SLOVENSKI STANDARD
SIST EN 60870-6-702:2000

01-februar-2000

Telecontrol equipment and systems - Part 6-702: Telecontrol protocols compatible with ISO standards and ITU-T recommendations - Functional profile for providing TASE.2 application service in end system (IEC 60870-6-702:1998)

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Fernwirkeinrichtungen und -systeme -- Teil 6-702: Fernwirkprotokolle, die mit ISO-Normen und ITU-T-Empfehlungen kompatibel sind - Funktionsprofil für den TASE.2-Anwendungsdienst in Endsystemen

Matériels et systèmes de téléconduite -- Partie 6-702: Protocoles de téléconduite compatibles avec les normes ISO et les recommandations de l'UIT-T - Profil fonctionnel pour fournir le service d'application TASE.2 dans des systèmes terminaux

Ta slovenski standard je istoveten z: **EN 60870-6-702:1998**

ICS:

33.200	Daljinsko krmiljenje, daljinske meritve (telemetrija)
	Telecontrol. Telemetering

SIST EN 60870-6-702:2000 **en**

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EN 60870-6-702

November 1998

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Descriptors: Open Systems Interconnection, telecontrol, application service element, functional profile, end system

English version

Telecontrol equipment and systems Part 6-702: Telecontrol protocols compatible with ISO standards and ITU-T recommendations - Functional profile for providing the TASE.2 application service in end systems

(IEC 60870-6-702:1998)

Matériels et systèmes de téléconduite
Partie 6-702: Protocoles de téléconduite compatibles avec les normes ISO et les recommandations de l'UIT-T
Profil fonctionnel pour fournir le service d'application TASE.2 dans les systèmes finals
(CEI 60870-6-702:1998)

Fernwirkeinrichtungen und -systeme
Teil 6-702: Fernwirkprotokolle, die mit ISO-Normen und ITU-T-Empfehlungen kompatibel sind
Funktionsprofil für den TASE.2-Anwendungsdienst in Endsystemen
(IEC 60870-6-702:1998)

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.

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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

Ref. No. EN 60870-6-702:1998 E

Foreword

The text of document 57/368/FDIS, future edition 1 of IEC 60870-6-702, 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 60870-6-702 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 annexes B and C are informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60870-6-702:1998 was approved by CENELEC as a European Standard without any modification.

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

IEC 60870-6-802 NOTE: Harmonized as EN 60870-6-802:1997 (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.

Publication	Year	Title	EN/HD	Year
IEC 60870-6-503	1997	Telecontrol equipment and systems Part 6: Telecontrol protocols compatible with ISO standards and ITU-T recommendations Section 503: TASE.2 Services and protocol	EN 60870-6-503	1997
ISO/IEC 8327-2	1996	Information technologies - Open Systems Interconnection - Connection oriented session protocol Part 2: Protocol Implementation Conformance Statement (PICS) proforma	-	-
ISO/IEC 8650-2	1995	Information technology - Open Systems Interconnection - Protocol specification for the Association Control Service Element Part 2: Protocol Implementation Conformance Statement (PICS) proforma	-	-
ISO/IEC 8823-2	1995	Information technology - Open Systems Interconnection - Connection-oriented presentation protocol Part 2: Protocol Implementation Conformance Statement (PICS) proforma	-	-
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	-	-

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FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

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3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.

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6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60870-6-702 has been prepared by IEC technical committee 57: Power system control and associated communications.

The text of this standard is based on the following documents:

FDIS	Report on voting
57/368/FDIS	57/377/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

Annex A forms an integral part of this standard.

Annexes B and C are for information only.

INTRODUCTION

This part of IEC 60870 is one of the IEC 60870-6 series defining functional profiles to be used in telecommunication networks for electric 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 IEC 60870-6 series. A description of functional profiles, their classification scheme and the manner of defining them are laid down in IEC 60870-6-1.

This profile for telecontrol application service element (TASE.2, also known as inter-control centre communications protocol, ICCP) is an application-class profile (A-profile) providing communications capabilities to control centre applications. The TASE.2 in the application layer is specified in IEC 60870-6-503. The present standard refines the application layer protocol to meet interoperability requirements and specifies requirements on the presentation and session layers support for TASE.2. TASE.2 operates in a connection mode, so this A-profile needs to interface to a transport-class profile of the T-profile variety.

Since the TASE.2 is an MMS-based protocol, this functional profile (FP) is based on MMS profiles. In the OSI international standardized profile taxonomy there is a category for MMS A-profiles. The present standard makes frequent use of the AMM11 profile.

TELECONTROL EQUIPMENT AND SYSTEMS –

Part 6-702: Telecontrol protocols compatible with ISO standards and ITU-T recommendations –

Functional profile for providing the TASE.2 application service in end systems

1 Scope

This part of IEC 60870 is a functional profile (FP) and defines the provision of the TASE.2 communications services between two control centre end systems. It is supported by the transport services implemented in accordance with transport-profiles defined for the type of network that interconnects the control centre end systems. This is demonstrated in figure 1.

This FP also defines the provision of the OSI connection-mode presentation and session services between the end systems.

ISO/ISP 14226 specifies the AMM11 profiles for MMS. The parts of ISO/ISP 14226 that cover the profile that are used as a basis for this FP are ISO/ISP 14226-1 and ISO/ISP 14226-2. This FP is in alignment with ISO/ISP 14226, as far as possible, and maintains this compatibility by reference. There are TASE.2 requirements in addition to ISO/ISP 14226. These requirements are specified in this FP.

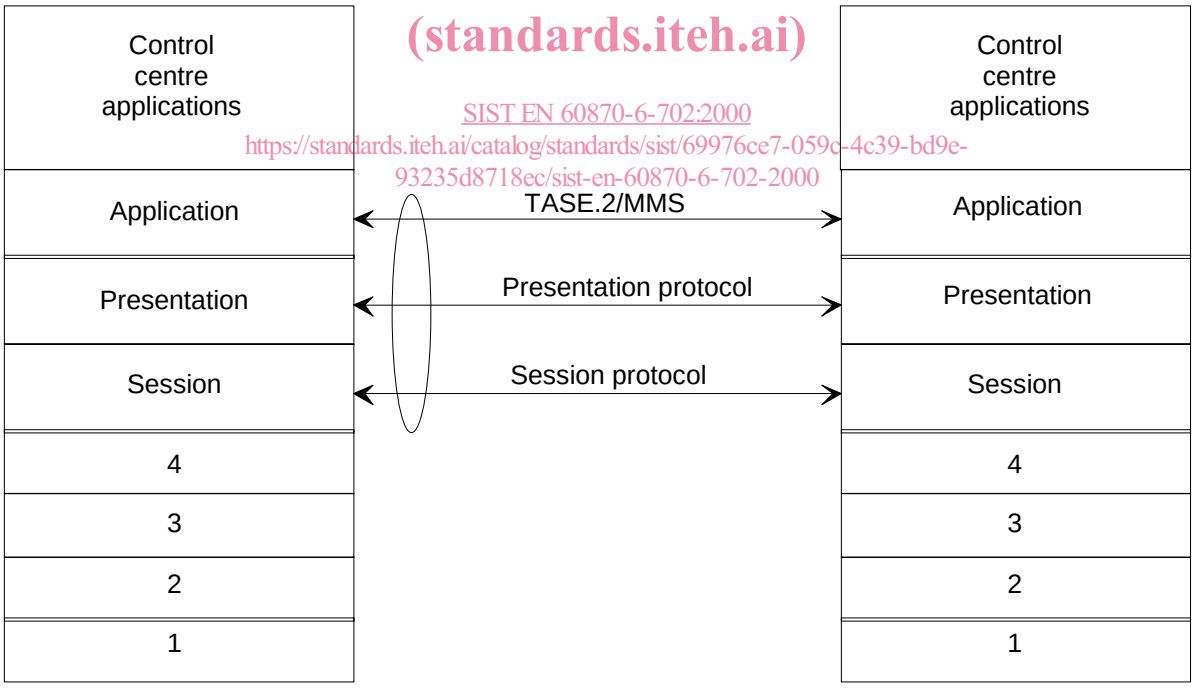

Figure 1 – Applicability of functional profile

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 60870-6-503:1997, *Telecontrol equipment and systems – Part 6: Telecontrol protocols compatible with ISO standards and ITU-T recommendations – Section 503: TASE.2 Services and protocol*

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

ISO/IEC 8650-2:1997, *Information technology – Open Systems Interconnection – Protocol specification for the Association Control Service Element – Part 2: Protocol Implementation Conformance Statement (PICS) proforma*

ISO/IEC 8823-2:1997, *Information technology – Open Systems Interconnection – Connection-oriented presentation protocol – Part 2: Protocol Implementation Conformance Statement (PICS) Proforma*

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, *Industrial automation systems – International Standardized Profile AMM11: MMS General Applications Base Profile – Part 2: Common MMS requirements*

3 Definitions

All the terms used in this standard are as defined in the above-referenced standards.

4 Abbreviations

All the abbreviations used in this standard are as defined in the above-referenced standards.

5 Profile protocol stacks

As shown in figure 1, the TASE.2 profile includes the TASE.2, MMS and ACSE elements in the TASE.2 protocol, the connection-mode presentation protocol, and the connection-mode session protocol.