

AS 61850.1—2005  
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AS 61850.1—2005

Australian Standard™

**Communication networks and systems  
in substations  
Part 1: Introduction and overview**



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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The following are represented on Committee EL-050:

Australian Electrical and Electronic Manufacturers Association  
Commerce Queensland  
Energy Networks Association  
Engineers Australia

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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 manufacturers and users of substation automation equipment and systems with an explanation of their structural elements, configurations and basic functions in order to provide an introduction to the more detailed standards of the series to be adopted in Australia.

This Standard is identical with, and has been reproduced from IEC/TR 61850-1, Ed.1 (2003), *Communication networks and systems in substations – Part 1: Introduction and overview*.

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

- Part 1: Introduction and overview (this Standard)
- Part 2: Glossary
- Part 3: General requirements
- Part 4: System and project management
- 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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