

# A demonstration of the $\LaTeX 2_{\epsilon}$ class file for *EAI Endorsed Transactions*<sup>★</sup>

Alistair Smith<sup>1</sup>, Joseph Rushton Wakeling<sup>2,\*</sup>

<sup>1</sup>Sunrise Setting Ltd, 12a Fore Street, St. Marychurch, Torquay, Devon, TQ1 4NE, UK

<sup>2</sup>Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (ICST)

## Abstract

This paper describes the use of the  $\LaTeX 2_{\epsilon}$  `icst.cls` class file for setting papers for submission to *EAI Endorsed Transactions*.

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## 1. Introduction

Many authors submitting to research journals use  $\LaTeX 2_{\epsilon}$  to prepare their papers. This paper describes the `icst.cls` class file which can be used to convert articles produced with other  $\LaTeX 2_{\epsilon}$  class files into the correct form for publication in *EAI Endorsed Transactions*.

The `icst.cls` class file preserves much of the standard  $\LaTeX 2_{\epsilon}$  interface so that any document which was produced using the standard  $\LaTeX 2_{\epsilon}$  article style can easily be converted to work with the `icst` style. However, the width of text and typesize will vary from that of `article.cls`; therefore, *line breaks will change* and it is likely that displayed mathematics and tabular material will need re-setting.

In the following sections we describe how to lay out your code to use `icst.cls` to reproduce the typographical look of *EAI Endorsed Transactions*. However, this paper is not a guide to using  $\LaTeX 2_{\epsilon}$  and we would refer you to any of the many books available (see, for example, [1–3]).

## 2. The three golden rules

Before we proceed, we would like to stress *three golden rules* that need to be followed to enable the most efficient use of your code at the typesetting stage:

- (i) keep your own macros to an absolute minimum;
- (ii) as  $\TeX$  is designed to make sensible spacing decisions by itself, do *not* use explicit horizontal or vertical spacing commands, except in a few accepted (mostly mathematical) situations, such as `\`, before a differential `d`, or `\quad` to separate an equation from its qualifier;
- (iii) follow the *EAI Endorsed Transactions* reference style.

## 3. Getting started

The `icst` class file should run on any standard  $\LaTeX 2_{\epsilon}$  installation. If any of the fonts, style files or packages it requires are missing from your installation, they can be found on the *TeX Collection* DVDs or from CTAN.

*EAI Endorsed Transactions* are published using a combination of Kp-Fonts and Iwona typefaces. This is achieved by using the `fonts` option as `\documentclass[fonts]{icst}`.

If for any reason you have a problem using this combination you can easily resort to Computer Modern fonts by removing the `fonts` option.

## 4. The article header information

The heading for any file using `icst.cls` is shown in Figure 1.

<sup>★</sup>Please ensure that you use the most up to date class file, available from EAI at <http://doc.eai.eu/publications/transactions/latex/>

\*Corresponding author. Email: [publications@eai.eu](mailto:publications@eai.eu)

```

\documentclass[fonts]{icst}
%\documentclass[fonts,doublespace]{icst}%For paper submission

\begin{document}

\runningheads{<Initials and Surnames>}{<Short title>}

\title{<Initial caps>}
%\title{<Initial caps>\tnoteref{1}}

\author{<An Author\affil{1}, Someone Else\affil{2}\fnoteref{1},
Perhaps Another\affil{1}>}

\address{<\affilnum{1}First author's address
(in this example it is the same as the third author)\
\affilnum{2}Second author's address>}

%\tnotetext[1]{<Footnote to the title, if needed>}

\fnotetext[1]{Corresponding author. \email{<email address>}}
%Corresponding author is the second author in this example

%\fnotetext[2]{<Text as needed>}

\abstract{<Text>}

\keywords{<List keywords>}

\maketitle

\section{Introduction}
.
.
.

```

Figure 1. Example header text

#### 4.1. Remarks

- (i) In `\runningheads` use ‘*et al.*’ if there are four or more authors.
- (ii) Note the use of `\tnoteref{<id num>}` and `"\tnotetext[<idnum>]<Text>"` for setting footnotes to the title  
Also note the use of `\fnoteref{<id num>}` and `\fnotetext[<id num>]{<Text>}` for setting footnotes to author names. At least one of these must identify the ‘Corresponding author’ (as in the example shown in Figure 1)
- (iii) For submitting a double-spaced manuscript, add `doublespace` as an option to the `documentclass` line.
- (iv) The abstract should be capable of standing by itself, in the absence of the body of the article and

of the bibliography. Therefore, it must not contain any reference citations.

- (v) Keywords are separated by commas.

## 5. The body of the article

### 5.1. Mathematics

`icst.cls` makes the full functionality of  $\mathcal{A}\mathcal{M}\mathcal{S}\mathcal{T}\mathcal{E}\mathcal{X}$  available. We encourage the use of the `align`, `gather` and `multline` environments for displayed mathematics. `amsthm` is used for setting theorem-like and proof environments. The usual `\newtheorem` command needs to be used to set up the environments for your particular document.

### 5.2. Figures and Tables

`icst.cls` includes the `graphicx` package for handling figures.

```

\begin{table}\small\sf
\caption{<Table caption>}
\centering
\begin{tabular}{<table alignment>}
\toprule
<column headings>\!
\midrule
<table entries
(separated by & as usual)>\!
<table entries>\!
.
.
.\!
\bottomrule
\end{tabular}
\end{table}

```

Figure 2. Example table layout

Figures are called in as follows:

```

\begin{figure}
\centering
\includegraphics{<figure name>}
\caption{<Figure caption>}
\end{figure}

```

For further details on how to size figures, etc., with the `graphicx` package see, for example, [1] or [3]. If figures are available in an acceptable format (for example, .eps, .ps) they will be used but a printed version should always be provided.

The standard coding for a table is shown in Figure 2.

### 5.3. Cross-referencing

The use of the  $\LaTeX$  cross-reference system for figures, tables, equations, etc., is encouraged (using `\ref{<name>}` and `\label{<name>}`).

### 5.4. Appendices

Code appendices as follows.

```

\begin{appendices}
\section{<The first appendix title>}
.
.
.
\subsection{<The first subappendix>}

\appendix
\section{<The second appendix title>}
.

```

```

.
.
\end{appendices}

```

### 5.5. Acknowledgements

An Acknowledgements section is started with `\ack` or `\acks` for *Acknowledgement* or *Acknowledgements*, respectively. It must be placed just before the References.

### 5.6. Bibliography

The *EAI Endorsed Transactions* allows either the Vancouver or Harvard reference style. The default style is Vancouver, but the Harvard style can be achieved easily by using the `authoryear` option as:

```
\documentclass[... ,authoryear]{icst}.
```

Please note that the files `icstnum.bst` and `icstauth.bst` (which output references in the Vancouver and Harvard style, respectively) are available from the same download page for those authors using  $\BibTeX$ .

### 5.7. Double Spacing

If you need to double space your document for submission please use the `double space` option as shown in the sample layout in Figure 1.

## 6. Support for icst.cls

We offer on-line support to participating authors. Please contact us via e-mail at [publications@eai.eu](mailto:publications@eai.eu)

We would welcome any feedback, positive or otherwise, on your experiences of using `icst.cls`.

## 7. Copyright statement

Please be aware that the use of this  $\LaTeX 2_{\epsilon}$  class file is governed by the following conditions.

### 7.1. Copyright

The Copyright licensed to ICST.

**Acknowledgement.** This class file was developed by Sunrise Setting Ltd, Torquay, Devon, UK. Website: [www.sunrise-setting.co.uk](http://www.sunrise-setting.co.uk)

## References

- [1] KOPKA H. and DALY P.W. (2003) *A Guide to  $\LaTeX$*  (Addison-Wesley), 4th ed.
- [2] LAMPORT L. (1994)  *$\LaTeX$ : a Document Preparation System* (Addison-Wesley), 2nd ed.
- [3] MITTELBACH F. and GOOSSENS M (2004) *The  $\LaTeX$  Companion* (Addison-Wesley), 2nd ed.