SLOVENSKI STANDARD
SIST EN 60870-6-503:2000

01-februar-2000

Telecontrol equipment and systems - Part 6: Telecontrol protocols compatible with ISO standards and ITU-T recommendations - Section 503: TASE.2 services and protocol (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 (IEC 60870-6-503:1997)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Fernwirkeinrichtungen und -systeme -- Teil 6: Fernwirkprotokolle, die mit ISO-Normen und ITU-T Empfehlungen kompatibel sind -- Hauptabschnitt 503: TASE.2, Dienste und Protokolle

SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-864e-

Matériels et systèmes de téléconduite -- Partie 6: Protocoles de téléconduite compatibles avec les normes ISO et les recommandations de l'UIT-T -- Section 503: Services et protocoles TASE.2

Ta slovenski standard je istoveten z: **EN 60870-6-503:1997**

ICS:

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

SIST EN 60870-6-503:2000 **en**

2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

SIST EN 60870-6-503:2000

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-864e-805e75b31240/sist-en-60870-6-503-2000

SIST EN 60870-6-503:2000

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60870-6-503

November 1997

ICS 33.200

Descriptors: Open systems interconnection, telecontrol, service and protocol, application service element, abstract syntax

English version

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

Matériels et systèmes de téléconduite
Partie 6: Protocoles de téléconduite compatibles avec les normes ISO et les recommandations de l'UIT-T
Section 503: Services et protocoles TASE.2
(CEI 60870-6-503:1997)

Fernwirkeinrichtungen und -systeme
Teil 6: Fernwirkprotokolle, die mit ISO-Normen und ITU-T Empfehlungen kompatibel sind
Hauptabschnitt 503: TASE.2, Dienste und Protokolle
(IEC 60870-6-503:1997)

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-864e-805e75b31240/sist-en-60870-6-503-2000

This European Standard was approved by CENELEC on 1997-10-01. 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

© 1997 CENELEC - All rights of exploitation in any form and by any means reserved worldwide for CENELEC members.

SIST EN 60870-6-503:2000

Foreword

The text of document 57/322/FDIS, future edition 1 of IEC 60870-6-503, 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 60870-6-503 on 1997-10-01.

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) 1998-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1998-07-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annexes A, B and ZA are normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60870-6-503:1997 was approved by CENELEC as a European Standard without any modification.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-864e-805e75b31240/sist-en-60870-6-503-2000

SIST EN 60870-6-503:2000

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 60870-6-702	199X[1]	Telecontrol equipment and systems Part 6: Telecontrol protocols compatible with ISO standards and ITU-T recommendations Section 702: TASE.2 Application profile	-	-
IEC 60870-6-802	1997	Section 802: TASE.2 Object models	EN 60870-6-802	1997
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[2]	1993
ISO/IEC 8208	1995	Information technology - Data communications - X.25 Packet Layer protocol for Data Terminal Equipment	-	-
ISO/IEC 8473	series	Information technology - Protocol for providing the connectionless-mode network service	-	-
ISO/IEC 8802-3	1993	Information technology - Local and metropolitan area networks Part 3: Carrier sense multiple access with collision detection (CSMA/CD) access method and physical layer specifications	-	-
ISO/IEC 9506-1	1990	Industrial automation systems Manufacturing message specification Part 1: Service definition	-	-
ISO/IEC 9506-2	1990	Part 2: Protocol specification	-	-

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-864e-505e75b31240/sist-en-60870-6-503-2000

1) To be published.

2) EN 28073 includes Technical Corrigendum 1:1993 to ISO/IEC 8073.

SIST EN 60870-6-503:2000

Publication	Year	Title	EN/HD	Year
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 10589	1992	Information technology Telecommunications and information exchange between systems - Intermediate system to intermediate system intra-domain-routing exchange protocol for use in conjunction with the protocol for providing the connectionless-mode network Service (ISO 8473)	-	-
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 10608-5	1992	Part 5: TA1111/TA1121 profiles including subnetwork-dependent requirements for X.25 packet-switched data networks using virtual calls	-	-
ISO/IEC ISP 10613-1	1994	Information technology - International Standardized Profile RA - Relaying the Connectionless-mode Network Service Part 1: Subnetwork-independent requirements	EN ISP 10613-1	1996
ISO/IEC ISP 10613-2	1994	Part 2: LAN Subnetwork-dependent, media-independent requirements	EN ISP 10613-2	1996
ISO/IEC ISP 10613-3	1994	Part 3: CSMA/CD LAN subnetwork-dependent, media-dependent requirements	EN ISP 10613-3	1996
ISO/IEC ISP 10613-5	1994	Part 5: Definition of profile RA51.51, relaying the Connectionless-mode Network Service between CSMA/CD LAN subnetworks	EN ISP 10613-5	1996
ISO/IEC ISP 10613-7	1994	Part 7: PSDN subnetwork-dependent, media-dependent requirements for virtual calls over a permanent access	EN ISP 10613-7	1996

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-864e-805a75b31240/sist-en-60870-6-503-2000

SIST EN 60870-6-503:2000

Publication	Year	Title	EN/HD	Year
ISO/IEC ISP 10613-8	1994	Part 8: Definition of profile RA51.1111, relaying the Connectionless-mode Network Service between CSMA/CD LAN subnetworks and PSDNs using virtual calls over a PSTN leased line permanent access	EN ISP 10613-8	1996
ISO/IEC ISP 10613-9	1994	Part 9: Definition of profile RA51.1121, relaying the Connectionless-mode Network Service between CSMA/CD LAN subnetworks and PSDNs using virtual calls over a digital data circuit/CSDN leased line permanent access	EN ISP 10613-9	1996
ISO 8649	1988	Information processing systems - Open Systems Interconnection - Service definition for the Association Control Service Element	-	-

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-864e-805e75b31240/sist-en-60870-6-503-2000

SIST EN 60870-6-503:2000

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-864e-805e75b31240/sist-en-60870-6-503-2000

SIST EN 60870-6-503:2000

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
60870-6-503

Première édition
First edition
1997-10

Matériels et systèmes de téléconduite –

Partie 6:
Protocoles de téléconduite compatibles avec les normes ISO et les recommandations de l'UIT-T –
Section 503: Services et protocole TASE.2

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/...
805e75b31240/sist-en-60870-6-503-2000

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

© IEC 1997 Droits de reproduction réservés — Copyright - all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission
Telefax: +41 22 919 0300
3, rue de Varembé Geneva, Switzerland
e-mail: inmail@iec.ch
IEC web site http: //www.iec.ch

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE XF

Pour prix, voir catalogue en vigueur
For price, see current catalogue

SIST EN 60870-6-503:2000

CONTENTS

	Page
FOREWORD	9
INTRODUCTION	11
Clause	
1 Scope	13
1.1 Control Centre	13
1.2 Architecture	15
1.3 Network Model	17
1.4 Relation between TASE.2 and MMS	17
2 Normative references	19
3 Definitions	23
4 Abbreviations	27
5 TASE.2 Model	27
5.1 Informal TASE.2 Model Description	27
5.1.1 Associations	31
5.1.2 Bilateral Agreements, Bilateral Tables and Access Control	33
5.1.3 Data Value Objects and Services	37
5.1.4 Data Set Objects and Services	37
5.1.5 Account Objects and Services	37
5.1.6 Information Message Object and Services	37
5.1.7 Transfer Set Objects and Services	39
5.1.8 Common Data Transfer Mechanisms	45
5.1.9 Special Transfer Objects and Services	47
5.1.10 Device Objects and Services	47
5.1.11 Program Objects and Services	49
5.1.12 Event Enrollment Objects and Services	51
5.1.13 Event Condition Objects and Services	51
5.2 Formal TASE.2 Model Description	51
5.2.1 General Access Control Requirements	57
5.2.2 Association Management	57
5.2.3 Bilateral Tables	61
5.2.4 List of Access Control Specification	65
5.2.5 Data Values	65
5.2.6 Data Sets	67
5.2.7 Accounts	71
5.2.8 Information Messages	71
5.2.9 Transfer Sets	73
5.2.10 Special Transfer Objects	91
5.2.11 Devices	93
5.2.12 Programs	95
5.2.13 Event Enrollments	97
5.2.14 Event Conditions	99

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-864e-805e75b31240/sist-en-60870-6-503-2000

SIST EN 60870-6-503:2000

Clause Page

6 Mapping of TASE.2 Object Models onto MMS Object Models 99
6.1 Object Modelling Notation (informative) 99
6.2 The Virtual Control Centre (VCC) 101
6.2.1 TASE.2 Domain Mapping 103
6.2.2 TASE.2 Control Centre Mapping 103
6.2.3 OSI Application Processes, Application Entities and Presentation Addresses 105
6.3 Association Object Model Mapping 105
6.4 Bilateral Table Object Model Mapping 107
6.5 Data Value Object Model Mapping 109
6.6 Data Set Object Model Mapping 111
6.7 Account Object Model Mapping 113
6.8 Information Message Object Model Mapping 113
6.9 Transfer Set Object Model Mapping 113
6.9.1 Data Set Transfer Set Object Model Mapping 113
6.9.2 Time Series Transfer Set Object Model Mapping 119
6.9.3 Transfer Account Transfer Set Object Model Mapping 121
6.9.4 Information Message Transfer Set Object Model Mapping 121
6.10 Next Transfer Set Object Model Mapping 123
6.11 Transfer Set Name Object Model Mapping 123
6.12 Conditions Object Model Mapping 123
6.13 Event Code Object Model Mapping 125
6.14 Transfer Set Time Stamp Object Model Mapping 125
6.15 Device Object Model Mapping 125
6.16 Program Object Model Mapping 127
6.17 Event Enrollment Object Model Mapping 127
6.18 Event Condition Object Model Mapping 129
7 Mapping of TASE.2 operations and actions onto MMS Services 131
7.1 Use of MMS Services 133
7.1.1 Association Management Mapping to MMS 133
7.1.2 Data Value Operations Mapping to MMS 139
7.1.3 Data Set Operations Mapping to MMS 147
7.1.4 Transfer Set Operations and Actions Mapping to MMS 161
7.1.5 Account Operations and Actions Mapping 185
7.1.6 Device Operations and Actions Mapping to MMS 187
7.1.7 Program Operations Mapping to MMS 199
7.1.8 Event Enrollment Operations Mapping to MMS 211
7.1.9 Event Condition Actions Mapping onto MMS 213
7.1.10 Summary of TASE.2 Operations 215
8 Standardized Application-specific Objects 219
8.1 Named Type Objects 219
8.1.1 Visible-String-32 Type 219
8.1.2 MMS ObjectName 219
8.1.3 Time Stamp Types 221
8.1.4 TimeStampExtended Type 221

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-864e-805e75b31240/sist-en-60870-6-503-2000

SIST EN 60870-6-503:2000

Clause Page

8.1.5 Time Interval Types 223
8.1.6 TransferSet Types 223
8.1.7 Conditions Types 227
8.1.8 SupportedFeatures Type 229
8.1.9 TASE.2Version Type 229
8.2 Named Variable Objects 231
8.2.1 "Supported_Features" 231
8.2.2 "Bilateral_Table_ID" 231
8.2.3 "TASE.2_Version" 231
8.2.4 Data Value Objects 231
8.2.5 Transfer Set Objects 233
8.2.6 "Next_DSTransfer_Set" 233
8.2.7 "Next_TSTransfer_Set" 233
8.2.8 "Transfer_Set_Name" 233
8.2.9 "TA_Transfer_Set" 233
8.2.10 "IM_Transfer_Set" 233
8.2.11 "DSConditions_Detected" 235
8.2.12 "TSConditions_Detected" 235
8.2.13 "TAConditions_Detected" 235
8.2.14 "Event_Code_Detected" 235
8.2.15 "Transfer_Set_Time_Stamp" 235
8.2.16 "Transfer_Report_ACK" 235
8.2.17 "Transfer_Report_NACK" 237
8.3 Named Variable List Objects 237
8.4 Information Message Objects 237
8.5 Event Condition Objects 237
9 Conformance 239
9.1 Allowable Subsets 239
9.2 PICS 243
9.3 MMS Services Required 249

Annexes
A TASE.2 Operations and Actions Summary 251
B Quality of Service (QOS), Routing and Priority 255

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-864e-
8b1e75e81240/sist-en-60870-6-503-2000

SIST EN 60870-6-503:2000

INTERNATIONAL ELECTROTECHNICAL COMMISSION

TELECONTROL EQUIPMENT AND SYSTEMS –

Part 6: Telecontrol protocols compatible with ISO standards and ITU-T recommendations – Section 503: TASE.2 Services and protocol

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.

2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.

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.

4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.

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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-864e-8f4f75d1d0b0/sist-en-60870-6-503-2000

International Standard IEC 60870-6-503 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
57/322/FDIS	57/329/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.

Annexes A and B form an integral part of this standard.

SIST EN 60870-6-503:2000

INTRODUCTION

The Telecontrol Application Service Element (TASE.2) protocol (also known as Inter-Control Centre Communications Protocol, ICCP) allows for data exchange over Wide Area Networks (WANs) between a utility control centre and other control centres, other utilities, power pools, regional control centres, and Non-Utility Generators. Data exchange information consists of real-time and historical power system monitoring and control data, including measured values, scheduling data, energy accounting data, and operator messages. This data exchange occurs between one control centre's SCADA/EMS host and another centre's host, often through one or more intervening communications processors.

This section of IEC 60870-6 defines a mechanism for exchanging time-critical data between control centres. In addition, it provides support for device control, general messaging and control of programs at a remote control centre. It defines a standardized method of using the ISO/IEC 9506 Manufacturing Message Specification (MMS) services to implement the exchange of data. The definition of TASE.2 consists of three documents. This section of IEC 60870-6 defines the TASE.2 application modelling and service definitions. IEC 60870-6-702 defines the Application Profile for use with TASE.2. IEC 60870-6-802 defines a set of standardized object definitions to be supported.

The TASE.2 describes real control centres with respect to their external visible data and behaviour using an object oriented approach. The objects are abstract in nature and may be used in a wide variety of applications. The use of TASE.2 goes far beyond the application in the control centre to control centre communications. This standard must be understood as a tool box for any application domain with comparable requirements, i.e., the TASE.2 may be applied in areas like substation automation, power plants, factory automation, chemical plants, or others which have comparable requirements. It provides a generic solution for advanced Information and Communication Technology.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

The TASE.2 version number for this standard is 1996-08. See 8.2.3 for more details.

SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-8b4e-805e75b31240/sist-en-60870-6-503-2000

SIST EN 60870-6-503:2000

TELECONTROL EQUIPMENT AND SYSTEMS –

Part 6: Telecontrol protocols compatible with ISO standards and ITU-T recommendations – Section 503: TASE.2 Services and protocol

1 Scope

This section of IEC 60870-6 specifies a method of exchanging time-critical control centre data through wide- and local-area networks using a full ISO compliant protocol stack. It contains provisions for supporting both centralized and distributed architectures. This standard includes the exchange of real-time data indications, control operations, timeseries data, scheduling and accounting information, remote program control and event notification.

Though the primary objective of TASE.2 is to provide control centre (telecontrol) data exchange its use is not restricted to control centre data exchange. It may be applied in any other domain having comparable requirements. Examples of such domains are power plants, factory automation, process control automation, and others.

This standard does not specify individual implementations or products, nor does it constrain the implementation of entities and interfaces within a computer system. This standard specifies the externally visible functionality of implementations together with conformance requirements for such functionalities.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 60870-6-503:2000
https://standards.iteh.ai/catalog/standards/sist/a4915bbe-4911-42e3-864e-803e75631240/sist-en-60870-6-503-2000

1.1 Control centre

The model of a control centre includes four primary classes of host processors: SCADA/EMS, DSM/Load Management, Distributed Applications, and Display Processors. The SCADA/EMS host is the primary processor, utilizing analogue and digital monitoring data collected at power plants, Non-Utility Generators, and transmission and distribution substations via Data Acquisition Units (DAUs) and Remote Terminal Units (RTUs). The control centre typically contains redundant SCADA/EMS hosts in a "hot standby" configuration. The DSM/Load Management host(s) are used by either an operator or EMS application to initiate load management activities. The Distributed Application host(s) perform miscellaneous analysis, scheduling, or forecasting functions. Display Processors allow for local operator and dispatcher display and control. Typically, the control centre will contain one or more Local Area Networks (LANs) to connect these various hosts. The control centre will also access several WANs, often through intermediate communications processors. These WAN connections may include the company-wide area network for communications with the corporate host and a distinct real-time SCADA network. Each control centre will also have one or more TASE.2 instances to handle data exchange with remote control centres.

Other classes of host processors like archive systems, engineering stations, or quality control systems (e.g., for data recording according to ISO 9000) may also be included. The application of the TASE.2 control centre model is in principle unlimited. This model provides a common and abstract definition applicable for any real systems which have comparable requirements.