


Criteria for Editors Processing Papers

Influences:
Level of Homogeneity
Speed with which Proceedings become available
Proceedings Budget

Jan Chrin, PSI

JACoW Team Meeting
14-17 November 2011, Shanghai

Conference Editors' Goal

is the *timely completion* of a homogeneous set of papers for the compilation of an electronic Proceedings Volume, with an appropriate submission rate

What is an acceptable submission rate?
At time of acceptance of abstracts/invitation of speakers, impress a sense of obligation onto authors from the very beginning: *talk/poster and paper belong together!*

What should the "look and feel" of the Proceedings be?
i.e. To what level of detail can the Conference/Workshop afford, in terms of manpower and budget,?

What constitutes a timely completion?
Factors include: amount of extra-time for late contributions (invited speakers), if printed volume (probably a thing of the past now); proximity to next event in the series

Conference Editors' Goal cont.

is the *timely completion* of a homogeneous set of papers for the compilation of an electronic Proceedings Volume, with an appropriate submission rate

Publication on JACoW

Publication on JACoW requires the submission of papers suitable for electronic viewing. JACoW does not itself make mandates other than paper size, fonts and performance. This is the role of the Conference organizers. In this respect, the document "Preparation of Papers for JACoW Conferences" is the ad-hoc standard. The editing criteria presented here relates to this document.

A “JACoW” compliant paper

ICALEPCS 2005
Single column
Conference name on top page
Paper ID (rather than page number)

10th ICALEPCS Int. Conf. on Accelerator & Large Expt. Physics Control Systems. Geneva, 10 - 14 Oct 2005, MO2.1-1I (2005)

THE LHC CONTROL SYSTEM

B. Frammery, reporting for the AB-CO Group
CERN, Geneva, Switzerland

ABSTRACT

A new control system for the LHC machine has been developed building on the existing controls

Paper (just about) meets the “technical constraints” for publication on JAcOW

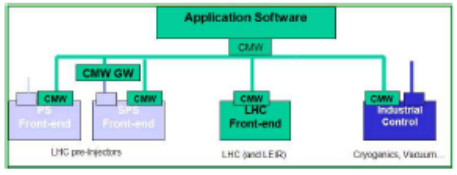

Figure 5: Controls Middleware implementation

which is available for both Java and C++.

Messaging Model

The LHC control system software relies on the Java Message Service (JMS). The JMS specification adds a standard and vendor-independent API that enables the development of portable, message-based applications in the Java programming language. Moreover, JMS is a strategic technology for the Java 2 Platform Enterprise Edition (J2EE).

SOFTWARE FRAMEWORKS

The FEC software framework

- The software running in the LHC FECs was developed using a specific framework, known as FESA. This framework is a complete environment for the equipment specialists to design, develop, test and deploy real-time control software for the FECs. This framework implemented in C++ is also the new standard for the LHC injector chain [6], [7], [8].
- The FESA framework is built for LynxOS and Linux platforms. The software tools are written in Java and are thus platform independent. No commercial software requiring a run-time license has been used.

The J2EE framework for accelerator controls

A 3-tier architecture [9] was implemented to get a clear separation between the GUI (the user interface), the control (the core business of the application and the abstract model of the accelerator control) and the devices (the physics equipment) that are controlled. The middle-tier is responsible for providing all services and for coordinating the client applications running on the operator consoles. To achieve this new programming model, the J2EE platform was selected to support the middle-tier and a unified Java API for Parameter Control (JAPC) was developed to access all types of parameters [10].

The UNICOS framework for industrial controls

The UNICOS framework (UNified Industrial COntrol System) [11] builds on a classic industrial controls architecture using PVSS [12], the SCADA product recommended at CERN, in the Supervision layer, Schneider or Siemens PLCs for process control at the Control layer and to connect process channels in the Field layer. Communication is based on Ethernet and FIPIO. In the UNICOS concept the object implementation is split into a GUI programmed in the SCADA and a process programmed in the PLC [13].

In order to optimize the communication bandwidth between the PLCs and the SCADA, an event-driven protocol based on TCP-Modbus has been developed.

The UNICOS and the J2EE frameworks share the same conventions for the graphical symbols used at the GUI level.

THE CONTROL ROOM SOFTWARE

For the LHC beam operation

The LHC control room applications are based on a set of common control system services and components, in order to avoid duplication of effort and solutions. The operational software development process relies on common development tools, guidelines and procedures for the construction, testing, integration, deployment and change management [13].

The Diligent Author

will have …

used the JACoW template, digested and implemented the requirements for electronic publication stated therein

Uploaded all source files, and a good postscripts file, from which the editors will auto-matically create a “JACoW standard” pdf

PREPARATION OF PAPERS FOR JACoW CONFERENCES*

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Abstract

Many conference series have adopted the same standards for electronic publication and have joined the Joint Accelerator Conference Website (JACoW) collaboration [1] for the publication of their proceedings. This document describes the common requirements for the submission of papers to these conferences. Please consult individual conference information for page limits, method of electronic submission, etc. It is not intended that this should be a tutorial in word processing; the aim is to explain the particular requirements for electronic publication at these conference series.

SUBMISSION OF PAPERS

Each author should submit the PostScript and all of the source files (text and figures), to enable the paper to be reconstructed if there are processing difficulties.

MANUSCRIPTS

Templates are provided for recommended software and authors are advised to use them. Please consult the individual conference help pages if questions arise.

General Layout

These instructions are a typical implementation of the requirements. Manuscripts should have:

- Either A4 (21.0 cm × 29.7 cm; 8.27 in × 11.69 in) or US letter size (21.6 cm × 27.9 cm; 8.5 in × 11.0 in) paper.
- Single-spaced text in two columns of 82.5 mm (3¼ in) with 5.3 mm (0.2 in) separation.
- The text located within the margins specified in Table 1 to facilitate electronic processing of the PostScript file.

Table 1: Margin Specifications

Margin	A4 Paper	US Letter Paper
Top	37 mm	19 mm (0.75 in)
Bottom	19 mm	19 mm (0.75 in)
Left	20 mm	20 mm (0.79 in)
Right	20 mm	26 mm (1.0 in)

The layout of the text on the page is illustrated in Fig. 1. Note that the paper’s title and the author list should be the width of the full page. Tables and figures may span the whole 170 mm page width, if desired (see Fig. 2), but full-width figures should be placed at either the top or bottom of a page to ensure proper flow of the text (Word templates only).

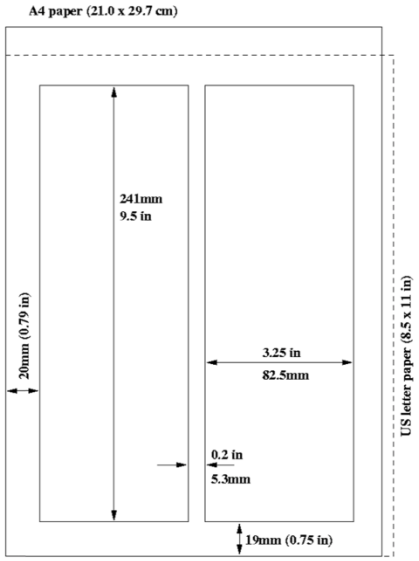


Figure 1: Layout of papers.

Fonts

In order to produce good Adobe Acrobat PDF files, authors using a LaTeX template are asked to use only Times (in roman (standard), bold or italic) and symbols from the standard PostScript set of fonts. In Word use only Symbol and, depending on your platform, Times or Times New Roman fonts in standard, bold or italic form.

Title and Author List

The title should use 14 pt bold uppercase letters and be centered on the page. Individual letters may be lowercase to avoid misinterpretation (e.g., mW, MW). To include a funding support statement, put an asterisk after the title and a footnote at the bottom of the first column on page 1; in LaTeX use \thanks.

The names of authors, their organizations/affiliations and mailing addresses should be grouped by affiliation and listed in 12 pt upper and lowercase letters. The name of the submitting or primary author should be first, followed by the co-authors, alphabetically by affiliation.

*Work supported by …
#cee@aps.anl.gov

…into the Proceedings Office

Crap In

Wrinkled

Rough Diamond

Editorial Team

Crap Out

Smoothed

Cut and Polished

Editorial Team READY to straighten out that badly formatted paper and sometimes that “badly formatted” author too!

Criteria for Editors

cf. "Processing Papers for JACoW Conferences", J. Poole

classifies processing papers into the following *criteria* and makes proposals for IPAC11:

- *Must have for JACoW ,* i.e. the basic JACoW constraints
  Level 0: **non-negotiable**
- *Must have for the Conference*, i.e. essential (conference) editing
  Level 1: **minimalistic** [if missing after edit, QA Fail]
- *Would be nice to have for the conference*, i.e. desirable editing
  Level 2: **pragmatic** [if missing after edit, QA Pass]
- *In an ideal world would have*, i.e. full adherence to template
  Level 3: **pedantic** [if missing after edit, QA Pass]

Essential Editing (Example)

- General Layout *must conform and margins adhered to*
- Fonts *Times New Roman, with correct font size*
- Title, *correctly formatted* Institutes*, correctly written*
- Section Headings *uppercase, centered*
- Sequential citations to Figures, Tables and References
- No page numbers, no numberings of sections

Desired Editing (Example)

- Author/Institute, *Correctly formatted (if done quickly)*
- Subsection Headings, *Initial Letter Capitalized*
- Paragraph Text , *Correct indentation*
- Figures and Tables

  attention to captions, positioning and formatting
- Citations to figures and tables *Figure 1/ Fig. 1 Table 1*
- References,

  should at least be consistent and properly aligned

Full adherence to template

- Equations, *spacing not adhered to, often not numbered*
- Footnotes v Endnotes, *inconsistent use of*
- Table Formatting, *unnecessary use of vertical lines*

Red Dots, Green Dots, Yellow Dots, More!

Essential Editing

Desirable Editing

Edit to Perfection

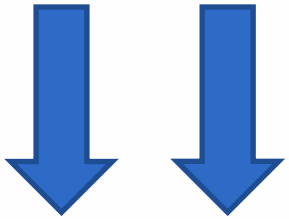
- Template not used; max page limit exceeded; editor unable to produce final pdf (e.g. missing files)
- Paper reprocessed from source; author required to proof-read pdf
- PS->PDF successful; Editor may have made some changes with Acrobat/PitStop
- Edit in process

Edit at Source or in PDF?

at Source

Reprocessing from source
dependent on Word version Asia/ West
[] not an uncommon phenomena!
Editor introduced errors !

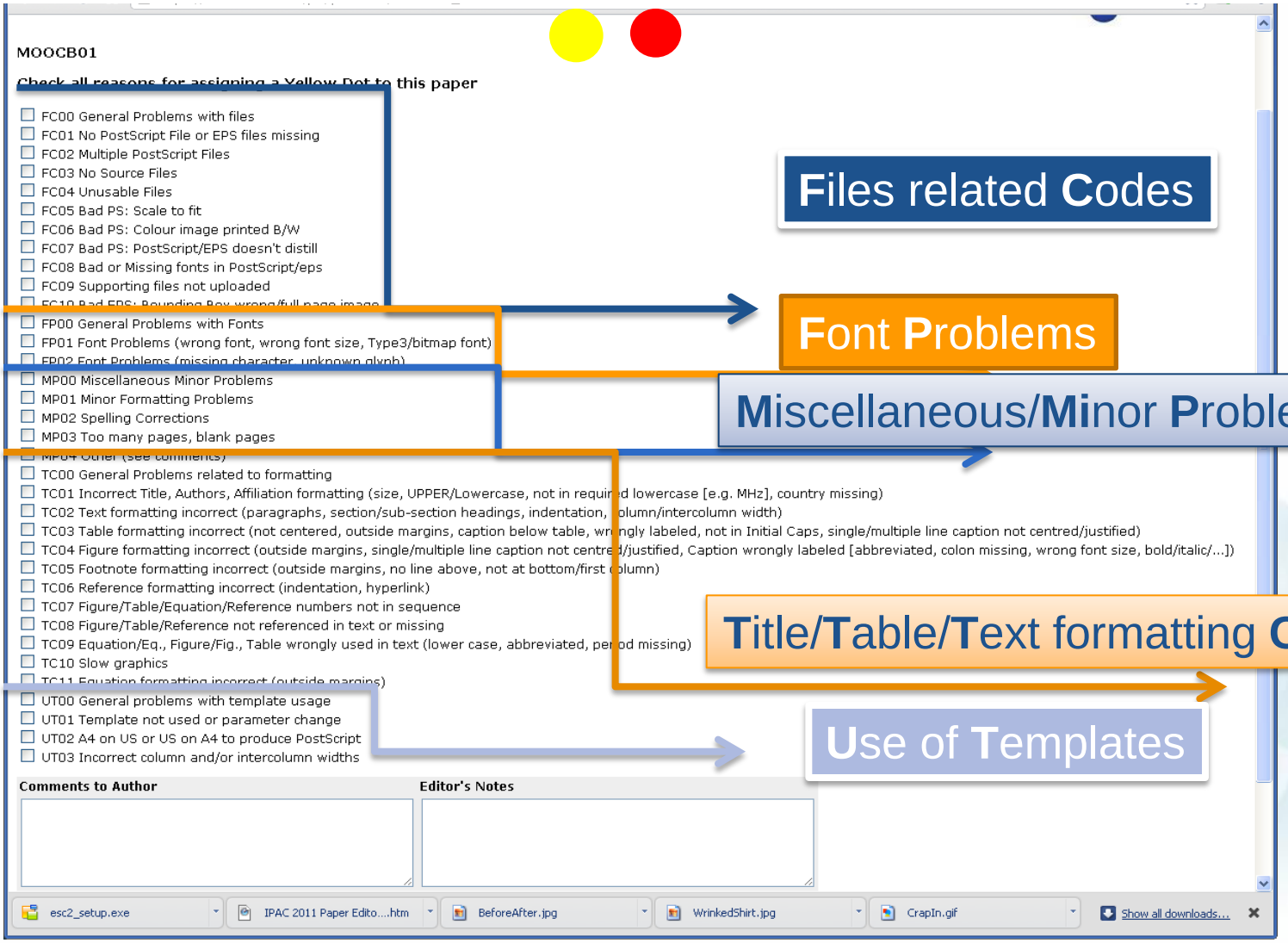
in PDF



Major changes (*) in pdf
warrant a yellow dot.
Acrobat/PitStop can
still mess things up. Watch out!
Minor changes -> green

(*) If much editing required, best done at source (remain flexible to later changes)
– time for reprocessing from source a small perturbation to total edit time

Editor's Error Reporting Page



Most Common Errors

IPAC11 and ICALEPCS 11 weighted averages

No 1. with 15% of Votes is:

TC04: Figure formatting incorrect (outside margins, single/multiple line caption not centered/justified, caption wrongly labeled [abbreviated, colon missing, wrong size, bold/italic/…]) Level 2

No 2. with 12% of Votes is:

TC02: Text formatting incorrect (paragraphs, section/sub-section headings, indentation,)

Level 2

Most Common Errors cont.

No 3. with 11% of Votes is:

TC06: Reference formatting incorrect (indentation, hyperlink) Level 2

Observation: by NOT acting on these ‘Top 3’ oversights from authors, editorial load can be reduced by approximately one-third

Most Common Errors cont.

No 4. with 10% of Votes is:

TC01: Incorrect Title, Authors, Affiliation formatting (size, UPPER/Lowercase, not in required lowercase [e.g. MHz], country missing Level 1

No 5. with 9% of Votes is:

TC03: Table formatting incorrect (not centered, outside margins, caption below table, wrongly labeled, not in Initial Caps, single/multiple line caption not centered/ justified

Level 2

Most Common Errors cont.

No. 6 with 4% of Votes is:

FC01 No Postscript File or EPS files missing

Level 1

No 7. with 4% of Votes is:

TC00: General problems related to formatting

No. 8. with 3% of Votes is:

MP01: Minor Formatting Problems

Remaining 32% taken by the remaining (approx. 26) error codes ! (About 11% Level 1 / 21% Level 2)

Most Common Errors cont.

Observation: approx. 25% papers fail Level 1 criteria
approx. 75% papers fail Level 2 criteria

40% Green
60% Yellow or Red

Therefore overall impact on going into source and correcting Level1 fail papers to Level 2 standards is 15%

Note: Editing in pdf does NOT appear in the above statistics!
Do we want to change this?

Paper Processing Rate

Editor	Papers/day (guess-estimate)	Processing Level
1	37	1-2
2	24	2
3	18	2-3 (Latex only)
4	17	2-3 (Latex only)
5	10	1-2
6	10	2
7	9	2
8	9	2

Impact on Cost

Level 1: x = no. editors at 20 papers/day (30/day Ed + 60/day QA)
Level 2: y = no. editors at 12 papers/day (15/day Ed + 60/day QA)
s = no. support staff (IT + DB + Transparency Ed.)
m,n = Total no. days
P = Tot. papers
B = Tot. Budget
D = Editor's cost/day

$$P = n(20x) + m(12y)$$
$$B = nD(x+s) + mD(y)$$

Example for P=1300, D=160 €/day, m,n=9:

Case 1 (Level 1): y=2, s=2 ➔ x = 6, B= 14400 € i.e. Total Staff=10

Case 2 (Level 2): x=0, s=2 ➔ y = 12, B= 20160 € i.e. Total Staff=14

Case 3 (IPAC11): x=2, y=9, s=2 ➔ B= 18720 € i.e. Total Staff=13

N.B. New editors folded in as 0.5y

Going from Case 3 to Case 1, reduces cost by 4320 € (exemplary) i.e. 3 Staff

Subjective or Objective?

Criteria for Editors defined by the Chief Editor/Scientific Secretariat – know your goals!

IPAC (1300 papers)
Level 1 or Level 2, if editing at source (à la John Poole)

Speedy Proceedings
Less stringent criteria
while ensuring uniformity
Edit in pdf
(hence more green dots)

DIPAC (150 papers)
Level 3

Tidy/Printed Proceedings
Correct *everything*

Edit at source
(more yellow dots)

Final Remark

Every Editor finds his/her Quantum State

What kind of Editor are YOU?

Set your “editing level” to that defined by the “goal” of the Conference Scientific Secretariat in order to achieve a complete, timely Proceedings Volume to facilitate in the rapid advancement of science and technology!

Every Author finds his/her Quantum State

Impress on author to submit a technically better paper!