

Australian Standard™

**Communication networks and systems
in substations
Part 4: System and project management**



This Australian Standard was prepared by Committee EL-050, Power System Control and Communication. It was approved on behalf of the Council of Standards Australia on 15 August 2005.
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Australian Electrical and Electronic Manufacturers Association
Commerce Queensland
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PREFACE

This Standard was prepared by the Standards Australia Committee EL-050, Power System Control and Communication.

The objective of this Standard is to provide users and manufacturers of substation automation equipment with specifications for the engineering process and its supporting tools.

This Standard is identical with, and has been reproduced from IEC/TR 61850-4, Ed.1 (2002), *Communication networks and systems in substations – Part 4: System and project management*.

This Standard is Part of *Communication networks and systems in substations*. The series consists of the following:

- Part 1: Introduction and overview
- Part 2: Glossary
- Part 3: General requirements
- Part 4: System and project management (this Standard)
- Part 5: Communication requirements for functions and device models
- Part 6: Configuration description language for communication in electrical substations related to IEDs
- Part 7.1: Basic communication structure for substation and feeder equipment—Principles and models
- Part 7.2: Basic communication structure for substation and feeder equipment—Abstract communication service interface (ACSI)
- Part 7.3: Basic communication structure for substation and feeder equipment—Common data classes
- Part 7.4: Basic communication structure for substation and feeder equipment—Compatible logical node classes and data classes
- Part 8.1: Specific communication service mapping (SCSM)—Mappings to MMS (ISO/IEC 9506-1 and ISO/IEC 9506-2) and to ISO/IEC 8802-3
- Part 9.1: Specific communication service mapping (SCSM)—Sampled values over serial unidirectional multidrop point to point link
- Part 9.2: Specific communication service mapping (SCSM)—Sampled values over ISO/IEC 8802-3

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- (d) Any French text on figures should be ignored.

The terms 'normative' and 'informative' are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

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NOTES

STANDARDS AUSTRALIA

Australian Standard**Communication networks and systems in substations
Part 4: System and project management**

1 Scope and object

This part of IEC 61850 applies to substation automation systems (SAS). It defines the communication between intelligent electronic devices (IEDs) in the substation and the related system requirements.

The specifications of this part pertain to the system and project management with respect to:

- the engineering process and its supporting tools;
- the life cycle of the overall system and its IEDs;
- the quality assurance beginning with the development stage and ending with discontinuation and decommissioning of the SAS and its IEDs.

The requirements of the system and project management process and of special supporting tools for engineering and testing are described.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61850. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61850 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

References to international standards that are struck through in this clause are replaced by references to Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is identified as such.

~~IEC 60848:1988, Preparation of function charts for control systems~~

AS/NZS 4382, Preparation of function charts for control systems (identical to IEC 60848)

~~IEC 61082 (all parts), Preparation of documents used in the electrotechnology~~

AS/NZS 4383 (all parts), Preparation of documents used in electrotechnology

IEC 61175:1993, Designations for signals and connections

IEC 61346 (all parts), Industrial systems, installations and equipment and industrial products
– Structuring principles and reference designations