

The **ekaia** package*

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Abstract

This package configures the **article** document class layout and provides a set of commands and environments to generate an article following the style of the University of the Basque Country Science and Technology Journal Ekaia.

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1 Introduction

In the last centuries, advances in science and technology have produced a significant impact in the society. For that reason, it is necessary to build a divulgation bridge between the scientific community and the society, publishing the research results in a knowledgeable fashion.

In the Basque Country, the divulgation of science and technology has encountered problems because technical Basque Language was not sufficiently developed.

*This file (ekaia.dtx) has version 1.04 last revised 16-11-25.

Hopefully, a great amount of work has been carried out in the last years. Nowadays, a variety of subjects can be studied in Basque Language at the university, and research groups that use Basque Language for their work have been created. This fact has increased the need of scientific divulgation in Basque Language, because the terminology created in the scientific community and the tradition built around it do not have the sufficient impact in the society. Scientific subjects are usually addressed in Basque media. However, at this moment this is not sufficient.

In 1989, the University of the Basque Country (UPV/EHU) founded the journal Ekaia to support the divulgation of science and technology in Basque Language. Unfortunately, this first attempt was brief. In 1995, a group of lecturers of the University of the Basque Country re-founded the journal, because of the need of a terminological unity and the continuous appearance of new discoveries and concepts.

The Ekaia journal is mainly written for readers that have a basic scientific formation. Its main objectives are the following: to publish the last advances in science and technology, to provide complementary bibliography for university students and non-university teachers, to support the standardization of the technical and scientific Basque Language and to help to solve the problems that arise when the Basque Language is used in these fields. Ekaia is published twice a year, and it gathers articles of a variety of scientific fields.

The `ekaia` package configures the `article` document class layout and provides a set of commands and environments to prepare articles using L^AT_EX for the peer review process of the University of the Basque Country Science and Technology Journal Ekaia.

2 Calling the package

The package `ekaia` is called using the `\usepackage` command:
`\usepackage{ekaia}`.

No package options are provided in the current `ekaia.sty` version. `ekaia` package requires the following additional packages: `babel`, `geometry`, `sectsty`, `fancyhdr` and `indentfirst`.

3 Package usage

3.1 L^AT_EX commands and environments provided by the package

The `ekaia` package provides the following L^AT_EX commands for Ekaia articles preparation:

- `\izenburua{}`: This command is used to produce the title of the document Basque.
- `\azpiizenburua{}`: This command is used to produce the title of the document in English.

- `\datak{}{}:` Submission and acceptance dates are introduced in this command, respectively.

Additionally, the `ekaia` package provides the following \LaTeX environments:

- `autoreak:` This environment is used to introduce information about the authors (names, surnames, affiliations and contact information).
- `laburpena:` This environment is used to produce the article abstract in Basque Language.
- `hitz-gakoak:` This environment sets the keywords in Basque Language.
- `abstract:` This environment is used to produce the article abstract in English.
- `keywords:` This environment sets the keywords in English.

3.2 Package usage example

The following `.tex` code example illustrates how to use the commands and environments summarized in the previous section to prepare a document for submission to the Ekaia journal.

```
\documentclass[twoside,a4paper,11pt]{article}
\usepackage{ekaia}
\begin{document}
\izenburua{\LaTeX{}: euskarazko dokumentu
zientifiko-teknikoen ediziorako baliabideak}

\azpiizenburua{\LaTeX{}: resources for the edition
of scientific and technical documents in Basque}

\begin{autoreak}
\textit{Edorta Ibarra$^1$, Jose Ramon Etxebarria$^2$}
\linebreak
$^1$APERT ikerketa-taldeko ikertzailea (UPV/EHU)
\linebreak
$^2$Euskal filologia saila, Bilboko Goi Ingeniaritza Eskola
(UPV/EHU)
\linebreak
helbidea@ehu.es
\linebreak
\end{autoreak}

\data{k}{2014-04-11}{2014-07-11}

\begin{laburpena}
```

```
Gaur egun, komunitate zientifikoaren ‘lingua francatzat’ har
daiteke kalitate tipografiko handiko testuen ediziorako den
\LaTeX{} sistema. Nahiz eta hainbat hizkuntzatan lan egiteko
aukera eman, ingelesarekin eta ingelesaren antzeko hizkuntzekin
lan egiteko dago \LaTeX{} prestatuta.
\end{laburpena}
```

```
\begin{hitz-gakoak}
Testu zientifikoen edizioa, \LaTeX{}, euskara.
\end{hitz-gakoak}
```

```
\begin{abstract}
Nowadays, \LaTeX{}, an editor for high typographical quality texts,
can be considered as a lingua franca for the scientific community.
Although \LaTeX{} supports a multi-lingual environment, it is suited
to work with English and English-like languages.
\end{abstract}
```

```
\begin{keywords}
Scientific document edition, \LaTeX{}, Basque Language.
\end{keywords}
```

```
\section{Sarrera}
```

3.3 Creating the bibliography

The use of the `thebibliography` environment is highly recommended to produce the article bibliography according to the Ekaia journal bibliography style¹. The following example helps to illustrate the procedure.

```
\renewcommand\refname{\indent Bibliografia}
\begin{thebibliography}{99}

\bibitem{ibarra}
IBARRA E. eta ETXEBARRIA J.R. 2014. "<\LaTeX{}: euskarazko dokumentu
zientifiko-teknikoen ediziorako baliabideak">. \textit{Ekaia},
27, 329-343.
\end{thebibliography}
```

¹<http://www.ehu.es/ojs/index.php/ekaia/about/submissions#authorGuidelines>

A Appendices

A.1 License

Copyright 2014-2016 Edorta Ibarra and the Ekaia Journal (UPV/EHU).

This program can be redistributed and/or modified under the terms of the L^AT_EX Project Public License Distributed from CTAN archives in directory macros/latex/base/lppl.txe; either version 1.2 of the License, or any later version.

A.2 Version history

- **Version v1.00 (14/07/27).** Initial non-public version for development.
- **Version v1.02 (14/12/26).** First public version.
- **Version v1.04 (16/11/04).** `azpiizenburua` command included to generate the title in English. Minor mistakes corrected.

A.3 Implementation

At the beginning of the code, document language selection is performed using the `babel` package. Ekaia articles are written in Basque. However, as the abstract must be also written in English, both language options are loaded.

```
1 \RequirePackage[english,basque]{babel}
2 \selectlanguage{basque}
3
```

Spaces according to Basque language rules are set.

```
4 \frenchspacing
5
```

The line spacing is set to one and a half of the standard line spacing.

```
6 \linespread{1.3}
7
```

Document margin layout is selected using the `geometry` package.

```
8 \RequirePackage[top=2.6cm,bottom=2.8cm,left=3cm,right=3cm]{geometry}
9
```

Additionally, section font size selection is achieved using the `sectsty` package.

```
10 \RequirePackage{sectsty}
11 \sectionfont{\fontsize{12}{15}\selectfont}
12 \subsectionfont{\fontsize{12}{15}\selectfont}
13 \subsubsectionfont{\fontsize{12}{15}\selectfont}
14
```

Document footer definition is performed using the `fancyhdr` package.

```
15 \RequirePackage{fancyhdr}
16 \pagestyle{fancy}
17 \renewcommand{\headrulewidth}{0pt}
```

```

18 \fancyhead[L]{ }
19 \fancyhead[C]{ }
20 \fancyhead[R]{ }
21 \fancyfoot[L]{ }
22 \fancyfoot[C]{ }
23 \fancyfoot[R]{\thepage}
24
25 \makeatletter
26 \let\ps@plain\ps@fancy
27 \makeatother
28
29 \makeatletter
30 \def\ps@headings{%
31     \let\@oddfoot\@empty
32     \def\@oddhead{\slshape\rightmark}\hfil\thepage}%
33     \let\@mkboth\markboth
34     \def\sectionmark##1{%
35         \markright {\MakeUppercase{%
36             \ifnum \c@secnumdepth >\m@ne
37                 \thesection\quad
38             \fi
39             ##1}}}}
40 \makeatother
41
Indent after the \section command is forced using the indentfirst package.
42 \RequirePackage{indentfirst}
43
Figure and table captions are re-defined according to the Basque Language rules.
44 \makeatletter
45 \def\fnun@figure{\textbf{\fontsize{10}{15}\selectfont\thefigure .~irudia}}
46 \makeatother
47
48 \makeatletter
49 \def\fnun@table{\textbf{\fontsize{10}{15}\selectfont \thetable .~taula}}
50 \makeatother
51
52 \makeatletter
53 \long\def\@makecaption#1#2{%
54     \vskip\abovecaptionskip
55     \sbox\@tempboxa{\textbf{.} \fontsize{10}{15}\selectfont #2}%
56     \ifdim\wd\@tempboxa >\hsize
57     #1\textbf{.} \fontsize{10}{15}\selectfont #2\par
58     \else
59     \global \@minipagefalse
60     \hb@xt@\hsize{\hfil\box\@tempboxa\hfil}%
61     \fi
62     \vskip\belowcaptionskip}
63 \makeatother
64

```

Commands `\thesection`, `\thesubsection`, etc. are redefined in order to comply with the Basque Language rules. Additionally, section indent is set.

```
65 \renewcommand\thesection {\indent \arabic{section}.}
66 \renewcommand\thesubsection {\thesection \arabic{subsection}.}
67 \renewcommand\thesubsubsection {\thesubsection \arabic{subsubsection}.}
68 \renewcommand\theparagraph {\thesubsubsection \arabic{paragraph}.}
69 \renewcommand\thesubparagraph {\theparagraph \arabic{subparagraph}.}
70
```

`\izenburua` A new command is defined in order to create the document title in Basque.

```
71 \newcommand{\izenburua}[1]{
72 \begin{flushleft}
73 \fontsize{16}{15}\textbf{#1}\linebreak\fontsize{11}{15}
74 \end{flushleft}
75 }
```

`\azpiizenburua` A new command is defined in order to create the document title in English.

```
76
77 \newcommand{\azpiizenburua}[1]{
78 \begin{flushleft}
79 \fontsize{12}{11}\textit{(#1)}\linebreak\fontsize{12}{11}
80 \end{flushleft}
81 }
82
83
84
```

`\datak` A new command is defined in order to create the document submission and acceptance dates.

```
85 \newcommand{\datak}[2]{
86 \begin{flushleft}
87 Jasoa:~{#1}
88 \linebreak
89 Onartua:~{#2}
90 \linebreak
91 \end{flushleft}
92 }
93
```

`autoreak` A new environment is created in order to print the document authors, affiliations and contact information.

```
94 \newenvironment{autoreak}
95 {
96 \flushright
97 }
98
```

`laburpena` A new environment is created to write the abstract in Basque.

```
99 \newenvironment{laburpena}
100 {
101 \selectlanguage{basque}
```

```

102 \setlength{\parindent}{0pt}
103 \textbf{Laburpena:}~\itshape
104 }{\setlength{\parindent}{0.8cm}\ }
105
abstract The abstract environment is redefined to write the abstract in English according
to the Ekaia Journal style.
106 \renewenvironment{abstract}
107 {
108 \selectlanguage{english}
109 \setlength{\parindent}{0pt}
110 \textbf{Abstract:}~\bfseries
111 }{\setlength{\parindent}{0.8cm}\selectlanguage{basque}\ }
112
hitz-gakoak A new environment for keywords in Basque is created.
113 \newenvironment{hitz-gakoak}{
114 \setlength{\parindent}{0pt}
115 \textbf{Hitz gakoak:}~
116 }{\setlength{\parindent}{0.8cm}\ }
117
keywords A new environment for keywords in English is created. Language selection com-
mand is used to switch between languages.
118 \newenvironment{keywords}{
119 \setlength{\parindent}{0pt}
120 \textbf{Keywords:}~
121 }{\setlength{\parindent}{0.8cm}\ }
122

```