#1}{#2}%
1980   {\@gls@field@font{\Glsaccesstext{#2}#3}}%
1981 }

```

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

```

1982 \newcommand*\glsxtrchecknohyperfirst[1]{%
1983   \glsifattribute{#1}{nohyperfirst}{true}{\KV@glslink@hyperfalse}{}%
1984 }

```

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

```

1985 \def\@glsfirst@#1#2[#3]{%
1986   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirst honours the nohyperfirst attribute.

```
1987  \@gls@field@link
1988  [\let\glsxtrifwasfirstuse\@firstoftwo
1989  \glsxtrchecknohyperfirst{#2}%
1990  ]{#1}{#2}%
1991  {\@gls@field@font{\glsaccessfirst{#2}#3}}%
1992 }
```

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

```
1993 \def\@Glsfirst@#1#2[#3]{%
1994  \glsxtrassignfieldfont{#2}%
```

Ensure that \Glsfirst honours the nohyperfirst attribute.

```
1995  \@gls@field@link
1996  [\let\glsxtrifwasfirstuse\@firstoftwo
1997  \let\glscapscase\@secondofthree
1998  \glsxtrchecknohyperfirst{#2}%
1999  ]%
2000  {#1}{#2}{\@gls@field@font{\Glsaccessfirst{#2}#3}}%
2001 }
```

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

```
2002 \def\@GLSfirst@#1#2[#3]{%
2003  \glsxtrassignfieldfont{#2}%
```

Ensure that \GLSfirst honours the nohyperfirst attribute.

```
2004  \@gls@field@link
2005  [\let\glsxtrifwasfirstuse\@firstoftwo
2006  \let\glscapscase\@thirdofthree
2007  \glsxtrchecknohyperfirst{#2}%
2008  ]%
2009  {#1}{#2}{\@gls@field@font{\GLSaccessfirst{#2}\mfirstuclMakeUppercase{#3}}}%
```

```
2010 }
```

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

```
2011 \def\@glsplural@#1#2[#3]{%
2012  \glsxtrassignfieldfont{#2}%
2013  \@gls@field@link[\let\glsifplural\@firstoftwo]{#1}{#2}%
2014  {\@gls@field@font{\glsaccessplural{#2}#3}}%
2015 }
```

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

```
2016 \def\@Glsplural@#1#2[#3]{%
2017  \glsxtrassignfieldfont{#2}%
2018  \@gls@field@link
2019  [\let\glsifplural\@firstoftwo
2020  \let\glscapscase\@secondofthree
2021  ]%
2022  {#1}{#2}{\@gls@field@font{\Glsaccessplural{#2}#3}}%
2023 }
```

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

```
2024 \def \@GLSplural@#1#2[#3]{%
2025   \glsxtrassignfieldfont{#2}%
2026   \gls@field@link
2027   [\let\glsifplural\@firstoftwo
2028     \let\glscapscase\@thirdofthree
2029   ]%
2030   {#1}{#2}{\gls@field@font{\GLSaccessplural{#2}\mfirstucMakeUppercase{#3}}}}
2031 }
```

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

```
2032 \def \@glsfirstplural@#1#2[#3]{%
2033   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2034   \gls@field@link
2035   [\let\glsxtrifwasfirstuse\@firstoftwo
2036     \let\glsifplural\@firstoftwo
2037     \glsxtrchecknohyperfirst{#2}%
2038   ]%
2039   {#1}{#2}{\gls@field@font{\glsaccessfirstplural{#2}#3}}%
2040 }
```

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

```
2041 \def \@Glsfirstplural@#1#2[#3]{%
2042   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2043   \gls@field@link
2044   [\let\glsxtrifwasfirstuse\@firstoftwo
2045     \let\glsifplural\@firstoftwo
2046     \let\glscapscase\@secondofthree
2047     \glsxtrchecknohyperfirst{#2}%
2048   ]%
2049   {#1}{#2}{\gls@field@font{\Glsaccessfirstplural{#2}#3}}%
2050 }
```

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

```
2051 \def \@GLSfirstplural@#1#2[#3]{%
2052   \glsxtrassignfieldfont{#2}%

```

Ensure that \glsfirstplural honours the nohyperfirst attribute.

```
2053   \gls@field@link
2054   [\let\glsxtrifwasfirstuse\@firstoftwo
2055     \let\glsifplural\@firstoftwo
2056     \let\glscapscase\@thirdofthree
2057     \glsxtrchecknohyperfirst{#2}%
2058   ]%
2059   {#1}{#2}%
2060   {\gls@field@font{\GLSaccessfirstplural{#2}\mfirstucMakeUppercase{#3}}%
2061 }
```

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

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

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

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

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

```
2072 \def\@GLSname@#1#2[#3]{%
2073   \glsxtrassignfieldfont{#2}%
2074   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2075   {#1}{#2}%
2076   {\gls@field@font{\GLSaccessname{#2}\mfirstucMakeUppercase{#3}}}}%
2077 }
```

\@glsdesc@

```
2078 \def\@glsdesc@#1#2[#3]{%
2079   \glsxtrassignfieldfont{#2}%
2080   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccessdesc{#2}#3}}%
2081 }
```

\@Glsdesc@ First letter uppercase version.

```
2082 \def\@Glsdesc@#1#2[#3]{%
2083   \glsxtrassignfieldfont{#2}%
2084   \gls@field@link
2085   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2086   {\gls@field@font{\Glsaccessdesc{#2}#3}}%
2087 }
```

\@GLSdesc@ All uppercase version.

```
2088 \def\@GLSdesc@#1#2[#3]{%
2089   \glsxtrassignfieldfont{#2}%
2090   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2091   {#1}{#2}{\gls@field@font{\GLSaccessdesc{#2}\mfirstucMakeUppercase{#3}}}}%
2092 }
```

@glsdescplural@ No case-changing version.

```
2093 \def\@glsdescplural@#1#2[#3]{%
2094   \glsxtrassignfieldfont{#2}%
2095   \gls@field@link
2096   [\let\glscapscase\@secondoftwo
```

```

2097   \let\glsifplural\@firstoftwo
2098 ]{#1}{#2}{\gls@field@font{\glsaccessdescplural{#2}{#3}}}
2099 }

@Glsdescplural@ First letter uppercase version.
2100 \def\@Glsdescplural@#1#2[#3]{%
2101   \glsxtrassignfieldfont{#2}%
2102   \gls@field@link
2103   [\let\glscapscase\@secondoftwo
2104     \let\glsifplural\@firstoftwo
2105   ]{#1}{#2}{\gls@field@font{\Glsaccessdescplural{#2}{#3}}}
2106 }

@GLSdescplural@ All uppercase version.
2107 \def\@GLSdesc@#1#2[#3]{%
2108   \glsxtrassignfieldfont{#2}%
2109   \gls@field@link
2110   [\let\glscapscase\@thirdoftwo
2111     \let\glsifplural\@firstoftwo
2112   ]%
2113   {#1}{#2}%
2114   {\gls@field@font{\GLSaccessdescplural{#2}\mfirstucMakeUppercase{#3}}}
2115 }

\@glssymbol@
2116 \def\@glssymbol@#1#2[#3]{%
2117   \glsxtrassignfieldfont{#2}%
2118   \gls@field@link{#1}{#2}{\gls@field@font{\glsaccesssymbol{#2}{#3}}}
2119 }

@\Glssymbol@ First letter uppercase version.
2120 \def\@Glssymbol@#1#2[#3]{%
2121   \glsxtrassignfieldfont{#2}%
2122   \gls@field@link
2123   [\let\glscapscase\@secondoftwo]%
2124   {#1}{#2}{\gls@field@font{\Glsaccesssymbol{#2}{#3}}}
2125 }

@\GLSsymbol@ All uppercase version.
2126 \def\@GLSsymbol@#1#2[#3]{%
2127   \glsxtrassignfieldfont{#2}%
2128   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2129   {#1}{#2}{\gls@field@font{\GLSaccesssymbol{#2}\mfirstucMakeUppercase{#3}}}
2130 }

lssymbolplural@ No case-changing version.
2131 \def\@glssymbolplural@#1#2[#3]{%
2132   \glsxtrassignfieldfont{#2}%

```

```

2133 \@gls@field@link
2134 [\let\glscapscase\@secondoftwo
2135 \let\glsifplural\@firstoftwo
2136 ]{#1}{#2}{\@gls@field@font{\glsaccesssymbolplural{#2}{#3}}}
2137 }

```

`lssymbolplural@` First letter uppercase version.

```

2138 \def\@Glssymbolplural@#1#2[#3]{%
2139   \glsxtrassignfieldfont{#2}%
2140   \@gls@field@link
2141   [\let\glscapscase\@secondoftwo
2142   \let\glsifplural\@firstoftwo
2143 ]{#1}{#2}{\@gls@field@font{\Glsaccesssymbolplural{#2}{#3}}}
2144 }

```

`Lsymbolplural@` All uppercase version.

```

2145 \def\@GLSsymbol@#1#2[#3]{%
2146   \glsxtrassignfieldfont{#2}%
2147   \@gls@field@link
2148   [\let\glscapscase\@thirddoftwo
2149   \let\glsifplural\@firstoftwo
2150 ]%
2151   {#1}{#2}%
2152   {\@gls@field@font{\GLSaccesssymbolplural{#2}\mfirstucMakeUppercase{#3}}}
2153 }

```

`\@Glsuseri@` First letter uppercase version.

```

2154 \def\@Glsuseri@#1#2[#3]{%
2155   \glsxtrassignfieldfont{#2}%
2156   \@gls@field@link
2157   [\let\glscapscase\@secondoftwo]{#1}{#2}%
2158   {\@gls@field@font{\Glsentryuseri{#2}{#3}}}
2159 }

```

`\@GLSuseri@` All uppercase version.

```

2160 \def\@GLSuseri@#1#2[#3]{%
2161   \glsxtrassignfieldfont{#2}%
2162   \@gls@field@link[\let\glscapscase\@thirddoftwo]%
2163   {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuseri{#2}{#3}}}}
2164 }

```

`\@Glsuserii@` First letter uppercase version.

```

2165 \def\@Glsuserii@#1#2[#3]{%
2166   \glsxtrassignfieldfont{#2}%
2167   \@gls@field@link
2168   [\let\glscapscase\@secondoftwo]%
2169   {#1}{#2}{\@gls@field@font{\Glsentryuserii{#2}{#3}}}
2170 }

```

```

\@GLSuserii@ All uppercase version.
2171 \def\@GLSuserii@#1#2[#3]{%
2172   \glsxtrassignfieldfont{#2}%
2173   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2174   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuserii{#2}{#3}}}}%
2175 }

\@Glsuseriii@ First letter uppercase version.
2176 \def\@Glsuseriii@#1#2[#3]{%
2177   \glsxtrassignfieldfont{#2}%
2178   \gls@field@link
2179   [\let\glscapscase\@secondoftwo]%
2180   {#1}{#2}{\gls@field@font{\Glsentryuseriii{#2}{#3}}}}%
2181 }

\@GLSuseriii@ All uppercase version.
2182 \def\@GLSuseriii@#1#2[#3]{%
2183   \glsxtrassignfieldfont{#2}%
2184   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2185   {#1}{#2}{\gls@field@font{\mfirstucMakeUppercase{\glsentryuseriii{#2}{#3}}}}%
2186 }

\@Glsuseriv@ First letter uppercase version.
2187 \def\@Glsuseriv@#1#2[#3]{%
2188   \glsxtrassignfieldfont{#2}%
2189   \gls@field@link
2190   [\let\glscapscase\@secondoftwo]%
2191   {#1}{#2}{\gls@field@font{\Glsentryuseriv{#2}{#3}}}}%
2192 }

\@GLSuseriv@ All uppercase version.
2193 \def\@GLSuseriv@#1#2[#3]{%
2194   \glsxtrassignfieldfont{#2}%
2195   \gls@field@link[\let\glscapscase\@thirdoftwo]%
2196   {#1}{#2}%
2197   {\gls@field@font{\mfirstucMakeUppercase{\glsentryuseriv{#2}{#3}}}}%
2198 }

\@Glsuserv@ First letter uppercase version.
2199 \def\@Glsuserv@#1#2[#3]{%
2200   \glsxtrassignfieldfont{#2}%
2201   \gls@field@link
2202   [\let\glscapscase\@secondoftwo]%
2203   {#1}{#2}{\gls@field@font{\Glsentryuserv{#2}{#3}}}}%
2204 }

\@GLSuserv@ All uppercase version.
2205 \def\@GLSuserv@#1#2[#3]{%

```

```

2206 \glsxtrassignfieldfont{#2}%
2207 \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2208 {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuserv{#2}#3}}}%
2209 }

```

\@Glsuservi@ First letter uppercase version.

```

2210 \def\@Glsuservi@#1#2[#3]{%
2211   \glsxtrassignfieldfont{#2}%
2212   \@gls@field@link
2213   [\let\glscapscase\@secondoftwo]%
2214   {#1}{#2}{\@gls@field@font{\Glsentryuserv{#2}#3}}%
2215 }

```

\@GLSuservi@ All uppercase version.

```

2216 \def\@GLSuservi@#1#2[#3]{%
2217   \glsxtrassignfieldfont{#2}%
2218   \@gls@field@link[\let\glscapscase\@thirdoftwo]%
2219   {#1}{#2}{\@gls@field@font{\mfirstucMakeUppercase{\glsentryuserv{#2}#3}}}%
2220 }

```

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

\@acrshort No case change.

```

2221 \def\@acrshort#1#2[#3]{%
2222   \glsdoifexists{#2}%
2223   {%
2224     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2225     \let\glsxtrifwasfirstuse\@secondoftwo
2226     \let\glsifplural\@secondoftwo
2227     \let\glscapscase\@firstofthree
2228     \let\glsinsert\@empty
2229     \def\glscustomtext{%
2230       \acronymfont{\glsaccessshort{#2}}#3%
2231     }%
2232     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2233   }%
2234   \glspostlinkhook
2235 }

```

\@Acrshort First letter uppercase.

```

2236 \def\@Acrshort#1#2[#3]{%
2237   \glsdoifexists{#2}%
2238   {%
2239     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2240     \let\glsxtrifwasfirstuse\@secondoftwo
2241     \let\glsifplural\@secondoftwo
2242     \let\glscapscase\@secondofthree
2243     \let\glsinsert\@empty

```

```

2244     \def\glscustomtext{%
2245         \acronymfont{\Glsaccessshort{#2}}#3%
2246     }%
2247     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2248 }%
2249 \glspostlinkhook
2250 }

```

\@ACRshort All uppercase.

```

2251 \def\@ACRshort#1#2[#3]{%
2252     \glsdoifexists{#2}%
2253     {%
2254         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2255         \let\glsxtrifwasfirstuse\@secondoftwo
2256         \let\glsifplural\@secondoftwo
2257         \let\glscapscase\@thirdofthree
2258         \let\glsinsert\@empty
2259         \def\glscustomtext{%
2260             \mfirstucMakeUppercase{\acronymfont{\glsaccessshort{#2}}#3}%
2261         }%
2262         \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2263     }%
2264     \glspostlinkhook
2265 }

```

\@acrshortpl No case change.

```

2266 \def\@acrshortpl#1#2[#3]{%
2267     \glsdoifexists{#2}%
2268     {%
2269         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2270         \let\glsxtrifwasfirstuse\@secondoftwo
2271         \let\glsifplural\@firstoftwo
2272         \let\glscapscase\@firstofthree
2273         \let\glsinsert\@empty
2274         \def\glscustomtext{%
2275             \acronymfont{\glsaccessshortpl{#2}}#3%
2276         }%
2277         \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2278     }%
2279     \glspostlinkhook
2280 }

```

\@Acrshortpl First letter uppercase.

```

2281 \def\@Acrshortpl#1#2[#3]{%
2282     \glsdoifexists{#2}%
2283     {%
2284         \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2285         \let\glsxtrifwasfirstuse\@secondoftwo
2286         \let\glsifplural\@firstoftwo

```

```

2287   \let\glscapscase\@secondofthree
2288   \let\glsinsert\@empty
2289   \def\glscustomtext{%
2290     \acronymfont{\Glsaccessshortpl{#2}}#3%
2291   }%
2292   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2293 }%
2294 \glspostlinkhook
2295 }

```

\@ACRshortpl All uppercase.

```

2296 \def\@ACRshortpl#1#2[#3]{%
2297   \glsdoifexists{#2}{%
2298     {%
2299       \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2300       \let\glsxtrifwasfirstuse\@secondoftwo
2301       \let\glsifplural\@firstoftwo
2302       \let\glscapscase\@thirdofthree
2303       \let\glsinsert\@empty
2304       \def\glscustomtext{%
2305         \mfirstrucMakeUppercase{\acronymfont{\glsaccessshortpl{#2}}#3}%
2306       }%
2307       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2308     }%
2309   \glspostlinkhook
2310 }

```

\@acrlong No case change.

```

2311 \def\@acrlong#1#2[#3]{%
2312   \glsdoifexists{#2}{%
2313     {%
2314       \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2315       \let\glsxtrifwasfirstuse\@secondoftwo
2316       \let\glsifplural\@secondoftwo
2317       \let\glscapscase\@firstofthree
2318       \let\glsinsert\@empty
2319       \def\glscustomtext{%
2320         \acronymfont{\glsaccesslong{#2}}#3%
2321       }%
2322       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2323     }%
2324   \glspostlinkhook
2325 }

```

\@Acrlong First letter uppercase.

```

2326 \def\@Acrlong#1#2[#3]{%
2327   \glsdoifexists{#2}{%
2328     {%
2329       \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper

```

```

2330   \let\glsxtrifwasfirstuse\@secondoftwo
2331   \let\glsifplural\@secondoftwo
2332   \let\glscapscase\@secondofthree
2333   \let\glsinsert\@empty
2334   \def\glscustomtext{%
2335     \acronymfont{\Glsaccesslong{#2}}#3%
2336   }%
2337   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2338 }%
2339 \glspostlinkhook
2340 }

```

\@ACRlong All uppercase.

```

2341 \def\@ACRlong#1#2[#3]{%
2342   \glsdoifexists{#2}%
2343   {%
2344     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2345     \let\glsxtrifwasfirstuse\@secondoftwo
2346     \let\glsifplural\@secondoftwo
2347     \let\glscapscase\@thirdofthree
2348     \let\glsinsert\@empty
2349     \def\glscustomtext{%
2350       \mfirstucMakeUppercase{\acronymfont{\glsaccesslong{#2}}#3}%
2351     }%
2352     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2353   }%
2354   \glspostlinkhook
2355 }

```

\@acrlongpl No case change.

```

2356 \def\@acrlongpl#1#2[#3]{%
2357   \glsdoifexists{#2}%
2358   {%
2359     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
2360     \let\glsxtrifwasfirstuse\@secondoftwo
2361     \let\glsifplural\@firstoftwo
2362     \let\glscapscase\@firstofthree
2363     \let\glsinsert\@empty
2364     \def\glscustomtext{%
2365       \acronymfont{\glsaccesslongpl{#2}}#3%
2366     }%
2367     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2368   }%
2369   \glspostlinkhook
2370 }

```

\@Acrlongpl First letter uppercase.

```

2371 \def\@Acrlongpl#1#2[#3]{%
2372   \glsdoifexists{#2}%

```

```

2373 {%
2374   \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2375   \let\glsxtrifwasfirstuse\@secondoftwo
2376   \let\glsifplural\@firstoftwo
2377   \let\glscapscase\@secondofthree
2378   \let\glsinsert\@empty
2379   \def\glscustomtext{%
2380     \acronymfont{\Glsaccesslongpl{#2}}#3%
2381   }%
2382   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2383 }%
2384 \glspostlinkhook
2385 }

```

\@ACRlongpl All uppercase.

```

2386 \def\@ACRlongpl#1#2[#3]{%
2387   \glsdoifexists{#2}{%
2388     {%
2389       \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
2390       \let\glsxtrifwasfirstuse\@secondoftwo
2391       \let\glsifplural\@firstoftwo
2392       \let\glscapscase\@thirdofthree
2393       \let\glsinsert\@empty
2394       \def\glscustomtext{%
2395         \mfirstucMakeUppercase{\acronymfont{\glsaccesslongpl{#2}}#3}%
2396       }%
2397       \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
2398     }%
2399   \glspostlinkhook
2400 }

```

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

\@glsaddkey

```

2401 \renewcommand*{\glsaddkey}[7]{%
2402   \key@ifundefined{glossentry}{#1}{%
2403     {%
2404       \define@key{glossentry}{#1}{\csdef{@glo@#1}{##1}}%
2405       \appto{\gls@keymap}{, #1}{#1}%
2406       \appto{\@newglossaryentryprehook}{\csdef{@glo@#1}{#2}}%
2407       \appto{\@newglossaryentryposthook}{%
2408         \letcs{@glo@tmp}{@glo@#1}%
2409         \gls@assign@field{#2}{\glo@label}{#1}{@glo@tmp}%
2410       }%
2411       \newcommand*{#3}[1]{\gls@entry@field{##1}{#1}}%
2412       \newcommand*{#4}[1]{\Gls@entry@field{##1}{#1}}%

```

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

```

2413 \ifcsdef@gls@user@#1@{%

```

```

2414  {%
2415      \PackageError{glossaries}%
2416      {Can't define '\string#5' as helper command
2417       '\expandafter\string\csname @gls@user@#1@\endcsname' already
2418       exists}%
2419  {}%
2420 }%
2421 {%
2422     \expandafter\newcommand\expandafter*\expandafter
2423         {\csname @gls@user@#1\endcsname}[2] []{%
2424             \new@ifnextchar[%
2425                 {\csuse{@gls@user@#1@}{##1}{##2}}%
2426                 {\csuse{@gls@user@#1@}{##1}{##2}[]}}%
2427     \csdef{@gls@user@#1@}##1##2[##3]{%
2428         \@gls@field@link{##1}{##2}{#3{##2}##3}%
2429     }%
2430     \newrobustcmd*{#5}{%
2431         \expandafter\@gls@hyp@opt\csname @gls@user@#1\endcsname}%
2432 }%

```

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

```

2433 \ifcsdef{@Gls@user@#1@}%
2434 {%
2435     \PackageError{glossaries}%
2436     {Can't define '\string#6' as helper command
2437      '\expandafter\string\csname @Gls@user@#1@\endcsname' already
2438      exists}%
2439  {}%
2440 }%
2441 {%
2442     \expandafter\newcommand\expandafter*\expandafter
2443         {\csname @Gls@user@#1\endcsname}[2] []{%
2444             \new@ifnextchar[%
2445                 {\csuse{@Gls@user@#1@}{##1}{##2}}%
2446                 {\csuse{@Gls@user@#1@}{##1}{##2}[]}}%
2447     \csdef{@Gls@user@#1@}##1##2[##3]{%
2448         \@gls@field@link[\let\glscapscase{@secondofthree}%
2449             {##1}{##2}{#4{##2}##3}%
2450     }%
2451     \newrobustcmd*{#6}{%
2452         \expandafter\@gls@hyp@opt\csname @Gls@user@#1\endcsname}%
2453 }%

```

Finally the all caps version (modified):

```

2454 \ifcsdef{@GLS@user@#1@}%
2455 {%
2456     \PackageError{glossaries}%
2457     {Can't define '\string#7' as helper command
2458      '\expandafter\string\csname @GLS@user@#1@\endcsname' already
2459      exists}%

```

```

2460     {}%
2461   }%
2462   {%
2463     \expandafter\newcommand\expandafter*\expandafter
2464       {\csname @GLS@user@\#1\endcsname}[2] []{%
2465         \new@ifnextchar[%
2466           {\csuse{@GLS@user@\#1@}{##1}{##2}}%
2467           {\csuse{@GLS@user@\#1@}{##1}{##2}[]}}%
2468         \csdef{@GLS@user@\#1@}{##1##2##3}{%
2469           \gls@field@link[\let\glscaps@case{@thirdofthree}%
2470             {##1}{##2}{\mfirstuc@MakeUppercase{##3}{##2}{##3}}]%
2471         }%
2472         \newrobustcmd*{##7}{%
2473           \expandafter\gls@hyp@opt\csname @GLS@user@\#1\endcsname}%
2474       }%
2475     }%
2476   {%
2477     \PackageError{glossaries-extra}{Key '#1' already exists}{}%
2478   }%
2479 }

```

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

```
2480 \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.

```
2481 \let\glsxtr@org@checkfirsthyper\gls@link@checkfirsthyper
2482 \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.

```
2483 \ifglsused{\glslabel}%
2484   {\let\glsxtrifwasfirstuse@secondoftwo}%
2485   {\let\glsxtrifwasfirstuse@firstoftwo}%
```

Store the category label for convenience.

```
2486 \edef\glscategorylabel{\glscategory{\glslabel}}%
2487 \ifglsused{\glslabel}%
2488 {%
2489   \glsifcategoryattribute{\glscategorylabel}{nohypernext}{true}%
2490   {\KV@glslink@hyperfalse}{}%
2491 }%
2492 {%
2493   \glsifcategoryattribute{\glscategorylabel}{nohyperfirst}{true}%
2494   {\KV@glslink@hyperfalse}{}%
2495 }%
2496 \glslinkcheckfirsthyperhook
2497 }
```

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.

```
2498 \ifdef\do@glsdisablehyperinlist
2499 {%
2500   \let\glsxtr@do@glsdisablehyperinlist\do@glsdisablehyperinlist
2501   \renewcommand*\do@glsdisablehyperinlist{%
2502     \glsxtr@do@glsdisablehyperinlist
2503     \glsifattribute{\glslabel}{nohyper}{true}{\KV@glslink@hyperfalse}{}%
2504   }
2505 }
2506 {}
```

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

```
2507 \define@boolkey{glslink}{noindex}[true]{}
2508 \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

```
2509 \ifdef\gls@setdefault@glslink@opts
2510 {%
2511   \renewcommand*\gls@setdefault@glslink@opts{%
2512     \KV@glslink@noindexfalse
2513     \glsxtrsetaliasnoindex
2514   }
2515 }
2516 {}
```

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

```
2517 \newcommand*\gls@setdefault@glslink@opts{%
2518   \KV@glslink@noindexfalse
2519   \glsxtrsetaliasnoindex
2520 }
2521 \preto\do@glsdisablehyperinlist{\gls@setdefault@glslink@opts}
2522 }
```

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.)

```
2523 \providecommand*\glsxtrsetaliasnoindex{%
2524   \KV@glslink@noindextrue
2525 }
```

setaliasnoindex

```
2526 \newcommand*\glsxtrsetaliasnoindex{%
2527   \glsxtrifhasfield{alias}{\glslabel}%
2528   {%
2529     \let\glsxtrindexaliased@glsxtrindexaliased
```

```

2530   \glsxtrsetaliasnoindex
2531   \let\glsxtrindexaliased\@no@glsxtrindexaliased
2532 }%
2533 {}%
2534 }

xtrindexaliased
2535 \newcommand{\@glsxtrindexaliased}{%
2536   \ifKV@glslink@noindex
2537   \else
2538     \begingroup
2539     \let\@glsnumberformat\glsxtr@defaultnumberformat
2540     \edef\@gls@counter{\csname glo@\glsdetoklabel{\glslabel}\@counter\endcsname}%
2541     \glsxtr@saveentrycounter
2542     \">@do@wrglossary{\glsxtralias{\glslabel}}%
2543     \endgroup
2544   \fi
2545 }

xtrindexaliased
2546 \newcommand{\@no@glsxtrindexaliased}{%
2547   \PackageError{glossaries-extra}{\string\glsxtrindexaliased\space
2548   not permitted outside definition of \string\glsxtrsetaliasnoindex}%
2549 }%
2550 }

xtrindexaliased Provide a command to redirect alias indexing, but only allow it to be used within \glsxtrsetaliasnoindex.
2551 \let\glsxtrindexaliased\@no@glsxtrindexaliased

tDefaultGlsOpts Set the default options for \glslink etc.
2552 \newcommand*\GlsXtrSetDefaultGlsOpts}[1]{%
2553   \renewcommand*\@gls@setdefault@glslink@opts}{%
2554   \setkeys{glslink}{#1}%
2555   \glsxtrsetaliasnoindex
2556 }%
2557 }

lsxtrifindexing Provide user level command to access it in \glswriteentry.
2558 \newcommand*\glsxtrifindexing}[2]{%
2559   \ifKV@glslink@noindex #2\else #1\fi
2560 }

\glswriteentry Redefine to test for indexonlyfirst category attribute.
2561 \renewcommand*\glswriteentry}[2]{%
2562   \glsxtrifindexing
2563 }%
2564   \ifglsindexonlyfirst
2565     \ifglsused{#1}

```

```

2566     {\glsxtrdoautoindexname{\#1}{dualindex}}%
2567     {\#2}%
2568 \else
2569     \glsifattribute{\#1}{indexonlyfirst}{true}%
2570     {\ifglsused{\#1}
2571         {\glsxtrdoautoindexname{\#1}{dualindex}}%
2572         {\#2}%
2573     {\#2}%
2574     \fi
2575 }%
2576 {}%
2577 }

```

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

```

2578 \appto\@do@@wrglossary{\glsxtr@do@@wrindex
2579   \glsxtrdownrglossaryhook{\gls@label}%
2580 }

```

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

Similarly for the “noidx” version:

`s@noidxglossary`

```

2581 \appto\gls@noidxglossary{\glsxtr@do@@wrindex
2582   \glsxtrdownrglossaryhook{\gls@label}%
2583 }

```

`xtr@do@@wrindex`

```

2584 \newcommand*{\glsxtr@do@@wrindex}{%
2585   \glsxtrdoautoindexname{\gls@label}{dualindex}%
2586 }

```

`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.)

```
2587 \newcommand*{\glsxtrdownrglossaryhook}[1]{}
```

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

```

2588 \newcommand*{\gls@alt@hyp@opt}[1]{%
2589   \let\glslinkvar\@firstofthree
2590   \let\gls@hyp@opt@cs\relax
2591   \@ifstar{\gls@hyp@opt}%
2592   {\ifnextchar+{%
2593     {\@firstoftwo{\p@gls@hyp@opt}}%
2594   {%
2595     \expandafter\ifnextchar\gls@alt@hyp@opt@char
2596     {\@firstoftwo{\gls@alt@hyp@opt}}%
2597     {\#1}%
2598   }
2599 }

```

```

2598    }%
2599 }%
2600 }

alt@gls@hyp@opt User version
2601 \newcommand*{\@alt@gls@hyp@opt}[1] []{%
2602   \let\glslinkvar\@firstoftree
2603   \expandafter\gls@hyp@opt@cs\expandafter[\@gls@alt@hyp@opt@keys,#1]}}

lt@hyp@opt@char Contains the character used as the command modifier.
2604 \newcommand*{\@gls@alt@hyp@opt@char}{}}

lt@hyp@opt@keys Contains the option list used as the command modifier.
2605 \newcommand*{\@gls@alt@hyp@opt@keys}{}}

rSetAltModifier
2606 \newcommand*{\GlsXtrSetAltModifier}[2]{%
2607   \let\@gls@hyp@opt\@gls@alt@hyp@opt
2608   \def\@gls@alt@hyp@opt@char{\#1}%
2609   \def\@gls@alt@hyp@opt@keys{\#2}%
2610 }

org@dohyperlink
2611 \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.
2612 \ifdef\glsnavhyperlink
2613 {
2614   \renewcommand*{\glsnavhyperlink}[3][\@glo@type]{%
2615     \edef\gls@grplabel{\#2}\protected@edef\gls@grptitle{\#3}%
Scope:
2616   {%
2617     \let\glsdohyperlink\glsxtr@org@dohyperlink
2618     \glslink{\glsnavhyperlinkname{\#1}{\#2}}{\#3}%
2619   }%
2620 }%
2621 }
2622 {}

\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 tem-
porarily makes \gls behave like \glstext[hyper=false,noindex]. (This will be overrid-
den 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.

```

2623 \renewcommand*{\glsdohyperlink}[2]{%
2624   \glshasattribute{\glslabel}{targeturl}%
2625   {%
2626     \glshasattribute{\glslabel}{targetname}%
2627     {%
2628       \glshasattribute{\glslabel}{targetcategory}%
2629       {%
2630         \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
2631           \glsgetattribute{\glslabel}{targetcategory}}%
2632           \glsgetattribute{\glslabel}{targetname}}%
2633           {{\glsxtrprotectlinks#2}}%
2634       }%
2635       {%
2636         \hyperref{\glsgetattribute{\glslabel}{targeturl}}{%
2637           {}%
2638             \glsgetattribute{\glslabel}{targetname}}%
2639             {{\glsxtrprotectlinks#2}}%
2640           }%
2641       }%
2642       {%
2643         \href{\glsgetattribute{\glslabel}{targeturl}}{%
2644           {{\glsxtrprotectlinks#2}}%
2645         }%
2646       }%
2647     }%

```

Check for alias.

```

2648   \glsfieldfetch{\glslabel}{alias}{\gloaliaslabel}%
2649   \ifdefvoid\gloaliaslabel
2650   {%
2651     \glsxtrhyperlink{\gloaliaslabel}{\glsxtrprotectlinks#2}%
2652   }%
2653   {%

```

Redirect link to the alias target.

```

2654   \glsxtrhyperlink
2655     {\glolinkprefix\glsdetoklabel{\gloaliaslabel}}%
2656     {{\glsxtrprotectlinks#2}}%
2657   }%
2658 }%
2659 }%

```

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

```

2660 \ifdef{@glsshowtarget
2661 {
2662   \newcommand{\glsxtrhyperlink}[2]{%
2663     @_glsshowtarget{#1}%
2664     \hyperlink{#1}{#2}%

```

```

2665  }%
2666 }
2667 {
2668 \newcommand{\glsxtrhyperlink}[2]{\hyperlink{#1}{#2}}%
2669 }

```

`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.

```

2670 \renewrobustcmd*{\glshyperlink}[2][\glsentrytext{\glo@label}]{%
2671 \glsdoifexists{#2}%
2672 {%
2673 \def\glo@label{#2}%
2674 {\edef\glslabel{#2}%
2675 \glslink{\glo@linkprefix\glslabel}{#1}}%
2676 }%
2677 }

```

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

```

2678 \renewcommand{\glsdisablehyper}{%
2679 \KV@glslink@hyperfalse
2680 \def\glslink{\glsdonohyperlink}%
2681 \let\gls@target\gls@secondoftwo
2682 }

```

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

```

2683 \renewcommand{\glsenablehyper}{%
2684 \KV@glslink@hypertrue
2685 \def\glslink{\glsdohyperlink}%
2686 \def\gls@target{\glsdohypertarget}%
2687 }

```

`\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.

```
2688 \def\glsdonohyperlink#1#2{\glsxtrprotectlinks{#2}}
```

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

```

2689 \ifcsundef{hyperlink}%
2690 {%
2691 \def\glslink{\glsdonohyperlink}%
2692 }%
2693 {%
2694 \def\glslink{\glsdohyperlink}%
2695 }

```

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

```

2696 \newcommand*{\glsxtrprotectlinks}{%
2697   \KV@glslink@hyperfalse
2698   \KV@glslink@noindextrue
2699   \let\@gls@\@glsxtr@p@text@
2700   \let\@Gls@\@Glsxtr@p@text@
2701   \let\@GLS@\@GLSxtr@p@text@
2702   \let\@glspl@\@glsxtr@p@plural@
2703   \let\@Glspl@\@Glsxtr@p@plural@
2704   \let\@GLSpl@\@GLSxtr@p@plural@
2705   \let\@glsxtrshort@\glsxtr@p@short@
2706   \let\@Glsxtrshort@\Glsxtr@p@short@
2707   \let\@GLSxtrshort@\GLSxtr@p@short@
2708   \let\@glsxtrlong@\glsxtr@p@long@
2709   \let\@Glsxtrlong@\Glsxtr@p@long@
2710   \let\@GLSxtrlong@\GLSxtr@p@long@
2711   \let\@glsxtrshortpl@\glsxtr@p@shortpl@
2712   \let\@Glsxtrshortpl@\Glsxtr@p@shortpl@
2713   \let\@GLSxtrshortpl@\GLSxtr@p@shortpl@
2714   \let\@glsxtrlongpl@\glsxtr@p@longpl@
2715   \let\@Glsxtrlongpl@\Glsxtr@p@longpl@
2716   \let\@GLSxtrlongpl@\GLSxtr@p@longpl@
2717   \let\@acrshort@\glsxtr@p@acrshort@
2718   \let\@Acrshort@\Glsxtr@p@acrshort@
2719   \let\@ACRshort@\GLSxtr@p@acrshort@
2720   \let\@acrshortpl@\glsxtr@p@acrshortpl@
2721   \let\@Acrshortpl@\Glsxtr@p@acrshortpl@
2722   \let\@ACRshortpl@\GLSxtr@p@acrshortpl@
2723   \let\@acrlong@\glsxtr@p@acrlong@
2724   \let\@Acrlong@\Glsxtr@p@acrlong@
2725   \let\@ACRLong@\GLSxtr@p@acrlong@
2726   \let\@acrlongpl@\glsxtr@p@acrlongpl@
2727   \let\@Acrlongpl@\Glsxtr@p@acrlongpl@
2728   \let\@ACRLongpl@\GLSxtr@p@acrlongpl@
2729 }

```

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

```

@glsxtr@p@text@
2730 \def\@glsxtr@p@text@#1#2[#3]{{\@glstext@{#1}{#2}[#3]}}
@Glsxtr@p@text@
2731 \def\@Glsxtr@p@text@#1#2[#3]{{\@Glstext@{#1}{#2}[#3]}}
@GLSxtr@p@text@
2732 \def\@GLSxtr@p@text@#1#2[#3]{{\@GLStext@{#1}{#2}[#3]}}
lsxtr@p@plural@
2733 \def\@glsxtr@p@plural@#1#2[#3]{{\@glsplural@{#1}{#2}[#3]}}

```

```

lsxtr@p@plural@
2734 \def\@Glsxtr@p@plural@#1#2[#3]{{\@Glsplural@{#1}{#2}[#3]}}
LSxtr@p@plural@
2735 \def\@GLSxtr@p@plural@#1#2[#3]{{\@GLSplural@{#1}{#2}[#3]}}
glsxtr@p@short@
2736 \def\@glsxtr@p@short@#1#2[#3]{%
2737   {%
2738     \glssetabbrvfmt{\glscategory{#2}}%
2739     \glsabbrvfont{\glsentryshort{#2}}#3%
2740   }%
2741 }

Glsxtr@p@short@
2742 \def\@Glsxtr@p@short@#1#2[#3]{%
2743   {%
2744     \glssetabbrvfmt{\glscategory{#2}}%
2745     \glsabbrvfont{\Glsentryshort{#2}}#3%
2746   }%
2747 }

GLSxtr@p@short@
2748 \def\@GLSxtr@p@short@#1#2[#3]{%
2749   {%
2750     \glssetabbrvfmt{\glscategory{#2}}%
2751     \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshort{#2}}#3}%
2752   }%
2753 }

sxtr@p@shortpl@
2754 \def\@glsxtr@p@shortpl@#1#2[#3]{%
2755   {%
2756     \glssetabbrvfmt{\glscategory{#2}}%
2757     \glsabbrvfont{\glsentryshortpl{#2}}#3%
2758   }%
2759 }

sxtr@p@shortpl@
2760 \def\@Glsxtr@p@shortpl@#1#2[#3]{%
2761   {%
2762     \glssetabbrvfmt{\glscategory{#2}}%
2763     \glsabbrvfont{\Glsentryshortpl{#2}}#3%
2764   }%
2765 }

Sxtr@p@shortpl@
2766 \def\@GLSxtr@p@shortpl@#1#2[#3]{%

```

```

2767  {%
2768   \glssetabrvfmt{\glscategory{#2}}%
2769   \mfirstucMakeUppercase{\glsabbrvfont{\glsentryshortpl{#2}}#3}%
2770 }%
2771 }

@glsxtr@p@long@
2772 \def@glsxtr@p@long@#1#2[#3]{{\glsentrylong{#2}}#3}

@Glsxtr@p@long@
2773 \def@Glsxtr@p@long@#1#2[#3]{{\Glsentrylong{#2}}#3}

@GLSxtr@p@long@
2774 \def@GLSxtr@p@long@#1#2[#3]{{%
2775   \mfirstucMakeUppercase{\glslongfont{\glsentrylong{#2}}#3}}}

lsxtr@p@longpl@
2776 \def@glsxtr@p@longpl@#1#2[#3]{{\glsentrylongpl{#2}}#3}

lsxtr@p@longpl@
2777 \def@Glsxtr@p@longpl@#1#2[#3]{{\glslongfont{\Glsentrylongpl{#2}}#3}}

LSxtr@p@longpl@
2778 \def@GLSxtr@p@longpl@#1#2[#3]{{%
2779   \mfirstucMakeUppercase{\glslongfont{\glsentrylongpl{#2}}#3}}}

xtr@p@acrshort@
2780 \def@glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\glsentryshort{#2}}#3}}

xtr@p@acrshort@
2781 \def@Glsxtr@p@acrshort@#1#2[#3]{{\acronymfont{\Glsentryshort{#2}}#3}}

xtr@p@acrshort@
2782 \def@GLSxtr@p@acrshort@#1#2[#3]{{%
2783   \mfirstucMakeUppercase{\acronymfont{\glsentryshort{#2}}#3}}}

r@p@acrshortpl@
2784 \def@glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\glsentryshortpl{#2}}#3}}

r@p@acrshortpl@
2785 \def@Glsxtr@p@acrshortpl@#1#2[#3]{{\acronymfont{\Glsentryshortpl{#2}}#3}}

r@p@acrshortpl@
2786 \def@GLSxtr@p@acrshortpl@#1#2[#3]{{%
2787   \mfirstucMakeUppercase{\acronymfont{\glsentryshortpl{#2}}#3}}}

sxtr@p@acrlong@
2788 \def@glsxtr@p@acrlong@#1#2[#3]{{\glsentrylong{#2}}#3}

```

```

sxtr@p@acrlong@
2789 \def\@Glsxtr@p@acrlong@#1#2[#3]{{\Glsentrylong{#2}#3}}
Sxtr@p@acrlong@
2790 \def\@GLSxtr@p@acrlong@#1#2[#3]{%
2791 {\mfirstucMakeUppercase{\glsentrylong{#2}#3}}}
tr@p@acrlongpl@
2792 \def\@glsxtr@p@acrlongpl@#1#2[#3]{{\glsentrylongpl{#2}#3}}
tr@p@acrlongpl@
2793 \def\@Glsxtr@p@acrlongpl@#1#2[#3]{{\Glsentrylongpl{#2}#3}}
tr@p@acrlongpl@
2794 \def\@GLSxtr@p@acrlongpl@#1#2[#3]{%
2795 {\mfirstucMakeUppercase{\glsentrylongpl{#2}#3}}}

Commands to minimise conflict.

\@glsxtrp@opt
2796 \newcommand*{\@glsxtrp@opt}{hyper=false,noindex}

\glsxtrsetpopts Used in glossary to switch hyperlinks on for the \glsxtrp type of commands.
2797 \newcommand*{\glsxtrsetpopts}[1]{%
2798 \renewcommand*{\@glsxtrp@opt}{#1}%
2799 }

\lossxtrsetpopts Used in glossary to switch hyperlinks on for the \glsxtrp type of commands.
2800 \newcommand*{\lossxtrsetpopts}{%
2801 \glsxtrsetpopts{noindex}%
2802 }

\@@glsxtrp
2803 \newrobustcmd*{\@@glsxtrp}[2]{%
Add scope.
2804 {%
2805 \let\glspostlinkhook\relax
2806 \csname#1\expandafter\endcsname\expandafter[\@glsxtrp@opt]{#2}[]%
2807 }%
2808 }

\@glsxtrp
2809 \newrobustcmd*{\@glsxtrp}[2]{%
2810 \ifcsdef{gls#1}{%
2811 {%
2812 \@@glsxtrp{gls#1}{#2}%
2813 }%

```

```

2814  {%
2815    \ifcsdef{glsxtr#1}%
2816    {%
2817      \@@glsxtrp{glsxtr#1}{#2}%
2818    }%
2819    {%
2820      \PackageError{glossaries-extra}{‘#1’ not recognised by
2821        \string\glsxtrp{}}{%
2822    }%
2823  }%
2824 }

\@Glsxtrp
2825 \newrobustcmd*\@Glsxtrp}[2]{%
2826   \ifcsdef{Gls#1}%
2827   {%
2828     \@@glsxtrp{Gls#1}{#2}%
2829   }%
2830   {%
2831     \ifcsdef{Glsxtr#1}%
2832     {%
2833       \@@glsxtrp{Glsxtr#1}{#2}%
2834     }%
2835     {%
2836       \PackageError{glossaries-extra}{‘#1’ not recognised by
2837         \string\Glsxtrp{}}{%
2838     }%
2839   }%
2840 }

\@GLSxtrp
2841 \newrobustcmd*\@GLSxtrp}[2]{%
2842   \ifcsdef{GLS#1}%
2843   {%
2844     \@@glsxtrp{GLS#1}{#2}%
2845   }%
2846   {%
2847     \ifcsdef{GLSxtr#1}%
2848     {%
2849       \@@glsxtrp{GLSxtr#1}{#2}%
2850     }%
2851     {%
2852       \PackageError{glossaries-extra}{‘#1’ not recognised by
2853         \string\GLSxtrp{}}{%
2854     }%
2855   }%
2856 }

\glsxtr@entry@p

```

```

2857 \newrobustcmd*\glsxtr@headentry@p}[2]{%
2858   \glsifattribute{#1}{headuc}{true}{%
2859     {%
2860       \mfirstucMakeUppercase{\gls@entry@field{#1}{#2}}%
2861     }%
2862     {%
2863       \gls@entry@field{#1}{#2}%
2864     }%
2865   }

```

\glsxtrp Not robust as it needs to expand somewhat.

```

2866 \ifdef\texorpdfstring
2867 {
2868   \newcommand{\glsxtrp}[2]{%
2869     \protect\NoCaseChange
2870     {%
2871       \protect\texorpdfstring
2872       {%
2873         \protect\glsxtrifinmark
2874         {%
2875           \ifcsdef{glsxtrhead#1}{%
2876             {%
2877               \protect\csuse{glsxtrhead#1}{#2}}%
2878             }%
2879             {%
2880               \glsxtr@headentry@p{#2}{#1}}%
2881             }%
2882           }%
2883           {%
2884             \glsxtrp{#1}{#2}}%
2885           }%
2886         }%
2887         {%
2888           \protect\gls@entry@field{#2}{#1}}%
2889         }%
2890       }%
2891     }%
2892   }
2893 {
2894   \newcommand{\glsxtrp}[2]{%
2895     \protect\NoCaseChange
2896     {%
2897       \protect\glsxtrifinmark
2898       {%
2899         \ifcsdef{glsxtrhead#1}{%
2900           {%
2901             \protect\csuse{glsxtrhead#1}}%
2902           }%
2903           {%

```

```

2904      \glsxtr@headentry@p{#2}{#1}%
2905      }%
2906      }%
2907      {%
2908      \glsxtrp{#1}{#2}%
2909      }%
2910      }%
2911  }%
2912 }
```

Provide short synonyms for the most common option.

```
\glsps
2913 \newcommand*\glsps{\glsxtrp{short}}
\glspt
2914 \newcommand*\glspt{\glsxtrp{text}}
```

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

```

2915 \ifdef\texorpdfstring
2916 {
2917   \newcommand{\Glsxtrp}[2]{%
2918     \protect\NoCaseChange
2919     {%
2920       \protect\texorpdfstring
2921       {%
2922         \protect\glsxtrifinmark
2923         {%
2924           \ifcsdef{Glsxtrhead#1}%
2925             {%
2926               \protect\csuse{Glsxtrhead#1}{#2}%
2927             }%
2928             {%
2929               \protect\@Gls@entry@field{#2}{#1}%
2930             }%
2931             }%
2932             {%
2933               \glsxtrp{#1}{#2}%
2934             }%
2935           }%
2936           {%
2937             \protect\@gls@entry@field{#2}{#1}%
2938           }%
2939         }%
2940     }
2941 }
2942 {
2943 \newcommand{\Glsxtrp}[2]{%
```

```

2944 \protect\NoCaseChange
2945 {%
2946   \protect\glsxtrifinmark
2947   {%
2948     \ifcsdef{Glsxtrhead#1}%
2949     {%
2950       \protect\csuse{Glsxtrhead#1}%
2951     }%
2952     {%
2953       \protect\@Gls@entry@field{#2}{#1}%
2954     }%
2955   }%
2956   {%
2957     \@Glsxtrp{#1}{#2}%
2958   }%
2959 }
2960 }%
2961 }

```

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

```

2962 \ifdef\texorpdfstring
2963 {%
2964   \newcommand{\GLSxtrp}[2]{%
2965     \protect\NoCaseChange
2966     {%
2967       \protect\texorpdfstring
2968       {%
2969         \protect\glsxtrifinmark
2970         {%
2971           \ifcsdef{GLSxtr#1}%
2972           {%
2973             \protect\GLSxtrshort[noindex,hyper=false]{#1}[]}%
2974           }%
2975           {%
2976             \protect\mfirstu{MakeUppercase}
2977             {%
2978               \protect\@gls@entry@field{#2}{#1}%
2979             }%
2980           }%
2981         }%
2982         {%
2983           \@GLSxtrp{#1}{#2}%
2984         }%
2985       }%
2986       {%
2987         \protect\@gls@entry@field{#2}{#1}%
2988       }%
2989     }%
2990   }

```

```

2991 }
2992 {
2993 \newcommand{\GLSxtrp}[2]{%
2994     \protect\NoCaseChange
2995     {%
2996         \protect\glsxtrifinmark
2997         {%
2998             \ifcsdef{GLSxtr#1}{%
2999                 {%
3000                     {\protect\GLSxtrshort[noindex,hyper=false]{#1}[]}{%
3001                         }%
3002                         {%
3003                             \protect\mfirstucMakeUppercase
3004                             {%
3005                                 \protect\@gls@entry@field{#2}{#1}{%
3006                                     }%
3007                                     {%
3008                                         }%
3009                                         {%
3010                                             \@GLSxtrp{#1}{#2}{%
3011                                                 }%
3012                                                 }%
3013                                         }%
3014 }%

```

1.3.5 Entry Counting

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

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

```

\@glsunset Global unset.
3015 \renewcommand*{\@glsunset}[1]{%
3016     \@@glsunset{#1}%
3017     \glsxtrpostunset{#1}%
3018 }%

```

```

glsxtrpostunset
3019 \newcommand*{\glsxtrpostunset}[1]{}

```

```

\@glslocalunset Local unset.
3020 \renewcommand*{\@glslocalunset}[1]{%
3021     \@@glslocalunset{#1}%
3022     \glsxtrpostlocalunset{#1}%

```

```

3023  }%
rpostlocalunset
3024 \newcommand*{\glsxtrpostlocalunset}[1] {}

\@glsreset Global reset.
3025 \renewcommand*{\@glsreset}[1]{%
3026   \@@glsreset{#1}%
3027   \glsxtrpostreset{#1}%
3028 }%

glsxtrpostreset
3029 \newcommand*{\glsxtrpostreset}[1] {}

\@glslocalreset Local reset.
3030 \renewcommand*{\@glslocalreset}[1]{%
3031   \@@glslocalreset{#1}%
3032   \glsxtrpostlocalreset{#1}%
3033 }%

rpostlocalreset
3034 \newcommand*{\glsxtrpostlocalreset}[1] {}

leEntryCounting The first argument is the list of categories and the second argument is the value of the entrycount attribute.
3035 \newcommand*{\GlsXtrEnableEntryCounting}[2]{%
  Enable entry counting:
3036   \glsenableentrycount
  Redefine \gls etc:
3037   \renewcommand*{\gls}{\cgls}%
3038   \renewcommand*{\Gls}{\cGls}%
3039   \renewcommand*{\glspol}{\cglspl}%
3040   \renewcommand*{\Glspol}{\cGlspol}%
3041   \renewcommand*{\GLS}{\cGLS}%
3042   \renewcommand*{\GLSpol}{\cGLSpol}%
  Set the entrycount attribute:
3043   \glsxtr@setentrycountunsetattr{#1}{#2}%
  In case this command is used again:
3044   \let\GlsXtrEnableEntryCounting\glsxtr@setentrycountunsetattr
3045   \renewcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
3046     \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryUnitCounting\space
3047       can't be used with \string\GlsXtrEnableEntryCounting}%
3048     {Use one or other but not both commands}}%
3049 }

```

```

ycountunsetattr
3050 \newcommand*{\@glsxtr@setentrycountunsetattr}[2]{%
3051   \c@for\@glsxtr@cat:=#1\do
3052   {%
3053     \ifdefempty{\@glsxtr@cat}{}{%
3054       {%
3055         \glssetcategoryattribute{\@glsxtr@cat}{entrycount}{#2}{%
3056       }%
3057     }%
3058   }%

```

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

nableentrycount

```
3059 \renewcommand*{\glsenableentrycount}{%
```

Enable new fields:

```
3060 \appto\@newglossaryentry@defcounters{\@newglossaryentry@defcounters}{%
```

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

```
3061 \renewcommand*{\gls@defdocnewglossaryentry}{%
3062   \renewcommand*{\newglossaryentry}[2]{%
3063     \PackageError{glossaries}{\string\newglossaryentry\space
3064       may only be used in the preamble when entry counting has
3065       been activated}{If you use \string\glsenableentrycount\space
3066       you must place all entry definitions in the preamble not in
3067       the document environment}%
3068   }%
3069 }%
```

New commands to access new fields:

```
3070 \newcommand*{\glsentrycurrcount}[1]{%
3071   \ifcsundef{glo@\glsdetoklabel{##1}@currcount}{%
3072     {0}{\gls@entry@field{##1}{currcount}}{%
3073   }%
3074   \newcommand*{\glsentryprevcount}[1]{%
3075     \ifcsundef{glo@\glsdetoklabel{##1}@prevcount}{%
3076       {0}{\gls@entry@field{##1}{prevcount}}{%
3077     }%

```

Adjust post unset and reset:

```
3078 \let\@glsxtr@entrycount@org@unset\glsxtrpostunset
3079 \renewcommand*{\glsxtrpostunset}[1]{%
3080   \glsxtr@entrycount@org@unset{##1}%
3081   \gls@increment@currcount{##1}%
3082 }%
3083 \let\@glsxtr@entrycount@org@localunset\glsxtrpostlocalunset
3084 \renewcommand*{\glsxtrpostlocalunset}[1]{%
3085   \glsxtr@entrycount@org@localunset{##1}%
3086   \gls@local@increment@currcount{##1}%
3087 }%
```

```

3088 \let\@glsxtr@entrycount@org@reset\glsxtrpostreset
3089 \renewcommand*{\glsxtrpostreset}[1]{%
3090   \glsxtr@entrycount@org@reset{##1}%
3091   \csgdef{glo@\glsdetoklabel{##1}@currcount}{0}%
3092 }%
3093 \let\@glsxtr@entrycount@org@localreset\glsxtrpostlocalreset
3094 \renewcommand*{\glsxtrpostlocalreset}[1]{%
3095   \glsxtr@entrycount@org@localreset{##1}%
3096   \csdef{glo@\glsdetoklabel{##1}@currcount}{0}%
3097 }%

```

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

```

3098 \let\@cgls@\@@cgls@
3099 \let\@cglspl@\@@cglspl@

3100 \let\@cGls@\@@cGls@
3101 \let\@cGlsp@\@@cGlsp@
3102 \let\@cGLS@\@@cGLS@
3103 \let\@cGLSp@\@@cGLSp@

```

The rest is as the original definition.

```

3104 \AtEndDocument{\@gls@write@entrycounts}%
3105 \renewcommand*{\@gls@entry@count}[2]{%
3106   \csgdef{glo@\glsdetoklabel{##1}@prevcount}{##2}%
3107 }%
3108 \let\glsenableentrycount\relax
3109 \renewcommand*{\glsenableentryunitcount}{%
3110   \PackageError{glossaries-extra}{\string\glsenableentryunitcount\space
3111     can't be used with \string\glsenableentrycount}%
3112   {Use one or other but not both commands}%
3113 }%
3114 }

```

`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.

```

3115 \renewcommand*{\@gls@write@entrycounts}{%
3116   \immediate\write\auxout
3117   {\string\providecommand*{\string\@gls@entry@count}[2]{}}
3118   \count@=0\relax
3119   \forallglsentries{\@glsentry}{%
3120     \glshasattribute{\@glsentry}{entrycount}%
3121     {%
3122       \ifglsused{\@glsentry}%
3123       {%
3124         \immediate\write\auxout
3125         {\string\@gls@entry@count{\@glsentry}{\glsentrycurrcount{\@glsentry}}}%
3126       }%
3127       {}%
3128       \advance\count@ by \one

```

```

3129     }%
3130     {}%
3131   }%
3132   \ifnum\count@=0
3133     \GlossariesExtraWarning{Entry counting has been enabled
3134       \MessageBreak with \string\glsenableentrycount\space but the
3135       \MessageBreak attribute ‘entrycount’ hasn’t
3136       \MessageBreak been assigned to any of the defined
3137       \MessageBreak entries}%
3138   \fi
3139 }

```

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

```

3140 \newcommand*\glsxtrifcounttrigger[3]{%
3141   \glshasattribute{#1}{entrycount}%
3142   {}%
3143   \ifnum\glsentryprevcount{#1}>\glsgetattribute{#1}{entrycount}\relax
3144     #3%
3145   \else
3146     #2%
3147   \fi
3148 }%
3149 {#3}%
3150 }

```

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

`\@@cglss@`

```

3151 \def\@@cglss@#1#2[#3]{%
3152   \glsxtrifcounttrigger{#2}%
3153   {}%
3154   \cglssformat{#2}{#3}%
3155   \glsunset{#2}%
3156 }%
3157 {}%
3158   \cglss@{#1}{#2}[#3]%
3159 }%
3160 }%

```

`\@@cglspl@`

```

3161 \def\@@cglspl@#1#2[#3]{%
3162   \glsxtrifcounttrigger{#2}%
3163   {}%
3164   \cglsplformat{#2}{#3}%
3165   \glsunset{#2}%

```

```

3166 }%
3167 {%
3168 \glspl@{#1}{#2}{#3}%
3169 }%
3170 }%


\@@cGls@

3171 \def\@@cGls@#1#2[#3]{%
3172 \glsxtrifcounttrigger{#2}%
3173 {%
3174 \cGlsformat{#2}{#3}%
3175 \glsunset{#2}%
3176 }%
3177 {%
3178 \cGls@{#1}{#2}{#3}%
3179 }%
3180 }%


\@@cGlspl@

3181 \def\@@cGlspl@#1#2[#3]{%
3182 \glsxtrifcounttrigger{#2}%
3183 {%
3184 \cGlsplformat{#2}{#3}%
3185 \glsunset{#2}%
3186 }%
3187 {%
3188 \cGlspl@{#1}{#2}{#3}%
3189 }%
3190 }%


\@@cGLS@

3191 \def\@@cGLS@#1#2[#3]{%
3192 \glsxtrifcounttrigger{#2}%
3193 {%
3194 \cGLSformat{#2}{#3}%
3195 \glsunset{#2}%
3196 }%
3197 {%
3198 \cGLS@{#1}{#2}{#3}%
3199 }%
3200 }%


\@@cGLSpl@

3201 \def\@@cGLSpl@#1#2[#3]{%
3202 \glsxtrifcounttrigger{#2}%
3203 {%
3204 \cGLSplformat{#2}{#3}%
3205 \glsunset{#2}%
3206 }%

```

```

3207  {%
3208    \c@GLSpl@{\#1}{\#2}{\#3}%
3209  }%
3210 }%

```

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

```

\@cgl{%
3211 \def\@cgl{#1#2[#3]}{\@gl{#1}{#2}{#3}}%
\@cGl{%
3212 \def\@cGl{#1#2[#3]}{\@Gl{#1}{#2}{#3}}%
\@cGLSpl{%
3213 \def\@cGLSpl{#1#2[#3]}{\@GLSpl{#1}{#2}{#3}}%
\@cGLSpl{%
3214 \def\@cGLSpl{#1#2[#3]}{\@GLSpl{#1}{#2}{#3}}%

```

Add all upper case versions not provided by glossaries.

```

\cGLS
3215 \newrobustcmd*\cGLS{\@gls@hyp@opt\cGLS}
\@cGLS Defined the un-starred form. Need to determine if there is a final optional argument
3216 \newcommand*\@cGLS[2][]{%
3217   \new@ifnextchar[\@cGLS{\#1}{\#2}]{\@cGLS{\#1}{\#2}[]}{%
3218 }

\@cGLS@%
3219 \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.

```

3220 \newcommand*\cGLSformat[2]{%
3221   \expandafter\mfirstuc\MakeUppercase\expandafter{\cgl{#1}{#2}}%
3222 }

```

```

\cGLSpl
3223 \newrobustcmd*\cGLSpl{\@gls@hyp@opt\cGLSpl}

```

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

```

3224 \newcommand*\@cGLSpl[2][]{%
3225   \new@ifnextchar[\@cGLSpl{\#1}{\#2}]{\@cGLSpl{\#1}{\#2}[]}{%
3226 }

```

```

\@cGLSpl@

3227 \def\@cGLSpl@#1#2[#3]{\@GLSpl@{#1}{#2}[#3]}

\cGLSplformat Format used by \cGLSpl if entry only used once on previous run. The first argument is the
label, the second argument is the insert text.
3228 \newcommand*{\cGLSplformat}[2]{%
3229   \expandafter\mfirstuc\expandafter{\cGLSplformat{#1}{#2}}%
3230 }

  Modify the trigger formats to check for the regular attribute.

\cglformat
3231 \renewcommand*{\cglformat}[2]{%
3232   \glsifregular{#1}%
3233   {\glsentryfirst{#1}}%
3234   {\ifglshaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
3235 }

\cGlsformat
3236 \renewcommand*{\cGlsformat}[2]{%
3237   \glsifregular{#1}%
3238   {\Glsentryfirst{#1}}%
3239   {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
3240 }

\cglsplformat
3241 \renewcommand*{\cglsplformat}[2]{%
3242   \glsifregular{#1}%
3243   {\glsentryfirstplural{#1}}%
3244   {\ifglshaslong{#1}{\glsentrylongpl{#1}}{\glsentryfirstplural{#1}}}#2%
3245 }

\cGlsplformat
3246 \renewcommand*{\cGlsplformat}[2]{%
3247   \glsifregular{#1}%
3248   {\Glsentryfirstplural{#1}}%
3249   {\ifglshaslong{#1}{\Glsentrylongpl{#1}}{\Glsentryfirstplural{#1}}}#2%
3250 }

```

New code similar to above for unit counting.

```

defunitcounters
3251 \newcommand*{\@newglossaryentry@defunitcounters}{%
3252   \edef\@glo@countunit{\csuse{@glsxtr@categoryattr@@\@glo@category @unitcount}}%
3253   \ifdefvoid\@glo@countunit
3254   {}%
3255   {%
3256     \glsxtr@ifunitcounter{\@glo@countunit}%

```

```

3257     {}%
3258     {\expandafter\@glsxtr@addunitcounter\expandafter{\@glo@countunit}}%
3259   }%
3260 }

r@unitcountlist List to keep track of which counters are being used by the entry unit count facility.
3261 \newcommand*{\@glsxtr@unitcountlist}{}}

@addunitcounter
3262 \newcommand*{\@glsxtr@addunitcounter}[1]{%
3263   \listadd{\@glsxtr@unitcountlist}{#1}%
3264   \ifcsundef{\glsxtr@theunit@#1}%
3265   {}%
3266   \ifcsdef{\theH#1}%
3267   {\csdef{\glsxtr@theunit@#1}{\csuse{\theH#1}}}%
3268   {\csdef{\glsxtr@theunit@#1}{\csuse{\the#1}}}%
3269 }%
3270 {}%
3271 }

r@ifunitcounter
3272 \newcommand*{\@glsxtr@ifunitcounter}[3]{%
3273   \xifinlist{#1}{\@glsxtr@unitcountlist}{#2}{#3}}%
3274 }

urrentunitcount
3275 \newcommand*{\@glsxtr@currentunitcount}[1]{%
3276   \glo@\glsdetoklabel{#1}@currunit@\glsgetattribute{#1}{unitcount}.%
3277   \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3278 }

eviousunitcount
3279 \newcommand*{\@glsxtr@previousunitcount}[1]{%
3280   \glo@\glsdetoklabel{#1}@prevunit@\glsgetattribute{#1}{unitcount}.%
3281   \csuse{\glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3282 }

t@currunitcount
3283 \newcommand*{\@gls@increment@currunitcount}[1]{%
3284   \glshasattribute{#1}{unitcount}%
3285   {}%
3286   \edef{\glsxtr@csname}{\@glsxtr@currentunitcount{#1}}%
3287   \ifcsundef{\@glsxtr@csname}%
3288   {}%
3289   \csgdef{\@glsxtr@csname}{1}%
3290   \listcsadd%
3291   {\glo@\glsdetoklabel{#1}@unitlist}%
3292   {\glsgetattribute{#1}{unitcount}}%

```

```

3293     \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3294   }%
3295 }%
3296 {%
3297   \csxdef{\@glsxtr@csname}%
3298   {\number\numexpr\csname\@glsxtr@csname\endcsname+1}%
3299 }%
3300 }%
3301 {}%
3302 }

t@currunitcount
3303 \newcommand*{\@gls@local@increment@currunitcount}[1]{%
3304   \glshasattribute{#1}{unitcount}%
3305 }%
3306   \edef{\@glsxtr@csname}{\@glsxtr@currentunitcount{#1}}%
3307   \ifcsundef{\@glsxtr@csname}%
3308   {%
3309     \csdef{\@glsxtr@csname}{1}%
3310     \listcseadd
3311     {\glo@\glsdetoklabel{#1}@unitlist}%
3312     {\glsgetattribute{#1}{unitcount}.}%
3313     \csuse{glsxtr@theunit@\glsgetattribute{#1}{unitcount}}%
3314   }%
3315 }%
3316 {}%
3317   \csedef{\@glsxtr@csname}%
3318   {\number\numexpr\csname\@glsxtr@csname\endcsname+1}%
3319 }%
3320 }%
3321 {}%
3322 }

r@currunitcount
3323 \newcommand*{\@glsxtr@currunitcount}[2]{%
3324   \ifcsundef
3325   {\glo@\glsdetoklabel{#1}@currunit@#2}%
3326   {0}%
3327   {\csuse{\glo@\glsdetoklabel{#1}@currunit@#2}}%
3328 }%

r@prevunitcount
3329 \newcommand*{\@glsxtr@prevunitcount}[2]{%
3330   \ifcsundef
3331   {\glo@\glsdetoklabel{#1}@prevunit@#2}%
3332   {0}%
3333   {\csuse{\glo@\glsdetoklabel{#1}@prevunit@#2}}%
3334 }%

```

```
entryunitcount
```

```
3335 \newcommand*{\glsenableentryunitcount}{%
```

Enable new fields:

```
3336 \appto{@newglossaryentry@defcounters{@@newglossaryentry@defunitcounters}}%
```

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

```
3337 \renewcommand*{\gls@defdocnewglossaryentry}{%
```

```
3338 \renewcommand*{\newglossaryentry}[2]{%
```

```
3339 \PackageError{glossaries}{\string\newglossaryentry\space}
```

```
3340 may only be used in the preamble when entry counting has
```

```
3341 been activated}{If you use \string\glsenableentryunitcount\space}
```

```
3342 you must place all entry definitions in the preamble not in
```

```
3343 the document environment}%
```

```
3344 }%
```

```
3345 }%
```

New commands to access new fields:

```
3346 \newcommand*{\glsentrycurrcount}[1]{%
```

```
3347 \@glsxtr@currunitcount{##1}{\glsgetattribute{##1}{unitcount}.%
```

```
3348 \csuse{glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
```

```
3349 }%
```

```
3350 \newcommand*{\glsentryprevcount}[1]{%
```

```
3351 \@glsxtr@prevunitcount{##1}{\glsgetattribute{##1}{unitcount}.%
```

```
3352 \csuse{glsxtr@theunit@\glsgetattribute{##1}{unitcount}}}%
```

```
3353 }%
```

Access total count:

```
3354 \newcommand*{\glsentryprevtotalcount}[1]{%
```

```
3355 \@ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}{%
```

```
3356 {0}%
```

```
3357 }%
```

```
3358 \number\csuse{glo@\glsdetoklabel{##1}@prevunittotal}
```

```
3359 }%
```

```
3360 }%
```

Access max value:

```
3361 \newcommand*{\glsentryprevmaxcount}[1]{%
```

```
3362 \@ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}{%
```

```
3363 {0}%
```

```
3364 }%
```

```
3365 \number\csuse{glo@\glsdetoklabel{##1}@prevunitmax}
```

```
3366 }%
```

```
3367 }%
```

Adjust post unset and reset:

```
3368 \let@glsxtr@entryunitcount@org@unset@glsxtrpostunset
```

```
3369 \renewcommand*{\glsxtrpostunset}[1]{%
```

```
3370 \@glsxtr@entryunitcount@org@unset{##1}%
```

```
3371 \gls@increment@currunitcount{##1}%
```

```
3372 }%
```

```
3373 \let@glsxtr@entryunitcount@org@localunset@glsxtrpostlocalunset
```

```

3374 \renewcommand*{\glsxtrpostlocalunset}[1]{%
3375   \glsxtr@entryunitcount@org@localunset{##1}%
3376   \gls@local@increment@currunitcount{##1}%
3377 }%
3378 \let\glsxtr@entryunitcount@org@reset\glsxtrpostreset
3379 \renewcommand*{\glsxtrpostreset}[1]{%
3380   \glshasattribute{##1}{unitcount}%
3381   {%
3382     \edef\glsxtr@csname{\glsxtr@currentunitcount{##1}}%
3383     \ifcsundef{\glsxtr@csname}%
3384     {}%
3385     {\csgdef{\glsxtr@csname}{0}}%
3386   }%
3387   {}%
3388 }%
3389 \let\glsxtr@entryunitcount@org@localreset\glsxtrpostlocalreset
3390 \renewcommand*{\glsxtrpostlocalreset}[1]{%
3391   \glsxtr@entryunitcount@org@localreset{##1}%
3392   \glshasattribute{##1}{unitcount}%
3393   {%
3394     \edef\glsxtr@csname{\glsxtr@currentunitcount{##1}}%
3395     \ifcsundef{\glsxtr@csname}%
3396     {}%
3397     {\csgdef{\glsxtr@csname}{0}}%
3398   }%
3399   {}%
3400 }%

```

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

```

3401 \let\cgls@\@@cgls@
3402 \let\cglsp@\@@cglsp@

3403 \let\cGls@\@@cGls@
3404 \let\cGlspl@\@@cGlspl@
3405 \let\cGLS@\@@cGLS@
3406 \let\cGLSp@\@@cGLSp@

```

Write information to the aux file.

```

3407 \AtEndDocument{\gls@write@entryunitcounts}%
3408 \renewcommand*{\gls@entry@unitcount}[3]{%
3409   \csgdef{glo@\glsdetoklabel{##1}@prevunit@##3}{##2}%
3410   \ifcsundef{glo@\glsdetoklabel{##1}@prevunittotal}%
3411   {\csgdef{glo@\glsdetoklabel{##1}@prevunittotal}{##2}}%
3412   {%
3413     \csxdef{glo@\glsdetoklabel{##1}@prevunittotal}{%
3414       \number\numexpr\csuse{glo@\glsdetoklabel{##1}@prevunittotal}+##2}%
3415   }%
3416   \ifcsundef{glo@\glsdetoklabel{##1}@prevunitmax}%
3417   {\csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}}%

```

```

3418  {%
3419    \ifnum\csuse{glo@\glsdetoklabel{##1}@prevunitmax}<##2
3420      \csgdef{glo@\glsdetoklabel{##1}@prevunitmax}{##2}%
3421      \fi
3422  }%
3423 }%
3424 \let\glsenableentryunitcount\relax
3425 \renewcommand*\glsenableentrycount{%
3426   \PackageError{glossaries-extra}{\string\glsenableentrycount\space
3427     can't be used with \string\glsenableentryunitcount}%
3428   {Use one or other but not both commands}%
3429 }%
3430 }%
3431 \onlypreamble\glsenableentryunitcount

entry@unitcount
3432 \newcommand*\gls@entry@unitcount[3]{}

ryunitcounts@do
3433 \newcommand*\gls@write@entryunitcounts@do[1]{%
3434   \immediate\write\auxout
3435   {\string\gls@entry@unitcount
3436   {\glsentry}%
3437   {\glsxtr@currunitcount{\glsentry}{#1}}%
3438   }%
3439   {#1}%
3440 }

entryunitcounts
3441 \newcommand*\gls@write@entryunitcounts{%
3442   \immediate\write\auxout
3443   {\string\providecommand*\gls@entry@unitcount[3]{}}
3444   \count@=0\relax
3445   \forallglsentries{\glsentry}{%
3446     \glshasattribute{\glsentry}{unitcount}%
3447     {%
3448       \ifglsused{\glsentry}%
3449       {%
3450         \forlistcsloop
3451           {\gls@write@entryunitcounts@do}%
3452           {glo@\glsdetoklabel{\glsentry}{unitlist}}%
3453       }%
3454       {}%
3455       \advance\count@ by \one
3456     }%
3457     {}%
3458   }%
3459   \ifnum\count@=0
3460     \GlossariesExtraWarningNoLine{Entry counting has been enabled

```

```

3461     \MessageBreak with \string\glsenableentryunitcount\space but the
3462     \MessageBreak attribute 'unitcount' hasn't
3463     \MessageBreak been assigned to any of the defined
3464     \MessageBreak entries}%
3465 \fi
3466 }

```

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.

```
3467 \newcommand*{\GlsXtrEnableEntryUnitCounting}[3]{%
```

Enable entry counting:

```
3468 \glsenableentryunitcount
```

Redefine \gls etc:

```

3469 \renewcommand*{\gls}{\cgls}%
3470 \renewcommand*{\Gls}{\cGls}%
3471 \renewcommand*{\glspl}{\cglspl}%
3472 \renewcommand*{\Glspl}{\cGlspl}%
3473 \renewcommand*{\GLS}{\cGLS}%
3474 \renewcommand*{\GLSpl}{\cGLSpl}%

```

Set the entrycount attribute:

```
3475 \@glsxtr@setentryunitcountunsetattr{#1}{#2}{#3}{%
```

In case this command is used again:

```

3476 \let\GlsXtrEnableEntryUnitCounting@\glsxtr@setentryunitcountunsetattr
3477 \renewcommand*{\GlsXtrEnableEntryCounting}[2]{%
3478   \PackageError{glossaries-extra}{\string\GlsXtrEnableEntryCounting\space
3479   can't be used with \string\GlsXtrEnableEntryUnitCounting}%
3480   {Use one or other but not both commands}}%
3481 }

```

tcountunsetattr

```

3482 \newcommand*{\@glsxtr@setentryunitcountunsetattr}[3]{%
3483   \@for \@glsxtr@cat:=#1\do
3484   {%
3485     \ifdefempty{\@glsxtr@cat}{}{%
3486       {%
3487         \glssetcategoryattribute{\@glsxtr@cat}{entrycount}{#2}{%
3488           \glssetcategoryattribute{\@glsxtr@cat}{unitcount}{#3}{%
3489         }%
3490       }%
3491     }%

```

1.3.6 Acronym Modifications

It's more consistent to use the abbreviation code for acronyms, but make some adjustments to allow for continued use of the glossaries package's custom acronym format. (For example, user may already have defined some acronym styles with \newacronymstyle which they

would like to continue to use.) The original glossaries acronym code can be restored with `\RestoreAcronyms`, but adjust `\SetGenericNewAcronym` so that `\newacronym` adds the category.

genericNewAcronym

```

3492 \renewcommand*{\SetGenericNewAcronym}{%
3493   \let\@Gls@entryname\@Gls@acrentryname
3494   \renewcommand{\newacronym}[4][]{%
3495     \ifdefempty{\@glsacronymlists}{%
3496       {%
3497         \def\@glo@type{\acronymtype}{%
3498           \setkeys{glossentry}{##1}{%
3499             \DeclareAcronymList{\@glo@type}{%
3500               }{%
3501               {}{%
3502                 \glskeylisttok{##1}{%
3503                   \glslabeltok{##2}{%
3504                     \glsshorttok{##3}{%
3505                       \glslongtok{##4}{%
3506                         \newacronymhook
3507                         \protected@edef\@do@newglossaryentry{%
3508                           \noexpand\newglossaryentry{\the\glslabeltok}{%
3509                             {%
3510                               type=\acronymtype,%
3511                               name={\expandonce{\acronymentry{##2}}},%
3512                               sort={\acronymsort{\the\glsshorttok}{\the\glslongtok}},%
3513                               text={\the\glsshorttok},%
3514                               short={\the\glsshorttok},%
3515                               shortplural={\the\glsshorttok\noexpand\acrpluralsuffix},%
3516                               long={\the\glslongtok},%
3517                               longplural={\the\glslongtok\noexpand\acrpluralsuffix},%
3518                               category=acronym,
3519                               \GenericAcronymFields,%
3520                               \the\glskeylisttok
3521                             }{%
3522                               }{%
3523                                 \@do@newglossaryentry
3524                               }{%
3525                                 \renewcommand*{\acrfullfmt}[3]{%
3526                                   \glslink[##1]{##2}{\genacrfullformat{##2}{##3}}}{%
3527                                 \renewcommand*{\Acrfullfmt}[3]{%
3528                                   \glslink[##1]{##2}{\Genacrfullformat{##2}{##3}}}{%
3529                                 \renewcommand*{\ACRfullfmt}[3]{%
3530                                   \glslink[##1]{##2}{%
3531                                     \mfirstucMakeUppercase{\genacrfullformat{##2}{##3}}}}}{%
3532                                 \renewcommand*{\acrfullplfmt}[3]{%
3533                                   \glslink[##1]{##2}{\genplacrfullformat{##2}{##3}}}{%
3534                                 \renewcommand*{\Acrfullplfmt}[3]{%
3535                                   \glslink[##1]{##2}{\Genplacrfullformat{##2}{##3}}}}{%

```

```

3536 \renewcommand*\ACRfullplfmt}[3]{%
3537   \glslink[##1]{##2}{%
3538     \mfirstucMakeUppercase{\genplacrfullformat{##2}{##3}}}}%
3539 \renewcommand*\glsentryfull}[1]{\genacrfullformat{##1}{}}%
3540 \renewcommand*\Glsentryfull}[1]{\Genacrfullformat{##1}{}}%
3541 \renewcommand*\glsentryfullpl}[1]{\genplacrfullformat{##1}{}}%
3542 \renewcommand*\Glsentryfullpl}[1]{\Genplacrfullformat{##1}{}}%
3543 }

```

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:

```

3544 \let\@glsxtr@org@setacronymstyle\setacronymstyle
3545 \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`.

```

3546 \newcommand*\MakeAcronymsAbbreviations}{%
3547   \renewcommand*\newacronym}[4][]{%
3548     \glsxtr@newabbreviation{type=\acronymtype,category=acronym,##1}{##2}{##3}{##4}}%
3549 }%
3550 \renewcommand*\firstacronymfont}[1]{\glsfirstabbrvfont{##1}}%
3551 \renewcommand*\acronymfont}[1]{\glsabbrvfont{##1}}%
3552 \renewcommand*\setacronymstyle}[1]{%
3553   \PackageError{glossaries-extra}{\string\setacronymstyle{##1}%
3554     unavailable.%
3555     Use \string\setabbreviationstyle\space instead.%
3556     The original acronym interface can be restored with%
3557     \string\RestoreAcronyms}{}%
3558 }%
3559 \renewcommand*\newacronymstyle}[1]{%
3560   \GlossariesExtraWarning{New acronym style ‘##1’ won’t be%
3561     available unless you restore the original acronym interface with%
3562     \string\RestoreAcronyms}%
3563   \glsxtr@org@newacronymstyle{##1}}%
3564 }%
3565 }

```

Switch acronyms to abbreviations:

```
3566 \MakeAcronymsAbbreviations
```

`RestoreAcronyms` Restore acronyms to glossaries interface.

```

3567 \newcommand*\RestoreAcronyms}{%
3568   \SetGenericNewAcronym
3569   \renewcommand*\firstacronymfont}[1]{\acronymfont{##1}}%
3570   \renewcommand*\acronymfont}[1]{##1}%
3571   \let\setacronymstyle\@glsxtr@org@setacronymstyle
3572   \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.

```
3573 \renewcommand*\@gls@link@checkfirsthyper{%
3574   \ifglsused{\glslabel}%
3575   {\let\glsxtrifwasfirstuse\@secondoftwo}%
3576   {\let\glsxtrifwasfirstuse\@firstoftwo}%
3577   \@glsxtr@org@checkfirsthyper
3578 }
3579 \glssetcategoryattribute{acronym}{regular}{false}%
3580 \setacronymstyle{long-short}%
3581 }
```

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

```
3582 \renewcommand*{\glsacspace}[1]{%
3583   \settowidth{\dimen@}{(\firstacronymfont{\glsentryshort{\#1}})}%
3584   \ifdim\dimen@<\glsacspacemax\else\space\fi
3585 }
```

`\glsacspacemax` Value used in the above.

```
3586 \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

```
3587 \newcommand*{\@glsxtr@reg@glosslist}{}%
```

Save the original definition of `\makeglossaries`:

```
3588 \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`

```
3589 \renewcommand*{\makeglossaries}[1][]{%
3590   \ifx\@glsxtr@record@setting\@glsxtr@record@setting@only
3591     \PackageError{glossaries-extra}{\string\makeglossaries\space
3592       not permitted\MessageBreak with record=only package option}%
3593     {You may only use \string\makeglossaries\space with
3594       record=off or record=alsoindex options}%
3595   \else
3596     \ifblank{\#1}{%
3597       {\@glsxtr@org@makeglossaries}%
3598     }%
```

```

3598  {%
3599    \ifx\@glsxtr@record@setting\@glsxtr@record@setting@alsoindex
3600      \PackageError{glossaries-extra}{\string\makeglossaries[#1]\space
3601        not permitted\MessageBreak with record=alsoindex package option}%
3602        {You may only use the hybrid \string\makeglossaries[...]\space with
3603          record=off option}%
3604    \else
3605      \edef\@glsxtr@reg@glosslist{\#1}%
3606      \ifundef{\glswrite}{\newwrite\glswrite}{}%
3607      \protected@write\@auxout{}{\string\providecommand
3608        \string\@glsorder[1]{}}
3609      \protected@write\@auxout{}{\string\providecommand
3610        \string\@istfilename[1]{}}
3611      \protected@write\@auxout{}{\string\@istfilename{\istfilename}}%
3612      \protected@write\@auxout{}{\string\@glsorder{\glsorder}}
3613      \protected@write\@auxout{}{\string\glsxtr@makeglossaries{\#1}}
3614      \write\@auxout{\string\providecommand\string\@gls@reference[3]{}}

```

Iterate through each supplied glossary type and activate it.

```

3615    \@for\@glo@type:=\#1\do{%
3616      \ifdefempty{\@glo@type}{}{\@makeglossary{\@glo@type}}%
3617    }%

```

New glossaries must be created before \makeglossaries:

```

3618    \renewcommand*\newglossary[4][]{%
3619      \PackageError{glossaries}{New glossaries
3620        must be created before \string\makeglossaries}{You need
3621        to move \string\makeglossaries\space after all your
3622        \string\newglossary\space commands}}%

```

Any subsequence instances of this command should have no effect

```

3623    \let\@makeglossary\relax
3624    \let\makeglossary\relax
3625    \renewcommand\makeglossaries[1][]{}

```

Disable all commands that have no effect after \makeglossaries

```

3626    \@disable@onlypremakeg

```

Allow see key:

```

3627    \let\gls@checkseeallowed\relax

```

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

```

3628    \renewcommand*\@do@seeglossary[2]{%
3629      \glsdoifexists{\#1}%
3630      {%
3631        \edef\@gls@label{\glsdetoklabel{\#1}}%
3632        \edef\@gls@type{\csname glo@\@gls@label \type\endcsname}%
3633        \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
3634        {\@glsxtr@org@doseeglossary{\#1}{\#2}}%
3635      }%
3636      \@@glsxtrwrglossmark

```

```

3637     \protected@write\@auxout{}{%
3638         \string\@gls@reference
3639         {\gls@type}{\gls@label}{\string\glsseeformat##2{}}
3640     }%
3641     }%
3642     }%
3643     }%
3644 
3645     Adjust \@@do@@wrglossary
3646     \let\@glsxtr@@do@@wrglossary\@@do@@wrglossary
3647     \def\@@do@@wrglossary{%
3648         \edef\@gls@type{\csname glo@\gls@label \type\endcsname}%
3649         \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
3650         {\@glsxtr@@do@@wrglossary}%
3651         {\gls@noidxglossary}%
3652     }%
3653 
3654     Suppress warning about no \makeglossaries
3655     \let\warn@nomakeglossaries\relax
3656     \def\warn@noprintglossary{%
3657         \GlossariesWarning{No \string\printglossary\space
3658             or \string\printglossaries\space
3659             found.^^J(Remove \string\makeglossaries\space if you don't want
3660             any glossaries.)^^JThis document will not have a glossary}%
3661     }%
3662 
3663     Only warn for glossaries not listed.
3664     \renewcommand{\@gls@noref@warn}[1]{%
3665         \edef\@gls@type{##1}%
3666         \expandafter\DTLifinlist\expandafter{\@gls@type}{\@glsxtr@reg@glosslist}%
3667     }%
3668         \GlossariesExtraWarning{Can't use
3669             \string\printnoidxglossary[type={\@gls@type}]
3670             when '\@gls@type' is listed in the optional argument of
3671             \string\makeglossaries}%
3672     }%
3673     }%
3674 
3675     \GlossariesWarning{Empty glossary for
3676         \string\printnoidxglossary[type={##1}].
3677         Rerun may be required (or you may have forgotten to use
3678             commands like \string\gls)}%
3679     }%
3680     }%
3681 
3682     Adjust display number list to check for type:
3683     \renewcommand*\glsdisplaynumberlist[1]{%
3684         \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3685         {\@glsxtr@idx@displaynumberlist{##1}}%
3686         {\@glsxtr@noidx@displaynumberlist{##1}}%
3687     }%
3688 
```

Adjust entry list:

```
3679     \renewcommand*{\glsentrynumberlist}[1]{%
3680         \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3681         {\@glsxtr@idx@entrynumberlist{##1}}%
3682         {\@glsxtr@noidx@entrynumberlist{##1}}%
3683     }%
```

Adjust number list loop

```
3684     \renewcommand*{\glsnumberlistloop}[2]{%
3685         \expandafter\DTLifinlist\expandafter{##1}{\@glsxtr@reg@glosslist}%
3686         {%
3687             \PackageError{glossaries-extra}{\string\glsnumberlistloop\space
3688             not available for glossary '##1'}{}%
3689         }%
3690         {\@glsxtr@noidx@numberlistloop{##1}{##2}}%
3691     }%
```

Only sanitize sort for normal indexing glossaries.

```
3692     \renewcommand*{\glsprestandardsort}[3]{%
3693         \expandafter\DTLifinlist\expandafter{##2}{\@glsxtr@reg@glosslist}%
3694         {%
3695             \glsdosanitizesort
3696         }%
3697         {%
3698             \ifglssanitizesort
3699                 \@gls@noidx@sanitizesort
3700             \else
3701                 \@gls@noidx@nosanitizesort
3702             \fi
3703         }%
3704     }%
```

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

```
3705     \renewcommand*\new@glossaryentry[2]{%
3706         \PackageError{glossaries-extra}{Glossary entries must be defined
3707             in the preamble\MessageBreak when you use the optional argument
3708             of \string\makeglossaries}{Either move your definitions to the
3709             preamble or don't use the optional argument of
3710             \string\makeglossaries}%
3711     }%
```

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).

```
3712     \let\@glo@assign@sortkey\glsxtr@mixed@assign@sortkey
3713     \renewcommand*{\@printgloss@setsort}{%
```

Need to extract just the type value.

```
3714     \expandafter\glsxtr@gettype\expandafter,\@glsxtr@printglossopts,%
3715         type=\glsdefaulttype,\@end@glsxtr@gettype
3716         \def\@glo@sorttype{\@glo@default@sorttype}%
```

```
3717     }%
```

Check automake setting:

```
3718     \ifglsautomake
3719         \renewcommand*{\@gls@doautomake}{%
3720             \@for\@gls@type:=\glsxtr@reg@glosslist\do{%
3721                 \ifdefempty{\@gls@type}{}{\@gls@automake{\@gls@type}}%
3722             }%
3723         }%
3724     \fi
```

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

```
3725     \ifdef{\@glo@check@sortallowed}{\@glo@check@sortallowed\makeglossaries}{}
3726     \fi
3727 }%
3728 \fi
3729 }
```

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

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

```
3730 \newcommand{\glsxtr@orgprintglossary}[2]{%
3731     \def\@glo@type{\glsdefaulttype}%
```

Add check here.

```
3732     \def\glossarytitle{%
3733         \ifcsdef{@glotype}{\@glo@type}{\@title}{%
3734             {\@csuse{@glotype}{\@glo@type}{\@title}}%
3735             {\glossaryname}}%
3736         \def\glossarytoctitle{\glossarytitle}%
3737         \let\org@glossarytitle\glossarytitle
3738         \def\@glossarystyle{%
3739             \ifx\@glossary@default@style\relax
3740                 \GlossariesWarning{No default glossary style provided}\MessageBreak
3741                 for the glossary ‘\@glo@type’. \MessageBreak
3742                 Using deprecated fallback. \MessageBreak
3743                 To fix this set the style with \MessageBreak
3744                 \string\setglossarystyle\space or use the \MessageBreak
3745                 style key=value option}%
3746         \fi
3747     }%
3748     \def\gls@dotocitle{\glssettoctitle{\@glo@type}}%
3749     \let\org@glossaryentrynumbers\glossaryentrynumbers
3750     \bgroup
3751         \printgloss@setsort
3752         \setkeys{printgloss}{#1}%
3753     \egroup
3754 }
```

```

3753 \ifx\glossarytitle\org@glossarytitle
3754 \else
3755   \cslet{@glotype@\glo@type}{\glossarytitle}%
3756 \fi
3757 \let\currentglossary@\glo@type
3758 \let\org@glossaryentrynumbers\glossaryentrynumbers
3759 \let\glsnonextpages@\glsnonextpages
3760 \let\glsnextpages@\glsnextpages

3761 \glsxtractivenopost
3762 \gls@dotocitle
3763 \glossarystyle
3764 \let\gls@org@glossaryentryfield\glossentry
3765 \let\gls@org@glossarysubentryfield\subglossentry
3766 \renewcommand{\glossentry}[1]{%
3767   \xdef\glscurrententrylabel{\glsdetoklabel{##1}}%
3768   \gls@org@glossaryentryfield{##1}%
3769 }%
3770 \renewcommand{\subglossentry}[2]{%
3771   \xdef\glscurrententrylabel{\glsdetoklabel{##2}}%
3772   \gls@org@glossarysubentryfield{##1}{##2}%
3773 }%
3774 \gls@preglossaryhook
3775 #2%
3776 \egroup
3777 \global\let\glossaryentrynumbers\org@glossaryentrynumbers
3778 \global\let\warn@noprintglossary\relax
3779 }

```

`ractivatenopost` Change `\nopostdesc` and `\glsxtrnropostpunc` to behave as they do in the glossary.

```

3780 \newcommand*{\glsxtractivenopost}{%
3781   \let\nopostdesc\nopostdesc
3782   \let\glsxtrnropostpunc\glsxtr@nopostpunc
3783 }

```

`lsxtrnropostpunc`

```
3784 \newrobustcmd*{\glsxtrnropostpunc}{}{}
```

`sxtr@nopostpunc` Provide a command that works like `\nopostdesc` but only switches off the punctuation without suppressing the post-description hook.

```

3785 \newcommand{\glsxtr@nopostpunc}{%
3786   \let\@glsxtr@org@postdescription\glspostdescription
3787   \ifglsnopostdot
3788     \renewcommand{\glspostdescription}{%
3789       \glsnopostdottrue
3790       \let\glspostdescription\@glsxtr@org@postdescription
3791       \let\glsxtrrestorepostpunc\glsxtr@restore@postpunc
3792       \glsxtrpostdescription
3793       \glsxtr@nopostpunc@postdesc}%

```

```

3794 \else
3795   \renewcommand{\glspostdescription}{%
3796     \let\glspostdescription\@glsxtr@org@postdescription
3797     \let\glsxtrrestorepostpunc\@glsxtr@restore@postpunc
3798     \glsxtrpostdescription
3799     \@glsxtr@nopostpunc@postdesc}%
3800 \fi
3801 \glsnopostrdotfalse
3802 }

stpunc@postdesc
3803 \newcommand*{\@glsxtr@nopostpunc@postdesc}{}}

estore@postpunc
3804 \newcommand*{\@glsxtr@restore@postpunc}{%
3805   \def\@glsxtr@nopostpunc@postdesc{%
3806     \@glsxtr@org@postdescription
3807     \let\@glsxtr@nopostpunc@postdesc\@empty
3808     \let\glsxtrrestorepostpunc\@empty
3809   }%
3810 }

restorepostpunc Does nothing outside of glossary.
3811 \newcommand*{\glsxtrrestorepostpunc}{}}

\@printglossary Redefine.
3812 \renewcommand{\@printglossary}[2]{%
3813   \def\@glsxtr@printglossopts{\#1}%
3814   \glsxtr@orgprintglossary{\#1}{\#2}%
3815 }

      Add a key that switches off the entry targets:
3816 \define@choicekey{printgloss}{target}
3817 [\@glsxtr@printglossval\@glsxtr@printglossnr]%
3818 {true,false}[true]%
3819 {%
3820   \ifcase\@glsxtr@printglossnr
3821     \let\@glstarget\glsdohypertarget
3822   \else
3823     \let\@glstarget\@secondoftwo
3824   \fi
3825 }

hypernameprefix
3826 \newcommand{\@glsxtrhypernameprefix}{}}

      New to v1.20:
3827 \define@key{printgloss}{targetnameprefix}{%
3828   \renewcommand{\@glsxtrhypernameprefix}{\#1}%
3829 }

```

```
lsdohypertarget Redefine to insert \@glsxtrhypernameprefix before the target name.  
3830 \let\@glsxtr@org@glsdohypertarget\glsdohypertarget  
3831 \renewcommand{\glsdohypertarget}[2]{%  
3832   \@glsxtr@org@glsdohypertarget{\@glsxtrhypernameprefix#1}{#2}}%  
3833 }
```

```
@makeglossaries For the benefit of makeglossaries  
3834 \newcommand*\@glsxtr@makeglossaries}[1]{}
```

```
@glsxtr@gettype Get just the type.  
3835 \def\@glsxtr@gettype#1,type=#2,#3@end@glsxtr@gettype{  
3836   \def\@glo@type{#2}}%  
3837 }
```

```
@assign@sortkey Assign the sort key.  
3838 \newcommand\@glsxtr@mixed@assign@sortkey[1]{%  
3839   \edef\@glo@type{\@glo@type}{%  
3840   \expandafter\DTLifinlist\expandafter{\@glo@type}{\@glsxtr@reg@glosslist}}%  
3841   {  
3842     \glo@no@assign@sortkey{#1}}%  
3843   }%  
3844   {  
3845     \glo@assign@sortkey{#1}}%  
3846   }%  
3847 }%
```

Display number list for the regular version:

```
splaynumberlist  
3848 \let\@glsxtr@idx@displaynumberlist\glsdisplaynumberlist
```

Display number list for the “noidx” version:

```
splaynumberlist  
3849 \newcommand*\@glsxtr@noidx@displaynumberlist}[1]{%  
3850   \letcs{\@gls@loclist}{\glo@\glsdetoklabel{#1}@locist}}%  
3851   \ifdef{\gls@locist}  
3852   {  
3853     \def\@gls@noidxlocist@sep{  
3854       \def\@gls@noidxlocist@sep{  
3855         \def\@gls@noidxlocist@sep{  
3856           \glsnumlistsep  
3857         }%  
3858         \def\@gls@noidxlocist@finalsep{\glsnumlistlastsep}}%  
3859       }%  
3860     }%  
3861     \def\@gls@noidxlocist@finalsep{}%  
3862     \def\@gls@noidxlocist@prev{}%  
3863     \forlistloop{\glsnoidxdisplaylocisthandler}{\gls@locist}}%
```

```

3864     \gls@noidxloclist@finalsep
3865     \gls@noidxloclist@prev
3866 }
3867 {%
3868     \glsxtrundeftag
3869     \glsdoifexists{#1}%
3870     {%
3871         \GlossariesWarning{Missing location list for '#1'. Either
3872             a rerun is required or you haven't referenced the entry.}%
3873     }%
3874 }%
3875 }%
3876

```

And for the number list loop:

@numberlistloop

```

3877 \newcommand*{\glsxtr@noidx@numberlistloop}[3]{%
3878     \letcs{\gls@loclist}{\glsdetoklabel{#1}@loclist}%
3879     \let\gls@org@glsnoidxdisplayloc\glsnoidxdisplayloc
3880     \let\gls@org@glsseefORMAT\glsseefORMAT
3881     \let\glsnoidxdisplayloc#2\relax
3882     \let\glsseefORMAT#3\relax
3883     \ifdef{\gls@loclist}
3884     {%
3885         \forlistloop{\glsnoidxnumberlistloophandler}{\gls@loclist}%
3886     }%
3887     {%
3888         \glsxtrundeftag
3889         \glsdoifexists{#1}%
3890         {%
3891             \GlossariesWarning{Missing location list for '##1'. Either
3892                 a rerun is required or you haven't referenced the entry.}%
3893         }%
3894     }%
3895     \let\glsnoidxdisplayloc\gls@org@glsnoidxdisplayloc
3896     \let\glsseefORMAT\gls@org@glsseefORMAT
3897 }%

```

Same for entry number list.

entrynumberlist

```

3898 \newcommand*{\glsxtr@noidx@entrynumberlist}[1]{%
3899     \letcs{\gls@loclist}{\glsdetoklabel{#1}@loclist}%
3900     \ifdef{\gls@loclist}
3901     {%
3902         \glsnoidxloclist{\gls@loclist}%
3903     }%
3904     {%

```

```

3905     \glsxtrundeftag
3906     \glsdoifexists{#1}%
3907     {%
3908         \GlossariesWarning{Missing location list for '#1'. Either
3909             a rerun is required or you haven't referenced the entry.}%
3910     }%
3911 }%
3912 }%


entrynumberlist
3913 \newcommand*{\@glsxtr@idx@entrynumberlist}[1]{\glsentrynumberlist{#1}}


x@getgroup title Patch.
3914 \renewcommand*{\@gls@noidx@getgroup title}[2]{%
3915     \protected@edef\@glsxtr@titlelabel{#1}%
3916     \ifdefvoid\@glsxtr@titlelabel
3917     {}%
3918     {%
3919         \protected@edef\@glsxtr@titlelabel{\csuse{\glsxtr@grouptitle@#1}}%
3920     }%
3921     \ifdefvoid{\@glsxtr@titlelabel}%
3922     {}%
3923     \DTLifint{#1}%
3924     {}%
3925     \ifnum#1<256\relax
3926         \edef#2{\char#1\relax}%
3927     \else
3928         \edef#2{#1}%
3929     \fi
3930 }%
3931 {}%
3932     \ifcsumdef{#1groupname}%
3933     {\def#2{#1}}%
3934     {\letcs#2{#1groupname}}%
3935 }%
3936 }%
3937 {}%
3938     \let#2\@glsxtr@titlelabel
3939 }%
3940 }%


g@getgroup title Save original definition of \@gls@getgroup title
3941 \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.

```

3942 \newrobustcmd{\glsxtr@trgetgroup title}[2]{%
3943     \protected@edef\@glsxtr@titlelabel{\glsxtr@grouptitle@#1}%
3944     \onelevel@sanitize\@glsxtr@titlelabel

```

```

3945 \ifcsdef{\@glsxtr@titlelabel}{%
3946 {\let\csname\@glsxtr@titlelabel\endcsname\relax}{%
3947 {\glsxtr@org@getgroup title{\#1}{\#2}}}{%
3948 }{%
3949 \let\@gls@getgroup title\glsxtr@getgroup title

```

`trsetgroup title` Sets the title for the given group label.

```

3950 \newcommand{\glsxtr@setgroup title}[2]{%
3951 \protected@edef{\glsxtr@titlelabel{\glsxtr@group title{\#1}}}{%
3952 \onelevel@sanitize{\glsxtr@titlelabel}%
3953 \protected@csxdef{\glsxtr@titlelabel}{\#2}}{%
3954 }

```

`alsetgroup title` As above put only locally defines the title.

```

3955 \newcommand{\glsxtr@localsetgroup title}[2]{%
3956 \protected@edef{\glsxtr@titlelabel{\glsxtr@group title{\#1}}}{%
3957 \onelevel@sanitize{\glsxtr@titlelabel}%
3958 \protected@csedef{\glsxtr@titlelabel}{\#2}}{%
3959 }

```

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

```

3960 \renewcommand*{\glsnavigation}{%
3961 \def\@gls@between{}{%
3962 \ifcsundef{@gls@hypergroup list@\glo@type}{%
3963 {}{%
3964 \def\@gls@list{}{%
3965 }{%
3966 {}{%
3967 \expandafter\let\expandafter\@gls@list
3968 \csname@gls@hypergroup list@\glo@type\endcsname
3969 }{%
3970 \for@\gls@tmp:=\gls@list\do{%
3971 \gls@between
3972 \glsxtr@getgroup title{\gls@tmp}{\gls@grptitle}{%
3973 \glsnavhyperlink{\gls@tmp}{\gls@grptitle}{%
3974 \let\@gls@between\glshypernavsep
3975 }{%
3976 }

```

`@noidx@glossary`

```

3977 \renewcommand*{\printnoidx@glossary}{%
3978 \ifcsdef{@glsref@\glo@type}{%
3979 {}{%
3980 \ifcsdef{@glo@sortmacro@\glo@sorttype}{%
3981 {}{%
3982 \csuse{@glo@sortmacro@\glo@sorttype}{\glo@type}{%
3983 }{%
3984 {}{%
3985 \PackageError{glossaries}{Unknown sort handler '\glo@sorttype'}{}}

```

```

3986    }%
3987    \glossarysection[\glossarytoctitle]{\glossarytitle}%
3988    \glossarypreamble

```

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

```

3989    \def\@gls@currentlettergroup{}%
3990    \begin{theglossary}%
3991      \glossaryheader
3992      \glsresetentrylist
3993      \forlistcsloop{\@gls@noidx@do}{\@glsref@\@glo@type}%
3994      \end{theglossary}%
3995      \glossarypostamble
3996    }%
3997  {%

```

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

```

3998    \glsxtrifemptyglossary{\@glo@type}%
3999    {}%
4000    {\glossarysection[\glossarytoctitle]{\glossarytitle}}%
4001    \@gls@noref@warn{\@glo@type}%
4002  }%
4003 }

```

`noidxdisplayloc` Patch to check for range formations.

```

4004 \renewcommand*\glsnoidxdisplayloc[4]{%
4005   \setentrycounter[#1]{#2}%
4006   \glsxtr@display@loc#3\empty\end@glsxtr@display@loc{#4}%
4007 }

```

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

```

4008 \def\@glsxtr@display@loc#1#2\end@glsxtr@display@loc#3{%
4009   \ifx#1(\relax
4010     \glsxtrdisplaystartloc{#2}{#3}%
4011   \else
4012     \ifx#1)\relax
4013       \glsxtrdisplayendloc{#2}{#3}%
4014     \else
4015       \glsxtrdisplaysingleloc{#1#2}{#3}%
4016     \fi
4017   \fi
4018 }

```

`isplaysingleloc` Single location.

```

4019 \newcommand*\glsxtrdisplaysingleloc[2]{%
4020   \csuse{#1}{#2}%
4021 }

```

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 \glsxtrlocrangefmt.

displaystartloc Start of a location range.

```
4022 \newcommand*\glsxtrdisplaystartloc}[2]{%
4023   \edef\glsxtrlocrangefmt{\#1}%
4024   \ifx\glsxtrlocrangefmt\empty
4025     \def\glsxtrlocrangefmt{\glsnumberformat}%
4026   \fi
4027   \expandafter\glsxtrdisplaysingleloc
4028   \expandafter{\glsxtrlocrangefmt}{\#2}%
4029 }
```

trdisplayendloc End of a location range.

```
4030 \newcommand*\glsxtrdisplayendloc}[2]{%
4031   \edef\@glsxtr@tmp{\#1}%
4032   \ifdefempty{\@glsxtr@tmp}{\def\@glsxtr@tmp{\glsnumberformat}}{%
4033     \ifx\glsxtrlocrangefmt\@glsxtr@tmp
4034       \else
4035         \GlossariesExtraWarning{Mismatched end location range
4036           (start=\glsxtrlocrangefmt, end=\@glsxtr@tmp)}%
4037       \fi
4038     \expandafter\glsxtrdisplayendlohook\expandafter{\@glsxtr@tmp}{\#2}%
4039     \expandafter\glsxtrdisplaysingleloc
4040     \expandafter{\glsxtrlocrangefmt}{\#2}%
4041   \def\glsxtrlocrangefmt{}%
4042 }
```

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

```
4043 \newcommand*\glsxtrdisplayendlohook}[2]{}
```

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

```
4044 \newcommand*\glsxtrlocrangefmt{}%
```

setentrycounter Adjust \setentrycounter to save the original prefix.

```
4045 \renewcommand*\setentrycounter}[2][]{%
4046   \def\glsxtrcounterprefix{\#1}%
4047   \ifx\glsxtrcounterprefix\empty
4048     \def\@glo@counterprefix{.}%
4049   \else
4050     \def\@glo@counterprefix{.\#1.}%
4051   \fi
4052   \def\glsentrycounter{\#2}%
4053 }
```

ls@removespaces Redefine to allow adjustments to location hyperlink.

```
4054 \def\gls@removespaces{\#1 \#2\@nil}%
4055 \toks@=\expandafter{\the\toks@#1}%
```

```

4056 \ifx\\#2\\%
4057   \edef\x{\the\toks@}%
4058   \ifx\x\empty
4059   \else
      Expand location (just in case \toks@ is needed for something else).
4060   \expandafter\glsxtrlocationhyperlink\expandafter
4061     \glsentrycounter\expandafter\@glo@counterprefix\expandafter{\the\toks@}%
4062   \fi
4063 \else
4064   \@gls@ReturnAfterFi{%
4065     \@gls@removespaces#2@nil
4066   }%
4067 \fi
4068 }

```

cationhyperlink

```

4069 \newcommand*\glsxtrlocationhyperlink}[3]{%
4070   \ifdefvoid\glsxtrspplocationurl
4071   {%
4072     \GlsXtrInternalLocationHyperlink{#1}{#2}{#3}%
4073   }%
4074   {%
4075     \hyperref{\glsxtrspplocationurl}{}{#1#2#3}{#3}%
4076   }%
4077 }

```

supphypernumber

```

4078 \newcommand*\glsxtrspphypernumber}[1]{%
4079 {%
4080   \glshasattribute{\glscurrententrylabel}{externalallocation}%
4081   {%
4082     \def\glsxtrspplocationurl{%
4083       \glsetattribute{\glscurrententrylabel}{externalallocation}{}%
4084     }%
4085   {%
4086     \def\glsxtrspplocationurl{}%
4087   }%
4088   \glshypernumber{#1}%
4089 }%
4090 }

```

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

@print@glossary

```

4091 \renewcommand{@print@glossary}{%
4092   \makeatletter
4093   \cinput{\jobname.\csname \glotype@\glo@type \in\endcsname}%

```

```

4094 \IfFileExists{\jobname.\csname @glo@type @in\endcsname}%
4095 {}%
4096 {\glstrNoGlossaryWarning{@glo@type}}%
4097 \ifglsxindy
4098   \ifcsundef{xdy@\glo@type @language}%
4099   {}%
4100   \edef\@do@auxoutstuff{%
4101     \noexpand\AtEndDocument{%
4102       \noexpand\immediate\noexpand\write\auxout{%
4103         \string\providecommand\string\@xdylanguage[2]{}%}
4104       \noexpand\immediate\noexpand\write\auxout{%
4105         \string\@xdylanguage{\glo@type}{\xdy@main@language}}%}
4106     }%
4107   }%
4108 }%
4109 {}%
4110 \edef\@do@auxoutstuff{%
4111   \noexpand\AtEndDocument{%
4112     \noexpand\immediate\noexpand\write\auxout{%
4113       \string\providecommand\string\@xdylanguage[2]{}%}
4114     \noexpand\immediate\noexpand\write\auxout{%
4115       \string\@xdylanguage{\glo@type}{\csname xdy@\glo@type
4116         @language\endcsname}}%}
4117   }%
4118 }%
4119 }%
4120 \do@auxoutstuff
4121 \edef\@do@auxoutstuff{%
4122   \noexpand\AtEndDocument{%
4123     \noexpand\immediate\noexpand\write\auxout{%
4124       \string\providecommand\string\@gls@codepage[2]{}%}
4125     \noexpand\immediate\noexpand\write\auxout{%
4126       \string@gls@codepage{\glo@type}{\gls@codepage}}%}
4127   }%
4128 }%
4129 \do@auxoutstuff
4130 \fi
4131 \renewcommand*{\warn@nomakeglossaries}{%
4132   \GlossariesWarningNoLine{\string\makeglossaries\space
4133   hasn't been used, ^J the glossaries will not be updated}%
4134 }%
4135 }

```

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

`\GlsWarningHead` Header message.

```

4136 \newcommand{\GlsXtrNoGlsWarningHead}[2]{%
4137 This document is incomplete. The external file associated with
4138 the glossary '#1' (which should be called \texttt{\#2})
4139 hasn't been created.%

```

```

4140 }

arningEmptyStart No entries have been added to the glossary.
4141 \newcommand{\GlsXtrNoGlsWarningEmptyStart}{%
4142   This has probably happened because there are no entries defined
4143   in this glossary.%}
4144 }

arningEmptyMain The default “main” glossary is empty.
4145 \newcommand{\GlsXtrNoGlsWarningEmptyMain}{%
4146   If you don’t want this glossary,
4147   add \texttt{nomain} to your package option list when you load
4148   \texttt{glossaries-extra.sty}. For example:%}
4149 }

ingEmptyNotMain A glossary that isn’t the default “main” glossary is empty.
4150 \newcommand{\GlsXtrNoGlsWarningEmptyNotMain}[1]{%
4151   Did you forget to use \texttt{type=#1} when you defined your
4152   entries? If you tried to load entries into this glossary with
4153   \texttt{\string\loadglsentries} did you remember to use
4154   \texttt{\string[\#1]} as the optional argument? If you did, check that
4155   the definitions in the file you loaded all had the type set
4156   to \texttt{\string\glsdefaulttype}.%}
4157 }

arningCheckFile Advisory message to check the file contents.
4158 \newcommand{\GlsXtrNoGlsWarningCheckFile}[1]{%
4159   Check the contents of the file \texttt{\#1}. If
4160   it’s empty, that means you haven’t indexed any of your entries in this
4161   glossary (using commands like \texttt{\string\gls} or
4162   \texttt{\string\glsadd}) so this list can’t be generated.
4163   If the file isn’t empty, the document build process hasn’t been
4164   completed.%}
4165 }

arningAutoMake Message when automake option has been used.
4166 \newcommand{\GlsXtrNoGlsWarningAutoMake}[1]{%
4167   You may need to rerun \LaTeX. If you already have, it may be that
4168   \TeX’s shell escape doesn’t allow you to run
4169   \texttt{\ifglsxindy xindy\else makeindex\fi}. Check the
4170   transcript file \texttt{\jobname.log}. If the shell escape is
4171   disabled, try one of the following:
4172
4173   \begin{itemize}
4174     \item Run the external (Lua) application:
4175
4176       \texttt{\makeglossaries-lite.lua \string"\jobname\string"}
4177
4178     \item Run the external (Perl) application:

```

```
4179      \texttt{\text{makeglossaries } \text{string"}\jobname\text{string"}}
4180      \end{itemize}
4182 Then rerun \LaTeX\ on this document.
4183 \GlossariesExtraWarning{Rerun required to build the
4184 glossary '#1' or check TeX's shell escape allows
4185 you to run \ifglsxindy xindy\else makeindex\fi}%
4186
4187 }
```

WarningMisMatch Mismatching \makenoidxglossaries.

```
4188 \newcommand{\GlsXtrNoGlsWarningMisMatch}{%
4189 You need to either replace \texttt{\text{string}\makenoidxglossaries}
4190 with \texttt{\text{string}\makeglossaries} or replace
4191 \texttt{\text{string}\printglossary} (or \texttt{\text{string}\printglossaries}) with
4192 \texttt{\text{string}\printnoidxglossary}
4193 (or \texttt{\text{string}\printnoidxglossaries}) and then rebuild
4194 this document.%
```

```
4195 }
```

arningBuildInfo Build advice.

```
4196 \newcommand{\GlsXtrNoGlsWarningBuildInfo}{%
4197 Try one of the following:
4198 \begin{itemize}
4199 \item Add \texttt{\text{automake}} to your package option list when you load
4200 \texttt{\text{glossaries-extra.sty}}. For example:
4201
4202 \texttt{\text{usepackage[automake]}}
4203 \texttt{\text{glossaries-extra}\{}}
```

```
4204 \item Run the external (Lua) application:
```

```
4205 \texttt{\text{makeglossaries-lite.lua } \text{string"}\jobname\text{string"}}
```

```
4206
4207 \item Run the external (Perl) application:
```

```
4208 \texttt{\text{makeglossaries } \text{string"}\jobname\text{string"}}
```

```
4209 \end{itemize}
```

```
4210 Then rerun \LaTeX\ on this document.%
```

```
4211 }
```

oGlsWarningTail Final paragraph.

```
4216 \newcommand{\GlsXtrNoGlsWarningTail}{%
4217 This message will be removed once the problem has been fixed.%
```

```
4218 }
```

GlsWarningNoOut No out file created. Build advice.

```

4219 \newcommand{\GlsXtrNoGlsWarningNoOut}[1]{%
4220   The file \texttt{\#1} doesn't exist. This most likely means you haven't used
4221   \texttt{\{string\}makeglossaries} or you have used
4222   \texttt{\{string\}nofiles}. If this is just a draft version of the
4223   document, you can suppress this message using the
4224   \texttt{\{nomissingglistext\}} package option.%}
4225 }

glossarywarning
4226 \newcommand*\{@glsxtr@defaultnoglossarywarning}[1]{%
4227   \glossarysection[\glossarytoctitle]{\glossarytitle}
4228   \GlsXtrNoGlsWarningHead{\#1}{\jobname.\csname@glo@type @in\endcsname}
4229   \par
4230   \glsxtrifemptyglossary{\#1}%
4231   {%
4232     \GlsXtrNoGlsWarningEmptyStart\space
4233     \ifthenelse{\equal{\#1}{main}}{\GlsXtrNoGlsWarningEmptyMain\par
4234       \medskip
4235       \noindent\texttt{\{string\}usepackage[nomain\ifglsacronym ,acronym\fi]\%}
4236       \glsopenbrace glossaries-extra\glsclosebrace}
4237       \medskip
4238     }%
4239     {\GlsXtrNoGlsWarningEmptyNotMain{\#1}}%
4240   }%
4241   {%
4242     \IfExists{\jobname.\csname@glo@type @out\endcsname}
4243   {%
4244     \GlsXtrNoGlsWarningCheckFile
4245       {\jobname.\csname@glo@type @out\endcsname}
4246
4247     \ifglsautomake
4248
4249     \GlsXtrNoGlsWarningAutoMake{\#1}
4250
4251   \else
4252
4253     \ifthenelse{\equal{\#1}{main}}{%
4254       {%
4255         \GlsXtrNoGlsWarningEmptyMain\par
4256         \medskip
4257         \noindent\texttt{\{string\}usepackage[nomain]\%}
4258         \glsopenbrace glossaries-extra\glsclosebrace}
4259         \medskip
4260       }%
4261     {}%
4262
4263     \ifdef{\makeglossaries}{\no@makeglossaries}{%
4264       {%
4265         \GlsXtrNoGlsWarningMisMatch

```

```

4266      }%
4267      {%
4268          \GlsXtrNoGlsWarningBuildInfo
4269      }%
4270      \fi
4271  }%
4272  {%
4273      \GlsXtrNoGlsWarningNoOut
4274      {\jobname.\csname \glototype@\glo@type \out\endcsname}%
4275  }%
4276 }%
4277 \par
4278 \GlsXtrNoGlsWarningTail
4279 }

```

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.

```
4280 \newcommand*{\glsxtrresourcefile}[2] [] {%
```

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

```

4281 \disable@keys{glossaries-extra.sty}{record}%
4282 \glsxtr@writefields
4283 \protected@write\auxout{\glsxtrresourceinit}{\string\glsxtr@resource{\#1}{\#2}}%
4284 \let\@glsxtr@org@see@noindex\gls@see@noindex
4285 \let\@gls@see@noindex\relax
4286 \IfFileExists{\#2.glstex}%
4287 {%

```

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

```

4288 \edef\@bibgls@restoreat{\noexpand\catcode\noexpand`\noexpand\@=\number\catcode`\@}%
4289 \makeatletter
4290 \input{\#2.glstex}%
4291 \@bibgls@restoreat
4292 }%
4293 {%
4294 \GlossariesExtraWarning{No file '#2.glstex'}%
4295 }%
4296 \let\@gls@see@noindex\glsxtr@org@see@noindex
4297 }
4298 \onlypreamble\glsxtrresourcefile

```

xtrresourceinit Code used during the protected write operation.

```
4299 \newcommand*{\glsxtrresourceinit}{}%
```

trresourcecount

```
4300 \newcount\glsxtrresourcecount
```

```

trLoadResources Short cut that uses \glsxtrresourcefile with \jobname as the mandatory argument.
4301 \newcommand*{\GlsXtrLoadResources}[1][]{%
4302   \ifnum\glsxtrresourcecount=0\relax
4303     \glsxtrresourcefile[#1]{\jobname}%
4304   \else
4305     \glsxtrresourcefile[#1]{\jobname-\the\glsxtrresourcecount}%
4306   \fi
4307   \advance\glsxtrresourcecount by 1\relax
4308 }

glsxtr@resource
4309 \newcommand*{\glsxtr@resource}[2]{}

\glsxtr@fields
4310 \newcommand*{\glsxtr@fields}[1]{}

xtr@texencoding
4311 \newcommand*{\glsxtr@texencoding}[1]{}

\glsxtr@langtag
4312 \newcommand*{\glsxtr@langtag}[1]{}

@pluralsuffixes
4313 \newcommand*{\glsxtr@pluralsuffixes}[4]{}

tr@shortcutsval
4314 \newcommand*{\glsxtr@shortcutsval}[1]{}

sxtr@linkprefix
4315 \newcommand*{\glsxtr@linkprefix}[1]{}

xtr@writefields This information only needs to be written once, so disable it after it's been used.
4316 \newcommand*{\glsxtr@writefields}{%
4317   \protected@write\@auxout{}{%
4318     {\string\providecommand*{\string\glsxtr@fields}[1]{}{}}%
4319   \protected@write\@auxout{}{%
4320     {\string\providecommand*{\string\glsxtr@resource}[2]{}{}}%
4321   \protected@write\@auxout{}{%
4322     {\string\providecommand*{\string\glsxtr@pluralsuffixes}[4]{}{}}%
4323   \protected@write\@auxout{}{%
4324     {\string\providecommand*{\string\glsxtr@shortcutsval}[1]{}{}}%
4325   \protected@write\@auxout{}{%
4326     {\string\providecommand*{\string\glsxtr@linkprefix}[1]{}{}}%
4327     \protected@write\@auxout{}{\string\glsxtr@fields{\@gls@keymap}}{}}%
4328   \protected@write\@auxout{}{%
4329     {\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.

```

4330 \ifdef\CurrentTrackedLanguageTag
4331 {%
4332   \protected@write\@auxout{}{%
4333     \string\glsxtr@langtag{\CurrentTrackedLanguageTag}}%
4334 }%
4335 {}%
4336 \protected@write\@auxout{}{\string\glsxtr@pluralsuffixes
4337   {\glspluralsuffix}{\abbrvpluralsuffix}{\acrpluralsuffix}}%
4338   {\glsxtrabbrvpluralsuffix}}%
4339 \ifdef\inputencodingname
4340 {%
4341   \protected@write\@auxout{}{\string\glsxtr@texencoding{\inputencodingname}}%
4342 }%
4343 {}%

```

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.)

```

4344 \@ifpackageloaded{fontspec}%
4345   {\protected@write\@auxout{}{\string\glsxtr@texencoding{utf8}}}}%
4346 {}%
4347 }%
4348 \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.

```

4349 \AtBeginDocument
4350   {\protected@write\@auxout{}{\string\glsxtr@linkprefix{\glolinkprefix}}}}%
4351 \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.

```

4352 \ifglsautomake
4353   \IfFileExists{\jobname.aux}%
4354   {\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.

```

4355 \ifx\gls@doautomake\gls@doautomake@err
4356   \let\gls@doautomake\relax
4357 \fi
4358 \fi
4359 }

```

do@automake@err

```

4360 \newcommand*{\gls@doautomake@err}{%
4361   \PackageError{glossaries}{You must use

```

```

4362 \string\makeglossaries\space with automake=true}
4363 {%
4364     Either remove the automake=true setting or
4365     add \string\makeglossaries\space to your document preamble.%
4366 }%
4367 }

```

Allow locations specific to a particular counter to be recorded.

\glsxtr@record
4368 \newcommand*{\glsxtr@record}[5]{}

r@counterrecord Aux file command.
4369 \newcommand*{\glsxtr@counterrecord}[3]{%
4370 \glsxtrfieldlistgadd{#1}{record.#2}{#3}%
4371 }

unterrecordhook Hook used by \glsxtr@dorecord.
4372 \newcommand*{\glsxtr@counterrecordhook}{}{}

trRecordCounter Activate recording for a particular counter (identified in the argument).
4373 \newcommand*{\GlsXtrRecordCounter}[1]{%
4374 \@@glsxtr@recordcounter{#1}%
4375 }
4376 \onlypreamble\GlsXtrRecordCounter

docounterrecord
4377 \newcommand*{\glsxtr@docounterrecord}[1]{%
4378 \protected@write\auxout{}{\string\glsxtr@counterrecord
4379 {\@gls@label}{#1}{\csuse{the#1}}}{%
4380 }}

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.

```

4381 \newcommand*{\glsxtrglossentry}[1]{%
4382     \glsxtrtitleorpdfforheading
4383     {\@glsxtrglossentry{#1}}%
4384     {\glsentryname{#1}}%
4385     {\glsxtrheadname{#1}}%
4386 }

```

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

```
4387 \newrobustcmd*{\glsxtrglossentry}[1]{%
```

```

4388 \glsxtrtitleorpdforheading
4389 {%
4390   \glsdoifexists{#1}%
4391   {%
4392     \begingroup
4393       \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
4394       \edef\currentglossary{\glsentrytype{\glscurrententrylabel}}%
4395       \ifglshasparent{#1}%
4396         {\glssubentryitem{#1}}%
4397         {\glsentryitem{#1}}%
4398         \glstarget{#1}{\glossentryname{#1}}%
4399       \endgroup
4400     }%
4401   }%
4402   {\glsentryname{#1}}%
4403   {\glsxtrheadname{#1}}%
4404 }

```

`glossentryother` As `\glsxtrglossentry` but uses a different field. First argument is command to use in the header. The second argument is the entry's label. The third argument is the internal field label. This needs to be expandable in case it occurs in a sectioning command so it can't have an optional argument.

```

4405 \newcommand*{\glsxtrglossentryother}[3]{%
4406   \ifstrempty{#1}%
4407   {%
4408     \ifcsdef{glsxtrhead#3}%
4409     {%
4410       \glsxtrtitleorpdforheading
4411       {\@glsxtrglossentryother{#2}{#3}{#1}}%
4412       {\@gls@entry@field{#2}{#3}}%
4413       {\csuse{glsxtrhead#3}{#2}}%
4414     }%
4415   }%
4416   \glsxtrtitleorpdforheading
4417   {\@glsxtrglossentryother{#2}{#3}{#1}}%
4418   {\@gls@entry@field{#2}{#3}}%
4419   {\@gls@entry@field{\NoCaseChange{#2}}{#3}}%
4420 }%
4421 }%
4422 {%
4423   \glsxtrtitleorpdforheading
4424   {\@glsxtrglossentryother{#2}{#3}{#1}}%
4425   {\@gls@entry@field{#2}{#3}}%
4426   {#1}}%
4427 }%
4428 }

```

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

```
4429 \newrobustcmd*{\@glsxtrglossentryother}[3]{%
```

```

4430 \glsxtrtitleorpdforheading
4431 {%
4432   \glsdoifexists{#1}%
4433   {%
4434     \begingroup
4435       \edef\glscurrententrylabel{\glsdetoklabel{#1}}%
4436       \edef\currentglossary{\glsentrytype{\glscurrententrylabel}}%
4437       \ifglshasparent{#1}%
4438         {\glssubentryitem{#1}}%
4439         {\glsentryitem{#1}}%
4440         \glstarget{#1}{\glossentrynameother{#1}{#2}}%
4441     \endgroup
4442   }%
4443 }%
4444 {\@gls@entry@field{#1}{#2}}%
4445 {#3}%
446 }

```

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

```

4447 \newcommand*{\printunsrtglossary}{%
4448   \@ifstar\s@printunsrtglossary\@printunsrtglossary
4449 }

```

`ntunsrtglossary` Unstarred version.

```

4450 \newcommand*{\@printunsrtglossary}[1][]{%
4451   \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%
4452 }

```

`ntunsrtglossary` Starred version.

```

4453 \newcommand*{\s@printunsrtglossary}[2][]{%
4454   \begingroup
4455   #2%
4456   \printglossary[type=\glsdefaulttype,#1]{\@print@unsrt@glossary}%
4457   \endgroup
4458 }

```

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

```

4459 \newcommand*{\printunsrtglossaries}{%
4460   \forallglossaries{\@glo@type}{\printunsrtglossary[type=\@glo@type]}%
4461 }

```

`@unsrt@glossary`

```

4462 \newcommand*{\@print@unsrt@glossary}{%
4463   \glossarysection[\glossarytoctitle]{\glossarytitle}%
4464   \glossarypreamble

```

check for empty list

```
4465 \glsxtrifemptyglossary{@glo@type}%
4466 {%
4467   \GlossariesExtraWarning{No entries defined in glossary '@glo@type'}%
4468 }%
4469 {%

4470   \key@ifundefined{glossentry}{group}%
4471   {\let\gls@getgroupitle\gls@noidx@getgroupitle}%
4472   {\let\gls@getgroupitle\glsxtr@unsrt@getgroupitle}%
4473   \def\gls@currentlettergroup{}%
```

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

```
4474 \def\glsxtr@doglossary{%
4475   \begin{theglossary}%
4476     \glossaryheader
4477     \glsresetentrylist
4478   }%
4479   \expandafter\for\expandafter\glscurrententrylabel\expandafter
4480   :\expandafter=\csname glolist@\glo@type\endcsname\do{%
4481     \ifdefempty{\glscurrententrylabel}%
4482     {}%
4483     {}%
```

Provide a hook (for example to measure width).

```
4484 \let\glsxtr@process@firstofone
4485 \let\printunsrtglossaryskipentry
4486   \glsxtr@printunsrtglossaryskipentry
4487   \printunsrtglossaryentryprocesshook{\glscurrententrylabel}%
```

Don't check group for child entries.

```
4488 \glsxtr@process
4489 {%
4490   \ifglshasparent{\glscurrententrylabel}{}%
4491   {%
4492     \glsxtr@checkgroup\glscurrententrylabel
4493     \expandafter\appto\expandafter\glsxtr@doglossary\expandafter
4494     {\glsxtr@groupheading}%
4495   }%
4496   \appto\glsxtr@doglossary{%
4497     \noexpand\printunsrt@glossary@handler{\glscurrententrylabel}}%
4498   {}%
4499   {}%
4500 }%
4501 \appto\glsxtr@doglossary{\end{theglossary}}%
4502 \printunsrtglossarypredoglossary
4503 \glsxtr@doglossary
4504 }%
4505 \glossarypostamble
4506 }
```

```

ntryprocesshook
4507 \newcommand*{\printunsrtglossaryentryprocesshook}[1]{}

ntryprocesshook
4508 \newcommand*{\printunsrtglossaryskipentry}{%
4509   \PackageError{glossaries-extra}{\string\printunsrtglossaryskipentry\space
4510 can only be used within \string\printunsrtglossaryentryprocesshook}{}
4511 }

ntryprocesshook
4512 \newcommand*{\@glsxtr@printunsrtglossaryskipentry}{%
4513   \let\glsxtr@process\@gobble
4514 }

rypredoglossary
4515 \newcommand*{\printunsrtglossarypredoglossary}{}

lossary@handler
4516 \newcommand{\@printunsrt@glossary@handler}[1]{%
4517   \xdef\glscurrententrylabel{\#1}%
4518   \printunsrtglossaryhandler\glscurrententrylabel
4519 }

glossaryhandler
4520 \newcommand{\printunsrtglossaryhandler}[1]{%
4521   \glsxtrunsrtdo{\#1}%
4522 }

triflabelinlist Might be useful for the handler to check if an entry label or category label is contained in a
list, so provide a user-level version of \@gls@ifinlist which ensures the label and list are
fully expanded.
4523 \newrobustcmd*{\glsxtriflabelinlist}[4]{%
4524   \protected@edef@glsxtr@doiflabelinlist{\noexpand@gls@ifinlist{\#1}{\#2}}%
4525   \@glsxtr@doiflabelinlist{\#3}{\#4}%
4526 }

srtglossaryunit
4527 \newcommand{\print@op@unsrtglossaryunit}[2][]{%
4528   \s@printunsrtglossary[type=\glsdefaulttype,\#1]{%
4529     \printunsrtglossaryunitsetup{\#2}%
4530   }%
4531 }

ossaryunitsetup
4532 \newcommand*{\printunsrtglossaryunitsetup}[1]{%
4533   \renewcommand{\printunsrtglossaryhandler}[1]{%
4534     \glsxtrfieldxifinlist{\#1}{record.\#1}{\csuse{the\#1}}%

```

```

4535     {\glsxtrunsrtdo{##1}}%
4536     {}%
4537 }

```

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

```

4538 \ifcsundef{theH#1}%
4539 {%
4540     \renewcommand*{\glsxtrhypernameprefix}{record.#1.\csuse{the#1}.\@gobble}%
4541 }%
4542 {%
4543     \renewcommand*{\glsxtrhypernameprefix}{record.#1.\csuse{theH#1}.\@gobble}%
4544 }%
4545 \renewcommand*{\glossarysection}[2][]{%
4546     \appto\glossarypostamble{\glspar\medskip\glspar}%
4547 }

```

srtglossaryunit

```

4548 \newcommand{\print@noop@unsrtglossaryunit}[2][]{%
4549     \PackageError{glossaries-extra}{\string\printunsrtglossaryunit\space%
4550     requires the record=only or record=alsoindex package option}{}%
4551 }

```

t@getgroupitle

```

4552 \newrobustcmd*{\glsxtr@unsrt@getgroupitle}[2]{%
4553     \protected@edef\glsxtr@titlelabel{\glsxtr@groupitle@#1}%
4554     \Conelevel@sanitize\glsxtr@titlelabel%
4555     \ifcsdef{\glsxtr@titlelabel}%
4556     {\letcs{\#2}{\glsxtr@titlelabel}}%
4557     {\def#2{\#1}}%
4558 }

```

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

```
4559 \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).

```
4560 \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.

```

4561 \newcommand*{\@glsxtr@checkgroup}[1]{%
4562   \def\@glsxtr@groupheading{}%
4563   \key@ifundefined{glossentry}{group}%
4564   {%
4565     \letcs{\@gls@sort}{glo@\glsdetoklabel{#1}@sort}%
4566     \expandafter\glo@grabfirst@\gls@sort{}{}\@nil
4567   }%
4568   {%
4569     \protected@edef\@glo@thislettergrp{%
4570       \csuse{glo@\glsdetoklabel{#1}@glsxtrgroupfield}}%
4571     }%
4572   \ifdefeq{\@glo@thislettergrp}{\@gls@currentlettergroup}%
4573   {}%
4574   {%
4575     \ifdefempty{\@gls@currentlettergroup}{}%
4576     {\def\@glsxtr@groupheading{\glsgroupskip}}%
4577     \appto{\@glsxtr@groupheading}{%
4578       \noexpand\glsgroupheading{\expandonce{\@glo@thislettergrp}}%
4579     }%
4580   }%
4581   \let\@gls@currentlettergroup\@glo@thislettergrp
4582 }

```

`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.

```

4583 \newcommand{\@glsxtr@noidx@do}[1]{%
4584   \ifglsentryexists{#1}%
4585   {%
4586     \global\letcs{\@gls@loclist}{glo@\glsdetoklabel{#1}@loclist}%
4587     \global\letcs{\@gls@location}{glo@\glsdetoklabel{#1}@location}%
4588     \ifglshasparent{#1}%
4589     {%
4590       \gls@level=\csuse{glo@\glsdetoklabel{#1}@level}\relax
4591       \ifdefvoid{\@gls@location}%
4592       {%
4593         \ifdefvoid{\@gls@loclist}%
4594         {%
4595           \subglossentry{\gls@level}{#1}{}%
4596         }%
4597         {%
4598           \subglossentry{\gls@level}{#1}%
4599           {%
4600             \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}%
4601           }%
4602         }%
4603       }%
4604       {%
4605         \subglossentry{\gls@level}{#1}{\glossaryentrynumbers{\@gls@location}}%
4606       }%
4607     }%
4608   }%
4609 }

```

```

4607    }%
4608    {%
4609        \ifdefvoid{\@gls@location}{%
4610            {%
4611                \ifdefvoid{\@gls@loclist}{%
4612                    {%
4613                        \glossentry{\#1}{}{%
4614                            }%
4615                            {%
4616                                \glossentry{\#1}{%
4617                                    }%
4618                                    \glossaryentrynumbers{\glsnoidxloclist{\@gls@loclist}}{%
4619                                        }%
4620                                        }%
4621                                    }%
4622                                    {%
4623                                        \glossentry{\#1}{%
4624                                            }%
4625                                            \glossaryentrynumbers{\@gls@location}{%
4626                                                }%
4627                                                }%
4628                                            }%
4629                                        }%
4630                                        {}{%
4631 }

```

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
4632 \newcount\@glsxtrnewgls@inner
```

(The default options supplied in *<options>* below could possibly be used to form the inner control sequence name to help make it unique, but it might feasibly contain the value where the value might contain commands.)

```
\@glsxtrnewgls \glsxtrnewgls[<options>]{<prefix>}{{<cs>}}{<inner cs name>}
```

```

4633 \newcommand*{\@glsxtrnewgls}[4]{%
4634     \ifdef{\#3}{%
4635         {%
4636             \PackageError{glossaries-extra}{Command \string#3\space already%
4637 defined}{}{%
4638             }%
4639             }%

```

```

4640 \ifcsdef{@#4like@#2}%
4641 {%
4642     \advance\@glsxtrnewgls@inner by \cne
4643     \def\@glsxtrnewgls@innercsname{@#4like\number\@glsxtrnewgls@inner @#2}%
4644 }%
4645 {\def\@glsxtrnewgls@innercsname{@#4like@#2}}%
4646 \expandafter\newrobustcmd\expandafter*\expandafter
4647 #3\expandafter{\expandafter\@gls@hyp@opt\csname\@glsxtrnewgls@innercsname\endcsname}%
4648 \ifstrempty{#1}%
4649 {%
4650     \expandafter\newcommand\expandafter*\csname\@glsxtrnewgls@innercsname\endcsname[2] [] {%
4651         \new@ifnextchar[%
4652             {\csname @#4@\endcsname{##1}{#2##2}}%
4653             {\csname @#4@\endcsname{##1}{#2##2}[] }%
4654 }%
4655 }%
4656 {%
4657     \expandafter\newcommand\expandafter*\csname\@glsxtrnewgls@innercsname\endcsname[2] [] {%
4658         \new@ifnextchar[%
4659             {\csname @#4@\endcsname{#1,##1}{#2##2}}%
4660             {\csname @#4@\endcsname{#1,##1}{#2##2}[] }%
4661 }%
4662 }%
4663 }%
4664 }

```

\glsxtrnewgls [⟨options⟩]{⟨prefix⟩}{⟨cs⟩}

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

```

4665 \newrobustcmd*{\glsxtrnewgls}[3] [] {%
4666     \glsxtrnewgls{#1}{#2}{#3}{gls}%
4667 }

```

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.

```

4668 \newrobustcmd*{\glsxtrnewglslike}[6] [] {%
4669     \glsxtrnewgls{#1}{#2}{#3}{gls}%
4670     \glsxtrnewgls{#1}{#2}{#4}{glspl}%
4671     \glsxtrnewgls{#1}{#2}{#5}{Gls}%
4672     \glsxtrnewgls{#1}{#2}{#6}{Glspl}%
4673 }

```

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.

```

4674 \newrobustcmd*{\glsxtrnewGLSlike}[4] [] {%

```

```

4675  \@glsxtrnewgls{#1}{#2}{#3}{GLS}%
4676  \@glsxtrnewgls{#1}{#2}{#4}{GLSpl}%
4677 }

\glsxtrnewrgls As \glsxtrnewgls but for \rgls.
4678 \newrobustcmd*\{\glsxtrnewrgls\}[3] [] {%
4679  \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
4680 }

sxtrnewrglslike As \glsxtrnewglslike but for \rgls etc.
4681 \newrobustcmd*\{\glsxtrnewrglslike\}[6] [] {%
4682  \@glsxtrnewgls{#1}{#2}{#3}{rgls}%
4683  \@glsxtrnewgls{#1}{#2}{#4}{rglsp1}%
4684  \@glsxtrnewgls{#1}{#2}{#5}{rGls}%
4685  \@glsxtrnewgls{#1}{#2}{#6}{rGlp1}%
4686 }

sxtrnewrGLSlike As \glsxtrnewGLSlike but for \rGLS etc.
4687 \newrobustcmd*\{\glsxtrnewrGLSlike\}[4] [] {%
4688  \@glsxtrnewgls{#1}{#2}{#3}{rGLS}%
4689  \@glsxtrnewgls{#1}{#2}{#4}{rGLSp1}%
4690 }

Provide easy access to record count fields.

totalCount Access total record count. This is designed to be expandable. The argument is the label.
4691 \newcommand*\{\GlsXtrTotalRecordCount\}[1]{%
4692  \ifcsdef{glo@\glsdetoklabel{#1}@recordcount}%
4693  {\csname glo@\glsdetoklabel{#1}@recordcount\endcsname}%
4694  {0}%
4695 }

xTrRecordCount Access record count for a particular counter. The first argument is the label. The second argument is the counter name.
4696 \newcommand*\{\GlsXtrRecordCount\}[2]{%
4697  \ifcsdef{glo@\glsdetoklabel{#1}@recordcount.#2}%
4698  {\csname glo@\glsdetoklabel{#1}@recordcount.#2\endcsname}%
4699  {0}%
4700 }

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.
4701 \newcommand*\{\GlsXtrLocationRecordCount\}[3]{%
4702  \ifcsdef{glo@\glsdetoklabel{#1}@recordcount.#2.\glsxtrdetoklocation{#3}}%
4703  {\csname glo@\glsdetoklabel{#1}@recordcount.#2.\glsxtrdetoklocation{#3}\endcsname}%
4704  {0}%
4705 }

```

```
trdetoklocation
4706 \newcommand*{\glsxtrdetoklocation}[1]{#1}
```

```
ablerecordcount
4707 \newcommand*{\glsxtrenablerecordcount}{%
4708   \renewcommand*{\gls}{\rgls}%
4709   \renewcommand*{\Gls}{\rGls}%
4710   \renewcommand*{\glsp1}{\rglsp1}%
4711   \renewcommand*{\Glp1}{\rGlp1}%
4712   \renewcommand*{\GLS}{\rGLS}%
4713   \renewcommand*{\GLSp1}{\rGLSp1}%
4714 }
```

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

```
4715 \newcommand*{\glsxtrrecordtriggervalue}[1]{%
4716   \GlsXtrTotalRecordCount{#1}%
4717 }
```

dCountAttribute

```
4718 \newcommand*{\GlsXtrSetRecordCountAttribute}[2]{%
4719   \@for\@glsxtr@cat:=#1\do
4720   {%
4721     \ifdefempty{\@glsxtr@cat}{%
4722       {%
4723         \glssetcategoryattribute{\@glsxtr@cat}{recordcount}{#2}%
4724       }%
4725     }%
4726   }
```

rifrecordtrigger `\glsxtrifrecordtrigger{<label>}{{<trigger format>}}{<(normal)>}`

```
4727 \newcommand*{\glsxtrifrecordtrigger}[3]{%
4728   \glshasattribute{#1}{recordcount}%
4729   {%
4730     \ifnum\glsxtrrecordtriggervalue{#1}>\glsgetattribute{#1}{recordcount}\relax
4731       #3%
4732     \else
4733       #2%
4734     \fi
4735   }%
4736   {#3}%
4737 }
```

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

```
4738 \newcommand*{\@glsxtr@rglstrigger@record}[3]{%
```

```

4739 \edef\glslabel{\glsdetoklabel{#2}}%
4740 \let\@gls@link@label\glslabel
4741 \def\@glsxtr@thevalue{}%
4742 \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
4743 \def\@glsnumberformat{\glstriggerrecordformat}%
4744 \edef\@gls@counter{\csname glo@\glslabel _@counter\endcsname}%
4745 \edef\glstype{\csname glo@\glslabel _@type\endcsname}%
4746 \def\@glsxtr@thevalue{}%
4747 \def\@glsxtr@theHvalue{\@glsxtr@thevalue}%
4748 \glsxtrinitwrgloss
4749 \glslinkpresetkeys
4750 \setkeys{glslink}{#1}%
4751 \glslinkpostsetkeys
4752 \ifdefempty{\@glsxtr@thevalue}%
4753 {%
4754   \@gls@saveentrycounter
4755 }%
4756 {%
4757   \let\the\glsentrycounter\@glsxtr@thevalue
4758   \def\theH\glsentrycounter{\@glsxtr@theHvalue}%
4759 }%
4760 \ifglsxtrinitwrglossbefore
4761   \do@wrglossary{#2}%
4762 \fi
4763 #3%
4764 \ifglsxtrinitwrglossbefore
4765 \else
4766   \do@wrglossary{#2}%
4767 \fi
4768 \ifKV@glslink@local
4769   \glslocalunset{#2}%
4770 \else
4771   \glsunset{#2}%
4772 \fi
4773 }

```

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

```
4774 \newcommand*{\glstriggerrecordformat}[1]{}
```

`\rgls`

```
4775 \newrobustcmd*{\rgls}{\gls@hyp@opt\@rgls}
```

`\@rgls`

```
4776 \newcommand*{\@rgls}[2][]{%
4777   \new@ifnextchar[{\@rgls@{#1}{#2}}{\@rgls@{#1}{#2}[]}%
4778 }
```

`\@rgls@`

```

4779 \def\@rgls@#1#2[#3]{%
4780   \glsxtrifrecordtrigger{#2}%
4781   {%
4782     \glsxtr@rglstrigger@record{#1}{#2}{\rglsformat{#2}{#3}}%
4783   }%
4784   {%
4785     \gls@{#1}{#2}[#3]%
4786   }%
4787 }%}

\rglspl
4788 \newrobustcmd*\rglspl{\gls@hyp@opt\rglspl}

\@rglspl
4789 \newcommand*\@rglspl[2][]{%
4790   \new@ifnextchar[\@rglspl@{#1}{#2}]{\@rglspl@{#1}{#2}[]}{%
4791 }

\@rglspl@
4792 \def\@rglspl@#1#2[#3]{%
4793   \glsxtrifrecordtrigger{#2}%
4794   {%
4795     \glsxtr@rglstrigger@record{#1}{#2}{\rglsplformat{#2}{#3}}%
4796   }%
4797   {%
4798     \glspl@{#1}{#2}[#3]%
4799   }%
4800 }%}

\rGls
4801 \newrobustcmd*\rGls{\gls@hyp@opt\rGls}

\@rGls
4802 \newcommand*\@rGls[2][]{%
4803   \new@ifnextchar[\@rGls@{#1}{#2}]{\@rGls@{#1}{#2}[]}{%
4804 }

\@rGls@
4805 \def\@rGls@#1#2[#3]{%
4806   \glsxtrifrecordtrigger{#2}%
4807   {%
4808     \glsxtr@rglstrigger@record{#1}{#2}{\rGlsformat{#2}{#3}}%
4809   }%
4810   {%
4811     \Gls@{#1}{#2}[#3]%
4812   }%
4813 }%

```

```

\rGlspl
4814 \newrobustcmd*\rGlspl{\gls@hyp@opt\rGlspl}

\@rGlspl
4815 \newcommand*\@rGlspl[2][]{%
4816   \new@ifnextchar[\@rGlspl[#1]{#2}{\@rGlspl[#1]{#2}[]}}%
4817 }

\@rGlspl@
4818 \def\@rGlspl#1#2[#3]{%
4819   \glsxtrifrecordtrigger{#2}%
4820   {%
4821     \glsxtr@rglstrigger@record[#1]{#2}{\rGlsplformat{#2}{#3}}%
4822   }%
4823   {%
4824     \@Glspl[#1]{#2}[#3]%
4825   }%
4826 }%

\rGLS
4827 \newrobustcmd*\rGLS{\gls@hyp@opt\@rGLS}

\@rGLS
4828 \newcommand*\@rGLS[2][]{%
4829   \new@ifnextchar[\@rGLS[#1]{#2}{\@rGLS[#1]{#2}[]}}%
4830 }

\@rGLS@
4831 \def\@rGLS#1#2[#3]{%
4832   \glsxtrifrecordtrigger{#2}%
4833   {%
4834     \glsxtr@rglstrigger@record[#1]{#2}{\rGLSformat{#2}{#3}}%
4835   }%
4836   {%
4837     \@GLS[#1]{#2}[#3]%
4838   }%
4839 }%

\rGLSpl
4840 \newrobustcmd*\rGLSpl{\gls@hyp@opt\@rGLSpl}

\@rGLSpl
4841 \newcommand*\@rGLSpl[2][]{%
4842   \new@ifnextchar[\@rGLSpl[#1]{#2}{\@rGLSpl[#1]{#2}[]}}%
4843 }

```

```

\@rGLSpl@

4844 \def\@rGLSpl@#1#2[#3]{%
4845   \glsxtrifrecordtrigger{#2}%
4846   {%
4847     \glsxtr@rglstrigger@record{#1}{#2}{\rGLSplformat{#2}{#3}}%
4848   }%
4849   {%
4850     \@GLSpl@{#1}{#2}{#3}%
4851   }%
4852 }%


\rglsformat

4853 \newcommand*\rglsformat[2]{%
4854   \glsifregular{#1}%
4855   {\glsentryfirst{#1}}%
4856   {\ifglshaslong{#1}{\glsentrylong{#1}}{\glsentryfirst{#1}}}#2%
4857 }

\rglsplformat

4858 \newcommand*\rglsplformat[2]{%
4859   \glsifregular{#1}%
4860   {\glsentryfirstplural{#1}}%
4861   {\ifglshaslong{#1}{\glsentrylongplural{#1}}{\glsentryfirstplural{#1}}}#2%
4862 }

\rGlsformat

4863 \newcommand*\rGlsformat[2]{%
4864   \glsifregular{#1}%
4865   {\Glsentryfirst{#1}}%
4866   {\ifglshaslong{#1}{\Glsentrylong{#1}}{\Glsentryfirst{#1}}}#2%
4867 }

\rGlsplformat

4868 \newcommand*\rGlsplformat[2]{%
4869   \glsifregular{#1}%
4870   {\Glsentryfirstplural{#1}}%
4871   {\ifglshaslong{#1}{\Glsentrylongplural{#1}}{\Glsentryfirstplural{#1}}}#2%
4872 }

\rGLSformat

4873 \newcommand*\rGLSformat[2]{%
4874   \expandafter\mfirrstucMakeUppercase\expandafter{\rglsformat{#1}{#2}}%
4875 }

\rGLSplformat

4876 \newcommand*\rGLSplformat[2]{%
4877   \expandafter\mfirrstucMakeUppercase\expandafter{\rglsplformat{#1}{#2}}%
4878 }

```

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`.

```
4879 \newcommand{\glsxtr@do@inc@linkcount}{%
```

Does this entry have the `linkcount` attribute set?

```
4880 \glsifattribute{\glslabel}{linkcount}{true}%
4881 {%
```

Does the counter exist?

```
4882 \ifcsdef{c@glsxtr@linkcount@\glslabel}{}%
4883 {%
```

Counter doesn’t exist, so define it.

```
4884 \newcounter{glsxtr@linkcount@\glslabel}%
```

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

```
4885 \glshasattribute{\glslabel}{linkcountmaster}%
4886 {%
```

Need to ensure values are fully expanded.

```
4887 \begingroup
4888   \edef\x{\endgroup\noexpand\addtoreset{glsxtr@linkcount@\glslabel}%
4889     {\glsgetattribute{\glslabel}{linkcountmaster}}}
4890   \x
4891 }
4892 {%
4893 }%
```

Increment counter:

```
4894 \glsxtrinlinkcounter{glsxtr@linkcount@\glslabel}%
4895 }%
4896 {%
4897 }
```

`rinlinkcounter` May be redefined to use `\refstepcounter` if required.

```
4898 \newcommand*{\glsxtrinlinkcounter}[1]{\stepcounter{#1}}
```

`linkCounterValue` Expands to the associated link counter register or 0 if not defined.

```
4899 \newcommand*{\GlsXtrLinkCounterValue}[1]{%
4900   \ifcsundef{c@glsxtr@linkcount@#1}{0}{\csname c@glsxtr@linkcount@#1\endcsname}%
4901 }
```

rTheLinkCounter Expands to the display value of the associated link counter or 0 if not defined.

```
4902 \newcommand*{\GlsXtrTheLinkCounter}[1]{%
4903   \ifcsundef{the\glsxtr@linkcount@\#1}{0}{%
4904     {\csname the\glsxtr@linkcount@\#1\endcsname}%
4905   }
```

fLinkCounterDef Tests if the counter has been defined

```
4906 \newcommand*{\GlsXtrIfLinkCounterDef}[3]{%
4907   \ifcsundef{the\glsxtr@linkcount@\#1}{#3}{#2}%
4908 }
```

LinkCounterName Expands to the associated link counter name. (No check for existence.)

```
4909 \newcommand*{\GlsXtrLinkCounterName}[1]{\glsxtr@linkcount@\#1}
```

ableLinkCounting **\GlsXtrEnableLinkCounting[*master counter*]{{*categories*}}**

Enable link counting for the given categories.

```
4910 \newcommand*{\GlsXtrEnableLinkCounting}[2][]{%
4911   \let\glsxtr@inc@linkcount@\glsxtr@do@inc@linkcount
4912   \@for\@glsxtr@label:=#2\do
4913   {%
4914     \glssetcategoryattribute{\@glsxtr@label}{linkcount}{true}%
4915     \ifstrempty{#1}{}%
4916   {%
4917     \ifcsundef{c@\#1}%
4918       {\@nocounterr{#1}}%
4919       {\glssetcategoryattribute{\@glsxtr@label}{linkcountmaster}{#1}}%
4920   }%
4921 }%
4922 }
4923 \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.

```
4924 @ifpackageloaded{glossaries-accsupp}
4925 {
```

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

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

```
4926 \newcommand*{\glsaccessname}[1]{%
```

```
4927     \glsnameaccessdisplay  
4928     {  
4929         \glsentryname{#1}  
4930     }  
4931     {#1}  
4932 }
```

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

```
4933 \newcommand*{\Glsaccessname}[1]{%  
4934     \glsnameaccessdisplay  
4935     {  
4936         \Glsentryname{#1}  
4937     }  
4938     {#1}  
4939 }
```

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

```
4940 \newcommand*{\GLSaccessname}[1]{%  
4941     \glsnameaccessdisplay  
4942     {  
4943         \mfirstucMakeUppercase{\glsentryname{#1}}  
4944     }  
4945     {#1}  
4946 }
```

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

```
4947 \newcommand*{\glsaccesstext}[1]{%  
4948     \glstextaccessdisplay  
4949     {  
4950         \glsentrytext{#1}  
4951     }  
4952     {#1}  
4953 }
```

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

```
4954 \newcommand*{\Glsaccesstext}[1]{%  
4955     \glstextaccessdisplay  
4956     {  
4957         \Glsentrytext{#1}  
4958     }  
4959     {#1}  
4960 }
```

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

```
4961 \newcommand*{\GLSaccesstext}[1]{%  
4962     \glstextaccessdisplay
```

```
4963     {%
4964         \mfirstucMakeUppercase{\glsentrytext{#1}}%
4965     }%
4966     {#1}%
4967 }
```

`glsaccessplural` Display the plural value (no link and no check for existence).

```
4968 \newcommand*{\glsaccessplural}[1]{%
4969     \glspluralaccessdisplay
4970     {%
4971         \glsentryplural{#1}%
4972     }%
4973     {#1}%
4974 }
```

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

```
4975 \newcommand*{\Glsaccessplural}[1]{%
4976     \glspluralaccessdisplay
4977     {%
4978         \Glsentryplural{#1}%
4979     }%
4980     {#1}%
4981 }
```

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

```
4982 \newcommand*{\GLSaccessplural}[1]{%
4983     \glspluralaccessdisplay
4984     {%
4985         \mfirstucMakeUppercase{\glsentryplural{#1}}%
4986     }%
4987     {#1}%
4988 }
```

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

```
4989 \newcommand*{\glsaccessfirst}[1]{%
4990     \glsfirstaccessdisplay
4991     {%
4992         \glsentryfirst{#1}%
4993     }%
4994     {#1}%
4995 }
```

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

```
4996 \newcommand*{\Glsaccessfirst}[1]{%
4997     \glsfirstaccessdisplay
4998     {%
```

```

4999      \Glsentryfirst{#1}%
5000  }%
5001  {#1}%
5002 }

\GLSaccessfirst Display the first value (no link and no check for existence) converted to upper case.
5003 \newcommand*{\GLSaccessfirst}[1]{%
5004   \glsfirstaccessdisplay
5005   {%
5006     \mfirstucMakeUppercase{\glsentryfirst{#1}}%
5007   }%
5008   {#1}%
5009 }

cessfirstplural Display the firstplural value (no link and no check for existence).
5010 \newcommand*{\glsaccessfirstplural}[1]{%
5011   \glsfirstpluralaccessdisplay
5012   {%
5013     \glsentryfirstplural{#1}%
5014   }%
5015   {#1}%
5016 }

cessfirstplural Display the firstplural value (no link and no check for existence) with the first letter converted
to upper case.
5017 \newcommand*{\Glsaccessfirstplural}[1]{%
5018   \glsfirstpluralaccessdisplay
5019   {%
5020     \Glsentryfirstplural{#1}%
5021   }%
5022   {#1}%
5023 }

cessfirstplural Display the firstplural value (no link and no check for existence) converted to upper case.
5024 \newcommand*{\GLSaccessfirstplural}[1]{%
5025   \glsfirstpluralaccessdisplay
5026   {%
5027     \mfirstucMakeUppercase{\glsentryfirstplural{#1}}%
5028   }%
5029   {#1}%
5030 }

glsaccesssymbol Display the symbol value (no link and no check for existence).
5031 \newcommand*{\glsaccesssymbol}[1]{%
5032   \glssymbolaccessdisplay
5033   {%
5034     \glsentrysymbol{#1}%
5035   }%

```

```
5036     {#1}%
5037 }
```

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

```
5038 \newcommand*{\Glsaccesssymbol}[1]{%
5039   \glssymbolaccessdisplay
5040   {%
5041     \Glsentrysymbol{#1}%
5042   }%
5043   {#1}%
5044 }
```

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

```
5045 \newcommand*{\GLSaccesssymbol}[1]{%
5046   \glssymbolaccessdisplay
5047   {%
5048     \mfirstucMakeUppercase{\glsentrysymbol{#1}}%
5049   }%
5050   {#1}%
5051 }
```

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

```
5052 \newcommand*{\glsaccesssymbolplural}[1]{%
5053   \glssymbolpluralaccessdisplay
5054   {%
5055     \glsentrysymbolplural{#1}%
5056   }%
5057   {#1}%
5058 }
```

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

```
5059 \newcommand*{\Glsaccesssymbolplural}[1]{%
5060   \glssymbolpluralaccessdisplay
5061   {%
5062     \Glsentrysymbolplural{#1}%
5063   }%
5064   {#1}%
5065 }
```

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

```
5066 \newcommand*{\GLSaccesssymbolplural}[1]{%
5067   \glssymbolpluralaccessdisplay
5068   {%
5069     \mfirstucMakeUppercase{\glsentrysymbolplural{#1}}%
5070   }%
5071   {#1}%
5072 }
```

```

\glsaccessdesc Display the desc value (no link and no check for existence).
5073 \newcommand*{\glsaccessdesc}[1]{%
5074   \glsdescriptionaccessdisplay
5075   {%
5076     \glsentrydesc{#1}%
5077   }%
5078   {#1}%
5079 }

\Glsaccessdesc Display the desc value (no link and no check for existence) with the first letter converted to
upper case.
5080 \newcommand*{\Glsaccessdesc}[1]{%
5081   \glsdescriptionaccessdisplay
5082   {%
5083     \Glsentrydesc{#1}%
5084   }%
5085   {#1}%
5086 }

\GLSaccessdesc Display the desc value (no link and no check for existence) converted to upper case.
5087 \newcommand*{\GLSaccessdesc}[1]{%
5088   \glsdescriptionaccessdisplay
5089   {%
5090     \mfirstucMakeUppercase{\glsentrydesc{#1}}%
5091   }%
5092   {#1}%
5093 }

accessdescplural Display the descplural value (no link and no check for existence).
5094 \newcommand*{\glsaccessdescplural}[1]{%
5095   \glsdescriptionpluralaccessdisplay
5096   {%
5097     \glsentrydescplural{#1}%
5098   }%
5099   {#1}%
5100 }

accessdescplural Display the descplural value (no link and no check for existence) with the first letter converted
to upper case.
5101 \newcommand*{\Glsaccessdescplural}[1]{%
5102   \glsdescriptionpluralaccessdisplay
5103   {%
5104     \Glsentrydescplural{#1}%
5105   }%
5106   {#1}%
5107 }

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

```

```
5108 \newcommand*{\GLSaccessdescplural}[1]{%
5109   \glsdescriptionpluralaccessdisplay
5110   {%
5111     \mfirstucMakeUppercase{\glsentrydescplural{\#1}}%
5112   }%
5113   {\#1}%
5114 }
```

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

```
5115 \newcommand*{\glsaccessshort}[1]{%
5116   \glsshortaccessdisplay
5117   {%
5118     \glsentryshort{\#1}%
5119   }%
5120   {\#1}%
5121 }
```

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

```
5122 \newcommand*{\Glsaccessshort}[1]{%
5123   \glsshortaccessdisplay
5124   {%
5125     \Glsentryshort{\#1}%
5126   }%
5127   {\#1}%
5128 }
```

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

```
5129 \newcommand*{\GLSaccessshort}[1]{%
5130   \glsshortaccessdisplay
5131   {%
5132     \mfirstucMakeUppercase{\glsentryshort{\#1}}%
5133   }%
5134   {\#1}%
5135 }
```

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

```
5136 \newcommand*{\glsaccessshortpl}[1]{%
5137   \glsshortpluralaccessdisplay
5138   {%
5139     \glsentryshortpl{\#1}%
5140   }%
5141   {\#1}%
5142 }
```

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

```
5143 \newcommand*{\Glsaccessshortpl}[1]{%
```

```
5144     \glsshortpluralaccessdisplay  
5145     {  
5146         \Glsentryshortpl{\#1}  
5147     }%  
5148     {\#1}%  
5149 }
```

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

```
5150     \newcommand*{\GLSaccessshortpl}[1]{%  
5151         \glsshortpluralaccessdisplay  
5152         {  
5153             \mfirstucMakeUppercase{\Glsentryshortpl{\#1}}%  
5154         }%  
5155         {\#1}%  
5156     }
```

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

```
5157     \newcommand*{\glsaccesslong}[1]{%  
5158         \glslongaccessdisplay{\Glsentrylong{\#1}}{\#1}%  
5159     }
```

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

```
5160     \newcommand*{\Glsaccesslong}[1]{%  
5161         \glslongaccessdisplay{\Glsentrylong{\#1}}{\#1}%  
5162     }
```

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

```
5164     \newcommand*{\GLSaccesslong}[1]{%  
5165         \glslongaccessdisplay  
5166         {  
5167             \mfirstucMakeUppercase{\Glsentrylong{\#1}}%  
5168         }%  
5169         {\#1}%  
5170     }
```

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

```
5171     \newcommand*{\glsaccesslongpl}[1]{%  
5172         \glslongpluralaccessdisplay{\Glsentrylongpl{\#1}}{\#1}%  
5173     }
```

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

```
5174     \newcommand*{\Glsaccesslongpl}[1]{%  
5175         \glslongpluralaccessdisplay{\Glsentrylongpl{\#1}}{\#1}%  
5176     }
```

```

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

5178  \newcommand*{\GLSaccesslongpl}[1]{%
5179    \glslongpluralaccessdisplay
5180    {%
5181      \mfirstucMakeUppercase{\glsentrylongpl{\#1}}%
5182    }%
5183    {\#1}%
5184  }

End of if part

5185 }
5186 {

No accessibility support. Just define these commands to do \glsentry{xxx}

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

5187  \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.

5188  \newcommand*{\Glsaccessname}[1]{\Glsentryname{\#1}}


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

5189  \newcommand*{\GLSaccessname}[1]{%
5190    \protect\mfirstucMakeUppercase{\glsentryname{\#1}}%


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

5191  \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.

5192  \newcommand*{\Glsaccesstext}[1]{\Glsentrytext{\#1}}


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

5193  \newcommand*{\GLSaccesstext}[1]{%
5194    \protect\mfirstucMakeUppercase{\glsentrytext{\#1}}%


glsaccessplural  Display the plural value (no link and no check for existence).

5195  \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.

5196  \newcommand*{\Glsaccessplural}[1]{\Glsentryplural{\#1}}


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

5197  \newcommand*{\GLSaccessplural}[1]{%
5198    \protect\mfirstucMakeUppercase{\glsentryplural{\#1}}}

```

```

\glsaccessfirst  Display the first value (no link and no check for existence).
5199  \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.
5200  \newcommand*{\Glsaccessfirst}[1]{\Glsentryfirst{\#1}}


\GLSaccessfirst  Display the first value (no link and no check for existence). converted to upper case.
5201  \newcommand*{\GLSaccessfirst}[1]{%
5202    \protect\mfirstucMakeUppercase{\glsentryfirst{\#1}}}

cessfirstplural  Display the firstplural value (no link and no check for existence).
5203  \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.
5204  \newcommand*{\Glsaccessfirstplural}[1]{\Glsentryfirstplural{\#1}}


cessfirstplural  Display the firstplural value (no link and no check for existence). converted to upper case.
5205  \newcommand*{\GLSaccessfirstplural}[1]{%
5206    \protect\mfirstucMakeUppercase{\glsentryfirstplural{\#1}}}

glsaccesssymbol  Display the symbol value (no link and no check for existence).
5207  \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.
5208  \newcommand*{\Glsaccesssymbol}[1]{\Glsentrysymbol{\#1}}


GLSaccesssymbol  Display the symbol value (no link and no check for existence). converted to upper case.
5209  \newcommand*{\GLSaccesssymbol}[1]{%
5210    \protect\mfirstucMakeUppercase{\glsentrysymbol{\#1}}}

esssymbolplural  Display the symbolplural value (no link and no check for existence).
5211  \newcommand*{\glsaccesssymbolplural}[1]{\glsentrysymbolplural{\#1}}


esssymbolplural  Display the symbolplural value (no link and no check for existence) with the first letter con-
verted to upper case.
5212  \newcommand*{\Glsaccesssymbolplural}[1]{\Glsentrysymbolplural{\#1}}


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

5213  \newcommand*{\GLSaccesssymbolplural}[1]{%
5214    \protect\mfirstucMakeUppercase{\glsentrysymbolplural{\#1}}}

\glsaccessdesc  Display the desc value (no link and no check for existence).
5215  \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.
5216 \newcommand*{\Glsaccessdesc}[1]{\Glsentrydesc{\#1}}

\GLSaccessdesc Display the desc value (no link and no check for existence). converted to upper case.
5217 \newcommand*{\GLSaccessdesc}[1]{%
5218 \protect\mfirstucMakeUppercase{\glsentrydesc{\#1}}}

\accessdescplural Display the descplural value (no link and no check for existence).
5219 \newcommand*{\glsaccessdescplural}[1]{\glsentrydescplural{\#1}}

\accessdescplural Display the descplural value (no link and no check for existence) with the first letter converted to upper case.
5220 \newcommand*{\Glsaccessdescplural}[1]{\Glsentrydescplural{\#1}}

\accessdescplural Display the descplural value (no link and no check for existence). converted to upper case.
5221 \newcommand*{\GLSaccessdescplural}[1]{%
5222 \protect\mfirstucMakeUppercase{\glsentrydescplural{\#1}}}

\glsaccessshort Display the short form (no link and no check for existence).
5223 \newcommand*{\glsaccessshort}[1]{\glsentryshort{\#1}}

\GLSaccessshort Display the short form with first letter converted to uppercase (no link and no check for existence).
5224 \newcommand*{\Glsaccessshort}[1]{\Glsentryshort{\#1}}

\GLSaccessshort Display the short value (no link and no check for existence). converted to upper case.
5225 \newcommand*{\GLSaccessshort}[1]{%
5226 \protect\mfirstucMakeUppercase{\glsentryshort{\#1}}}

\glsaccessshortpl Display the short plural form (no link and no check for existence).
5227 \newcommand*{\glsaccessshortpl}[1]{\glsentryshortpl{\#1}}

\glsaccessshortpl Display the short plural form with first letter converted to uppercase (no link and no check for existence).
5228 \newcommand*{\Glsaccessshortpl}[1]{\Glsentryshortpl{\#1}}

\Laccessshortpl Display the shortplural value (no link and no check for existence). converted to upper case.
5229 \newcommand*{\GLSaccessshortpl}[1]{%
5230 \protect\mfirstucMakeUppercase{\glsentryshortpl{\#1}}}

\glsaccesslong Display the long form (no link and no check for existence).
5231 \newcommand*{\glsaccesslong}[1]{\glsentrylong{\#1}}

\GLsaccesslong Display the long form (no link and no check for existence).
5232 \newcommand*{\Glsaccesslong}[1]{\Glsentrylong{\#1}}

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

```
5233 \newcommand*{\GLSaccesslong}[1]{%
5234 \protect\mfirstucMakeUppercase{\glsentrylong{#1}}}
```

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

```
5235 \newcommand*{\glsaccesslongpl}[1]{\glsentrylongpl{#1}}
```

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

```
5236 \newcommand*{\Glsaccesslongpl}[1]{\Glsentrylongpl{#1}}
```

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

```
5237 \newcommand*{\GLSaccesslongpl}[1]{%
5238 \protect\mfirstucMakeUppercase{\glsentrylongpl{#1}}}
```

End of else part

```
5239 }
```

1.6 Categories

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

```
5240 \glsaddstoragekey{category}{general}{\glscategory}
```

\glsifcategory Convenient shortcut to determine if an entry has the given category.

```
5241 \newcommand{\glsifcategory}[4]{%
5242 \ifglsfieldeq{#1}{category}{#2}{#3}{#4}%
5243 }
```

Categories can have attributes.

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

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

```
5244 \newcommand*{\glssetcategoryattribute}[3]{%
5245 \csdef{@glsxtr@categoryattr@@#1@#2}{#3}%
5246 }
```

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

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

```
5247 \newcommand*{\glsgetcategoryattribute}[2]{%
5248 \csuse{@glsxtr@categoryattr@@#1@#2}%
5249 }
```

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

Tests if the category has the given attribute set.

```
5250 \newcommand*\glshascategoryattribute[4]{%
5251   \ifcvoid{\glsxtr@categoryattr@@\#1\#2}{\#4}{\#3}%
5252 }
```

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

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

```
5253 \newcommand*\glssetattribute[3]{%
5254   \glssetcategoryattribute{\glscategory{\#1}}{\#2}{\#3}%
5255 }
```

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

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

```
5256 \newcommand*\glsgetattribute[2]{%
5257   \glsgetcategoryattribute{\glscategory{\#1}}{\#2}%
5258 }
```

```
\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.

```
5259 \newcommand*\glshasattribute[4]{%
5260   \ifglsentryexists{\#1}%
5261     {\glshascategoryattribute{\glscategory{\#1}}{\#2}{\#3}{\#4}}%
5262   {\#4}%
5263 }
```

```
\glsifcategoryattribute{\category}{\attribute-label}{\value}{\true part}{\false part}
```

True if category has the attribute with the given value.

```
5264 \newcommand{\glsifcategoryattribute}[5]{%
```

```

5265 \ifcsundef{@glsxtr@categoryattr@@#1@#2}%
5266 {#5}%
5267 {\ifcsstring{@glsxtr@categoryattr@@#1@#2}{#3}{#4}{#5}}%
5268 }

```

```
\glsifattribute{\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.

```

5269 \newcommand{\glsifattribute}[5]{%
5270   \ifglsentryexists{#1}{%
5271     \glsifcategoryattribute{\glscategory{#1}}{#2}{#3}{#4}{#5}}%
5272   {#5}%
5273 }

```

Set attributes for the default general category:

```
5274 \glssetcategoryattribute{general}{regular}{true}
```

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

```
5275 \glssetcategoryattribute{acronym}{regular}{true}
```

`regularcategory` Convenient shortcut to create add the regular attribute.

```

5276 \newcommand*\glssetregularcategory[1]{%
5277   \glssetcategoryattribute{#1}{regular}{true}}%
5278 
```

```
\glsifregularcategory{<category>}{<true part>}{<false part>}
```

Short cut to determine if a category has the regular attribute explicitly set to true.

```

5279 \newcommand{\glsifregularcategory}[3]{%
5280   \glsifcategoryattribute{#1}{regular}{true}{#2}{#3}}%
5281 
```

```
\glsifnotregularcategory{<category>}{<true part>}{<false part>}
```

Short cut to determine if a category has the regular attribute explicitly set to false.

```

5282 \newcommand{\glsifnotregularcategory}[3]{%
5283   \glsifcategoryattribute{#1}{regular}{false}{#2}{#3}}%
5284 
```

```
\glsifregular \glsifregular{\entrylabel}{\truepart}{\falsepart}
```

Short cut to determine if an entry has a regular attribute set to true.

```
5285 \newcommand{\glsifregular}[3]{%
5286   \glsifregularcategory{\glscategory{\#1}}{\#2}{\#3}%
5287 }
```

```
\glsifnotregular \glsifnotregular{\entrylabel}{\truepart}{\falsepart}
```

Short cut to determine if an entry has a regular attribute set to false.

```
5288 \newcommand{\glsifnotregular}[3]{%
5289   \glsifnotregularcategory{\glscategory{\#1}}{\#2}{\#3}%
5290 }
```

```
\glsforeachincategory[\glossarylabels]{\categorylabel}{\glossarycs}{\labelcs}{\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.

```
5291 \newcommand{\glsforeachincategory}[5][\@glo@types]{%
5292   \forallglossaries[\#1]{\#3}%
5293   {%
5294     \forglsentries[\#3]{\#4}%
5295     {%
5296       \glsifcategory{\#4}{\#2}{\#5}{}%
5297     }%
5298   }%
5299 }
```

```
\glsforeachwithattribute[\glossarylabels]{\attributelabel}{\attributevalue}{\glossarycs}{\labelcs}{\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.

```

5300 \newcommand{\glsforeachwithattribute}[6] [\\@glo@types]{%
5301   \forallglossaries[#1]{#4}%
5302   {%
5303     \forglsentries[#4]{#5}%
5304     {%
5305       \glsifattribute{#5}{#2}{#3}{#6}{}}%
5306     }%
5307   }%
5308 }

```

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

```

5309 \ifdef\newterm
5310 {%

```

`\newterm`

```

5311 \renewcommand*\newterm[2][]{%
5312   \newglossaryentry[#2]{%
5313     type=index,category=index,name={#2},%
5314     description={\glsxtrpostdescription\nopostdesc},#1}%
5315 }

```

Indexed terms are regular by default.

```

5316 \glssetcategoryattribute{index}{regular}{true}

```

`trpostdescindex`

```

5317 \newcommand*\glsxtrpostdescindex(){}
5318 {}
5319 {}

```

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`.

```

5320 \ifdef\printsymbols
5321 {%

```

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

```

5322 \newcommand*\glsxtrnewsymbol[3][]{%
5323   \newglossaryentry[#2]{name={#3},sort={#2},type=symbols,category=symbol, #1}%
5324 }

```

Symbols are regular by default.

```

5325 \glssetcategoryattribute{symbol}{regular}{true}

```

`rpostdescsymbol`

```

5326 \newcommand*\glsxtrpostdescsymbol(){}

```

```
5327 }
5328 {}
```

Similar for the numbers option.

```
5329 \ifdef\printnumbers
5330 {%
```

`glsxtrnewnumber`

```
5331 \ifdef\printnumbers
5332   \newcommand*{\glsxtrnewnumber}[3] []{%
5333     \newglossaryentry{\#2}{name=\#3,sort=\#2,type=numbers,category=number,\#1}%
5334 }
```

Numbers are regular by default.

```
5335 \glssetcategoryattribute{number}{regular}{true}
```

`rpostdescnumber`

```
5336 \newcommand*{\glsxtrpostdescnumber}{}%
5337 {}
5338 {}
```

`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.

```
5339 \newcommand*{\glsxtrsetcategory}[2]{%
5340   \@for\@glsxtr@label:=#1\do
5341   {%
5342     \glsfieldxdef{\@glsxtr@label}{category}{#2}%
5343   }%
5344 }
```

`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.

```
5345 \newcommand*{\glsxtrsetcategoryforall}[2]{%
5346   \forallglossaries[#1]{\@glsxtr@type}{%
5347     \forglsentries[\@glsxtr@type]{\@glsxtr@label}{%
5348       {%
5349         \glsfieldxdef{\@glsxtr@label}{category}{#2}%
5350       }%
5351     }%
5352 }
```

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

Apply title casing to the contents of the given field.

```
5353 \newcommand*{\glsxtrfieldtitlecase}[2]{%
```

```

5354 \expandafter\glsxtrfieldtitlecasecs\expandafter
5355   {\csname glo@\glsdetoklabel{#1}@#2\endcsname}%
5356 }

```

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

```
5357 \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.

```

5358 \@ifpackageloaded{glossaries-accsupp}%
5359 {%
5360   \renewcommand*{\glossentrydesc}[1]{%
5361     \glsdoifexistsorwarn{#1}%
5362     {%
5363       \glssetabbrvfmt{\glscategory{#1}}%

```

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

```

5364   \glshasattribute{#1}{glossdescfont}%
5365   {%
5366     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%
5367     \ifcsdef{\@glsxtr@attrval}%
5368     {%
5369       \letcs{\@glsxtr@glossdescfont}{\@glsxtr@attrval}%
5370     }%
5371     {%
5372       \GlossariesExtraWarning{Unknown control sequence name
5373         '\@glsxtr@attrval' supplied in glossdescfont attribute
5374         for entry '#1'. Ignoring}%
5375       \let\@glsxtr@glossdescfont\@firstofone
5376     }%
5377   }%
5378   {\let\@glsxtr@glossdescfont\@firstofone}%
5379   \glsifattribute{#1}{glossdesc}{firstuc}%
5380   {%
5381     \glsxtr@glossdescfont{\Glsaccessdesc{#1}}%
5382   }%
5383   {%
5384     \glsifattribute{#1}{glossdesc}{title}%
5385     {%
5386       \glsxtr@do@titlecaps@warn
5387       \glsdescriptionaccessdisplay
5388       {%
5389         \glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
5390       }%
5391     }%

```

```

5392      }%
5393      {%
5394          \glsxtr@glossdescfont{\glsaccessdesc{#1}}%
5395      }%
5396      }%
5397      }%
5398  }
5399 }
5400 {
5401 \renewcommand*\glossentrydesc[1]{%
5402     \glsdoifexistsorwarn{#1}%
5403     {%
5404         \glssetabbrvfmt{\glscategory{#1}}%
5405         \glshasattribute{#1}{glossdescfont}%
5406     }%
5407         \edef\glsxtr@attrval{\glsgetattribute{#1}{glossdescfont}}%
5408         \ifcsdef{\glsxtr@attrval}%
5409             {%
5410                 \letcs{\glsxtr@glossdescfont}{\glsxtr@attrval}%
5411             }%
5412             {%
5413                 \GlossariesExtraWarning{Unknown control sequence name
5414                     ‘\glsxtr@attrval’ supplied in glossdescfont attribute
5415                     for entry ‘#1’. Ignoring}%
5416                 \let\glsxtr@glossdescfont\firstofone
5417             }%
5418         }%
5419         {\let\glsxtr@glossdescfont\firstofone}%
5420         \glsifattribute{#1}{glossdesc}{firstuc}%
5421     }%
5422         \glsxtr@glossdescfont{\glsentrydesc{#1}}%
5423     }%
5424     {%
5425         \glsifattribute{#1}{glossdesc}{title}%
5426     }%
5427         \glsxtr@do@titlecaps@warn
5428         \glsxtr@glossdescfont{\glsxtrfieldtitlecase{#1}{desc}}%
5429     }%
5430     {%
5431         \glsxtr@glossdescfont{\glsentrydesc{#1}}%
5432     }%
5433     }%
5434 }%
5435 }
5436 }

```

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

```
5437 \ifpackageloaded{glossaries-accsupp}
```

```

5438 {
5439   \renewcommand*\glossentryname{[1]}{%
5440     \glsdoifexistsorwarn{#1}%
5441     {%
5442       \glssetabbrvfmt{\glscategory{#1}}%
5443     \glsphasattribute{#1}{glossnamefont}%
5444     {%
5445       \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5446       \ifcsdef{\@glsxtr@attrval}%
5447         {%
5448           \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5449         }%
5450         {%
5451           \GlossariesExtraWarning{Unknown control sequence name}%
5452           '\@glsxtr@attrval' supplied in glossnamefont attribute%
5453           for entry '#1'. Reverting to default \string\glsnamefont}%
5454           \let\@glsxtr@glossnamefont\glsnamefont
5455         }%
5456       }%
5457       {\let\@glsxtr@glossnamefont\glsnamefont}%
5458       \glsifattribute{#1}{glossname}{firststuc}%
5459     {%
5460       \glsnameaccessdisplay
5461     {%
5462       \glsxtr@glossnamefont{\Glsentryname{#1}}%
5463     }%
5464     {#1}%
5465   }%
5466   {%
5467     \glsifattribute{#1}{glossname}{title}%
5468   {%
5469     \glsxtr@do@titlecaps@warn
5470     \glsnameaccessdisplay
5471     {%
5472       \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
5473     }%
5474     {#1}%
5475   }%
5476   {%
5477     \glsifattribute{#1}{glossname}{uc}%
5478   {%
5479     \glsnameaccessdisplay
5480   }%

```

Hide the label from the upper-casing command.

```

5481   \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5482   \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
5483 }

```

```

5484      {#1}%
5485    }%
5486    {%
5487      \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@name}%
5488      \glsnameaccessdisplay
5489    {%
5490      \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
5491    }%
5492    {#1}%
5493  }%
5494 }%
5495 }%

```

Do post-name hook:

```

5496      \glsxtrpostnamehook{#1}%
5497    }%
5498  }
5499 }
5500 {
5501 \renewcommand*\glossentryname[1]{%
5502   \glsdoifexistsorwarn{#1}%
5503   {%
5504     \glssetabbrvfmt{\glscategory{#1}}%
5505     \glshasattribute{#1}{glossnamefont}%
5506   {%
5507     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5508     \ifcsdef{\@glsxtr@attrval}%
5509     {%
5510       \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5511     }%
5512     {%
5513       \GlossariesExtraWarning{Unknown control sequence name
5514         '\@glsxtr@attrval' supplied in glossnamefont attribute
5515         for entry '#1'. Reverting to default \string\glsnamefont}%
5516       \let\@glsxtr@glossnamefont\glsnamefont
5517     }%
5518   }%
5519   {\let\@glsxtr@glossnamefont\glsnamefont}%
5520   \glsifattribute{#1}{glossname}{firstuc}%
5521   {%
5522     \glsxtr@glossnamefont{\Glsentryname{#1}}%
5523   }%
5524   {%
5525     \glsifattribute{#1}{glossname}{title}%
5526   {%
5527     \glsxtr@do@titlecaps@warn
5528     \glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{name}}%
5529   }%
5530   {%
5531     \glsifattribute{#1}{glossname}{uc}%

```

```
5532     {%
```

Hide the label from the upper-casing command.

```
5533         \letcs{\glo@name}{\glsdetoklabel{#1}@name}%
5534             \glsxtr@glossnamefont{\mfirstucMakeUppercase{\glo@name}}%
5535         }%
5536     {%
```

This little trick is used by glossaries to allow the user to redefine `\glossnamefont` to use `\makefirstuc`. Support it even though they can now use the `firstuc` attribute.

```
5537         \letcs{\glo@name}{\glsdetoklabel{#1}@name}%
5538             \expandafter\glsxtr@glossnamefont\expandafter{\glo@name}%
5539         }%
5540     }%
5541 }%
```

Do post-name hook.

```
5542     \glsxtrpostnamehook{#1}%
5543   }%
5544 }
5545 }
```

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

```
5546 @ifpackageloaded{glossaries-accsupp}%
5547 {
5548     \renewcommand*\Glossentryname[1]{%
5549         \glsdoifexistsorwarn{#1}%
5550     {%
5551         \glsetabbrvfmt{\glscategory{#1}}%
```

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

```
5552     \glshasattribute{#1}{glossnamefont}%
5553     {%
5554         \edef\glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5555         \ifcsdef\glsxtr@attrval{%
5556             {%
5557                 \letcs{\glsxtr@glossnamefont}{\glsxtr@attrval}%
5558             }%
5559             {%
5560                 \GlossariesExtraWarning{Unknown control sequence name
5561                   '\glsxtr@attrval' supplied in glossnamefont attribute
5562                   for entry '#1'. Reverting to default \string\glossnamefont}%
5563                 \let\glsxtr@glossnamefont\glossnamefont
5564             }%
5565             }%
5566             {\let\glsxtr@glossnamefont\glossnamefont}%
5567             \glsnameaccessdisplay
5568             {%
5569                 \glsxtr@glossnamefont{\Glossentryname{#1}}%
5570             }%
5571             {#1}%
5572         }%
5573     }%
```

Do post-name hook:

```
5572     \glsxtrpostnamehook{#1}%
5573   }%
5574 }
5575 }
5576 {
5577 \renewcommand*{\Glossentryname}[1]{%
5578   \@glsdoifexistsorwarn{#1}%
5579   {%
5580     \glssetabrvfmt{\glscategory{#1}}%
5581     \glshasattribute{#1}{glossnamefont}%
5582     {%
5583       \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5584       \ifcsdef{\@glsxtr@attrval}%
5585       {%
5586         \letcs{\@glsxtr@glossnamefont}{\@glsxtr@attrval}%
5587       }%
5588       {%
5589         \GlossariesExtraWarning{Unknown control sequence name
5590           '\@glsxtr@attrval' supplied in glossnamefont attribute
5591           for entry '#1'. Reverting to default \string\glsnamefont}%
5592         \let\@glsxtr@glossnamefont\glsnamefont
5593       }%
5594     }%
5595     {\let\@glsxtr@glossnamefont\glsnamefont}%
5596     \@glsxtr@glossnamefont{\Glossentryname{#1}}%

```

Do post-name hook:

```
5597   \glsxtrpostnamehook{#1}%
5598 }%
5599 }
5600 }
```

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.

```
5601 \newcommand*{\glsxtrpostnamehook}[1]{%
5602   \let\@glsnumberformat\@glsxtr@defaultnumberformat
5603   \glsxtrdoautoindexname{#1}{indexname}%

```

Allow additional code regardless of category:

```
5604   \glsextrapostnamehook{#1}%

```

Allow categories to hook in here.

```
5605   \csuse{glsxtrpostname\glscategory{#1}}%
5606 }
```

trapostnamehook

```
5607 \newcommand*{\glsextrapostnamehook}[1]{}%
```

```

setaccessdisplay
5608 \@ifpackageloaded{glossaries-accsupp}
5609 {
5610   \newcommand*{\glsxtr@setaccessdisplay}[1]{%
5611     \ifcsdef{gls#1accessdisplay}{%
5612       {\let\cs\glsxtr@accessdisplay{gls#1accessdisplay}}%
5613     }%
5614     \edef\@gls@thisval{#1}%
5615     \for\@gls@map:=\@gls@keymap\do{%
5616       \edef\@this@key{\expandafter\@secondoftwo\@gls@map}%
5617       \ifequal{\@this@key}{\@gls@thisval}{%
5618         \%
5619         \edef\@gls@thisval{\expandafter\@firstoftwo\@gls@map}%
5620         \endfortrue
5621       }%
5622     }%
5623   }%
5624   \ifcsdef{gls@\gls@thisval accessdisplay}{%
5625     {\let\cs\glsxtr@accessdisplay{gls@\gls@thisval accessdisplay}}%
5626     {\let\@glsxtr@accessdisplay\@firstoftwo}%
5627   }%
5628 }
5629 }
5630 {%
5631   \newcommand*{\glsxtr@setaccessdisplay}[1]{%
5632     \let\@glsxtr@accessdisplay\@firstoftwo}
5633 }

```

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

```

5634 \newrobustcmd*{\glossentrynameother}[2]{%
5635   \glsdoifexistsorwarn{#1}%
5636   {%

```

Accessibility support:

```

5637   \glsxtr@setaccessdisplay{#2}%

```

Set the abbreviation format:

```

5638   \glssetabbrvfmt{\glscategory{#1}}%
5639   \glshasattribute{#1}{glossnamefont}%
5640   {%
5641     \edef\@glsxtr@attrval{\glsgetattribute{#1}{glossnamefont}}%
5642     \ifcsdef{\@glsxtr@attrval}{%
5643       {%
5644         \let\cs\@glsxtr@glossnamefont{\@glsxtr@attrval}%
5645       }%

```

```

5646   {%
5647     \GlossariesExtraWarning{Unknown control sequence name
5648       '@glsxtr@attrval' supplied in glossnamefont attribute
5649       for entry '#1'. Reverting to default \string\glsnamefont}%
5650     \let\@glsxtr@glossnamefont\glsnamefont
5651   }%
5652 }%
5653 {\let\@glsxtr@glossnamefont\glsnamefont}%
5654 \glsifattribute{#1}{glossname}{firststuc}%
5655 {%
5656   \@glsxtr@accessdisplay
5657   {\@glsxtr@glossnamefont{\@Gls@entry@field{#1}{#2}}}%
5658   {#1}%
5659 }%
5660 {%
5661   \glsifattribute{#1}{glossname}{title}%
5662   {%
5663     \@glsxtr@do@titlecaps@warn
5664     \@glsxtr@accessdisplay
5665     {\@glsxtr@glossnamefont{\glsxtrfieldtitlecase{#1}{#2}}}%
5666     {#1}%
5667   }%
5668   {%
5669     \glsifattribute{#1}{glossname}{uc}%
5670     {%
5671       \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
5672       \@glsxtr@accessdisplay
5673       {\@glsxtr@glossnamefont{\mfirststucMakeUppercase{\glo@name}}}%
5674       {#1}%
5675     }%
5676     {%
5677       \letcs{\glo@name}{\glo@\glsdetoklabel{#1}@#2}%
5678       \@glsxtr@accessdisplay
5679       {\expandafter\@glsxtr@glossnamefont\expandafter{\glo@name}}%
5680       {#1}%
5681     }%
5682   }%
5683 }%

```

Do post-name hook.

```

5684   \glsxtrpostnamehook{#1}%
5685 }%
5686 }%

```

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

```

5687 \newif\if@glsxtr@format@Override
5688 \glsxtr@format@Overridefalse

```

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

```

xFormatOverride
5689 \@ifpackageloaded{hyperref}
5690 {
  If hyperref's hyperindex option is on, then hyperref will automatically add \hyperpage, so
  don't add it.
5691   \ifHy@hyperindex
5692     \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
5693       \@glsxtr@format@overridetrue
5694       \appto\theindex{\let\glshypernumber\@firstofone}%
5695     }
5696   \else
5697     \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
5698       \@glsxtr@format@overridetrue
5699       \appto\theindex{\let\glshypernumber\hyperpage}%
5700     }
5701   \fi
5702 }
5703 {
5704   \newcommand*{\GlsXtrEnableIndexFormatOverride}{%
5705     \@glsxtr@format@overridetrue
5706   }
5707 }
5708 \onlypreamble\GlsXtrEnableIndexFormatOverride

```

```

doautoindexname
5709 \newcommand*{\glsxtrdoautoindexname}[2]{%
5710   \glshasattribute{#1}{#2}%
5711   {%
    Escape any makeindex/xindy characters in the value of the name field. Take care with babel
    as this won't work if the category code has changed for those characters.
5712   \@glsxtr@autoindex@setname{#1}%
    If the attribute value is simply "true" don't add an encap, otherwise use the value as the encap.
5713   \protected@edef@glsxtr@attrval{\glsgetattribute{#1}{#2}}%
5714   \if@glsxtr@format@override
      \ifx\glsnumberformat@glsxtr@defaultnumberformat
      \else
        \let@glsxtr@attrval@glsnumberformat
      \fi
      \fi
      \ifdefstring{\glsxtr@attrval}{true}%
      {}%
      {\eappto@glo@name{\glsxtr@autoindex@encap@glsxtr@attrval}}%
      \expandafter\glsxtrautoindex\expandafter{\glo@name}%
    }%
    {}%
  }
5726 }

```

```

glsxtrautoindex
5727 \newcommand*{\glsxtrautoindex}{\index}

toindex@setname Assign \@glo@name for use with indexname attribute.
5728 \newcommand*{@glsxtr@autoindex@setname}[1]{%
5729   \protected@edef{\glo@name{\glsxtrautoindexentry{#1}}}{%
5730     \glsxtrautoindexassingsort{\glo@sort}{#1}}%
5731   \gls@checkmkidxchars{\glo@sort}%
5732   \glsxtr@autoindex@doextra@esc{\glo@sort}%
5733   \epreto{\glo@name{\glo@sort\glsxtr@autoindex@at}}{%
5734 }

```

rautoindexentry Command used for the actual part when auto-indexing.

```

5735 \newcommand*{\glsxtrautoindexentry}[1]{\string\glsentryname{#1}}

```

indexassingsort Used to assign the sort value when auto-indexing.

```

5736 \newcommand*{\glsxtrautoindexassingsort}[2]{%
5737   \glsletentryfield{#1}{#2}{sort}}%
5738 }

```

dex@doextra@esc

```

5739 \newcommand*{@glsxtr@autoindex@doextra@esc}[1]{%
  Escape the escape character unless it has already been escaped.
5740   \ifx\glsxtr@autoindex@esc\gls@quotechar
5741   \else
5742     \def\gls@checkedmkidx{}%
5743     \edef\@glsxtr@checkspch{%
5744       \noexpand\glsxtr@autoindex@escquote\expandonce{#1}%
5745       \noexpand\empty\glsxtr@autoindex@esc\noexpand\@nnil
5746       \glsxtr@autoindex@esc\noexpand\empty\noexpand\glsxtr@endescspch}%
5747     \@@glsxtr@checkspch
5748     \let#1\gls@checkedmkidx\relax
5749   \fi
  Escape actual character unless it has already been escaped.
5750   \ifx\glsxtr@autoindex@at\gls@actualchar
5751   \else
5752     \def\gls@checkedmkidx{}%
5753     \edef\@glsxtr@checkspch{%
5754       \noexpand\glsxtr@autoindex@escat\expandonce{#1}%
5755       \noexpand\empty\glsxtr@autoindex@at\noexpand\@nnil
5756       \glsxtr@autoindex@at\noexpand\empty\noexpand\glsxtr@endescspch}%
5757     \@@glsxtr@checkspch
5758     \let#1\gls@checkedmkidx\relax
5759   \fi
  Escape level character unless it has already been escaped.
5760   \ifx\glsxtr@autoindex@level\gls@levelchar
5761   \else

```

```

5762 \def\@gls@checkedmkidx{}%
5763 \edef\@glsxtr@checkspch{%
5764   \noexpand\@glsxtr@autoindex@esclevel\expandonce{\#1}%
5765   \noexpand\@empty\@glsxtr@autoindex@level\noexpand\@nnil
5766   \@glsxtr@autoindex@level\noexpand\@empty\noexpand\@glsxtr@endescspch}%
5767 \@@glsxtr@checkspch
5768 \let#1\@gls@checkedmkidx\relax
5769 \fi

```

Escape encapsulation character unless it has already been escaped.

```

5770 \ifx\@glsxtr@autoindex@encap\@gls@encapchar
5771 \else
5772 \def\@gls@checkedmkidx{}%
5773 \edef\@glsxtr@checkspch{%
5774   \noexpand\@glsxtr@autoindex@escencap\expandonce{\#1}%
5775   \noexpand\@empty\@glsxtr@autoindex@encap\noexpand\@nnil
5776   \@glsxtr@autoindex@encap\noexpand\@empty\noexpand\@glsxtr@endescspch}%
5777 \@@glsxtr@checkspch
5778 \let#1\@gls@checkedmkidx\relax
5779 \fi
5780 }

```

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`.

```
5781 \newcommand*{\@glsxtr@autoindex@at}{}%
```

`trSetActualChar` Set the actual character.

```

5782 \newcommand*{\GlsXtrSetActualChar}[1]{%
5783   \gdef\@glsxtr@autoindex@at{\#1}%
5784   \def\@glsxtr@autoindex@escat##1##2##3\@glsxtr@endescspch{%
5785     \@@glsxtr@autoindex@escspch{\#1}{\@glsxtr@autoindex@escat}{##1}{##2}{##3}%
5786   }%
5787 }
5788 \onlypreamble\GlsXtrSetActualChar
5789 \makeatother
5790 \GlsXtrSetActualChar{@}
5791 \makeatletter

```

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

```
5792 \newcommand*{\@glsxtr@autoindex@encap}{}%
```

`XtrSetEncapChar` Set the encapsulation character.

```

5793 \newcommand*{\GlsXtrSetEncapChar}[1]{%
5794   \gdef\@glsxtr@autoindex@encap{\#1}%
5795   \def\@glsxtr@autoindex@escencap##1##2##3\@glsxtr@endescspch{%
5796     \@@glsxtr@autoindex@escspch{\#1}{\@glsxtr@autoindex@escencap}{##1}{##2}{##3}%
5797   }%

```

```

5798 }
5799 \GlsXtrSetEncapChar{|}
5800 \@onlypreamble\GlsXtrSetEncapChar

autoindex@level Level character for use with \index.
5801 \newcommand*{\glsxtr@autoindex@level}{}}

XtrSetLevelChar Set the encapsulation character.
5802 \newcommand*{\GlsXtrSetLevelChar}[1]{%
5803   \gdef\@glsxtr@autoindex@level{\#1}%
5804   \def\@glsxtr@autoindex@esclevel##1##2##3\@glsxtr@endescspch{%
5805     \@@glsxtr@autoindex@escspch{\#1}{\@glsxtr@autoindex@esclevel}{##1}{##2}{##3}%
5806   }%
5807 }%
5808 \GlsXtrSetLevelChar{!}
5809 \@onlypreamble\GlsXtrSetLevelChar

r@autoindex@esc Escape character for use with \index.
5810 \newcommand*{\glsxtr@autoindex@esc}{"}

lsXtrSetEscChar Set the escape character.
5811 \newcommand*{\GlsXtrSetEscChar}[1]{%
5812   \gdef\@glsxtr@autoindex@esc{\#1}%
5813   \def\@glsxtr@autoindex@escquote##1##2##3\@glsxtr@endescspch{%
5814     \@@glsxtr@autoindex@escspch{\#1}{\@glsxtr@autoindex@escquote}{##1}{##2}{##3}%
5815   }%
5816 }%
5817 \GlsXtrSetEscChar{"}
5818 \@onlypreamble\GlsXtrSetEscChar

      Set if defined. (For example, if doc package has been loaded.) Actual character \actualchar:
5819 \ifdef\actualchar
5820   {\expandafter\GlsXtrSetActualChar\expandafter{\actualchar}}
5821 {}

      Quote character \quotechar:
5822 \ifdef\quotechar
5823   {\expandafter\GlsXtrSetEscChar\expandafter{\quotechar}}
5824 {}

      Level character \levelchar:
5825 \ifdef\levelchar
5826   {\expandafter\GlsXtrSetLevelChar\expandafter{\levelchar}}
5827 {}

      Encapsulation character \encapchar:
5828 \ifdef\encapchar
5829   {\expandafter\GlsXtrSetEncapChar\expandafter{\encapchar}}
5830 {}

```

```

leto@endescspch
5831 \def\@glsxtr@gobbleto@endescspch#1\@glsxtr@endescspch{}

toindex@esc@spch  @@glsxtr@autoindex@escspch{\char}{\cs}{\pre}{\mid}{\post}

5832 \newcommand*{\@glsxtr@autoindex@escspch}[5]{%
5833   \gls@tmpb=\expandafter{\gls@checkedmidx}%
5834   \toks@={#3}%
5835   \ifx\@nnil#3\relax
5836     \def\@glsxtr@checkspch{\glsxtr@gobbleto@endescspch#5\glsxtr@endescspch}%
5837   \else
5838     \ifx\@nnil#4\relax
5839       \edef\gls@checkedmidx{\the\gls@tmpb\the\toks@}%
5840       \def\@glsxtr@checkspch{\glsxtr@gobbleto@endescspch
5841         #4#5\glsxtr@endescspch}%
5842     \else
5843       \edef\gls@checkedmidx{\the\gls@tmpb\the\toks@%
5844         \glsxtr@autoindex@esc#1}%
5845       \def\@glsxtr@checkspch{\#2#5#1\@nnil#1\glsxtr@endescspch}%
5846     \fi
5847   \fi
5848   \glsxtr@checkspch
5849 }

\Glossentrydesc Redefine to set the abbreviation format and accessibility support.
5850 \renewcommand*{\Glossentrydesc}[1]{%
5851   \glsdoifexistsorwarn{#1}%
5852   {%
5853     \glssetabrvfmt{\glscategory{#1}}%
5854     \Glsaccessdesc{#1}%
5855   }%
5856 }

\glossentrysymbol Redefine to set the abbreviation format and accessibility support.
5857 \renewcommand*{\glossentrysymbol}[1]{%
5858   \glsdoifexistsorwarn{#1}%
5859   {%
5860     \glssetabrvfmt{\glscategory{#1}}%
5861     \glsaccesssymbol{#1}%
5862   }%
5863 }

\glossentrysymbol Redefine to set the abbreviation format and accessibility support.
5864 \renewcommand*{\glossentrysymbol}[1]{%
5865   \glsdoifexistsorwarn{#1}%
5866   {%

```

```

5867     \glssetabrvfmt{\glscategory{#1}}%
5868     \Glsaccesssymbol{#1}%
5869 }%
5870 }

```

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.

```

5871 \newcommand*{\GlsXtrEnableInitialTagging}{%
5872   @ifstar@s@glsxtr@enabletagging@glsxtr@enabletagging
5873 }
5874 @onlypreamble\GlsXtrEnableInitialTagging

```

r@enabletagging Starred version undefines command.

```

5875 \newcommand*{\s@glsxtr@enabletagging}[2]{%
5876   \undef#2%
5877   @glsxtr@enabletagging{#1}{#2}%
5878 }

```

r@enabletagging Internal command.

```
5879 \newcommand*{@glsxtr@enabletagging}[2]{%
```

Set attributes for categories given in the first argument.

```

5880  @for@glsxtr@cat:=#1\do
5881  {%
5882    \ifdefempty@glsxtr@cat
5883    {}%
5884    {\glssetcategoryattribute{@glsxtr@cat}{tagging}{true}}%
5885  }%
5886  \newrobustcmd*#2[1]{##1}%
5887  \def@glsxtr@taggingcs{#2}%
5888  \renewcommand*@\glsxtr@activate@initialtagging{%
5889    \let#2@glsxtr@tag
5890  }%
5891  \ifundef@gls@preglossaryhook
5892  {\GlossariesExtraWarning{Initial tagging requires at least
5893    glossaries.sty v4.19 to work correctly}}%
5894  {}%
5895 }

```

Are we using an old version of `mfirstruc` 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 `mfirstruc`

```

5896 \ifundef\mfu@checkword@do
5897 {
5898  \newcommand*{\mfu@checkword@do}[1]{%

```

```

5899   \ifdefstring{\mfp@checkword@arg}{#1}%
5900   {%
5901     \let\@mfp@domakefirstuc\@firstofone
5902     \listbreak
5903   }%
5904   {}%
5905 }

\mfp@checkword \capitalisewords was introduced in mfirstuc v1.06. If \mfp@checkword hasn't been defined mfirstuc is too old to support the title case attribute.
5906 \ifdef\mfp@checkword
5907 {
5908   \newcommand{\@glsxtr@do@titlecaps@warn}{%
5909     \GlossariesExtraWarning{mfirstuc.sty too old. Title Caps
5910       support not available}%
5911 
      One warning should suffice.
5912   \let\@glsxtr@do@titlecaps@warn\relax
5913 }
5914 {
5915   \renewcommand*{\mfp@checkword}[1]{%
5916     \def\mfp@checkword@arg{#1}%
5917     \let\@mfp@domakefirstuc\makefirstuc
5918     \forlistloop\mfp@checkword@do\@mfp@nocaplist
5919   }
5920 }
5921 }
5922 {}% no patch required

@titlecaps@warn Do warning if title case not supported.
5923 \newcommand*{\@glsxtr@do@titlecaps@warn}{} 

@initialtagging Used in \printglossary but at least v4.19 of glossaries required.
5924 \newcommand*{\@glsxtr@activate@initialtagging}{} 

@glsxtr@tag Definition of tagging command when used in glossary.
5925 \newrobustcmd*{\@glsxtr@tag}[1]{%
5926   \glsifattribute{\glscurrententrylabel}{tagging}{true}%
5927   {\glsxtrtagfont{#1}}{#1}%
5928 }

\glsxtrtagfont Used in the glossary.
5929 \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.

```

```

5930 \ifdef@\gls@preglossaryhook
5931 {
5932   \renewcommand*\@gls@preglossaryhook{%
5933     \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.

```

5934   \ifundef@\glsxtr@org@postdescription
5935   {%
5936     \let\@glsxtr@org@postdescription\glspostdescription
5937     \renewcommand*\glspostdescription{%
5938       \ifglsentryexists{\glscurrententrylabel}{%
5939         {%
5940           \glsxtrpostdescription
5941           \glsxtr@org@postdescription
5942         }%
5943         {}%
5944       }%
5945     }%
5946     {}%

```

Enable the options used by \glsxtrp:

```

5947   \glossxtrsetopts
5948   }%
5949 }
5950 {}

```

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.

```

5951 \newcommand*\glsxtrpostdescription{%
5952   \csuse{glsxtrpostdesc\glscategory}{\glscurrententrylabel}}%
5953 }

```

postdescgeneral

```

5954 \newcommand*\glsxtrpostdescgeneral(){}

```

xtrpostdescterm

```

5955 \newcommand*\glsxtrpostdescterm(){}

```

postdescacronym

```

5956 \newcommand*\glsxtrpostdescacronym(){}

```

escabbreviation

```

5957 \newcommand*\glsxtrpostdescabbreviation(){}

```

glspostlinkhook Redefine the post link hook used by commands like \gls to make it easier for categories or attributes to modify this action. Since this hook occurs outside the existence check of

commands like \gls, this needs to be checked again here. Do nothing if the entry hasn't been defined.

```
5958 \renewcommand*{\glspostlinkhook}{%
5959   \ifglsentryexists{\glslabel}{\glsxtrpostlinkhook}{}%
5960 }
```

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

```
5961 \newcommand*{\glsxtrpostlinkhook}{%
5962   \glsxtrdiscardperiod{\glslabel}%
5963   {\glsxtrpostlinkendsentence}%
5964   {\glsxtrifcustomdiscardperiod
5965     {\glsxtrifperiod{\glsxtrpostlinkendsentence}{\glsxtrpostlink}}%
5966     {\glsxtrpostlink}%
5967   }%
5968 }
```

omdiscardperiod Allow user to provide a custom check. Should expand to #2 if no check is required otherwise expand to #1.

```
5969 \newcommand*{\glsxtrifcustomdiscardperiod}[2]{#2}
```

\glsxtrpostlink

```
5970 \newcommand*{\glsxtrpostlink}{%
5971   \csuse{glsxtrpostlink}\glscategory{\glslabel}%
5972 }
```

linkendsentence Done by \glsxtrpostlinkhook if a full stop is discarded.

```
5973 \newcommand*{\glsxtrpostlinkendsentence}{%
5974   \ifcsdef{glsxtrpostlink}\glscategory{\glslabel}%
5975   {%
5976     \csuse{glsxtrpostlink}\glscategory{\glslabel}%
5977     Put the full stop back.
5978   }%
5979 }
```

Assume the full stop was discarded because the entry ends with a period, so adjust the space-factor.

```
5980   \spacefactor\sfcode`\.\relax
5981 }%
5982 }
```

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.

```
5983 \newcommand*{\glsxtrpostlinkAddDescOnFirstUse}{%
5984   \glsxtrifwasfirstuse{\space\glsxtrparen{\glsaccessdesc{\glslabel}}}{}%
5985 }
```

`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.

```
5986 \newcommand*{\glsxtrpostlinkAddSymbolOnFirstUse}{%
5987   \glsxtrifwasfirstuse
5988   {%
5989     \ifglshassymbol{\glslabel}%
5990     {\space\glsxtrparen{\glsaccesssymbol{\glslabel}}}}%
5991     {}%
5992   }%
5993   {}%
5994 }
```

`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).

```
5995 \newcommand*{\glsxtrdiscardperiod}[3]{%
5996   \glsxtrifwasfirstuse
5997   {%
5998     \glsifattribute{#1}{retainfirstuseperiod}{true}%
5999     {#3}%
6000   {%
6001     \glsifattribute{#1}{discardperiod}{true}%
6002     {%
6003       \glsifplural
6004       {%
6005         \glsifattribute{#1}{pluraldiscardperiod}{true}%
6006         {\glsxtrifperiod{#2}{#3}}%
6007         {}#
6008       }%
6009       {%
6010         \glsxtrifperiod{#2}{#3}%
6011       }%
6012     }%
6013     {}#
6014   }%
6015 }%
6016 {%
6017   \glsifattribute{#1}{discardperiod}{true}%
6018   {%
6019     \glsifplural
6020     {%
6021       \glsifattribute{#1}{pluraldiscardperiod}{true}%
6022       {\glsxtrifperiod{#2}{#3}}%
6023       {}#
6024     }%
6025     {%
6026       \glsxtrifperiod{#2}{#3}%
6027     }%
}
```

```
6028    }%
6029    {#3}%
6030  }%
6031 }
```

\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

```
6032 \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 '').

```
6033 \newcommand*{\glsxtr@punclist}{.,;?!}
```

punctuationmark Add character to punctuation list.

```
6034 \newcommand*{\glsxtraddpunctuationmark}[1]{\appto\glsxtr@punclist{#1}}
```

unctuationmarks Reset the punctuation list.

```
6035 \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.)

```
6036 \newcommand*{\glsxtrifnextpunc}[2]{%
6037   \def\reserved@a{#1}%
6038   \def\reserved@b{#2}%
6039   \futurelet\@glspunc@token\glsxtr@ifnextpunc
6040 }
```

sxtr@ifnextpunc

```
6041 \newcommand*{\glsxtr@ifnextpunc}{%
6042   \glsxtr@ifpunctoken{\@glspunc@token}{\let\reserved@b\reserved@a}{}%
6043   \reserved@b
6044 }
```

xtr@ifpunctoken Test if the token given in the first argument is in the punctuation list.

```
6045 \newcommand*{\glsxtr@ifpunctoken}[1]{%
6046   \expandafter\glsxtr@ifpunctoken\expandafter#1\glsxtr@punclist\@nnil
6047 }
```

xtr@ifpunctoken

```
6048 \def\@glsxtr@ifpunctoken#1#2{%
6049   \let\reserved@d=#2%
6050   \ifx\reserved@d\@nnil
```

```

6051     \let\glsxtr@next\@glsxtr@notfoundinlist
6052 \else
6053   \ifx#1\reserved@d
6054     \let\glsxtr@next\@glsxtr@foundinlist
6055   \else
6056     \let\glsxtr@next\@glsxtr@ifpunctoken
6057   \fi
6058 \fi
6059 \glsxtr@next#1%
6060 }

xtr@foundinlist
6061 \def\@glsxtr@foundinlist#1\@nnil{\@firstoftwo}

@notfoundinlist
6062 \def\@glsxtr@notfoundinlist#1{\@secondoftwo}

```

glsxtrdopostpunc \glsxtrdopostpunc{*code*}

If this is followed be a punctuation character, do *code* after the character otherwise do *code* before whatever comes next.

```

6063 \newcommand{\glsxtrdopostpunc}[1]{%
6064   \glsxtrifnextpunc{\@glsxtr@swaptwo{#1}}{#1}%
6065 }

```

@glsxtr@swaptwo
6066 \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.

```

6067 \define@key{glsxtrabbrv}{category}{%
6068   \edef\glscategorylabel{#1}%
6069   \ifcsdef{@glsabbrv@current@#1}%
6070   {%

```

Warning should already have been issued.

```

6071   \let\@glsxtr@orgwarndep\GlsXtrWarnDeprecatedAbbrStyle
6072   \let\GlsXtrWarnDeprecatedAbbrStyle\@gobbletwo
6073   \glsxtr@applyabbrvstyle{\csname@glsabbrv@current@#1\endcsname}%
6074   \let\GlsXtrWarnDeprecatedAbbrStyle\@glsxtr@orgwarndep

```

```
6075 }%
6076 {}%
6077 }
```

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

```
6078 \define@key{glsxtrabbrv}{shortplural}{%
6079   \def\@gls@shortpl{\#1}%
6080 }
```

Similarly for the long plural form.

```
6081 \define@key{glsxtrabbrv}{longplural}{%
6082   \def\@gls@longpl{\#1}%
6083 }
```

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

```
\glsshortpltok
6084 \newtoks\glsshortpltok
```

```
\glslongpltok
6085 \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.

```
6086 \newcommand*{\@glsxtr@insertdots}[2]{%
6087   \def#1{}%
6088   \glsxtr@insert@dots#1#2\@nnil
6089 }
```

```
xtr@insert@dots
6090 \newcommand*{\@glsxtr@insert@dots}[2]{%
6091   \ifx\@nnil#2\relax
6092     \let\@glsxtr@insert@dots@next\@gobble
6093   \else
6094     \ifx\relax#2\relax
6095     \else
6096       \appto#1{\#2.}%
6097     \fi
6098     \let\@glsxtr@insert@dots@next\@glsxtr@insert@dots
6099   \fi
6100   \glsxtr@insert@dots@next#1%
6101 }
```

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

```
\glsxtrwordsep  
6102 \newcommand*{\glsxtrwordsep}{\space}
```

Each word is marked with

```
\glsxtrword  
6103 \newcommand*{\glsxtrword}[1]{#1}
```

```
tr@markwordseps  
6104 \newcommand*{\@glsxtr@markwordseps}[2]{%  
6105   \def#1{}%  
6106   \glsxtr@mark@wordseps#1#2 \cnnil  
6107 }
```

```
r@mark@wordseps  
6108 \def\@glsxtr@mark@wordseps#1#2 #3{%  
6109   \ifdefempty{#1}{%  
6110     {\def#1{\protect\glsxtrword{#2}}}{%  
6111     {\appto{#1}{\protect\glsxtrwordsep\protect\glsxtrword{#2}}}{%  
6112       \ifx\cnnil#3\relax  
6113         \let\@glsxtr@mark@wordseps@next\relax  
6114       \else  
6115         \def\@glsxtr@mark@wordseps@next{  
6116           \glsxtr@mark@wordseps#1#3}{%  
6117       \fi  
6118     \glsxtr@mark@wordseps@next  
6119 }
```

newabbreviation Define a new generic abbreviation.

```
6120 \newcommand*{\newabbreviation}[4][]{%  
6121   \glsxtr@newabbreviation{#1}{#2}{#3}{#4}}%  
6122 }
```

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.)

```
6123 \newcommand*{\glsxtr@newabbreviation}[4]{%  
6124   \glskeylisttok{#1}{%  
6125   \glslabeltok{#2}{%  
6126   \glsshorttok{#3}{%  
6127   \glslongtok{#4}{%
```

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

```
6128 \def\glsxtrorgshort{#3}{%  
6129 \def\glsxtrorglong{#4}{%
```

Get the category.

```
6130 \def\glscategorylabel{abbreviation}{%  
6131 \glsxtr@applyabbrvstyle{\glsabrv@current@abbreviation}{%
```

Ignore the shortplural and longplural keys.

```
6132 \setkeys*{glsxtrabbry}[shortplural, longplural]{#1}%
```

Set the default long plural

```
6133 \def\@gls@longpl{\#4\glspluralsuffix}%
```

```
6134 \let\@gls@default@longpl\@gls@longpl
```

Has the markwords attribute been set?

```
6135 \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
```

```
6136 {%
```

```
6137 \@glsxtr@markwordseps\@gls@long{\#4}%
```

```
6138 \expandafter\def\expandafter\@gls@longpl\expandafter
```

```
6139 {\@gls@long\glspluralsuffix}%
```

```
6140 \let\@gls@default@longpl\@gls@longpl
```

Update \glslongtok.

```
6141 \expandafter\glslongtok\expandafter{\@gls@long}%
```

```
6142 }%
```

```
6143 {}%
```

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

```
6144 \glsifcategoryattribute{\glscategorylabel}{markshortwords}{true}%
```

```
6145 {%
```

```
6146 \@glsxtr@markwordseps\@gls@short{\#3}%
```

```
6147 }%
```

```
6148 {}%
```

Has the insertdots attribute been set?

```
6149 \glsifcategoryattribute{\glscategorylabel}{insertdots}{true}%
```

```
6150 {%
```

```
6151 \@glsxtr@insertdots\@gls@short{\#3}%
```

```
6152 \expandafter\glsshorttok\expandafter{\@gls@short\spacefactor1000 \relax}%
```

```
6153 }%
```

```
6154 {\def\@gls@short{\#3}}%
```

```
6155 }%
```

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

```
6156 \glsifcategoryattribute{\glscategorylabel}{aposplural}{true}%
```

```
6157 {%
```

```
6158 \expandafter\def\expandafter\@gls@shortpl\expandafter{\@gls@short
```

```
6159 '\abrvpluralsuffix}%
```

```
6160 }%
```

```
6161 {}%
```

Has the noshortplural attribute been set?

```
6162 \glsifcategoryattribute{\glscategorylabel}{noshortplural}{true}%
```

```
6163 {%
```

```
6164 \let\@gls@shortpl\@gls@short
```

```
6165 }%
```

```
6166 {}%
```

```
6167 \expandafter\def\expandafter\@gls@shortpl\expandafter{\@gls@short
```

```
6168 '\abrvpluralsuffix}%
```

```

6169      }%
6170  }%
  Update \glsshorttok:
6171  \expandafter\glsshorttok\expandafter{\@gls@short}%
  Hook for further customisation if required:
6172  \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).
6173  \setkeys*{\glsxtrabbrv}[category]{#1}%
  Has the plural been explicitly set?
6174  \ifx\@gls@default@longpl\@gls@longpl
6175  \else
  Has the markwords attribute been set?
6176  \glsifcategoryattribute{\glscategorylabel}{markwords}{true}%
6177  {%
6178  \expandafter\@glsxtr@markwordseps\expandafter\@gls@longpl\expandafter
6179  {\@gls@longpl}%
6180  }%
6181  {}%
6182  \fi
  Set the plural token registers so the values can be accessed by the abbreviation styles.
6183  \expandafter\glsshortpltok\expandafter{\@gls@shortpl}%
6184  \expandafter\glslongpltok\expandafter{\@gls@longpl}%
  Do any extra setup provided by hook:
6185  \newabbreviationhook
  Define this entry:
6186  \protected@edef\@do@newglossaryentry{%
6187  \noexpand\newglossaryentry{\the\glslabeltok}%
6188  {%
6189  type=\glsxtrabbrvtype,%
6190  category=abbreviation,%
6191  short={\the\glsshorttok},%
6192  shortplural={\the\glsshortpltok},%
6193  long={\the\glslongtok},%
6194  longplural={\the\glslongpltok},%
6195  name={\the\glsshorttok},%
6196  \CustomAbbreviationFields,%
6197  \the\glskeylisttok
6198  }%
6199  }%
6200  \@do@newglossaryentry
6201  \GlsXtrPostNewAbbreviation
6202 }

```

```

evpresetkeyhook Hook for extra stuff in \newabbreviation
6203 \newcommand*{\glsxtrnewabbrevresetkeyhook}[3]{}

NewAbbreviation Hook used by abbreviation styles.
6204 \newcommand*{\GlsXtrPostNewAbbreviation}{{}

bbreviationhook Hook for use with \newabbreviation.
6205 \newcommand*{\newabbreviationhook}{{}

reviationFields
6206 \newcommand*{\CustomAbbreviationFields}{{}

\glsxtrparen For the parenthetical styles.
6207 \newcommand*{\glsxtrparen}[1]{(#1)}

lsxtrfullformat Full format without case change.
6208 \newcommand*{\glsxtrfullformat}[2]{%
6209   \glsfirstlongfont{\glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
6210   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
6211 }

lsxtrfullformat Full format with case change.
6212 \newcommand*{\Glsxtrfullformat}[2]{%
6213   \glsfirstlongfont{\Glsaccesslong{#1}}#2\glsxtrfullsep{#1}%
6214   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{#1}}}%
6215 }

xtrfullplformat Plural full format without case change.
6216 \newcommand*{\glsxtrfullplformat}[2]{%
6217   \glsfirstlongfont{\glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
6218   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}%
6219 }

xtrfullplformat Plural full format with case change.
6220 \newcommand*{\Glsxtrfullplformat}[2]{%
6221   \glsfirstlongfont{\Glsaccesslongpl{#1}}#2\glsxtrfullsep{#1}%
6222   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{#1}}}%
6223 }

\glsxtrfullsep Separator used by full format is a space by default. The argument is the entry's label.
6224 \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.
6225 \newcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}

```

inlinefullformat Full format with case change.
6226 \newcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}

xtrfullplformat Plural full format without case change.
6227 \newcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}

inefullplformat Plural full format with case change.
6228 \newcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}

Redefine \glsentryfull etc to use the inline format. Since these commands as supposed to be expandable, they can only use the currently applied style. If there are mixed styles, you'll need to use the \glsxtrfull set of commands instead.

\glsentryfull
6229 \renewcommand*{\glsentryfull}[1]{\glsxtrinlinefullformat{\#1}{}}

\Glsentryfull
6230 \renewcommand*{\Glsentryfull}[1]{\Glsxtrinlinefullformat{\#1}{}}

\glsentryfullpl
6231 \renewcommand*{\glsentryfullpl}[1]{\glsxtrinlinefullplformat{\#1}{}}

\Glsentryfullpl
6232 \renewcommand*{\Glsentryfullpl}[1]{\Glsxtrinlinefullplformat{\#1}{}}

sfirstabbrvfont Font changing command used for the abbreviation on first use or in the full format.
6233 \newcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{\#1}}

bbrvdefaultfont Font changing command used for the abbreviation on first use or in the full format.
6234 \newcommand*{\glsfirstabbrvdefaultfont}[1]{\glsabbrvfont{\#1}}

\glsabbrvfont Font changing command used for the abbreviation on subsequent use.
6235 \newcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{\#1}}

bbrvdefaultfont
6236 \newcommand*{\glsabbrvdefaultfont}[1]{\#1}

\glslongfont Font changing command used for the long form in commands like \glsxtrlong.
6237 \newcommand*{\glslongfont}[1]{\glslongdefaultfont{\#1}}

longdefaultfont Default font changing command used for the long form in commands like \glsxtrlong.
6238 \newcommand*{\glslongdefaultfont}[1]{\#1}

\glsfirstlongfont Font changing command used for the long form on first use or in the full format.
6239 \newcommand*{\glsfirstlongfont}[1]{\glslongfont{\#1}}

```

longdefaultfont
 6240 \newcommand*{\glsfirstlongdefaultfont}[1]{\glslongdefaultfont{#1}}


brvpluralsuffix Default plural suffix. Allow an alternative default suffix for abbreviations.
 6241 \newcommand*{\glsxtrabbbrvpluralsuffix}{\glspluralsuffix}

brvpluralsuffix Default plural suffix.
 6242 \newcommand*{\abbrvpluralsuffix}{\glsxtrabbbrvpluralsuffix}

\glsxtrfull Full form (no case-change).
 6243 \newrobustcmd*{\glsxtrfull}{\@gls@hyp@opt\ns@glsxtrfull}
 6244 \newcommand*\ns@glsxtrfull[2][]{%
 6245   \new@ifnextchar[\{\@glsxtr@full{#1}{#2}\}]{%
 6246     \{@glsxtr@full{#1}{#2}[]\}%
 6247 }

\@glsxtr@full Low-level macro:
 6248 \def\@glsxtr@full#1#2[#3]{%
 6249   \glsdoifexists{#2}%
 6250   {%
 6251     \glssetabrvfmt{\glscategory{#2}}%
 6252     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
 6253     \let\glsifplural\@secondoftwo
 6254     \let\glscapscase\@firstofthree
 6255     \let\glsinsert\@empty
 6256     \def\glscustomtext{\glsxtrinlinefullformat{#2}{#3}}%


What should \glsxtrifwasfirstuse be set to here? Where the inline and display full forms
are the same, this is essentially emulating first use, to it make sense for the postlink hook
to pretend it was a first use instance. It makes less sense if the inline and display forms are
different. Provide a hook to make it easier to reconfigure.

 6257   \glsxtrsetupfulldefs
 6258   \@gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
 6259 }%
 6260 \glspostlinkhook
 6261 }

trsetupfulldefs
 6262 \newcommand*{\glsxtrsetupfulldefs}{%
 6263   \let\glsxtrifwasfirstuse\@firstoftwo
 6264 }

\Glsxtrfull Full form (first letter uppercase).
 6265 \newrobustcmd*{\Glsxtrfull}{\@gls@hyp@opt\ns@Glsxtrfull}
 6266 \newcommand*\ns@Glsxtrfull[2][]{%
 6267   \new@ifnextchar[\{\@Glsxtr@full{#1}{#2}\}]{%
 6268     \{@Glsxtr@full{#1}{#2}[]\}%
 6269 }

```

\@Glsxtr@full Low-level macro:

```
6270 \def\@Glsxtr@full#1#2[#3]{%
6271   \glsdoifexists{#2}%
6272 {%
6273   \glssetabrvfmt{\glscategory{#2}}%
6274   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6275   \let\glsifplural\@secondoftwo
6276   \let\glscapscase\@secondofthree
6277   \let\glsinsert\@empty
6278   \def\glscustomtext{\Glsxtrinlinefullformat{#2}{#3}}%
6279   \glsxtrsetupfulldefs
6280   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6281 }%
6282 \glspostlinkhook
6283 }
```

\GLSxtrfull Full form (all uppercase).

```
6284 \newrobustcmd*\GLSxtrfull{\gls@hyp@opt\ns@GLSxtrfull}
6285 \newcommand*\ns@GLSxtrfull[2][]{%
6286   \new@ifnextchar[\{@Glsxtr@full{#1}{#2}}%
6287           {\@Glsxtr@full{#1}{#2}[]}%
6288 }
```

\@GLSxtr@full Low-level macro:

```
6289 \def\@GLSxtr@full#1#2[#3]{%
6290   \glsdoifexists{#2}%
6291 {%
6292   \glssetabrvfmt{\glscategory{#2}}%
6293   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6294   \let\glsifplural\@secondoftwo
6295   \let\glscapscase\@thirdofthree
6296   \let\glsinsert\@empty
6297   \def\glscustomtext{\mfirstrucMakeUppercase{\glsxtrinlinefullformat{#2}{#3}}}}%
6298   \glsxtrsetupfulldefs
6299   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6300 }%
6301 \glspostlinkhook
6302 }
```

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

```
6303 \newrobustcmd*\glsxtrfullpl{\gls@hyp@opt\ns@glsxtrfullpl}
6304 \newcommand*\ns@glsxtrfullpl[2][]{%
6305   \new@ifnextchar[\{@glsxtr@fullpl{#1}{#2}}%
6306           {\@glsxtr@fullpl{#1}{#2}[]}%
6307 }
```

\@glsxtr@fullpl Low-level macro:

```
6308 \def\@glsxtr@fullpl#1#2[#3]{%
6309   \glsdoifexists{#2}%
```

```

6310 {%
6311   \glssetabrvfmt{\glscategory{#2}}%
6312   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6313   \let\glsifplural@\firstoftwo
6314   \let\glscapscase@\firstofthree
6315   \let\glsinsert@\empty
6316   \def\glscustomtext{\glsxtrinlinefullplformat{#2}{#3}}%
6317   \glsxtrsetupfulldefs
6318   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6319 }%
6320 \glspostlinkhook
6321 }

```

\Glsxtrfullpl Plural full form (first letter uppercase).

```

6322 \newrobustcmd*\Glsxtrfullpl{\gls@hyp@opt\ns@Glsxtrfullpl}
6323 \newcommand*\ns@Glsxtrfullpl[2][]{%
6324   \new@ifnextchar[\glsxtr@fullpl{#1}{#2}}%
6325           {\glsxtr@fullpl{#1}{#2}[]}}%
6326 }

```

\@Glsxtr@fullpl Low-level macro:

```

6327 \def\@Glsxtr@fullpl#1#2[#3]{%
6328   \glsdoIfExists{#2}}%
6329 {%
6330   \glssetabrvfmt{\glscategory{#2}}%
6331   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6332   \let\glsifplural@\firstoftwo
6333   \let\glscapscase@\secondofthree
6334   \let\glsinsert@\empty
6335   \def\glscustomtext{\Glsxtrinlinefullplformat{#2}{#3}}%
6336   \glsxtrsetupfulldefs
6337   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6338 }%
6339 \glspostlinkhook
6340 }

```

\GLSxtrfullpl Plural full form (all upper case).

```

6341 \newrobustcmd*\GLSxtrfullpl{\gls@hyp@opt\ns@GLSxtrfullpl}
6342 \newcommand*\ns@GLSxtrfullpl[2][]{%
6343   \new@ifnextchar[\glsxtr@fullpl{#1}{#2}}%
6344           {\glsxtr@fullpl{#1}{#2}[]}}%
6345 }

```

\@GLSxtr@fullpl Low-level macro:

```

6346 \def\@GLSxtr@fullpl#1#2[#3]{%
6347   \glsdoIfExists{#2}}%
6348 {%
6349   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6350   \let\glsifplural@\firstoftwo

```

```

6351   \let\glscapscase\@thirdofthree
6352   \let\glsinsert\empty
6353   \def\glscustomtext{%
6354     \mfirstucMakeUppercase{\glsxtrinlinefullplformat{#2}{#3}}%
6355     \glsxtrsetupfulldefs
6356     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6357   }%
6358   \glspostlinkhook
6359 }

```

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

\glsxtrshort

```
6360 \newrobustcmd*\glsxtrshort{\gls@hyp@opt\ns@glsxtrshort}
```

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

```

6361 \newcommand*\ns@glsxtrshort[2][]{%
6362   \new@ifnextchar[\glsxtrshort[#1]{#2}{\glsxtrshort[#1]{#2}}[]%
6363 }

```

Read in the final optional argument:

```

6364 \def\glsxtrshort#1#2[#3]{%
6365   \glsdoifexists{#2}%
6366   {%

```

Need to make sure \glsabbrvfont is set correctly.

```

6367   \glssetabbrvfmt{\glscategory{#2}}%
6368   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6369   \let\glsxtrifwasfirstuse\secondoftwo
6370   \let\glsifplural\secondoftwo
6371   \let\glscapscase\firstofthree
6372   \let\glsinsert\empty
6373   \def\glscustomtext{%
6374     \glsabbrvfont{\glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
6375     \ifglsxtrinsertinside\else#3\fi
6376   }%
6377   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6378 }%
6379 \glspostlinkhook
6380 }

```

\Glsxtrshort

```
6381 \newrobustcmd*\Glsxtrshort{\gls@hyp@opt\ns@Glsxtrshort}
```

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

```

6382 \newcommand*\ns@Glsxtrshort[2][]{%
6383   \new@ifnextchar[\Glsxtrshort[#1]{#2}{\Glsxtrshort[#1]{#2}}[]%
6384 }

```

Read in the final optional argument:

```
6385 \def\Glsxtrshort#1#2[#3]{%
```

```

6386 \glsdoifexists{#2}%
6387 {%
6388   \glssetabbrvfmt{\glscategory{#2}}%
6389   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6390   \let\glsxtrifwasfirstuse@secondoftwo
6391   \let\glsifplural@secondoftwo
6392   \let\glscapscase@secondofthree
6393   \let\glsinsert@\empty
6394   \def\glscustomtext{%
6395     \glsabbrvfont{\Glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
6396     \ifglsxtrinsertinside\else#3\fi
6397   }%
6398   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6399 }%
6400 \glspostlinkhook
6401 }

```

\GLSxtrshort

```
6402 \newrobustcmd*\GLSxtrshort{\gls@hyp@opt\ns@GLSxtrshort}
```

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

```

6403 \newcommand*\ns@GLSxtrshort[2][]{%
6404   \new@ifnextchar[\ns@GLSxtrshort[#1]{#2}{\ns@GLSxtrshort[#1]{#2}[]}}%
6405 }

```

Read in the final optional argument:

```

6406 \def\@GLSxtrshort#1#2[#3]{%
6407   \glsdoifexists{#2}%
6408 {%
6409   \glssetabbrvfmt{\glscategory{#2}}%
6410   \let\do@gls@link@checkfirsthyper@gls@link@nocheckfirsthyper
6411   \let\glsxtrifwasfirstuse@secondoftwo
6412   \let\glsifplural@secondoftwo
6413   \let\glscapscase@thirdofthree
6414   \let\glsinsert@\empty
6415   \def\glscustomtext{%
6416     \mfirstrucMakeUppercase
6417     \glsabbrvfont{\Glsaccessshort{#2}\ifglsxtrinsertinside#3\fi}%
6418     \ifglsxtrinsertinside\else#3\fi
6419   }%
6420 }%
6421   \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6422 }%
6423 \glspostlinkhook
6424 }

```

\glsxtrlong

```
6425 \newrobustcmd*\glsxtrlong{\gls@hyp@opt\ns@glsxtrlong}
```

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

```

6426 \newcommand*{\ns@glsxtrlong}[2] []{%
6427   \new@ifnextchar[{\@glsxtrlong[#1]{#2}}{\@glsxtrlong[#1]{#2}[] }%
6428 }

```

Read in the final optional argument:

```

6429 \def\@glsxtrlong#1#2[#3]{%
6430   \glsdoifexists{#2}%
6431   {%
6432     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6433     \let\glsxtrifwasfirstuse\@secondoftwo
6434     \let\glsifplural\@secondoftwo
6435     \let\glscapscase\@firstofthree
6436     \let\glsinsert\@empty
6437     \def\glscustomtext{%
6438       \glslongfont{\glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
6439       \ifglsxtrinsertinside\else#3\fi
6440     }%
6441     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6442   }%
6443   \glspostlinkhook
6444 }

```

\Glsxtrlong

```

6445 \newrobustcmd*{\Glsxtrlong}{\gls@hyp@opt\ns@glsxtrlong}

```

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

```

6446 \newcommand*{\ns@Glsxtrlong}[2] []{%
6447   \new@ifnextchar[{\@Glsxtrlong[#1]{#2}}{\@Glsxtrlong[#1]{#2}[] }%
6448 }

```

Read in the final optional argument:

```

6449 \def\@Glsxtrlong#1#2[#3]{%
6450   \glsdoifexists{#2}%
6451   {%
6452     \let\do@gls@link@checkfirsthyper\@gls@link@nocheckfirsthyper
6453     \let\glsxtrifwasfirstuse\@secondoftwo
6454     \let\glsifplural\@secondoftwo
6455     \let\glscapscase\@secondofthree
6456     \let\glsinsert\@empty
6457     \def\glscustomtext{%
6458       \glslongfont{\Glsaccesslong{#2}\ifglsxtrinsertinside#3\fi}%
6459       \ifglsxtrinsertinside\else#3\fi
6460     }%
6461     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6462   }%
6463   \glspostlinkhook
6464 }

```

\GLSxtrlong

```

6465 \newrobustcmd*{\GLSxtrlong}{\gls@hyp@opt\ns@GLSxtrlong}

```

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

```
6466 \newcommand*{\ns@GLSxtrlong}[2] []{%
6467   \new@ifnextchar[{\@\ns@GLSxtrlong[#1]{#2}}{\@\ns@GLSxtrlong[#1]{#2}[] }%
6468 }
```

Read in the final optional argument:

```
6469 \def\@GLSxtrlong#1#2[#3]{%
6470   \glsdoifexists{#2}%
6471   {%
6472     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6473     \let\glsxtrifwasfirstuse\@secondoftwo
6474     \let\glsifplural\@secondoftwo
6475     \let\glscapscase\@thirdofthree
6476     \let\glsinsert\@empty
6477     \def\glscustomtext{%
6478       \mfirstrucMakeUppercase
6479       {\glslongfont{\glsaccesslong[#2]\ifglsxtrinsertinside#3\fi}%
6480         \ifglsxtrinsertinside\else#3\fi
6481       }%
6482     }%
6483     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6484   }%
6485   \glspostlinkhook
6486 }
```

Plural short forms:

```
\glsxtrshortpl
```

```
6487 \newrobustcmd*{\glsxtrshortpl}{\gls@hyp@opt\ns@glsxtrshortpl}
```

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

```
6488 \newcommand*{\ns@glsxtrshortpl}[2] []{%
6489   \new@ifnextchar[{\@\ns@glsxtrshortpl[#1]{#2}}{\@\ns@glsxtrshortpl[#1]{#2}[] }%
6490 }
```

Read in the final optional argument:

```
6491 \def\@glsxtrshortpl#1#2[#3]{%
6492   \glsdoifexists{#2}%
6493   {%
6494     \glssetabbrvfmt{\glscategory[#2]}%
6495     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6496     \let\glsxtrifwasfirstuse\@secondoftwo
6497     \let\glsifplural\@firstoftwo
6498     \let\glscapscase\@firstofthree
6499     \let\glsinsert\@empty
6500     \def\glscustomtext{%
6501       \glsabbrvfont{\glsaccessshortpl[#2]\ifglsxtrinsertinside#3\fi}%
6502         \ifglsxtrinsertinside\else#3\fi
6503     }%
6504     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6505   }%
```

```

6506 \glspostlinkhook
6507 }

\Glsxtrshortpl
6508 \newrobustcmd*\{ \Glsxtrshortpl \}{\gls@hyp@opt\ns@Glsxtrshortpl}
Define the un-starred form. Need to determine if there is a final optional argument
6509 \newcommand*{\ns@Glsxtrshortpl}[2][]{%
6510 \new@ifnextchar[\{@Glsxtrshortpl{#1}{#2}\}{\@Glsxtrshortpl{#1}{#2}[]}%
6511 }

```

Read in the final optional argument:

```

6512 \def \@Glsxtrshortpl#1#2[#3]{%
6513 \glsdoifexists{#2}%
6514 {%
6515 \glssetabrvfmt{\glscategory{#2}}%
6516 \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6517 \let\glsxtrifwasfirstuse\secondoftwo
6518 \let\glsifplural\firstoftwo
6519 \let\glscapscase\secondofthree
6520 \let\glsinsert\empty
6521 \def\glscustomtext{%
6522 \glsabbrvfont{\Glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%
6523 \ifglsxtrinsertinside\else#3\fi
6524 }%
6525 \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6526 }%
6527 \glspostlinkhook
6528 }

```

```

\GLSxtrshortpl
6529 \newrobustcmd*\{ \GLSxtrshortpl \}{\gls@hyp@opt\ns@GLSxtrshortpl}
Define the un-starred form. Need to determine if there is a final optional argument
6530 \newcommand*{\ns@GLSxtrshortpl}[2][]{%
6531 \new@ifnextchar[\{@GLSxtrshortpl{#1}{#2}\}{\@GLSxtrshortpl{#1}{#2}[]}%
6532 }

```

Read in the final optional argument:

```

6533 \def \@GLSxtrshortpl#1#2[#3]{%
6534 \glsdoifexists{#2}%
6535 {%
6536 \glssetabrvfmt{\glscategory{#2}}%
6537 \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6538 \let\glsxtrifwasfirstuse\secondoftwo
6539 \let\glsifplural\firstoftwo
6540 \let\glscapscase\thirdofthree
6541 \let\glsinsert\empty
6542 \def\glscustomtext{%
6543 \mfirstucMakeUppercase
6544 \glsabbrvfont{\glsaccessshortpl{#2}\ifglsxtrinsertinside#3\fi}%

```

```

6545      \ifglsxtrinsertinside\else#3\fi
6546      }%
6547      }%
6548      \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6549      }%
6550      \glspostlinkhook
6551 }

```

Plural long forms:

\glsxtrlongpl

```
6552 \newrobustcmd*\glsxtrlongpl{\gls@hyp@opt\ns@glsxtrlongpl}
```

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

```

6553 \newcommand*\ns@glsxtrlongpl[2][]{%
6554   \new@ifnextchar{@\glsxtrlongpl[#1]{#2}}{@\glsxtrlongpl[#1]{#2}[]}{%
6555 }

```

Read in the final optional argument:

```

6556 \def\glsxtrlongpl#1#2[#3]{%
6557   \glsdoifexists{#2}%
6558   {%
6559     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6560     \let\glsxtrifwasfirstuse\secondoftwo
6561     \let\glsifplural\firstoftwo
6562     \let\glscapscase\firstofthree
6563     \let\glsinsert\empty
6564     \def\glscustomtext{%
6565       \glslongfont{\glsaccesslongpl[#2]\ifglsxtrinsertinside#3\fi}%
6566       \ifglsxtrinsertinside\else#3\fi
6567     }%
6568     \gls@link[#1]{#2}{\csname gls@\glstype @entryfmt\endcsname}%
6569   }%
6570   \glspostlinkhook
6571 }

```

\Glsxtrlongpl

```
6572 \newrobustcmd*\Glsxtrlongpl{\gls@hyp@opt\ns@Glsxtrlongpl}
```

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

```

6573 \newcommand*\ns@Glsxtrlongpl[2][]{%
6574   \new@ifnextchar{@\Glsxtrlongpl[#1]{#2}}{@\Glsxtrlongpl[#1]{#2}[]}{%
6575 }

```

Read in the final optional argument:

```

6576 \def\Glsxtrlongpl#1#2[#3]{%
6577   \glsdoifexists{#2}%
6578   {%
6579     \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6580     \let\glsxtrifwasfirstuse\secondoftwo
6581     \let\glsifplural\firstoftwo

```

```

6582   \let\glscapscase\@secondofthree
6583   \let\glsinsert\@empty
6584   \def\glscustomtext{%
6585     \glslongfont{\Glsaccesslongpl{\#2}\ifglsxtrinsertinside\#3\fi}%
6586     \ifglsxtrinsertinside\else\#3\fi
6587   }%
6588   \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
6589 }%
6590 \glspostlinkhook
6591 }

```

\GLSxtrlongpl
6592 \newrobustcmd*\{ \GLSxtrlongpl \}{ \gls@hyp@opt \ns@GLSxtrlongpl }

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

```

6593 \newcommand*{\ns@GLSxtrlongpl}[2][]{%
6594   \new@ifnextchar[{\@GLSxtrlongpl{\#1}{\#2}}{\@GLSxtrlongpl{\#1}{\#2}[]}%
6595 }

```

Read in the final optional argument:

```

6596 \def\@GLSxtrlongpl#1#2[#3]{%
6597   \glsdoifexists{\#2}%
6598 {%
6599   \let\do@gls@link@checkfirsthyper\gls@link@nocheckfirsthyper
6600   \let\glsxtrifwasfirstuse\@secondoftwo
6601   \let\glsifplural\@firstoftwo
6602   \let\glscapscase\@thirdofthree
6603   \let\glsinsert\@empty
6604   \def\glscustomtext{%
6605     \mfirstucMakeUppercase
6606     \glslongfont{\glsaccesslongpl{\#2}\ifglsxtrinsertinside\#3\fi}%
6607     \ifglsxtrinsertinside\else\#3\fi
6608   }%
6609 }%
6610   \gls@link[\#1]{\#2}{\csname gls@\glstype @entryfmt\endcsname}%
6611 }%
6612 \glspostlinkhook
6613 }

```

\glssetabbrvfmt Set the current format for the given category (or the abbreviation category if unset).

```

6614 \newcommand*{\glssetabbrvfmt}[1]{%
6615   \ifcscurrent{\glsabbrv@current@#1}%
6616   {\glsxtr@applyabbrvfmt{\csname \glsabbrv@current@#1\endcsname}}%
6617   {\glsxtr@applyabbrvfmt{\glsabbrv@current@abbreviation}}%
6618 }

```

\glsuseabbrvfont Provide a way to use the abbreviation font for a given category for arbitrary text.

```
6619 \newrobustcmd*\{ \glsuseabbrvfont \}[2]{\glssetabbrvfmt{\#2}\glsabbrvfont{\#1}}
```

```

\glsuselongfont Provide a way to use the long font for a given category for arbitrary text.
6620 \newrobustcmd*{\glsuselongfont}[2]{{\glssetabbrvfmt{\#2}\glslongfont{\#1}}}

sxtrgenabbrvfmt Similar to \glsgenacfmt, but for abbreviations.
6621 \newcommand*{\glsxtrgenabbrvfmt}{%
6622   \ifdefempty{\glscustomtext}%
6623   {%
6624     \ifglsused\glslabel%
6625   }%
6626   Subsequent use:%
6627   \glsifplural%
6628   Subsequent plural form:%
6629   \glscapscase%
6630   Subsequent plural form, don't adjust case:%
6631   \glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
6632   }%
6633   Subsequent plural form, make first letter upper case:%
6634   \Glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
6635   }%
6636   Subsequent plural form, all caps:%
6637   \mfirstucMakeUppercase%
6638   \glsxtrsubsequentplfmt{\glslabel}{\glsinsert}%
6639   }%
6640   }%
6641   Subsequent singular form:%
6642   \glscapscase%
6643   Subsequent singular form, don't adjust case:%
6644   \glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
6645   }%
6646   Subsequent singular form, make first letter upper case:%
6647   \Glsxtrsubsequentfmt{\glslabel}{\glsinsert}%
6648   }%
6649   Subsequent singular form, all caps:%
6650   \mfirstucMakeUppercase%
6651   \glsxtrsubsequentfmt{\glslabel}{\glsinsert}%

```

```
6651      }%
6652      }%
6653      }%
6654      {%
```

First use:

```
6655      \glsifplural
6656      {%
```

First use plural form:

```
6657      \glscapscase
6658      {%
```

First use plural form, don't adjust case:

```
6659      \glsxtrfullplformat{\glslabel}{\glsinsert}%
6660      }%
6661      {%
```

First use plural form, make first letter upper case:

```
6662      \Glsxtrfullplformat{\glslabel}{\glsinsert}%
6663      }%
6664      {%
```

First use plural form, all caps:

```
6665      \mfirstucMakeUppercase
6666      {\glsxtrfullplformat{\glslabel}{\glsinsert}}%
6667      }%
6668      }%
6669      {%
```

First use singular form

```
6670      \glscapscase
6671      {%
```

First use singular form, don't adjust case:

```
6672      \glsxtrfullformat{\glslabel}{\glsinsert}%
6673      }%
6674      {%
```

First use singular form, make first letter upper case:

```
6675      \Glsxtrfullformat{\glslabel}{\glsinsert}%
6676      }%
6677      {%
```

First use singular form, all caps:

```
6678      \mfirstucMakeUppercase
6679      {\glsxtrfullformat{\glslabel}{\glsinsert}}%
6680      }%
6681      }%
6682      }%
6683      }%
6684      {%
```

User supplied text.

```
6685     \glscustomtext
6686 }%
6687 }
```

trsubsequentfmt Subsequent use format (singular no case change).

```
6688 \newcommand*{\glsxtrsubsequentfmt}[2]{%
6689   \glsabbrvfont{\glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
6690   \ifglsxtrinsertinside \else#2\fi
6691 }
6692 \let\glsxtrdefaultsubsequentfmt\glsxtrsubsequentfmt
```

subsequentplfmt Subsequent use format (plural no case change).

```
6693 \newcommand*{\glsxtrsubsequentplfmt}[2]{%
6694   \glsabbrvfont{\glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
6695   \ifglsxtrinsertinside \else#2\fi
6696 }
6697 \let\glsxtrdefaultsubsequentplfmt\glsxtrsubsequentplfmt
```

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

```
6698 \newcommand*{\Glsxtrsubsequentfmt}[2]{%
6699   \glsabbrvfont{\Glsaccessshort{#1}\ifglsxtrinsertinside #2\fi}%
6700   \ifglsxtrinsertinside \else#2\fi
6701 }
6702 \let\Glsxtrdefaultsubsequentfmt\Glsxtrsubsequentfmt
```

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

```
6703 \newcommand*{\Glsxtrsubsequentplfmt}[2]{%
6704   \glsabbrvfont{\Glsaccessshortpl{#1}\ifglsxtrinsertinside #2\fi}%
6705   \ifglsxtrinsertinside \else#2\fi
6706 }
6707 \let\Glsxtrdefaultsubsequentplfmt\Glsxtrsubsequentplfmt
```

1.7.1 Abbreviation Styles Setup

breviationstyle

```
6708 \newcommand*{\setabbreviationstyle}[2][abbreviation]{%
6709   \ifcsundef{@glsabbrv@dispstyle@setup@#2}%
6710   {%
6711     \PackageError{glossaries-extra}{Undefined abbreviation style '#2'}{}%
6712   }%
6713 }
```

Have abbreviations already been defined for this category?

```
6714   \ifcsstring{@glsabbrv@current@#1}{#2}%
6715 }
```

Style already set.

```
6716      }%
6717      {%
6718      \def\@glsxtr@dostylewarn{}%
6719      \glsforeachincategory{#1}{\@gls@type}{\@gls@label}%
6720      {%
6721      \def\@glsxtr@dostylewarn{\GlossariesWarning{Abbreviation
6722          style has been switched \MessageBreak
6723          for category '#1', \MessageBreak
6724          but there have already been entries \MessageBreak
6725          defined for this category. Unwanted \MessageBreak
6726          side-effects may result}}%
6727      \@endfortrue
6728      }%
6729      \@glsxtr@dostylewarn
```

Set up the style for the given category.

```
6730      \csdef{@glsabbrv@current@#1}{#2}%
6731      \glsxtr@applyabbrvstyle{#2}%
6732      }%
6733  }%
6734 }
```

`applyabbrvstyle` Apply the abbreviation style without existence check.

```
6735 \newcommand*{\glsxtr@applyabbrvstyle}[1]{%
6736   \csuse{@glsabbrv@dispstyle@setup@#1}%
6737   \csuse{@glsabbrv@dispstyle@fmts@#1}%
6738 }
```

`r@applyabbrvfmt` Only apply the style formats.

```
6739 \newcommand*{\glsxtr@applyabbrvfmt}[1]{%
6740   \csuse{@glsabbrv@dispstyle@fmts@#1}%
6741 }
```

`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.

```
6742 \newcommand*{\newabbreviationstyle}[3]{%
6743   \ifcsdef{@glsabbrv@dispstyle@setup@#1}%
6744   {%
6745     \PackageError{glossaries-extra}{Abbreviation style '#1' already
6746     defined}{}%
6747   }%
6748   {%
6749     \csdef{@glsabbrv@dispstyle@setup@#1}{%
```

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

```
6750   \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
6751   #2}%
6752   \csdef{@glsabbrv@dispstyle@fmts@#1}{%
```

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

```
6753 \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}%
6754 \renewcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}%
6755 \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}%
6756 \renewcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}%
```

Reset \glsxtrsubsequentfmt etc in case a style changes this.

```
6757 \let\glsxtrsubsequentfmt\glsxtrdefaultsubsequentfmt
6758 \let\glsxtrsubsequentplfmt\glsxtrdefaultsubsequentplfmt
6759 \let\Glsxtrsubsequentfmt\Glsxtrdefaultsubsequentfmt
6760 \let\Glsxtrsubsequentplfmt\Glsxtrdefaultsubsequentplfmt
6761 #3}%
6762 }%
6763 }
```

abbreviationstyle

```
6764 \newcommand*{\renewabbreviationstyle}[3]{%
6765 \ifcsundef{@glsabbrv@dispstyle@setup@#1}%
6766 {%
6767 \PackageError{glossaries-extra}{Abbreviation style '#1' not defined}{}%
6768 }%
6769 {%
6770 \csdef{@glsabbrv@dispstyle@setup@#1}{%
```

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

```
6771 \renewcommand*{\GlsXtrPostNewAbbreviation}{}%
6772 #2}%
6773 \csdef{@glsabbrv@dispstyle@fmcts@#1}{%
```

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

```
6774 \renewcommand*{\glsxtrinlinefullformat}{\glsxtrfullformat}%
6775 \renewcommand*{\Glsxtrinlinefullformat}{\Glsxtrfullformat}%
6776 \renewcommand*{\glsxtrinlinefullplformat}{\glsxtrfullplformat}%
6777 \renewcommand*{\Glsxtrinlinefullplformat}{\Glsxtrfullplformat}%
6778 #3}%
6779 }%
6780 }
```

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

```
6781 \newcommand*{\letabbreviationstyle}[2]{%
6782 \csletcs{@glsabbrv@dispstyle@setup@#1}{@glsabbrv@dispstyle@setup@#2}%
6783 \csletcs{@glsabbrv@dispstyle@fmcts@#1}{@glsabbrv@dispstyle@fmcts@#2}%
6784 }
```

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

Define a synonym for a deprecated abbreviation style.

```
6785 \newcommand*{\glsxtr@deprecated@abbrstyle}[2]{%
6786   \csdef{@glsabrv@dispstyle@setup@#1}{%
6787     \GlsXtrWarnDeprecatedAbbrStyle{#1}{#2}%
6788     \csuse{@glsabrv@dispstyle@setup@#2}%
6789   }%
6790   \csletcs{@glsabrv@dispstyle@fmts@#1}{@glsabrv@dispstyle@fmts@#2}%
6791 }
```

ecatedAbbrStyle Generate warning for deprecated style use.

```
6792 \newcommand*{\GlsXtrWarnDeprecatedAbbrStyle}[2]{%
6793   \GlossariesExtraWarning{Deprecated abbreviation style name '#1',
6794   use '#2' instead}%
6795 }
```

eAbbrStyleSetup

```
6796 \newcommand*{\GlsXtrUseAbbrStyleSetup}[1]{%
6797   \ifcsundef{@glsabrv@dispstyle@setup@#1}{%
6798     {%
6799       \PackageError{glossaries-extra}{%
6800         Unknown abbreviation style definitions '#1'}{}%
6801     }%
6802     {%
6803       \csname @glsabrv@dispstyle@setup@#1\endcsname
6804     }%
6805 }
```

seAbbrStyleFmts

```
6806 \newcommand*{\GlsXtrUseAbbrStyleFmts}[1]{%
6807   \ifcsundef{@glsabrv@dispstyle@fmts@#1}{%
6808     {%
6809       \PackageError{glossaries-extra}{%
6810         Unknown abbreviation style formats '#1'}{}%
6811     }%
6812     {%
6813       \csname @glsabrv@dispstyle@fmts@#1\endcsname
6814     }%
6815 }
```

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.

```
6816 \newif\ifglsxtrinsertinside  
6817 \glsxtrinsertinsidefalse
```

trlongshortname

```
6818 \newcommand*\glsxtrlongshortname{  
6819   \protect\glsabbrvfont{\the\glsshorttok}  
6820 }
```

long-short

```
6821 \newabbreviationstyle{long-short}{  
6822 {  
6823   \renewcommand*\CustomAbbreviationFields{  
6824     name={\glsxtrlongshortname},  
6825     sort={\the\glsshorttok},  
6826     first={\protect\glsfirstlongfont{\the\glslongtok}}%  
6827       \protect\glsxtrfullsep{\the\glslabeltok}%  
6828       \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%  
6829     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}}%  
6830       \protect\glsxtrfullsep{\the\glslabeltok}%  
6831       \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%  
6832     plural={\protect\glsabbrvfont{\the\glsshortpltok}},%  
6833     description={\the\glslongtok}}%
```

Unset the regular attribute if it has been set.

```
6834 \renewcommand*\GlsXtrPostNewAbbreviation{  
6835   \glshasattribute{\the\glslabeltok}{regular}}%  
6836 {  
6837   \glssetattribute{\the\glslabeltok}{regular}{false}}%  
6838 }%  
6839 {}%  
6840 }%  
6841 }%  
6842 {
```

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

```
6843 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%  
6844 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%  
6845 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%  
6846 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%  
6847 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

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

```
6848 \renewcommand*\glsxtrfullformat[2]{  
6849   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}}%  
6850   \ifglsxtrinsertinside\else##2\fi  
6851   \glsxtrfullsep{##1}}
```

```

6852     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
6853 }
6854 \renewcommand*{\glsxtrfullplformat}[2]{%
6855     \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
6856     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6857     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
6858 }%
6859 \renewcommand*{\Glsxtrfullformat}[2]{%
6860     \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
6861     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6862     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}%
6863 }%
6864 \renewcommand*{\Glsxtrfullplformat}[2]{%
6865     \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
6866     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6867     \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
6868 }%
6869 }

```

Set this as the default style for general abbreviations:

```
6870 \setabbreviationstyle{long-short}
```

ngshortdescsort

```

6871 \newcommand*{\glsxtrlongshortdescsort}{%
6872     \expandonce\glsxtrorglong\space (\expandonce\glsxtrorgshort)%
6873 }

```

ngshortdescname

```

6874 \newcommand*{\glsxtrlongshortdescname}{%
6875     \protect\glslongfont{\the\glslongtok}%
6876     \glsxtrparen{\protect\glsabbrvfont{\the\glsshorttok}}%
6877 }

```

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

```

6878 \newabbreviationstyle{long-short-desc}%
6879 {%
6880     \renewcommand*{\CustomAbbreviationFields}{%
6881         name={\glsxtrlongshortdescname},%
6882         sort={\glsxtrlongshortdescsort},%
6883         first={\protect\glsfirstlongfont{\the\glslongtok}}%
6884         \protect\glsxtrfullsep{\the\glslabeltok}%
6885         \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshorttok}}},%
6886         firstplural={\protect\glsfirstlongfont{\the\glslongpltok}}%
6887         \protect\glsxtrfullsep{\the\glslabeltok}%
6888         \glsxtrparen{\protect\glsfirstabbrvfont{\the\glsshortpltok}}},%

```

The text key should only have the short form.

```
6889     text={\protect\glsabbrvfont{\the\glsshorttok}},%
```

```

6890     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
6891   }%

```

Unset the regular attribute if it has been set.

```

6892   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
6893     \glshasattribute{\the\glslabeltok}{regular}%
6894     {%
6895       \glssetattribute{\the\glslabeltok}{regular}{false}%
6896     }%
6897     {}%
6898   }%
6899 }%
6900 {%
6901   \GlsXtrUseAbbrStyleFmts{long-short}%
6902 }

```

trshortlongname

```

6903 \newcommand*{\glsxtrshortlongname}{%
6904   \protect\glsabbrvfont{\the\glsshorttok}%
6905 }

```

short-long Short form followed by long form in parenthesis on first use.

```

6906 \newabbreviationstyle{short-long}%
6907 {%
6908   \renewcommand*{\CustomAbbreviationFields}{%
6909     name={\glsxtrshortlongname},
6910     sort={\the\glsshorttok},
6911     description={\the\glslongtok},%
6912     first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
6913       \protect\glsxtrfullsep{\the\glslabeltok}%
6914       \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}}},%
6915     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
6916       \protect\glsxtrfullsep{\the\glslabeltok}%
6917       \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
6918     plural={\protect\glsabbrvfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

6919   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
6920     \glshasattribute{\the\glslabeltok}{regular}%
6921     {%
6922       \glssetattribute{\the\glslabeltok}{regular}{false}%
6923     }%
6924     {}%
6925   }%
6926 }%
6927 {%

```

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

```

6928   \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%

```

```

6929 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
6930 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
6931 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
6932 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

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

```

6933 \renewcommand*{\glsxtrfullformat}[2]{%
6934   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6935   \ifglsxtrinsertinside\else##2\fi
6936   \glsxtrfullsep{##1}%
6937   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
6938 }%
6939 \renewcommand*{\glsxtrfullplformat}[2]{%
6940   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6941   \ifglsxtrinsertinside\else##2\fi
6942   \glsxtrfullsep{##1}%
6943   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
6944 }%
6945 \renewcommand*{\Glsxtrfullformat}[2]{%
6946   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
6947   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6948   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
6949 }%
6950 \renewcommand*{\Glsxtrfullplformat}[2]{%
6951   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
6952   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
6953   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
6954 }%
6955 }

```

ortlongdescsort

```
6956 \newcommand*{\glsxtrshortlongdescsort}{\the\glsshorttok}
```

ortlongdescname

```

6957 \newcommand*{\glsxtrshortlongdescname}{%
6958   \protect\glsabbrvfont{\the\glsshorttok}%
6959   \glsxtrparen{\protect\glslongfont{\the\glslongtok}}}%
6960 }

```

short-long-desc

User supplies description. The long form is included in the name.

```

6961 \newabbreviationstyle{short-long-desc}%
6962 {%
6963   \renewcommand*{\CustomAbbreviationFields}{%
6964     name={\glsxtrshortlongdescname},%
6965     sort={\glsxtrshortlongdescsort},%
6966     first={\protect\glsfirstabbrvfont{\the\glsshorttok}}%
6967     \protect\glsxtrfullsep{\the\glslabeltok}%
6968     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongtok}},%
6969     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}}%
}

```

```

6970     \protect\glsxtrfullsep{\the\glslabeltok}%
6971     \glsxtrparen{\protect\glsfirstlongfont{\the\glslongpltok}}},%
6972     text={\protect\glsabbrvfont{\the\glsshorttok}},%
6973     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
6974 }%

```

Unset the regular attribute if it has been set.

```

6975 \renewcommand*\GlsXtrPostNewAbbreviation{%
6976   \glshasattribute{\the\glslabeltok}{regular}%
6977   {%
6978     \glssetattribute{\the\glslabeltok}{regular}{false}%
6979   }%
6980   {}%
6981 }%
6982 }%
6983 {}%
6984 \GlsXtrUseAbbrStyleFmts{short-long}%
6985 }

```

`ongfootnotefont` Only used by the “footnote” styles.

```
6986 \newcommand*\glsfirstlongfootnotefont}[1]{\glslongfootnotefont{#1}}%
```

`ongfootnotefont` Only used by the “footnote” styles.

```
6987 \newcommand*\glslongfootnotefont}[1]{\glslongdefaultfont{#1}}%
```

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

Command used by footnote abbreviation styles. The default definition ignores the first argument. The second argument *⟨long⟩* includes the font changing command and may be the singular or plural form, depending on the command that was used (for example, `\gls` or `\glspl`).

```
6988 \newcommand*\glsxtrabbrvfootnote}[2]{\footnote{#2}}
```

`xtrfootnotename`

```

6989 \newcommand*\glsxtrfootnotename}{%
6990   \protect\glsabbrvfont{\the\glsshorttok}%
6991 }

```

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

```

6992 \newabbreviationstyle{footnote}{%
6993 {}%
6994 \renewcommand*\CustomAbbreviationFields{%
6995   name={\glsxtrfootnotename},%
6996   sort={\the\glsshorttok},%
6997   description={\the\glslongtok},%

```

```

6998   first={\protect\glsfirstabbrvfont{\the\glsshorttok}%
6999     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7000       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
7001   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}%
7002     \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7003       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
7004   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.

7005 \renewcommand*\GlsXtrPostNewAbbreviation{%
7006   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
7007   \glshasattribute{\the\glslabeltok}{regular}%
7008   {%
7009     \glssetattribute{\the\glslabeltok}{regular}{false}%
7010   }%
7011   {}%
7012 }%
7013 }%
7014 {%

```

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

```

7015 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
7016 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7017 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
7018 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
7019 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%

```

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

```

7020 \renewcommand*\glsxtrfullformat[2]{%
7021   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7022   \ifglsxtrinsertinside\else##2\fi
7023   \protect\glsxtrabbrvfootnote{##1}%
7024   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7025 }%
7026 \renewcommand*\glsxtrfullplformat[2]{%
7027   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7028   \ifglsxtrinsertinside\else##2\fi
7029   \protect\glsxtrabbrvfootnote{##1}%
7030   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7031 }%
7032 \renewcommand*\Glsxtrfullformat[2]{%
7033   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7034   \ifglsxtrinsertinside\else##2\fi
7035   \protect\glsxtrabbrvfootnote{##1}%
7036   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7037 }%
7038 \renewcommand*\Glsxtrfullplformat[2]{%
7039   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

7040     \ifglsxtrinsertinside\else##2\fi
7041     \protect\glsxtrabrvfootnote{##1}%
7042     {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7043 }%

```

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

```

7044 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7045   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7046   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7047   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7048 }%
7049 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7050   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7051   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7052   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7053 }%
7054 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7055   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7056   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7057   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7058 }%
7059 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7060   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7061   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7062   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7063 }%
7064 }

```

short-footnote

```
7065 \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.

```

7066 \newabbreviationstyle{postfootnote}%
7067 {%
7068   \renewcommand*{\CustomAbbreviationFields}{%
7069     name={\glsxtrfootnotename},
7070     sort={\the\glsshorttok},
7071     description={\the\glslongtok},%
7072     first={\protect\glsfirstabbrvfont{\the\glsshorttok}},%
7073     firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},%
7074     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.

```

7075 \renewcommand*{\GlsXtrPostNewAbbreviation}%
7076   \csdef{glsxtrpostlink\glscategorylabel}{%
7077     \glsxtrifwasfirstuse

```

```
7078     {%
```

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

```
7079     \glsxtrdopostpunc{\protect\glsxtrabrvfootnote{\glslabel}}%
7080     {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}}}%
7081     }%
7082     {}%
7083     }%
7084     \glshasattribute{\the\glslabeltok}{regular}%
7085     {}%
7086     \glssetattribute{\the\glslabeltok}{regular}{false}%
7087     }%
7088     {}%
7089 }%
```

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

```
7090 \renewcommand*{\glsxtrsetupfulldefs}{%
7091   \let\glsxtrifwasfirstuse\@secondoftwo
7092 }%
7093 }%
7094 {%
```

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

```
7095 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabrvpluralsuffix}%
7096 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
7097 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
7098 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
7099 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

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

```
7100 \renewcommand*{\glsxtrfullformat}[2]{%
7101   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7102   \ifglsxtrinsertinside\else##2\fi
7103 }%
7104 \renewcommand*{\glsxtrfullplformat}[2]{%
7105   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7106   \ifglsxtrinsertinside\else##2\fi
7107 }%
7108 \renewcommand*{\Glsxtrfullformat}[2]{%
7109   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7110   \ifglsxtrinsertinside\else##2\fi
7111 }%
7112 \renewcommand*{\Glsxtrfullplformat}[2]{%
7113   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7114   \ifglsxtrinsertinside\else##2\fi
7115 }%
```

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

```
7116 \renewcommand*{\glsxtrinlinefullformat}[2]{%
```

```

7117   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7118   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7119   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7120 }%
7121 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7122   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7123   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7124   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7125 }%
7126 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7127   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7128   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7129   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7130 }%
7131 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7132   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7133   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7134   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7135 }%
7136 }

```

rt-postfootnote

```
7137 \letabbreviationstyle{short-postfootnote}{postfootnote}
```

shortnolongname

```

7138 \newcommand*{\glsxtrshortnolongname}{%
7139   \protect\glsabbrvfont{\the\glsshorttok}%
7140 }

```

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.

```

7141 \newabbreviationstyle{short}{%
7142 }%
7143 \renewcommand*{\CustomAbbreviationFields}{%
7144   name={\glsxtrshortnolongname},
7145   sort={\the\glsshorttok},
7146   first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
7147   firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
7148   text={\protect\glsabbrvfont{\the\glsshorttok}},
7149   plural={\protect\glsabbrvfont{\the\glsshortpltok}},
7150   description={\the\glslongtok}}%
7151 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7152   \glssetattribute{\the\glslabeltok}{regular}{true}}%
7153 }%
7154 }%

```

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

```

7155 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
7156 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvdefaultfont{##1}}%
7157 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
7158 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7159 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

7160 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7161   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
7162   \ifglsxtrinsertinside##2\fi}%
7163 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7164 \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7165 }%
7166 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7167   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
7168   \ifglsxtrinsertinside##2\fi}%
7169 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7170 \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7171 }%
7172 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7173   \protect\glsfirstabbrvfont{\glsaccessshort{##1}}%
7174   \ifglsxtrinsertinside##2\fi}%
7175 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7176 \glsxtrparen{\glsfirstlongfont{\Glsaccesslong{##1}}}%
7177 }%
7178 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7179   \protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}%
7180   \ifglsxtrinsertinside##2\fi}%
7181 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7182 \glsxtrparen{\glsfirstlongfont{\Glsaccesslongpl{##1}}}%
7183 }%

```

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.

```

7184 \renewcommand*{\glsxtrfullformat}[2]{%
7185   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7186   \ifglsxtrinsertinside\else##2\fi
7187 }%
7188 \renewcommand*{\glsxtrfullplformat}[2]{%
7189   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7190   \ifglsxtrinsertinside\else##2\fi
7191 }%
7192 \renewcommand*{\Glsxtrfullformat}[2]{%
7193   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7194   \ifglsxtrinsertinside\else##2\fi
7195 }%
7196 \renewcommand*{\Glsxtrfullplformat}[2]{%
7197   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7198   \ifglsxtrinsertinside\else##2\fi
7199 }%

```

```
7200 }
```

Set this as the default style for acronyms:

```
7201 \setabbreviationstyle[acronym]{short}
```

short-nolong

```
7202 \letabbreviationstyle{short-nolong}{short}
```

short-nolong-noreg Like **short-nolong** but doesn't set the **regular** attribute.

```
7203 \newabbreviationstyle{short-nolong-noreg}{%
```

```
7204 {%
```

```
7205 \GlsXtrUseAbbrStyleSetup{short-nolong}{%
```

Unset the **regular** attribute if it has been set.

```
7206 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
```

```
7207 \glshasattribute{\the\glslabeltok}{regular}{%
```

```
7208 {%
```

```
7209 \glssetattribute{\the\glslabeltok}{regular}{false}{%
```

```
7210 }{%
```

```
7211 {}{%
```

```
7212 }{%
```

```
7213 }{%
```

```
7214 {%
```

```
7215 \GlsXtrUseAbbrStyleFmts{short-nolong}{%
```

```
7216 }
```

trshortdescname

```
7217 \newcommand*{\glsxtrshortdescname}{%
```

```
7218 \protect\glsabbrvfont{\the\glsshorttok}{%
```

```
7219 }
```

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.

```
7220 \newabbreviationstyle{short-desc}{%
```

```
7221 {%
```

```
7222 \renewcommand*{\CustomAbbreviationFields}{%
```

```
7223 name={\glsxtrshortdescname},
```

```
7224 sort={\the\glsshorttok},
```

```
7225 first={\protect\glsfirstabbrvfont{\the\glsshorttok}},
```

```
7226 firstplural={\protect\glsfirstabbrvfont{\the\glsshortpltok}},
```

```
7227 text={\protect\glsabbrvfont{\the\glsshorttok}},
```

```
7228 plural={\protect\glsabbrvfont{\the\glsshortpltok}},
```

```
7229 description={\the\glslongtok}}{%
```

```
7230 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
```

```
7231 \glssetattribute{\the\glslabeltok}{regular}{true}{%
```

```
7232 }{%
```

```
7233 {%
```

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

```
7234 \renewcommand*\{\abbrvpluralsuffix\}\glsxtrabbrvpluralsuffix}%
7235 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7236 \renewcommand*\{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
7237 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7238 \renewcommand*\{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short format followed by the long form in parentheses.

```
7239 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
7240   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7241   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7242   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7243 }%
7244 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
7245   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7246   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7247   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7248 }%
7249 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
7250   \glsfirstabbrvfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7251   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7252   \glsxtrparen{\glsfirstlongfont{\glsaccesslong{##1}}}%
7253 }%
7254 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
7255   \glsfirstabbrvfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7256   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7257   \glsxtrparen{\glsfirstlongfont{\glsaccesslongpl{##1}}}%
7258 }%
```

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.

```
7259 \renewcommand*\{\glsxtrfullformat}[2]{%
7260   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7261   \ifglsxtrinsertinside\else##2\fi
7262 }%
7263 \renewcommand*\{\glsxtrfullplformat}[2]{%
7264   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7265   \ifglsxtrinsertinside\else##2\fi
7266 }%
7267 \renewcommand*\{\Glsxtrfullformat}[2]{%
7268   \glsfirstabbrvfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7269   \ifglsxtrinsertinside\else##2\fi
7270 }%
7271 \renewcommand*\{\Glsxtrfullplformat}[2]{%
7272   \glsfirstabbrvfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7273   \ifglsxtrinsertinside\else##2\fi
7274 }%
7275 }
```

ort-nolong-desc

```
7276 \letabbreviationstyle{short-nolong-desc}{short-desc}
```

long-desc-noreg Like short-nolong-desc but doesn't set the regular attribute.

```
7277 \newabbreviationstyle{short-nolong-desc-noreg}{%
```

```
7278 {%
```

```
7279 \GlsXtrUseAbbrStyleSetup{short-nolong-desc}{%
```

Unset the regular attribute if it has been set.

```
7280 \renewcommand*\GlsXtrPostNewAbbreviation}{%
```

```
7281 \glshasattribute{\the\glslabeltok}{regular}{%
```

```
7282 {%
```

```
7283 \glssetattribute{\the\glslabeltok}{regular}{false}{%
```

```
7284 }{%
```

```
7285 {}{%
```

```
7286 }{%
```

```
7287 }{%
```

```
7288 {}{%
```

```
7289 \GlsXtrUseAbbrStyleFmts{short-nolong-desc}{%
```

```
7290 }
```

nolong-short Similar to short-nolong but the full form shows the long form followed by the short form in parentheses.

```
7291 \newabbreviationstyle{nolong-short}{%
```

```
7292 {%
```

```
7293 \GlsXtrUseAbbrStyleSetup{short-nolong}{%
```

```
7294 }{%
```

```
7295 {}{%
```

```
7296 \GlsXtrUseAbbrStyleFmts{short-nolong}{%
```

The inline full form displays the long form followed by the short form in parentheses.

```
7297 \renewcommand*\glsxtrinlinefullformat}[2]{%
```

```
7298 \protect\glsfirstlongfont{\glsaccesslong{##1}}{%
```

```
7299 \ifglsxtrinsertinside##2\fi}{%
```

```
7300 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{%
```

```
7301 \glsxtrparen{\glsfirstabbrvfont{\glsaccessshort{##1}}}{}}
```

```
7302 }{%
```

```
7303 \renewcommand*\glsxtrinlinefullplformat}[2]{%
```

```
7304 \protect\glsfirstlongfont{\glsaccesslongpl{##1}}{%
```

```
7305 \ifglsxtrinsertinside##2\fi}{%
```

```
7306 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{%
```

```
7307 \glsxtrparen{\glsfirstabbrvfont{\glsaccessshortpl{##1}}}{}}
```

```
7308 }{%
```

```
7309 \renewcommand*\Glsxtrinlinefullformat}[2]{%
```

```
7310 \protect\glsfirstlongfont{\glsaccesslong{##1}}{%
```

```
7311 \ifglsxtrinsertinside##2\fi}{%
```

```
7312 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{}}
```

```
7313 \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshort{##1}}}{}}
```

```
7314 }{%
```

```
7315 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
```

```
7316 \protect\glsfirstlongfont{\glsaccesslongpl{##1}}{%
```

```

7317     \ifglsxtrinsertinside##2\fi}%
7318     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7319     \glsxtrparen{\glsfirstabbrvfont{\Glsaccessshortpl{##1}}}%
7320 }%
7321 }

```

`nong-short-noreg` Like `nolong-short` but doesn't set the `regular` attribute.

```

7322 \newabbreviationstyle{nong-short-noreg}{%
7323 {%
7324   \GlsXtrUseAbbrStyleSetup{nolong-short}%

```

Unset the `regular` attribute if it has been set.

```

7325   \renewcommand*\GlsXtrPostNewAbbreviation{%
7326     \glshasattribute{\the\glslabeltok}{regular}%
7327   {%
7328     \glssetattribute{\the\glslabeltok}{regular}{false}%
7329   }%
7330   {}%
7331 }%
7332 }%
7333 {%
7334   \GlsXtrUseAbbrStyleFmts{nolong-short}%
7335 }

```

`noshortdescname`

```

7336 \newcommand*\glsxtrlongnoshortdescname{%
7337   \protect\glslongfont{\the\glslongtok}%
7338 }

```

`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.

```

7339 \newabbreviationstyle{long-desc}{%
7340 {%
7341   \renewcommand*\CustomAbbreviationFields{%
7342     name={\glsxtrlongnoshortdescname},
7343     sort={\the\glslongtok},
7344     first={\protect\glsfirstlongfont{\the\glslongtok}},
7345     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}},
7346     text={\glslongfont{\the\glslongtok}},
7347     plural={\glslongfont{\the\glslongpltok}}}%
7348 }%
7349   \renewcommand*\GlsXtrPostNewAbbreviation{%
7350     \glssetattribute{\the\glslabeltok}{regular}{true}%
7351 }%
7352 {%

```

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

```

7353 \renewcommand*\abbrvpluralsuffix{\glsxtrabbrvpluralsuffix}%

```

```

7354 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
7355 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvdefaultfont{##1}}%
7356 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7357 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

7358 \renewcommand*\glsxtrsubsequentfmt[2]{%
7359   \glslongfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7360   \ifglsxtrinsertinside \else##2\fi
7361 }%
7362 \renewcommand*\glsxtrsubsequentplfmt[2]{%
7363   \glslongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7364   \ifglsxtrinsertinside \else##2\fi
7365 }%
7366 \renewcommand*\Glsxtrsubsequentfmt[2]{%
7367   \glslongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7368   \ifglsxtrinsertinside \else##2\fi
7369 }%
7370 \renewcommand*\Glsxtrsubsequentplfmt[2]{%
7371   \glslongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7372   \ifglsxtrinsertinside \else##2\fi
7373 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

7374 \renewcommand*\glsxtrinlinefullformat[2]{%
7375   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7376   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7377   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
7378 }%
7379 \renewcommand*\glsxtrinlinefullplformat[2]{%
7380   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7381   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7382   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
7383 }%
7384 \renewcommand*\Glsxtrinlinefullformat[2]{%
7385   \glsfirstlongfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7386   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7387   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
7388 }%
7389 \renewcommand*\Glsxtrinlinefullplformat[2]{%
7390   \glsfirstlongfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7391   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7392   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
7393 }%

```

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.

```

7394 \renewcommand*\glsxtrfullformat[2]{%
7395   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7396   \ifglsxtrinsertinside\else##2\fi
7397 }%

```

```

7398 \renewcommand*{\glsxtrfullplformat}[2]{%
7399   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7400   \ifglsxtrinsertinside\else##2\fi
7401 }%
7402 \renewcommand*{\Glsxtrfullformat}[2]{%
7403   \glsfirstlongfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7404   \ifglsxtrinsertinside\else##2\fi
7405 }%
7406 \renewcommand*{\Glsxtrfullplformat}[2]{%
7407   \glsfirstlongfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7408   \ifglsxtrinsertinside\else##2\fi
7409 }%
7410 }

```

`ng-noshort-desc` Provide a synonym that matches similar styles.

```
7411 \letabbreviationstyle{long-noshort-desc}{long-desc}
```

`hort-desc-noreg` Like `long-noshort-desc` but doesn't set the regular attribute.

```

7412 \newabbreviationstyle{long-noshort-desc-noreg}%
7413 {%
7414   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%

```

Unset the regular attribute if it has been set.

```

7415 \renewcommand*{\GlsXtrPostNewAbbreviation}%
7416   \glshasattribute{\the\glslabeltok}{regular}%
7417   {%
7418     \glssetattribute{\the\glslabeltok}{regular}{false}%
7419   }%
7420   {}%
7421 }%
7422 }%
7423 {%
7424   \GlsXtrUseAbbrStyleFmts{long-noshort-desc}%
7425 }

```

`longnoshortname`

```

7426 \newcommand*{\glsxtrlongnoshortname}%
7427   \protect\glsabbrvfont{\the\glsshorttok}%
7428 }
```

`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.

```

7429 \newabbreviationstyle{long}%
7430 {%
7431   \renewcommand*{\CustomAbbreviationFields}%
7432     name={\glsxtrlongnoshortname},%
7433     sort={\the\glsshorttok},%
7434     first={\protect\glsfirstlongfont{\the\glslongtok}},
```

```

7435     firstplural={\protect\glsfirstlongfont{\the\glslongpltok}\},
7436     text={\glslongfont{\the\glslongtok}\},
7437     plural={\glslongfont{\the\glslongpltok}\},%
7438     description={\the\glslongtok}\}%
7439 \}%
7440 \renewcommand*\GlsXtrPostNewAbbreviation{%
7441   \glssetattribute{\the\glslabeltok}{regular}{true}}%
7442 }%
7443 {%
7444   \GlsXtrUseAbbrStyleFmts{long-desc}%
7445 }

```

`long-noshort` Provide a synonym that matches similar styles.

```
7446 \letabbreviationstyle{long-noshort}{long}
```

`g-noshort-noreg` Like `long-noshort` but doesn't set the `regular` attribute.

```

7447 \newabbreviationstyle{long-noshort-noreg}\%
7448 {%
7449   \GlsXtrUseAbbrStyleSetup{long-noshort}\%

```

Unset the `regular` attribute if it has been set.

```

7450 \renewcommand*\GlsXtrPostNewAbbreviation{%
7451   \glshasattribute{\the\glslabeltok}{regular}\}%
7452 {%
7453   \glssetattribute{\the\glslabeltok}{regular}{false}}%
7454 }%
7455 {}%
7456 \}%
7457 }%
7458 {%
7459   \GlsXtrUseAbbrStyleFmts{long-noshort}\%
7460 }

```

1.7.3 Predefined Styles (Small Capitals)

These styles use `\textsc` for the short form.

`\glsxtrscfont` Maintained for backward-compatibility.

```
7461 \newcommand*\glsxtrscfont[1]{\textsc{#1}}
```

`\glsabbrvscfont` Added for consistent naming.

```
7462 \newcommand*\glsabbrvscfont{\glsxtrscfont}
```

`sxtrfirstscfont` Maintained for backward-compatibility.

```
7463 \newcommand*\sxtrfirstscfont[1]{\glsabbrvscfont{#1}}
```

`irstabbrvscfont` Added for consistent naming.

```
7464 \newcommand*\glsfirstabbrvscfont{\sxtrfirstscfont}
```

and for the default short form suffix:

```
\glsxtrscsuffix
7465 \newcommand*{\glsxtrscsuffix}{\glstextup{\glsxtrabbrvpluralsuffix}}
long-short-sc
7466 \newabbreviationstyle{long-short-sc}%
7467 {%
7468   \renewcommand*{\CustomAbbreviationFields}{%
7469     name={\glsxtrlongshortname},
7470     sort={\the\glsshorttok},
7471     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
7472       \protect\glsxtrfullsep{\the\glslabeltok}%
7473       \glsxtrparen{\protect\glsfirstabrvscfont{\the\glsshorttok}}},%
7474     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
7475       \protect\glsxtrfullsep{\the\glslabeltok}%
7476       \glsxtrparen{\protect\glsfirstabrvscfont{\the\glsshortpltok}}},%
7477     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},%
7478     description={\the\glslongtok}}%
7479   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7480     \glshasattribute{\the\glslabeltok}{regular}%
7481     {%
7482       \glssetattribute{\the\glslabeltok}{regular}{false}%
7483     }%
7484     {}%
7485   }%
7486 }%
7487 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
7488 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7489 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7490 \renewcommand*\glsfirstabrvfont[1]{\glsfirstabrvscfont{##1}}%
```

Use the default long fonts.

```
7491 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7492 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

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

```
7493 \renewcommand*{\glsxtrfullformat}[2]{%
7494   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7495   \ifglsxtrinsertinside\else##2\fi
7496   \glsxtrfullsep{##1}%
7497   \glsxtrparen{\glsfirstabrvscfont{\glsaccessshort{##1}}}}%
7498 }%
7499 \renewcommand*{\glsxtrfullplformat}[2]{%
7500   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7501   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7502   \glsxtrparen{\glsfirstabrvscfont{\glsaccessshortpl{##1}}}}%
7503 }%
7504 \renewcommand*{\Glsxtrfullformat}[2]{%
```

```

7505   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7506   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7507   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7508 }%
7509 \renewcommand*\Glsxtrfullplformat}[2]{%
7510   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7511   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7512   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7513 }%
7514 }

```

g-short-sc-desc

```

7515 \newabbreviationstyle{long-short-sc-desc}%
7516 {%
7517 \renewcommand*\CustomAbbreviationFields}{%
7518   name={\glsxtrlongshortdescname},%
7519   sort={\glsxtrlongshortdescsort},%
7520   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
7521     \protect\glsxtrfullsep{\the\glslabeltok}%
7522     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshorttok}}},%
7523   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
7524     \protect\glsxtrfullsep{\the\glslabeltok}%
7525     \glsxtrparen{\protect\glsfirstabbrvscfont{\the\glsshortpltok}}},%
7526   text={\protect\glsabbrvscfont{\the\glsshorttok}},%
7527   plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
7528 }%

```

Unset the regular attribute if it has been set.

```

7529 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7530   \glshasattribute{\the\glslabeltok}{regular}%
7531   {%
7532     \glssetattribute{\the\glslabeltok}{regular}{false}%
7533   }%
7534   {}%
7535 }%
7536 }%
7537 {%

```

As long-short-sc style:

```

7538 \GlsXtrUseAbbrStyleFmts{long-short-sc}%
7539 }

```

Now the short (long) version

```

7540 \newabbreviationstyle{short-sc-long}%
7541 {%
7542 \renewcommand*\CustomAbbreviationFields}{%
7543   name={\glsxtrshortlongname},%
7544   sort={\the\glsshorttok},%
7545   description={\the\glslongtok},%
7546   first={\protect\glsfirstabbrvscfont{\the\glsshorttok}}%

```

```

7547     \protect\glsxtrfullsep{\the\glslabeltok}%
7548     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
7549     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}%
7550     \protect\glsxtrfullsep{\the\glslabeltok}%
7551     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
7552     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

7553 \renewcommand*\GlsXtrPostNewAbbreviation}{%
7554   \glshasattribute{\the\glslabeltok}{regular}%
7555   {%
7556     \glssetattribute{\the\glslabeltok}{regular}{false}%
7557   }%
7558   {}%
7559 }%
7560 }%
7561 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7562 \renewcommand*\abbrvpluralsuffix{\protect\glsxtrscsuffix}%
7563 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7564 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
7565 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7566 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

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

```

7567 \renewcommand*\glsxtrfullformat}[2]{%
7568   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7569   \ifglsxtrinsertinside\else##2\fi
7570   \glsxtrfullsep{##1}%
7571   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7572 }%
7573 \renewcommand*\glsxtrfullplformat}[2]{%
7574   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7575   \ifglsxtrinsertinside\else##2\fi
7576   \glsxtrfullsep{##1}%
7577   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7578 }%
7579 \renewcommand*\GlsXtrfullformat}[2]{%
7580   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7581   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7582   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7583 }%
7584 \renewcommand*\GlsXtrfullplformat}[2]{%
7585   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7586   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7587   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7588 }%
7589 }

```

As before but user provides description

```

7590 \newabbreviationstyle{short-sc-long-desc}%
7591 {%
7592   \renewcommand*{\CustomAbbreviationFields}{%
7593     name={\glsxtrshortlongdescname},
7594     sort={\glsxtrshortlongdescsort},
7595     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}}%
7596       \protect\glsxtrfullsep{\the\glslabeltok}%
7597       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
7598     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}}%
7599       \protect\glsxtrfullsep{\the\glslabeltok}%
7600       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
7601     text={\protect\glsabbrvscfont{\the\glsshorttok}},%
7602     plural={\protect\glsabbrvscfont{\the\glsshortpltok}}%
7603 }%

```

Unset the regular attribute if it has been set.

```

7604   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7605     \glshasattribute{\the\glslabeltok}{regular}%
7606     {%
7607       \glssetattribute{\the\glslabeltok}{regular}{false}%
7608     }%
7609     {}%
7610   }%
7611 }%
7612 {%

```

As short-sc-long style:

```

7613   \GlsXtrUseAbbrStyleFmts{short-sc-long}%
7614 }

```

short-sc

```

7615 \newabbreviationstyle{short-sc}%
7616 {%
7617   \renewcommand*{\CustomAbbreviationFields}{%
7618     name={\glsxtrshortnolongname},
7619     sort={\the\glsshorttok},
7620     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
7621     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
7622     text={\protect\glsabbrvscfont{\the\glsshorttok}},
7623     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},
7624     description={\the\glslongtok}}%
7625   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7626     \glssetattribute{\the\glslabeltok}{regular}{true}}%
7627 }%
7628 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7629   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7630   \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{\#1}}%
7631   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{\#1}}%

```

```
7632 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7633 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%
```

The inline full form displays the short form followed by the long form in parentheses.

```
7634 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7635   \protect\glsfirstabbrvscfont{\glsaccessshort{##1}}%
7636   \ifglsxtrinsertinside##2\fi}%
7637   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7638   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7639 }%
7640 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7641   \protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}%
7642   \ifglsxtrinsertinside##2\fi}%
7643   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7644   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
7645 }%
7646 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7647   \protect\glsfirstabbrvscfont{\Glsaccessshort{##1}}%
7648   \ifglsxtrinsertinside##2\fi}%
7649   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7650   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
7651 }%
7652 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7653   \protect\glsfirstabbrvscfont{\Glsaccessshortpl{##1}}%
7654   \ifglsxtrinsertinside##2\fi}%
7655   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7656   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
7657 }%
```

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.

```
7658 \renewcommand*{\glsxtrfullformat}[2]{%
7659   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7660   \ifglsxtrinsertinside\else##2\fi
7661 }%
7662 \renewcommand*{\glsxtrfullplformat}[2]{%
7663   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7664   \ifglsxtrinsertinside\else##2\fi
7665 }%
7666 \renewcommand*{\Glsxtrfullformat}[2]{%
7667   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7668   \ifglsxtrinsertinside\else##2\fi
7669 }%
7670 \renewcommand*{\Glsxtrfullplformat}[2]{%
7671   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7672   \ifglsxtrinsertinside\else##2\fi
7673 }%
7674 }
```

```

short-sc-nolong
7675 \letabbreviationstyle{short-sc-nolong}{short-sc}

short-sc-desc
7676 \newabbreviationstyle{short-sc-desc}%
7677 {%
7678   \renewcommand*{\CustomAbbreviationFields}{%
7679     name={\glsxtrshortdescname},
7680     sort={\the\glsshorttok},
7681     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},
7682     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},
7683     text={\protect\glsabbrvscfont{\the\glsshorttok}},
7684     plural={\protect\glsabbrvscfont{\the\glsshortpltok}},
7685     description={\the\glslongtok}}%
7686   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7687     \glssetattribute{\the\glslabeltok}{regular}{true}}%
7688 }%
7689 {%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7690 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7691 \renewcommand*{\glsabbrvfont[1]}{\glsabbrvscfont{\#1}}%
7692 \renewcommand*{\glsfirstabbrvfont[1]}{\glsfirstabbrvscfont{\#1}}%
7693 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\#1}}%
7694 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{\#1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

7695 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7696   \glsfirstabbrvscfont{\glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
7697   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
7698   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
7699 }%
7700 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7701   \glsfirstabbrvscfont{\glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
7702   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
7703   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
7704 }%
7705 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7706   \glsfirstabbrvscfont{\Glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
7707   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
7708   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
7709 }%
7710 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7711   \glsfirstabbrvscfont{\Glsaccessshort{\#1}\ifglsxtrinsertinside##2\fi}%
7712   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
7713   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\#1}}}%
7714 }%

```

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.

```

7715 \renewcommand*{\glsxtrfullformat}[2]{%
7716   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7717   \ifglsxtrinsertinside\else##2\fi
7718 }%
7719 \renewcommand*{\glsxtrfullplformat}[2]{%
7720   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7721   \ifglsxtrinsertinside\else##2\fi
7722 }%
7723 \renewcommand*{\Glsxtrfullformat}[2]{%
7724   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7725   \ifglsxtrinsertinside\else##2\fi
7726 }%
7727 \renewcommand*{\Glsxtrfullplformat}[2]{%
7728   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7729   \ifglsxtrinsertinside\else##2\fi
7730 }%
7731 }

```

-sc-nolong-desc

```
7732 \letabbreviationstyle{short-sc-nolong-desc}{short-sc-desc}
```

nolong-short-sc

```

7733 \newabbreviationstyle{nolong-short-sc}%
7734 {%
7735   \GlsXtrUseAbbrStyleSetup{short-sc-nolong}%
7736 }%
7737 {%
7738   \GlsXtrUseAbbrStyleFmts{short-sc-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

7739 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7740   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
7741   \ifglsxtrinsertinside##2\fi}%
7742   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7743   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7744 }%
7745 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7746   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
7747   \ifglsxtrinsertinside##2\fi}%
7748   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7749   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7750 }%
7751 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7752   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
7753   \ifglsxtrinsertinside##2\fi}%
7754   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7755   \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7756 }%
7757 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7758   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%

```

```

7759     \ifglsxtrinsertinside##2\fi}%
7760     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7761     \glsxtrparen{\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7762 }%
7763 }

```

`long-noshort-sc` The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsxtrshort`.

```

7764 \newabbreviationstyle{long-noshort-sc}{%
7765 {%
7766   \renewcommand*{\CustomAbbreviationFields}{%
7767     name={\glsxtrlongnoshortname},
7768     sort={\the\glsshorttok},
7769     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
7770     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
7771     text={\protect\glslongdefaultfont{\the\glslongtok}},
7772     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
7773     description={\the\glslongtok}%
7774 }%
7775   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7776     \glssetattribute{\the\glslabeltok}{regular}{true}}%
7777 }%
7778 }%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

7779 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7780 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7781 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
7782 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
7783 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

7784 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
7785   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7786   \ifglsxtrinsertinside \else##2\fi
7787 }%
7788 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
7789   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7790   \ifglsxtrinsertinside \else##2\fi
7791 }%
7792 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
7793   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7794   \ifglsxtrinsertinside \else##2\fi
7795 }%
7796 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
7797   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7798   \ifglsxtrinsertinside \else##2\fi
7799 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

7800 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7801   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7802   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7803   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7804 }%
7805 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7806   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7807   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7808   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7809 }%
7810 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7811   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7812   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7813   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}}%
7814 }%
7815 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
7816   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7817   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7818   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}}%
7819 }%

```

The first use full form only displays the long form, but it typically won't be used as the regular attribute is set by this style.

```

7820 \renewcommand*{\glsxtrfullformat}[2]{%
7821   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7822   \ifglsxtrinsertinside\else##2\fi
7823 }%
7824 \renewcommand*{\glsxtrfullplformat}[2]{%
7825   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7826   \ifglsxtrinsertinside\else##2\fi
7827 }%
7828 \renewcommand*{\Glsxtrfullformat}[2]{%
7829   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7830   \ifglsxtrinsertinside\else##2\fi
7831 }%
7832 \renewcommand*{\Glsxtrfullplformat}[2]{%
7833   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7834   \ifglsxtrinsertinside\else##2\fi
7835 }%
7836 }

```

long-sc Backward compatibility:

```
7837 @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`.

```

7838 \newabbreviationstyle{long-noshort-sc-desc}%
7839 {%
7840   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%

```

```
7841 }%
```

```
7842 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
7843 \renewcommand*\abbrrvpluralsuffix}{\protect\glsxtrscsuffix}%
7844 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7845 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
7846 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
7847 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
7848 \renewcommand*\glsxtrsubsequentfmt}[2]{%
7849   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7850   \ifglsxtrinsertinside \else##2\fi
7851 }%
7852 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
7853   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7854   \ifglsxtrinsertinside \else##2\fi
7855 }%
7856 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
7857   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
7858   \ifglsxtrinsertinside \else##2\fi
7859 }%
7860 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
7861   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
7862   \ifglsxtrinsertinside \else##2\fi
7863 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
7864 \renewcommand*\glsxtrinlinefullformat}[2]{%
7865   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7866   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7867   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7868 }%
7869 \renewcommand*\glsxtrinlinefullplformat}[2]{%
7870   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7871   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7872   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7873 }%
7874 \renewcommand*\Glsxtrinlinefullformat}[2]{%
7875   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7876   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7877   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshort{##1}}}%
7878 }%
7879 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
7880   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7881   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7882   \glsxtrparen{\protect\glsfirstabbrvscfont{\glsaccessshortpl{##1}}}%
7883 }%
```

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.

```
7884 \renewcommand*{\glsxtrfullformat}[2]{%
7885   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7886   \ifglsxtrinsertinside\else##2\fi
7887 }%
7888 \renewcommand*{\glsxtrfullplformat}[2]{%
7889   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7890   \ifglsxtrinsertinside\else##2\fi
7891 }%
7892 \renewcommand*{\Glsxtrfullformat}[2]{%
7893   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
7894   \ifglsxtrinsertinside\else##2\fi
7895 }%
7896 \renewcommand*{\Glsxtrfullplformat}[2]{%
7897   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
7898   \ifglsxtrinsertinside\else##2\fi
7899 }%
7900 }
```

long-desc-sc Backward compatibility:

```
7901 \glsxtr@deprecated@abbrstyle{long-desc-sc}{long-noshort-sc-desc}
```

short-sc-footnote

```
7902 \newabbreviationstyle{short-sc-footnote}%
7903 {%
7904   \renewcommand*{\CustomAbbreviationFields}{%
7905     name={\glsxtrfootnotename},
7906     sort={\the\glsshorthttok},
7907     description={\the\glslongtok},%
7908     first={\protect\glsfirstabbrvscfont{\the\glsshorthttok}%
7909       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7910         {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
7911     firstplural={\protect\glsfirstabbrvscfont{\the\glsshorthplttok}%
7912       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
7913         {\protect\glsfirstlongfootnotefont{\the\glslongplttok}}},%
7914     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.

```
7915 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
7916   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
7917   \glssetattribute{\the\glslabeltok}{regular}%
7918   {%
7919     \glssetattribute{\the\glslabeltok}{regular}{false}%
7920   }%
7921   {}%
7922 }%
7923 }%
7924 {%
```

Use smallcaps and adjust the plural suffix to revert to upright.

```
7925 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
7926 \renewcommand*\glsabbrvfont[1]{\glsabbrvscfont{##1}}%
7927 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvscfont{##1}}%
7928 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
7929 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%
```

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

```
7930 \renewcommand*{\glsxtrfullformat}[2]{%
7931   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7932   \ifglsxtrinsertinside\else##2\fi
7933   \protect\glsxtrabbrvfootnote{##1}%
7934   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7935 }%
7936 \renewcommand*{\glsxtrfullplformat}[2]{%
7937   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7938   \ifglsxtrinsertinside\else##2\fi
7939   \protect\glsxtrabbrvfootnote{##1}%
7940   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7941 }%
7942 \renewcommand*{\Glsxtrfullformat}[2]{%
7943   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7944   \ifglsxtrinsertinside\else##2\fi
7945   \protect\glsxtrabbrvfootnote{##1}%
7946   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7947 }%
7948 \renewcommand*{\Glsxtrfullplformat}[2]{%
7949   \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7950   \ifglsxtrinsertinside\else##2\fi
7951   \protect\glsxtrabbrvfootnote{##1}%
7952   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7953 }%
```

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

```
7954 \renewcommand*{\glsxtrinlinefullformat}[2]{%
7955   \glsfirstabbrvscfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7956   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7957   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7958 }%
7959 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
7960   \glsfirstabbrvscfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7961   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7962   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7963 }%
7964 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
7965   \glsfirstabbrvscfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
7966   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7967   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
7968 }%
7969 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
```

```

7970     \glsfirstabbrvscfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
7971     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
7972     \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
7973 }%
7974 }

```

footnote-sc Backward compatibility:

```
7975 @glsxtr@deprecated@abbrstyle{footnote-sc}{short-sc-footnote}
```

sc-postfootnote

```

7976 \newabbreviationstyle{short-sc-postfootnote}%
7977 {%
7978   \renewcommand*{\CustomAbbreviationFields}{%
7979     name={\glsxtrfootnotename},
7980     sort={\the\glsshorttok},
7981     description={\the\glslongtok},%
7982     first={\protect\glsfirstabbrvscfont{\the\glsshorttok}},%
7983     firstplural={\protect\glsfirstabbrvscfont{\the\glsshortpltok}},%
7984     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.

```

7985 \renewcommand*{\GlsXtrPostNewAbbreviation}%
7986   \csdef{glsxtrpostlink\glscategorylabel}{%
7987     \glsxtrifwasfirstuse
7988   }%

```

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

```

7989   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
7990   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
7991 }%
7992 {}%
7993 }%
7994 \glshasattribute{\the\glslabeltok}{regular}%
7995 {}%
7996   \glssetattribute{\the\glslabeltok}{regular}{false}%
7997 }%
7998 {}%
7999 }%

```

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

```

8000 \renewcommand*{\glsxtrsetupfulldefs}%
8001   \let\glsxtrifwasfirstuse\@secondoftwo
8002 }%
8003 }%
8004 {}%

```

Use smallcaps and adjust the plural suffix to revert to upright.

```

8005 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrscsuffix}%
8006 \renewcommand*\glsabbrvfont[1]{\glsabbrvcfont{##1}}%
8007 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvcfont{##1}}%
8008 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8009 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

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

```

8010 \renewcommand*{\glsxtrfullformat}[2]{%
8011   \glsfirstabbrvcfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8012   \ifglsxtrinsertinside\else##2\fi
8013 }%
8014 \renewcommand*{\glsxtrfullplformat}[2]{%
8015   \glsfirstabbrvcfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8016   \ifglsxtrinsertinside\else##2\fi
8017 }%
8018 \renewcommand*{\Glsxtrfullformat}[2]{%
8019   \glsfirstabbrvcfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8020   \ifglsxtrinsertinside\else##2\fi
8021 }%
8022 \renewcommand*{\Glsxtrfullplformat}[2]{%
8023   \glsfirstabbrvcfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8024   \ifglsxtrinsertinside\else##2\fi
8025 }%

```

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

```

8026 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8027   \glsfirstabbrvcfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8028   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8029   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8030 }%
8031 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8032   \glsfirstabbrvcfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8033   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8034   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8035 }%
8036 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8037   \glsfirstabbrvcfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8038   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8039   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8040 }%
8041 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8042   \glsfirstabbrvcfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8043   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8044   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8045 }%
8046 }%

```

postfootnote-sc Backward compatibility:

```
8047 @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.  
8048 \newcommand*{\glsxtrsmfont}[1]{\textsmaller{#1}}  
  
\glsabbrvsmfont Added for consistent naming.  
8049 \newcommand*{\glsabbrvsmfont}{\glsxtrsmfont}  
  
\sxtrfirstsmfont Maintained for backward compatibility.  
8050 \newcommand*{\sxtrfirstsmfont}[1]{\glsabbrvsmfont{#1}}  
  
\irstabbrvsmfont Added for consistent naming.  
8051 \newcommand*{\irstabbrvsmfont}{\sxtrfirstsmfont}  
  
and for the default short form suffix:  
  
\glsxtrsmssuffix  
8052 \newcommand*{\glsxtrsmssuffix}{\glsxtrabbrvpluralsuffix}  
  
long-short-sm  
8053 \newabbreviationstyle{long-short-sm}{%  
8054 {  
8055   \renewcommand*{\CustomAbbreviationFields}{%  
8056     name={\glsxtrlongshortname},  
8057     sort={\the\glsshorttok},  
8058     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}}%  
8059       \protect\glsxtrfullsep{\the\glslabeltok}}%  
8060     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%  
8061     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}}%  
8062       \protect\glsxtrfullsep{\the\glslabeltok}}%  
8063     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%  
8064     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},%  
8065     description={\the\glslongtok}}%  
8066   \renewcommand*{\GlsXtrPostNewAbbreviation}{%  
8067     \glshasattribute{\the\glslabeltok}{regular}}%  
8068   {  
8069     \glssetattribute{\the\glslabeltok}{regular}{false}}%  
8070   }%  
8071   {}%  
8072 }%  
8073 }%  
8074 {  
8075   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%  
8076   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%  
8077   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsmssuffix}%
```

Use the default long fonts.

```
8078 \renewcommand*\{\glsfirstlongfont\}[1]{\glsfirstlongdefaultfont{##1}}%
8079 \renewcommand*\{\glslongfont\}[1]{\glslongdefaultfont{##1}}%
```

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

```
8080 \renewcommand*\{\glsxtrfullformat\}[2]{%
8081   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8082   \ifglsxtrinsertinside\else##2\fi
8083   \glsxtrfullsep{##1}%
8084   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8085 }%
8086 \renewcommand*\{\glsxtrfullplformat\}[2]{%
8087   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8088   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8089   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8090 }%
8091 \renewcommand*\{\Glsxtrfullformat\}[2]{%
8092   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8093   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8094   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8095 }%
8096 \renewcommand*\{\Glsxtrfullplformat\}[2]{%
8097   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8098   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8099   \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8100 }%
8101 }
```

g-short-sm-desc

```
8102 \newabbreviationstyle{long-short-sm-desc}{%
8103 }%
8104 \renewcommand*\{\CustomAbbreviationFields\}{%
8105   name={\glsxtrlongshortdescname},%
8106   sort={\glsxtrlongshortdescsort},%
8107   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
8108     \protect\glsxtrfullsep{\the\glslabeltok}%
8109     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshorttok}}},%
8110   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
8111     \protect\glsxtrfullsep{\the\glslabeltok}%
8112     \glsxtrparen{\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}},%
8113   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8114   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}%
8115 }%
```

Unset the regular attribute if it has been set.

```
8116 \renewcommand*\{\GlsXtrPostNewAbbreviation\}{%
8117   \glshasattribute{\the\glslabeltok}{regular}%
8118 }%
8119   \glssetattribute{\the\glslabeltok}{regular}{false}%
8120 }
```

```

8121     {}%
8122   }%
8123 }%
8124 {%

```

As long-short-sm style:

```

8125 \GlsXtrUseAbbrStyleFmts{long-short-sm}%
8126 }

```

short-sm-long Now the short (long) version

```

8127 \newabbreviationstyle{short-sm-long}{%
8128 {%
8129   \renewcommand*{\CustomAbbreviationFields}{%
8130     name={\glsxtrshortlongname},
8131     sort={\the\glsshorttok},
8132     description={\the\glslongtok},%
8133     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}}%
8134       \protect\glsxtrfullsep{\the\glslabeltok}%
8135       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}},%
8136     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}}%
8137       \protect\glsxtrfullsep{\the\glslabeltok}%
8138       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}},%
8139     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

8140   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8141     \glshasattribute{\the\glslabeltok}{regular}%
8142     {%
8143       \glssetattribute{\the\glslabeltok}{regular}{false}%
8144     }%
8145   {}%
8146 }%
8147 }%
8148 {%
8149   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8150   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8151   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmsuffix}%
8152   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8153   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

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

```

8154   \renewcommand*{\glsxtrfullformat}[2]{%
8155     \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8156     \ifglsxtrinsertinside\else##2\fi
8157     \glsxtrfullsep{##1}%
8158     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8159   }%
8160   \renewcommand*{\glsxtrfullplformat}[2]{%
8161     \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8162     \ifglsxtrinsertinside\else##2\fi

```

```

8163   \glsxtrfullsep{##1}%
8164   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8165 }%
8166 \renewcommand*{\Glsxtrfullformat}[2]{%
8167   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8168   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8169   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8170 }%
8171 \renewcommand*{\Glsxtrfullplformat}[2]{%
8172   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8173   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8174   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8175 }%
8176 }

```

rt-sm-long-desc As before but user provides description

```

8177 \newabbreviationstyle{short-sm-long-desc}%
8178 }%
8179 \renewcommand*{\CustomAbbreviationFields}{%
8180   name={\glsxtrshortlongdescname},
8181   sort={\glsxtrshortlongdescsort},
8182   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
8183     \protect\glsxtrfullsep{\the\glslabeltok}%
8184     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8185   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
8186     \protect\glsxtrfullsep{\the\glslabeltok}%
8187     \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8188   text={\protect\glsabbrvsmfont{\the\glsshorttok}},%
8189   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}%
8190 }%

```

Unset the regular attribute if it has been set.

```

8191 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8192   \glshasattribute{\the\glslabeltok}{regular}%
8193 }%
8194   \glssetattribute{\the\glslabeltok}{regular}{false}%
8195 }%
8196 {}%
8197 }%
8198 }%
8199 }%

```

As short-sm-long style:

```

8200 \GlsXtrUseAbbrStyleFmts{short-sm-long}%
8201 }

```

short-sm

```

8202 \newabbreviationstyle{short-sm}%
8203 }%
8204 \renewcommand*{\CustomAbbreviationFields}{%

```

```

8205   name={\glsxtrshortnolongname},
8206   sort={\the\glsshorttok},
8207   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
8208   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
8209   text={\protect\glsabbrvsmfont{\the\glsshorttok}},
8210   plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
8211   description={\the\glslongtok}}%
8212 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8213   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8214 }%
8215 {%
8216 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8217 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8218 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmsuffix}%
8219 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8220 \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

8221 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8222   \protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}%
8223   \ifglsxtrinsertinside##2\fi}%
8224 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8225 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8226 }%
8227 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8228   \protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}%
8229   \ifglsxtrinsertinside##2\fi}%
8230 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8231 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8232 }%
8233 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8234   \protect\glsfirstabbrvsmfont{\Glsaccessshort{##1}}%
8235   \ifglsxtrinsertinside##2\fi}%
8236 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8237 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8238 }%
8239 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8240   \protect\glsfirstabbrvsmfont{\Glsaccessshortpl{##1}}%
8241   \ifglsxtrinsertinside##2\fi}%
8242 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8243 \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8244 }%

```

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.

```

8245 \renewcommand*{\glsxtrfullformat}[2]{%
8246   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8247   \ifglsxtrinsertinside\else##2\fi
8248 }%

```

```

8249 \renewcommand*{\glsxtrfullplformat}[2]{%
8250   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8251   \ifglsxtrinsertinside\else##2\fi
8252 }%
8253 \renewcommand*{\Glsxtrfullformat}[2]{%
8254   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8255   \ifglsxtrinsertinside\else##2\fi
8256 }%
8257 \renewcommand*{\Glsxtrfullplformat}[2]{%
8258   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8259   \ifglsxtrinsertinside\else##2\fi
8260 }%
8261 }

```

short-sm-nolong

```
8262 \letabbreviationstyle{short-sm-nolong}{short-sm}
```

short-sm-desc

```

8263 \newabbreviationstyle{short-sm-desc}%
8264 {%
8265   \renewcommand*{\CustomAbbreviationFields}{%
8266     name={\glsxtrshortdescname},
8267     sort={\the\glsshorttok},
8268     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},
8269     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},
8270     text={\protect\glsabbrvsmfont{\the\glsshorttok}},
8271     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}},
8272     description={\the\glslongtok}}%
8273   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8274     \glssetattribute{\the\glslabeltok}{regular}{true}}%
8275 }%
8276 {%
8277   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8278   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8279   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmsuffix}%
8280   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
8281   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

8282 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8283   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8284   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8285   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8286 }%
8287 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8288   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8289   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%
8290   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8291 }%
8292 \renewcommand*{\Glsxtrinlinefullformat}[2]{%

```

```

8293   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8294   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8295   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8296 }%
8297 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8298   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8299   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8300   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8301 }%

```

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.

```

8302 \renewcommand*{\glsxtrfullformat}[2]{%
8303   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8304   \ifglsxtrinsertinside\else##2\fi
8305 }%
8306 \renewcommand*{\glsxtrfullplformat}[2]{%
8307   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8308   \ifglsxtrinsertinside\else##2\fi
8309 }%
8310 \renewcommand*{\Glsxtrfullformat}[2]{%
8311   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8312   \ifglsxtrinsertinside\else##2\fi
8313 }%
8314 \renewcommand*{\Glsxtrfullplformat}[2]{%
8315   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8316   \ifglsxtrinsertinside\else##2\fi
8317 }%
8318 }

```

-sm-nolong-desc

```
8319 \letabbreviationstyle{short-sm-nolong-desc}{short-sm-desc}
```

nolong-short-sm

```

8320 \newabbreviationstyle{nolong-short-sm}%
8321 {%
8322   \GlsXtrUseAbbrStyleSetup{short-sm-nolong}%
8323 }%
8324 {%
8325   \GlsXtrUseAbbrStyleFmts{short-sm-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

8326 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8327   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}}%
8328   \ifglsxtrinsertinside##2\fi}%
8329 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8330 \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8331 }%
8332 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8333   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}%

```

```

8334     \ifglsxtrinsertinside##2\fi}%
8335     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8336     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8337 }%
8338 \renewcommand*\Glsxtrinlinefullformat}[2]{%
8339     \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}}%
8340     \ifglsxtrinsertinside##2\fi}%
8341     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8342     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8343 }%
8344 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
8345     \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}}%
8346     \ifglsxtrinsertinside##2\fi}%
8347     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8348     \glsxtrparen{\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8349 }%
8350 }

```

`long-noshort-sm` The smallcaps font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

8351 \newabbreviationstyle{long-noshort-sm}{%
8352 }%
8353 \renewcommand*\CustomAbbreviationFields}{%
8354     name={\glsxtrlongnoshortname},
8355     sort={\the\glsshorttok},
8356     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},
8357     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},
8358     text={\protect\glslongdefaultfont{\the\glslongtok}},
8359     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%
8360     description={\the\glslongtok}%
8361 }%
8362 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8363     \glssetattribute{\the\glslabeltok}{regular}{true}%
8364 }%
8365 }%
8366 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8367 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8368 \renewcommand*\abbrvpluralsuffix{\protect\glsxtrsmsuffix}%
8369 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8370 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

8371 \renewcommand*\glsxtrsubsequentfmt}[2]{%
8372     \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8373     \ifglsxtrinsertinside \else##2\fi
8374 }%
8375 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
8376     \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8377     \ifglsxtrinsertinside \else##2\fi
8378 }%

```

```

8379 \renewcommand*\Glsxtrsubsequentfmt}[2]{%
8380   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
8381   \ifglsxtrinsertinside \else##2\fi
8382 }%
8383 \renewcommand*\Glsxtrsubsequentplfmt}[2]{%
8384   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
8385   \ifglsxtrinsertinside \else##2\fi
8386 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

8387 \renewcommand*\glsxtrinlinefullformat}[2]{%
8388   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8389   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8390   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8391 }%
8392 \renewcommand*\glsxtrinlinefullplformat}[2]{%
8393   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8394   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8395   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8396 }%
8397 \renewcommand*\Glsxtrinlinefullformat}[2]{%
8398   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8399   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8400   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{##1}}}%
8401 }%
8402 \renewcommand*\Glsxtrinlinefullplformat}[2]{%
8403   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8404   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8405   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}%
8406 }%

```

The first use full form only displays the long form, but it typically won't be used as the regular attribute is set by this style.

```

8407 \renewcommand*\glsxtrfullformat}[2]{%
8408   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8409   \ifglsxtrinsertinside\else##2\fi
8410 }%
8411 \renewcommand*\glsxtrfullplformat}[2]{%
8412   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8413   \ifglsxtrinsertinside\else##2\fi
8414 }%
8415 \renewcommand*\Glsxtrfullformat}[2]{%
8416   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8417   \ifglsxtrinsertinside\else##2\fi
8418 }%
8419 \renewcommand*\Glsxtrfullplformat}[2]{%
8420   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8421   \ifglsxtrinsertinside\else##2\fi
8422 }%
8423 }

```

long-sm Backward compatibility:

```
8424 \@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.

```
8425 \newabbreviationstyle{long-noshort-sm-desc}%
8426 {%
8427   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}%
8428 }%
8429 {%
8430   \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{\#1}}%
8431   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{\#1}}%
8432   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrmsuffix}%
8433   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{\#1}}%
8434   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{\#1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
8435 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
8436   \glslongdefaultfont{\glsaccesslong{\#1}\ifglsxtrinsertinside##2\fi}%
8437   \ifglsxtrinsertinside \else##2\fi
8438 }%
8439 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
8440   \glslongdefaultfont{\glsaccesslongpl{\#1}\ifglsxtrinsertinside##2\fi}%
8441   \ifglsxtrinsertinside \else##2\fi
8442 }%
8443 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
8444   \glslongdefaultfont{\Glsaccesslong{\#1}\ifglsxtrinsertinside##2\fi}%
8445   \ifglsxtrinsertinside \else##2\fi
8446 }%
8447 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
8448   \glslongdefaultfont{\Glsaccesslongpl{\#1}\ifglsxtrinsertinside##2\fi}%
8449   \ifglsxtrinsertinside \else##2\fi
8450 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
8451 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8452   \glsfirstlongdefaultfont{\glsaccesslong{\#1}\ifglsxtrinsertinside##2\fi}%
8453   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
8454   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{\#1}}}%
8455 }%
8456 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8457   \glsfirstlongdefaultfont{\glsaccesslongpl{\#1}\ifglsxtrinsertinside##2\fi}%
8458   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
8459   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{\#1}}}%
8460 }%
8461 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8462   \glsfirstlongdefaultfont{\Glsaccesslong{\#1}\ifglsxtrinsertinside##2\fi}%
8463   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{\#1}%
8464   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshort{\#1}}}%
8465 }%
```

```

8466 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8467   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8468   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8469   \glsxtrparen{\protect\glsfirstabbrvsmfont{\glsaccessshortpl{##1}}}}%
8470 }%

```

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.

```

8471 \renewcommand*{\glsxtrfullformat}[2]{%
8472   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8473   \ifglsxtrinsertinside\else##2\fi
8474 }%
8475 \renewcommand*{\glsxtrfullplformat}[2]{%
8476   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8477   \ifglsxtrinsertinside\else##2\fi
8478 }%
8479 \renewcommand*{\Glsxtrfullformat}[2]{%
8480   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8481   \ifglsxtrinsertinside\else##2\fi
8482 }%
8483 \renewcommand*{\Glsxtrfullplformat}[2]{%
8484   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8485   \ifglsxtrinsertinside\else##2\fi
8486 }%
8487 }

```

long-desc-sm Backward compatibility:

```
8488 \glsxtr@deprecated@abbrstyle{long-desc-sm}{long-noshort-sm-desc}
```

short-sm-footnote

```

8489 \newabbreviationstyle{short-sm-footnote}%
8490 {%
8491   \renewcommand*{\CustomAbbreviationFields}{%
8492     name={\glsxtrfootnotename},
8493     sort={\the\glsshorttok},
8494     description={\the\glslongtok},%
8495     first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}%
8496       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8497       {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
8498     firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}%
8499       \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
8500       {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
8501     plural={\protect\glsabbrvsmfont{\the\glsshortpltok}}}}%

```

Switch off hyperlinks on first use to prevent nested hyperlinks, and unset the regular attribute if it has been set.

```

8502 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8503   \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
8504   \glsresetattribute{\the\glslabeltok}{regular}%
8505 }%

```

```

8506      \glssetattribute{\the\glslabeltok}{regular}{false}%
8507  }%
8508  {}%
8509 }%
8510 }%
8511 {%
8512 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8513 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8514 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtrsnsuffix}%
8515 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8516 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

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

```

8517 \renewcommand*{\glsxtrfullformat}[2]{%
8518   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8519   \ifglsxtrinsertinside\else##2\fi
8520   \protect\glsxtrabbrvfootnote{##1}%
8521   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8522 }%
8523 \renewcommand*{\glsxtrfullplformat}[2]{%
8524   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8525   \ifglsxtrinsertinside\else##2\fi
8526   \protect\glsxtrabbrvfootnote{##1}%
8527   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8528 }%
8529 \renewcommand*{\Glsxtrfullformat}[2]{%
8530   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8531   \ifglsxtrinsertinside\else##2\fi
8532   \protect\glsxtrabbrvfootnote{##1}%
8533   {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8534 }%
8535 \renewcommand*{\Glsxtrfullplformat}[2]{%
8536   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8537   \ifglsxtrinsertinside\else##2\fi
8538   \protect\glsxtrabbrvfootnote{##1}%
8539   {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8540 }%

```

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

```

8541 \renewcommand*{\glsxtrinlinefullformat}[2]{%
8542   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8543   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8544   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8545 }%
8546 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
8547   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8548   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8549   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8550 }%
8551 \renewcommand*{\Glsxtrinlinefullformat}[2]{%

```

```

8552   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8553   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8554   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8555 }%
8556 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8557   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8558   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8559   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8560 }%
8561 }

```

footnote-sm Backward compatibility:

```
8562 @glsxtr@deprecated@abbrstyle{footnote-sm}{short-sm-footnote}
```

sm-postfootnote

```

8563 \newabbreviationstyle{short-sm-postfootnote}%
8564 {%
8565 \renewcommand*{\CustomAbbreviationFields}{%
8566   name={\glsxtrfootnotename},
8567   sort={\the\glsshorttok},
8568   description={\the\glslongtok},%
8569   first={\protect\glsfirstabbrvsmfont{\the\glsshorttok}},%
8570   firstplural={\protect\glsfirstabbrvsmfont{\the\glsshortpltok}},%
8571   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.

```

8572 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8573   \csdef{glsxtrpostlink\glscategorylabel}{%
8574     \glsxtrifwasfirstuse
8575   }%

```

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

```

8576   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
8577   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}}%
8578 }%
8579 {}%
8580 }%
8581 \glshasattribute{\the\glslabeltok}{regular}%
8582 {}%
8583   \glssetattribute{\the\glslabeltok}{regular}{false}%
8584 }%
8585 {}%
8586 }%

```

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

```

8587 \renewcommand*{\glsxtrsetupfulldefs}{%
8588   \let\glsxtrifwasfirstuse\secondoftwo

```

```

8589  }%
8590 }%
8591 {%
8592 \renewcommand*\glsabbrvfont[1]{\glsabbrvsmfont{##1}}%
8593 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvsmfont{##1}}%
8594 \renewcommand*\{\abrvpluralsuffix}{\protect\glsxtrsmssuffix}%
8595 \renewcommand*\{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{##1}}%
8596 \renewcommand*\{\glslongfont}[1]{\glslongfootnotefont{##1}}%

```

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

```

8597 \renewcommand*\{\glsxtrfullformat}[2]{%
8598   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8599   \ifglsxtrinsertinside\else##2\fi
8600 }%
8601 \renewcommand*\{\glsxtrfullplformat}[2]{%
8602   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8603   \ifglsxtrinsertinside\else##2\fi
8604 }%
8605 \renewcommand*\{\Glsxtrfullformat}[2]{%
8606   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8607   \ifglsxtrinsertinside\else##2\fi
8608 }%
8609 \renewcommand*\{\Glsxtrfullplformat}[2]{%
8610   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8611   \ifglsxtrinsertinside\else##2\fi
8612 }%

```

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

```

8613 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
8614   \glsfirstabbrvsmfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8615   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8616   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8617 }%
8618 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
8619   \glsfirstabbrvsmfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8620   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8621   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8622 }%
8623 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
8624   \glsfirstabbrvsmfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8625   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8626   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
8627 }%
8628 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
8629   \glsfirstabbrvsmfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8630   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8631   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
8632 }%
8633 }

```

```
postfootnote-sm Backward compatibility:  
8634 \@glsxtr@deprecated@abbrstyle{postfootnote-sm}{short-sm-postfootnote}
```

1.7.5 Predefined Styles (Emphasized)

These styles use `\emph` for the short form.

```
\glsabbrvemfont  
8635 \newcommand*\{\glsabbrvemfont\}[1]{\emph{\#1}}%
```

```
\irstabbrvemfont  
8636 \newcommand*\{\glsfirstabbrvemfont\}[1]{\glsabbrvemfont{\#1}}%
```

The default short form suffix:

```
\glsxtremsuffix  
8637 \newcommand*\{\glsxtremsuffix\}{\glsxtrabbrvpluralsuffix}
```

```
\firstlongemfont Only used by the “long-em” styles.  
8638 \newcommand*\{\glsfirstlongemfont\}[1]{\glslongemfont{\#1}}%
```

```
\glslongemfont Only used by the “long-em” styles.  
8639 \newcommand*\{\glslongemfont\}[1]{\emph{\#1}}%
```

`long-short-em` The long form is just set in the default long font.

```
8640 \newabbreviationstyle{long-short-em}{%  
8641 {  
8642   \renewcommand*\{\CustomAbbreviationFields\}{%  
8643     name=\{\glsxtrlongshortname\},  
8644     sort=\{\the\glsshorttok\},  
8645     first=\{\protect\glsfirstlongdefaultfont{\the\glslongtok}\}%  
8646     \protect\glsxtrfullsep{\the\glslabeltok\}%  
8647     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok\}}\},%  
8648     firstplural=\{\protect\glsfirstlongdefaultfont{\the\glslongpltok}\}%  
8649     \protect\glsxtrfullsep{\the\glslabeltok\}%  
8650     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok\}}\},%  
8651     plural=\{\protect\glsabbrvemfont{\the\glsshortpltok\}}\},%  
8652     description=\{\the\glslongtok\}\}%  
8653   \renewcommand*\{\GlsXtrPostNewAbbreviation\}{%  
8654     \glshasattribute{\the\glslabeltok}{regular}\%  
8655     {  
8656       \glssetattribute{\the\glslabeltok}{regular}{false}\%  
8657     }%  
8658     {}%  
8659   }%  
8660 }%  
8661 {  
8662   \renewcommand*\{\glsabbrvfont\}[1]{\glsabbrvemfont{\##1}}%  
8663   \renewcommand*\{\glsfirstabbrvfont\}[1]{\glsfirstabbrvemfont{\##1}}%  
8664   \renewcommand*\{\abbrvpluralsuffix\}{\protect\glsxtremsuffix\}%
```

Use the default long fonts.

```
8665 \renewcommand*\{\glsfirstlongfont\}[1]{\glsfirstlongdefaultfont{##1}}%
8666 \renewcommand*\{\glslongfont\}[1]{\glslongdefaultfont{##1}}%
```

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

```
8667 \renewcommand*\{\glsxtrfullformat\}[2]{%
8668   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8669   \ifglsxtrinsertinside\else##2\fi
8670   \glsxtrfullsep{##1}%
8671   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8672 }%
8673 \renewcommand*\{\glsxtrfullplformat\}[2]{%
8674   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8675   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8676   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8677 }%
8678 \renewcommand*\{\Glsxtrfullformat\}[2]{%
8679   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8680   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8681   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8682 }%
8683 \renewcommand*\{\Glsxtrfullplformat\}[2]{%
8684   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8685   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8686   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8687 }%
8688 }
```

g-short-em-desc

```
8689 \newabbreviationstyle{long-short-em-desc}{%
8690 }%
8691 \renewcommand*\{\CustomAbbreviationFields\}{%
8692   name={\glsxtrlongshortdescname},%
8693   sort={\glsxtrlongshortdescsort},%
8694   first={\protect\glsfirstlongdefaultfont{\the\glslongtok}%
8695     \protect\glsxtrfullsep{\the\glslabeltok}%
8696     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
8697   firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}%
8698     \protect\glsxtrfullsep{\the\glslabeltok}%
8699     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
8700   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8701   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
8702 }%
```

Unset the regular attribute if it has been set.

```
8703 \renewcommand*\{\GlsXtrPostNewAbbreviation\}{%
8704   \glshasattribute{\the\glslabeltok}{regular}%
8705 }%
8706   \glssetattribute{\the\glslabeltok}{regular}{false}%
8707 }%
```

```
8708     {}%
8709   }%
8710 }%
8711 {%
```

As long-short-em style:

```
8712 \GlsXtrUseAbbrStyleFmts{long-short-em}%
8713 }
```

long-em-short-em

```
8714 \newabbreviationstyle{long-em-short-em}%
8715 {%
```

\glslongemfont is used in the description since \glsdesc doesn't set the style.

```
8716 \renewcommand*{\CustomAbbreviationFields}{%
8717   name={\glsxtrlongshortname},
8718   sort={\the\glsshorttok},
8719   first={\protect\glsfirstlongemfont{\the\glslongtok}%
8720     \protect\glsxtrfullsep{\the\glslabeltok}%
8721     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}}},%
8722   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}%
8723     \protect\glsxtrfullsep{\the\glslabeltok}%
8724     \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}}},%
8725   plural={\protect\glsabbrvemfont{\the\glsshortpltok}},%
8726   description={\protect\glslongemfont{\the\glslongtok}}}%
```

Unset the regular attribute if it has been set.

```
8727 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8728   \glshasattribute{\the\glslabeltok}{regular}%
8729   {%
8730     \glssetattribute{\the\glslabeltok}{regular}{false}%
8731   }%
8732   {}%
8733 }%
8734 }%
8735 {%
8736 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8737 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvemfont{##1}}%
8738 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
8739 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
8740 \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%
```

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

```
8741 \renewcommand*{\glsxtrfullformat}[2]{%
8742   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8743   \ifglsxtrinsertinside\else##2\fi
8744   \glsxtrfullsep{##1}%
8745   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
8746 }%
8747 \renewcommand*{\glsxtrfullplformat}[2]{%
```

```

8748 \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8749 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8750 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8751 }%
8752 \renewcommand*\Glsxtrfullformat[2]{%
8753 \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
8754 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8755 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
8756 }%
8757 \renewcommand*\Glsxtrfullplformat[2]{%
8758 \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
8759 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8760 \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
8761 }%
8762 }

```

m-short-em-desc

```

8763 \newabbreviationstyle{long-em-short-em-desc}{%
8764 }%
8765 \renewcommand*\CustomAbbreviationFields{%
8766   name={\glsxtrlongshortdescname},%
8767   sort={\glsxtrlongshortdescsort},%
8768   first={\protect\glsfirstlongemfont{\the\glslongtok}}%
8769   \protect\glsxtrfullsep{\the\glslabeltok}%
8770   \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
8771   firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}}%
8772   \protect\glsxtrfullsep{\the\glslabeltok}%
8773   \glsxtrparen{\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
8774   text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8775   plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
8776 }%

```

Unset the regular attribute if it has been set.

```

8777 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8778   \glshasattribute{\the\glslabeltok}{regular}%
8779   {}%
8780   \glssetattribute{\the\glslabeltok}{regular}{false}%
8781   {}%
8782   {}%
8783 }%
8784 }%
8785 }%
8786 \GlsXtrUseAbbrStyleFmts{long-em-short-em}%
8787 }

```

short-em-long Now the short (long) version

```

8788 \newabbreviationstyle{short-em-long}{%
8789 }%
8790 \renewcommand*\CustomAbbreviationFields{%
8791   name={\glsxtrshortlongname},%

```

```

8792     sort={\the\glsshorttok},
8793     description={\the\glslongtok},%
8794     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
8795       \protect\glsxtrfullsep{\the\glslabeltok}%
8796       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8797     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
8798       \protect\glsxtrfullsep{\the\glslabeltok}%
8799       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8800     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}

```

Unset the regular attribute if it has been set.

```

8801 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8802   \glshasattribute{\the\glslabeltok}{regular}%
8803   {%
8804     \glssetattribute{\the\glslabeltok}{regular}{false}%
8805   }%
8806   {}%
8807 }%
8808 }%
8809 {%

```

Mostly as short-long style:

```

8810 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
8811 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
8812 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
8813 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%
8814 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

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

```

8815 \renewcommand*\glsxtrfullformat}[2]{%
8816   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8817   \ifglsxtrinsertinside\else##2\fi
8818   \glsxtrfullsep{##1}%
8819   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%
8820 }%
8821 \renewcommand*\glsxtrfullplformat}[2]{%
8822   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8823   \ifglsxtrinsertinside\else##2\fi
8824   \glsxtrfullsep{##1}%
8825   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%
8826 }%
8827 \renewcommand*\Glsxtrfullformat}[2]{%
8828   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8829   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8830   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}}%
8831 }%
8832 \renewcommand*\Glsxtrfullplformat}[2]{%
8833   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8834   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8835   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}}%
8836 }%

```

```
8837 }
```

rt-em-long-desc As before but user provides description

```
8838 \newabbreviationstyle{short-em-long-desc}{%
8839 {%
8840   \renewcommand*{\CustomAbbreviationFields}{%
8841     name={\glsxtrshortlongdescname},
8842     sort={\glsxtrshortlongdescsort},
8843     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%
8844       \protect\glsxtrfullsep{\the\glslabeltok}%
8845       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongtok}}},%
8846     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}%
8847       \protect\glsxtrfullsep{\the\glslabeltok}%
8848       \glsxtrparen{\protect\glsfirstlongdefaultfont{\the\glslongpltok}}},%
8849     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8850     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}%
8851   }%
```

Unset the regular attribute if it has been set.

```
8852   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
8853     \glshasattribute{\the\glslabeltok}{regular}}%
8854   {%
8855     \glssetattribute{\the\glslabeltok}{regular}{false}}%
8856   }%
8857   {}%
8858 }%
8859 }%
8860 {%
8861   \GlsXtrUseAbbrStyleFmts{short-em-long}%
8862 }
```

hort-em-long-em

```
8863 \newabbreviationstyle{short-em-long-em}{%
8864 {%
```

\glslongemfont is used in the description since \glsdesc doesn't set the style.

```
8865   \renewcommand*{\CustomAbbreviationFields}{%
8866     name={\glsxtrshortlongname},
8867     sort={\the\glsshorttok},
8868     description={\protect\glslongemfont{\the\glslongtok}},%
8869     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}}%
8870       \protect\glsxtrfullsep{\the\glslabeltok}%
8871       \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}}},%
8872     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}%
8873       \protect\glsxtrfullsep{\the\glslabeltok}%
8874       \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
8875     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
```

Unset the regular attribute if it has been set.

```

8876 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8877   \glshasattribute{\the\glslabeltok}{regular}{}
8878   {%
8879     \glssetattribute{\the\glslabeltok}{regular}{false}{}
8880   }%
8881   {}{%
8882 }%
8883 }%
8884 {}%
8885 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtremsuffix}{%
8886 \renewcommand*\glsabbrvfont}[1]{\glsabbrvemfont{##1}}{%
8887 \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}{%
8888 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}{%
8889 \renewcommand*\glslongfont}[1]{\glslongemfont{##1}}{%

```

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

```

8890 \renewcommand*\glsxtrfullformat}[2]{%
8891   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}{%
8892     \ifglsxtrinsertinside\else##2\fi
8893     \glsxtrfullsep{##1}{%
8894       \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}{%
8895     }{%
8896   \renewcommand*\glsxtrfullplformat}[2]{%
8897     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}{%
8898       \ifglsxtrinsertinside\else##2\fi
8899       \glsxtrfullsep{##1}{%
8900         \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}{%
8901       }{%
8902     \renewcommand*\Glsxtrfullformat}[2]{%
8903       \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}{%
8904         \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{%
8905           \glsxtrparen{\glsfirstlongemfont{\glsaccesslong{##1}}}{%
8906         }{%
8907       \renewcommand*\Glsxtrfullplformat}[2]{%
8908         \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}{%
8909           \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}{%
8910             \glsxtrparen{\glsfirstlongemfont{\glsaccesslongpl{##1}}}{%
8911           }{%
8912 }%

```

em-long-em-desc

```

8913 \newabbreviationstyle{short-em-long-em-desc}{%
8914 }{%
8915 \renewcommand*\CustomAbbreviationFields}{%
8916   name={\glsxtrshortlongdescname},%
8917   sort={\glsxtrshortlongdescsort},%
8918   first={\protect\glsfirstabbrvemfont{\the\glsshorttok}{%
8919     \protect\glsxtrfullsep{\the\glslabeltok}{%
8920       \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongtok}},%
8921       firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}}{%

```

```

8922     \protect\glsxtrfullsep{\the\glslabeltok}%
8923     \glsxtrparen{\protect\glsfirstlongemfont{\the\glslongpltok}}},%
8924     text={\protect\glsabbrvemfont{\the\glsshorttok}},%
8925     plural={\protect\glsabbrvemfont{\the\glsshortpltok}}}%
8926 }%

```

Unset the regular attribute if it has been set.

```

8927 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8928   \glshasattribute{\the\glslabeltok}{regular}}%
8929 {%
8930   \glssetattribute{\the\glslabeltok}{regular}{false}}%
8931 }%
8932 {%
8933 }%
8934 }%
8935 {%
8936 \GlsXtrUseAbbrStyleFmts{short-em-long-em}%
8937 }%

```

short-em

```

8938 \newabbreviationstyle{short-em}{%
8939 {%
8940   \renewcommand*\CustomAbbreviationFields}{%
8941     name={\glsxtrshortnolongname},
8942     sort={\the\glsshorttok},
8943     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
8944     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
8945     text={\protect\glsabbrvemfont{\the\glsshorttok}},
8946     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},
8947     description={\the\glslongtok}}%
8948 \renewcommand*\GlsXtrPostNewAbbreviation}{%
8949   \glssetattribute{\the\glslabeltok}{regular}{true}}%
8950 }%
8951 {%
8952   \renewcommand*\abrvpluralsuffix}{\protect\glsxtremsuffix}%
8953   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
8954   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{\##1}}%
8955   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{\##1}}%
8956   \renewcommand*\glslongfont[1]{\glslongdefaultfont{\##1}}%

```

The inline full form displays the short form followed by the long form in parentheses.

```

8957 \renewcommand*\glsxtrinlinefullformat}[2]{%
8958   \protect\glsfirstabbrvemfont{\glsaccessshort{\##1}}%
8959   \ifglsxtrinsertinside{\fi}%
8960   \ifglsxtrinsertinside{\else{\glsxtrfullsep{\##1}}%
8961   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{\##1}}}}%
8962 }%
8963 \renewcommand*\glsxtrinlinefullplformat}[2]{%
8964   \protect\glsfirstabbrvemfont{\glsaccessshortpl{\##1}}%
8965   \ifglsxtrinsertinside{\fi}%

```

```

8966     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8967     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8968 }%
8969 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
8970     \protect\glsfirstabbrvemfont{\Glsaccessshort{##1}%
8971         \ifglsxtrinsertinside##2\fi}%
8972     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8973     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%
8974 }%
8975 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
8976     \protect\glsfirstabbrvemfont{\Glsaccessshortpl{##1}%
8977         \ifglsxtrinsertinside##2\fi}%
8978     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
8979     \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%
8980 }%

```

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.

```

8981 \renewcommand*{\glsxtrfullformat}[2]{%
8982     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8983     \ifglsxtrinsertinside\else##2\fi
8984 }%
8985 \renewcommand*{\glsxtrfullplformat}[2]{%
8986     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8987     \ifglsxtrinsertinside\else##2\fi
8988 }%
8989 \renewcommand*{\Glsxtrfullformat}[2]{%
8990     \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
8991     \ifglsxtrinsertinside\else##2\fi
8992 }%
8993 \renewcommand*{\Glsxtrfullplformat}[2]{%
8994     \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
8995     \ifglsxtrinsertinside\else##2\fi
8996 }%
8997 }

```

short-em-nolong

```
8998 \letabbreviationstyle{short-em-nolong}{short-em}
```

short-em-desc

```

8999 \newabbreviationstyle{short-em-desc}%
9000 {%
9001 \renewcommand*{\CustomAbbreviationFields}{%
9002     name={\glsxtrshortdescname},
9003     sort={\the\glsshorttok},
9004     first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},
9005     firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},
9006     text={\protect\glsabbrvemfont{\the\glsshorttok}},
```

```

9007     plural={\protect\glsabbrvemfont{\the\glsshortpltok}},  

9008     description={\the\glslongtok}}%  

9009 \renewcommand*{\GlsXtrPostNewAbbreviation}{%  

9010   \glssetattribute{\glslabeltok}{regular}{true}}%  

9011 }%  

9012 {%-  

9013 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%  

9014 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%  

9015 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%  

9016 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongdefaultfont{##1}}%  

9017 \renewcommand*\glslongfont[1]{\glslongdefaultfont{##1}}%

```

The inline full form displays the short format followed by the long form in parentheses.

```

9018 \renewcommand*{\glsxtrinlinefullformat}[2]{%  

9019   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

9020   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

9021   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%  

9022 }%  

9023 \renewcommand*{\glsxtrinlinefullplformat}[2]{%  

9024   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

9025   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

9026   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%  

9027 }%  

9028 \renewcommand*{\Glsxtrinlinefullformat}[2]{%  

9029   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

9030   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

9031   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslong{##1}}}%  

9032 }%  

9033 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%  

9034   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

9035   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}}%  

9036   \glsxtrparen{\glsfirstlongdefaultfont{\glsaccesslongpl{##1}}}%  

9037 }%

```

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.

```

9038 \renewcommand*{\glsxtrfullformat}[2]{%  

9039   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

9040   \ifglsxtrinsertinside\else##2\fi  

9041 }%  

9042 \renewcommand*{\glsxtrfullplformat}[2]{%  

9043   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%  

9044   \ifglsxtrinsertinside\else##2\fi  

9045 }%  

9046 \renewcommand*{\Glsxtrfullformat}[2]{%  

9047   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}}%  

9048   \ifglsxtrinsertinside\else##2\fi  

9049 }%  

9050 \renewcommand*{\Glsxtrfullplformat}[2]{%  

9051   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}}%

```

```

9052     \ifglsxtrinsertinside\else##2\fi
9053   }%
9054 }

-em-nolong-desc
9055 \letabbreviationstyle{short-em-nolong-desc}{short-em-desc}

```

nolong-short-em

```

9056 \newabbreviationstyle{nolong-short-em}%
9057 {%
9058   \GlsXtrUseAbbrStyleSetup{short-em-nolong}%
9059 }%
9060 {%
9061   \GlsXtrUseAbbrStyleFmts{short-em-nolong}%

```

The inline full form displays the long form followed by the short form in parentheses.

```

9062 \renewcommand*\{\glsxtrinlinefullformat}[2]{%
9063   \protect\glsfirstlongdefaultfont{\glsaccesslong{##1}%
9064     \ifglsxtrinsertinside##2\fi}%
9065   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9066   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9067 }%
9068 \renewcommand*\{\glsxtrinlinefullplformat}[2]{%
9069   \protect\glsfirstlongdefaultfont{\glsaccesslongpl{##1}%
9070     \ifglsxtrinsertinside##2\fi}%
9071   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9072   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9073 }%
9074 \renewcommand*\{\Glsxtrinlinefullformat}[2]{%
9075   \protect\glsfirstlongdefaultfont{\Glsaccesslong{##1}%
9076     \ifglsxtrinsertinside##2\fi}%
9077   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9078   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9079 }%
9080 \renewcommand*\{\Glsxtrinlinefullplformat}[2]{%
9081   \protect\glsfirstlongdefaultfont{\Glsaccesslongpl{##1}%
9082     \ifglsxtrinsertinside##2\fi}%
9083   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9084   \glsxtrparen{\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9085 }%
9086 }

```

long-noshort-em

The short form is explicitly invoked through commands like `\glsshort`.

```

9087 \newabbreviationstyle{long-noshort-em}%
9088 {%
9089   \renewcommand*\{\CustomAbbreviationFields}{%
9090     name={\glsxtrlongnoshortname},
9091     sort={\the\glsshorttok},
9092     first={\protect\glsfirstlongdefaultfont{\the\glslongtok}},

```

```

9093     firstplural={\protect\glsfirstlongdefaultfont{\the\glslongpltok}},  

9094     text={\protect\glslongdefaultfont{\the\glslongtok}},  

9095     plural={\protect\glslongdefaultfont{\the\glslongpltok}},%  

9096     description={\the\glslongtok}%
9097 }%
9098 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9099   \glssetattribute{\the\glslabeltok}{regular}{true}%
9100 }%
9101 {%
9102   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9103   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9104   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9105   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}%
9106   \renewcommand*{\glslongfont}[1]{\glslongdefaultfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

9107 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9108   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9109   \ifglsxtrinsertinside \else##2\fi
9110 }%
9111 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9112   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9113   \ifglsxtrinsertinside \else##2\fi
9114 }%
9115 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9116   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9117   \ifglsxtrinsertinside \else##2\fi
9118 }%
9119 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9120   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9121   \ifglsxtrinsertinside \else##2\fi
9122 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9123 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9124   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9125   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9126   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9127 }%
9128 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9129   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9130   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9131   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9132 }%
9133 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9134   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9135   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9136   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9137 }%
9138 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%

```

```

9139   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9140     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9141   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9142 }%

```

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.

```

9143 \renewcommand*\glsxtrfullformat[2]{%
9144   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9145   \ifglsxtrinsertinside\else##2\fi
9146 }%
9147 \renewcommand*\glsxtrfullplformat[2]{%
9148   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9149   \ifglsxtrinsertinside\else##2\fi
9150 }%
9151 \renewcommand*\Glsxtrfullformat[2]{%
9152   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9153   \ifglsxtrinsertinside\else##2\fi
9154 }%
9155 \renewcommand*\Glsxtrfullplformat[2]{%
9156   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9157   \ifglsxtrinsertinside\else##2\fi
9158 }%
9159 }

```

`long-em` Backward compatibility:

```
9160 @glsxtr@deprecated@abbrstyle{long-em}{long-noshort-em}
```

`g-em-noshort-em` The short form is explicitly invoked through commands like `\glsshort`.

```

9161 \newabbreviationstyle{long-em-noshort-em}%
9162 {%
9163   \renewcommand*\CustomAbbreviationFields{%
9164     name={\glsxtrlongnoshortname},
9165     sort={\the\glsshorttok},
9166     first={\protect\glsfirstlongemfont{\the\glslongtok}},
9167     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
9168     text={\protect\glslongemfont{\the\glslongtok}},
9169     plural={\protect\glslongemfont{\the\glslongpltok}},%
9170     description={\protect\glslongemfont{\the\glslongtok}}%
9171 }%
9172   \renewcommand*\GlsXtrPostNewAbbreviation{%
9173     \glssetattribute{\the\glslabeltok}{regular}{true}%
9174 }%
9175 }%
9176   \renewcommand*\abbrvpluralsuffix{\protect\glsxtremsuffix}%
9177   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9178   \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
9179   \renewcommand*\glsfirstlongfont[1]{\glsfirstlongemfont{##1}}%
9180   \renewcommand*\glslongfont[1]{\glslongemfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```
9181 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9182   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9183   \ifglsxtrinsertinside \else##2\fi
9184 }%
9185 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9186   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9187   \ifglsxtrinsertinside \else##2\fi
9188 }%
9189 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9190   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9191   \ifglsxtrinsertinside \else##2\fi
9192 }%
9193 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9194   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9195   \ifglsxtrinsertinside \else##2\fi
9196 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9197 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9198   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9199   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9200   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9201 }%
9202 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9203   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9204   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9205   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9206 }%
9207 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9208   \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9209   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9210   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9211 }%
9212 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9213   \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9214   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9215   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9216 }%
```

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.

```
9217 \renewcommand*{\glsxtrfullformat}[2]{%
9218   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9219   \ifglsxtrinsertinside\else##2\fi
9220 }%
9221 \renewcommand*{\glsxtrfullplformat}[2]{%
9222   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9223   \ifglsxtrinsertinside\else##2\fi
9224 }%
```

```

9225 \renewcommand*\Glsxtrfullformat}[2]{%
9226   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9227   \ifglsxtrinsertinside\else##2\fi
9228 }%
9229 \renewcommand*\Glsxtrfullplformat}[2]{%
9230   \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9231   \ifglsxtrinsertinside\else##2\fi
9232 }%
9233 }

```

`oshort-em-noreg` Like `long-em-noshort-em` but doesn't set the `regular` attribute.

```

9234 \newabbreviationstyle{long-em-noshort-em-noreg}{%
9235 {%
9236   \GlsXtrUseAbbrStyleSetup{long-em-noshort-em}{%

```

Unset the `regular` attribute if it has been set.

```

9237 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9238   \glshasattribute{\the\glslabeltok}{regular}{%
9239   {%
9240     \glssetattribute{\the\glslabeltok}{regular}{false}{%
9241   }%
9242   {}{%
9243 }%
9244 }%
9245 {}%
9246 \GlsXtrUseAbbrStyleFmts{long-em-noshort-em}{%
9247 }

```

`noshort-em-desc` The emphasized font will only be used if the short form is explicitly invoked through commands like `\glsshort`.

```

9248 \newabbreviationstyle{long-noshort-em-desc}{%
9249 {%
9250   \GlsXtrUseAbbrStyleSetup{long-noshort-desc}{%
9251 }%
9252 {}%
9253 \renewcommand*\abbrvpluralsuffix}{\protect\glsxtremsuffix}{%
9254 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}{%
9255 \renewcommand*\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}{%
9256 \renewcommand*\glsfirstlongfont}[1]{\glsfirstlongdefaultfont{##1}}{%
9257 \renewcommand*\glslongfont}[1]{\glslongdefaultfont{##1}}{%

```

The format for subsequent use (not used when the `regular` attribute is set).

```

9258 \renewcommand*\glsxtrsubsequentfmt}[2]{%
9259   \glslongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}{%
9260   \ifglsxtrinsertinside \else##2\fi
9261 }%
9262 \renewcommand*\glsxtrsubsequentplfmt}[2]{%
9263   \glslongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}{%
9264   \ifglsxtrinsertinside \else##2\fi
9265 }%

```

```

9266 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9267   \glslongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9268   \ifglsxtrinsertinside \else##2\fi
9269 }%
9270 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9271   \glslongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9272   \ifglsxtrinsertinside \else##2\fi
9273 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```

9274 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9275   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9276   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9277   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9278 }%
9279 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9280   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9281   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9282   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9283 }%
9284 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9285   \glsfirstlongdefaultfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9286   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9287   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9288 }%
9289 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9290   \glsfirstlongdefaultfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9291   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9292   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9293 }%

```

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.

```

9294 \renewcommand*{\glsxtrfullformat}[2]{%
9295   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9296   \ifglsxtrinsertinside\else##2\fi
9297 }%
9298 \renewcommand*{\glsxtrfullplformat}[2]{%
9299   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9300   \ifglsxtrinsertinside\else##2\fi
9301 }%
9302 \renewcommand*{\Glsxtrfullformat}[2]{%
9303   \glsfirstlongdefaultfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9304   \ifglsxtrinsertinside\else##2\fi
9305 }%
9306 \renewcommand*{\Glsxtrfullplformat}[2]{%
9307   \glsfirstlongdefaultfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9308   \ifglsxtrinsertinside\else##2\fi
9309 }%
9310 }

```

long-desc-em Backward compatibility:

```
9311 \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.

```
9312 \newabbreviationstyle{long-em-noshort-em-desc}%
9313 {%
9314   \renewcommand*{\CustomAbbreviationFields}{%
9315     name={\glsxtrlongnoshortdescname},
9316     sort={\the\glslongtok},
9317     first={\protect\glsfirstlongemfont{\the\glslongtok}},
9318     firstplural={\protect\glsfirstlongemfont{\the\glslongpltok}},
9319     text={\glslongemfont{\the\glslongtok}},
9320     plural={\glslongemfont{\the\glslongpltok}}%
9321   }%
9322   \renewcommand*{\GlsXtrPostNewAbbreviation}%
9323     \glssetattribute{\the\glslabeltok}{regular}{true}%
9324 }%
9325 {%
9326   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9327   \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9328   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{##1}}%
9329   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongemfont{##1}}%
9330   \renewcommand*{\glslongfont}[1]{\glslongemfont{##1}}%
```

The format for subsequent use (not used when the regular attribute is set).

```
9331 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
9332   \glslongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9333   \ifglsxtrinsertinside \else##2\fi
9334 }%
9335 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
9336   \glslongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9337   \ifglsxtrinsertinside \else##2\fi
9338 }%
9339 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
9340   \glslongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside ##2\fi}%
9341   \ifglsxtrinsertinside \else##2\fi
9342 }%
9343 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
9344   \glslongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside ##2\fi}%
9345   \ifglsxtrinsertinside \else##2\fi
9346 }%
```

The inline full form displays the long format followed by the short form in parentheses.

```
9347 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9348   \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9349   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9350   \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}}%
9351 }%
9352 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
```

```

9353     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9354     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9355     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9356 }%
9357 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9358     \glsfirstlongemfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9359     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9360     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshort{##1}}}%
9361 }%
9362 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9363     \glsfirstlongemfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9364     \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9365     \glsxtrparen{\protect\glsfirstabbrvemfont{\glsaccessshortpl{##1}}}%
9366 }%

```

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.

```

9367 \renewcommand*{\glsxtrfullformat}[2]{%
9368     \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9369     \ifglsxtrinsertinside\else##2\fi
9370 }%
9371 \renewcommand*{\glsxtrfullplformat}[2]{%
9372     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9373     \ifglsxtrinsertinside\else##2\fi
9374 }%
9375 \renewcommand*{\Glsxtrfullformat}[2]{%
9376     \glsfirstlongemfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9377     \ifglsxtrinsertinside\else##2\fi
9378 }%
9379 \renewcommand*{\Glsxtrfullplformat}[2]{%
9380     \glsfirstlongemfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9381     \ifglsxtrinsertinside\else##2\fi
9382 }%
9383 }

```

t-em-desc-noreg Like long-em-noshort-em-desc but doesn't set the regular attribute.

```

9384 \newabbreviationstyle{long-em-noshort-em-desc-noreg}{%
9385 {%
9386     \GlsXtrUseAbbrStyleSetup{long-em-noshort-em-desc}%

```

Unset the regular attribute if it has been set.

```

9387 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9388     \glshasattribute{\the\glslabeltok}{regular}%
9389     {%
9390         \glssetattribute{\the\glslabeltok}{regular}{false}%
9391     }%
9392     {}%
9393 }%
9394 }%
9395 {%

```

```

9396 \GlsXtrUseAbbrStyleFmts{long-em-noshort-em-desc}%
9397 }

sort-em-footnote

9398 \newabbreviationstyle{short-em-footnote}{%
9399 {%
9400 \renewcommand*{\CustomAbbreviationFields}{%
9401 name={\glsxtrfootnotename},
9402 sort={\the\glsshorttok},
9403 description={\the\glslongtok},%
9404 first={\protect\glsfirstabbrvemfont{\the\glsshorttok}%
9405 \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9406 {\protect\glsfirstlongfootnotefont{\the\glslongtok}}},%
9407 firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}%
9408 \protect\glsxtrabbrvfootnote{\the\glslabeltok}%
9409 {\protect\glsfirstlongfootnotefont{\the\glslongpltok}}},%
9410 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.

9411 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9412 \glssetattribute{\the\glslabeltok}{nohyperfirst}{true}%
9413 \glshasattribute{\the\glslabeltok}{regular}%
9414 {%
9415 \glssetattribute{\the\glslabeltok}{regular}{false}%
9416 }%
9417 {}%
9418 }%
9419 }%
9420 {%
9421 \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtremsuffix}%
9422 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{\##1}}%
9423 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvemfont{\##1}}%
9424 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongfootnotefont{\##1}}%
9425 \renewcommand*{\glslongfont}[1]{\glslongfootnotefont{\##1}}%


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

9426 \renewcommand*{\glsxtrfullformat}[2]{%
9427 \glsfirstabbrvemfont{\glsaccessshort{\##1}\ifglsxtrinsertinside##2\fi}%
9428 \ifglsxtrinsertinside\else##2\fi
9429 \protect\glsxtrabbrvfootnote{\##1}%
9430 {\glsfirstlongfootnotefont{\glsaccesslong{\##1}}}%
9431 }%
9432 \renewcommand*{\glsxtrfullplformat}[2]{%
9433 \glsfirstabbrvemfont{\glsaccessshortpl{\##1}\ifglsxtrinsertinside##2\fi}%
9434 \ifglsxtrinsertinside\else##2\fi
9435 \protect\glsxtrabbrvfootnote{\##1}%
9436 {\glsfirstlongfootnotefont{\glsaccesslongpl{\##1}}}%
9437 }%
9438 \renewcommand*{\Glsxtrfullformat}[2]{%

```

```

9439 \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9440 \ifglsxtrinsertinside\else##2\fi
9441 \protect\glsxtrabbrvfootnote{##1}%
9442 {\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9443 }%
9444 \renewcommand*{\Glsxtrfullplformat}[2]{%
9445 \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9446 \ifglsxtrinsertinside\else##2\fi
9447 \protect\glsxtrabbrvfootnote{##1}%
9448 {\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9449 }%

```

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

```

9450 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9451 \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9452 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9453 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9454 }%
9455 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9456 \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9457 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9458 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9459 }%
9460 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9461 \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9462 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9463 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9464 }%
9465 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9466 \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9467 \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9468 \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9469 }%
9470 }

```

footnote-em Backward compatibility:

```
9471 \glsxtr@deprecated@abbrstyle{footnote-em}{short-em-footnote}
```

em-postfootnote

```

9472 \newabbreviationstyle{short-em-postfootnote}%
9473 {%
9474 \renewcommand*{\CustomAbbreviationFields}{%
9475 name={\glsxtrfootnotename},
9476 sort={\the\glsshorttok},
9477 description={\the\glslongtok},%
9478 first={\protect\glsfirstabbrvemfont{\the\glsshorttok}},%
9479 firstplural={\protect\glsfirstabbrvemfont{\the\glsshortpltok}},%
9480 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.

```
9481 \renewcommand*\GlsXtrPostNewAbbreviation}{%
9482   \csdef{glsxtrpostlink\glscategorylabel}{%
9483     \glsxtrifwasfirstuse
9484   }%
```

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

```
9485   \glsxtrdopostpunc{\protect\glsxtrabbrvfootnote{\glslabel}}%
9486   {\glsfirstlongfootnotefont{\glsentrylong{\glslabel}}} }%
9487 }%
9488 {}%
9489 }%
9490 \glshasattribute{\the\glslabeltok}{regular}%
9491 {}%
9492   \glssetattribute{\the\glslabeltok}{regular}{false}%
9493 }%
9494 {}%
9495 }%
```

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

```
9496 \renewcommand*\glsxtrsetupfulldefs}{%
9497   \let\glsxtrifwasfirstuse\@secondoftwo
9498 }%
9499 }%
9500 {}%
9501 \renewcommand*\abbrvpluralsuffix{\protect\glsxtremsuffix}%
9502 \renewcommand*\glsabbrvfont[1]{\glsabbrvemfont{##1}}%
9503 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvemfont{##1}}%
9504 \renewcommand*\glsfirstlongfont[1]{\glsfirstlongfootnotefont{##1}}%
9505 \renewcommand*\glslongfont[1]{\glslongfootnotefont{##1}}%
```

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

```
9506 \renewcommand*\glsxtrfullformat}[2]{%
9507   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9508   \ifglsxtrinsertinside\else##2\fi
9509 }%
9510 \renewcommand*\glsxtrfullplformat}[2]{%
9511   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9512   \ifglsxtrinsertinside\else##2\fi
9513 }%
9514 \renewcommand*\Glsxtrfullformat}[2]{%
9515   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9516   \ifglsxtrinsertinside\else##2\fi
9517 }%
9518 \renewcommand*\Glsxtrfullplformat}[2]{%
9519   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9520   \ifglsxtrinsertinside\else##2\fi
```

```

9521 }%
The first use full form and the inline full form use the short (long) style.
9522 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9523   \glsfirstabbrvemfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9524   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9525   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9526 }%
9527 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9528   \glsfirstabbrvemfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9529   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9530   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9531 }%
9532 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9533   \glsfirstabbrvemfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9534   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9535   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslong{##1}}}%
9536 }%
9537 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9538   \glsfirstabbrvemfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9539   \ifglsxtrinsertinside\else##2\fi\glsxtrfullsep{##1}%
9540   \glsxtrparen{\glsfirstlongfootnotefont{\glsaccesslongpl{##1}}}%
9541 }%
9542 }

```

postfootnote-em Backward compatibility:

```
9543 \@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.

```
9544 \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.

```

9545 \ifdef\glscurrentfieldvalue
9546 {
9547   \newcommand*{\glsxtruserparen}[2]{%
9548     \glsxtrfullsep{##2}%
9549     \glsxtrparen
9550     {##1\ifglshasfield{\glsxtruserfield}{##2}{, \glscurrentfieldvalue}{}%}
9551   }
9552 }
9553 {
9554   \newcommand*{\glsxtruserparen}[2]{%

```

```

9555     \glsxtrfullsep{#2}%
9556     \glsxtrparen
9557     {#1\ifglshasfield{\glsxtruserfield}{#2}{, \glo@thisvalue}{}}
9558 }
9559 }
```

Font used for short form:

```
lsabbrvuserfont
9560 \newcommand*{\glsabbrvuserfont}[1]{\glsabbrvdefaultfont{#1}}
```

Font used for short form on first use:

```
stabrvuserfont
9561 \newcommand*{\glsfirststabrvuserfont}[1]{\glsabbrvuserfont{#1}}
```

Font used for long form:

```
glslonguserfont
9562 \newcommand*{\glslonguserfont}[1]{\glslongdefaultfont{#1}}
```

Font used for long form on first use:

```
rstlonguserfont
9563 \newcommand*{\glsfirstlonguserfont}[1]{\glslonguserfont{#1}}
```

The default short form suffix:

```
lsxtrusersuffix
9564 \newcommand*{\glsxtrusersuffix}{\glsxtrabrvpluralsuffix}
```

```
long-short-user
9565 \newabbreviationstyle{long-short-user}%
9566 {%
9567   \renewcommand*{\CustomAbbreviationFields}{%
9568     name={\glsxtrlongshortname},
9569     sort={\the\glsshorttok},
9570     first={\protect\glsfirstlonguserfont{\the\glslongtok}%
9571       \protect\glsxtruserparen{\protect\glsfirststabrvuserfont{\the\glsshorttok}}%
9572       {\the\glslabeltok}},%
9573     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}%
9574       \protect\glsxtruserparen
9575       {\protect\glsfirststabrvuserfont{\the\glsshortpltok}}{\the\glslabeltok}},%
9576     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
9577     description={\protect\glslonguserfont{\the\glslongtok}}}%
9578 }
```

Unset the regular attribute if it has been set.

```
9578 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9579   \glshasattribute{\the\glslabeltok}{regular}%
9580 }
```

```

9581     \glssetattribute{\the\glslabeltok}{regular}{false}%
9582   }%
9583   {}%
9584 }%
9585 }%
9586 {%

```

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

```

9587 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9588 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
9589 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
9590 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
9591 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

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

```

9592 \renewcommand*{\glsxtrfullformat}[2]{%
9593   \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9594   \ifglsxtrinsertinside\else##2\fi
9595   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9596 }%
9597 \renewcommand*{\glsxtrfullplformat}[2]{%
9598   \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9599   \ifglsxtrinsertinside\else##2\fi
9600   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9601 }%
9602 \renewcommand*{\Glsxtrfullformat}[2]{%
9603   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9604   \ifglsxtrinsertinside\else##2\fi
9605   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9606 }%
9607 \renewcommand*{\Glsxtrfullplformat}[2]{%
9608   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9609   \ifglsxtrinsertinside\else##2\fi
9610   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9611 }%
9612 }

```

-postshort-user Like long-short-user but defers the parenthetical matter to after the link.

```

9613 \newabbreviationstyle{long-postshort-user}%
9614 {%
9615 \renewcommand*{\CustomAbbreviationFields}{%
9616   name={\glsxtrlongshortname},
9617   sort={\the\glsshorttok},
9618   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9619   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9620   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
9621   description={\protect\glslonguserfont{\the\glslongtok}}}%
9622 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9623   \csdef{glsxtrpostlink\glscategorylabel}{%

```

```

9624     \glsxtrifwasfirstuse
9625     {%
9626         \glsxtruserparen
9627             {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}{%
9628                 {\glslabel}%
9629             }%
9630             {}%
9631         }%
9632         \glshasattribute{\the\glslabeltok}{regular}%
9633         {%
9634             \glssetattribute{\the\glslabeltok}{regular}{false}%
9635         }%
9636         {}%
9637     }%
9638 }%
9639 {%

```

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

```

9640 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9641 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
9642 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
9643 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
9644 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

9645 \renewcommand*{\glsxtrfullformat}[2]{%
9646     \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9647     \ifglsxtrinsertinside\else##2\fi
9648 }%
9649 \renewcommand*{\glsxtrfullplformat}[2]{%
9650     \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9651     \ifglsxtrinsertinside\else##2\fi
9652 }%
9653 \renewcommand*{\Glsxtrfullformat}[2]{%
9654     \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9655     \ifglsxtrinsertinside\else##2\fi
9656 }%
9657 \renewcommand*{\Glsxtrfullplformat}[2]{%
9658     \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9659     \ifglsxtrinsertinside\else##2\fi
9660 }%

```

In-line format:

```

9661 \renewcommand*{\glsxtrinlinefullformat}[2]{%
9662     \glsfirstlonguserfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9663     \ifglsxtrinsertinside\else##2\fi
9664     \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9665 }%
9666 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9667     \glsfirstlonguserfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

9668 \ifglsxtrinsertinside\else##2\fi
9669 \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9670 }%
9671 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9672   \glsfirstlonguserfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
9673   \ifglsxtrinsertinside\else##2\fi
9674   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshort{##1}}}{##1}%
9675 }%
9676 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9677   \glsfirstlonguserfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
9678   \ifglsxtrinsertinside\else##2\fi
9679   \glsxtruserparen{\glsfirstabbrvuserfont{\glsaccessshortpl{##1}}}{##1}%
9680 }%
9681 }

```

ortuserdescname

```

9682 \newcommand*{\glsxtrlongshortuserdescname}{%
9683   \protect\glslonguserfont{\the\glslongtok}%
9684   \protect\glsxtruserparen
9685     {\protect\glsabbrvuserfont{\the\glsshorttok}}{\the\glslabeltok}%
9686 }

```

short-user-desc Like **long-postshort-user** but the user supplies the description.

```

9687 \newabbreviationstyle{long-postshort-user-desc}%
9688 {%
9689   \renewcommand*{\CustomAbbreviationFields}{%
9690     name={\glsxtrlongshortuserdescname},
9691     sort={\the\glslongtok},
9692     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9693     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9694     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9695     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}}%
9696 }%
9697 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9698   \csdef{glsxtrpostlink\glscategorylabel}{%
9699     \glsxtrifwasfirstuse
9700     {%
9701       \glsxtruserparen
9702         {\glsfirstabbrvuserfont{\glsentryshort{\glslabel}}}}%
9703         {\glslabel}%
9704     }%
9705     {}%
9706   }%
9707   \glshasattribute{\the\glslabeltok}{regular}%
9708   {%
9709     \glssetattribute{\the\glslabeltok}{regular}{false}%
9710   }%
9711   {}%

```

```

9712  }%
9713 }%
9714 {%
9715 \GlsXtrUseAbbrStyleFmts{long-postshort-user}%
9716 }

```

t-postlong-user Like short-long-user but defers the parenthetical matter to after the link.

```

9717 \newabbreviationstyle{short-postlong-user}%
9718 {%
9719 \renewcommand*{\CustomAbbreviationFields}{%
9720   name={\glsxtrshortlongname},
9721   sort={\the\glsshorttok},
9722   first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9723   firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%
9724   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}},%
9725   description={\protect\glslonguserfont{\the\glslongtok}}}%
9726 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9727   \csdef{glsxtrpostlink\glscategorylabel}{%
9728     \glsxtrifwasfirstuse
9729   }%
9730   \glsxtruserparan
9731     {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}%
9732     {\glslabel}%
9733   }%
9734   {}%
9735 }%
9736 \glshasattribute{\the\glslabeltok}{regular}%
9737 {}%
9738   \glssetattribute{\the\glslabeltok}{regular}{false}%
9739 }%
9740   {}%
9741 }%
9742 }%
9743 {%

```

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

```

9744 \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9745 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvuserfont{##1}}%
9746 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
9747 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
9748 \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

First use full form:

```

9749 \renewcommand*{\glsxtrfullformat}[2]{%
9750   \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9751   \ifglsxtrinsertinside\else##2\fi
9752 }%
9753 \renewcommand*{\glsxtrfullplformat}[2]{%
9754   \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%

```

```

9755     \ifglsxtrinsertinside\else##2\fi
9756   }%
9757   \renewcommand*{\Glsxtrfullformat}[2]{%
9758     \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9759     \ifglsxtrinsertinside\else##2\fi
9760   }%
9761   \renewcommand*{\Glsxtrfullplformat}[2]{%
9762     \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9763     \ifglsxtrinsertinside\else##2\fi
9764   }%

```

In-line format:

```

9765   \renewcommand*{\glsxtrinlinefullformat}[2]{%
9766     \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9767     \ifglsxtrinsertinside\else##2\fi
9768     \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
9769   }%
9770   \renewcommand*{\glsxtrinlinefullplformat}[2]{%
9771     \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9772     \ifglsxtrinsertinside\else##2\fi
9773     \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
9774   }%
9775   \renewcommand*{\Glsxtrinlinefullformat}[2]{%
9776     \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9777     \ifglsxtrinsertinside\else##2\fi
9778     \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
9779   }%
9780   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
9781     \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9782     \ifglsxtrinsertinside\else##2\fi
9783     \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
9784   }%
9785 }

```

onguserdescname

```

9786 \newcommand*{\glsxtrshortlonguserdescname}{%
9787   \protect\glsabbrvuserfont{\the\glsshorttok}%
9788   \protect\glsxtruserparen
9789   {\protect\glslonguserfont{\the\glslongpltok}}%
9790   {\the\glslabeltok}%
9791 }

```

tlong-user-desc Like short-postlong-user but leaves the user to specify the description.

```

9792 \newabbreviationstyle{short-postlong-user-desc}%
9793 {%
9794   \renewcommand*{\CustomAbbreviationFields}{%
9795     name={\glsxtrshortlonguserdescname},
9796     sort={\the\glsshorttok},
9797     first={\protect\glsfirstlonguserfont{\the\glslongtok}},%
9798     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}},%

```

```

9799     text={\protect\glsabbrvuserfont{\the\glsshorttok}},%
9800     plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}%
9801 }%
9802 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9803   \csdef{glsxtrpostlink\glscategorylabel}{%
9804     \glsxtrifwasfirstuse
9805     {%
9806       \glsxtruserparen
9807         {\glsfirstlonguserfont{\glsentrylong{\glslabel}}}}%
9808       {\glslabel}%
9809     }%
9810     {}%
9811   }%
9812   \glshasattribute{\the\glslabeltok}{regular}%
9813   {%
9814     \glssetattribute{\the\glslabeltok}{regular}{false}%
9815   }%
9816   {}%
9817 }%
9818 }%
9819 {%
9820   \GlsXtrUseAbbrStyleFmts{short-postlong-user}%
9821 }

```

short-user-desc

```

9822 \newabbreviationstyle{long-short-user-desc}%
9823 {%
9824   \renewcommand*{\CustomAbbreviationFields}{%
9825     name={\glsxtrlongshortuserdescname},
9826     sort={\glsxtrlongshortdescsort},%
9827     first={\protect\glsfirstlonguserfont{\the\glslongtok}}%
9828       \protect\glsxtruserparen{\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
9829       {\the\glslabeltok},%
9830     firstplural={\protect\glsfirstlonguserfont{\the\glslongpltok}}%
9831       \protect\glsxtruserparen
9832       {\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}{\the\glslabeltok},%
9833     text={\protect\glsabbrvfont{\the\glsshorttok}},%
9834     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
9835   }%

```

Unset the regular attribute if it has been set.

```

9836   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9837     \glshasattribute{\the\glslabeltok}{regular}%
9838     {%
9839       \glssetattribute{\the\glslabeltok}{regular}{false}%
9840     }%
9841     {}%
9842   }%
9843 }%

```

```

9844 {%
9845   \GlsXtrUseAbbrStyleFmts{long-short-user}%
9846 }

short-long-user
9847 \newabbreviationstyle{short-long-user}{%
9848 {%
  \glslonguserfont is used in the description since \glsdesc doesn't set the style.
9849   \renewcommand*{\CustomAbbreviationFields}{%
9850     name={\glsxtrshortlongname},
9851     sort={\the\glsshorttok},
9852     description={\protect\glslonguserfont{\the\glslongtok}},%
9853     first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}}%
9854     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
9855     {\the\glslabeltok}},%
9856     firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}}%
9857     \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
9858     {\the\glslabeltok}},%
9859   plural={\protect\glsabbrvuserfont{\the\glsshortpltok}}}%

```

Unset the regular attribute if it has been set.

```

9860   \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9861     \glshasattribute{\the\glslabeltok}{regular}%
9862     {%
9863       \glssetattribute{\the\glslabeltok}{regular}{false}%
9864     }%
9865     {}%
9866   }%
9867 }%
9868 {%

```

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

```

9869   \renewcommand*{\abbrvpluralsuffix}{\glsxtrusersuffix}%
9870   \renewcommand*\glsabbrvfont[1]{\glsabbrvuserfont{##1}}%
9871   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvuserfont{##1}}%
9872   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonguserfont{##1}}%
9873   \renewcommand*{\glslongfont}[1]{\glslonguserfont{##1}}%

```

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

```

9874   \renewcommand*{\glsxtrfullformat}[2]{%
9875     \glsfirstabbrvuserfont{\glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9876     \ifglsxtrinsertinside\else##2\fi
9877     \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
9878   }%
9879   \renewcommand*{\glsxtrfullplformat}[2]{%
9880     \glsfirstabbrvuserfont{\glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9881     \ifglsxtrinsertinside\else##2\fi
9882     \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
9883   }%

```

```

9884 \renewcommand*{\Glsxtrfullformat}[2]{%
9885   \glsfirstabbrvuserfont{\Glsaccessshort{##1}\ifglsxtrinsertinside##2\fi}%
9886   \ifglsxtrinsertinside\else##2\fi
9887   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslong{##1}}}{##1}%
9888 }%
9889 \renewcommand*{\Glsxtrfullplformat}[2]{%
9890   \glsfirstabbrvuserfont{\Glsaccessshortpl{##1}\ifglsxtrinsertinside##2\fi}%
9891   \ifglsxtrinsertinside\else##2\fi
9892   \glsxtruserparen{\glsfirstlonguserfont{\glsaccesslongpl{##1}}}{##1}%
9893 }%
9894 }

-long-user-desc
9895 \newabbreviationstyle{short-long-user-desc}%
9896 {%
9897   \renewcommand*{\CustomAbbreviationFields}{%
9898     name={\glsxtrshortlonguserdescname},
9899     sort={\glsxtrshortlongdescsort},%
9900     first={\protect\glsfirstabbrvuserfont{\the\glsshorttok}%
9901       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongtok}}%
9902         {\the\glslabeltok}},%
9903     firstplural={\protect\glsfirstabbrvuserfont{\the\glsshortpltok}%
9904       \protect\glsxtruserparen{\protect\glsfirstlonguserfont{\the\glslongpltok}}%
9905         {\the\glslabeltok}},%
9906     text={\protect\glsabbrvfont{\the\glsshorttok}},%
9907     plural={\protect\glsabbrvfont{\the\glsshortpltok}}%
9908   }%

```

Unset the regular attribute if it has been set.

```

9909 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
9910   \glshasattribute{\the\glslabeltok}{regular}%
9911   {%
9912     \glssetattribute{\the\glslabeltok}{regular}{false}%
9913   }%
9914   {}%
9915 }%
9916 }%
9917 {%
9918 \GlsXtrUseAbbrStyleFmts{short-long-user}%
9919 }

```

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.

```
9920 \newrobustcmd*\{\glsxtrifhyphenstart\}[3] {%
9921   \ifx\glsinsert#1\relax
9922     \expandafter\@glsxtrifhyphenstart#1\relax\relax
9923     \@end@glsxtrifhyphenstart{#2}{#3}%
9924   \else
9925     \@glsxtrifhyphenstart#1\relax\relax\@end@glsxtrifhyphenstart{#2}{#3}%
9926   \fi
9927 }
```

trifhyphenstart

```
9928 \def\@glsxtrifhyphenstart#1#2\@end@glsxtrifhyphenstart#3#4{%
9929   \ifx-#1\relax#3\else #4\fi
9930 }
```

rlonghyphenshort

```
\glsxtrlonghyphenshort{\label}{\long}{\short}{\insert}
```

The *long* and *short* arguments may be the plural form. The *long* argument may also be the first letter uppercase form.

```
9931 \newcommand*\{\glsxtrlonghyphenshort\}[4] {%
```

Grouping is needed to localise the redefinitions.

```
9932 {%
```

If *insert* starts with a hyphen, redefine \glsxtrwordsep to a hyphen. The inserted material is also inserted into the parenthetical part. (The inserted material is grouped as a precautionary measure.) No change is made to \glsxtrwordsep if *insert* doesn't start with a hyphen.

```
9933   \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{%
9934     \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#4}\fi}%
9935     \ifglsxtrinsertinside\else{#4}\fi
9936     \glsxtrfullsep{#1}%
9937     \glsxtrparen{\glsfirstabbrvhyphenfont{#3\ifglsxtrinsertinside{#4}\fi}%
9938       \ifglsxtrinsertinside\else{#4}\fi}%
9939   }%
9940 }
```

abbrvhypenfont

```
9941 \newcommand*\{\glsabbrvhypenfont\}{\glsabbrvdefaultfont}%
```

abbrvhypenfont

```
9942 \newcommand*\{\glsfirstabbrvhypenfont\}{\glsabbrvhypenfont}%
```

slonghypenfont

```
9943 \newcommand*\{\glslonghypenfont\}{\glslongdefaultfont}%
```

```
tlonghyphenfont
9944 \newcommand*{\glsfirstlonghyphenfont}{\glslonghyphenfont}%
```

The default short form suffix:

```
xtrhyphensuffix
9945 \newcommand*{\glsxtrhyphensuffix}{\glsxtrabbrvpluralsuffix}
```

en-short-hyphen Designed for use with the markwords attribute.

```
9946 \newabbreviationstyle{long-hyphen-short-hyphen}%
9947 {%
9948   \renewcommand*{\CustomAbbreviationFields}{%
9949     name={\glsxtrlongshortname},
9950     sort={\the\glsshorttok},
9951     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}%
9952       \protect\glsxtrfullsep{\the\glslabeltok}%
9953       \glsxtrparen{\protect\glsfirstabrvhyphenfont{\the\glsshorttok}}},%
9954     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}%
9955       \protect\glsxtrfullsep{\the\glslabeltok}%
9956       \glsxtrparen{\protect\glsfirstabrvhyphenfont{\the\glsshortpltok}}},%
9957     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
9958     description={\protect\glslonghypenfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```
9959   \renewcommand*{\GlsXtrPostNewAbbreviation}%
9960     \glshasattribute{\the\glslabeltok}{regular}%
9961   {%
9962     \glssetattribute{\the\glslabeltok}{regular}{false}%
9963   }%
9964   {}%
9965 }%
9966 }%
9967 {%
9968   \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
9969   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
9970   \renewcommand*{\glsfirstabrvfont}[1]{\glsfirstabrvhyphenfont{##1}}%
9971   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
9972   \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%
```

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

```
9973   \renewcommand*{\glsxtrfullformat}[2]{%
9974     \glsxtrlonghypenshort{##1}{\glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
9975   }%
9976   \renewcommand*{\glsxtrfullplformat}[2]{%
9977     \glsxtrlonghypenshort{##1}{\glsaccesslongpl{##1}}%
9978     {\glsaccessshortpl{##1}}{##2}%
9979   }%
9980   \renewcommand*{\Glsxtrfullformat}[2]{%
9981     \glsxtrlonghypenshort{##1}{\Glsaccesslong{##1}}{\glsaccessshort{##1}}{##2}%
9982   }%
```

```

9983 \renewcommand*{\Glsxtrfullplformat}[2]{%
9984   \glsxtrlonghyphenshort{##1}{\Glsaccesslongpl{##1}}%
9985   {\glsaccessshortpl{##1}}{##2}%
9986 }%
9987 }

```

`ort-hyphen-desc` Like long-hyphen-short-hyphen but the description must be supplied by the user.

```

9988 \newabbreviationstyle{long-hyphen-short-hyphen-desc}{%
9989 {%
9990   \renewcommand*{\CustomAbbreviationFields}{%
9991     name={\glsxtrlongshortdescname},
9992     sort={\glsxtrlongshortdescsort},
9993     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}}%
9994       \protect\glsxtrfullsep{\the\glslabeltok}%
9995       \glsxtrparen{\protect\glsfirstabrvhyphenfont{\the\glsshorttok}},%
9996     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}}%
9997       \protect\glsxtrfullsep{\the\glslabeltok}%
9998       \glsxtrparen{\protect\glsfirstabrvhyphenfont{\the\glsshortpltok}},%
9999     text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
10000   plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}}%
10001 }%

```

Unset the regular attribute if it has been set.

```

10002 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10003   \glshasattribute{\the\glslabeltok}{regular}%
10004   {%
10005     \glssetattribute{\the\glslabeltok}{regular}{false}%
10006   }%
10007   {}%
10008 }%
10009 }%
10010 {%
10011 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%
10012 }

```

`onghyphennoshort` `\glsxtrlonghyphennoshort{<label>}{<long>}{{<insert>}}`

```
10013 \newcommand*{\glsxtrlonghyphennoshort}[3]{%
```

Grouping is needed to localise the redefinitions.

```
10014 {%
```

If `<insert>` starts with a hyphen, redefine `\glsxtrwordsep` to a hyphen. The inserted material is also inserted into the parenthetical part. (The inserted material is grouped as a precautionary measure.) No change is made to `\glsxtrwordsep` if `<insert>` doesn't start with a hyphen.

```

10015 \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
10016 \glsfirstlonghyphenfont{#2\ifglsxtrinsertinside{#3}\fi}%

```

```

10017   \ifglsxtrinsertinside\else{#3}\fi
10018 }%
10019 }

```

`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.

```

10020 \newabbreviationstyle{long-hyphen-noshort-desc-noreg}%
10021 {%
10022   \renewcommand*{\CustomAbbreviationFields}{%
10023     name={\glsxtrlongnoshortdescname},
10024     sort={\expandonce\glsxtrorglong},
10025     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10026     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10027     plural={\protect\glslonghyphenfont{\the\glslongpltok}}%
10028 }%

```

Unset the regular attribute if it has been set.

```

10029 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10030   \glshasattribute{\the\glslabeltok}{regular}%
10031   {%
10032     \glssetattribute{\the\glslabeltok}{regular}{false}%
10033   }%
10034   {}%
10035 }%
10036 }%
10037 {%
10038 \GlsXtrUseAbbrStyleFmts{long-hyphen-short-hyphen}%

```

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

```

10039 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
10040 \renewcommand*\glsabbrvfont[1]{\glsabbrvdefaultfont{##1}}%
10041 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvdefaultfont{##1}}%
10042 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghyphenfont{##1}}%
10043 \renewcommand*{\glslongfont}[1]{\glslonghyphenfont{##1}}%

```

The format for subsequent use (not used when the regular attribute is set).

```

10044 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10045   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
10046 }%
10047 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
10048   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
10049 }%
10050 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10051   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10052 }%
10053 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10054   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10055 }%

```

The inline full form displays the long format followed by the short form in parentheses.

```
10056 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10057   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
10058   \glsxtrfullsep{##1}%
10059   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
10060 }%
10061 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10062   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
10063   \glsxtrfullsep{##1}%
10064   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
10065 }%
10066 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10067   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10068   \glsxtrfullsep{##1}%
10069   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshort{##1}}}%
10070 }%
10071 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10072   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10073   \glsxtrfullsep{##1}%
10074   \glsxtrparen{\protect\glsfirstabbrvfont{\glsaccessshortpl{##1}}}%
10075 }%
```

The first use full form only displays the long form.

```
10076 \renewcommand*{\glsxtrfullformat}[2]{%
10077   \glsxtrlonghyphennoshort{##1}{\glsaccesslong{##1}}{##2}%
10078 }%
10079 \renewcommand*{\glsxtrfullplformat}[2]{%
10080   \glsxtrlonghyphennoshort{##1}{\glsaccesslongpl{##1}}{##2}%
10081 }%
10082 \renewcommand*{\Glsxtrfullformat}[2]{%
10083   \glsxtrlonghyphennoshort{##1}{\Glsaccesslong{##1}}{##2}%
10084 }%
10085 \renewcommand*{\Glsxtrfullplformat}[2]{%
10086   \glsxtrlonghyphennoshort{##1}{\Glsaccesslongpl{##1}}{##2}%
10087 }%
10088 }
```

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.

```
10089 \newabbreviationstyle{long-hyphen-noshort-noreg}{%
10090 {%
10091   \renewcommand*{\CustomAbbreviationFields}{%
10092     name={\glsxtrlongnoshortname},
10093     sort={\the\glsshorttok},
10094     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10095     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10096     text={\protect\glslonghyphenfont{\the\glslongtok}},%
10097     plural={\protect\glslonghyphenfont{\the\glslongpltok}},%
```

```

10098     description={\the\glslongtok}%
10099 }%
    Unset the regular attribute if it has been set.
10100 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10101     \glshasattribute{\the\glslabeltok}{regular}%
10102     {%
10103         \glssetattribute{\the\glslabeltok}{regular}{false}%
10104     }%
10105     {}%
10106 }%
10107 }%
10108 {%
10109 \GlsXtrUseAbbrStyleFmts{long-desc}%
10110 }

```

`\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.

```

10111 \newcommand*{\glsxtrlonghyphen}[3]{%
    Grouping is needed to localise the redefinitions.
10112 {%
10113     \glsxtrifhyphenstart{#3}{\def\glsxtrwordsep{-}}{}%
10114     \glsfirstlonghyphenfont{#1}%
10115 }%
10116 }

```

`\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.

```

10117 \newcommand*{\glsxtrposthyphenshort}[2]{%
10118 {%
10119     \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
10120     \ifglsxtrinsertinside{\glsfirstlonghyphenfont{#2}}\else{#2}\fi
10121     \glsxtrfullsep{#1}%
10122     \glsxtrparen
10123     {\glsfirstabbrvhyphenfont{\glsentryshort{#1}\ifglsxtrinsertinside{#2}\fi}%
10124     \ifglsxtrinsertinside\else{#2}\fi
10125 }%
10126 }%
10127 }

```

```
hyphen subsequent \glsxtrposthyphensubsequent{\label}{\insert}
```

Format in the post-link hook for subsequent use. The label is ignored by default.

```
10128 \newcommand*\glsxtrposthyphensubsequent[2]{%
10129   \glsabbrvfont{\ifglsxtrinsertinside {\#2}\fi}%
10130   \ifglsxtrinsertinside \else{\#2}\fi
10131 }
```

postshort-hyphen Like long-hyphen-short-hyphen but shifts the insert and parenthetical material to the post-link hook.

```
10132 \newabbreviationstyle{long-hyphen-postshort-hyphen}{%
10133 {%
10134   \renewcommand*\CustomAbbreviationFields{%
10135     name={\glsxtrlongshortname},
10136     sort={\the\glsshorttok},
10137     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10138     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10139     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10140     description={\protect\glslonghypenfont{\the\glslongtok}}}}%
10141 \renewcommand*\GlsXtrPostNewAbbreviation{%
10142   \csdef{glsxtrpostlink\glscategorylabel}{%
10143     \glsxtrifwasfirstuse
10144     {%
10145       \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
10146     }%
10147   }%
```

Put the insertion into the post-link:

```
10148   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10149   }%
10150   }%
10151   \glshasattribute{\the\glslabeltok}{regular}%
10152   {%
10153     \glssetattribute{\the\glslabeltok}{regular}{false}%
10154   }%
10155   {}%
10156 }%
10157 }%
10158 {%
```

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

```
10159 \renewcommand*\abrvpluralsuffix{\glsxtrabbrvpluralsuffix}%
10160 \renewcommand*\glsabbrvfont[1]{\glsabbrvhypenfont{\##1}}%
10161 \renewcommand*\glsfirstabbrvfont[1]{\glsfirstabbrvhypenfont{\##1}}%
10162 \renewcommand*\glsfirstlongfont[1]{\glsfirstlonghyphenfont{\##1}}%
10163 \renewcommand*\glslongfont[1]{\glslonghypenfont{\##1}}%
```

Subsequent use needs to omit the insertion:

```

10164 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10165   \glsabbrvfont{\glsaccessshort{##1}}%
10166 }%
10167 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
10168   \glsabbrvfont{\glsaccessshortpl{##1}}%
10169 }%
10170 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10171   \glsabbrvfont{\Glsaccessshort{##1}}%
10172 }%
10173 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10174   \glsabbrvfont{\Glsaccessshortpl{##1}}%
10175 }%

```

First use full form:

```

10176 \renewcommand*{\glsxtrfullformat}[2]{%
10177   \glsxtrlonghyphen{\glsaccesslong{##1}{##1}{##2}}%
10178 }%
10179 \renewcommand*{\glsxtrfullplformat}[2]{%
10180   \glsxtrlonghyphen{\glsaccesslongpl{##1}{##1}{##2}}%
10181 }%
10182 \renewcommand*{\Glsxtrfullformat}[2]{%
10183   \glsxtrlonghyphen{\Glsaccesslong{##1}{##1}{##2}}%
10184 }%
10185 \renewcommand*{\Glsxtrfullplformat}[2]{%
10186   \glsxtrlonghyphen{\Glsaccesslongpl{##1}{##1}{##2}}%
10187 }%

```

In-line format.

```

10188 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10189   \glsfirstlonghyphenfont{\glsaccesslong{##1}}%
10190   \ifglsxtrinsertinside{##2}\fi}%
10191   \ifglsxtrinsertinside \else{##2}\fi
10192 }%
10193 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10194   \glsfirstlonghyphenfont{\glsaccesslongpl{##1}}%
10195   \ifglsxtrinsertinside{##2}\fi}%
10196   \ifglsxtrinsertinside \else{##2}\fi
10197 }%
10198 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10199   \glsfirstlonghyphenfont{\Glsaccesslong{##1}}%
10200   \ifglsxtrinsertinside{##2}\fi}%
10201   \ifglsxtrinsertinside \else{##2}\fi
10202 }%
10203 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10204   \glsfirstlonghyphenfont{\Glsaccesslongpl{##1}}%
10205   \ifglsxtrinsertinside{##2}\fi}%
10206   \ifglsxtrinsertinside \else{##2}\fi
10207 }%
10208 }

```

ort-hyphen-desc Like long-hyphen-postshort-hyphen but the description must be supplied by the user.

```
10209 \newabbreviationstyle{long-hyphen-postshort-hyphen-desc}{%
10210 {%
10211   \renewcommand*{\CustomAbbreviationFields}{%
10212     name={\glsxtrlongshortdescname},%
10213     sort={\glsxtrlongshortdescsort},%
10214     first={\protect\glsfirstlonghyphenfont{\the\glslongtok}},%
10215     firstplural={\protect\glsfirstlonghyphenfont{\the\glslongpltok}},%
10216     text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
10217     plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}}%
10218 }%
10219 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10220   \csdef{glsxtrpostlink}{\glscategorylabel}{%
10221     \glsxtrifwasfirstuse
10222   }%
10223   \glsxtrposthyphenshort{\glslabel}{\glsinsert}%
10224 }%
10225 }%
```

Put the insertion into the post-link:

```
10226   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10227 }%
10228 }%
10229 \glshasattribute{\the\glslabeltok}{regular}%
10230 {%
10231   \glssetattribute{\the\glslabeltok}{regular}{false}%
10232 }%
10233 {}%
10234 }%
10235 }%
10236 {%
10237 \GlsXtrUseAbbrStyleFmts{long-hyphen-postshort-hyphen}%
10238 }
```

rshorthypenlong **\glsxtrshorthypenlong{\langle label \rangle}{\langle short \rangle}{\langle long \rangle}{\langle insert \rangle}**

The *⟨long⟩* and *⟨short⟩* arguments may be the plural form. The *⟨long⟩* argument may also be the first letter uppercase form.

```
10239 \newcommand*{\glsxtrshorthypenlong}[4]{%
```

Grouping is needed to localise the redefinitions.

```
10240 {%
```

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.)

```
10241 \glsxtrifhyphenstart{#4}{\def\glsxtrwordsep{-}}{}}
```

```

10242   \glsfirstabbrvhypenfont{#2\ifglsxtrinsertinside{#4}\fi}%
10243   \ifglsxtrinsertinside\else{#4}\fi
10244   \glsxtrfullsep{#1}%
10245   \glsxtrparen{\glsfirstlonghypenfont{#3\ifglsxtrinsertinside{#4}\fi}%
10246   \ifglsxtrinsertinside\else{#4}\fi}%
10247 }%
10248 }

```

hen-long-hyphen Designed for use with the markwords attribute.

```

10249 \newabbreviationstyle{short-hyphen-long-hyphen}%
10250 {%
10251   \renewcommand*{\CustomAbbreviationFields}{%
10252     name={\glsxtrshortlongname},
10253     sort={\the\glsshorttok},
10254     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
10255       \protect\glsxtrfullsep{\the\glslabeltok}%
10256       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
10257     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
10258       \protect\glsxtrfullsep{\the\glslabeltok}%
10259       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
10260     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10261     description={\protect\glslonghypenfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```

10262   \renewcommand*{\GlsXtrPostNewAbbreviation}%
10263     \glshasattribute{\the\glslabeltok}{regular}%
10264   {%
10265     \glssetattribute{\the\glslabeltok}{regular}{false}%
10266   }%
10267   {}%
10268 }%
10269 }%
10270 {%
10271   \renewcommand*{\abbrvpluralsuffix}{\glsxtrhyphensuffix}%
10272   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10273   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10274   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10275   \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%

```

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

```

10276   \renewcommand*{\glsxtrfullformat}[2]{%
10277     \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\glsaccesslong{##1}}{##2}%
10278   }%
10279   \renewcommand*{\glsxtrfullplformat}[2]{%
10280     \glsxtrshorthypenlong{##1}%
10281     {\glsaccessshort{##1}}{\glsaccesslongpl{##1}}{##2}%
10282   }%
10283   \renewcommand*{\GlsXtrfullformat}[2]{%
10284     \glsxtrshorthypenlong{##1}{\glsaccessshort{##1}}{\Glsaccesslong{##1}}{##2}%
10285   }%

```

```

10286 \renewcommand*\Glsxtrfullplformat}[2]{%
10287   \glsxtrshorthypenlong{##1}%
10288   {\glsaccessshortpl{##1}}{\Glsaccesslongpl{##1}}{##2}%
10289 }%
10290 }

ong-hyphen-desc Like short-hyphen-long-hyphen but the description must be supplied by the user.
10291 \newabbreviationstyle{short-hyphen-long-hyphen-desc}{%
10292 {%
10293   \renewcommand*\CustomAbbreviationFields}{%
10294     name={\glsxtrshortlongdescname},
10295     sort={\glsxtrshortlongdescsort},
10296     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}%
10297       \protect\glsxtrfullsep{\the\glslabeltok}%
10298       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongtok}}},%
10299     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}%
10300       \protect\glsxtrfullsep{\the\glslabeltok}%
10301       \glsxtrparen{\protect\glsfirstlonghypenfont{\the\glslongpltok}}},%
10302     text={\protect\glsabbrvhypenfont{\the\glsshorttok}},%
10303     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}}%
10304 }%
10305 }

Unset the regular attribute if it has been set.
10306 \renewcommand*\GlsXtrPostNewAbbreviation}{%
10307   \glshasattribute{\the\glslabeltok}{regular}%
10308   {%
10309     \glssetattribute{\the\glslabeltok}{regular}{false}%
10310   }%
10311 }%
10312 }%
10313 {%
10314 \GlsXtrUseAbbrStyleFmts{short-hyphen-long-hyphen}%
10315 }

```

`\glsxtrshorthypen{<short>}{{<label>}}{<insert>}`

Used by short-hyphen-postlong-hyphen. The `<insert>` is checked to determine if it starts with a hyphen but isn't used here as it's moved to the post-link hook.

```

10316 \newcommand*\glsxtrshorthypen}[3]{%
10317 {%
10318   \glsxtrifhypenstart{#3}{\def\glsxtrwordsep{-}}{}%
10319   \glsfirstabbrvhypenfont{#1}%
10320 }%
10321 }

```

```
\glsxtrposthyphenlong{\label}{\insert}
```

Used in the post-link hook for the short-hyphen-postlong-hyphen style. Much like \glsxtrshorthyphenlong but omits the *<short>* part. This always uses the singular long form.

```
10322 \newcommand*\glsxtrposthyphenlong[2]{%
10323 {%
10324   \glsxtrifhyphenstart{#2}{\def\glsxtrwordsep{-}}{}%
10325   \ifglsxtrinsertinside{\glsfirstabbrvhypenfont{#2}}\else{#2}\fi%
10326   \glsxtrfullsep{#1}%
10327   \glsxtrparen%
10328   {\glsfirstlonghypenfont{\glsentrylong{#1}}\ifglsxtrinsertinside{#2}\fi}%
10329   \ifglsxtrinsertinside\else{#2}\fi%
10330 }%
10331 }%
10332 }
```

postlong-hyphen Like short-hyphen-long-hyphen but shifts the insert and parenthetical material to the post-link hook.

```
10333 \newabbreviationstyle{short-hyphen-postlong-hyphen}%
10334 {%
10335   \renewcommand*\CustomAbbreviationFields{%
10336     name={\glsxtrshortlongname},
10337     sort={\the\glsshorttok},
10338     first={\protect\glsfirstabbrvhypenfont{\the\glsshorttok}},%
10339     firstplural={\protect\glsfirstabbrvhypenfont{\the\glsshortpltok}},%
10340     plural={\protect\glsabbrvhypenfont{\the\glsshortpltok}},%
10341     description={\protect\glslonghypenfont{\the\glslongtok}}}%
10342   \renewcommand*\GlsXtrPostNewAbbreviation{%
10343     \csdef{glsxtrpostlink\glscategorylabel}{%
10344       \glsxtrifwasfirstuse
10345     }%
10346     \glsxtrposthyphenlong{\glslabel}{\glsinsert}%
10347   }%
10348 }%
```

Put the insertion into the post-link:

```
10349   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10350 }%
10351 }%
10352 \glshasattribute{\the\glslabeltok}{regular}%
10353 {%
10354   \glssetattribute{\the\glslabeltok}{regular}{false}%
10355 }%
10356 {}%
10357 }%
10358 }%
10359 {%
```

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

```
10360 \renewcommand*{\abbrvpluralsuffix}{\glsxtrabbrvpluralsuffix}%
10361 \renewcommand*{\glsabbrvfont}[1]{\glsabbrvhypenfont{##1}}%
10362 \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvhypenfont{##1}}%
10363 \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlonghypenfont{##1}}%
10364 \renewcommand*{\glslongfont}[1]{\glslonghypenfont{##1}}%
```

Subsequent use needs to omit the insertion:

```
10365 \renewcommand*{\glsxtrsubsequentfmt}[2]{%
10366   \glsabbrvfont{\glsaccessshort{##1}}%
10367 }%
10368 \renewcommand*{\glsxtrsubsequentplfmt}[2]{%
10369   \glsabbrvfont{\glsaccessshortpl{##1}}%
10370 }%
10371 \renewcommand*{\Glsxtrsubsequentfmt}[2]{%
10372   \glsabbrvfont{\Glsaccessshort{##1}}%
10373 }%
10374 \renewcommand*{\Glsxtrsubsequentplfmt}[2]{%
10375   \glsabbrvfont{\Glsaccessshortpl{##1}}%
10376 }%
```

First use full form:

```
10377 \renewcommand*{\glsxtrfullformat}[2]{%
10378   \glsxtrshorthypen{\glsaccessshort{##1}}{##1}{##2}%
10379 }%
10380 \renewcommand*{\glsxtrfullplformat}[2]{%
10381   \glsxtrshorthypen{\glsaccessshortpl{##1}}{##1}{##2}%
10382 }%
10383 \renewcommand*{\Glsxtrfullformat}[2]{%
10384   \glsxtrshorthypen{\Glsaccessshort{##1}}{##1}{##2}%
10385 }%
10386 \renewcommand*{\Glsxtrfullplformat}[2]{%
10387   \glsxtrshorthypen{\Glsaccessshortpl{##1}}{##1}{##2}%
10388 }%
```

In-line format. Commands like \glsxtrfull set \glsinsert to empty. The entire link-text (provided by the following commands) is stored in \glscustomtext.

```
10389 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10390   \glsfirstabbrvhypenfont{\glsaccessshort{##1}}%
10391   \ifglsxtrinsertinside{##2}\fi}%
10392   \ifglsxtrinsertinside \else{##2}\fi
10393 }%
10394 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10395   \glsfirstabbrvhypenfont{\glsaccessshortpl{##1}}%
10396   \ifglsxtrinsertinside{##2}\fi}%
10397   \ifglsxtrinsertinside \else{##2}\fi
10398 }%
10399 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10400   \glsfirstabbrvhypenfont{\Glsaccessshort{##1}}%
10401   \ifglsxtrinsertinside{##2}\fi}%

```

```

10402     \ifglsxtrinsertinside \else{##2}\fi
10403   }%
10404   \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10405     \glsfirstabbrvhyphenfont{\Glsaccessshortpl{##1}}%
10406     \ifglsxtrinsertinside{##2}\fi}%
10407   \ifglsxtrinsertinside \else{##2}\fi
10408 }%
10409 }

```

`ong-hyphen-desc` Like `short-hyphen-postlong-hyphen` but the description must be supplied by the user.

```

10410 \newabbreviationstyle{short-hyphen-postlong-hyphen-desc}{%
10411 {%
10412   \renewcommand*{\CustomAbbreviationFields}{%
10413     name={\glsxtrshortlongdescname},%
10414     sort={\glsxtrshortlongdescsort},%
10415     first={\protect\glsfirstabbrvhyphenfont{\the\glsshorttok}},%
10416     firstplural={\protect\glsfirstabbrvhyphenfont{\the\glsshortpltok}},%
10417     text={\protect\glsabbrvhyphenfont{\the\glsshorttok}},%
10418     plural={\protect\glsabbrvhyphenfont{\the\glsshortpltok}}}%
10419 }%
10420 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10421   \csdef{glsxtrpostlink}{\glscategorylabel}{%
10422     \glsxtrifwasfirstuse
10423     {%
10424       \glsxtrposthyphenlong{\glslabel}{\glsinsert}}%
10425     }%
10426   }%

```

Put the insertion into the post-link:

```

10427   \glsxtrposthyphensubsequent{\glslabel}{\glsinsert}%
10428   }%
10429 }%
10430 \glshasattribute{\the\glslabeltok}{regular}%
10431 {%
10432   \glssetattribute{\the\glslabeltok}{regular}{false}%
10433 }%
10434 {}%
10435 }%
10436 }%
10437 {}%
10438 \GlsXtrUseAbbrStyleFmts{short-hyphen-postlong-hyphen}%
10439 }

```

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`

```
10440 \newcommand*{\glsabbrvonlyfont}{\glsabbrvdefaultfont}%

```

```
stabbrvonlyfont
10441 \newcommand*{\glsfirststabbrvonlyfont}{\glsabbrvonlyfont}%

```

```
glslongonlyfont
10442 \newcommand*{\glslongonlyfont}{\glslongdefaultfont}%

```

```
rstlongonlyfont
10443 \newcommand*{\glsfirstlongonlyfont}{\glslongonlyfont}%

```

The default short form suffix:

```
lsxtronlysuffix
10444 \newcommand*{\glsxtronlysuffix}{\glsxtrabrvpluralsuffix}%

```

\glsxtronlyname The default name format for this style.

```
10445 \newcommand*{\glsxtronlyname}{%
10446   \protect\glsabbrvonlyfont{\the\glsshorttok}%
10447 }%
```

only-short-only

```
10448 \newabbreviationstyle{long-only-short-only}%
10449 {%
10450   \renewcommand*{\CustomAbbreviationFields}{%
10451     name={\glsxtronlyname},
10452     sort={\the\glsshorttok},
10453     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
10454     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
10455     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}},%
10456     description={\protect\glslongonlyfont{\the\glslongtok}}}%

```

Unset the regular attribute if it has been set.

```
10457 \renewcommand*{\GlsXtrPostNewAbbreviation}{%
10458   \glshasattribute{\the\glslabeltok}{regular}%
10459   {%
10460     \glssetattribute{\the\glslabeltok}{regular}{false}%
10461   }%
10462   {}%
10463 }%
10464 }%
10465 {%
10466   \renewcommand*{\abbrvpluralsuffix}{\protect\glsxtronlysuffix}%
10467   \renewcommand*{\glsabbrvfont}[1]{\glsabbrvonlyfont{\##1}}%
10468   \renewcommand*{\glsfirstabbrvfont}[1]{\glsfirstabbrvonlyfont{\##1}}%
10469   \renewcommand*{\glsfirstlongfont}[1]{\glsfirstlongonlyfont{\##1}}%
10470   \renewcommand*{\glslongfont}[1]{\glslongonlyfont{\##1}}%

```

The first use full form doesn't show the short form.

```
10471 \renewcommand*{\glsxtrfullformat}[2]{%
10472   \glsfirstlongonlyfont{\glsaccesslong{\##1}\ifglsxtrinsertinside##2\fi}%
}
```

```

10473     \ifglsxtrinsertinside\else##2\fi
10474   }%
10475 \renewcommand*{\glsxtrfullplformat}[2]{%
10476   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10477   \ifglsxtrinsertinside\else##2\fi
10478 }%
10479 \renewcommand*{\Glsxtrfullformat}[2]{%
10480   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10481   \ifglsxtrinsertinside\else##2\fi
10482 }%
10483 \renewcommand*{\Glsxtrfullplformat}[2]{%
10484   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10485   \ifglsxtrinsertinside\else##2\fi
10486 }%

```

The inline full form does show the short form.

```

10487 \renewcommand*{\glsxtrinlinefullformat}[2]{%
10488   \glsfirstlongonlyfont{\glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10489   \ifglsxtrinsertinside\else##2\fi
10490   \glsxtrfullsep{##1}%
10491   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshort{##1}}}%
10492 }%
10493 \renewcommand*{\glsxtrinlinefullplformat}[2]{%
10494   \glsfirstlongonlyfont{\glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10495   \ifglsxtrinsertinside\else##2\fi
10496   \glsxtrfullsep{##1}%
10497   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
10498 }%
10499 \renewcommand*{\Glsxtrinlinefullformat}[2]{%
10500   \glsfirstlongonlyfont{\Glsaccesslong{##1}\ifglsxtrinsertinside##2\fi}%
10501   \ifglsxtrinsertinside\else##2\fi
10502   \glsxtrfullsep{##1}%
10503   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\glsaccessshortpl{##1}}}%
10504 }%
10505 \renewcommand*{\Glsxtrinlinefullplformat}[2]{%
10506   \glsfirstlongonlyfont{\Glsaccesslongpl{##1}\ifglsxtrinsertinside##2\fi}%
10507   \ifglsxtrinsertinside\else##2\fi
10508   \glsxtrfullsep{##1}%
10509   \glsxtrparen{\protect\glsfirstabbrvonlyfont{\Glsaccessshortpl{##1}}}%
10510 }%
10511 }

```

xtronlydescsort

```
10512 \newcommand*{\glsxtronlydescsort}{\the\glslongtok}
```

xtronlydescname

```
10513 \newcommand*{\glsxtronlydescname}{%
10514   \protect\glslongfont{\the\glslongtok}%
10515 }
```

```

short-only-desc
10516 \newabbreviationstyle{long-only-short-only-desc}%
10517 {%
10518   \renewcommand*{\CustomAbbreviationFields}{%
10519     name={\glsxtronlydescname},%
10520     sort={\glsxtronlydescsort},%
10521     first={\protect\glsfirstlongonlyfont{\the\glslongtok}},%
10522     firstplural={\protect\glsfirstlongonlyfont{\the\glslongpltok}},%
10523     text={\protect\glsabbrvonlyfont{\the\glsshorttok}},%
10524     plural={\protect\glsabbrvonlyfont{\the\glsshortpltok}}%
10525   }%

```

Unset the regular attribute if it has been set.

```

10526   \renewcommand*{\GlsXtrPostNewAbbreviation}%
10527     {\glshasattribute{\the\glslabeltok}{regular}}%
10528     {%
10529       \glssetattribute{\the\glslabeltok}{regular}{false}}%
10530     {%
10531       {}%
10532     }%
10533   }%
10534 {%
10535   \GlsXtrUseAbbrStyleFmts{long-only-short-only}%
10536 }

```

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:

```
10537 \let\@glsxtr@org@markright\markright
```

Redefine (grouping not added in case it interferes with the original code):

```
10538 \renewcommand*\{\markright}[1]{%
10539   \glsxtrmarkhook
10540   \@glsxtr@org@markright{\@glsxtrinmark#1\@glsxtrnotinmark}%
10541   \glsxtrrestoremarkhook
10542 }
```

\markboth Save original definition:

```
10543 \let\@glsxtr@org@markboth\markboth
```

Redefine (grouping not added in case it interferes with the original code):

```
10544 \renewcommand*\{\markboth}[2]{%
10545   \glsxtrmarkhook
10546   \@glsxtr@org@markboth
10547   {\@glsxtrinmark#1\@glsxtrnotinmark}%
10548   {\@glsxtrinmark#2\@glsxtrnotinmark}%
10549   \glsxtrrestoremarkhook
10550 }
```

Also do this for \starttoc

\starttoc Save original definition:

```
10551 \let\@glsxtr@org@\starttoc\starttoc
```

Redefine:

```
10552 \renewcommand*\{\starttoc}[1]{%
10553   \glsxtrmarkhook
10554   \@glsxtrinmark
10555   \@glsxtr@org@\starttoc{#1}%
10556   \@glsxtrnotinmark
10557   \glsxtrrestoremarkhook
10558 }
```

If this causes a problem provide a simple way of switching back to the original definitions:

sxtrRevertMarks

```
10559 \newcommand*\{\glsxtrRevertMarks}{%
10560   \let\markright\@glsxtr@org@markright
10561   \let\markboth\@glsxtr@org@markboth
10562   \let\@starttoc\@glsxtr@org@\starttoc
10563 }
```

\glsxtrifinmark

```
10564 \newcommand*\{\glsxtrifinmark}[2]{#2}
```

```

@glsxtrinmark
10565 \newrobustcmd*{\glsxtrinmark}{%
10566   \let\glsxtrifinmark\@firstoftwo
10567 }

glsxtrnotinmark
10568 \newrobustcmd*{\glsxtrnotinmark}{%
10569   \let\glsxtrifinmark\@secondoftwo
10570 }

eorpdfforheading
10571 \ifdef\texorpdfstring
10572 {
10573   \newcommand*{\glsxtrtitleorpdfforheading}[3]{\texorpdfstring{#1}{#2}}
10574 }
10575 {
10576   \newcommand*{\glsxtrtitleorpdfforheading}[3]{#1}
10577 }

```

\glsxtrmarkhook Hook used in new definition of \markboth and \markright to make some changes to apply to the marks:

```

10578 \newcommand*{\glsxtrmarkhook}{%
  Save current definitions:
10579   \let\@glsxtr@org@MakeUppercase\MakeUppercase
10580   \let\@glsxtr@org@glsxtrtitleorpdfforheading\glsxtrtitleorpdfforheading
10581   \let\@glsxtr@org@glsxtrtitleshort\glsxtrtitleshort
10582   \let\@glsxtr@org@glsxtrtitleshortpl\glsxtrtitleshortpl
10583   \let\@glsxtr@org@Glsxtrtitleshort\Glsxtrtitleshort
10584   \let\@glsxtr@org@Glsxtrtitleshortpl\Glsxtrtitleshortpl
10585   \let\@glsxtr@org@glsxtrtitlename\glsxtrtitlename
10586   \let\@glsxtr@org@Glsxtrtitlename\Glsxtrtitlename
10587   \let\@glsxtr@org@glsxtrtitletext\glsxtrtitletext
10588   \let\@glsxtr@org@Glsxtrtitletext\Glsxtrtitletext
10589   \let\@glsxtr@org@glsxtrtitleplural\glsxtrtitleplural
10590   \let\@glsxtr@org@Glsxtrtitleplural\Glsxtrtitleplural
10591   \let\@glsxtr@org@glsxtrtitlefirst\glsxtrtitlefirst
10592   \let\@glsxtr@org@Glsxtrtitlefirst\Glsxtrtitlefirst
10593   \let\@glsxtr@org@glsxtrtitlefirstplural\glsxtrtitlefirstplural
10594   \let\@glsxtr@org@Glsxtrtitlefirstplural\Glsxtrtitlefirstplural
10595   \let\@glsxtr@org@glsxtrtitlelong\glsxtrtitlelong
10596   \let\@glsxtr@org@glsxtrtitlelongpl\glsxtrtitlelongpl
10597   \let\@glsxtr@org@Glsxtrtitlelong\Glsxtrtitlelong
10598   \let\@glsxtr@org@Glsxtrtitlelongpl\Glsxtrtitlelongpl
10599   \let\@glsxtr@org@glsxtrtitlefull\glsxtrtitlefull
10600   \let\@glsxtr@org@glsxtrtitlefullpl\glsxtrtitlefullpl
10601   \let\@glsxtr@org@Glsxtrtitlefull\Glsxtrtitlefull
10602   \let\@glsxtr@org@Glsxtrtitlefullpl\Glsxtrtitlefullpl

```

New definitions

```

10603 \let\glsxtrifinmark\@firstoftwo
10604 \let\MakeUppercase\MakeTextUppercase
10605 \let\glsxtrtitleorpdforheading\@thirdofthree
10606 \let\glsxtrtitleshort\glsxtrheadshort
10607 \let\glsxtrtitleshortpl\glsxtrheadshortpl
10608 \let\Glsxtrtitleshort\Glsxtrheadshort
10609 \let\Glsxtrtitleshortpl\Glsxtrheadshortpl
10610 \let\glsxtrtitlename\glsxtrheadname
10611 \let\Glsxtrtitlename\Glsxtrheadname
10612 \let\glsxtrtitletext\glsxtrheadtext
10613 \let\Glsxtrtitletext\Glsxtrheadtext
10614 \let\glsxtrtitleplural\glsxtrheadplural
10615 \let\Glsxtrtitleplural\Glsxtrheadplural
10616 \let\glsxtrtitlefirst\glsxtrheadfirst
10617 \let\Glsxtrtitlefirst\Glsxtrheadfirst
10618 \let\glsxtrtitlefirstplural\glsxtrheadfirstplural
10619 \let\Glsxtrtitlefirstplural\Glsxtrheadfirstplural
10620 \let\glsxtrtitlelong\glsxtrheadlong
10621 \let\glsxtrtitlelongpl\glsxtrheadlongpl
10622 \let\Glsxtrtitlelong\Glsxtrheadlong
10623 \let\Glsxtrtitlelongpl\Glsxtrheadlongpl
10624 \let\glsxtrtitlefull\glsxtrheadfull
10625 \let\glsxtrtitlefullpl\glsxtrheadfullpl
10626 \let\Glsxtrtitlefull\Glsxtrheadfull
10627 \let\Glsxtrtitlefullpl\Glsxtrheadfullpl
10628 }

```

`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.)

```

10629 \newcommand*\glsxtrrestoremarkhook}{%
10630 \let\glsxtrifinmark\@secondoftwo
10631 \let\MakeUppercase\@glsxtr@org@MakeUppercase
10632 \let\glsxtrtitleorpdforheading\@glsxtr@org@glsxtrtitleorpdforheading
10633 \let\glsxtrtitleshort\@glsxtr@org@glsxtrtitleshort
10634 \let\glsxtrtitleshortpl\@glsxtr@org@glsxtrtitleshortpl
10635 \let\Glsxtrtitleshort\@glsxtr@org@Glsxtrtitleshort
10636 \let\Glsxtrtitleshortpl\@glsxtr@org@Glsxtrtitleshortpl
10637 \let\glsxtrtitlename\@glsxtr@org@glsxtrtitlename
10638 \let\Glsxtrtitlename\@glsxtr@org@Glsxtrtitlename
10639 \let\glsxtrtitletext\@glsxtr@org@glsxtrtitletext
10640 \let\Glsxtrtitletext\@glsxtr@org@Glsxtrtitletext
10641 \let\glsxtrtitleplural\@glsxtr@org@glsxtrtitleplural
10642 \let\Glsxtrtitleplural\@glsxtr@org@Glsxtrtitleplural
10643 \let\glsxtrtitlefirst\@glsxtr@org@glsxtrtitlefirst
10644 \let\Glsxtrtitlefirst\@glsxtr@org@Glsxtrtitlefirst
10645 \let\glsxtrtitlefirstplural\@glsxtr@org@glsxtrtitlefirstplural

```

```

10646 \let\Glsxtrtitlefirstplural@\glsxtr@org@Glsxtrtitlefirstplural
10647 \let\glsxtrtitlelong@\glsxtr@org@glsxtrtitlelong
10648 \let\glsxtrtitlelongpl@\glsxtr@org@glsxtrtitlelongpl
10649 \let\Glsxtrtitlelong@\glsxtr@org@Glsxtrtitlelong
10650 \let\Glsxtrtitlelongpl@\glsxtr@org@Glsxtrtitlelongpl
10651 \let\glsxtrtitlefull@\glsxtr@org@glsxtrtitlefull
10652 \let\glsxtrtitlefullpl@\glsxtr@org@glsxtrtitlefullpl
10653 \let\Glsxtrtitlefull@\glsxtr@org@Glsxtrtitlefull
10654 \let\Glsxtrtitlefullpl@\glsxtr@org@Glsxtrtitlefullpl
10655 }

```

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.

```

10656 \newcommand*\glsxtrheadshort}[1]{%
10657 \protect\NoCaseChange
10658 {%
10659 \glsifattribute{#1}{headuc}{true}%
10660 {%
10661 \GLSxtrshort [noindex,hyper=false]{#1}[]%
10662 }%
10663 {%
10664 \glsxtrshort [noindex,hyper=false]{#1}[]%
10665 }%
10666 }%
10667 }

```

`lsxtrtitleshort` Command to display short form of abbreviation in section title and table of contents.

```

10668 \newrobustcmd*\glsxtrtitleshort}[1]{%
10669 \glsxtrshort [noindex,hyper=false]{#1}[]%
10670 }

```

`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.

```

10671 \newcommand*\glsxtrheadshortpl}[1]{%
10672 \protect\NoCaseChange
10673 {%
10674 \glsifattribute{#1}{headuc}{true}%
10675 {%
10676 \GLSxtrshortpl [noindex,hyper=false]{#1}[]%
10677 }%
10678 {%
10679 \glsxtrshortpl [noindex,hyper=false]{#1}[]%
10680 }%
10681 }%
10682 }

```

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents.

```
10683 \newrobustcmd*\{\glsxtrtitleshortpl\}[1]{%
10684   \glsxtrshortpl[noindex,hyper=false]{#1}[]%
10685 }
```

Glsxtrheadshort Command used to display short form in the page header with the first letter converted to upper case.

```
10686 \newcommand*\{\Glsxtrheadshort\}[1]{%
10687   \protect\NoCaseChange
10688   {%
10689     \glsifattribute{#1}{headuc}{true}%
10690     {%
10691       \GLSxtrshort[noindex,hyper=false]{#1}[]%
10692     }%
10693     {%
10694       \Glsxtrshort[noindex,hyper=false]{#1}[]%
10695     }%
10696   }%
10697 }
```

lsxtrtitleshort Command to display short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10698 \newrobustcmd*\{\Glsxtrtitleshort\}[1]{%
10699   \Glsxtrshort[noindex,hyper=false]{#1}[]%
10700 }
```

sxtrheadshortpl Command used to display plural short form in the page header with the first letter converted to upper case.

```
10701 \newcommand*\{\Glsxtrheadshortpl\}[1]{%
10702   \protect\NoCaseChange
10703   {%
10704     \glsifattribute{#1}{headuc}{true}%
10705     {%
10706       \GLSxtrshortpl[noindex,hyper=false]{#1}[]%
10707     }%
10708     {%
10709       \Glsxtrshortpl[noindex,hyper=false]{#1}[]%
10710     }%
10711   }%
10712 }
```

xtrtitleshortpl Command to display plural short form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10713 \newrobustcmd*\{\Glsxtrtitleshortpl\}[1]{%
10714   \Glsxtrshortpl[noindex,hyper=false]{#1}[]%
10715 }
```

\glsxtrheadname As above but for the name value.

```

10716 \newcommand*{\glsxtrheadname}[1]{%
10717   \protect\NoCaseChange
10718   {%
10719     \glsifattribute{#1}{headuc}{true}{%
10720       {%
10721         \GLSname[noindex,hyper=false]{#1}[]%
10722       }%
10723     {%
10724       \glsname[noindex,hyper=false]{#1}[]%
10725     }%
10726   }%
10727 }

```

`\glsxtrtitlename` Command to display name value in section title and table of contents.

```

10728 \newrobustcmd*{\glsxtrtitlename}[1]{%
10729   \glsname[noindex,hyper=false]{#1}[]%
10730 }

```

`\Glsxtrheadname` First letter converted to upper case

```

10731 \newcommand*{\Glsxtrheadname}[1]{%
10732   \protect\NoCaseChange
10733   {%
10734     \glsifattribute{#1}{headuc}{true}{%
10735       {%
10736         \GLSname[noindex,hyper=false]{#1}[]%
10737       }%
10738     {%
10739       \Glsname[noindex,hyper=false]{#1}[]%
10740     }%
10741   }%
10742 }

```

`\Glsxtrtitlename` Command to display name value in section title and table of contents with the first letter changed to upper case.

```

10743 \%changes{1.21}{2017-11-03}{new}
10744 \newrobustcmd*{\Glsxtrtitlename}[1]{%
10745   \Glsname[noindex,hyper=false]{#1}[]%
10746 }

```

`\glsxtrheadtext` As above but for the text value.

```

10747 \newcommand*{\glsxtrheadtext}[1]{%
10748   \protect\NoCaseChange
10749   {%
10750     \glsifattribute{#1}{headuc}{true}{%
10751       {%
10752         \GLStext[noindex,hyper=false]{#1}[]%
10753       }%
10754     {%
10755       \glstext[noindex,hyper=false]{#1}[]%

```

```
10756    }%
10757  }%
10758 }
```

`glsxtrtitletext` Command to display text value in section title and table of contents.

```
10759 \newrobustcmd*\{\glsxtrtitletext\}[1]{%
10760   \glstext[noindex,hyper=false]{#1}[]%
10761 }
```

`\Glsxtrheadtext` First letter converted to upper case

```
10762 \newcommand*\{\Glsxtrheadtext\}[1]{%
10763   \protect\NoCaseChange
10764 {%
10765   \glsifattribute{#1}{headuc}{true}%
10766   {%
10767     \GLStext[noindex,hyper=false]{#1}[]%
10768   }%
10769   {%
10770     \Glstext[noindex,hyper=false]{#1}[]%
10771   }%
10772 }%
10773 }
```

`Glsxtrtitletext` Command to display text value in section title and table of contents with the first letter changed to upper case.

```
10774 \newrobustcmd*\{\Glsxtrtitletext\}[1]{%
10775   \Glstext[noindex,hyper=false]{#1}[]%
10776 }
```

`lsxtrheadplural` As above but for the plural value.

```
10777 \newcommand*\{\lsxtrheadplural\}[1]{%
10778   \protect\NoCaseChange
10779 {%
10780   \glsifattribute{#1}{headuc}{true}%
10781   {%
10782     \GLSplural[noindex,hyper=false]{#1}[]%
10783   }%
10784   {%
10785     \glsplural[noindex,hyper=false]{#1}[]%
10786   }%
10787 }%
10788 }
```

`sxtrtitleplural` Command to display plural value in section title and table of contents.

```
10789 \newrobustcmd*\{\sxtrtitleplural\}[1]{%
10790   \glsplural[noindex,hyper=false]{#1}[]%
10791 }
```

```

lsxtrheadplural Convert first letter to upper case.
10792 \newcommand*\Glsxtrheadplural[1]{%
10793   \protect\NoCaseChange
10794   {%
10795     \glsifattribute{#1}{headuc}{true}%
10796     {%
10797       \GLSplural[noindex,hyper=false]{#1}[]%
10798     }%
10799     {%
10800       \Glsplural[noindex,hyper=false]{#1}[]%
10801     }%
10802   }%
10803 }

sxttitleplural Command to display plural value in section title and table of contents with the first letter
changed to upper case.
10804 \newrobustcmd*\Gsxtrtitleplural[1]{%
10805   \Glsplural[noindex,hyper=false]{#1}[]%
10806 }

glsxtrheadfirst As above but for the first value.
10807 \newcommand*\glsxtrheadfirst[1]{%
10808   \protect\NoCaseChange
10809   {%
10810     \glsifattribute{#1}{headuc}{true}%
10811     {%
10812       \GLSfirst[noindex,hyper=false]{#1}[]%
10813     }%
10814     {%
10815       \glsfirst[noindex,hyper=false]{#1}[]%
10816     }%
10817   }%
10818 }

sxttitlefirst Command to display first value in section title and table of contents.
10819 \newrobustcmd*\glsxtrtitlefirst[1]{%
10820   \glsfirst[noindex,hyper=false]{#1}[]%
10821 }

Glsxtrheadfirst First letter converted to upper case
10822 \newcommand*\Glsxtrheadfirst[1]{%
10823   \protect\NoCaseChange
10824   {%
10825     \glsifattribute{#1}{headuc}{true}%
10826     {%
10827       \GLSfirst[noindex,hyper=false]{#1}[]%
10828     }%
10829   }%

```

```
10830     \Glsfirst [noindex,hyper=false]{#1}[]%
10831   }%
10832 }%
10833 }
```

`lsxtrtitlefirst` Command to display `first` value in section title and table of contents with the first letter changed to upper case.

```
10834 \newrobustcmd*\{\Glsxtrtitlefirst\}[1]{%
10835   \Glsfirst [noindex,hyper=false]{#1}[]%
10836 }
```

`headfirstplural` As above but for the `firstplural` value.

```
10837 \newcommand*\{\glsxtrheadfirstplural\}[1]{%
10838   \protect\NoCaseChange
10839 }%
10840   \glsifattribute{#1}{headuc}{true}%
10841   {%
10842     \GLSfirstplural [noindex,hyper=false]{#1}[]%
10843   }%
10844   {%
10845     \glsfirstplural [noindex,hyper=false]{#1}[]%
10846   }%
10847 }%
10848 }
```

`titlefirstplural` Command to display `firstplural` value in section title and table of contents.

```
10849 \newrobustcmd*\{\glsxtrtitlefirstplural\}[1]{%
10850   \glsfirstplural [noindex,hyper=false]{#1}[]%
10851 }
```

`headfirstplural` First letter converted to upper case

```
10852 \newcommand*\{\Glsxtrheadfirstplural\}[1]{%
10853   \protect\NoCaseChange
10854 }%
10855   \glsifattribute{#1}{headuc}{true}%
10856   {%
10857     \GLSfirstplural [noindex,hyper=false]{#1}[]%
10858   }%
10859   {%
10860     \Glsfirstplural [noindex,hyper=false]{#1}[]%
10861   }%
10862 }%
10863 }
```

`titlefirstplural` Command to display `first` value in section title and table of contents with the first letter changed to upper case.

```
10864 \newrobustcmd*\{\Glsxtrtitlefirstplural\}[1]{%
10865   \Glsfirstplural [noindex,hyper=false]{#1}[]%
10866 }
```

\glsxtrheadlong Command used to display long form in the page header.

```
10867 \newcommand*\glsxtrheadlong[1]{%
10868   \protect\NoCaseChange
10869   {%
10870     \glsifattribute{#1}{headuc}{true}%
10871     {%
10872       \GLSxtrlong[noindex,hyper=false]{#1}[]%
10873     }%
10874     {%
10875       \glsxtrlong[noindex,hyper=false]{#1}[]%
10876     }%
10877   }%
10878 }
```

\glsxtrtitlelong Command to display long form of abbreviation in section title and table of contents.

```
10879 \newrobustcmd*\glsxtrtitlelong[1]{%
10880   \glsxtrlong[noindex,hyper=false]{#1}[]%
10881 }
```

\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.

```
10882 \newcommand*\glsxtrheadlongpl[1]{%
10883   \protect\NoCaseChange
10884   {%
10885     \glsifattribute{#1}{headuc}{true}%
10886     {%
10887       \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
10888     }%
10889     {%
10890       \glsxtrlongpl[noindex,hyper=false]{#1}[]%
10891     }%
10892   }%
10893 }
```

\sxtrtitlelongpl Command to display plural long form of abbreviation in section title and table of contents.

```
10894 \newrobustcmd*\glsxtrtitlelongpl[1]{%
10895   \glsxtrlongpl[noindex,hyper=false]{#1}[]%
10896 }
```

\Glsxtrheadlong Command used to display long form in the page header with the first letter converted to upper case.

```
10897 \newcommand*\Glsxtrheadlong[1]{%
10898   \protect\NoCaseChange
10899   {%
10900     \glsifattribute{#1}{headuc}{true}%
10901     {%
10902       \GLSxtrlong[noindex,hyper=false]{#1}[]%
```

```
10903   }%
10904   {%
10905     \Glsxtrlong[noindex,hyper=false]{#1}[]%
10906   }%
10907 }%
10908 }
```

`Glsxtrtitlelong` Command to display long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10909 \newrobustcmd*\{\Glsxtrtitlelong\}[1]{%
10910   \Glsxtrlong[noindex,hyper=false]{#1}[]%
10911 }
```

`Glsxtrheadlongpl` Command used to display plural long form in the page header with the first letter converted to upper case.

```
10912 \newcommand*\{\Glsxtrheadlongpl\}[1]{%
10913   \protect\NoCaseChange
10914   {%
10915     \glsifattribute{#1}{headuc}{true}%
10916     {%
10917       \GLSxtrlongpl[noindex,hyper=false]{#1}[]%
10918     }%
10919   {%
10920     \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
10921   }%
10922 }%
10923 }
```

`Glsxtrtitlelongpl` Command to display plural long form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10924 \newrobustcmd*\{\Glsxtrtitlelongpl\}[1]{%
10925   \Glsxtrlongpl[noindex,hyper=false]{#1}[]%
10926 }
```

`\glsxtrheadfull` Command used to display full form in the page header.

```
10927 \newcommand*\{\glsxtrheadfull\}[1]{%
10928   \protect\NoCaseChange
10929   {%
10930     \glsifattribute{#1}{headuc}{true}%
10931     {%
10932       \GLSxtrfull[noindex,hyper=false]{#1}[]%
10933     }%
10934   {%
10935     \glsxtrfull[noindex,hyper=false]{#1}[]%
10936   }%
10937 }%
10938 }
```

`glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents.

```
10939 \newrobustcmd*\{\glsxtrtitlefull\}[1]{%
10940   \glsxtrfull[noindex,hyper=false]{#1}[]%
10941 }
```

`lsxtrheadfullpl` Command used to display plural full form in the page header. If you want the text converted to upper case, this needs to be redefined to use `\GLSxtrfullpl` instead. If you are using a `smallcaps` style, the default fonts don't provide italic smallcaps.

```
10942 \newcommand*\{\glsxtrheadfullpl\}[1]{%
10943   \protect\NoCaseChange
10944   {%
10945     \glsifattribute{#1}{headuc}{true}%
10946     {%
10947       \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
10948     }%
10949     {%
10950       \glsxtrfullpl[noindex,hyper=false]{#1}[]%
10951     }%
10952   }%
10953 }
```

`sxttitlefullpl` Command to display plural full form of abbreviation in section title and table of contents.

```
10954 \newrobustcmd*\{\glsxtrtitlefullpl\}[1]{%
10955   \glsxtrfullpl[noindex,hyper=false]{#1}[]%
10956 }
```

`\Glsxtrheadfull` Command used to display full form in the page header with the first letter converted to upper case.

```
10957 \newcommand*\{\Glsxtrheadfull\}[1]{%
10958   \protect\NoCaseChange
10959   {%
10960     \glsifattribute{#1}{headuc}{true}%
10961     {%
10962       \GLSxtrfull[noindex,hyper=false]{#1}[]%
10963     }%
10964     {%
10965       \Glsxtrfull[noindex,hyper=false]{#1}[]%
10966     }%
10967   }%
10968 }
```

`Glsxtrtitlefull` Command to display full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10969 \newrobustcmd*\{\Glsxtrtitlefull\}[1]{%
10970   \Glsxtrfull[noindex,hyper=false]{#1}[]%
10971 }
```

`\sxtrheadfullpl` Command used to display plural full form in the page header with the first letter converted to upper case.

```
10972 \newcommand*{\Gsxtrheadfullpl}[1]{%
10973   \protect\NoCaseChange
10974   {%
10975     \glsifattribute{#1}{headuc}{true}{%
10976       \GLSxtrfullpl[noindex,hyper=false]{#1}[]%
10977     }%
10978   }%
10979   {%
10980     \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
10981   }%
10982 }%
10983 }
```

`\sxtrtitlefullpl` Command to display plural full form of abbreviation in section title and table of contents with the first letter converted to upper case.

```
10984 \newrobustcmd*{\Gsxtrtitlefullpl}[1]{%
10985   \Glsxtrfullpl[noindex,hyper=false]{#1}[]%
10986 }
```

`\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.

```
10987 \ifdef\texorpdfstring
10988 {
10989   \newcommand*{\glsfmtshort}[1]{%
10990     \texorpdfstring
10991     {\glsxrtitleshort{#1}}%
10992     {\glsentryshort{#1}}%
10993   }
10994 }
10995 {
10996   \newcommand*{\glsfmtshort}[1]{%
10997     \glsxrtitleshort{#1}%
10998 }
```

Similarly for the plural version.

```
\glsfmtshortpl
10999 \ifdef\texorpdfstring
11000 {
11001   \newcommand*{\glsfmtshortpl}[1]{%
11002     \texorpdfstring
11003     {\glsxrtitleshortpl{#1}}%
11004     {\glsentryshortpl{#1}}%
11005   }
11006 }
11007 {
11008   \newcommand*{\glsfmtshortpl}[1]{%
```

```
11009     \glsxtrtitleshortpl{#1}%
11010 }
```

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).

```
11011 \ifdef\textorpdfstring
11012 {
11013     \newcommand*\{\Glsfmtshort}{[1]{%
11014         \textorpdfstring
11015             {\glsxtrtitleshort{#1}}%
11016             {\glsentryshort{#1}}%
11017     }
11018 }
11019 {
11020     \newcommand*\{\Glsfmtshort}{[1]{%
11021         \glsxtrtitleshort{#1}}
11022 }
```

\Glsfmtshortpl Plural form (first letter uppercase).

```
11023 \ifdef\textorpdfstring
11024 {
11025     \newcommand*\{\Glsfmtshortpl}{[1]{%
11026         \textorpdfstring
11027             {\glsxtrtitleshortpl{#1}}%
11028             {\glsentryshortpl{#1}}%
11029     }
11030 }
11031 {
11032     \newcommand*\{\Glsfmtshortpl}{[1]{%
11033         \glsxtrtitleshortpl{#1}}
11034 }
```

\glsfmtname As above but for the name value.

```
11035 \ifdef\textorpdfstring
11036 {
11037     \newcommand*\{\glsfmtname}{[1]{%
11038         \textorpdfstring
11039             {\glsxtrtitlename{#1}}%
11040             {\glsentryname{#1}}%
11041     }
11042 }
11043 {
11044     \newcommand*\{\glsfmtname}{[1]{%
11045         \glsxtrtitlename{#1}}
11046 }
```

\Glsfmtname First letter converted to upper case.

```

11047 \ifdef\textorpdfstring
11048 {
11049   \newcommand*{\Glsfmtname}[1]{%
11050     \textorpdfstring
11051     {\Glsxtrtitlename{#1}}%
11052     {\glsentryname{#1}}%
11053   }
11054 }
11055 {
11056   \newcommand*{\Glsfmtname}[1]{%
11057     \Glsxtrtitlename{#1}%
11058 }

```

\glsfmttext As above but for the text value.

```

11059 \ifdef\textorpdfstring
11060 {
11061   \newcommand*{\glsfmttext}[1]{%
11062     \textorpdfstring
11063     {\Glsxtrtitletext{#1}}%
11064     {\glsentrytext{#1}}%
11065   }
11066 }
11067 {
11068   \newcommand*{\glsfmttext}[1]{%
11069     \Glsxtrtitletext{#1}%
11070 }

```

\Glsfmttext First letter converted to upper case.

```

11071 \ifdef\textorpdfstring
11072 {
11073   \newcommand*{\Glsfmttext}[1]{%
11074     \textorpdfstring
11075     {\Glsxtrtitletext{#1}}%
11076     {\glsentrytext{#1}}%
11077   }
11078 }
11079 {
11080   \newcommand*{\Glsfmttext}[1]{%
11081     \Glsxtrtitletext{#1}%
11082 }

```

\glsfmtplural As above but for the plural value.

```

11083 \ifdef\textorpdfstring
11084 {
11085   \newcommand*{\glsfmtplural}[1]{%
11086     \textorpdfstring
11087     {\Glsxtrtitleplural{#1}}%
11088     {\glsentryplural{#1}}%
11089   }

```

```
11090 }
11091 {
11092 \newcommand*{\glsfmtplural}[1]{%
11093   \glsxtrtitleplural{#1}}
11094 }
```

\glsfmtplural First letter converted to upper case.

```
11095 \ifdef\textorpdfstring
11096 {
11097 \newcommand*{\Glsfmtplural}[1]{%
11098   \textorpdfstring
11099   {\glsxtrtitleplural{#1}}%
11100   {\glsentryplural{#1}}%
11101 }
11102 }
11103 {
11104 \newcommand*{\Glsfmtplural}[1]{%
11105   \glsxtrtitleplural{#1}}
11106 }
```

\glsfmtfirst As above but for the first value.

```
11107 \ifdef\textorpdfstring
11108 {
11109 \newcommand*{\glsfmtfirst}[1]{%
11110   \textorpdfstring
11111   {\glsxtrtitlefirst{#1}}%
11112   {\glsentryfirst{#1}}%
11113 }
11114 }
11115 {
11116 \newcommand*{\glsfmtfirst}[1]{%
11117   \glsxtrtitlefirst{#1}}
11118 }
```

\glsfmtfirst First letter converted to upper case.

```
11119 \ifdef\textorpdfstring
11120 {
11121 \newcommand*{\Glsfmtfirst}[1]{%
11122   \textorpdfstring
11123   {\glsxtrtitlefirst{#1}}%
11124   {\glsentryfirst{#1}}%
11125 }
11126 }
11127 {
11128 \newcommand*{\Glsfmtfirst}[1]{%
11129   \glsxtrtitlefirst{#1}}
11130 }
```

\glsfmtfirstpl As above but for the firstplural value.

```

11131 \ifdef\textorpdfstring
11132 {
11133   \newcommand*\glsfmtfirstpl}[1]{%
11134     \textorpdfstring
11135     {\glsxrttitlefirstplural{#1}}%
11136     {\glsentryfirstplural{#1}}%
11137 }
11138 }
11139 {
11140   \newcommand*\glsfmtfirstpl}[1]{%
11141     \glsxrttitlefirstplural{#1}%
11142 }

```

\Glsfmtfirstpl First letter converted to upper case.

```

11143 \ifdef\textorpdfstring
11144 {
11145   \newcommand*\Glsfmtfirstpl}[1]{%
11146     \textorpdfstring
11147     {\Glsxrttitlefirstplural{#1}}%
11148     {\glsentryfirstplural{#1}}%
11149 }
11150 }
11151 {
11152   \newcommand*\Glsfmtfirstpl}[1]{%
11153     \Glsxrttitlefirstplural{#1}%
11154 }

```

\glsfmtlong As above but for the long value.

```

11155 \ifdef\textorpdfstring
11156 {
11157   \newcommand*\glsfmtlong}[1]{%
11158     \textorpdfstring
11159     {\glsxrttitlelong{#1}}%
11160     {\glsentrylong{#1}}%
11161 }
11162 }
11163 {
11164   \newcommand*\glsfmtlong}[1]{%
11165     \glsxrttitlelong{#1}%
11166 }

```

\Glsfmtlong First letter converted to upper case.

```

11167 \ifdef\textorpdfstring
11168 {
11169   \newcommand*\Glsfmtlong}[1]{%
11170     \textorpdfstring
11171     {\Glsxrttitlelong{#1}}%
11172     {\glsentrylong{#1}}%
11173 }

```

```

11174 }
11175 {
11176   \newcommand*{\Glsfmtlong}[1]{%
11177     \Glsxtrtitlelong{#1}}
11178 }

```

\glsfmtlongpl As above but for the longplural value.

```

11179 \ifdef\textorpdfstring
11180 {
11181   \newcommand*{\glsfmtlongpl}[1]{%
11182     \textorpdfstring
11183       {\Glsxtrtitlelongpl{#1}}%
11184       {\glsentrylongpl{#1}}%
11185   }
11186 }
11187 {
11188   \newcommand*{\glsfmtlongpl}[1]{%
11189     \Glsxtrtitlelongpl{#1}}
11190 }

```

\Glsfmtlongpl First letter converted to upper case.

```

11191 \ifdef\textorpdfstring
11192 {
11193   \newcommand*{\Glsfmtlongpl}[1]{%
11194     \textorpdfstring
11195       {\Glsxtrtitlelongpl{#1}}%
11196       {\glsentrylongpl{#1}}%
11197   }
11198 }
11199 {
11200   \newcommand*{\Glsfmtlongpl}[1]{%
11201     \Glsxtrtitlelongpl{#1}}
11202 }

```

\glsfmtfull In-line full format.

```

11203 \ifdef\textorpdfstring
11204 {
11205   \newcommand*{\glsfmtfull}[1]{%
11206     \textorpdfstring
11207       {\Glsxtrtitlefull{#1}}%
11208       {\glsxtrinlinetitleformat{#1}{}}%
11209   }
11210 }
11211 {
11212   \newcommand*{\glsfmtfull}[1]{%
11213     \Glsxtrtitlefull{#1}}
11214 }

```

\Glsfmtfull First letter converted to upper case.

```

11215 \ifdef\textorpdfstring
11216 {
11217   \newcommand*{\Glsfmtfull}[1]{%
11218     \textorpdfstring
11219     {\Glsxrttitlefull{#1}}%
11220     {\Glsxtrinlinefullformat{#1}{}}
11221 }
11222 }
11223 {
11224   \newcommand*{\Glsfmtfull}[1]{%
11225     \Glsxrttitlefull{#1}
11226 }

```

\glsfmtfullpl In-line full plural format.

```

11227 \ifdef\textorpdfstring
11228 {
11229   \newcommand*{\glsfmtfullpl}[1]{%
11230     \textorpdfstring
11231     {\glsxrttitlefullpl{#1}}%
11232     {\glsxtrinlinefullplformat{#1}{}}
11233 }
11234 }
11235 {
11236   \newcommand*{\glsfmtfullpl}[1]{%
11237     \glsxrttitlefullpl{#1}
11238 }

```

\Glsfmtfullpl First letter converted to upper case.

```

11239 \ifdef\textorpdfstring
11240 {
11241   \newcommand*{\Glsfmtfullpl}[1]{%
11242     \textorpdfstring
11243     {\Glsxrttitlefullpl{#1}}%
11244     {\Glsxtrinlinefullplformat{#1}{}}
11245 }
11246 }
11247 {
11248   \newcommand*{\Glsfmtfullpl}[1]{%
11249     \Glsxrttitlefullpl{#1}
11250 }

```

1.9 Multi-Lingual Support

Add the facility to load language modules, if they are installed, but none are provided with this package.

sariesExtraLang

```
11251 \newcommand*{\RequireGlossariesExtraLang}[1]{%
```

```
11252  \@ifundefined{ver@glossariesxtr-#1.ldf}{\input{glossariesxtr-#1.ldf}}{}%
11253 }
```

sariesExtraLang

```
11254 \newcommand*\ProvidesGlossariesExtraLang}[1]{%
11255   \ProvidesFile{glossariesxtr-#1.ldf}%
11256 }
```

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.

```
11257 \newcommand{\glsxtr@loaddialect}{%
11258   \IfTrackedLanguageFileExists{\this@dialect}%
11259   {glossariesxtr-}%
11260   {.ldf}%
11261   {}%
11262   \RequireGlossariesExtraLang{\CurrentTrackedTag}%
11263 }%
11264 {}% not found
```

If `glossaries-extra-bib2gls` has been loaded, `\@glsxtrdialechook` will check for the associated script, otherwise it will do nothing.

```
11265 \@glsxtrdialechook
11266 }
```

```
11267 \@ifpackageloaded{tracklang}%
11268 {}%
11269   \AnyTrackedLanguages
11270   {}%
11271   \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
11272 }%
11273 {}%
11274 }
11275 {}
```

Load `glossaries-extra-stylemods` if required.

```
11276 \@glsxtr@redefstyles
```

and set the style:

```
11277 \@glsxtr@do@style
```

1.10 glossaries-extra-bib2gls.sty

This package provides additional support for `bib2gls` and is automatically loaded by the `record` option.

```
11278 \NeedsTeXFormat{LaTeX2e}
11279 \ProvidesPackage{glossaries-extra-bib2gls}[2018/04/09 v1.29 (NLCT)]
```

These are some convenient macros for use with custom rules.

```
\glshex
11280 \newcommand*\glshex{\string\u}
```

rprovidecommand For use in @preamble, this behaves like \providecommand in the document but like \renewcommand in bib2gls.

```
11281 \newcommand*\glsxtrprovidecommand{\providecommand}
```

lossarylocation For use with indexcounter and bib2gls.

```
11282 \newcommand*\glsxtr@wrglossarylocation[2]{#1}
```

IndexCounterLink `\GlsXtrIndexCounterLink{<text>}{<label>}`

For use with indexcounter and bib2gls.

```
11283 \ifdef\hyperref
11284 {%
11285   \newcommand*\GlsXtrIndexCounterLink[2]{%
11286     \glsxtrifhasfield{indexcounter}{#2}%
11287     {\hyperref[wrglossary.\glscurrentfieldvalue]{#1}}%
11288     {#1}%
11289   }
11290 }
11291 {
11292   \newcommand*\GlsXtrIndexCounterLink[2]{#1}
11293 }
```

TeXEntryAliases Convenient shortcut for use with entry-type-aliases to alias standard BIB_TE_X entry types to @bibtexentry.

```
11294 \newcommand*\GlsXtrBibTeXEntryAliases{%
11295   article=bibtexentry,
11296   book=bibtexentry,
11297   booklet=bibtexentry,
11298   conference=bibtexentry,
11299   inbook=bibtexentry,
11300   incollection=bibtexentry,
11301   inproceedings=bibtexentry,
11302   manual=bibtexentry,
11303   mastersthesis=bibtexentry,
11304   misc=bibtexentry,
11305   phdthesis=bibtexentry,
11306   proceedings=bibtexentry,
11307   techreport=bibtexentry,
```

```

11308 unpublished=bibtexentry
11309 }

ideBibTeXFields Convenient shortcut to define the standard BIBTeX fields.
11310 \newcommand*\GlsXtrProvideBibTeXFields}{%
11311   \glsaddstoragekey{address}{}{\glsxtrbibaddress}%
11312   \glsaddstoragekey{author}{}{\glsxtrbibauthor}%
11313   \glsaddstoragekey{booktitle}{}{\glsxtrbibbooktitle}%
11314   \glsaddstoragekey{chapter}{}{\glsxtrbibchapter}%
11315   \glsaddstoragekey{edition}{}{\glsxtrbibedition}%
11316   \glsaddstoragekey{howpublished}{}{\glsxtrbibhowpublished}%
11317   \glsaddstoragekey{institution}{}{\glsxtrbibinstitution}%
11318   \glsaddstoragekey{journal}{}{\glsxtrbibjournal}%
11319   \glsaddstoragekey{month}{}{\glsxtrbibmonth}%
11320   \glsaddstoragekey{note}{}{\glsxtrbibnote}%
11321   \glsaddstoragekey{number}{}{\glsxtrbibnumber}%
11322   \glsaddstoragekey{organization}{}{\glsxtrbiborganization}%
11323   \glsaddstoragekey{pages}{}{\glsxtrbibpages}%
11324   \glsaddstoragekey{publisher}{}{\glsxtrbibpublisher}%
11325   \glsaddstoragekey{school}{}{\glsxtrbibschool}%
11326   \glsaddstoragekey{series}{}{\glsxtrbibseries}%
11327   \glsaddstoragekey{title}{}{\glsxtrbibtitle}%
11328   \glsaddstoragekey{bibtexttype}{}{\glsxtrbibtype}%
11329   \glsaddstoragekey{volume}{}{\glsxtrbibvolume}%
11330 }

```

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
11331 \providecommand*\Alpha{\mathrm{A}{}}

\Beta
11332 \providecommand*\Beta{\mathrm{B}{}}

\Epsilon
11333 \providecommand*\Epsilon{\mathrm{E}{}}

\Zeta
11334 \providecommand*\Zeta{\mathrm{Z}{}}

\Eta
11335 \providecommand*\Eta{\mathrm{H}{}}

```

```

\Iota
11336 \providecommand*\Iota{\mathrm{I}}

\Kappa
11337 \providecommand*\Kappa{\mathrm{K}>

\Mu
11338 \providecommand*\Mu{\mathrm{M}>

\nu
11339 \providecommand*\nu{\mathrm{N}>

\Omicron
11340 \providecommand*\Omicron{\mathrm{O}>

\rho
11341 \providecommand*\rho{\mathrm{P}>

\Tau
11342 \providecommand*\Tau{\mathrm{T}>

\Chi
11343 \providecommand*\Chi{\mathrm{X}>

\Digamma
11344 \providecommand*\Digamma{\mathrm{F}>

\omicron
11345 \providecommand*\omicron{\mathit{o}>

Provide corresponding upright characters if upgreek has been loaded. (The upper case
characters are the same as above.)
11346 @ifpackageloaded{upgreek}%
11347 {

\Upalpha
11348 \providecommand*\Upalpha{\mathrm{A}>

\Upbeta
11349 \providecommand*\Upbeta{\mathrm{B}>

\Upsilon
11350 \providecommand*\Upsilon{\mathrm{E}>

\Upzeta
11351 \providecommand*\Upzeta{\mathrm{Z}>


```

```

\Upeta
11352 \providecommand*\Upeta{\mathrm{H}}
\Upsilon
11353 \providecommand*\Upsilon{\mathrm{I}}
\Upkappa
11354 \providecommand*\Upkappa{\mathrm{K}}
\Upmu
11355 \providecommand*\Upmu{\mathrm{M}}
\Upnu
11356 \providecommand*\Upnu{\mathrm{N}}
\Upomicron
11357 \providecommand*\Upomicron{\mathrm{O}}
\Uprho
11358 \providecommand*\Uprho{\mathrm{P}}
\Uptau
11359 \providecommand*\Uptau{\mathrm{T}}
\Upchi
11360 \providecommand*\Upchi{\mathrm{X}}
\upomicron
11361 \providecommand*\upomicron{\mathrm{o}}
11362 }%
11363 {}% upgreek.sty not loaded

```

This package provides some basic rules, but it's not intended for complete coverage of all locales. The CLDR should provide the appropriate locale-sensitive rules. These macros are primarily to help construct custom rules to include, for example, Greek maths symbols mixed with Latin. For the full rule syntax, see the Java API for [RuleBaseCollator](#)

If you want to provide a rule-block for a particular locale to allow for customization within that locale, create a file called `glossariesxtr-<tag>.ldf` (where `<tag>` identifies the locale) and add similar commands. See the description of `\IfTrackedLanguageFileExists` in the `tracklang` manual for the allowed forms of `<tag>`. The simplest is to just use the root language label or ISO code. The file will then be automatically loaded by `glossaries-extra` if the document has support for that language.

When combining these blocks of rules, remember to separate them with the appropriate character. For example:

```
sort-rule={\glsxtrcontrolrules}
```

```

; \glsxtrspacerules
; \glsxtrnonprintablerules
; \glsxtrcombiningdiacriticrules
, \glsxtrhyphenrules
<\glsxtrgeneralpuncrules
<\glsxtrdigitrules
<\glsxtrfractionrules
<\glsxtrGeneralLatinIVrules
<\glsxtrMathItalicGreekIrules
}

```

xtrcontrolrules These are control characters that are usually placed at the start of a rule in the ‘ignored characters’ section. These control characters are unlikely to appear in any entry fields but are provided for completeness. `\string` is used for punctuation characters in case they’ve been made active.

```

11364 \newcommand*{\glsxtrcontrolrules}{%
11365   \string'\glshex 200B\string'\string=\glshex 200C\string=\glshex 200D
11366   \string=\glshex 200E\string=\glshex 200F\string=\glshex 0000\string=\glshex 0001
11367   \string=\glshex 0002\string=\glshex 0003\string=\glshex 0004\string=\glshex 0005
11368   \string=\glshex 0006\string=\glshex 0007\string=\glshex 0008
11369   \string=\string'\glshex 0009\string'\string=\string'\glshex 000B\string'
11370   \string=\glshex 000E\string=\glshex 000F\string=\string'\glshex
11371 0010\string'\string=\glshex 0011
11372   \string=\glshex 0012\string=\glshex 0013\string=\glshex 0014\string=\glshex 0015
11373   \string=\glshex 0016\string=\glshex 0017\string=\glshex 0018\string=\glshex 0019
11374   \string=\glshex 001A\string=\glshex 001B\string=\glshex 001C\string=\glshex 001D
11375   \string=\glshex 001E\string=\glshex 001F\string=\glshex 007F\string=\glshex 0080
11376   \string=\glshex 0081\string=\glshex 0082\string=\glshex 0083\string=\glshex 0084
11377   \string=\glshex 0085\string=\glshex 0086\string=\glshex 0087\string=\glshex 0088
11378   \string=\glshex 0089\string=\glshex 008A\string=\glshex 008B\string=\glshex 008C
11379   \string=\glshex 008D\string=\glshex 008E\string=\glshex 008F\string=\glshex 0090
11380   \string=\glshex 0091\string=\glshex 0092\string=\glshex 0093\string=\glshex 0094
11381   \string=\glshex 0095\string=\glshex 0096\string=\glshex 0097\string=\glshex 0098
11382   \string=\glshex 0099\string=\glshex 009A\string=\glshex 009B\string=\glshex 009C
11383   \string=\glshex 009D\string=\glshex 009E\string=\glshex 009F
11384 }

```

lsxtrspacerules These are space characters.

```

11385 \newcommand*{\glsxtrspacerules}{%
11386   \string' \string'\string;
11387   \string'\glshex 00A0\string'\string;
11388   \string'\glshex 2000\string'\string;
11389   \string'\glshex 2001\string'\string;
11390   \string'\glshex 2002\string'\string;
11391   \string'\glshex 2003\string'\string;
11392   \string'\glshex 2004\string'\string;
11393   \string'\glshex 2005\string'\string;
11394   \string'\glshex 2006\string'\string;
11395   \string'\glshex 2007\string'\string;

```

```

11396 \string'\glshex 2008\string'\string;
11397 \string'\glshex 2009\string'\string;
11398 \string'\glshex 200A\string'\string;
11399 \string'\glshex 3000\string'
11400 }

```

`nprintablerules` These are non-printable characters (BOM, tabs, line feed and carriage return).

```

11401 \newcommand*{\glsxtrnonprintablerules}{%
11402 \string'\glshex FEFF\string'\string;
11403 \string'\glshex 000A\string'\string;
11404 \string'\glshex 0009\string'\string;
11405 \string'\glshex 000C\string'\string;
11406 \string'\glshex 000B\string'
11407 }

```

`gdiacriticrules` Combining diacritic marks. This is split into multiple macros.

```

11408 \newcommand*{\glsxtrcombiningdiacriticrules}{%
11409 \glsxtrcombiningdiacriticIrules\string;
11410 \glsxtrcombiningdiacriticIIrules\string;
11411 \glsxtrcombiningdiacriticIIIrules\string;
11412 \glsxtrcombiningdiacriticIVrules
11413 }

```

`diacriticIrules` First set of combining diacritic marks.

```

11414 \newcommand*{\glsxtrcombiningdiacriticIrules}{%
11415 \glshex 0301\string;% combining acute
11416 \glshex 0300\string;% combining grave
11417 \glshex 0306\string;% combining breve
11418 \glshex 0302\string;% combining circumflex
11419 \glshex 030C\string;% combining caron
11420 \glshex 030A\string;% combining ring
11421 \glshex 030D\string;% combining vertical line above
11422 \glshex 0308\string;% combining diaeresis
11423 \glshex 030B\string;% combining double acute
11424 \glshex 0303\string;% combining tilde
11425 \glshex 0307\string;% combining dot above
11426 \glshex 0304% combining macron
11427 }

```

`iacriticIIrules` Second set of combining diacritic marks.

```

11428 \newcommand*{\glsxtrcombiningdiacriticIIrules}{%
11429 \glshex 0337\string;% combining short solidus overlay
11430 \glshex 0327\string;% combining cedilla
11431 \glshex 0328\string;% combining ogonek
11432 \glshex 0323\string;% combining dot below
11433 \glshex 0332\string;% combining low line
11434 \glshex 0305\string;% combining overline
11435 \glshex 0309\string;% combining hook above
11436 \glshex 030E\string;% combining double vertical line above

```

```

11437 \glshex 030F\string;% combining double grave accent
11438 \glshex 0310\string;% combining candrabindu
11439 \glshex 0311\string;% combining inverted breve
11440 \glshex 0312\string;% combining turned comma above
11441 \glshex 0313\string;% combining comma above
11442 \glshex 0314\string;% combining reversed comma above
11443 \glshex 0315\string;% combining comma above right
11444 \glshex 0316\string;% combining grave accent below
11445 \glshex 0317% combining acute accent below
11446 }

```

acriticIIIrules Third set of combining diacritic marks.

```

11447 \newcommand*\glsxtrcombiningdiacriticIIIrules}{%
11448 \glshex 0318\string;% combining left tack below
11449 \glshex 0319\string;% combining right tack below
11450 \glshex 031A\string;% combining left angle above
11451 \glshex 031B\string;% combining horn
11452 \glshex 031C\string;% combining left half ring below
11453 \glshex 031D\string;% combining up tack below
11454 \glshex 031E\string;% combining down tack below
11455 \glshex 031F\string;% combining plus sign below
11456 \glshex 0320\string;% combining minus sign below
11457 \glshex 0321\string;% combining palatalized hook below
11458 \glshex 0322\string;% combining retroflex hook below
11459 \glshex 0324\string;% combining diaresis below
11460 \glshex 0325\string;% combining ring below
11461 \glshex 0326\string;% combining comma below
11462 \glshex 0329\string;% combining vertical line below
11463 \glshex 032A\string;% combining bridge below
11464 \glshex 032B\string;% combining inverted double arch below
11465 \glshex 032C\string;% combining caron below
11466 \glshex 032D\string;% combining circumflex accent below
11467 \glshex 032E\string;% combining breve below
11468 \glshex 032F\string;% combining inverted breve below
11469 \glshex 0330\string;% combining tilde below
11470 \glshex 0331\string;% combining macron below
11471 \glshex 0333\string;% combining double low line
11472 \glshex 0334\string;% combining tilde overlay
11473 \glshex 0335\string;% combining short stroke overlay
11474 \glshex 0336\string;% combining long stroke overlay
11475 \glshex 0338\string;% combining long solidus overlay
11476 \glshex 0339\string;% combining combining right half ring below
11477 \glshex 033A\string;% combining inverted bridge below
11478 \glshex 033B\string;% combining square below
11479 \glshex 033C\string;% combining seagull below
11480 \glshex 033D\string;% combining x above
11481 \glshex 033E\string;% combining vertical tilde
11482 \glshex 033F\string;% combining double overline
11483 \glshex 0342\string;% combining Greek perispomeni

```

```

11484 \glshex 0344\string;% combining Greek dialytika tonos
11485 \glshex 0345\string;% combining Greek ypogegrammeni
11486 \glshex 0360\string;% combining double tilde
11487 \glshex 0361\string;% combining double inverted breve
11488 \glshex 0483\string;% combining Cyrillic titlo
11489 \glshex 0484\string;% combining Cyrillic palatalization
11490 \glshex 0485\string;% combining Cyrillic dasia pneumata
11491 \glshex 0486% combining Cyrillic psili pneumata
11492 }

```

iacriticIVrules Fourth set of combining diacritic marks.

```

11493 \newcommand*\{glsxtrcombinngdiacriticIVrules}\{%
11494 \glshex 20D0\string;% combining left harpoon above
11495 \glshex 20D1\string;% combining right harpoon above
11496 \glshex 20D2\string;% combining long vertical line overlay
11497 \glshex 20D3\string;% combining short vertical line overlay
11498 \glshex 20D4\string;% combining anticlockwise arrow above
11499 \glshex 20D5\string;% combining clockwise arrow above
11500 \glshex 20D6\string;% combining left arrow above
11501 \glshex 20D7\string;% combining right arrow above
11502 \glshex 20D8\string;% combining ring overlay
11503 \glshex 20D9\string;% combining clockwise ring overlay
11504 \glshex 20DA\string;% combining anticlockwise ring overlay
11505 \glshex 20DB\string;% combining three dots above
11506 \glshex 20DC\string;% combining four dots above
11507 \glshex 20DD\string;% combining enclosing circle
11508 \glshex 20DE\string;% combining enclosing square
11509 \glshex 20DF\string;% combining enclosing diamond
11510 \glshex 20E0\string;% combining enclosing circle backslash
11511 \glshex 20E1% combining left right arrow above
11512 }

```

sxtrhyphenrules Hyphens.

```

11513 \newcommand*\{glsxtrhyphenrules}\{%
11514 \string'\string-\string'\string%;% ASCII hyphen
11515 \glshex 00AD\string;% soft hyphen
11516 \glshex 2010\string;% hyphen
11517 \glshex 2011\string;% non-breaking hyphen
11518 \glshex 2012\string;% figure dash
11519 \glshex 2013\string;% en dash
11520 \glshex 2014\string;% em dash
11521 \glshex 2015\string;% horizontal bar
11522 \glshex 2212\string=\glshex 207B\string=\glshex 208B% minus sign
11523 }

```

eneralpuncrules General punctuation.

```

11524 \newcommand*\{glsxtrgeneralpuncrules}\{%
11525 \glsxtrgeneralpuncrules
11526 \string<\glsxtrcurrenctyrules

```

```
11527 \string<\glsxtrgeneralpuncIIRules  
11528 }
```

neralpuncIIRules First set of general punctuation.

```
11529 \newcommand*\glsxtrgeneralpuncIIRules{  
11530 \string'\glshex 005F\string'% underscore  
11531 \string<\glshex 00AF% macron  
11532 \string<\string'\glshex 002C\string'% comma  
11533 \string<\string'\glshex 003B\string'% semi-colon  
11534 \string<\string'\glshex 003A\string'% colon  
11535 \string<\string'\glshex 0021\string'% exclamation mark  
11536 \string<\glshex 00A1% inverted exclamation mark  
11537 \string<\string'\glshex 003F\string'% question mark  
11538 \string<\glshex 00BF% inverted question mark  
11539 \string<\string'\glshex 002F\string'% solidus  
11540 \string<\string'\glshex 002E\string'% full stop  
11541 \string<\glshex 00B4% acute accent  
11542 \string<\string'\glshex 0060\string'% grave accent  
11543 \string<\string'\glshex 005E\string'% circumflex accent  
11544 \string<\glshex 00A8% diaersis  
11545 \string<\string'\glshex 007E\string'% tilde  
11546 \string<\glshex 00B7% middle dot  
11547 \string<\glshex 00B8% cedilla  
11548 \string<\string'\glshex 0027\string'% straight apostrophe  
11549 \string<\string'\glshex 0022\string'% straight double quote  
11550 \string<\glshex 00AB% left guillemet  
11551 \string<\glshex 00BB% right guillemet  
11552 \string<\string'\glshex 0028\string'% left parenthesis  
11553 \string=\glshex 207D\string=\glshex 208D% super/subscript left parenthesis  
11554 \string<\string'\glshex 0029\string'% right parenthesis  
11555 \string=\glshex 207E\string=\glshex 208E% super/subscript right parenthesis  
11556 \string<\string'\glshex 005B\string'% left square bracket  
11557 \string<\string'\glshex 005D\string'% right square bracket  
11558 \string<\string'\glshex 007B\string'% left curly bracket  
11559 \string<\string'\glshex 007D\string'% right curly bracket  
11560 \string<\glshex 00A7% section sign  
11561 \string<\glshex 00B6% pilcrow sign  
11562 \string<\glshex 00A9% copyright sign  
11563 \string<\glshex 00AE% registered sign  
11564 \string<\string'\glshex 0040\string'% at sign  
11565 }
```

trcurrencyrules General punctuation.

```
11566 \newcommand*\glsxtrcurrencyrules{  
11567 \glshex 00A4% currency sign  
11568 \string<\glshex 0E3F% Thai currency symbol baht  
11569 \string<\glshex 00A2% cent sign  
11570 \string<\glshex 20A1% colon sign  
11571 \string<\glshex 20A2% cruzeiro sign
```

```

11572 \string<\string'\glshex 0024\string'% dollar sign
11573 \string<\glshex 20AB% dong sign
11574 \string<\glshex 20AC% euro sign
11575 \string<\glshex 20A3% French franc sign
11576 \string<\glshex 20A4% lira sign
11577 \string<\glshex 20A5% mill sign
11578 \string<\glshex 20A6% naira sign
11579 \string<\glshex 20A7% peseta sign
11580 \string<\glshex 00A3% pound sign
11581 \string<\glshex 20A8% rupee sign
11582 \string<\glshex 20AA% new sheqel sign
11583 \string<\glshex 20A9% won sign
11584 \string<\glshex 00A5% yen sign
11585 }

```

generalpuncIIrules Second set of general punctuation.

```

11586 \newcommand*\glsxtrgeneralpuncIIrules}{%
11587 \string'\glshex 002A\string'% asterisk
11588 \string<\string'\glshex 005C\string'% backslash
11589 \string<\string'\glshex 0026\string'% ampersand
11590 \string<\string'\glshex 0023\string'% hash sign
11591 \string<\string'\glshex 0025\string'% percent sign
11592 \string<\string'\glshex 002B\string'% plus sign
11593 \string=\glshex 207A\string=\glshex 208A% super/subscript plus sign
11594 \string<\glshex 00B1% plus-minus sign
11595 \string<\glshex 00F7% division sign
11596 \string<\glshex 00D7% multiplication sign
11597 \string<\string'\glshex 003C\string'% less-than sign
11598 \string<\string'\glshex 003D\string'% equals sign
11599 \string<\string'\glshex 003E\string'% greater-than sign
11600 \string<\glshex 00AC% not sign
11601 \string<\string'\glshex 007C\string'% vertical bar (pipe)
11602 \string<\glshex 00A6% broken bar
11603 \string<\glshex 00B0% degree sign
11604 \string<\glshex 00B5% micron sign
11605 }

```

generalLatinIrules Basic Latin alphabet.

```

11606 \newcommand*\glsxtrGeneralLatinIrules}{%
11607 \glsxtrLatinA
11608 \string<{b,B%
11609 \string<{c,C%
11610 \string<{d,D%
11611 \string<\glsxtrLatinE
11612 \string<{f,F%
11613 \string<{g,G%
11614 \string<\glsxtrLatinH
11615 \string<\glsxtrLatinI
11616 \string<{j,J%

```

```

11617 \string<\glsxtrLatinK
11618 \string<\glsxtrLatinL
11619 \string<\glsxtrLatinM
11620 \string<\glsxtrLatinN
11621 \string<\glsxtrLatinO
11622 \string<\glsxtrLatinP
11623 \string<q,Q%
11624 \string<r,R%
11625 \string<\glsxtrLatinS
11626 \string<\glsxtrLatinT
11627 \string<u,U%
11628 \string<v,V%
11629 \string<w,W%
11630 \string<\glsxtrLatinX
11631 \string<y,Y%
11632 \string<z,Z
11633 }

```

`ralLatinIIrules` General Latin alphabet (eth between D and E, ß treated as SS).

```

11634 \newcommand*{\glsxtrGeneralLatinIIrules}{%
11635 \glsxtrLatinA
11636 \string<b,B%
11637 \string<c,C%
11638 \string<d,D%
11639 \string<\glsxtrLatinEth
11640 \string<\glsxtrLatinE
11641 \string<f,F%
11642 \string<g,G%
11643 \string<\glsxtrLatinH
11644 \string<\glsxtrLatinI
11645 \string<j,J%
11646 \string<\glsxtrLatinK
11647 \string<\glsxtrLatinL
11648 \string<\glsxtrLatinM
11649 \string<\glsxtrLatinN
11650 \string<\glsxtrLatinO
11651 \string<\glsxtrLatinP
11652 \string<q,Q%
11653 \string<r,R%
11654 \string<\glsxtrLatinS
11655 \string& SS \string, \glsxtrLatinEszettSs
11656 \string<\glsxtrLatinT
11657 \string<u,U%
11658 \string<v,V%
11659 \string<w,W%
11660 \string<\glsxtrLatinX
11661 \string<y,Y%
11662 \string<z,Z%
11663 }

```

allLatinIIIrules General Latin alphabet (eth between D and E, ß treated as SZ).

```
11664 \newcommand*{\glsxtrGeneralLatinIIIrules}{%
11665   \glsxtrLatinA
11666   \string<b,B%
11667   \string<c,C%
11668   \string<d,D%
11669   \string<\glsxtrLatinEth
11670   \string<\glsxtrLatinE
11671   \string<f,F%
11672   \string<g,G%
11673   \string<\glsxtrLatinH
11674   \string<\glsxtrLatinI
11675   \string<j,J%
11676   \string<\glsxtrLatinK
11677   \string<\glsxtrLatinL
11678   \string<\glsxtrLatinM
11679   \string<\glsxtrLatinN
11680   \string<\glsxtrLatinO
11681   \string<\glsxtrLatinP
11682   \string<q,Q%
11683   \string<r,R%
11684   \string<\glsxtrLatinS
11685   \string& SZ, \glsxtrLatinEszettSz
11686   \string<\glsxtrLatinT
11687   \string<u,U%
11688   \string<v,V%
11689   \string<w,W%
11690   \string<\glsxtrLatinX
11691   \string<y,Y%
11692   \string<z,Z%
11693 }
```

ralLatinIVrules General Latin alphabet (Æ treated as AE and œ treated as OE, þ treated as TH, ß treated as SS, eth between D and E).

```
11694 \newcommand*{\glsxtrGeneralLatinIVrules}{%
11695   \glsxtrLatinA
11696   \string& AE , \glsxtrLatinAELigature
11697   \string<b,B%
11698   \string<c,C%
11699   \string<d,D%
11700   \string<\glsxtrLatinEth
11701   \string<\glsxtrLatinE
11702   \string<f,F%
11703   \string<g,G%
11704   \string<\glsxtrLatinH
11705   \string<\glsxtrLatinI
11706   \string<j,J%
11707   \string<\glsxtrLatinK
11708   \string<\glsxtrLatinL
```

```

11709 \string<\glsxtrLatinM
11710 \string<\glsxtrLatinN
11711 \string<\glsxtrLatinO
11712 \string& OE , \glsxtrLatinOELigature
11713 \string<\glsxtrLatinP
11714 \string<q,Q%
11715 \string<r,R%
11716 \string<\glsxtrLatinS
11717 \string& SS , \glsxtrLatinEszettSs
11718 \string<\glsxtrLatinT
11719 \string& th =\glshex 00DE
11720 \string& TH =\glshex 00FE
11721 \string<u,U%
11722 \string<v,V%
11723 \string<w,W%
11724 \string<\glsxtrLatinX
11725 \string<y,Y%
11726 \string<z,Z%
11727 }

```

`eralLatinVrules` General Latin alphabet (eth between D and E, ß treated as SS, Þ treated as TH).

```

11728 \newcommand*\glsxtrGeneralLatinVrules}{%
11729 \glsxtrLatinA
11730 \string<b,B%
11731 \string<c,C%
11732 \string<d,D%
11733 \string<\glsxtrLatinEth
11734 \string<\glsxtrLatinE
11735 \string<f,F%
11736 \string<g,G%
11737 \string<\glsxtrLatinH
11738 \string<\glsxtrLatinI
11739 \string<j,J%
11740 \string<\glsxtrLatinK
11741 \string<\glsxtrLatinL
11742 \string<\glsxtrLatinM
11743 \string<\glsxtrLatinN
11744 \string<\glsxtrLatinO
11745 \string<\glsxtrLatinP
11746 \string<q,Q%
11747 \string<r,R%
11748 \string<\glsxtrLatinS
11749 \string& SS , \glsxtrLatinEszettSs
11750 \string<\glsxtrLatinT
11751 \string& th =\glshex 00DE
11752 \string& TH =\glshex 00FE
11753 \string<u,U%
11754 \string<v,V%
11755 \string<w,W%

```

```
11756 \string<\glsxtrLatinX  
11757 \string<y,Y%  
11758 \string<z,Z%  
11759 }
```

ralLatinVIrules General Latin alphabet (eth between D and E, ß treated as SZ, Þ treated as TH).

```
11760 \newcommand*{\glsxtrGeneralLatinVIrules}{%  
11761 \glsxtrLatinA  
11762 \string<b,B%  
11763 \string<c,C%  
11764 \string<d,D%  
11765 \string<\glsxtrLatinEth  
11766 \string<\glsxtrLatinE  
11767 \string<f,F%  
11768 \string<g,G%  
11769 \string<\glsxtrLatinH  
11770 \string<\glsxtrLatinI  
11771 \string<j,J%  
11772 \string<\glsxtrLatinK  
11773 \string<\glsxtrLatinL  
11774 \string<\glsxtrLatinM  
11775 \string<\glsxtrLatinN  
11776 \string<\glsxtrLatinO  
11777 \string<\glsxtrLatinP  
11778 \string<q,Q%  
11779 \string<r,R%  
11780 \string<\glsxtrLatinS  
11781 \string& SZ , \glsxtrLatinEszettSz  
11782 \string<\glsxtrLatinT  
11783 \string& th =\glshex 00DE  
11784 \string& TH =\glshex 00FE  
11785 \string<u,U%  
11786 \string<v,V%  
11787 \string<w,W%  
11788 \string<\glsxtrLatinX  
11789 \string<y,Y%  
11790 \string<z,Z%  
11791 }
```

allLatinVIIrules General Latin alphabet (Æ between A and B, eth between D and E, insular G as G, CE between O and P, long S equivalent to S, Þ between T and U and wynn as W).

```
11792 \newcommand*{\glsxtrGeneralLatinVIIrules}{%  
11793 \glsxtrLatinA  
11794 \string<\glsxtrLatinAEligature  
11795 \string<b,B%  
11796 \string<c,C%  
11797 \string<d,D%  
11798 \string<\glsxtrLatinEth  
11799 \string<\glsxtrLatinE
```

```

11800 \string<f,F%
11801 \string<\glsxtrLatinInsularG
11802 \string<\glsxtrLatinH
11803 \string<\glsxtrLatinI
11804 \string<j,J%
11805 \string<\glsxtrLatinK
11806 \string<\glsxtrLatinL
11807 \string<\glsxtrLatinM
11808 \string<\glsxtrLatinN
11809 \string<\glsxtrLatinO
11810 \string<\glsxtrLatinOEEligature
11811 \string<\glsxtrLatinP
11812 \string<q,Q%
11813 \string<r,R%
11814 \string<\glshex 017F=\glsxtrLatinS % s and long s
11815 \string<\glsxtrLatinT
11816 \string<\glsxtrLatinThorn
11817 \string<u,U%
11818 \string<v,V%
11819 \string< w\string=\glshex 01BF, W\string=\glshex 01F7
11820 \string<\glsxtrLatinX
11821 \string<y,Y%
11822 \string<z,Z%
11823 }

```

`\LatinVIIIRules` General Latin alphabet (Æ treated as AE and Ø treated as OE, Þ treated as TH, ß treated as SS, eth treated as D, Ø treated as O, Ł treated as L).

```

11824 \newcommand*\glsxtrGeneralLatinVIIIRules}{%
11825 \glsxtrLatinA
11826 \string& AE , \glsxtrLatinAEEligature
11827 \string<b,B%
11828 \string<c,C%
11829 \string<\glshex 00F0\string;d,\glshex 00D0\string;D% D and eth
11830 \string<\glsxtrLatinE
11831 \string<f,F%
11832 \string<g,G%
11833 \string<\glsxtrLatinH
11834 \string<\glsxtrLatinI
11835 \string<j,J%
11836 \string<\glsxtrLatinK
11837 \string<\glshex 0142\string=\glsxtrLatinL\string=\glshex 0141% L and \L
11838 \string<\glsxtrLatinM
11839 \string<\glsxtrLatinN
11840 \string<\glshex 00F8\string=\glsxtrLatinO\string=\glshex 00D8% O and \O
11841 \string& OE , \glsxtrLatinOEEligature
11842 \string<\glsxtrLatinP
11843 \string<q,Q%
11844 \string<r,R%
11845 \string<\glsxtrLatinS

```

```

11846 \string& SS , \glsxtrLatinEszettSs
11847 \string<\glsxtrLatinT
11848 \string& th =\glshex 00DE
11849 \string& TH =\glshex 00FE
11850 \string<u,U%
11851 \string<v,V%
11852 \string<w,W%
11853 \string<\glsxtrLatinX
11854 \string<y,Y%
11855 \string<z,Z%
11856 }

\glsxtrLatinA
11857 \newcommand*\glsxtrLatinA{%
11858   a\string=\glshex 00AA\string=\glshex 2090,A
11859 }

\glsxtrLatinE
11860 \newcommand*\glsxtrLatinE{%
11861   e\string=\glshex 2091,E
11862 }

\glsxtrLatinH
11863 \newcommand*\glsxtrLatinH{%
11864   h\string=\glshex 2095,H
11865 }

\glsxtrLatinI
11866 \newcommand*\glsxtrLatinI{%
11867   i\string=\glshex 2071,I
11868 }

\glsxtrLatinK
11869 \newcommand*\glsxtrLatinK{%
11870   k\string=\glshex 2096,K
11871 }

\glsxtrLatinL
11872 \newcommand*\glsxtrLatinL{%
11873   l\string=\glshex 2097,L
11874 }

\glsxtrLatinM
11875 \newcommand*\glsxtrLatinM{%
11876   m\string=\glshex 2098,M
11877 }

```

```

\glsxtrLatinN
11878 \newcommand*{\glsxtrLatinN}{%
11879   n\string=\glshex 207F\string=\glshex 2099,N
11880 }

\glsxtrLatinO
11881 \newcommand*{\glsxtrLatinO}{%
11882   o\string=\glshex 00BA\string=\glshex 2092,O
11883 }

\glsxtrLatinP
11884 \newcommand*{\glsxtrLatinP}{%
11885   p\string=\glshex 209A,P
11886 }

\glsxtrLatinS
11887 \newcommand*{\glsxtrLatinS}{%
11888   s\string=\glshex 209B,S
11889 }

\glsxtrLatinT
11890 \newcommand*{\glsxtrLatinT}{%
11891   t\string=\glshex 209C,T
11892 }

\glsxtrLatinX
11893 \newcommand*{\glsxtrLatinX}{%
11894   x\string=\glshex 2093,X
11895 }

lsxtrLatinSchwa Latin schwa (lower case, subscript and upper case).
11896 \newcommand*{\glsxtrLatinSchwa}{%
11897   \glshex 0259\string=\glshex 2094,\glshex 018F
11898 }

trLatinEszettSs
11899 \newcommand*{\glsxtrLatinEszettSs}{%
11900   \glshex 00DF% eszett
11901   \string=\glshex 017Fs % long S s
11902 }

trLatinEszettSz
11903 \newcommand*{\glsxtrLatinEszettSz}{%
11904   \glshex 00DF% eszett
11905   \string= \glshex 017Fz % long S z
11906 }

```

```

\glsxtrLatinEth
 11907 \newcommand*{\glsxtrLatinEth}{%
 11908   \glshex{00F0},\glshex{00D0} eth
 11909 }

\glsxtrLatinThorn
 11910 \newcommand*{\glsxtrLatinThorn}{%
 11911   \glshex{00FE},\glshex{00DE} thorn
 11912 }

LatinAEligature
 11913 \newcommand*{\glsxtrLatinAEligature}{%
 11914   \glshex{00E6},\glshex{00C6} AE-ligature
 11915 }

LatinOEligature
 11916 \newcommand*{\glsxtrLatinOEligature}{%
 11917   \glshex{0153},\glshex{0152} OE-ligature
 11918 }

\glsxtrLatinAA
 11919 \newcommand*{\glsxtrLatinAA}{%
 11920   \glshex{00E5}=a\glshex{030A},% \aa
 11921   \glshex{00C5}=A\glshex{030A}% \AA
 11922 }

\glsxtrLatinWynn
 11923 \newcommand*{\glsxtrLatinWynn}{%
 11924   \glshex{01BF},\glshex{01F7} wynn
 11925 }

trLatinInsularG
 11926 \newcommand*{\glsxtrLatinInsularG}{%
 11927   \glshex{1D79},\glshex{A77D} insular G
 11928   \string; g, G
 11929 }

sxtrLatinOslash
 11930 \newcommand*{\glsxtrLatinOslash}{%
 11931   \glshex{00F8},\glshex{00D8} \o, \O
 11932 }

sxtrLatinLslash
 11933 \newcommand*{\glsxtrLatinLslash}{%
 11934   \glshex{0142},\glshex{0141} \l, \L
 11935 }

```

thUpGreekIrules Includes digamma between epsilon and zeta.

```
11936 \newcommand*{\glsxtrMathUpGreekIrules}{%
11937   \glsxtrUpAlpha
11938   \string<\glsxtrUpBeta
11939   \string<\glsxtrUpGamma
11940   \string<\glsxtrUpDelta
11941   \string<\glsxtrUpEpsilon
11942   \string<\glsxtrUpDigamma
11943   \string<\glsxtrUpZeta
11944   \string<\glsxtrUpEta
11945   \string<\glsxtrUpTheta
11946   \string<\glsxtrUpIota
11947   \string<\glsxtrUpKappa
11948   \string<\glsxtrUpLambda
11949   \string<\glsxtrUpMu
11950   \string<\glsxtrUpNu
11951   \string<\glsxtrUpXi
11952   \string<\glsxtrUpOmicron
11953   \string<\glsxtrUpPi
11954   \string<\glsxtrUpRho
11955   \string<\glsxtrUpSigma
11956   \string<\glsxtrUpTau
11957   \string<\glsxtrUpUpsilon
11958   \string<\glsxtrUpPhi
11959   \string<\glsxtrUpChi
11960   \string<\glsxtrUpPsi
11961   \string<\glsxtrUpOmega
11962 }
```

hUpGreekIIrules Doesn't include digamma.

```
11963 \newcommand*{\glsxtrMathUpGreekIIrules}{%
11964   \glsxtrUpAlpha
11965   \string<\glsxtrUpBeta
11966   \string<\glsxtrUpGamma
11967   \string<\glsxtrUpDelta
11968   \string<\glsxtrUpEpsilon
11969   \string<\glsxtrUpZeta
11970   \string<\glsxtrUpEta
11971   \string<\glsxtrUpTheta
11972   \string<\glsxtrUpIota
11973   \string<\glsxtrUpKappa
11974   \string<\glsxtrUpLambda
11975   \string<\glsxtrUpMu
11976   \string<\glsxtrUpNu
11977   \string<\glsxtrUpXi
11978   \string<\glsxtrUpOmicron
11979   \string<\glsxtrUpPi
11980   \string<\glsxtrUpRho
11981   \string<\glsxtrUpSigma
```

```

11982 \string<\glsxtrUpTau
11983 \string<\glsxtrUpUpsilon
11984 \string<\glsxtrUpPhi
11985 \string<\glsxtrUpChi
11986 \string<\glsxtrUpPsi
11987 \string<\glsxtrUpOmega
11988 }

```

`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.

```

11989 \newcommand*{\glsxtrMathItalicGreekIrules}{%
11990 \glsxtrMathItalicAlpha
11991 \string<\glsxtrMathItalicBeta
11992 \string<\glsxtrMathItalicGamma
11993 \string<\glsxtrMathItalicDelta
11994 \string<\glsxtrMathItalicEpsilon
11995 \string<\glsxtrUpDigamma
11996 \string<\glsxtrMathItalicZeta
11997 \string<\glsxtrMathItalicEta
11998 \string<\glsxtrMathItalicTheta
11999 \string<\glsxtrMathItalicIota
12000 \string<\glsxtrMathItalicKappa
12001 \string<\glsxtrMathItalicLambda
12002 \string<\glsxtrMathItalicMu
12003 \string<\glsxtrMathItalicNu
12004 \string<\glsxtrMathItalicXi
12005 \string<\glsxtrMathItalicOmicron
12006 \string<\glsxtrMathItalicPi
12007 \string<\glsxtrMathItalicRho
12008 \string<\glsxtrMathItalicSigma
12009 \string<\glsxtrMathItalicTau
12010 \string<\glsxtrMathItalicUpsilon
12011 \string<\glsxtrMathItalicPhi
12012 \string<\glsxtrMathItalicChi
12013 \string<\glsxtrMathItalicPsi
12014 \string<\glsxtrMathItalicOmega
12015 }

```

`licGreekIIrules` Doesn't include digamma.

```

12016 \newcommand*{\glsxtrMathItalicGreekIIrules}{%
12017 \glsxtrMathItalicAlpha
12018 \string<\glsxtrMathItalicBeta
12019 \string<\glsxtrMathItalicGamma
12020 \string<\glsxtrMathItalicDelta
12021 \string<\glsxtrMathItalicEpsilon
12022 \string<\glsxtrMathItalicZeta
12023 \string<\glsxtrMathItalicEta
12024 \string<\glsxtrMathItalicTheta
12025 \string<\glsxtrMathItalicIota

```

```

12026 \string<\glsxtrMathItalicKappa
12027 \string<\glsxtrMathItalicLambda
12028 \string<\glsxtrMathItalicMu
12029 \string<\glsxtrMathItalicNu
12030 \string<\glsxtrMathItalicXi
12031 \string<\glsxtrMathItalicOmicron
12032 \string<\glsxtrMathItalicPi
12033 \string<\glsxtrMathItalicRho
12034 \string<\glsxtrMathItalicSigma
12035 \string<\glsxtrMathItalicTau
12036 \string<\glsxtrMathItalicUpsilon
12037 \string<\glsxtrMathItalicPhi
12038 \string<\glsxtrMathItalicChi
12039 \string<\glsxtrMathItalicPsi
12040 \string<\glsxtrMathItalicOmega
12041 }

```

`upperGreekIrules` Upper case only (includes upright digamma).

```

12042 \newcommand*{\glsxtrMathItalicUpperGreekIrules}{%
12043 \glshex 1D6E2% upper case alpha (maths italic)
12044 \string<\glshex 1D6E3% upper case beta (maths italic)
12045 \string<\glshex 1D6E4% upper case gamma (maths italic)
12046 \string<\glshex 1D6E5% upper case delta (maths italic)
12047 \string<\glshex 1D6E6% upper case epsilon (maths italic)
12048 \string<\glshex 03DC% upper case digamma
12049 \string<\glshex 1D6E7% upper case zeta (maths italic)
12050 \string<\glshex 1D6E8% upper case eta (maths italic)
12051 \string<\glshex 1D6E9% upper case theta (maths italic)
12052 \string=\glshex 1D6F3% upper case theta variant (maths italic)
12053 \string<\glshex 1D6EA% upper case iota (maths italic)
12054 \string<\glshex 1D6EB% upper case kappa (maths italic)
12055 \string<\glshex 1D6EC% upper case lambda (maths italic)
12056 \string<\glshex 1D6ED% upper case mu (maths italic)
12057 \string<\glshex 1D6EE% upper case nu (maths italic)
12058 \string<\glshex 1D6EF% upper case xi (maths italic)
12059 \string<\glshex 1D6F0% upper case omicron (maths italic)
12060 \string<\glshex 1D6F1% upper case pi (maths italic)
12061 \string<\glshex 1D6F2% upper case rho (maths italic)
12062 \string<\glshex 1D6F4% upper case sigma (maths italic)
12063 \string<\glshex 1D6F5% upper case tau (maths italic)
12064 \string<\glshex 1D6F6% upper case upsilon (maths italic)
12065 \string<\glshex 1D6F7% upper case phi (maths italic)
12066 \string<\glshex 1D6F8% upper case chi (maths italic)
12067 \string<\glshex 1D6F9% upper case psi (maths italic)
12068 \string<\glshex 1D6FA% upper case omega (maths italic)
12069 }

```

`upperGreekIIrules` Upper case only (doesn't include upright digamma).

```

12070 \newcommand*{\glsxtrMathItalicUpperGreekIIrules}{%

```

```

12071 \glshex 1D6E2% upper case alpha (maths italic)
12072 \string<\glshex 1D6E3% upper case beta (maths italic)
12073 \string<\glshex 1D6E4% upper case gamma (maths italic)
12074 \string<\glshex 1D6E5% upper case delta (maths italic)
12075 \string<\glshex 1D6E6% upper case epsilon (maths italic)
12076 \string<\glshex 1D6E7% upper case zeta (maths italic)
12077 \string<\glshex 1D6E8% upper case eta (maths italic)
12078 \string<\glshex 1D6E9% upper case theta (maths italic)
12079 \string=\glshex 1D6F3% upper case theta variant (maths italic)
12080 \string<\glshex 1D6EA% upper case iota (maths italic)
12081 \string<\glshex 1D6EB% upper case kappa (maths italic)
12082 \string<\glshex 1D6EC% upper case lambda (maths italic)
12083 \string<\glshex 1D6ED% upper case mu (maths italic)
12084 \string<\glshex 1D6EE% upper case nu (maths italic)
12085 \string<\glshex 1D6EF% upper case xi (maths italic)
12086 \string<\glshex 1D6F0% upper case omicron (maths italic)
12087 \string<\glshex 1D6F1% upper case pi (maths italic)
12088 \string<\glshex 1D6F2% upper case rho (maths italic)
12089 \string<\glshex 1D6F4% upper case sigma (maths italic)
12090 \string<\glshex 1D6F5% upper case tau (maths italic)
12091 \string<\glshex 1D6F6% upper case upsilon (maths italic)
12092 \string<\glshex 1D6F7% upper case phi (maths italic)
12093 \string<\glshex 1D6F8% upper case chi (maths italic)
12094 \string<\glshex 1D6F9% upper case psi (maths italic)
12095 \string<\glshex 1D6FA% upper case omega (maths italic)
12096 }

```

`owerGreekIrules` Lower case only (includes upright digamma).

```

12097 \newcommand*{\glsxtrMathItalicLowerGreekIrules}{%
12098 \glshex 1D6FC% lower case alpha (maths italic)
12099 \string<\glshex 1D6FD% lower case beta (maths italic)
12100 \string<\glshex 1D6FE% lower case gamma (maths italic)
12101 \string<\glshex 1D6FF% lower case delta (maths italic)
12102 \string<\glshex 1D700% lower case epsilon (maths italic)
12103 \string=\glshex 1D716% lower case epsilon variant (maths italic)
12104 \string<\glshex 03DD% lower case digamma
12105 \string<\glshex 1D701% lower case zeta (maths italic)
12106 \string<\glshex 1D702% lower case eta (maths italic)
12107 \string<\glshex 1D703% lower case theta (maths italic)
12108 \string=\glshex 1D717% lower case theta variant (maths italic)
12109 \string<\glshex 1D704% lower case iota (maths italic)
12110 \string<\glshex 1D705% lower case kappa (maths italic)
12111 \string=\glshex 1D718% lower case kappa variant (maths italic)
12112 \string<\glshex 1D706% lower case lambda (maths italic)
12113 \string<\glshex 1D707% lower case mu (maths italic)
12114 \string<\glshex 1D708% lower case nu (maths italic)
12115 \string<\glshex 1D709% lower case xi (maths italic)
12116 \string<\glshex 1D70A% lower case omicron (maths italic)
12117 \string<\glshex 1D70B% lower case pi (maths italic)

```

```

12118 \string=\glshex 1D71B% lower case pi variant (maths italic)
12119 \string<\glshex 1D70C% lower case rho (maths italic)
12120 \string=\glshex 1D71A% lower case rho variant (maths italic)
12121 \string<\glshex 1D70D% lower case final sigma (maths italic)
12122 \string=\glshex 1D70E% lower case sigma (maths italic)
12123 \string<\glshex 1D70F% lower case tau (maths italic)
12124 \string<\glshex 1D710% lower case upsilon (maths italic)
12125 \string<\glshex 1D711% lower case phi (maths italic)
12126 \string=\glshex 1D719% lower case phi variant (maths italic)
12127 \string<\glshex 1D712% lower case chi (maths italic)
12128 \string<\glshex 1D713% lower case psi (maths italic)
12129 \string<\glshex 1D714% lower case omega (maths italic)
12130 }

```

werGreekIIrules Lower case only (doesn't includes upright digamma).

```

12131 \newcommand*{\glsxtrMathItalicLowerGreekIIrules}{%
12132 \glshex 1D6FC% lower case alpha (maths italic)
12133 \string<\glshex 1D6FD% lower case beta (maths italic)
12134 \string<\glshex 1D6FE% lower case gamma (maths italic)
12135 \string<\glshex 1D6FF% lower case delta (maths italic)
12136 \string<\glshex 1D700% lower case epsilon (maths italic)
12137 \string=\glshex 1D716% lower case epsilon variant (maths italic)
12138 \string<\glshex 1D701% lower case zeta (maths italic)
12139 \string<\glshex 1D702% lower case eta (maths italic)
12140 \string<\glshex 1D703% lower case theta (maths italic)
12141 \string=\glshex 1D717% lower case theta variant (maths italic)
12142 \string<\glshex 1D704% lower case iota (maths italic)
12143 \string<\glshex 1D705% lower case kappa (maths italic)
12144 \string=\glshex 1D718% lower case kappa variant (maths italic)
12145 \string<\glshex 1D706% lower case lambda (maths italic)
12146 \string<\glshex 1D707% lower case mu (maths italic)
12147 \string<\glshex 1D708% lower case nu (maths italic)
12148 \string<\glshex 1D709% lower case xi (maths italic)
12149 \string<\glshex 1D70A% lower case omicron (maths italic)
12150 \string<\glshex 1D70B% lower case pi (maths italic)
12151 \string=\glshex 1D71B% lower case pi variant (maths italic)
12152 \string<\glshex 1D70C% lower case rho (maths italic)
12153 \string=\glshex 1D71A% lower case rho variant (maths italic)
12154 \string<\glshex 1D70D% lower case final sigma (maths italic)
12155 \string=\glshex 1D70E% lower case sigma (maths italic)
12156 \string<\glshex 1D70F% lower case tau (maths italic)
12157 \string<\glshex 1D710% lower case upsilon (maths italic)
12158 \string<\glshex 1D711% lower case phi (maths italic)
12159 \string=\glshex 1D719% lower case phi variant (maths italic)
12160 \string<\glshex 1D712% lower case chi (maths italic)
12161 \string<\glshex 1D713% lower case psi (maths italic)
12162 \string<\glshex 1D714% lower case omega (maths italic)
12163 }

```

MathGreekIrules Includes both upright and italic with digamma between epsilon and zeta.

```
12164 \newcommand*\glsxtrMathGreekIrules}{%
12165  \glsxtrMathItalicAlpha
12166  \string;\glsxtrUpAlpha
12167  \string<\glsxtrMathItalicBeta
12168  \string;\glsxtrUpBeta
12169  \string<\glsxtrMathItalicGamma
12170  \string;\glsxtrUpGamma
12171  \string<\glsxtrMathItalicDelta
12172  \string;\glsxtrUpDelta
12173  \string<\glsxtrMathItalicEpsilon
12174  \string;\glsxtrUpEpsilon
12175  \string<\glsxtrUpDigamma
12176  \string<\glsxtrMathItalicZeta
12177  \string;\glsxtrUpZeta
12178  \string<\glsxtrMathItalicEta
12179  \string;\glsxtrUpEta
12180  \string<\glsxtrMathItalicTheta
12181  \string;\glsxtrUpTheta
12182  \string<\glsxtrMathItalicIota
12183  \string;\glsxtrUpIota
12184  \string<\glsxtrMathItalicKappa
12185  \string;\glsxtrUpKappa
12186  \string<\glsxtrMathItalicLambda
12187  \string;\glsxtrUpLambda
12188  \string<\glsxtrMathItalicMu
12189  \string;\glsxtrUpMu
12190  \string<\glsxtrMathItalicNu
12191  \string;\glsxtrUpNu
12192  \string<\glsxtrMathItalicXi
12193  \string;\glsxtrUpXi
12194  \string<\glsxtrMathItalicOmicron
12195  \string;\glsxtrUpOmicron
12196  \string<\glsxtrMathItalicPi
12197  \string;\glsxtrUpPi
12198  \string<\glsxtrMathItalicRho
12199  \string;\glsxtrUpRho
12200  \string<\glsxtrMathItalicSigma
12201  \string;\glsxtrUpSigma
12202  \string<\glsxtrMathItalicTau
12203  \string;\glsxtrUpTau
12204  \string<\glsxtrMathItalicUpsilon
12205  \string;\glsxtrUpUpsilon
12206  \string<\glsxtrMathItalicPhi
12207  \string;\glsxtrUpPhi
12208  \string<\glsxtrMathItalicChi
12209  \string;\glsxtrUpChi
12210  \string<\glsxtrMathItalicPsi
12211  \string;\glsxtrUpPsi
```

```

12212 \string<\glsxtrMathItalicOmega
12213 \string; \glsxtrUpOmega
12214 }

```

`athGreekIIrules` Includes both upright and italic (digamma not included).

```

12215 \newcommand*\glsxtrMathGreekIIrules}{%
12216 \glsxtrMathItalicAlpha
12217 \string; \glsxtrUpAlpha
12218 \string<\glsxtrMathItalicBeta
12219 \string; \glsxtrUpBeta
12220 \string<\glsxtrMathItalicGamma
12221 \string; \glsxtrUpGamma
12222 \string<\glsxtrMathItalicDelta
12223 \string; \glsxtrUpDelta
12224 \string<\glsxtrMathItalicEpsilon
12225 \string; \glsxtrUpEpsilon
12226 \string<\glsxtrMathItalicZeta
12227 \string; \glsxtrUpZeta
12228 \string<\glsxtrMathItalicEta
12229 \string; \glsxtrUpEta
12230 \string<\glsxtrMathItalicTheta
12231 \string; \glsxtrUpTheta
12232 \string<\glsxtrMathItalicIota
12233 \string; \glsxtrUpIota
12234 \string<\glsxtrMathItalicKappa
12235 \string; \glsxtrUpKappa
12236 \string<\glsxtrMathItalicLambda
12237 \string; \glsxtrUpLambda
12238 \string<\glsxtrMathItalicMu
12239 \string; \glsxtrUpMu
12240 \string<\glsxtrMathItalicNu
12241 \string; \glsxtrUpNu
12242 \string<\glsxtrMathItalicXi
12243 \string; \glsxtrUpXi
12244 \string<\glsxtrMathItalicOmicron
12245 \string; \glsxtrUpOmicron
12246 \string<\glsxtrMathItalicPi
12247 \string; \glsxtrUpPi
12248 \string<\glsxtrMathItalicRho
12249 \string; \glsxtrUpRho
12250 \string<\glsxtrMathItalicSigma
12251 \string; \glsxtrUpSigma
12252 \string<\glsxtrMathItalicTau
12253 \string; \glsxtrUpTau
12254 \string<\glsxtrMathItalicUpsilon
12255 \string; \glsxtrUpUpsilon
12256 \string<\glsxtrMathItalicPhi
12257 \string; \glsxtrUpPhi
12258 \string<\glsxtrMathItalicChi

```

```

12259 \string;\glsxtrUpChi
12260 \string<\glsxtrMathItalicPsi
12261 \string;\glsxtrUpPsi
12262 \string<\glsxtrMathItalicOmega
12263 \string;\glsxtrUpOmega
12264 }

\glsxtrUpAlpha
12265 \newcommand*\glsxtrUpAlpha{%
12266 \glshex 03B1,% lower case alpha
12267 \glshex 0391% upper case alpha
12268 }

\glsxtrUpBeta
12269 \newcommand*\glsxtrUpBeta{%
12270 \glshex 03B2,% lower case beta
12271 \glshex 0392% upper case beta
12272 }

\glsxtrUpGamma
12273 \newcommand*\glsxtrUpGamma{%
12274 \glshex 03B3,% lower case gamma
12275 \glshex 0393% upper case gamma
12276 }

\glsxtrUpDelta
12277 \newcommand*\glsxtrUpDelta{%
12278 \glshex 03B4,% lower case delta
12279 \glshex 0394% upper case delta
12280 }

glsxtrUpEpsilon
12281 \newcommand*\glsxtrUpEpsilon{%
12282 \glshex 03B5% lower case epsilon
12283 \string=\glshex 03F5,% lower case epsilon variant
12284 \glshex 0395% upper case epsilon
12285 }

glsxtrUpDigamma
12286 \newcommand*\glsxtrUpDigamma{%
12287 \glshex 03DD,% lower case digamma
12288 \glshex 03DC% upper case digamma
12289 }

\glsxtrUpZeta
12290 \newcommand*\glsxtrUpZeta{%
12291 \glshex 03B6,% lower case zeta
12292 \glshex 0396% upper case zeta
12293 }

```

```

\glsxtrUpEta
12294 \newcommand*{\glsxtrUpEta}{%
12295  \glshex 03B7,% lower case eta
12296  \glshex 0397% upper case eta
12297 }

\glsxtrUpTheta
12298 \newcommand*{\glsxtrUpTheta}{%
12299  \glshex 03B8% lower case theta
12300  \string=\glshex 03D1,% lower case theta variant
12301  \glshex 0398% upper case theta
12302 }

\glsxtrUpIota
12303 \newcommand*{\glsxtrUpIota}{%
12304  \glshex 03B9,% lower case iota
12305  \glshex 0399% upper case iota
12306 }

\glsxtrUpKappa
12307 \newcommand*{\glsxtrUpKappa}{%
12308  \glshex 03BA% lower case kappa
12309  \string=\glshex 03F0,% lower case kappa variant
12310  \glshex 039A% upper case kappa
12311 }

\glsxtrUpLambda
12312 \newcommand*{\glsxtrUpLambda}{%
12313  \glshex 03BB,% lower lambda
12314  \glshex 039B% upper case lambda
12315 }

\glsxtrUpMu
12316 \newcommand*{\glsxtrUpMu}{%
12317  \glshex 03BC,% lower case mu
12318  \glshex 039C% upper case mu
12319 }

\glsxtrUpNu
12320 \newcommand*{\glsxtrUpNu}{%
12321  \glshex 03BD,% lower case nu
12322  \glshex 039D% upper case nu
12323 }

\glsxtrUpXi
12324 \newcommand*{\glsxtrUpXi}{%
12325  \glshex 03BE,% lower case xi
12326  \glshex 039E% upper case xi
12327 }

```

```

glsxtrUpOmicron
12328 \newcommand*{\glsxtrUpOmicron}{%
12329  \glshex 03BF,% lower case omicron
12330  \glshex 039F% upper case omicron
12331 }

\glsxtrUpPi
12332 \newcommand*{\glsxtrUpPi}{%
12333  \glshex 03C0% lower case pi
12334  \string=\glshex 03D6,% lower case pi variant
12335  \glshex 03A0% upper case pi
12336 }

\glsxtrUpRho
12337 \newcommand*{\glsxtrUpRho}{%
12338  \glshex 03C1% lower case rho
12339  \string=\glshex 03F1,% lower case rho variant
12340  \glshex 03A1% upper case rho
12341 }

\glsxtrUpSigma
12342 \newcommand*{\glsxtrUpSigma}{%
12343  \glshex 03C2% lower case sigma
12344  \string=\glshex 03C3,% lower case sigma
12345  \glshex 03A3% upper case sigma
12346 }

\glsxtrUpTau
12347 \newcommand*{\glsxtrUpTau}{%
12348  \glshex 03C4,% lower case tau
12349  \glshex 03A4% upper case tau
12350 }

glsxtrUpUpsilon
12351 \newcommand*{\glsxtrUpUpsilon}{%
12352  \glshex 03C5,% lower case epsilon
12353  \glshex 03A5% upper case epsilon
12354 }

\glsxtrUpPhi
12355 \newcommand*{\glsxtrUpPhi}{%
12356  \glshex 03C6% lower case phi
12357  \string=\glshex 03D5,% lower case phi variant
12358  \glshex 03A6% upper case phi
12359 }

\glsxtrUpChi
12360 \newcommand*{\glsxtrUpChi}{%

```

```

12361 \glshex 03C7,% lower case chi
12362 \glshex 03A7% upper case chi
12363 }

\glsxtrUpPsi
12364 \newcommand*\glsxtrUpPsi{%
12365 \glshex 03C8,% lower case psi
12366 \glshex 03A8% upper case psi
12367 }

\glsxtrUpOmega
12368 \newcommand*\glsxtrUpOmega{%
12369 \glshex 03C9,% lower case omega
12370 \glshex 03A9% upper case omega
12371 }

MathItalicAlpha
12372 \newcommand*\glsxtrMathItalicAlpha{%
12373 \glshex 1D6FC,% lower case alpha (maths italic)
12374 \glshex 1D6E2% upper case alpha (maths italic)
12375 }

rMathItalicBeta
12376 \newcommand*\glsxtrMathItalicBeta{%
12377 \glshex 1D6FD,% lower case beta (maths italic)
12378 \glshex 1D6E3% upper case beta (maths italic)
12379 }

MathItalicGamma
12380 \newcommand*\glsxtrMathItalicGamma{%
12381 \glshex 1D6FE,% lower case gamma (maths italic)
12382 \glshex 1D6E4% upper case gamma (maths italic)
12383 }

MathItalicDelta
12384 \newcommand*\glsxtrMathItalicDelta{%
12385 \glshex 1D6FF,% lower case delta (maths italic)
12386 \glshex 1D6E5% upper case delta (maths italic)
12387 }

thItalicEpsilon
12388 \newcommand*\glsxtrMathItalicEpsilon{%
12389 \glshex 1D700% lower case epsilon (maths italic)
12390 \string=\glshex 1D716,% lower case epsilon variant (maths italic)
12391 \glshex 1D6E6% upper case epsilon (maths italic)
12392 }

```

```

rMathItalicZeta
12393 \newcommand*{\glsxtrMathItalicZeta}{%
12394  \glshex 1D701,% lower case zeta (maths italic)
12395  \glshex 1D6E7% upper case zeta (maths italic)
12396 }

trMathItalicEta
12397 \newcommand*{\glsxtrMathItalicEta}{%
12398  \glshex 1D702,% lower case eta (maths italic)
12399  \glshex 1D6E8% upper case eta (maths italic)
12400 }

MathItalicTheta
12401 \newcommand*{\glsxtrMathItalicTheta}{%
12402  \glshex 1D703% lower case theta (maths italic)
12403  \string=\glshex 1D717,% lower case theta variant (maths italic)
12404  \glshex 1D6E9% upper case theta (maths italic)
12405  \string=\glshex 1D6F3% upper case theta variant (maths italic)
12406 }

rMathItalicIota
12407 \newcommand*{\glsxtrMathItalicIota}{%
12408  \glshex 1D704,% lower case iota (maths italic)
12409  \glshex 1D6EA% upper case iota (maths italic)
12410 }

MathItalicKappa
12411 \newcommand*{\glsxtrMathItalicKappa}{%
12412  \glshex 1D705% lower case kappa (maths italic)
12413  \string=\glshex 1D718,% lower case kappa variant (maths italic)
12414  \glshex 1D6EB% upper case kappa (maths italic)
12415 }

athItalicLambda
12416 \newcommand*{\glsxtrMathItalicLambda}{%
12417  \glshex 1D706,% lower case lambda (maths italic)
12418  \glshex 1D6EC% upper case lambda (maths italic)
12419 }

xtrMathItalicMu
12420 \newcommand*{\glsxtrMathItalicMu}{%
12421  \glshex 1D707,% lower case mu (maths italic)
12422  \glshex 1D6ED% upper case mu (maths italic)
12423 }

xtrMathItalicNu
12424 \newcommand*{\glsxtrMathItalicNu}{%
12425  \glshex 1D708,% lower case nu (maths italic)

```

```

12426 \glshex 1D6EE% upper case nu (maths italic)
12427 }

xtrMathItalicXi
12428 \newcommand*{\glsxtrMathItalicXi}{%
12429 \glshex 1D709,% lower case xi (maths italic)
12430 \glshex 1D6EF% upper case xi (maths italic)
12431 }

thItalicOmicron
12432 \newcommand*{\glsxtrMathItalicOmicron}{%
12433 \glshex 1D70A,% lower case omicron (maths italic)
12434 \glshex 1D6F0% upper case omicron (maths italic)
12435 }

xtrMathItalicPi
12436 \newcommand*{\glsxtrMathItalicPi}{%
12437 \glshex 1D70B% lower case pi (maths italic)
12438 \string=\glshex 1D71B,% lower case pi variant (maths italic)
12439 \glshex 1D6F1% upper case pi (maths italic)
12440 }

trMathItalicRho
12441 \newcommand*{\glsxtrMathItalicRho}{%
12442 \glshex 1D70C% lower case rho (maths italic)
12443 \string=\glshex 1D71A,% lower case rho variant (maths italic)
12444 \glshex 1D6F2% upper case rho (maths italic)
12445 }

MathItalicSigma
12446 \newcommand*{\glsxtrMathItalicSigma}{%
12447 \glshex 1D70D% lower case final sigma (maths italic)
12448 \string=\glshex 1D70E,% lower case sigma (maths italic)
12449 \glshex 1D6F4% upper case sigma (maths italic)
12450 }

trMathItalicTau
12451 \newcommand*{\glsxtrMathItalicTau}{%
12452 \glshex 1D70F,% lower case tau (maths italic)
12453 \glshex 1D6F5% upper case tau (maths italic)
12454 }

thItalicUpsilon
12455 \newcommand*{\glsxtrMathItalicUpsilon}{%
12456 \glshex 1D710,% lower case upsilon (maths italic)
12457 \glshex 1D6F6% upper case upsilon (maths italic)
12458 }

```

```

trMathItalicPhi
12459 \newcommand*{\glsxtrMathItalicPhi}{%
12460   \glshex{1D711} lower case phi (maths italic)
12461   \string=\glshex{1D719},% lower case phi variant (maths italic)
12462   \glshex{1D6F7} upper case phi (maths italic)
12463 }

trMathItalicChi
12464 \newcommand*{\glsxtrMathItalicChi}{%
12465   \glshex{1D712},% lower case chi (maths italic)
12466   \glshex{1D6F8} upper case chi (maths italic)
12467 }

trMathItalicPsi
12468 \newcommand*{\glsxtrMathItalicPsi}{%
12469   \glshex{1D713},% lower case psi (maths italic)
12470   \glshex{1D6F9} upper case psi (maths italic)
12471 }

MathItalicOmega
12472 \newcommand*{\glsxtrMathItalicOmega}{%
12473   \glshex{1D714},% lower case omega (maths italic)
12474   \glshex{1D6FA} upper case omega (maths italic)
12475 }

thItalicPartial
12476 \newcommand*{\glsxtrMathItalicPartial}{%
12477   \glshex{1D715} partial differential (maths italic)
12478 }

MathItalicNabla
12479 \newcommand*{\glsxtrMathItalicNabla}{%
12480   \glshex{1D6FB} nabla (maths italic)
12481 }

lsxtrdigirules Digits from the Basic Latin set and subscript and superscript digit rules.
12482 \newcommand*{\glsxtrdigirules}{%
12483   0\string=\glshex{2080}\string=\glshex{2070}
12484   \string<1\string=\glshex{2081}\string=\glshex{00B9}
12485   \string<2\string=\glshex{2082}\string=\glshex{00B2}
12486   \string<3\string=\glshex{2083}\string=\glshex{00B3}
12487   \string<4\string=\glshex{2084}\string=\glshex{2074}
12488   \string<5\string=\glshex{2085}\string=\glshex{2075}
12489   \string<6\string=\glshex{2086}\string=\glshex{2076}
12490   \string<7\string=\glshex{2087}\string=\glshex{2077}
12491   \string<8\string=\glshex{2088}\string=\glshex{2078}
12492   \string<9\string=\glshex{2089}\string=\glshex{2079}
12493 }

```

BasicDigitrules Digits from the Basic Latin set.

```
12494 \newcommand*\glsxtrBasicDigitrules}{%
12495 0\string<1\string<2\string<3\string<4%
12496 \string<5\string<6\string<7\string<8\string<9%
12497 }
```

criptDigitrules Subscript digits.

```
12498 \newcommand*\glsxtrSubScriptDigitrules}{%
12499 \glshex 2080% subscript 0
12500 \string<\glshex 2081% subscript 1
12501 \string<\glshex 2082% subscript 2
12502 \string<\glshex 2083% subscript 3
12503 \string<\glshex 2084% subscript 4
12504 \string<\glshex 2085% subscript 5
12505 \string<\glshex 2086% subscript 6
12506 \string<\glshex 2087% subscript 7
12507 \string<\glshex 2088% subscript 8
12508 \string<\glshex 2089% subscript 9
12509 }
```

criptDigitrules Superscript digits.

```
12510 \newcommand*\glsxtrSuperScriptDigitrules}{%
12511 \glshex 2070% superscript 0
12512 \string<\glshex 00B9% superscript 1
12513 \string<\glshex 00B2% superscript 2
12514 \string<\glshex 00B3% superscript 3
12515 \string<\glshex 2074% superscript 4
12516 \string<\glshex 2075% superscript 5
12517 \string<\glshex 2076% superscript 6
12518 \string<\glshex 2077% superscript 7
12519 \string<\glshex 2078% superscript 8
12520 \string<\glshex 2079% superscript 9
12521 }
```

trfractionrules Vulgar fractions.

```
12522 \newcommand*\glsxtrfractionrules}{%
12523 \glshex 215F% fraction numerator one (1/)
12524 \string<\glshex 2189% zero thirds (0/3 = 0)
12525 \string<\glshex 2152% one tenth (1/10 = 0.1)
12526 \string<\glshex 2151% one ninth (1/9 ~ 0.111)
12527 \string<\glshex 215B% one eighth (1/8 = 0.125)
12528 \string<\glshex 2150% one seventh (1/7 ~ 0.143)
12529 \string<\glshex 2159% one sixth (1/6 ~ 0.167)
12530 \string<\glshex 2155% one fifth (1/5 = 0.2)
12531 \string<\glshex 00BC% one quarter (1/4 = 0.25)
12532 \string<\glshex 2153% one third (1/3 ~ 0.333)
12533 \string<\glshex 215C% three eighths (3/8 = 0.375)
12534 \string<\glshex 2156% two fifths (2/5 = 0.4)
12535 \string<\glshex 00BD% one half (1/2 = 0.5)
```

```

12536 \string<\glshex 2157% three fifths (3/5 = 0.6)
12537 \string<\glshex 215D% five eighths (5/8 = 0.625)
12538 \string<\glshex 2154% two thirds (2/3 ~ 0.667)
12539 \string<\glshex 00BE% three quarters (3/4 = 0.75)
12540 \string<\glshex 2158% four fifths (4/5 = 0.8)
12541 \string<\glshex 215A% five sixths (5/6 ~ 0.833)
12542 \string<\glshex 215E% seven eighths (7/8 = 0.875)
12543 }

```

sxtrdialecthook Check for scripts associated with the document dialects.

```

12544 \renewcommand{\@glsxtrdialecthook}{%
12545   \ifundef\CurrentTrackedScript
12546   {%
12547     \TrackLangIfHasDefaultScript{\CurrentTrackedLanguage}%
12548   {%
12549     \edef\CurrentTrackedScript{%
12550       \TrackLangGetDefaultScript\CurrentTrackedLanguage}%
12551   }%
12552   {}%
12553 }%
12554 {}%
12555 \ifdef\CurrentTrackedScript
12556 {%
12557   \let\gls@orgTrackLangRequireDialectPrefix\TrackLangRequireDialectPrefix
12558   \def\TrackLangRequireDialectPrefix{glossariesxtr-}%
12559   \let\CurrentTrackedTag\CurrentTrackedScript
12560   \IfFileExists{\TrackLangRequireDialectPrefix\CurrentTrackedTag.1df}%
12561   {\RequireGlossariesExtraLang{\CurrentTrackedTag}}%
12562   {}%
12563   \let\TrackLangRequireDialectPrefix\gls@orgTrackLangRequireDialectPrefix
12564 }%
12565 {}%
12566 }

```

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.

```

12567 \ifdef\glsxtr@loaddialect
12568 {%
12569   \c@ifpackageloaded{tracklang}
12570   {%
12571     \AnyTrackedLanguages
12572     {%
12573       \ForEachTrackedDialect{\this@dialect}{\glsxtr@loaddialect}%
12574     }%
12575     {}%
12576   }
12577 {}%
12578 }

```

12579 { }

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:

```
12580 \NeedsTeXFormat{LaTeX2e}
12581 \ProvidesPackage{glossaries-extra-stylemods}[2018/04/09 v1.29 (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
12582 \newcommand*\{@glsxtr@loadstyles}{}%
```

all Provide all known styles.

```
12583 \DeclareOption{all}{%
12584   \appto\@glsxtr@loadstyles{%
12585     \RequirePackage{glossary-inline}%
12586     \RequirePackage{glossary-list}%
12587     \RequirePackage{glossary-tree}%
12588     \RequirePackage{glossary-mcols}%
12589     \RequirePackage{glossary-long}%
12590     \RequirePackage{glossary-longragged}%
12591     \RequirePackage{glossary-longbooktabs}%
12592     \RequirePackage{glossary-super}%
12593     \RequirePackage{glossary-superragged}%
12594     \RequirePackage{glossary-bookindex}%
12595   }%
12596 }
12597 \DeclareOption*{%
12598   \IfFileExists{glossary-\CurrentOption.sty}%
12599   {\appto\@glsxtr@loadstyles{%
12600     \noexpand\RequirePackage{glossary-\CurrentOption}}%
12601   }%
12602   {%
12603     \PackageError{glossaries-extra-styles}%
}
```

```
12604     {Unknown option '\CurrentOption'}{}%
12605   }%
12606 }
```

Process the package options:

```
12607 \ProcessOptions
```

Load the required packages:

```
12608 \@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:

sxtprerelocation This uses \providecommand as the same command is also provided by glossary-bookindex.

```
12609 \providecommand*\@glsxtrprelocation}{\space}
```

In case we have an old version of glossaries:

ewglossarystyle

```
12610 \providecommand{\renewglossarystyle}[2]{%
12611   \ifcsundef{@glsstyle@#1}{%
12612     {%
12613       \PackageError{glossaries-extra}{Glossary style '#1' isn't already defined}{}%
12614     }%
12615     {%
12616       \csdef{@glsstyle@#1}{#2}%
12617     }%
12618 }
```

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.

```
12619 \ifdef{\@glsstyle@listdotted}{%
12620   {%
12621     \renewglossarystyle{listdotted}{%
12622       \setglossarystyle{list}{%
12623         \renewcommand*\@glossentry}[2]{%
12624           \item[]\makebox[\glslistdottedwidth][l]{%
12625             \glsentryitem{##1}%
12626             \glstarget{##1}{\glossentryname{##1}}%
12627             \unskip\leaders\hbox to 2.9mm{\hss.}\hfill\strut}%
12628             \glossentrydesc{##1}\glspostdescription}%
12629         \renewcommand*\@subglossentry}[3]{%
12630           \item[]\makebox[\glslistdottedwidth][l]{%
12631             \glssubentryitem{##2}%
12632             \glstarget{##2}{\glossentryname{##2}}%
12633             \unskip\leaders\hbox to 2.9mm{\hss.}\hfill\strut}%
12634             \glossentrydesc{##2}\glspostdescription}%
12635 }}
```

```
12636 }  
12637 {%
```

Assume the style isn't required if it hasn't already been defined.

```
12638 }
```

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.

```
12639 \ifdef{@glsstyle@list}  
12640 {%
```

listprelocation Space before number list for top-level entries.

```
12641 \newcommand{\glslistprelocation}{\glsxtrprelocation}
```

childprelocation Space before number list for child entries.

```
12642 \newcommand{\glslistchildprelocation}{\glslistprelocation}
```

childpostlocation Full stop after number list.

```
12643 \newcommand{\glslistchildpostlocation}{.}
```

Redefine list to use these commands.

```
12644 \renewglossarystyle{list}{%  
12645   \renewenvironment{theglossary}{%  
12646     {\begin{description}}{\end{description}}%  
12647     \renewcommand*\glossaryheader{}%  
12648     \renewcommand*\glsgroupheading[1]{}%  
12649     \renewcommand*\glossentry[2]{%  
12650       \item[\glsentryitem{##1}%  
12651         \glstarget{##1}{\glossentryname{##1}}]  
12652         \glossentrydesc{##1}\glspostdescription\glslistprelocation ##2}%  
12653     \renewcommand*\subglossentry[3]{%  
12654       \glssubentryitem{##2}%  
12655       \glstarget{##2}{\strut}\space  
12656       \glossentrydesc{##2}\glspostdescription  
12657       \glslistchildprelocation ##3\glslistchildpostlocation}%  
12658     \renewcommand*\glsgroupskip{\ifglsnogroupskip\else\indexspace\fi}%  
12659   }  
12660 }  
12661 {}
```

Similarly for altlist. Since it requires list, the new commands should have been defined above.

```
12662 \ifdef{@glsstyle@altlist}  
12663 {%
```



```
12664   \renewglossarystyle{altlist}{%  
12665     \setglossarystyle{list}{%  
12666     \renewcommand*\glossentry[2]{%  
12667       \item[\glsentryitem{##1}%
```

```

12668     \glstarget{##1}{\glossentryname{##1}}]%
12669     \mbox{} \par \nobreak \afterheading
12670     \glossentrydesc{##1} \glspostdescription \glslistprelocation ##2}%
12671     \renewcommand{\subglossentry}[3]{%
12672         \par
12673         \glssubentryitem{##2}%
12674         \glstarget{##2}{\strut} \glossentrydesc{##2} \glspostdescription
12675         \glslistchildprelocation ##3}%
12676     }
12677 }
12678 {}

```

Redefine `listgroup` so that it discourages a break after group headings.

```

12679 \ifdef{\@glsstyle@listgroup}
12680 {%
12681     \renewglossarystyle{listgroup}{%
12682         \setglossarystyle{list}%
12683         \renewcommand*{\glsgroupheading}[1]{%
12684             \item[\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}]%
12685             \mbox{} \par \nobreak \afterheading
12686         }%
12687     }
12688 }
12689 {}

```

Similarly for `listhypergroup`.

```

12690 \ifdef{\@glsstyle@listhypergroup}
12691 {%
12692     \renewglossarystyle{listhypergroup}{%
12693         \setglossarystyle{list}%
12694         \renewcommand*{\glossaryheader}{%
12695             \glslistnavigationitem{\glsnavigation}}%
12696         \renewcommand*{\glsgroupheading}[1]{%
12697             \item[\glslistgroupheaderfmt
12698                 {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}]%
12699             \mbox{} \par \nobreak \afterheading
12700         }%
12701     }
12702 }
12703 {}

```

Similarly for `altlistgroup`.

```

12704 \ifdef{\@glsstyle@altlistgroup}
12705 {%
12706     \renewglossarystyle{altlistgroup}{%
12707         \setglossarystyle{altlist}%
12708         \renewcommand*{\glsgroupheading}[1]{%
12709             \item[\glslistgroupheaderfmt{\glsgetgrouptitle{##1}}]%
12710             \mbox{} \par \nobreak \afterheading
12711         }%
12712     }

```

```

12713 }
12714 {}

Similarly for altlisthypergroup.

12715 \ifdef{\@glsstyle@altlisthypergroup}
12716 {%
12717   \renewglossarystyle{altlisthypergroup}{%
12718     \setglossarystyle{altlist}{%
12719       \renewcommand*{\glossaryheader}{%
12720         \glslistnavigationitem{\glsnavigation}}%
12721       \renewcommand*{\glsgroupheading}[1]{%
12722         \item[\glslistgroupheaderfmt
12723           {\glsnavhypertarget{\#\#1}{\glsgetgrouptitle{\#\#1}}}]%
12724         \mbox{}\par\nobreak\@afterheading
12725       }%
12726     }%
12727   }%
12728 }

```

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`.

```

12729 \ifcsdef{@glsstyle@long}
12730 {%
12731   \renewglossarystyle{long}{%
12732     \renewenvironment{theglossary}{%
12733       {\begin{longtable}{lp{\glsdescwidth}}}%
12734       {\end{longtable}}%
12735     \renewcommand*{\glossaryheader}{}%
12736     \renewcommand*{\glsgroupheading}[1]{}%
12737     \renewcommand{\glossentry}[2]{%
12738       \glsentryitem{\#\#1}\glstarget{\#\#1}{\glossentryname{\#\#1}} &
12739       \glossentrydesc{\#\#1}\glspostdescription
12740       \glsxtrprelocation ##2\tabularnewline
12741     }%
12742     \renewcommand{\subglossentry}[3]{%
12743       &
12744       \glssubentryitem{\#\#2}%
12745       \glstarget{\#\#2}{\strut}\glossentrydesc{\#\#2}\glspostdescription
12746       \glsxtrprelocation ##3\tabularnewline
12747     }%
12748     \ifglsnogroupskip
12749       \renewcommand*{\glsgroupskip}{}%
12750     \else
12751       \renewcommand*{\glsgroupskip}{\& \tabularnewline}%
12752     \fi
12753   }

```

```
12754 }
12755 {}
```

Three column style:

```
12756 \ifcsdef{@glsstyle@long3col}
12757 {%
12758   \renewglossarystyle{long3col}{%
12759     \renewenvironment{theglossary}{%
12760       {\begin{longtable}{lp{\glsdescwidth}p{\glspagelistwidth}}}%
12761     {\end{longtable}}%
12762     \renewcommand*\glossaryheader{}{%
12763       \renewcommand*\glsgroupheading}[1]{}}{%
12764       \renewcommand{\glossentry}[2]{%
12765         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12766         \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
12767       }{%
12768         \renewcommand{\subglossentry}[3]{%
12769           &
12770           \glosssubentryitem{##2}{%
12771             \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12772             ##3\tabularnewline
12773       }}}{}}
```

Conditional needs to be outside of \glsgroupskip otherwise it can cause “Incomplete \iftrue” errors.

```
12774 \ifglsnogroupskip
12775   \renewcommand*\glsgroupskip{}{%
12776   \else
12777     \renewcommand*\glsgroupskip}{\& \&\tabularnewline}{%
12778   \fi
12779 }
12780 }
12781 {}
```

Four column style:

```
12782 \ifcsdef{@glsstyle@long4col}
12783 {%
12784   \renewglossarystyle{long4col}{%
12785     \renewenvironment{theglossary}{%
12786       {\begin{longtable}{llll}}%
12787     {\end{longtable}}%
12788     \renewcommand*\glossaryheader{}{%
12789       \renewcommand*\glsgroupheading}[1]{}}{%
12790       \renewcommand{\glossentry}[2]{%
12791         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12792         \glossentrydesc{##1}\glspostdescription &
12793         \glossentrysymbol{##1} &
12794         ##2\tabularnewline
12795       }{%
12796         \renewcommand{\subglossentry}[3]{%
12797           &
```

```

12798     \glssubentryitem{##2}%
12799     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12800     \glossentrysymbol{##2} & ##3\tabularnewline
12801   }%
12802   \ifglsnogroupskip
12803     \renewcommand*\glsgroupskip{}%
12804   \else
12805     \renewcommand*\glsgroupskip{\& \&\tabularnewline}%
12806   \fi
12807 }
12808 }
12809 {}
```

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`.

```

12810 \ifcsdef@glsstyle@longragged}
12811 {%
12812   \renewglossarystyle{longragged}{%
12813     \renewenvironment{theglossary}{%
12814       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}}%
12815       {\end{longtable}}%
12816     \renewcommand*\glossaryheader{}%
12817     \renewcommand*\glsgroupheading}[1]{%
12818     \renewcommand{\glossentry}[2]{%
12819       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12820       \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%
12821       \tabularnewline
12822     }%
12823     \renewcommand{\subglossentry}[3]{%
12824       &
12825       \glssubentryitem{##2}%
12826       \glstarget{##2}{\strut}\glossentrydesc{##2}%
12827       \glspostdescription\glsxtrprelocation ##3%
12828       \tabularnewline
12829     }%
12830     \ifglsnogroupskip
12831       \renewcommand*\glsgroupskip{}%
12832     \else
12833       \renewcommand*\glsgroupskip{\& \tabularnewline}%
12834     \fi
12835   }%
12836 }
```

```
12837 {}
```

Three and four column styles don't use \glsxtrprelocation since the number list is in its own column.

```
12838 \ifcsdef{@glsstyle@longragged3col}{%
12839 {%
12840   \renewglossarystyle{longragged3col}{%
12841     \renewenvironment{theglossary}{%
12842       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}}{%
12843         >{\raggedright}p{\glspagelistwidth}}}}{%
12844       {\end{longtable}}}}{%
12845     \renewcommand*\glossaryheader{}{%
12846     \renewcommand*\glsgroupheading}[1]{}}{%
12847     \renewcommand{\glossentry}[2]{%
12848       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12849       \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
12850     }{%
12851     \renewcommand{\subglossentry}[3]{%
12852       &
12853       \glssubentryitem{##2}{%
12854         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12855         ##3\tabularnewline
12856     }{%
12857       \ifglsnogroupskip
12858         \renewcommand*\glsgroupskip{}{%
12859       \else
12860         \renewcommand*\glsgroupskip}{\& \&\tabularnewline}{%
12861       \fi
12862     }{%
12863   }{%
12864 }}
```

Four column style:

```
12865 \ifcsdef{@glsstyle@altlongragged4col}{%
12866 {%
12867   \renewglossarystyle{altlongragged4col}{%
12868     \renewenvironment{theglossary}{%
12869       {\begin{longtable}{l>{\raggedright}p{\glsdescwidth}l>{\raggedright}p{\glspagelistwidth}}{%
12870         >{\raggedright}p{\glspagelistwidth}}}}{%
12871       {\end{longtable}}}}{%
12872     \renewcommand*\glossaryheader{}{%
12873     \renewcommand*\glsgroupheading}[1]{}}{%
12874     \renewcommand{\glossentry}[2]{%
12875       \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12876       \glossentrydesc{##1}\glspostdescription & \glossentrysymbol{##1} &
12877       ##2\tabularnewline
12878     }{%
12879     \renewcommand{\subglossentry}[3]{%
12880       &
```

```

12881     \glssubentryitem{##2}%
12882     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12883     \glossentrysymbol{##2} & ##3\tabularnewline
12884 }%
12885 \ifglsnogroupskip
12886     \renewcommand*\glsgroupskip{}%
12887 \else
12888     \renewcommand*\glsgroupskip{\& \&\tabularnewline}%
12889 \fi
12890 }
12891 }
12892 {}
```

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`.

```

12893 \ifcsdef{@glsstyle@super}%
12894 {%
12895     \renewglossarystyle{super}{%
12896         \renewenvironment{theglossary}{%
12897             {\tablehead{}\tabletail{}}%
12898             \begin{supertabular}{lp{\glsdescwidth}}{}}%
12899             \end{supertabular}}%
12900         \renewcommand*\glossaryheader{}%
12901         \renewcommand*\glsgroupheading[1]{}%
12902         \renewcommand{\glossentry}[2]{%
12903             \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12904             \glossentrydesc{##1}\glspostdescription
12905             \glsxtrprelocation ##2\tabularnewline
12906 }%
12907         \renewcommand{\subglossentry}[3]{%
12908             &
12909             \glssubentryitem{##2}%
12910             \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
12911             \glsxtrprelocation ##3\tabularnewline
12912 }%
12913 \ifglsnogroupskip
12914     \renewcommand*\glsgroupskip{}%
12915 \else
12916     \renewcommand*\glsgroupskip{\& \tabularnewline}%
12917 \fi
12918 }
12919 }
12920 {}
```

Three column style:

```
12921 \ifcsdef{@glsstyle@super3col}
```

```

12922 {%
12923   \renewglossarystyle{super3col}{%
12924     \renewenvironment{theglossary}{%
12925       {\tablehead{}\tabletail{}%
12926         \begin{supertabular}{lp{\glscolumnwidth}p{\glspagelistwidth}}}}{%
12927       \end{supertabular}}{%
12928         \renewcommand*\glossaryheader{}{%
12929           \renewcommand*\glsgroupheading}[1]{}}{%
12930           \renewcommand{\glossentry}[2]{%
12931             \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12932               \glossentrydesc{##1}\glspostdescription & ##2\tabularnewline
12933             }{%
12934               \renewcommand{\subglossentry}[3]{%
12935                 &
12936                   \glssubentryitem{##2}{%
12937                     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12938                       ##3\tabularnewline
12939             }{%
12940               \ifglsnogroupskip
12941                 \renewcommand*\glsgroupskip{}{%
12942               \else
12943                 \renewcommand*\glsgroupskip}{ & \tabularnewline}{%
12944               \fi
12945             }{%
12946           }{%
12947 }{%

```

Four column styles:

```

12948 \ifcsdef{@glsstyle@super4col}{%
12949 {%
12950   \renewglossarystyle{super4col}{%
12951     \renewenvironment{theglossary}{%
12952       {\tablehead{}\tabletail{}%
12953         \begin{supertabular}{llll}{%
12954           \end{supertabular}}{%
12955             \renewcommand*\glossaryheader{}{%
12956               \renewcommand*\glsgroupheading}[1]{}}{%
12957               \renewcommand{\glossentry}[2]{%
12958                 \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12959                   \glossentrydesc{##1}\glspostdescription &
12960                     \glossentrysymbol{##1} & ##2\tabularnewline
12961             }{%
12962               \renewcommand{\subglossentry}[3]{%
12963                 &
12964                   \glssubentryitem{##2}{%
12965                     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
12966                       \glossentrysymbol{##2} & ##3\tabularnewline
12967             }{%

```

```

12968 \ifglsnogroupskip
12969   \renewcommand*\glsgroupskip{}%
12970 \else
12971   \renewcommand*\glsgroupskip{& & \tabularnewline}%
12972 \fi
12973 }
12974 }
12975 {}

```

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`.

```

12976 \ifcsdef{@glsstyle@superragged}{%
12977 }{%
12978   \renewglossarystyle{superragged}{%
12979     \renewenvironment{theglossary}{%
12980       {\tablehead{}\tabletail{}}{%
12981         \begin{supertabular}{l>\raggedright p{\glsdescwidth}}{%
12982           {\end{supertabular}}{%
12983             \renewcommand*\glossaryheader{}{%
12984               \renewcommand*\glsgroupheading}[1]{%
12985                 \renewcommand{\glossentry}[2]{%
12986                   \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
12987                     \glossentrydesc{##1}\glspostdescription\glsxtrprelocation ##2%{%
12988                     \tabularnewline
12989                   }{%
12990                     \renewcommand{\subglossentry}[3]{%
12991                       &
12992                         \glssubentryitem{##2}{%
12993                           \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription
12994                             \glsxtrprelocation ##3%{%
12995                               \tabularnewline
12996                             }{%
12997                               \ifglsnogroupskip
12998                                 \renewcommand*\glsgroupskip{}{%
12999                               \else
13000                                 \renewcommand*\glsgroupskip{& \tabularnewline}%
13001                               \fi
13002                           }
13003                         }
13004 }{%

```

Three column style:

```

13005 \ifcsdef{@glsstyle@superragged3col}{%
13006 }{%
13007   \renewglossarystyle{superragged3col}{%

```

```

13008 \renewenvironment{theglossary}%
13009   {\tablehead{}\tabletail{}%
13010     \begin{supertabular}{l>{\raggedright\p{\glscdescwidth}}%
13011       >{\raggedright\p{\glspagelistwidth}}}%
13012     \end{supertabular}%
13013   \renewcommand*\glossaryheader{}%
13014   \renewcommand*\glsgroupheding}[1]{}%
13015   \renewcommand{\glossentry}[2]{%
13016     \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13017     \glossentrydesc{##1}\glspostdescription &
13018     ##2\tabularnewline
13019   }%
13020   \renewcommand{\subglossentry}[3]{%
13021     &
13022     \glssubentryitem{##2}%
13023     \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13024     ##3\tabularnewline
13025   }%
13026   \ifglsnogroupskip
13027     \renewcommand*\glsgroupskip{}%
13028   \else
13029     \renewcommand*\glsgroupskip{\&\tabularnewline}%
13030   \fi
13031 }
13032 }
13033 {}
```

Four columns:

```

13034 \ifcsdef{@glsstyle@altsuperragged4col}%
13035 {}%
13036   \renewglossarystyle{altsuperragged4col}{%
13037     \renewenvironment{theglossary}%
13038       {\tablehead{}\tabletail{}%
13039         \begin{supertabular}{l>{\raggedright\p{\glscdescwidth}l}%
13040           >{\raggedright\p{\glspagelistwidth}}}%
13041         \end{supertabular}%
13042       \renewcommand*\glossaryheader{}%
13043       \renewcommand{\glossentry}[2]{%
13044         \glsentryitem{##1}\glstarget{##1}{\glossentryname{##1}} &
13045         \glossentrydesc{##1}\glspostdescription &
13046         \glossentrysymbol{##1} & ##2\tabularnewline
13047       }%
13048       \renewcommand{\subglossentry}[3]{%
13049         &
13050         \glssubentryitem{##2}%
13051         \glstarget{##2}{\strut}\glossentrydesc{##2}\glspostdescription &
13052         \glossentrysymbol{##2} & ##3\tabularnewline
13053       }%
```

```

13054     \ifglsnogroupskip
13055         \renewcommand*\{\glsgroupskip\}{\relax}
13056     \else
13057         \renewcommand*\{\glsgroupskip\}{\& \& \tabularnewline\relax}
13058     \fi
13059 }
13060 }
13061 {}

```

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`.

```

13062 \ifdef{@glsstyle@inline}
13063 {%
13064     \renewcommand*\{\glspostinline\}{.\spacefactor\sfcode`\.}
Just use \glsxtrpostdescription instead of \glspostdescription.
13065     \renewcommand*\{\glsinlinedescformat\}[3]{%
13066         \space#1\glsxtrpostdescription}
13067     \renewcommand*\{\glsinlinesubdescformat\}[3]{%
13068         #1\glsxtrpostdescription}

```

The default settings don't show the location lists, so there's no adjustment for `\glsxtrprelocation`.

```

13069 }
13070 {}

```

2.8 Tree Styles

The index style is redefined so that the space before the number list isn't hard coded.

```

13071 \ifdef{@glsstyle@index}
13072 {%

```

`treeprelocation` The space before the number list for top-level entries. This is shared by the other tree styles.

```

13073     \newcommand*\{\glstreeprelocation\}{\glsxtrprelocation}

```

`childprelocation` The space before the number list for child entries. This is shared by the other tree styles.

```

13074     \newcommand*\{\glstreechildprelocation\}{\glstreeprelocation}

13075     \renewglossarystyle{index}{%
13076         \renewenvironment{theglossary}{%
13077             {\setlength{\parindent}{0pt}}%
13078             {\setlength{\parskip}{0pt plus 0.3pt}}%
13079             \let\item\glstreeitem
13080             \let\subitem\glstreesubitem

```

```

13081     \let\subsubitem\glstreesubsubitem
13082     }%
13083 {\par}%
13084 \renewcommand*\glossaryheader{}%
13085 \renewcommand*\glsgroupheading}[1]{%
13086 \renewcommand*\glossentry}[2]{%
13087     \item\glstreeentryitem{##1}%
13088     \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
13089     \ifglshassymbol{##1}{\space(\glossentrysymbol{##1})}{}%
13090     \glstreepredesc \glossentrydesc{##1}\glspostdescription
13091     \glstreeprelocation ##2%
13092 }%
13093 \renewcommand{\subglossentry}[3]{%
13094     \ifcase##1\relax
13095         \item
13096     \or
13097         \subitem
13098         \glssubentryitem{##2}%
13099     \else
13100         \subsubitem
13101     \fi
13102     \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
13103     \ifglshassymbol{##2}{\space(\glossentrysymbol{##2})}{}%
13104     \glstreechildpredesc\glossentrydesc{##2}\glspostdescription
13105     \glstreechildprelocation ##3%
13106 }%
13107 \renewcommand*\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
13108 }
13109 }
13110 {}
```

The `indexgroup` style is redefined to discourage a page break after the heading.

```

13111 \ifdef{@glsstyle@indexgroup}
13112 {%
13113     \renewglossarystyle{indexgroup}{%
13114         \setglossarystyle{index}%
13115         \renewcommand*\glsgroupheading}[1]{%
13116             \item\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
13117             \nopagebreak\indexspace
13118             \nobreak\@afterheading
13119         }%
13120     }
13121 }
13122 {}
```

Similarly for `indexhypergroup`.

```

13123 \ifdef{@glsstyle@indexhypergroup}
13124 {%
13125     \renewglossarystyle{indexhypergroup}{%
13126         \setglossarystyle{index}%
```

```

13127 \renewcommand*\glossaryheader}{%
13128   \item\glstreenavigationfmt{\glsnavigation}%
13129   \nobreak\@afterheading\indexspace}%
13130 \renewcommand*\glsgroupheading}[1]{%
13131   \item\glstreegroupheaderfmt
13132   {\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
13133   \nopagebreak\indexspace
13134   \nobreak\@afterheading}%
13135 }%
13136 }
13137 {}
```

Adjust tree style to remove hard coded space before number list.

```

13138 \ifdef{@glsstyle@tree}
13139 {%
13140   \renewglossarystyle{tree}{%
13141     \renewenvironment{theglossary}{%
13142       \setlength{\parindent}{0pt}%
13143       \setlength{\parskip}{0pt plus 0.3pt}}%
13144     {}%
13145     \renewcommand*\glossaryheader}{%
13146     \renewcommand*\glsgroupheading}[1]{%
13147     \renewcommand{\glossentry}[2]{%
13148       \hangindent0pt\relax
13149       \parindent0pt\relax
13150       \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
13151       \ifglshassymbol{##1}{\space(\glossentrysymbol{##1})}{}%
13152       \glstreepredesc\glossentrydesc{##1}\glspostdescription
13153       \glstreeprelocation##2\par
13154     }%
13155     \renewcommand{\subglossentry}[3]{%
13156       \hangindent##1\glstreeindent\relax
13157       \parindent##1\glstreeindent\relax
13158       \ifnum##1=1\relax
13159         \glssubentryitem{##2}%
13160       \fi
13161       \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}%
13162       \ifglshassymbol{##2}{\space(\glossentrysymbol{##2})}{}%
13163       \glstreechildpredesc\glossentrydesc{##2}\glspostdescription
13164       \glstreechildprelocation ##3\par
13165     }%
13166     \renewcommand*\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
13167   }%
13168 }
13169 {}
```

The treegroup style is redefined to discourage a page break after the heading.

```

13170 \ifdef{@glsstyle@treegroup}
13171 {%
13172   \renewglossarystyle{treegroup}{%
```

```

13173 \setglossarystyle{tree}%
13174 \renewcommand{\glsgroupheding}[1]{\par
13175   \noindent\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}\par
13176   \nopagebreak\indexspace\nobreak\@afterheading}%
13177 }
13178 }
13179 {}

```

Similarly for treehypergroup

```

13180 \ifdef{\@glsstyle@treehypergroup}
13181 {%
13182   \renewglossarystyle{treehypergroup}{%
13183     \setglossarystyle{tree}%
13184     \renewcommand*\glossaryheader{%
13185       \par\noindent\glstreenavigationfmt{\glsnavigation}\par
13186       \nobreak\@afterheading\indexspace}%
13187     \renewcommand*\glsgroupheding[1]{%
13188       \par\noindent
13189       \glstreegroupheaderfmt
13190       {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}\par
13191       \nopagebreak\indexspace\nobreak\@afterheading}%
13192   }
13193 }
13194 {}

```

Adjust treenoname style to remove hard coded space before number list.

```

13195 \ifdef{\@glsstyle@treenoname}
13196 {%
13197   \renewglossarystyle{treenoname}{%
13198     \renewenvironment{theglossary}%
13199       {\setlength{\parindent}{0pt}%
13200         \setlength{\parskip}{0pt plus 0.3pt}}%
13201       {}%
13202     \renewcommand*\glossaryheader{}%
13203     \renewcommand*\glsgroupheding[1]{}%
13204     \renewcommand{\glossentry}[2]{%
13205       \hangindent0pt\relax
13206       \parindent0pt\relax
13207       \glsentryitem{##1}\glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
13208       \ifglshassymbol{##1}{\space(\glossentrysymbol{##1})}{}%
13209       \glstreepredesc\glossentrydesc{##1}\glspostdescription
13210       \glstreeprelocation##2\par
13211     }%
13212     \renewcommand{\subglossentry}[3]{%
13213       \hangindent##1\glstreeindent\relax
13214       \parindent##1\glstreeindent\relax
13215       \ifnum##1=1\relax
13216         \glssubentryitem{##2}%
13217       \fi
13218       \glstarget{##2}{\strut}}%

```

```

13219      \glossentrydesc{##2}\glspostdescription\glstreechildprelocation##3\par
13220  }%
13221  \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
13222 }
13223 }
13224 {}
```

The treenonamegroup style is redefined to discourage a page break after the heading.

```

13225 \ifdef{\@glsstyle@treenonamegroup}
13226 {%
13227  \renewglossarystyle{treenonamegroup}{%
13228   \setglossarystyle{treenoname}%
13229   \renewcommand{\glsgroupheading}[1]{\par
13230     \noindent\glstreegroupheaderfmt
13231     {\glsgetgroupname{##1}}%
13232     \nopagebreak\indexspace\nobreak\@afterheading
13233   }%
13234 }
13235 }
13236 {}
```

Similarly for treenamehypergroup

```

13237 \ifdef{\@glsstyle@treenamehypergroup}
13238 {%
13239  \renewglossarystyle{treenamehypergroup}{%
13240   \setglossarystyle{treenoname}%
13241   \renewcommand*{\glossaryheader}{%
13242     \par\noindent\glstreenavigationfmt{\glsnavigation}\par
13243     \nobreak\@afterheading\indexspace}%
13244   \renewcommand*{\glsgroupheading}[1]{%
13245     \par\noindent
13246     \glstreegroupheaderfmt
13247     {\glsnavhypertarget{##1}{\glsgetgroupname{##1}}}%
13248     \nopagebreak\indexspace\nobreak\@afterheading}%
13249 }
13250 }
13251 {}
```

The alttree style is redefined to make it easier to made minor adjustments.

```

13252 \ifdef{\@glsstyle@alttree}
13253 {%
```

Only redefine this style if it's already been defined.

```
\glsxtralttreeSymbolDescLocation{<label>}{{<location list>}}
```

Layout the symbol, description and location for top-level entries.

```

13254 \newcommand{\glsxtralttreeSymbolDescLocation}[2]{%
```

```

13255   {%
13256     \let\par\glsxtrAltTreePar
13257     \ifglshassymbol{#1}{(\glossentrysymbol{#1})\space}{}%
13258       \glossentrydesc{#1}\glspostdescription\glstreeprelocation #2\par
13259     }%
13260   }

```

`trAltTreeIndent` Paragraph indent for subsequent paragraphs in multi-paragraph descriptions.

```
13261 \newlength\glsxtrAltTreeIndent
```

`lsxtrAltTreePar` Multi-paragraph descriptions need to keep the hanging indent.

```

13262 \newcommand{\glsxtrAltTreePar}{%
13263   \@@par
13264   \glsxtrAltTreeSetHangIndent
13265   \setlength{\parindent}{\dimexpr\hangindent+\glsxtrAltTreeIndent}%
13266 }

```

`mbolDescLocation` `\glsxtralttreeSubSymbolDescLocation{<level>}{<label>}{<location list>}`

Layout the symbol, description and location for sub-entries. Defaults to the same as the top-level.

```

13267 \newcommand{\glsxtralttreeSubSymbolDescLocation}[3]{%
13268   \glsxtralttreeSymbolDescLocation{#2}{#3}%
13269 }

```

`trtreeopindent` The original style has to keep computing the width of the name at each entry. This register allows the style to compute it once for the top-level at the start of the glossary.

```
13270 \newlength\glsxtrtrreetopindent
```

`sxtalttreeInit` User-level initialisation for the alttree style.

```

13271 \newcommand*{\glsxtralttreeInit}{%
13272   \settowidth{\glsxtrtrreetopindent}{\glstreenamefmt{\glsgetwidestname\space}}%
13273   \glsxtrAltTreeIndent=\parindent
13274 }

```

`\gglsetwidest` The original `\glssetwidest` only uses `\def`. This uses `\gdef`.

```

13275 \newcommand*{\gglsetwidest}[2][0]{%
13276   \csgdef{@glswidestname\romannumeral#1}{#2}%
13277 }

```

`\eglsetwidest` The original `\glssetwidest` only uses `\def`. This uses `\protected@csedef`.

```

13278 \newcommand*{\eglsetwidest}[2][0]{%
13279   \protected@csedef{@glswidestname\romannumeral#1}{#2}%
13280 }

```

```

\xglssetwidest Like the above but uses \protected@csxdef.
13281 \newcommand*{\xglssetwidest}[2][0]{%
13282   \protected@csxdef{@\glswidestname\romannumeral#1}{#2}%
13283 }

glsupdatewidest Only sets if new value is wider than old value.
13284 \newcommand*{\glsupdatewidest}[2][0]{%
13285   \ifcsundef{@\glswidestname\romannumeral#1}%
13286     {\csdef{@\glswidestname\romannumeral#1}{#2}}%
13287     {}%
13288     \settowidth{\dimen@}{\csuse{@\glswidestname\romannumeral#1}}%
13289     \settowidth{\dimen@ii}{#2}%
13290     \ifdim\dimen@ii>\dimen@
13291       \csdef{@\glswidestname\romannumeral#1}{#2}%
13292     \fi
13293   }%
13294 }

glsupdatewidest As above but global definition.
13295 \newcommand*{\gglsupdatewidest}[2][0]{%
13296   \ifcsundef{@\glswidestname\romannumeral#1}%
13297     {\csgdef{@\glswidestname\romannumeral#1}{#2}}%
13298     {}%
13299     \settowidth{\dimen@}{\csuse{@\glswidestname\romannumeral#1}}%
13300     \settowidth{\dimen@ii}{#2}%
13301     \ifdim\dimen@ii>\dimen@
13302       \csgdef{@\glswidestname\romannumeral#1}{#2}%
13303     \fi
13304   }%
13305 }

glsupdatewidest As \glsupdatewidest but expands value.
13306 \newcommand*{\eglsupdatewidest}[2][0]{%
13307   \ifcsundef{@\glswidestname\romannumeral#1}%
13308     {\protected@csedef{@\glswidestname\romannumeral#1}{#2}}%
13309     {}%
13310     \settowidth{\dimen@}{\csuse{@\glswidestname\romannumeral#1}}%
13311     \settowidth{\dimen@ii}{#2}%
13312     \ifdim\dimen@ii>\dimen@
13313       \protected@csedef{@\glswidestname\romannumeral#1}{#2}%
13314     \fi
13315   }%
13316 }

glsupdatewidest As above but global.
13317 \newcommand*{\xglsupdatewidest}[2][0]{%
13318   \ifcsundef{@\glswidestname\romannumeral#1}%
13319     {\protected@csxdef{@\glswidestname\romannumeral#1}{#2}}%
13320     {}%

```

```

13321      \settowidth{\dimen@}{\csuse{@glswidestname\romannumeral#1}}%
13322      \settowidth{\dimen@ii}{#2}%
13323      \ifdim\dimen@ii>\dimen@
13324          \protected@csxdef{@glswidestname\romannumeral#1}{#2}%
13325      \fi
13326  }%
13327 }

```

`lsgetwidestname` Provide a user-level macro to obtain the widest top-level name.

```

13328 \newcommand*{\lsgetwidestname}{\glswidestname}

```

`etwidestsubname` Provide a user-level macro to obtain the widest sub-entry name.

```

13329 \newcommand*{\glsetwidestsubname}[1]{%
13330     \ifcsundef{@glswidestname\romannumeral#1}%
13331     {\glswidestname}%
13332     {\csuse{@glswidestname\romannumeral#1}}%
13333 }

```

`estTopLevelName` CamelCase is easier for long command names. Provide a CamelCase synonym of `\glsfindwidesttoplevelname`

```

13334 \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.

```

13335 \newrobustcmd*{\glsFindWidestUsedTopLevelName}[1][\glo@types]{%
13336     \dimen@=0pt\relax
13337     \gls@tmp@len=0pt\relax
13338     \forallglossaries[#1]{\gls@type}%
13339     {%
13340         \forglsentries[\gls@type]{\glo@label}%
13341     }%
13342         \ifglsused{\glo@label}%
13343             {%
13344                 \ifglshasparent{\glo@label}%
13345                     {}%
13346                     {%
13347                         \settowidth{\dimen@}%
13348                         {\glstreenamefmt{\glsentryname{\glo@label}}}%
13349                         \ifdim\dimen@>\gls@tmp@len
13350                             \gls@tmp@len=\dimen@
13351                             \eglssetwidest{\glsentryname{\glo@label}}%
13352                         \fi
13353                     }%
13354             }%
13355             {}%
13356         }%
13357     }%
13358 }

```

`destUsedAnyName` Like the above but doesn't check the parent key. Useful if all levels should have the same width for the name.

```

13359 \newrobustcmd*{\glsFindWidestUsedAnyName}[1][\@glo@types]{%
13360   \dimen@=0pt\relax
13361   \gls@tmp@len=0pt\relax
13362   \forallglossaries[#1]{\gls@type}{%
13363     {%
13364       \forglse{[\gls@type]}{\glo@label}{%
13365         {%
13366           \ifglsused{\glo@label}{%
13367             {%
13368               \settowidth{\dimen@}{%
13369                 {\glsentryname{\glo@label}}}}%
13370               \ifdim\dimen@>\gls@tmp@len
13371                 \gls@tmp@len=\dimen@
13372                 \glssetwidest{\glsentryname{\glo@label}}{%
13373                   \fi
13374                 }%
13375               {}%
13376             }%
13377           }%
13378         }%

```

`ndWidestAnyName` Like the above but doesn't check if the entry has been used.

```

13379 \newrobustcmd*{\glsFindWidestAnyName}[1][\@glo@types]{%
13380   \dimen@=0pt\relax
13381   \gls@tmp@len=0pt\relax
13382   \forallglossaries[#1]{\gls@type}{%
13383     {%
13384       \forglse{[\gls@type]}{\glo@label}{%
13385         {%
13386           \settowidth{\dimen@}{%
13387             {\glsentryname{\glo@label}}}}%
13388             \ifdim\dimen@>\gls@tmp@len
13389               \gls@tmp@len=\dimen@
13390               \glssetwidest{\glsentryname{\glo@label}}{%
13391                 \fi
13392               }%
13393             }%
13394         }%

```

`estUsedLevelTwo` This is like `\glsFindWidestUsedTopLevelName` but also sets the first two sub-levels as well.
Any entry that has a great-grandparent is ignored.

```

13395 \newrobustcmd*{\glsFindWidestUsedLevelTwo}[1][\@glo@types]{%
13396   \dimen@=0pt\relax
13397   \dimen@i=0pt\relax
13398   \dimen@ii=0pt\relax
13399   \forallglossaries[#1]{\gls@type}{%
13400     {%

```

```

13401 \forglsentries[\@gls@type]{\@glo@label}%
13402 {%
13403     \ifglsused{\@glo@label}%
13404     {%
13405         \ifglshasparent{\@glo@label}%
13406         {%
13407             \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@label}}@parent}%
13408             \ifglshasparent{\@glo@parent}%
13409             {%
13410                 \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@parent}}@parent}%
13411                 \ifglshasparent{\@glo@parent}%
13412                 {}%
13413                 {%
13414                     \settowidth{\gls@tmp[1]}%
13415                         {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13416                     \ifdim\gls@tmp[1]>\dimen@ii
13417                         \dimen@ii=\gls@tmp[1]
13418                         \eglssetwidest[2]{\glsentryname{\@glo@label}}%
13419                         \fi
13420                     }%
13421                 }%
13422                 {%
13423                     \settowidth{\gls@tmp[1]}%
13424                         {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13425                     \ifdim\gls@tmp[1]>\dimen@i
13426                         \dimen@i=\gls@tmp[1]
13427                         \eglssetwidest[1]{\glsentryname{\@glo@label}}%
13428                         \fi
13429                     }%
13430                 }%
13431                 {%
13432                     \settowidth{\gls@tmp[1]}%
13433                         {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13434                     \ifdim\gls@tmp[1]>\dimen@o
13435                         \dimen@o=\gls@tmp[1]
13436                         \eglssetwidest{\glsentryname{\@glo@label}}%
13437                         \fi
13438                     }%
13439                 }%
13440                 {}%
13441             }%
13442         }%
13443     }

```

`dWidestLevelTwo` This is like `\glsFindWidestUsedLevelTwo` but doesn't check if the entry has been used.

```

13444 \newrobustcmd*\glsFindWidestLevelTwo[1][\@glo@types]{%
13445     \dimen@=0pt\relax
13446     \dimen@i=0pt\relax
13447     \dimen@ii=0pt\relax

```

```

13448 \forallglossaries[#1]{\@gls@type}%
13449 {%
13450   \forglsentries[\@gls@type]{\@glo@label}%
13451   {%
13452     \ifglshasparent{\@glo@label}%
13453     {%
13454       \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@label}}@parent}%
13455       \ifglshasparent{\@glo@parent}%
13456       {%
13457         \edef\@glo@parent{\csuse{glo@\glsdetoklabel{\@glo@parent}}@parent}%
13458         \ifglshasparent{\@glo@parent}%
13459         {}%
13460         {%
13461           \settowidth{\gls@tmp[1]}%
13462             {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13463           \ifdim\gls@tmp[1]>\dimen@ii
13464             \dimen@ii=\gls@tmp[1]
13465             \eglssetwidest[2]{\glsentryname{\@glo@label}}%
13466           \fi
13467         }%
13468       }%
13469     {%
13470       \settowidth{\gls@tmp[1]}%
13471         {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13472       \ifdim\gls@tmp[1]>\dimen@i
13473         \dimen@i=\gls@tmp[1]
13474         \eglssetwidest[1]{\glsentryname{\@glo@label}}%
13475       \fi
13476     }%
13477   }%
13478   {%
13479     \settowidth{\gls@tmp[1]}%
13480       {\glstreenamefmt{\glsentryname{\@glo@label}}}%
13481     \ifdim\gls@tmp[1]>\dimen@o
13482       \dimen@o=\gls@tmp[1]
13483       \eglssetwidest{\glsentryname{\@glo@label}}%
13484     \fi
13485   }%
13486 }%
13487 }%
13488 }

```

`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.

```

13489 \newrobustcmd*\glsFindWidestUsedAnyNameSymbol}[2][\@glo@types]{%
13490   \dimen@=0pt\relax
13491   \gls@tmp[1]=0pt\relax
13492   #2=0pt\relax
13493   \forallglossaries[#1]{\@gls@type}%

```

```

13494  {%
13495      \forglsentries[\@gls@type]{\@glo@label}%
13496      {%
13497          \ifglsused{\@glo@label}%
13498          {%
13499              \settowidth{\dimen@}%
13500                  {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
13501          \ifdim\dimen@>\gls@tmpplen
13502              \gls@tmpplen=\dimen@
13503                  \glssetwidest{\glsentryname{\@glo@label}}%
13504          \fi
13505          \settowidth{\dimen@}%
13506              {\glstrysymbol{\@glo@label}}%
13507          \ifdim\dimen@>\#2\relax
13508              \#2=\dimen@
13509          \fi
13510      }%
13511      {}%
13512  }%
13513 }%
13514 }

```

`\stAnyNameSymbol` Like the above but doesn't check if the entry has been used.

```

13515  \newrobustcmd*\glsFindWidestAnyNameSymbol}[2][\@glo@types]{%
13516      \dimen@=0pt\relax
13517      \gls@tmpplen=0pt\relax
13518      \#2=0pt\relax
13519      \forallglossaries[#1]{\@gls@type}%
13520      {%
13521          \forglsentries[\@gls@type]{\@glo@label}%
13522          {%
13523              \settowidth{\dimen@}%
13524                  {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
13525          \ifdim\dimen@>\gls@tmpplen
13526              \gls@tmpplen=\dimen@
13527                  \glssetwidest{\glsentryname{\@glo@label}}%
13528          \fi
13529          \settowidth{\dimen@}%
13530              {\glstrysymbol{\@glo@label}}%
13531          \ifdim\dimen@>\#2\relax
13532              \#2=\dimen@
13533          \fi
13534      }%
13535  }%
13536 }

```

`\glsFindWidestUsedAnyNameSymbol` Like the `\glsFindWidestUsedAnyNameSymbol` but also measures the location list. This requires `\glsentrynumberlist`. The length of the widest symbol is stored in the second argument should be a length register. The length of the widest location list is stored in the third

argument, which should also be a length register.

```
13537 \newrobustcmd*\glsFindWidestUsedAnyNameSymbolLocation}[3][\@glo@types]{%
13538   \dimen@=0pt\relax
13539   \gls@tmp@len=0pt\relax
13540   #2=0pt\relax
13541   #3=0pt\relax
13542   \forallglossaries[#1]{\gls@type}{%
13543   {%
13544     \forglsentries[\gls@type]{\glo@label}{%
13545     {%
13546       \ifglsused{\glo@label}{%
13547       {%
13548         \settowidth{\dimen@}{%
13549           {\glsentryname{\glo@label}}}}%
13550         \ifdim\dimen@>\gls@tmp@len
13551           \gls@tmp@len=\dimen@
13552           \glssetwidest{\glsentryname{\glo@label}}{%
13553             \fi
13554             \settowidth{\dimen@}{%
13555               {\glsentrysymbol{\glo@label}}}}%
13556             \ifdim\dimen@>#2\relax
13557               #2=\dimen@
13558             \fi
13559             \settowidth{\dimen@}{%
13560               {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}}%
13561             \ifdim\dimen@>#3\relax
13562               #3=\dimen@
13563             \fi
13564           }%
13565           {}%
13566         }%
13567       }%
13568     }%
13569 }
```

`eSymbolLocation` Like the `\glsFindWidestUsedAnyNameSymbol` but doesn't check if the entry has been used.

```
13569 \newrobustcmd*\glsFindWidestAnyNameSymbolLocation}[3][\@glo@types]{%
13570   \dimen@=0pt\relax
13571   \gls@tmp@len=0pt\relax
13572   #2=0pt\relax
13573   #3=0pt\relax
13574   \forallglossaries[#1]{\gls@type}{%
13575   {%
13576     \forglsentries[\gls@type]{\glo@label}{%
13577     {%
13578       \settowidth{\dimen@}{%
13579         {\glsentryname{\glo@label}}}}%
13580       \ifdim\dimen@>\gls@tmp@len
13581         \gls@tmp@len=\dimen@
13582         \glssetwidest{\glsentryname{\glo@label}}{%
```

```

13583     \fi
13584     \settowidth{\dimen@}%
13585     {\glsentrysymbol{@glo@label}}%
13586     \ifdim\dimen@>\#2\relax
13587         #2=\dimen@
13588     \fi
13589     \settowidth{\dimen@}%
13590     {\GlsXtrFormatLocationList{\glsentrynumberlist{@glo@label}}}%
13591     \ifdim\dimen@>\#3\relax
13592         #3=\dimen@
13593     \fi
13594     }%
13595 }%
13596 }

```

`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.

```

13597 \newrobustcmd*{\glsFindWidestUsedAnyNameLocation}[2][{@glo@types}]{%
13598     \dimen@=0pt\relax
13599     \gls@tmp@len=0pt\relax
13600     #2=0pt\relax
13601     \forallglossaries[#1]{\gls@type}%
13602     {%
13603         \forallglsentries[\gls@type]{\glo@label}%
13604         {%
13605             \ifglsused{\glo@label}%
13606             {%
13607                 \settowidth{\dimen@}%
13608                 {\glstreenamefmt{\glsentryname{\glo@label}}}%
13609                 \ifdim\dimen@>\gls@tmp@len
13610                     \gls@tmp@len=\dimen@
13611                     \glssetwidest{\glsentryname{\glo@label}}%
13612                 \fi
13613                 \settowidth{\dimen@}%
13614                 {\GlsXtrFormatLocationList{\glsentrynumberlist{\glo@label}}}%
13615                 \ifdim\dimen@>\#2\relax
13616                     #2=\dimen@
13617                 \fi
13618             }%
13619             {}%
13620         }%
13621     }%
13622 }

```

`AnyNameLocation` Like the `\glsFindWidestAnyNameLocation` but doesn't check the `first use` flag.

```

13623 \newrobustcmd*{\glsFindWidestAnyNameLocation}[2][{@glo@types}]{%
13624     \dimen@=0pt\relax
13625     \gls@tmp@len=0pt\relax

```

```

13626     #2=0pt\relax
13627     \forallglossaries[#1]{\@gls@type}%
13628     {%
13629         \forglentries[\@gls@type]{\@glo@label}%
13630         {%
13631             \settowidth{\dimen@}%
13632             {\glstreenamefmt{\glsentryname{\@glo@label}}}}%
13633             \ifdim\dimen@>\gls@tmpplen
13634                 \gls@tmpplen=\dimen@
13635                 \eglssetwidest{\glsentryname{\@glo@label}}%
13636             \fi
13637             \settowidth{\dimen@}%
13638             {\GlsXtrFormatLocationList{\glsentrynumberlist{\@glo@label}}}}%
13639             \ifdim\dimen@#2\relax
13640                 #2=\dimen@
13641             \fi
13642         }%
13643     }%
13644 }

```

`\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`.

```

13645 \newcommand*{\glsxtrComputeTreeIndent}[1]{%
13646     \glstreeindent=\glsxtrtreeindent\relax
13647 }

```

`\computeTreeSubIndent` `\glsxtrComputeTreeSubIndent{<level>}{<label>}{<register>}`

Compute the indent for the sub-entries. The first argument is the level, the second argument is the entry label and the third argument is the length register used to store the computed indent.

```

13648 \newcommand*{\glsxtrComputeTreeSubIndent}[3]{%
13649     \ifcsundef{\glswidestname\romannumeral#1}%
13650     {%
13651         \settowidth{#3}{\glstreenamefmt{\@glswidestname\space}}%
13652     }%
13653     {%
13654         \settowidth{#3}{\glstreenamefmt{%
13655             \csname\glswidestname\romannumeral#1\endcsname\space}}%
13656     }%
13657 }

```

`\setHangIndent` Set `\hangindent` for top-level entries:

```

13658 \newcommand*{\glsxtrAltTreeSetHangIndent}{\hangindent\glstreeindent}

```

etSubHangIndent Set \hangindent for sub-entries:

```
13659 \newcommand*{\glsxtrAltTreeSetSubHangIndent}[1]{\hangindent\glstreeindent}
```

Redefine alttree:

```
13660 \renewglossarystyle{alttree}{%
13661   \renewenvironment{theglossary}{%
13662     {%
13663       \glsxtralttreeInit
13664       \def\@gls@prevlevel{-1}%
13665       \mbox{}\par}%
13666     {\par}%
13667     \renewcommand*{\glossaryheader}{}%
13668     \renewcommand*{\glsgroupheading}[1]{}%
13669     \renewcommand{\glossentry}[2]{%
13670       \ifnum\@gls@prevlevel=0\relax
13671       \else
13672         \glsxtrComputeTreeIndent{##1}%
13673       \fi
13674       \parindent\glstreeindent
13675       \glsxtrAltTreeSetHangIndent
13676       \makebox[0pt][r]%
13677     {%
13678       \glstreenamebox{\glstreeindent}%
13679     {%
13680       \glsentryitem{##1}%
13681       \glstreenamefmt{\glstarget{##1}{\glossentryname{##1}}}%
13682     }%
13683   }%
13684   \glsxtralttreeSymbolDescLocation{##1}{##2}%
13685   \def\@gls@prevlevel{0}%
13686 }
13687 \renewcommand{\subglossentry}[3]{%
13688   \ifnum##1=1\relax
13689     \glssubentryitem{##2}%
13690   \fi
13691   \ifnum\@gls@prevlevel=##1\relax
13692   \else
13693     \glsxtrComputeTreeSubIndent{##1}{##2}{\gls@tmp{len}}%
13694     \ifnum\@gls@prevlevel<##1\relax
13695       \setlength\glstreeindent{\gls@tmp{len}}
13696       \addtolength\glstreeindent\parindent
13697       \parindent\glstreeindent
13698     \else
13699       \ifnum\@gls@prevlevel=0\relax
13700         \glsxtrComputeTreeIndent{##2}%
13701       \else
13702         \glsxtrComputeTreeSubIndent{\@gls@prevlevel}{##2}{\glstreeindent}%
13703       \fi
13704     \addtolength\parindent{-\glstreeindent}%

```

```

13705      \setlength\glstreeindent\parindent
13706      \fi
13707      \fi
13708      \glsxtrAltTreeSetSubHangIndent{##1}%
13709      \makebox[0pt][r]{\glstreenamebox{\gls@tmplen}{%
13710          \glstreenamefmt{\glstarget{##2}{\glossentryname{##2}}}}}}%
13711      \glsxtralttreeSubSymbolDescLocation{##1}{##2}{##3}%
13712      \def\@gls@prevlevel{##1}%
13713  }%
13714  \renewcommand*{\glsgroupskip}{\ifglsnogroupskip\else\indexspace\fi}%
13715 }
13716 }%
13717 {%
13718 }

```

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.

```

13719 \ifdef{\@glsstyle@alttreegroup}
13720 {%
13721     \renewglossarystyle{alttreegroup}{%
13722         \setglossarystyle{alttree}{%
13723             \renewcommand{\glsgroupheading}[1]{\par
13724                 \def\@gls@prevlevel{-1}%
13725                 \hangindent0pt\relax
13726                 \parindent0pt\relax
13727                 \glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
13728                 \nopagebreak\indexspace\nopagebreak
13729             }%
13730         }%
13731     }%
13732 {%
13733 }

```

Similarly for `alttreehypergroup`.

```

13734 \ifdef{\@glsstyle@alttreehypergroup}
13735 {%
13736     \renewglossarystyle{alttreehypergroup}{%
13737         \setglossarystyle{alttree}{%
13738             \renewcommand*{\glossaryheader}{%
13739                 \par
13740                 \def\@gls@prevlevel{-1}%
13741                 \hangindent0pt\relax
13742                 \parindent0pt\relax
13743                 \glstreenavigationfmt{\glsnavigation}\par\indexspace
13744             }%
13745             \renewcommand*{\glsgroupheading}[1]{%
13746                 \par
13747                 \def\@gls@prevlevel{-1}%
13748                 \hangindent0pt\relax
13749                 \parindent0pt\relax

```

```

13750     \glstreegroupheaderfmt
13751         {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}\par
13752         \nopagebreak\indexspace\nopagebreak
13753     }%
13754 }
13755 }%
13756 {%
13757 }

```

2.9 Multicolumn Styles

Adjust `mcolindexgroup` to discourage page breaks after the group headings.

```

13758 \ifdef{@glsstyle@mcolindexgroup}%
13759 {%
13760     \renewglossarystyle{mcolindexgroup}{%
13761         \setglossarystyle{mcolindex}{%
13762             \renewcommand*{\glsgroupheading}[1]{%
13763                 \item\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}\%
13764                 \nopagebreak\indexspace\nobreak\@afterheading
13765             }%
13766         }%
13767 }%
13768 {%
13769 }

```

Similarly for `mcolindexhypergroup`.

```

13770 \ifdef{@glsstyle@mcolindexhypergroup}%
13771 {%
13772     \renewglossarystyle{mcolindexhypergroup}{%
13773         \setglossarystyle{mcolindex}{%
13774             \renewcommand*{\glossaryheader}{%
13775                 \item\glstreenavigationfmt{\glsnavigation}\%
13776                 \indexspace
13777             }%
13778             \renewcommand*{\glsgroupheading}[1]{%
13779                 \item\glstreegroupheaderfmt
13780                     {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}\%
13781                     \nopagebreak\indexspace\nobreak\@afterheading
13782             }%
13783         }%
13784 }%
13785 {%
13786 }

```

Similarly for `mcolindexspannav`.

```

13787 \ifdef{@glsstyle@mcolindexspannav}%
13788 {%
13789     \renewglossarystyle{mcolindexspannav}{%
13790         \setglossarystyle{index}{%

```

```

13791 \renewenvironment{theglossary}%
13792 {%
13793   \begin{multicols}{\glsmcols}[\noindent\glstreenavigationfmt{\glsnavigation}]%
13794   \setlength{\parindent}{0pt}%
13795   \setlength{\parskip}{0pt plus 0.3pt}%
13796   \let\item\glstreeitem}%
13797 {\end{multicols}}%
13798 \renewcommand*\glsgroupheading[1]{%
13799   \item\glstreegroupheaderfmt
13800   {\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
13801   \nopagebreak\indexspace\nobreak\@afterheading
13802 }%
13803 }%
13804 }%
13805 {%
13806 }

```

Similarly for mcoltreegroup.

```

13807 \ifdef{@glsstyle@mcoltreegroup}%
13808 {%
13809   \renewglossarystyle{mcoltreegroup}{%
13810     \setglossarystyle{mcoltree}%
13811     \renewcommand{\glsgroupheading}[1]{\par
13812       \noindent\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}}%
13813       \nopagebreak\indexspace\nobreak\@afterheading
13814     }%
13815   }%
13816 }%
13817 {%
13818 }

```

Similarly for mcoltreehypergroup.

```

13819 \ifdef{@glsstyle@mcoltreehypergroup}%
13820 {%
13821   \renewglossarystyle{mcoltreehypergroup}{%
13822     \setglossarystyle{mcoltree}%
13823     \renewcommand*\glossaryheader{%
13824       \par\noindent\glstreenavigationfmt{\glsnavigation}\par\indexspace
13825     }%
13826     \renewcommand*\glsgroupheading[1]{%
13827       \par\noindent
13828       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
13829       \nopagebreak\indexspace\nobreak\@afterheading
13830     }%
13831   }%
13832 }%
13833 {%
13834 }

```

Similarly for mcoltreespannav.

```

13835 \ifdef{@glsstyle@mcoltreespannav}%

```

```

13836 {%
13837   \renewglossarystyle{mcoltreeespannav}{%
13838     \setglossarystyle{tree}%
13839     \renewenvironment{theglossary}%
13840     {%
13841       \begin{multicols}{\glsmcols}%
13842         [\noindent\glstreenavigationfmt{\glsnavigation}]%
13843         \setlength{\parindent}{0pt}%
13844         \setlength{\parskip}{0pt plus 0.3pt}%
13845     }%
13846   {\end{multicols}}%
13847   \renewcommand*{\glsgroupheading}[1]{%
13848     \par\noindent
13849     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
13850     \nopagebreak\indexspace\nobreak\@afterheading
13851   }%
13852 }
13853 }%
13854 {%
13855 }%

```

Similarly for mcoltreeonamegroup.

```

13856 \ifdef{@glsstyle@mcoltreeonamegroup}%
13857 {%
13858   \renewglossarystyle{mcoltreeonamegroup}{%
13859     \setglossarystyle{mcoltreeoname}%
13860     \renewcommand{\glsgroupheading}[1]{\par
13861       \noindent\glstreegroupheaderfmt{\glsgetgrouptitle{##1}}%
13862       \nopagebreak\indexspace\nobreak\@afterheading
13863     }%
13864 }
13865 }%
13866 {%
13867 }%

```

Similarly for mcoltreeonamehypergroup.

```

13868 \ifdef{@glsstyle@mcoltreeonamehypergroup}%
13869 {%
13870   \renewglossarystyle{mcoltreeonamehypergroup}{%
13871     \setglossarystyle{mcoltreeoname}%
13872     \renewcommand*{\glossaryheader}{%
13873       \par\noindent\glstreenavigationfmt{\glsnavigation}\par\indexspace}%
13874     \renewcommand*{\glsgroupheading}[1]{%
13875       \par\noindent
13876       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgrouptitle{##1}}}%
13877       \nopagebreak\indexspace\nobreak\@afterheading
13878     }%
13879 }%
13880 {%
13881 }%

```

Similarly for mcoltreeonenamespannav.

```
13882 \ifdef{@glsstyle@mcoltreeonenamespannav}{%
13883 {%
13884   \renewglossarystyle{mcoltreeonenamespannav}{%
13885     \setglossarystyle{treenoname}{%
13886     \renewenvironment{theglossary}{%
13887       {%
13888         \begin{multicols}{\glsmcols}{%
13889           [\noindent\glstreenavigationfmt{\glsnavigation}]{%
13890             \setlength{\parindent}{0pt}{%
13891               \setlength{\parskip}{0pt plus 0.3pt}{%
13892             }{%
13893             }\{%
13894             \renewcommand*\glsgroupheading[1]{%
13895               \par\noindent
13896               \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroup title{##1}}}{%
13897                 \nopagebreak\indexspace\nobreak\@afterheading}{%
13898               }{%
13899             }{%
13900             {%
13901           }
```

mcolaltree needs adjusting so that it uses \glsxtralttreeInit This doesn't use \mbox{} \par which would unbalance the top of the columns.

```
13902 \ifdef{@glsstyle@mcolaltree}{%
13903 {%
13904   \renewglossarystyle{mcolaltree}{%
13905     \setglossarystyle{alttree}{%
13906     \renewenvironment{theglossary}{%
13907       {%
13908         \glsxtralttreeInit
13909         \def@gls@prevlevel{-1}{%
13910           \begin{multicols}{\glsmcols}{%
13911             }{%
13912             }\{%
13913           }{%
13914         }{%
13915         {%
13916       }
```

Redefine mcolalttreegroup to discourage page breaks after the group headings.

```
13917 \ifdef{@glsstyle@mcolalttreegroup}{%
13918 {%
13919   \renewglossarystyle{mcolalttreegroup}{%
13920     \setglossarystyle{mcolalttree}{%
13921     \renewcommand*\glsgroupheading[1]{\par
13922       \def@gls@prevlevel{-1}{%
13923         \hangindent0pt\relax
13924         \parindent0pt\relax
13925         \glstreegroupheaderfmt{\glsgetgroup title{##1}}{%
```

```

13926      \nopagebreak\indexspace\nopagebreak
13927  }%
13928 }
13929 }%
13930 {%
13931 }

```

Similarly for mcolaltreehypergroup.

```

13932 \ifdef{\@glsstyle@mcolaltreehypergroup}
13933 {%
13934   \renewglossarystyle{mcolaltreehypergroup}{%
13935     \setglossarystyle{mcolaltree}{%
13936       \renewcommand*{\glossaryheader}{%
13937         \par
13938         \def\@gls@prevlevel{-1}%
13939         \hangindent0pt\relax
13940         \parindent0pt\relax
13941         \glstreenavigationfmt{\glsnavigation}%
13942         \par\indexspace
13943     }%
13944     \renewcommand*{\glsgroupheading}[1]{%
13945       \par
13946       \def\@gls@prevlevel{-1}%
13947       \hangindent0pt\relax
13948       \parindent0pt\relax
13949       \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroup{##1}}}%
13950       \nopagebreak\indexspace\nopagebreak
13951     }%
13952   }%
13953 }%
13954 {%
13955 }

```

Similarly for mcolaltreespannav.

```

13956 \ifdef{\@glsstyle@mcolaltreespannav}
13957 {%
13958   \renewglossarystyle{mcolaltreespannav}{%
13959     \setglossarystyle{alttree}{%
13960       \renewenvironment{theglossary}{%
13961         {%
13962           \glsxtralttreeInit
13963           \def\@gls@prevlevel{-1}%
13964           \begin{multicols}{\glsmcols}%
13965             [\noindent\glstreenavigationfmt{\glsnavigation}]%
13966         }%
13967         {\par\end{multicols}}%
13968         \renewcommand*{\glsgroupheading}[1]{%
13969           \par
13970           \def\@gls@prevlevel{-1}%
13971           \hangindent0pt\relax

```

```
13972     \parindent0pt\relax
13973     \glstreegroupheaderfmt{\glsnavhypertarget{##1}{\glsgetgroup{##1}}}{%
13974         \nopagebreak\indexspace\nopagebreak
13975     }%
13976 }
13977 }%
13978 {%
13979 }

    Reset the default style

13980 \ifx\@glossary@default@style\relax
13981 \else
13982     \setglossarystyle{@glsxtr@current@style}
13983 \fi
```

3 bookindex style (glossary-bookindex.sty)

3.1 Package Initialisation and Options

```
13984 \NeedsTeXFormat{LaTeX2e}
13985 \ProvidesPackage{glossary-bookindex}[2018/04/09 v1.29 (NLCT)]

    Load required packages.
13986 \RequirePackage{multicol}
13987 \RequirePackage{glossary-tree}

trbookindexcols  Number of columns.
13988 \newcommand{\glsxtrbookindexcols}{2}

trbookindexname  Format used for top-level entries. (Argument is the label.)
13989 \newcommand*{\glsxtrbookindexname}[1]{\glossentryname{#1}}


ookindexsubname  Format used for sub entries.
13990 \newcommand*{\glsxtrbookindexsubname}[1]{\glsxtrbookindexname{#1}}


sxtrprelocation  Provide in case glossaries-stylemods isn't loaded.
13991 \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.
13992 \newcommand*{\glsxtrbookindexprelocation}[1]{%
13993     \glsxtrifhasfield{location}{#1}%
13994     {,\glsxtrprelocation}%
13995     {\glsxtrprelocation}%
13996 }
```

xsubprelocation Separator used before location list for sub-entries.

```
13997 \newcommand*{\glsxtrbookindexsubprelocation}[1]{%
13998     \glsxtrbookindexprelocation{#1}%
13999 }
```

xparentchildsep Separator used between top-level parent and child entry.

```
14000 \newcommand{\glsxtrbookindexparentchildsep}{\nopagebreak}
```

rentsubchildsep Separator used between sub-level parent and child entry.

```
14001 \newcommand{\glsxtrbookindexparentsubchildsep}{\glsxtrbookindexparentchildsep}
```

ookindexbetween Between two top-level entries identified by the labels in the arguments.
14002 \newcommand{\glsxtrbookindexbetween}[2]{}

indexsubbetween Between two level 1 entries identified by the labels in the arguments.
14003 \newcommand{\glsxtrbookindexsubbetween}[2]{}

exsubsubbetween Between two level 2 entries identified by the labels in the arguments.
14004 \newcommand{\glsxtrbookindexsubsubbetween}[2]{}

indexatendgroup At the end of a letter group. The argument is the index of the last top-level entry.
14005 \newcommand{\glsxtrbookindexatendgroup}[1]{}

exsubatendgroup At the end of a letter group. The argument is the index of the last level 1 entry.
14006 \newcommand{\glsxtrbookindexsubatendgroup}[1]{}

ubsubatendgroup At the end of a letter group. The argument is the index of the last level 2 entry.
14007 \newcommand{\glsxtrbookindexsubsubatendgroup}[1]{}

kindexgroupskip Group separator.
14008 \newcommand{\glsxtrbookindexgroupskip}{\ifglsnogroupskip\else\indexspace\fi}
Format group title.

dexformatheader Group separator.
14009 \newcommand*{\glsxtrbookindexformatheader}[1]{%
14010 \par{\centering\glstreegroupheaderfmt{\#1}\par}%
14011 }

okindexbookmark Book mark group heading if supported.
14012 \ifdef\pdfbookmark
14013 {%
14014 \newcommand*{\glsxtrbookindexbookmark}[2]{%
14015 \ifdefstring{\@glossarysec}{chapter}%
14016 {\pdfbookmark[1]{\#1}{\#2}}%
14017 {\pdfbookmark[2]{\#1}{\#2}}%
14018 }
14019 }
14020 {%
14021 \newcommand*{\glsxtrbookindexbookmark}[2]{}
14022 }

kindexcolspread
14023 \newcommand*{\glsxtrbookindexcolspread}{}

dexmulticolsenv
14024 \newcommand*{\glsxtrbookindexmulticolsenv}{\multicols}

Define the style.

```
14025 \newglossarystyle{bookindex}{%
14026   \setglossarystyle{index}%
14027   \renewenvironment{theglossary}%
14028 {%
14029   \ifempty{\glsxtrbookindexcols}{%
14030     \expandafter\begin\expandafter{\glsxtrbookindexmulticolsenv}%
14031     {\glsxtrbookindexcols}%
14032   }%
14033   \expandafter\begin\expandafter{\glsxtrbookindexmulticolsenv}%
14034   {\glsxtrbookindexcols}[\glsxtrbookindexcols]{%
14035   }%
14036   \setlength{\parindent}{0pt}%
14037   \setlength{\parskip}{0pt plus 0.3pt}%
14038   \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
14039   \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
14040   \let\@glsxtr@bookindex@between\@gobble
14041   \let\@glsxtr@bookindex@subbetween\@gobble
14042   \let\@glsxtr@bookindex@subsubbetween\@gobble
14043   \let\@glsxtr@bookindex@atendgroup\relax
14044   \let\@glsxtr@bookindex@subatendgroup\relax
14045   \let\@glsxtr@bookindex@subsubatendgroup\relax
14046   \let\@glsxtr@bookindexgroupskip\relax
14047 }%
14048 }%
14049 }%
14050 {%
```

Do end group hooks.

```
14051 \let\@glsxtr@bookindex@subsubatendgroup
14052 \let\@glsxtr@bookindex@subatendgroup
14053 \let\@glsxtr@bookindex@atendgroup
```

End multicols environment.

```
14054 \expandafter\end\expandafter{\glsxtrbookindexmulticolsenv}%
14055 }%
```

Use ragged right as columns are likely to be narrow and indexes tend not to be fully justified.

```
14056 \renewcommand*{\glossaryheader}{\raggedright}%
```

Top level entry format.

```
14057 \renewcommand*{\glossentry}[2]{%
```

Do separator.

```
14058 \let\@glsxtr@bookindex@between{\#1}%
```

Update separators.

```
14059 \let\@glsxtr@bookindex@sep\glsxtrbookindexparentchildsep
14060 \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
14061 \let\@glsxtr@bookindex@subbetween\@gobble
14062 \let\@glsxtr@bookindex@subsubbetween\@gobble
14063 \edef\@glsxtr@bookindex@between{%
```

```

14064     \noexpand\glsxtrbookindexbetween{##1}%
14065   }%
14066   \edef\@glsxtr@bookindex@atendgroup{%
14067     \noexpand\glsxtrbookindexatendgroup{##1}%
14068   }%
14069   \let\@glsxtr@bookindex@subatendgroup\relax
14070   \let\@glsxtr@bookindex@subsubatendgroup\relax

```

Format entry.

```

14071   \glstreeitem
14072     \glsentryitem{##1}%
14073     \glstarget{##1}{\glsxtrbookindexname{##1}}%
14074     \glsxtrbookindexprelocation{##1}##2%
14075   }%
14076   \renewcommand{\subglossentry}[3]{%
14077     \ifcase##1\relax

```

Level 0 (shouldn't happen as that's formatted with \glossentry).

```

14078     \glstreeitem
14079   \or

```

Level 1.

```

14080   \glsxtr@bookindex@sep
14081   \glsxtr@bookindex@subbetween{##2}%
14082   \let\@glsxtr@bookindex@sep\relax

```

Update separators.

```

14083   \let\@glsxtr@bookindex@subsubbetween@gobble
14084   \let\@glsxtr@bookindex@subsep\glsxtrbookindexparentsubchildsep
14085   \edef\@glsxtr@bookindex@subbetween{%
14086     \noexpand\glsxtrbookindexsubbetween{##2}%
14087   }%
14088   \edef\@glsxtr@bookindex@atsubendgroup{%
14089     \noexpand\glsxtrbookindexatsubendgroup{##1}%
14090   }%

```

Start sub-item.

```

14091   \glstreesubitem
14092     \glssubentryitem{##2}%
14093   \else

```

All other levels.

```

14094   \glsxtr@bookindex@subsep
14095   \glsxtr@bookindex@subsubbetween{##2}%

```

Update separators.

```

14096   \let\@glsxtr@bookindex@subsep\relax
14097   \edef\@glsxtr@bookindex@subsubbetween{%
14098     \noexpand\glsxtrbookindexsubsubbetween{##2}%
14099   }%
14100   \edef\@glsxtr@bookindex@atsubsubendgroup{%
14101     \noexpand\glsxtrbookindexatsubsubendgroup{##1}%
14102   }%

```

Start sub-sub-item.

```
14103     \glstreesubsubitem
14104     \fi
```

Format entry.

```
14105     \glstarget{##2}{\glsxtrbookindexsubname{##2}}%
14106     \glsxtrbookindexsubprelocation{##2}##3%
14107 }%
```

The group skip is moved to the group heading to avoid interfering with the end letter group hooks.

```
14108 \renewcommand*\glsgroupskip{}%
```

Group heading format.

```
14109 \renewcommand*\glsgroupheading[1]{%
```

Do end group hooks.

```
14110 \glsxtr@bookindex@subsubatendgroup
14111 \glsxtr@bookindex@subatendgroup
14112 \glsxtr@bookindex@atendgroup
14113 \glsxtr@bookindexgroupskip
```

Update separators.

```
14114 \let\glsxtr@bookindexgroupskip\glsxtrbookindexgroupskip
14115 \let\glsxtr@bookindex@between@gobble
14116 \let\glsxtr@bookindex@atendgroup\relax
14117 \let\glsxtr@bookindex@subatendgroup\relax
14118 \let\glsxtr@bookindex@subsubatendgroup\relax
```

Fetch the group title from the label supplied in #1.

```
14119 \glsxtrgetgrouptitle{##1}{\thisgrptitle}%
```

Do the PDF bookmark if supported.

```
14120 \glsxtrbookindexbookmark{\thisgrptitle}{index.##1}%
```

Format the group title.

```
14121 \glsxtrbookindexformatheader{\thisgrptitle}%
14122 \nopagebreak\indexspace\nopagebreak\@afterheading
14123 }%
14124 }
```

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.

```
14125 \newcommand{\glsxtrbookindexthepage}{%
14126 \ifdef\currentglossary{\currentglossary.\arabic{page}}{\arabic{page}}%
14127 }
```

`kindexmarkentry` Writes entry information to the .aux file. The argument is the entry label.

```
14128 \newcommand*{\glsxtrbookindexmarkentry}[1]{%
14129   \protected@write\auxout{%
14130   {\let\glsxtrbookindexthepage\relax}%
14131   {\string\glsxtr@setbookindexmark{\glsxtrbookindexthepage}{#1}}%
14132 }
```

`etbookindexmark`

```
14133 \newcommand*{\glsxtr@setbookindexmark}[2]{%
14134   \ifcsundef{\glsxtr@idxfirstmark@#1}{%
14135     {\csgdef{\glsxtr@idxfirstmark@#1}{#2}}%
14136   }%
14137   {\csgdef{\glsxtr@idxlastmark@#1}{#2}}%
14138 }
```

`dexfirstmarkfmt`

```
14139 \newcommand*{\glsxtrbookindexfirstmarkfmt}[1]{%
14140   \glsentryname{#1}}%
14141 }
```

`kindexfirstmark`

```
14142 \newcommand*{\glsxtrbookindexfirstmark}{%
14143   \letcs{\glsxtr@label}{\glsxtr@idxfirstmark@\glsxtrbookindexthepage}%
14144   \ifdef{\glsxtr@label}{%
14145     {\glsxtrbookindexfirstmarkfmt{\glsxtr@label}}%
14146   }%
14147 }
```

`ndexlastmarkfmt`

```
14148 \newcommand*{\glsxtrbookindexlastmarkfmt}[1]{%
14149   \glsentryname{#1}}%
14150 }
```

`okindexlastmark`

```
14151 \newcommand*{\glsxtrbookindexlastmark}{%
14152   \letcs{\glsxtr@label}{\glsxtr@idxlastmark@\glsxtrbookindexthepage}%
14153   \ifdef{\glsxtr@label}{%
14154     {\glsxtrbookindexlastmarkfmt{\glsxtr@label}}%
14155   }%
14156 }
```

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 309
\glsfmtshort: new 308
\Glsfmtshortpl: new 309
\glsfmtshortpl: new 308
short: switched inline full form to short
(long) 212

0.3 (2015-12-02)

\@ACRlong: added redefinition 73
\@ACRlongpl: added redefinition 74
\@ACRshort: added redefinition 71
\@ACRshortpl: added redefinition 72
\@Acrlong: added redefinition 72
\@Acrlongpl: added redefinition 73
\@Acrshort: added redefinition 70
\@Acrshortpl: added redefinition 71
\@GLSdesc@: added redefinition 66
\@GLSdescplural@: added redefinition 67
\@GLSfirst@: added redefinition 64
\@GLSfirstplural@: added redefinition 65
\@GLSname@: added redefinition 66
\@GLSplural@: added redefinition 65
\@GLSsymbol@: added redefinition 67
\@GLSsymbolplural@: added
redefinition 68
\@GLStext@: added redefinition 63
\@GLSuseri@: added redefinition 68
\@GLSuserii@: added redefinition 69
\@GLSuseriii@: added redefinition 69
\@GLSuseriv@: added redefinition 69
\@GLSuserv@: added redefinition 69
\@Glsdesc@: added redefinition 66
\@Glsdescplural@: added redefinition 67
\@Glsfirst@: added redefinition 63
\@Glsfirstplural@: added redefinition 65
\@glsplural@: added redefinition 64
\@glssymbolplural@: added
redefinition 67

\@glssymbol@: added redefinition 67
\@glssymbolplural@: added
redefinition 68
\@Gls{text@: added redefinition 63
\@Gls{useri@: added redefinition 68
\@Gls{userii@: added redefinition 68
\@Gls{useriii@: added redefinition 69
\@Gls{useriv@: added redefinition 69
\@Gls{userv@: added redefinition 69
\@Gls{uservi@: added redefinition 69
\@Gls{uservii@: added redefinition 70
\@Gls{userviii@: added redefinition 71
\@gls@field@link: added optional
argument 56
\@glsdescplural@: added redefinition 66
\@glsfirst@: added redefinition 63
\@glsfirstplural@: added redefinition 65
\@glsplural@: added redefinition 64
\@glssymbolplural@: added
redefinition 67
\@glsxtr@defaultnoglossarywarning:
new 124
\@glsxtr@field@linkdefs: new 62
\@glsxtr@insertdots: new 181
\@print@glossary: added redefinition 120
\glsabbrvdefaultfont: renamed from
 \abbrvdefaultfont 186
\glsaccessdesc: new 149
\glsaccessdescplural: new 149
\glsaccessfirst: new 146
\glsaccessfirstplural: new 147
\Glsaccesslong: new 151
\glsaccesslong: new 151
\glsaccessname: new 144
\glsaccessplural: new 146
\Glsaccessshort: new 150
\glsaccessshort: new 150
\Glsaccessshortpl: new 150

\glsaccessshortpl: new	150
\glsaccesssymbol: new	147
\glsaccesssymbolplural: new	148
\glsaccesstext: new	145
\glsentryfmt: added check for short ..	56
\glslongpltok: new	181
\glsshortpltok: new	181
\glsxtr@newabbreviation: fixed family name in \setkeys	182
\glsxtrdiscardperiod: added check for plural	178
\GLSxtrlongpl: new	196
\Glsxtrlongpl: new	195
\glsxtrlongpl: new	195
\glsxtrNoGlossaryWarning: new ..	21
\glsxtrpostlinkAddDescOnFirstUse: new	177
\glsxtrpostlinkAddSymbolOnFirstUse: new	178
\glsxtrpostlinkendsentence: new ..	177
\GLSxtrshortpl: new	194
\Glsxtrshortpl: new	194
\glsxtrshortpl: new	193
short-long-desc: fixed name to use \glslabeltok	206
long-short-desc: fixed name to use \glslabeltok	204
0.4 (2015-12-03)	
{@glsxtr@doabbreviationsdef: added redefinition of \acronymtype	17
\Glsfmtshort: changed to use \Glsxtrshort	309
\glsfmtshort: changed to use \glsxtrshort	308
\Glsfmtshortpl: changed to use \glsxtrshortpl	309
\glsfmtshortpl: changed to use \glsxtrshortpl	308
\glsxtrifemptyglossary: new	27
\glsxtrnewnumber: added extra argument	160
\glsxtrnewsymbol: added extra argument	159
\MakeAcronymsAbbreviations: set the default type to \acronymtype	106
\newterm: fixed name argument	159
0.5 (2015-12-07)	
{@cGLS: new	97
{@cGLS@: new	97
{@cGLSpl: new	97
{@cGLSpl@: new	98
{@glsxtr@setentrycountunsetattr: new	93
\cGLS: new	97
\cGLSformat: new	97
\cGLSpl: new	97
\cGLSplformat: new	98
\GlossariesExtraWarningNoLine: new	15
\glsenableentrycount: new	93
\glsfirstabrvdefaultfont: new ..	186
\glsfirstlongdefaultfont: new ..	187
\Glsfmtfirst: new	311
\glsfmtfirst: new	311
\Glsfmtfirstpl: new	312
\glsfmtfirstpl: new	311
\Glsfmtplural: new	311
\glsfmtplural: new	310
\Glsfmtshort: changed to use \Glsxtrtitleshort	309
renamed from \Glsentryfmtshort ..	309
\glsfmtshort: changed to use \glsxtrtitleshort	308
renamed from \glsentryfmtshort ..	308
\Glsfmtshortpl: changed to use \Glsxtrtitleshortpl	309
renamed from \Glsentryfmtshortpl	309
\glsfmtshortpl: changed to use \glsxtrtitleshortpl	308
renamed from \glsentryfmtshortpl	308
\Glsfmttext: new	310
\glsfmttext: new	310
\glshasattribute: new	156
\glshascategoryattribute: new ..	156
\glsxtremsuffix: new	248
\GlsXtrEnableEntryCounting: new ..	92
\glsxtrifcounttrigger: new	95
\glsxtrscfont: new	219
\glsxtrscsuffix: new	220
\glsxtrsmfont: new	234
\glsxtrsmsuffix: new	234
short-em: new	255
short-em-desc: new	256
short-em-footnote: new	266
short-em-long: new	251
short-em-long-desc: new	253

short-em-postfootnote: new	267
short-sc-footnote: new	230
short-sc-postfootnote: new	232
short-sm: new	237
short-sm-desc: new	239
short-sm-footnote: new	244
short-sm-long: new	236
short-sm-long-desc: new	237
short-sm-postfootnote: new	246
long-noshort-em: new	258
long-noshort-em-desc: new	262
long-noshort-sm: new	241
long-noshort-sm-desc: new	243
long-short-em: new	248
long-short-em-desc: new	249
long-short-sm: new	234
long-short-sm-desc: new	235
0.5.1 (2015-12-02)	
\Glsaccesstext: new	145
0.5.1 (2015-12-07)	
\@glsxtr@doaccsupp: new	20
General: removed \ifglsxtruseuchhead	299
\Glsaccessdesc: new	149
\Glsaccessdescplural: new	149
\Glsaccessfirst: new	146
\Glsaccessfirstplural: new	147
\Glsaccessname: new	145
\Glsaccessplural: new	146
\Glsaccesssymbol: new	148
\Glsaccesssymbolplural: new	148
\Glsxtrheadfirst: now uses headuc attribute	303
\glsxtrheadfirst: now uses headuc <br attribute<="" td=""><td>303</td></br attribute>	303
\Glsxtrheadfirstplural: now uses headuc attribute	304
\glsxtrheadfirstplural: now uses headuc attribute	304
\Glsxtrheadplural: now uses headuc attribute	303
\glsxtrheadplural: now uses headuc attribute	302
\Glsxtrheadshort: now uses headuc attribute	300
\glsxtrheadshort: now uses headuc attribute	299
\Glsxtrheadshortpl: now uses headuc attribute	300
\glsxtrheadshortpl: now uses headuc attribute	299
\Glsxtrheadtext: now uses headuc attribute	302
\glsxtrheadtext: now uses headuc attribute	301
short-em-footnote: switch off regular attribute if set	266
short-long: switch off regular attribute if set	205
short-long-desc: switch off regular attribute if set	207
short-sc-footnote: switch off regular attribute if set	230
short-sm-footnote: switch off regular attribute if set	244
long-short: switch off regular attribute if set	203
long-short-desc: switch off regular attribute if set	205
long-short-sc-desc: switch off regular attribute if set	221
footnote: switch off regular attribute if set	208
postfootnote: switch off regular attribute if set	209
0.5.2 (2015-12-08)	
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