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Utrustning för fjärrstyrning – Del 6-701: Protokoll för fjärrstyrning kompatibla med ISO-standard och rekommendationer från ITU-T – Funktionsprofil för TASE.1 applikationstjänster i ändsystem

Telecontrol equipment and systems –

Part 6-701: Telecontrol protocols compatible with ISO standards and ITU-T recommendations –

Functional profile for providing the TASE.1 application service in end systems

Som svensk standard gäller europastandarden EN 60870-6-701:1998. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60870-6-701:1998.

Nationellt förord

Europastandarden EN 60870-6-701:1998^{*)}

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60870-6-701, First edition, 1998 - Telecontrol equipment and systems - Part 6-701: Telecontrol protocols compatible with ISO standards and ITU-T recommendations - Functional profile for providing the TASE.1 application service in end systems**

utarbetad inom International Electrotechnical Commission, IEC.

^{*)} EN 60870-6-701:1998 ikraftsattes 1999-06-18 som SS-EN 60870-6-701 genom offentliggörande, d v s utan utgivning av något svenskt dokument.

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Descriptors: Open systems interconnection, telecontrol, application service element, functional profile, end system

English version

Telecontrol equipment and systems
Part 6-701: Telecontrol protocols compatible with
ISO standards and ITU-T recommendations
Functional profile for providing the TASE.1
application service in end systems
(IEC 60870-6-701:1998)

Matériels et systèmes de téléconduite
Partie 6-701: Protocoles de téléconduite
compatibles avec les normes ISO et les
recommandations de l'UIT-T
Profils fonctionnels pour fournir le
service d'application TASE.1 dans des
systèmes terminaux
(CEI 60870-6-701:1998)

Fernwirkrichtungen und -systeme
Teil 6-701: Fernwirkprotokolle, die mit
ISO-Normen und ITU-T-Empfehlungen
kompatibel sind
Funktionsprofil für den TASE.1-
Anwendungsdienst in Endsystemen
(IEC 60870-6-701:1998)

This European Standard was approved by CENELEC on 1998-10-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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 57/357/FDIS, future edition 1 of IEC 60870-6-701, prepared by IEC TC 57, Power system control and associated communications, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60870-6-701 on 1998-10-01.

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) 1999-07-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2001-07-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes A and ZA are normative and annex B is informative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60870-6-701:1998 was approved by CENELEC as a European Standard without any modification.

In the official version, for annex B, Bibliography, the following note has to be added for the standard indicated:

IEC 60870-6-501 NOTE: Harmonized as EN 60870-6-501:1990 (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When 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 60870-6-502	1995	Telecontrol equipment and systems Part 6: Telecontrol protocols compatible with ISO standards and ITU-T recommendations Section 502: TASE.1 Protocol definitions	EN 60870-6-502	1996
ISO/IEC 8326	1987	Information processing systems - Open systems interconnection - Basic connection oriented session service definition	-	-
ISO/IEC 8327	1987	Information processing systems - Open systems interconnection - Basic connection oriented session protocol specification	-	-
ISO/IEC 8327-2	1996	Information technologies - Open systems interconnection - Connection oriented session protocol - Protocol implementation conformance statement (PICS) proforma	-	-
ISO/IEC 8649	1996	Information technologies - Open systems interconnection - Service definition for the association control service element (ACSE)	-	-
ISO/IEC 8650	1988	Information processing systems - Open Systems Interconnection - Protocol specification for the Association Control Service Element (ACSE)	-	-
ISO/IEC 8650-2	1995	Information technology - Open systems interconnection - Protocol specification for the association control service element Protocol implementation conformance statement (PICS) proforma	-	-
ISO/IEC 8822	1994	Information technology - Open Systems Interconnection - Presentation service definition	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO/IEC 8823-2	1995	Information technology - Open systems interconnection - Connection-oriented presentation protocol - Protocol implementation conformance statement (PICS) proforma	-	-
ISO/IEC 9072-2	1989	Information processing systems - Text communication - Remote operations Part 2: Protocol specification	-	-

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INTRODUCTION

This standard is one of the IEC 60870-6 series defining functional profiles to be used in telecommunication networks for electrical power systems. It is largely based on existing ISO/IEC International Standards and international standardized profiles (ISP).

The notion of functional profiles is fundamental in the organization of the publications of IEC 60870-6. A description of functional profiles, their classification scheme, and the manner of defining them are laid down in IEC 60870-6-1 [1]*.

The present standard TASE.1 application profile is an application-class profile providing inter control system communication to control system applications. The TASE.1 protocol in the application layer is specified in IEC 60870-6-501 [2], and the TASE.1 application services are specified in IEC 60870-6-502. The present standard refines the TASE.1 to meet interoperability requirements and specifies requirements on the presentation and session layers. The TASE.1 operates in a connection mode so this A-profile interfaces to a transport-class profile of the T-profile variety.

* The numbers in square brackets refer to the bibliography given in annex B.

TELECONTROL EQUIPMENT AND SYSTEMS –

Part 6-701: Telecontrol protocols compatible with ISO standards and ITU-T recommendations – Functional profile for providing the TASE.1 application service in end systems

1 Scope

This part of IEC 60870 describes the functional profile (FP) which defines the provision of the TASE.1 communication services between two control centre end systems. This functional profile is supported by the transport services implemented in accordance with transport profiles defined for the type of network that interconnect the control centre end systems. Figure 1 illustrates the applicability of the functional profile.

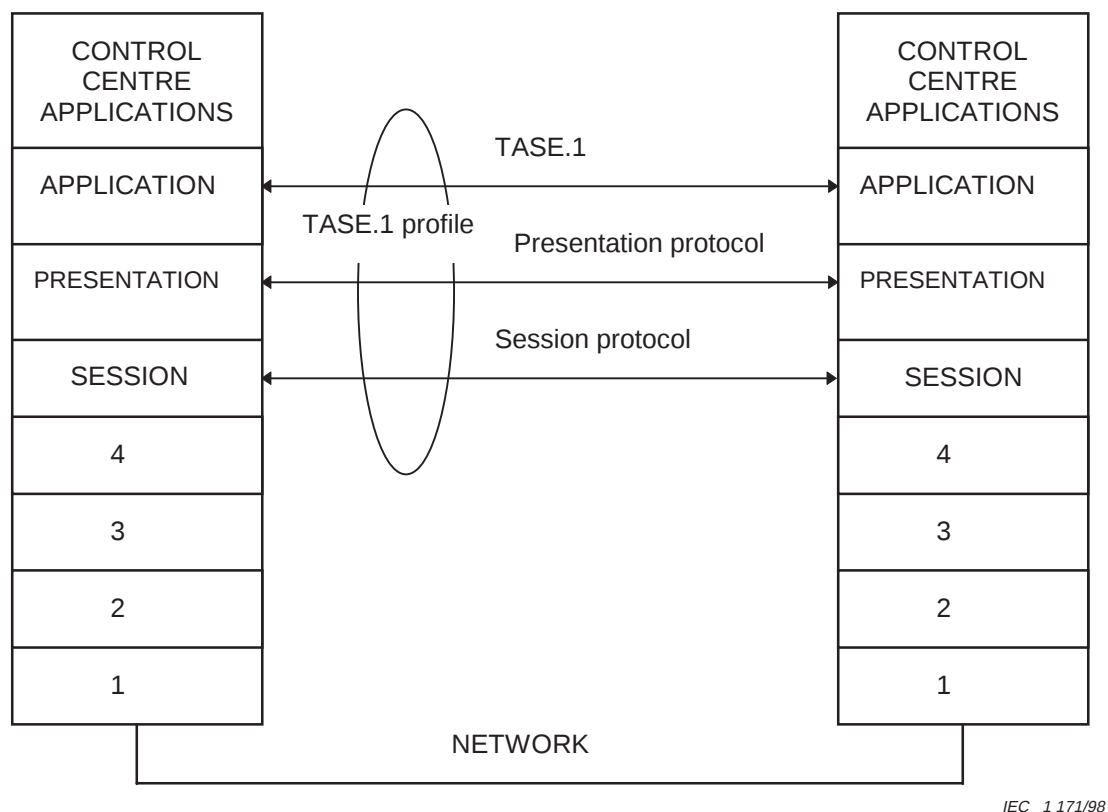


Figure 1 – Applicability of the functional profile

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60870. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 60870 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60870-6-502:1995, *Telecontrol equipment and systems – Part 6: Telecontrol protocols compatible with ISO standards and ITU-T recommendations – Section 502: TASE.1 protocol definitions*

ISO/IEC 8326:1987, *Information processing systems – Open Systems Interconnection – Basic connection oriented session service definition*

ISO/IEC 8327:1987, *Information processing systems – Open Systems Interconnection – Basic connection oriented session protocol specification*

ISO/IEC 8327-2:1996, *Information technologies – Open Systems Interconnection – Connection-oriented session protocol – Protocol implementation conformance statement (PICS) proforma*

ISO/IEC 8649:1996, *Information technologies – Open Systems Interconnection – Service definition for the Association Control Service Element (ACSE)*

ISO/IEC 8650:1988, *Information processing systems – Open Systems Interconnection – Protocol Specification for the Association Control Service Element (ACSE)*

ISO/IEC 8650-2:1995, *Information technology – Open Systems Interconnection – Protocol Specification for the Association Control Service Element – Protocol Implementation Conformance Statement (PICS) proforma*

ISO/IEC 8822:1994, *Information technology – Open Systems Interconnection – Presentation service definition*

ISO/IEC 8823:—, *Information technology – Open Systems Interconnection – Connection-oriented presentation protocol*

ISO/IEC 8823-2:1995, *Information technology – Open Systems Interconnection – Connection-oriented presentation protocol – Protocol Implementation Conformance Statement (PICS) proforma*

ISO/IEC 9072-2:1989, *Information processing systems – Text communication – Remote operations – Part 2: Protocols specification*