
Komunikacijska omrežja in sistemi v postajah – 8-1. del: Preslikave posebne komunikacijske storitve (SCSM) – Preslikave v MMS (ISO 9506-1 in ISO 9506-2) in ISO/IEC 8802-3 (IEC 61850-8-1:2004)

Communication networks and systems in substations -- Part 8-1: Specific Communication Service Mapping (SCSM) - Mappings to MMS (ISO 9506-1 and ISO 9506-2) and to ISO/IEC 8802-3

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Kommunikationsnetze und -systeme in Stationen -- Teil 8-1: Spezifische Abbildung von Kommunikationsdiensten (SCSM) - Abbildungen auf MMS (nach ISO 9506-1 und ISO 9506-2) und ISO/IEC 8802-3

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Réseaux et systèmes de communication dans les postes -- Partie 8-1: Implémentation spécifique des services de communication (SCSM) - Cartographie avec MMS (ISO 9506-1 et ISO 9506-2) et l'ISO/CEI 8802-3

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**Communication networks and systems in substations
Part 8-1: Specific Communication Service Mapping (SCSM) –
Mappings to MMS (ISO 9506-1 and ISO 9506-2)
and to ISO/IEC 8802-3
(IEC 61850-8-1:2004)**

Réseaux et systèmes de communication
dans les postes
Partie 8-1: Implémentation spécifique
des services de communication (SCSM) -
Cartographie avec MMS (ISO 9506-1
et ISO 9506-2) et l'ISO/CEI 8802-3
(CEI 61850-8-1:2004)

Kommunikationsnetze und -systeme
in Stationen
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von Kommunikationsdiensten (SCSM) -
Abbildungen auf MMS (nach ISO 9506-1
und ISO 9506-2) und ISO/IEC 8802-3
(IEC 61850-8-1:2004)

SIST EN 61850-8-1:2005

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 57/692/FDIS, future edition 1 of IEC 61850-8-1, prepared by IEC TC 57, Power systems management and associated information exchange, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61850-8-1 on 2004-04-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2005-03-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2007-04-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61850-8-1:2004 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE Where an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60874-10-1	1997	Connectors for optical fibres and cables Part 10-1: Detail specification for fibre optic connector type BFOC/2,5 terminated to multimode fibre type A1	-	-
IEC 60874-10-2	1997	Part 10-2: Detail specification for fibre optic connector type BFOC/2,5 terminated to single-mode fibre type B1	-	-
IEC 60874-10-3	1997	Part 10-3: Detail specification for fibre optic adaptor type BFOC/2,5 for single and multimode fibre	-	-
IEC/TS 61850-2	- ¹⁾	Communication networks and systems in substations Part 2: Glossary	-	-
IEC 61850-5	- ¹⁾	Part 5: Communication requirements for functions and device models	EN 61850-5	2003 ²⁾
IEC 61850-7-1	- ¹⁾	Part 7-1: Basic communication structure for substation and feeder equipment - Principles and models	EN 61850-7-1	2003 ²⁾
IEC 61850-7-2	- ¹⁾	Part 7-2: Basic communication structure for substation and feeder equipment - Abstract communication service interface (ACSI)	EN 61850-7-2	2003 ²⁾
IEC 61850-7-3	- ¹⁾	Part 7-3: Basic communication structure for substation and feeder equipment - Common data classes	EN 61850-7-3	2003 ²⁾
IEC 61850-7-4	- ¹⁾	Part 7-4: Basic communication structure for substation and feeder equipment - Compatible logical node classes and data classes	EN 61850-7-4	2003 ²⁾

1) Undated reference.

2) Valid edition at date of issue.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61850-9-1	- ¹⁾	Part 9-1: Specific Communication Service Mapping (SCSM) - Sampled values over serial unidirectional multidrop point to point link	EN 61850-9-1	2003 ²⁾
IEC 61850-9-2	- ¹⁾	Part 9-2: Specific Communication Service Mapping (SCSM) - Sampled values over ISO/IEC 8802-3	EN 61850-9-2	2004 ²⁾
ISO/IEC 7498-1	1994	Information technology - Open systems interconnection - Basic reference model Part 1: The basic model	EN ISO 7498-1	1995
ISO/IEC 7498-3	1997	Part 3: Naming and addressing	-	-
ISO/IEC 8072	1996	Information technology - Open systems interconnection - Transport service definition	-	-
ISO/IEC 8073	1997	Information technology - Open Systems Interconnection - Protocol for providing the connection-mode transport service	-	-
ISO/IEC 8326	1996	Information technology - Open systems Interconnection - Session service definition	-	-
ISO/IEC 8327-1	1997	Information technology - Open Systems Interconnection - Connection-oriented Session protocol: Protocol specification	-	-
ISO/IEC 8348	2002	Information technology - Open Systems Interconnection - Network service definition	-	-
ISO/IEC 8473-1	1998	Information technology - Protocol for providing the connectionless-mode network service: Protocol specification	-	-
ISO/IEC 8473-2	1996	Part 2: Provision of the underlying service by an ISO/IEC 8802 subnetwork	-	-
ISO/IEC 8602	1995	Information technology - Protocol for providing the OSI connectionless-mode transport service	-	-
ISO/IEC 8649	1996	Information technology - Open systems Interconnection - Service definition for the Association Control Service Element (ACSE)	-	-
ISO/IEC/TR2 8650-1	1996	Information technology - Open systems Interconnection - Connection-oriented protocol for the Association Control Service Element: Protocol specification	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO/IEC 8802-2	1998	Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements Part 2: Logical link control	-	-
ISO/IEC 8802-3	2001	Part 3: Carrier sense multiple access with collision detection (CSMA/CD) access method and physical layer specifications	-	-
ISO/IEC 8822	1994	Information technology - Open Systems Interconnection - Presentation service definition	-	-
ISO/IEC 8823-1	1994	Information technology - Open Systems Interconnexion - Connection-oriented presentation protocol: Protocol specification	-	-
ISO/IEC 8824-1	2000	Information technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation	-	-
A1	2000	Information technology - ASN.1 encoding rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)	-	-
A2	2000		-	-
ISO/IEC 8825-1	2000	Information technology - ASN.1 encoding rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)	-	-
ISO/IEC 8877	1992	Information technology - Telecommunications and information exchange between systems - Interface connector and contact assignments for ISDN Basic Access Interface located at reference points S and T	EN 28877	1993
ISO/IEC 9542	1988	Information processing systems - Telecommunications and information exchange between systems - End system to intermediate system routing exchange protocol for use in conjunction with the Protocol for providing the connectionless-mode network service (ISO 8473)	-	-
ISO/IEC 9548-1	1996	Information technology - Open Systems Interconnection - Connectionless Session protocol: Protocol specification	-	-
ISO/IEC 9576-1	1995	Information technology - Open Systems Interconnection - Connectionless Presentation protocol: Protocol specification	-	-

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO/IEC 10035-1	1995	Information technology - Open Systems Interconnection - Connectionless protocol for the Association Control Service Element: Protocol specification	-	-
A1	1998		-	-
ISO/IEC ISP 10608-1	1992	Information technology - International Standardized Profile TAnnnn - Connection-mode Transport Service over Connectionless-mode Network Service Part 1: General overview and subnetwork-independent requirements	EN ISP 10608-1	1994
ISO/IEC ISP 10608-2	1992	Part 2: TA51 profile including subnetwork-dependent requirements for CSMA/CD Local Area Networks (LANs)	EN ISP 10608-2	1994
ISO/IEC ISP 11188-1	1995	Information technology - International Standardized Profile - Common upper layer requirements Part 1: Basic connection oriented requirements	EN ISP 11188-1	1996
ISO/IEC ISP 11188-3	1996	Part 3: Minimal OSI upper layer facilities	-	-
ISO 9506-1	2003	Industrial automation systems - Manufacturing Message Specification Part 1: Service definition	-	-
ISO 9506-2	2003	Part 2: Protocol specification	-	-
ISO/ISP 14226-1	1996	Industrial automation systems - International Standardized Profile AMM11: MMS General Applications Base Profile Part 1: Specification of ACSE, Presentation and Session protocols for the use by MMS	-	-
ISO/ISP 14226-2	1996	Part 2: Common MMS requirements	-	-
ISO/ISP 14226-3	1996	Part 3: Specific MMS requirements	-	-
IEEE C37.111	1999	IEEE Standard for Common Format for Transient Data Exchange (COMTRADE) for Power Systems	-	-
IEEE 754	1985	Standard for Binary Floating-Point Arithmetic	-	-
IEEE 802.1Q	1998	IEEE Standards for Local and Metropolitan Networks: Virtual Bridged Local Area Networks	-	-
RFC 542	- ¹⁾	File Transfer Protocol for the ARPA Network	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
RFC 768	- ¹⁾	User Datagram Protocol	-	-
RFC 791	- ¹⁾	Internet Protocol - DARPA Internet Program Protocol Specification	-	-
RFC 792	- ¹⁾	Internet Control Message Protocol - DARPA Internet Program Protocol Specification	-	-
RFC 793	- ¹⁾	Transmission Control Protocol - DARPA Internet Program Protocol Specification	-	-
RFC 826	- ¹⁾	Ethernet Address Resolution Protocol: Or converting network protocol addresses to 48.bit Ethernet address for Transmission on Ethernet hardware	-	-
RFC 894	- ¹⁾	Standard for the Transmission of IP datagrams over Ethernet Networks	-	-
RFC 919	- ¹⁾	Broadcasting Internet Datagrams	-	-
RFC 922	- ¹⁾	Broadcasting Internet Datagrams in the presence of subnets	-	-
RFC 950	- ¹⁾	Internet Standard Subnetting Procedure	-	-
RFC 959	- ¹⁾	File Transfer Protocol (FTP)	-	-
RFC 1006	- ¹⁾	ISO transport services on top of TCP: Version 3	-	-
RFC 1112	- ¹⁾	Host Extensions for IP Multicasting	-	-
RFC 1122	- ¹⁾	Requirements for Internet Hosts - Communication Layers	-	-
RFC 1123	- ¹⁾	Requirements for Internet Hosts - Application and Support	-	-
RFC 2030	- ¹⁾	Simple Network Time Protocol (SNTP) Version 4 for IPv4, IPv6 and OSI	-	-

Undated reference.

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CONTENTS

FOREWORD.....	8
INTRODUCTION.....	10
1 Scope.....	11
2 Normative references	11
3 Terms and definitions	15
4 Abbreviations	17
5 Overview	18
5.1 General	18
5.2 IEC 61850 server object.....	20
5.3 MMS communication profiles.....	20
5.4 Non-MMS communication profiles	20
5.5 MMS objects being used	20
6 Communication stack	21
6.1 Overview of the protocol usage	21
6.2 Client/server services and communication profiles	22
6.3 GSE management and GOOSE services communication profiles.....	25
6.4 GSSE Service and communication profile.....	27
6.5 Time sync.....	29
7 Objects of IEC 61850	30
7.1 Server	30
7.2 Logical device (LD).....	30
7.3 Logical node (LN).....	30
8 Mapping of IEC 61850-7-2 and IEC 61850-7-3 data attributes	33
8.1 Mapping of Attributes specified in IEC 61850-7-2	33
8.2 Mapping of quality common data attribute type specified in IEC 61850-7-3.....	36
9 Server class model.....	37
9.1 Server mapping.....	37
9.2 Server class attributes.....	37
9.3 Server class service GetServerDirectory	38
10 Association model	40
10.1 Association relation to communication profiles	40
10.2 Two party association model for client/server communication profile	40
10.3 Two party association model for GSE management communication profile	41
10.4 Two party association model for time sync	41
10.5 Multicast association model.....	42
11 Logical device model.....	42
12 Logical node model	42
12.1 Logical node class.....	42
12.2 Logical node class attributes	42
12.3 Logical node class services	43
13 Data class model.....	44
13.1 Data class	44
13.2 Data class services	45

14	Data set class model	46
14.1	Data set class	46
14.2	Data set attributes	46
14.3	Data set services	47
15	Substitution model	50
16	Setting group control class model	50
16.1	Setting group control class definition	50
16.2	Setting group control class services	50
17	Reporting and logging class model	51
17.1	Report model	51
17.2	Reporting services	53
17.3	Log model	56
18	Mapping of the generic substation event model (GSE)	62
18.1	Generic object oriented substation event (GOOSE)	62
18.2	Generic Substation State Event (GSSE)	71
19	Transmission of sampled values class model	81
20	Control class model	81
20.1	Control service parameters	81
20.2	Mapping of control objects	81
20.3	Mapping of control services	83
20.4	Select	84
20.5	SelectWithValue	84
20.6	Cancel	85
20.7	Operate	85
20.8	AdditionalCauseDiagnosis in negative control service responses	87
20.9	CommandTermination	89
21	Time and time synchronization model	89
22	Naming conventions	89
23	File transfer	89
23.1	File transfer model	89
23.2	File services	91
24	Conformance	94
24.1	Notation	94
24.2	PICS	94
24.3	PICS Statement	107
25	Substation Configuration Language (SCL)	109
25.1	SCL file and SCL extensions	109
Annex A (normative) Application protocol specification for GOOSE and GSE management		111
Annex B (informative) Multicast address selection		113
Annex C (normative) Overview of ISO/IEC 8802-3 frame structure for GSE management and GOOSE		114
Annex D (informative) SCL conformance		117
Annex E (normative) Specialized CDCs for control service mapping		121
Annex F (informative) Time scales and epochs		128
Annex G (normative) Type extensions to ISO 9506-1 (2003) and ISO 9506-2 (2003)		131

Figure 1 – Overview of functionality and profiles	19
Figure 2 – OSI reference model and profiles	21
Figure 3 – Recommended ordered list of functional constraints.....	31
Figure 4 – Relationship of LCB attributes to IEC 61850-7-2 log definitions.....	56
Figure 5 – GetGoReference service primitives	63
Figure 6 – GetGOOSEElementNumber service primitives	66
Figure 7 – Transmission time for events	68
Figure 8 – SendGooseMessage message service primitives	68
Figure 9 – Client state machine for GOOSE service.....	69
Figure 10 – Server state machine for GOOSE service.....	69
Figure 11 – GetGsReference service primitives	74
Figure 12 – GetGSSEDataOffset service primitives.....	76
Figure 13 – GSSE service primitives.....	78
Figure 14 – Client state machine for GSSE service.....	78
Figure 15 – Server state machine for GSSE service.....	79
Figure 16 – Mapping of ACSI GetFile to MMS FileOpen, FileRead, FileClose	91
Figure 17 – Mapping of ACSI SetFile service	92
Figure C.1 – ISO/IEC 8802-3 frame format	114
Figure C.2 – Virtual LAN tag	115
Table 1 – MMS objects and services in use within this SCSM	21
Table 2 – Services requiring client/server Communication Profile	22
Table 3 – Service and protocols for client/server communication A-Profile	23
Table 4 – Service and protocols for client/server TCP/IP T-Profile	24
Table 5 – Service and protocols for client/server OSI T-Profile	25
Table 6 – Services requiring GSE Management and GOOSE communication profile	26
Table 7 – Service and protocols for GSE Management and GOOSE communication A-Profile	26
Table 8 – GOOSE/GSE T-Profile	26
Table 9 – Service requiring GSSE communication profile.....	27
Table 10 – Service and protocols for GSSE communication A-Profile.....	27
Table 11 – GSSE management T-Profile.....	28
Table 12 – Time sync A-Profile	29
Table 13 – Time sync T-Profile	29
Table 14 – Mapping of ACSI data types	33
Table 15 – Encoding of IEC 61850-7-2 TimeQuality.....	36
Table 16 – Encoding of IEC 61850-7-3 quality	37
Table 17 – ServiceError mapping for GetServerDirectory for non-files	39
Table 18 – ServiceErrors mapping of ACSI GetServerDirectory for files.....	39
Table 19 – Association model versus communication profiles	40
Table 20 – Associate service error mappings	41
Table 21 – Release service error mappings	41
Table 22 – GetNamedList classes for GetLogicalNodeDirectory service.....	43

Table 23 – MMS AccessResult mapping to ASCII ServiceError	44
Table 24 – Mapping of GetDataValues service parameters	45
Table 25 – Mapping of SetDataValues service parameters.....	45
Table 26 – Mapping of GetDataDirectory service parameters.....	46
Table 27 – ServiceError Mappings for GetDataDirectory service	46
Table 28 – Mapping of GetDataSetValues service parameters	47
Table 29 – Mapping of SetDataSetValues service parameters	47
Table 30 – Mapping of CreateDataSet service parameters.....	48
Table 31 – ServiceError mapping for CreateDataSet.....	48
Table 32 – Mapping of DeleteDataSet service parameters	48
Table 33 – ServiceError mapping for DeleteDataSet	49
Table 34 – Mapping of GetDataSetDirectory service parameters.....	49
Table 35 – ServiceError mapping for GetDataSetDirectory.....	49
Table 36 – Mapping of ACSI ServiceError for SelectActiveSG.....	50
Table 37 – Mapping of BRCB to MMS type definition	51
Table 38 – Mapping of OptFlds within Bitstring	52
Table 39 – Mapping of URCB to MMS type definition	52
Table 40 – Order of AccessResults for variableListName report.....	53
Table 41 – Definition of an MMS log control block.....	57
Table 42 – Mapping of values for LogEna.....	57
Table 43 – Mapping of ACSI LogEntries.....	58
Table 44 – General mappings of ACSI log model services.....	60
Table 45 – Mapping of QueryLogByTime request parameters.....	61
Table 46 – Mapping of response parameters	61
Table 47 – ServiceError mappings for Log services	61
Table 48 – Mapping of QueryLogAfter request parameters.....	61
Table 49 – Log conformance requirements	62
Table 50 – MMS TypeDescription definition for GCB MMS structure	62
Table 51 – DstAddress structure	63
Table 52 – Mapping of GetGoReference service	64
Table 53 – GetGoReference	64
Table 54 – Mapping of GetGOOSEElementNumber service	66
Table 55 – GetGOOSEElementNumber.....	67
Table 56 – GOOSE service parameter mapping.....	70
Table 57 – MMS TypeDescription Definition for GSSE control block MMS structure	71
Table 58 – Mapping of LSentData	72
Table 59 – Definition of integer values of PhsID.....	73
Table 60 – Definition of double-bit GSSE values	73
Table 61 – Mapping of GetGsReference service	74
Table 62 – GetGsReference.....	75
Table 63 – Mapping of GetGOOSEElementNumber service	76
Table 64 – GetGSSEDataOffset.....	77
Table 65 – GSSE service.....	79