

# Greek and hyperref

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On 2010-11-05, Heiko Oberdiek wrote in comp.text.tex:

```
\pdfstringdef (converting TeX code to PDF strings for bookmarks)
supports NFSS2 and needs active characters. Encoding stuff based
on the internal font machinery of TeX (letters with catcode 11 or
12, ligatures) does not work, because the strings don't reach TeX's
stomach.
```

The *greek-fontenc* package allows input of Greek characters in a way that “reaches TeX’s stomach” and hence works in both, the main document as well as in PDF strings (e.g. bookmarks). Hyperref’s “puenc.def” font encoding file defines LICR macros for monotonic Greek (Greek characters of the “Greek and Coptic” unicode block).

All utf8-encoded literal Unicode characters work in PDF strings. With *greek-fontenc* and *greek-inputenc*, this enables use of all Greek character in text and PDF strings.

## 1 Transcription: $\lambda\omicron\gamma\omicron\varsigma$ , $\lambda\omicron\gamma\omicron\varsigma$

`\textgreek + LGR` transcription or Greek language (babel) + LGR transcription: In the PDF-bookmark are Latin letters instead of Greek ones.

## 2 Macros: $\lambda\omicron\gamma\omicron\varsigma$ , $\lambda\omicron\gamma\omicron\varsigma$ , $\lambda\omicron\gamma\omicron\varsigma$

`textalpha` package with `\textgreek*` macros, `alphabetalpha` package with `\alpha ... \Omega` macros, and literal Greek Unicode characters.

Works, if the “unicode” or “pdfencoding=auto” option is given to hyperref. (With the “xpdf” viewer, Greek letters are not shown in PDF bookmarks.)

The generic short macros from the *alphabetalpha* package result in hyperref warnings. See “alphabetalpha-doc.tex” and “alphabetalpha-doc.pdf” from the ‘lgrx’ package for details an workarounds.

## 3 LGR + Macros: $\lambda\omicron\gamma\omicron\varsigma$

LICR-macro input works also if the font encoding is LGR.



## 8 Conclusion

For Greek text parts in section headers use either literal Unicode characters or macros. For multi-accented letters or non-standard accents, use literal pre-composed Unicode characters. (Combining Unicode characters do not work with `inputenc` and 8-bit LaTeX. This is a general restriction.)

For proper kerning in the main document, combine this with the `\textgreek` or `\foreignlanguage{greek}` macros.