CIGRE SC B5 2025 Osaka Colloquium 30th June – 6th July 2025 Osaka, Japan

INSTRUCTIONS FOR THE PREPARATION OF PAPERS AT CIGRE COLLOQUIUM

This document gives general instructions to be followed for the preparation of Papers at CIGRE SC B5 2025 Osaka Colloquium. We kindly ask you to read them carefully and comply with them so that publication of your Paper may be smoothly processed.

Further to these instructions, the organizing committee will provide a word template with three sample pages. The three pages are: Title page with the Session header included, page 1 where the text starts, and last page where the Bibliography appears. Authors are required to use these sample pages. The sample pages will be available for downloading on the Colloquium website.

IMPORTANT POINTS:

- Papers will not be proof-read by the CIGRE. No changes or additions will be accepted.
- ❖ The deadline of 31th January 2025, for reception of full papers must be strictly observed.
- Final notification will be delivered to authors on 14th March 2025.
- ❖ The electronic file is essential for publication. Files uploaded PDF format only must not exceed 2 Mbyte.

1. GENERAL

1.1 Nature of PapersMb

Papers presented at CIGRE Sessions must not carry any advertising connotation. Consequently, names of manufacturers must not appear in the body of the text, nor in tables or figures. Names of Companies or Universities should only appear at the top of the first page (title page), under the authors' names. (See paragraph 3.2)

1.2 Languages used

Colloquium synopses and papers must be in English. Decide if you use British English, American English or some other version and be consistent.

2. STRUCTURE OF PAPERS

For homogeneity, the Paper structure with heading, "SUMMARY", "KEYWORDS" and "BIBLIOGRAPHY" must be duly kept. The titles "SUMMARY", "KEYWORDS" and "BIBLIOGRAPHY" also must be kept as they stand.

2.1 Heading

The heading comprises the Colloquium header, the paper reference number, Preferential Subject*, the title of the paper and the authors' identification.

*PS should be determined from the three PSs listed in the Call for Papers and on the website. The keywords are examples only; they are not necessarily indicators of PS categorization.

2.2 Summary

The paper starts with an extensive summary, of about **500 words**, intended to provide readers with a thorough overview of the paper.

Summary and title give the first impression of a paper; hence great care should be taken in their formulation.

2.3 Keywords

A list of keywords follows the summary, as specified in **Appendix 1**. They are part of the title page.

2.4 Main text.

To come after the keywords, and start at top of next page.

2.5 Bibliography

Included at the end of the paper, it gives the details of the references mentioned in the paper.

3. PRESENTATION OF PAPERS

Papers are to be posted on the following link (https://www.conftool.org/cigre2025osaka/).

3.1 Typing: General

Texts should be typed in single spacing, and normal layout should be used (no 2-column layout). - **See sample: Appendix 3**. There is no need for an extra left-hand margin, unnecessary waste of space. The text should be justified on both sides.

The fonts 'Times' or 'Helvetica' are recommended, size 11 or 12 only. Narrower typing will be illegible. Do not use fancy characters.

In order to simplify and speed up the editing of the Papers, CIGRE kindly requests the authors to effect the lay-out of their Papers on a PC (with figures and tables inserted) on a ISO 21x29,7cm / DIN A4-format (final size). Please do not use other formats.

3.2 Title page, Summary and keywords

The authors are requested to use the provided sample page of the Title page. Its layout must be very carefully observed. (spacing, fonts...).

The heading comprises three parts:

- the header, CIGRE details and Colloquium title
- the reference number of the paper, which has been attributed to the paper
- the title of the Paper. For the authors: first names start with a capital letter and continue in lower case, last names are written in CAPITAL letters only, company, country, and email address for each author. The main author must be indicated by an asterisk immediately following his name.

Paper title should be typed with **Times Roman**, **bold characters**, **size 14**. The authors' names should be typed with **Times Roman**, **bold characters**, **size 12**. They should be **centred** under the title.

"SUMMARY" should be written ideally when possible 4.8" (12cm) from the top of the page, under the "heading".

3.3 Other pages

Pages other than title page must be typed starting 2,5 cm (1") from the top of the page. Pages other than the title page must be numbered at the bottom page (right hand side).

3.4 Bibliography

References should be mentioned following the order in which they appear in the text. Each reference should be set as follows:

- Reference number (in the text) in square brackets []
- First name(s) or initial(s), name(s) of the author(s)
- Title of the article and in brackets the name of the publication, reference number, date, page (or first and last page numbers),
- Title of the Paper, and in brackets the name of the relevant Conference, date, reference number and page (or first and last page numbers)
- Title of the book, editor, year of publication and page (or first and last page numbers).
- Authors should not refer to internal company documents and more generally to unpublished

3.5 Figures and Images

Electronic versions of the figures should be inserted directly in the text. They should be carefully prepared.

Figure numbers and captions should appear under each figure. For better understanding, avoid cramming information on figures and only use graphic symbols recommended by the International Electrotechnical Commission (IEC) Recommended Graphics Symbols – database No 60617: 'Graphical Symbols for Diagrams' -.

All comments relevant to the figures should appear in the caption. Typing characters have to be carefully selected to ensure legibility. Images should be check as well to ensure a good resolution while maintaining a reasonable size of the full Paper PDF file.

3.6 Tables

Typing characters should be chosen such as to be clearly legible. Tables should be numbered using roman figures; number and title should appear just above the table.

3.7 Conformity requirements

All Papers must be prepared in keeping with the present instructions.

3.8 Length of Papers

The recommended length for Papers is 6 - 8 pages (title and figures included).

4. ADVICE FOR LAY-OUT OF PAPERS

- For greater clarity, texts should be divided under headings and subheadings. Decimals should be used as reference numbers to identify chapters, sections, paragraphs.
- Authors are kindly requested to use the decimal metric system referred to as International System SI (See IEC Publication No 60027 <u>"Technical International standards for letter symbols in 6 parts)</u>. Some indications concerning symbols are given in **Appendix 2**.
- Authors should avoid giving mathematical developments. If these are necessary, the longer part should be given in an appendix.
- For formulae, authors should use mathematical software. Equations should be centred on the page and numbered. The number is to appear in brackets on the right hand side of the formula.

5. COPYRIGHT

By submitting the paper, it is deemed that the Author and Presenter has granted a free unconditional perpetual licence to CIGRE for the distribution or sale of the paper and/or presentation as proceedings of the conference without recompense to the authors or their organisations.

It is deemed that the Author has granted a free unconditional perpetual licence to CIGRE to use any documents, information photos and videos of the conference and exhibition area for the promotion of CIGRE and its activities.

6. SUBMITTING PAPERS

Authors should upload the synopses and papers to ConfTool using the same account for both the synopses and paper.

[URL]https://www.conftool.org/cigre2025osaka/

If authors do not know their account details, they should contact the organizing committee. Contact details will be available in the webpage.

[URL]https://www.cigre2025osaka.jp/

Files should be converted to Adobe Portable Document Format (pdf) before being uploaded. Files should not contain any scripts or macros.

7. AVAILABILITY OF PAPERS

Colloquium Papers can be downloaded through the Colloquium registrations portal before the Session by duly registered delegates only.

APPENDIX 1

CHOICE OF THE KEYWORDS

A.1. Number of keywords

Authors have full latitude as regards choice and number of keywords. As an indication, 3 to 10 words or groups of words are usually sufficient to characterise a technical document.

A.2. Choice of keywords

1. Each keyword should correspond to a single and precise notion. Certain compound words or groups of words designating one sole notion will constitute keywords.

Examples: High Voltage - Reactive Power - Power Factor

On the other hand, many compound words which are in fact an association of two independent notions will have to appear as two separate keywords.

Examples:

Interconnection systems -> Interconnection - System Anchor tower -> Anchor - Tower

2. Words, which do not convey precise information, such as: product, matter, agent, effect process, device, phenomenon, etc...must not be used as keywords.

<u>Examples:</u> Breaking device -> Breaking Corona effect -> Corona

However, with 'Switching Overvoltage' the keywords will be :'Switching' and 'Overvoltage'.

3. For the purpose of indexation, wherever possible, the noun in the singular should be used, rather than the adjective.

Examples: Guyed tower -> Tower - Guy Inhibited oil -> Oil - Inhibitor

4. A well-defined chemical substance is a single keyword.

Example: Sulphur Hexafluoride

However, chemical substance types should be coded with the help of independent keywords.

Example: Alcaline Chloride -> Chloride - Alcaline

A.3. Final comments

Keywords should always be written **in singular**, start with a capital letter, and a dash between each word.

Authors are advised to use as keywords the terms which appear in the IEC's International Electrotechnical Vocabulary (IEC Publication No 50).

APPENDIX 2

RECOMMENDATIONS ON THE SYMBOLS WHICH SHOULD BE USED TO REPRESENT UNITS

The SI symbols for units are typed with vertical characters, whatever the kind of characters used in the text. They are written in small letters, except when the name of the unit comes from a name, in which case the first letter of the symbol is a capital one.

Examples: metre: m volt: V hertz: Hz

The products of two units are expressed by combining their symbols with a full stop.

Example: Newton metre: N.m

The symbols for single units can however be joined together without a full stop when there is no risk of confusion:

Examples: Watt-hour: Wh Volt ampere: VA

kilovolt: kV Megavar: Mvar

Write: HV or h.v. HVDC or h.v.d.c. AC or a.c. DC or d.c.

The quotient of two units is expressed by putting a stroke between their symbols or by using negative exponents, preferably when there are several symbols in the denominator.

<u>Examples:</u> metre per second: m/s or m.s⁻¹ metre per second squared: m/s² or m.s⁻²

The multiples and sub-multiples of SI units are linked to the basic units by standardised symbols

Examples: T for Tera (10¹²) k for kilo (10³) n for nano (10⁻⁹)

The prefix should not be separated from the name of the unit either by a space or any typographical sign.

Thus, one should write:

GW: 109 watts mA:10-3 amperes MHz: 106hertz μ F: 10-6 farads μ F: 10-9 seconds

cm: 10-2 metres

Symbols are written without a full stop (except when the full stop is a punctuation mark at the end of a sentence which finishes with a symbol) and must not bear the indication that they are plural because 's' stands for 'second'.

Examples: 100 kilometres: 100 km

1 metre per second: 1 m/s 1 lumen second: 1 lm.s

Symbols with decimal figures should appear at the right of the whole number, which indicates the numerical value:

One should write: 24,5 m - 25,4°C

One should not write: 24 m,5 - 25°,4C nor °C25,4

Symbols for units should not be used after a number written out in full.

One should write: Five kilometres

5 kilometres

5 km

One should not write: five km.

Generally speaking, it is not advisable to use a symbol for a unit in a text without it being associated with a numerical value written in figures.

One should write: 'Length is expressed in metres' One should not write: 'Length is expressed in m'



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APPENDIX 3

Paper ID -

Preferential Subject

example PS1 IEC 61850 based Interoperability of IEDs of different manufacturers and technologies integrated in one PACS
 Information available in the emails sent to your att.
 delete before publication.

Title of your Paper Times New Roman Bold size 14

Authorship: (Times New Roman, bold, size 12), main author with an asterisk, center-aligned

John DOE* John DOE John DOE
Company/University Company/University
Country Country Country
Email address Email address Email address

John DOE
Company/University
Company/University
Country
Email address
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Email address

First name start with a capital letter and continue in lower case, last name are written in CAPITAL letters only. You may use numbers if some authors are from the same companies. Main author must be indicated by an asterisk immediately following the name.

- delete before publication.

SUMMARY

Start typing here with the summary (about 500 words; Times or Helvetica, size 11 or 12 only). Do not remove or shift the title "**SUMMARY**".

KEYWORDS

3 to 10 words or phrases (Times or Helvetica, size 11 or 12 only). As for "SUMMARY", please keep the title "KEYWORDS".

All pages after title page must start from this line, i.e. 1" (2, 5 cm) margin from the top (Times or Helvetica, size 11 or 12). Pages will be automatically numbered.

1 Introduction

Start the main text here on a new page.

2 Heading-1

Start the main text here.

2.1 Heading-2

Start the main text here. Refer to Bibliography with the following numbering [1]. Refer to each Figure in the text before the Figure is presented in the paper. Figures are centralized.



Figure 1 - Explain the Figure in figure text

2.1.1 Heading-3

3 Heading-1

3.1 Heading-2

Start the main text here. List:

- Item 1.
 - o Sub-level
- Item 2.
 - o Sub-level

Refer to each Table in the text before the Table is presented in the paper. Tables are centralized.

Table 1 - Explain the Table in table text

| text | text | | | |
|------|------|--|--|--|
| Text | | | | |
| text | | | | |

Equations must be numbered, as illustrated below:

$$\dot{x} = f(x, v) \tag{1}$$

Paper Cont'd

4 Conclusion

End of text

BIBLIOGRAPHY

Type here the bibliography at the end of your text, according to this presentation (see sample references below). Font to be used is always Times or Helvetica 11 or 12. For instance:

- [1] Working Group SC 22-12 CIGRE. "The thermal behaviour of overhead conductors Section 1 and 2 Mathematical model for evaluation of conductor temperature in the steady state and the application thereof" (Electra number 144 October 1992 pages 107-125)
- [2] T. Seppa "Fried Wire?" (Public Utilities Fortnightly, December 2003, pages 39-41)
- [3] Prospectiva del Sector Eléctrico 2002-2011. (Secretaría de Energía. Mexico, 2002).
- [4] Resolución sobre las Modificaciones a la Metodología para la Determinación de los Cargos por Servicio de Transmisión de Energía Eléctrica. (Diario Oficial de la Federación. Jueves 23 de Diciembre de 1999).