

National Standards Authority of Ireland

**IRISH STANDARD** 

I.S. EN 60870-6-2:1999

ICS 33.200 35.100

**TELECONTROL EQUIPMENT AND SYSTEMS -**

PART 6: TELECONTROL PROTOCOLS

COMPATIBLE WITH ISO STANDARDS AND

**ITU-T RECOMMENDATIONS - SECTION 2: USE** 

OF BASIC STANDARDS (OSI LAYERS 1-4) (IEC

870-6-2:1995)

National Standards Authority of Ireland Glasnevin, Dublin 9 Ireland

Tel: +353 1 807 3800 Fax: +353 1 807 3838 http://www.nsai.ie

Sales http://www.standards.ie

This Irish Standard was published under the authority of the National Standards Authority of Ireland and comes into effect on: January 8, 1999

NO COPYING WITHOUT NSAI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

© NSAI 1999

Price Code O

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

### EN 60870-6-2

November 1995

ICS 33.200

Descriptors: Telecontrol, data transmission, transport layer, network layer, data link layer, physical layer, protocol, Open Systems Interconnection, communication, interworking, end system, intermediate system, service

English version

### Telecontrol equipment and systems Part 6: Telecontrol protocols compatible with ISO standards and ITU-T recommendations Section 2: Use of basic standards (OSI layers 1-4) (IEC 870-6-2:1995)

Matériels et systèmes de téléconduite Partie 6: Protocoles de téléconduite compatibles avec les normes ISO et les recommendations de l'UIT-T Section 2: Utilisation des normes de base (couches OSI 1 à 4) (CEI 870-6-2:1995) Ferneinwirkungen und -systeme Teil 6: Fernwirkprotokolle, die mit ISO-Normen und ITU-T-Empfehlungen kompatibel sind Hauptabschnitt 2: Anwendungen der Grundnormen (OSI-Schichten 1 bis 4) (IEC 870-6-2:1995)

This European Standard was approved by CENELEC on 1995-09-20. 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, 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

© 1995 Copyright reserved to CENELEC members

Page 2 EN 60870-6-2:1995

#### Foreword

The text of document 57/201/DIS, future edition 1 of IEC 870-6-2, 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 60870-6-2 on 1995-09-20.

**4** ~~~.

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) 1996-07-01
- latest date by which the national standards conflicting
  with the EN have to be withdrawn
  (dow) 1996-07-01

Annexes designated "normative" are part of the body of the standard. Annexes designated "informative" are given for information only. In this standard, annexes A, B and ZA are normative and annex C is informative. Annex ZA has been added by CENELEC.

#### Endorsement notice

The text of the International Standard IEC 870-6-2:1995 was approved by CENELEC as a European Standard without any modification.

-

. .....

. . . . . . . . . . .

3

#### 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	<u>EN/HD</u>
IEC 50(371): 1984, International Electrotechnical Vocabulary (IEV) – Chapter 371: Telecontrol	
IEC 50(721): 1991, International Electrotechnical Vocabulary (IEV) – Chapter 721: Telegraphy, facsimile and data communication	-
IEC 870-1-3: 1990, Telecontrol equipment and systems – Part 1: General considerations – Section 3: Glossary	
IEC 870-6-1: 1995, Telecontrol equipment and systems – Part 6: Telecontrol protocols compatible with ISO standards and ITU-T recommendations – Section 1: Application context and organization of standards	-
ISO 2110: 1989, Information technology – Data communication – 25-pole DTE/DCE interface connector and contact number assignments	-
ISO 2382-9: 1984, Data processing – Vocabulary – Part 09: Data communication	
ISO/IEC 3309: 1993, Information technology – Telecommunications and information exchange between systems – High-level data link control (HDLC) procedures – Frame structure	-
ISO/IEC 4335: 1993, Information technology Telecommunications and information exchange between systems High-level data link control (HDLC) procedures Elements of procedures	-
ISO 4903: 1989, Information technology – Data communication – 15-pole DTE/DCE interface connector and contact number assignments	
ISO/IEC 7498-1: 1994; Information technology – Open Systems Interconnection – Reference Model – Part 1: Basic Reference Model	
ISO 7776: 1986, Information processing systems – Data communications – High-level data link control procedures – Description of the X.25 LAPB-compatible DTE data link procedures	-
ISO/IEC 7809: 1993, Information technology – Telecommunications and information exchange between systems – High-level data link control (HDLC) procedures – Classes of procedures	-
ISO/IEC 8072: 1994, Information technology – Open Systems Interconnection – Transport service , definition	<b></b>
ISO/IEC 8073: 1992, Information technology – Telecommunications and information exchange between systems – Open Systems Interconnection – Protocol for providing the connection-mode transport service	EN 28073:1993
ISO/IEC 8208: 1990, Information technology – Data communications – X.25 Packet Layer Protocol for Data Terminal Equipment	

Page 4 EN 60870-6-2:1995

#### **Publication**

.

#### EN/HD

...

ISO/IEC 8348: 1993, Information technology – Open Systems Interconnection – Network service Definition	-
ISO/IEC 8473-1: 1994, Information technology – Protocol for providing the connectionless-mode network service: Protocol specification	
ISO 8602: 1987, Information processing systems – Open Systems Interconnection – Protocol for providing the connectionless-mode transport service	-
ISO 8648: 1988, Information processing systems – Open Systems Interconnection – Internal organization of the Network Layer	~
ISO 8802-2: 1989, Information processing systems – Local area networks – Part 2: Logical link control	-
ISO/IEC 8878: 1992, Information technology – Telecommunications and information exchange between systems – Use of X.25 to provide the OSI Connection-Mode Network Service	
ISO/IEC 8880-2: 1992, Information technology – Telecommunications and information exchange between systems – Protocol combinations to provide and support the OSI Network Service – Part 2: Provision and support of the connection-mode Network Service	~
ISO/IEC 8880-3: 1990, Information technology Telecommunications and information exchange between systems Protocol combinations to provide and support the OSI Network Service Part 3: Provision and support of the connectionless-mode Network Service	
ISO/IEC 8886: 1992, Information technology – Telecommunications and information exchange between systems – Data link service definition for Open System Interconnection	
ISO/IEC 10022: 1990, Information technology – Open Systems Interconnection – Physical Service Definition	_
ISO/IEC TR 10172: 1991, Information technology – Telecommunications and information exchange between systems – Network Transport Protocol interworking specification	
ITU-T T.5009: 1992, International Reference Alphabet	
ITU-T V.10: 1993, Electrical characteristics for unbalanced double-current interchange circuits operating at data signalling rates nominally up to 100 kbit/s	
ITU-T V.11: 1993, Electrical characteristics for unbalanced double-current interchange circuits operating at data signalling rates up to 10 Mbit/s	
ITU-T V.21: 1988, 300 bits per second duplex modem standardized for use in the general switched telephone network	
ITU-T V.22: 1988, 1200 bits per second duplex modem standardized for use in the general switched telephone network and on point-to-point 2-wire leased telephone-type circuits	
ITU T M 22 birs 1089 2400 bits and studies and such as the formation of th	

ITU-T V.22bis: 1988, 2400 bits per second duplex modern using the frequency division technique standardized for use on the general switched telephone network and on point-to-point 2-wire leased telephone-type circuits



This is a free preview. Purchase the entire publication at the link below:

**Product Page** 

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation