Preparing FP7 EU Proposals and Reports in LATEX with euproposal.cls

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Abstract

The euproposal class supports many of the specific elements of a Framework 7 Proposal. It is optimized towards collaborative projects. The package comes with an extensive example (a fake EU proposal) that shows all elements in action.

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1 Introduction

Writing grant proposals is a collaborative effort that requires the integration of contributions from many individuals. The use of an ASCII-based format like LATEX allows to coordinate the process via a source code control system like Subversion, allowing the proposal writing team to concentrate on the contents rather than the mechanics of wrangling with text fragments and

The euproposal class extends the proposal class [Koh14a] and supports many of the specific elements of Part B of a Framework 7 Proposal. The package documentation is still preliminary, fragmented and incomplete and only dwells on the particulars of DFG proposals, so we treat [Koh14a] as a prerequisite. Please consult the example proposal propB.tex, which comes with the package and shows the usage of the class in action. It is intended as a template for your proposal, but please bear in mind that the EU guidelines may change from call to call, if in doubt, please consult the FP7 guide for proposers.¹

EdN:1

The eureporting class supports most of the specific elements of the project reports to the EC. The example report dfg/report.tex is intended as a template for your final report².

EdN:2

The euproposal and europorting classes and the eupdata package are distributed under the terms of the LaTeX Project Public License from CTAN archives in directory macros/latex/base/lppl.txt. Either version 1.0 or, at your option, any later version. The CTAN archive always contains the latest stable version, the development version can be found at https://github.com/KWARC/ LaTeX-proposal. For bug reports please use the sTeX TRAC at https://github.com/KWARC/ LaTeX-proposal/issues.

2 The User Interface

In this section we will describe the functionality offered by the euproposal class along the lines of the macros and environments the class provides. Much of the functionality can better be understood by studying the functional example proposal.tex (and its dependents) that comes with the euproposal package in conjunction with the proposer's EU proposer's guidelines (we have included it as *** for convenience into the package distribution).³

EdN:3

2.1Package Options

As usual in IATEX, the package is loaded by \documentclass[\langle options \rangle] \{ euproposal \}, where [\langle options \rangle] is optional and gives a comma separated list of options specified in [Koh14a]. Some versions EU proposals want non-standard numbering schemes (e.g. starting with B... since we are writing Part B.), this can be reached by giving the propB option.

2.2Proposal Metadata and Title page

The metadata of the proposal is specified in the proposal environment, which also generates the title page and the first section of the proposal as well as the last pages of the proposal with the signatures, enclosures, and references. The proposal environment should contain all the mandatory parts of the proposal text. The proposal environment uses the following EU-specific keys to specify metadata.

callname ICT Call 1, callid is the corresponding identifier, usually a string of the form FP7-???-200?-?. callid

proposal

• The challenge, objective, and outcome keys specifies the specific parts in the call this proposal addresses. These are specified in the "call fiche" that can be obtained from the URL above. All of these have an identifier, which can be specified via the challengeid,

An overview over open calls can be found at http://cordis.europa.eu/fp7/dc/index.cfm

• callname specifies the call the proposal addresses. It is usually a string of the form

challenge objective outcome challengeid

¹EdNote: say something about the proposers guide.

²EdNote: say something about reporting

³EdNote: MK@MK do that and talk about reporting as well.

 $\begin{array}{c} \text{objectiveid} \\ \text{outcomeid} \\ EdN:4 \\ \text{topicsaddressed} \\ \text{coordinator} \end{array}$

- objectiveid, and outcomeid keys.4
- topicsaddressed allows to enter free-form text instead of specifying the challenge*, objective*, and outcome* keys.
- The coordinator key gives the identifier of the proposal coordinator. The euproposal package uses the workaddress package for representation of personal metadata, see [Koh14b] for details.

iconrowheight

• If given, the iconrowheight key instructs the euproposal class to make a line with the logos of the participants at the bottom of the title page, and specify their heights; 1.5cm is often a good value.

2.3 Work Packages and Work Areas

v

BNP:5

The type key specifies the activity type of the work package: RTD = Research and technological development (including any activities to prepare for the dissemination and/or exploitation of project results, and coordination activities); DEM = Demonstration; MGT = Management of the consortium; OTHER = Other specific activities, if applicable in this call.

2.4 Reporting Infrastructure

report

The eureporting class gives an infrastructure for writing final reports of completed projects (see the file finalreport.tex in the package distribution). The report environment has functionality analogous to the proposal environment. It takes the same metadata keys — making it easy to generate by copy/paste from the proposal — but adds the keys key can be used to specify the reference key (something like KO 2428 47-11) given to the project by EU. Note that in the case of multiple proposers, you can use multiple instances of key to specify more than one reference key.

ENP:5

3 Limitations and Enhancements

The euproposal is relatively early in its development, and many enhancements are conceivable. We will list them here.

1. none reported yet.

If you have other enhancements to propose or feel you can alleviate some limitation, please feel free to contact the author.

 $^{^4{\}rm EdNote}$: MK@MK: the outcomeid should key should be a list key, I am not implementing this right now, since it comes more natural when we change the class to metakeys support.

⁵NEW PART: MK@MK: This is new, and only partially implemented

4 The Implementation

In this section we describe the implementation of the functionality of the euproposal and eureporting classes and the eupdata package.

4.1 Package Options and Format Initialization

We first set up the options for the package.

4.2 Proposal Metadata and Title Page

We extend the metadata keys from the proposal class.

```
16 (*pdata)
17 \define@key{prop@gen}{coordinator}{\def\prop@gen@coordinator{#1}\pdata@def{prop}{gen}{coordinator}{#1}}
18 \def\prop@gen@challenge{??}\def\prop@gen@challengeid{??}
19 \define@key{prop@gen}{challenge}{\def\prop@gen@challenge{#1}\pdata@def{prop}{gen}{challenge}{#1}}
20 \define@key{prop@gen}{challengeid}{\def\prop@gen@challengeid{#1}\pdata@def{prop}{gen}{challengeid}{#1}}
21 \def\prop@gen@objective{??}\def\prop@gen@objectiveid{??}
22 \define@key{prop@gen}{objective}{\def\prop@gen@objective{#1}\pdata@def{prop}{gen}{objective}{#1}}
23 \define@key{prop@gen}{objectiveid}{\def\prop@gen@objectiveid{#1}\pdata@def{prop}{gen}{objectiveid}{#1}}
24 \def\prop@gen@outcome{??}\def\prop@gen@outcomeid{??}
25 \define@key{prop@gen}{outcome}{\def\prop@gen@outcome{#1}\pdata@def{prop}{gen}{outcome}{#1}}
26 \define@key{prop@gen}{outcomeid}{\def\prop@gen@outcomeid{#1}\pdata@def{prop}{gen}{outcomeid}{#1}}
27 \define@key{prop@gen}{callname}{\def\prop@gen@call{#1}\pdata@def{prop}{gen}{callname}{#1}}
28 \define@key{prop@gen}{callid}{\def\prop@gen@call{#1}\pdata@def{prop}{gen}{callid}{#1}}
29 \define@key{prop@gen}{iconrowheight}{\def\prop@gen@iconrowheight{#1}}
30 \define@key{prop@gen}{topicsaddressed}{\def\prop@gen@topicsaddressed{#1}}
31 (/pdata)
   and now the ones for the final report
32 (*reporting)
33 \define@key{prop@gen}{reportperiod}{\def\prop@gen@reportperiod{#1}}
34 \define@key{prop@gen}{key}{\@dmp{key=#1}%
35 \@ifundefined{prop@gen@keys}{\xdef\prop@gen@keys{#1}}}\xdef\prop@gen@keys{\prop@gen@keys,#1}}}
36 \define@key{prop@gen}{projpapers}{\def\prop@gen@projpapers{#1}}
37 (/reporting)
   and the default values, these will be used, if the author does not specify something better.
   If the propB option is given, we need to redefine some of the internal counters and table of
```

contents mechanisms to adapt to the fact that the proposal text is just Part B.

38 (*cls)

```
39 \ifpartB
                   40 \def\thepart{\Alph{part}}
                   41 \setcounter{part}{2}
                   42 \def\thechapter{\thepart.\arabic{chapter}}
                   43 \def\numberline#1{\hb@xt@\@tempdima{#1\hfil} }
                   44 \fi
\prop@sites@table
                   45 \newcommand\prop@sites@table{\def\@@table{}
                   46 {\let\tabularnewline\relax\let\hline\relax
                   47 \@for\@I:=\prop@gen@sites\do{\xdef\@@table{\@@table\pdataref{site}\@I{number}}
                   48 \end{constitution@@lable&@nameuse{wa@institution@@l @name}} \\
                   49 \xdef\@@table{\@@table&\@nameuse{wa@institution@\@I @acronym}}
                   50 \xdef\@@table{\@@table&\@nameuse{wa@institution@\@I @countryshort}\tabularnewline\hline}}}
                   51 \begin{tabular}{||1|p{8cm}||1||}\hline%|
                   52\ & Participant organisation name & Short name & Country\\hline\hline
                   53 \@@table
                   54 \end{tabular}}
   prop@proposal
                   55 \renewenvironment{prop@proposal}
                   56 {\thispagestyle{empty}\begin{center}
                     {\Large \prop@gen@instrument}\\[.2cm]
                   58 {\LARGE\textbf\prop@gen@callname}\\[.4cm]
                   59 {\Large \prop@gen@callid}\\[.4cm]
                   60 {\LARGE\textbf\prop@gen@title}\\[.3cm]
                   61 {\LARGE Acronym: {\prop@gen@acronym}}\\[.2cm]
                   62 \end{center}
                   63 {\large\prop@gen@instrument}\\
                   64 {\large\textbf{Date of Preparation: \today}}
                   65 \ifsubmit\else\\
                   66 {\large\textbf{Revision}:
                   67 \if@svninfo\svnInfoRevision\fi\if@gitinfo\gitAbbrevHash\fi
                   69 \if@svninfo\svnInfoDate\fi\if@gitinfo\gitAuthorDate\fi}
                   70 \fi\\[1em]
                   71 {\large}
                   72 \begin{large}
                   73 \begin{description}
                       \item[Work program topics addressed by \pn:]
                   74
                         \@ifundefined{prop@gen@topicsaddressed}
                   75
                         {\textbf{Challenge \prop@gen@challengeid}: \prop@gen@challenge,
                   76
                          \textbf{Objective \prop@gen@objectiveid}: \prop@gen@objective,
                   77
                   78
                          \textbf{target outcome \prop@gen@outcomeid}) \prop@gen@outcome.}
                          {\prop@gen@topicsaddressed}\\[1em]
                   79
                   80
                       \item[Coordinator:] \wa@ref{person}\prop@gen@coordinator{name}
                       \item[e-mail:] \wa@ref{person}\prop@gen@coordinator{email}
                   81
                   82
                       \item[tel/fax:] \wa@ref{person}\prop@gen@coordinator{worktelfax}
                       \end{description}
                   83
                   84 \end{large}
                   85 \vspace*{1em}
                   86 \begin{center}
                   87 \prop@sites@table\vfill
                   88 \@ifundefined{prop@gen@iconrowheight}{}
                   89 {\@for\@site:=\prop@gen@sites\do{\wa@institution@logo[height=\prop@gen@iconrowheight]\@site\qquad}}
                   90 \end{center}
                   91 \newpage
                   92 \setcounter{tocdepth}{2}\setcounter{part}{2}}
                   93 {\newpage\printbibliography[heading=warnpubs,maxnames=999]}
```

4.3 Site Descriptions

⁹EDNOTE: document this above

```
EdN:6
                             <sup>7</sup> \begin{sitedescritpion} [\langle opt \rangle] {\meta{site}} marks up the description for the site \langle site \rangle.
sitedescription
                                                                                                                                                                                                 EdN:7
                              It looks up the relevant metadata from the respective \WAinstitution declarations. The options
                              argument \langle opt \rangle is a key-value list for the keys logo (add the logo from \WAinstitution to the
                                                                                                                                                                                                               logo
                              site description), width, height (intended dimensions of the logo), 8.
                                                                                                                                                                                                             width
                                                                                                                                                                                                           height
                              95 \define@key{site@desc}{box}[true]{\def\site@desc@box{#1}%
                                                                                                                                                                                                  EdN:8
                              96 \pdata@def{sitedesc}{\@site}{box}{#1}}
                              97 \define@key{site@desc}{logo}[true]{\def\site@desc@logo{#1}%
                              98 \pdata@def{sitedesc}{\@site}{logo}{#1}}
                              99 \define@key{site@desc}{width}{\def\site@desc@width{#1}%
                            100 \def{sitedesc}{\def{width}{\#1}\def{wd=\#1}}
                            101 \end{area} $$101 
                            103 \newenvironment{sitedescription}[2][]%
                            104 {\def\@site{#2}% remember the site ID
                            105 \newcounter{site@#2@PM} % for the site PM
                            106 \def\site@desc@box{false}% not box unless requested
                            107 \def\site@desc@logo{false}% not logo unless requested
                            108 \def\site@desc@height{1.3cm}% default height
                            109 \def\site@desc@width{5cm}% default width
                            110 \setkeys{site@desc}{#1}% read the keys to overwrite the defaults
                            111 \ifx\@site@desc@box\@true% if we want a logo
                            112 \begin{wrapfigure}{r}{\site@desc@width}\vspace{-2.5ex}%
                            113 \begin{tabular}{|p{\site@desc@width}|}\hline\vspace{1mm}%
                            114 \ifx\@site@desc@logo\@true% if we want a logo
                            115 \wa@institution@logo[height=\site@desc@width]{#2}\\[1ex]%
                            116 \fi% end logo
                            \label{limited} $$117 \text{\enskip}(\) \
                            118 \small\wa@ref{institution}{#2}{streetaddress}, \wa@ref{institution}{#2}{townzip}\\\hline%
                            119 \end{tabular}\vspace{-2.5ex}%
                            120 \end{wrapfigure}%
                            121 \fi end box
                            122 \pdata@target{site}{#2}%
                            123 {\subsection{\wa@ref{institution}{#2}{acronym}: % space here
                            124 {\textsc{\wa@ref{institution}{#2}{name}} (\wa@ref{institution}{#2}{countryshort}))}}}%
                            126 \renewcommand\paragraph{\@startsection{paragraph}{4}{\z@}%
                            127
                                                                                                  {0.25ex \@plus1ex \@minus.2ex}%
                            128
                                                                                                  {-1em}%
                                                                                                  {\normalfont\normalsize\bfseries}}}
                            129
                            130 {\pdata@def{site}{\@site}{\reqPM}{\csname thesite@\@site @PM\endcsname}}
                             <sup>9</sup> \begin{picv}[\langle PM \rangle] {\meta{name}} marks up the CV and metadata about a principal inves-
      participant
                              tigator of a site (it can only be use inside a sitedescription environment). The first argument
                              \langle PM \rangle specifies the involvement in person months: a fair estimation this PI will spend on this
                              specific project over its whole duration.
                            131 \define@key{site@part}{type}{\def\site@part@type{#1}\@dmp{type=#1}}
                            132 \define@key{site@part}{PM}{\def\site@part@PM{#1}\@dmp{PM=#1}}
                                  ^6\mathrm{EdNote}: this functionality should probably be refactored into proposal.dtx
                                  <sup>7</sup>EDNOTE: document this above
                                  <sup>8</sup>EdNote: more?
```

```
134 \newenvironment{participant}[2][]%
               135 {\def\site@part@type{}\def\site@part@PM{}\def\site@part@salary{}%
               136 \setkeys{site@part}{#1}%
               137 \ifx\site@part@PM\@empty\else\addtocounter{site@\@site @PM}{\site@part@PM}\fi%
               138 \paragraph*{#2 \ifx\site@part@type\@empty\else(\site@part@type)\fi}%
               139 \ignorespaces}
               140 {\par\medskip}
                       Work Packages, Work Areas, and Deliverables
           wp*
               141 \newmdenv[frametitle=Objectives] {wpobjectives}
               142 \newmdenv[frametitle=Description] {wpdescription}
  workpackage
               143 \renewenvironment{workpackage}[1][]
               144 {\begin{work@package}[#1]\medskip\wpheadertable%
               145 \addcontentsline{toc}{subsubsection}{\wp@label\wp@num: \pdataref{wp}\wp@id{title}}}
               146 {\end{work@package}}
\wpheadertable We redefine the macro that computes the default work package header table, since there are more
                sites in a EU proposal, we do this in a tabular form as asked for in the template. We use the
                internal counter @sites@po (sites plus one) for convenience.
               147 \newcounter{@sitespo}\newcounter{@sitespt}
               148 \renewcommand\wpheadertable{%
               149 \wp@sites@efforts@lines%
               150 \setcounter{@sitespo}{\thewp@sites@num}\addtocounter{@sitespo}{1}%
               151 \par\noindent\begin{tabular}{||1|*{\thewp@sites@num}{c|}c|}\hline%
               152 \multicolumn{\the@sitespo}{||1|}{\textbf{\wp@mk@title{\wp@num}: }%
               153 \textsf{\pdata@target{wp}{\wp@id}{\pdataref{wp}\wp@id{title}}}}
               154 &\textbf{Start: }\pdataref{wp}\wp@id{start}\\\hline%
               155 \wp@sites@line\\hline%
               156 \wp@efforts@line\\\hline%
               157 \end{tabular}\smallskip\par\noindent\ignorespaces}
      wpdelivs We make the deliverables boxed, this is simple with mdframed.sty.
               158 \surroundwithmdframed{wpdelivs}
                4.5
                       Risks
          risk
               159 \newenvironment{risk}[3]
               160 {\paragraph{Risk: #1}\hfill\emph{probability}: #2, \emph{gravity}: #3\par\noindent\ignorespaces}
               161 {}
      riskcont
               162 \newenvironment{riskcont}[3]
               163 {\begin{risk}{#1}{#2}{#3}\textbf{Contingency:} }
               164 {\end{risk}}
                4.6
                      Risks
```

133 \define@key{site@part}{salary}{\def\site@part@salary{#1}}%\@dmp{\euro=#1}}

In some EU proposals (e.g. FET), we need to identify risks and contingency and specify mitigation

 $\operatorname{light}_{\langle title \rangle} {\langle prob \rangle} {\langle qrav \rangle} \dots \operatorname{light}_{\langle title \rangle}$ makes a paragraph no a risk $\langle title \rangle$

plans for them. In the euproposal we use two environments to mark them up.

risk

with gravity $\langle grav \rangle$ and probability $\langle prob \rangle$, where the body of the environment contains a deriskcont scription of the risk. The riskcont is a variant, where $\langle title \rangle$ names a risk and the body is a description of the contingency plan.

4.7 Relevant Papers

 $\begin{array}{c} 10 \\ 165 \newcommand\keypubs[1]{\%} \\ 166 \paragraph{Key publications relevant to the project}\% \\ 167 {\newcommand{\baselinestretch}{.9}\prop@paperlist{\#1}} \\ 168 \cdot \cdo$

 $^{^{10}{\}rm EdNote}$: MK: the baselinestretch manipulation does not work here, since prop@paperslist makes its own provisions. We should provide a way of manipulating sizes here.

References

- [Koh14a] Michael Kohlhase. Preparing Proposals in LATEX with proposal.cls. Tech. rep. 2014. URL: https://svn.kwarc.info/repos/kwarc/doc/macros/forCTAN/proposal/base/proposal.pdf.
- [Koh14b] Michael Kohlhase. workaddress.sty: An Infrastructure for marking up Dublin Core Metadata in LATEX documents. Tech. rep. Comprehensive TEX Archive Network (CTAN), 2014. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/workaddress/workaddress.pdf.