COMMISSION OF THE EUROPEAN COMMUNITIES

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REPORT FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

on

Standardization in the field of Information Technology and Telecommunications

1992 - 1993 Report

SUMMARY

This report is presented pursuant to Article 8 of Council Decision 87/95/EEC of 22 December 1986 ([1]) and describes progress in the field of information technology and telecommunications in the period 1992-1993.

It illustrates :

- the extension of the technical fields covered in the information technology and telecommunications sectors;

- the introduction of tools and procedures aimed at faster and more effective standardization;

- the launch of projects for effective application of the standards in the Member States of the European Union as well as the former Eastern Block countries (user guides etc.);

- Information activities aimed at improving public awareness of standardization.

1 OJ L 36 of 7.2.1987, p. 31.

INTRODUCTION

This report covers the years 1992 and 1993; developments in the period 1988-1991 were described in the previous reports ([2]).

The first report (1988-1989) placed particular emphasis on :

- the legal basis for standardization activities;
- the importance of standardization for completing the Single Market;
- the structures and procedures for European standardization;
- the results achieved over the years in question (production of standards, conformity testing and certification, reference to standards in public procurement etc.).

The second report (1990-1991) placed particular emphasis on :

- extension of the fields covered by standardization activities;
- development of tools to speed up and improve working;
- practical application of the projects launched previously;
- promotion of the standards by the Commission.

With a view to keeping the present report brief, it was felt unnecessary to reiterate these developments.

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2 SEC(91)786 final of 30.4.91 and SEC(92)1598 final of 2.9.92.

The breakdown of this report for the period 1992-1993 is the same as that for the 1990-1991 report. The report also contains information on standardization which includes the former Eastern Block countries.

I. The most important feature is the increase in the fields dealt with :

* In the field of information technology (IT), besides the subjects already tackled such as electronic message systems, file transfer, production automation, smart houses, computer graphics, computer processing and exchange of medical data, electromagnetic compatibility, exchange of information between libraries and electronic payment systems, new fields have gained in importance. Examples of these are electronic data interchange (EDI), geo-data, character sets, road traffic telematics, barcoding, the postal sector, promotion of testing and certification in the field of information technology and telecommunications.

  Standardization at the service of the people of Europe - let us take a number of concrete examples to illustrate the impact of standardization on our daily life :

  - standardization work in the field of road traffic telematics should lead to improved traffic control and a uniform accounting system for road tolls.

  - the purpose of standardization in the field of geo-data is to prepare for electronic maps. These are required for traffic guidance systems as well as specific planning projects on the part of industry and the authorities, to speed up the information and decision-making process.

  - standardization work in the field of barcoding has been successfully completed. These standards should increase efficiency in stock control and the sale of goods.

  - in the postal sector the standardization work should speed up postal deliveries.

* In the telecommunications field :

  - in the regulated field the work on implementing the ONP concept (= Open Network Provision) and the mutual recognition of the general approval for terminal equipment (Directive 91/263/EEC) continued. Work is currently under way on technical conversion since the scope of this Directive was expanded to include satellite equipment. Annex 1, Part 1 contains the standardization and study commissions awarded in the regulated field.

  - in the non-regulated field, the work on mobile radio systems was monitored with special attention as these are setting up European Services with Community-wide frequency allocation. Encouraging progress was made in the specification of digital systems for GSM, wireless telephony (DECT), pager services (ERMES) and Trunked Radio (TETRA). The standardization work on satellite communication, particularly in the field of VSAT equipment and communication with

low Earth orbit satellites is continuing. Further work will be carried out to promote the application of the ISDNs, encourage user involvement and take account of the increasing importance of rehabilitation techniques. Annex 1, Part 2 contains the standardization and study commissions awarded in the non-regulated field.

- 31 standards (EN, ENV) (Annex 2) in the IT field and 27 standards in the telecommunications field (European Telecommunication Standards - ETS) (Annex 3) were published in the period under review.

II A further feature of the period under review was the preparation of procedures aimed at further improvements in the cooperation between the Commission and the European Standards Organizations (CEN/CENELEC/ETSI) at project and management level :

- CEN and CENELEC have prepared databank procedures which will enable the Commission, among other things, to obtain information on the status of all standardization work and in particular that which is receiving Commission support, via online access. This means that the entire development of a European Standard (EN/ENV) can be followed right up to the point at which it is converted into national standards. The work is already at the demonstration stage.

- New skeleton contracts which make the effects of the support assured by the Commission more transparent have been concluded between the Commission and the European standardization organizations. There is now a strict distinction between a "mandate" (this term has been re-defined) and an "order". A "mandate" now denotes the Commission's political will for standardization work to be carried out in a particular field, and is not therefore accompanied by budgetary funds. The European standardization organizations are free to decide on their response to this expression of political will.

The previous type of mandate has been converted into an "order". By means of an "order", the Commission concludes a contract against payment with the European standardization organizations, for standardization work or other activities (such as studies) which are useful to standardization.

-In the last few years the orders have been increasingly broken down into smaller units, which has caused monitoring and administrative problems. The Commission's response was to introduce "global orders". They summarize the objectives for a project period (a year, for example) and the European standardization organizations have a free hand in fulfilling the order. To guarantee project control by the Commission and the consultation rights of the sector committee SOGITS ([3]), a two-stage procedure is basically envisaged for the performance of the global order. The first stage comprises a study which will examine the way in which the standardization work is to be carried out in order to achieve the result set out in the global order on time. The results of the study are submitted to the Commission and SOGITS. After consulting SOGITS the Commission decides whether and in what form the second stage of the global order (the actual standardization work) should be initiated. 1994 and 1995 will be a trial period for this concept.

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3 "Senior Officials Group for Information Technologies Standardization".

III The work carried out in the period under review is also characterized by the results achieved and the specific measures taken to ensure the effective application of the standards.

1. Testing

Within the CTS (Conformance Testing Services) programme the Commission finances the provision of harmonized test equipment and the setting up of laboratories which offer harmonized testing services for determining the conformity of products and equipment with European standards (or with international ones in the case of telecommunications).

The first three phases of the project were implemented between 1985 and 1991. The evaluation of the results led to a concentration on the telecommunications aspects in the application of the terminal equipment directive 91/263/EEC.

The fourth phase (CTS 4 - telecoms phase), which started in May 1991, essentially covers particular aspects of the ISDN network and the field of interoperability.

Finally, the fifth phase (CTS 5), which is essentially devoted to the expansion of existing projects, started at the end of 1992.

2. Certification

a) Information technology

By the beginning of 1993 progress in the preparatory work mentioned in the previous reports was such that specific measures could be taken to enable the European scheme (establishment of the organizations responsible for testing and certification and regulation of the relations between them) for testing and certification to operate. The relevant order BC-IT-226 covers information technology and telecommunications. Work is still continuing.

b) Telecommunications

Work in the telecommunications field has progressed further. Test centres have been set up. Work has concentrated on converting Directive 91/263/EEC in the last two years, for which the "Association of Designated Laboratories and Notified Bodies" (ADLNB) was set up. The ADLNB's task is to create a European structure for testing and certification in the field of general approval. Efforts are being made to adapt these structures to be created in the regulated field with the aid of the ADLNB to those already in existence in the non-regulated field (see 2.a).

3. Reference to standards in public procurement

The application of standards was undertaken with particular reference to public procurement, for which Council Decision 87/95/EEC of 22.12.1986 requires reference to be made to standards in the field of IT and T. This requires adequate information to be made available to the officials responsible for awarding contracts in the Member States in order to facilitate their task. To this end, two projects, EPHOS

and EUROMETHOD, were launched with support from the Commission and the Public Procurement Group (SOGITS-PPG) ([4]) :

A EPHOS (European Procurement Handbook for Open Systems) is chiefly intended for public procurement officials. Its aim is to facilitate the task of those entrusted with drawing up specifications for public contracts relating to open IT systems. The information directly usable for drawing up specifications is to be published in the form of a handbook.

Work is well advanced. The introductory publication "How to apply standards in Information Technology Public Procurement" is to appear in a second, revised edition in mid-1994. The progress of work on the technical contributions for the specifications can be found in the Table (Annex 4).

Although EPHOS was originally intended as information for public procurement officials, it is now becoming apparent that it is gaining in importance in terms of general information about IT standards and their application in public administration.

Reference should be made at this point to the book "EPHOS - At a Glance", the second, revised edition of which is due to appear in 1994. The EPHOS Awareness Office is also to issue two magazines "EPHOS News" and "EPHOS Gazette" which have more than 2000 subscribers worldwide.

In this case "worldwide" does not just mean the European market area, the United States and Japan but also the countries of Central and Eastern Europe. These countries are currently setting up a market economy system and this also means the introduction of an appropriate public procurement system. Most of these countries are therefore taking a keen interest in information via EPHOS.

Contacts have therefore been established with Hungary, Poland and the Czech Republic. A presentation about EPHOS in Russia is scheduled for 1994.

B EUROMETHOD is addressed not only to public procurement officials but also to all those involved in public procurement, to those using computer systems and to various providers of services. EUROMETHOD lays down a common European approach to the overall planning, development and maintenance of open systems.

The first two phases of the project (definition phase and feasibility study) have been completed. The aim of the third phase is to produce a set of new handbooks dealing with the management of the development of information systems by the authorities. These documents are to be available in 1994. Annex 5 shows the contents of each of the handbooks, which are to undergo practical trials in the Member States' administrations. The experience gained from this will be taken into account in a review phase.

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[4] A group of national officials working under the aegis and on behalf of SOGITS (Senior Officials Group for Information Technologies Standardization).

The interim results of the EUROMETHOD project attracted worldwide attention as early as the preparatory phase. The administrations of the EFTA countries and the USA expressed an interest, and the Western European Union is interested in respect of military procurement for information technology. The Hungarian and Romanian Governments have also signalled their interest in EUROMETHOD.

CONCLUSIONS

Development in the fields of information technology and telecommunications in the period under review has been positive from a number of viewpoints :

- extension of the technical fields covered
- introduction of tools and procedures to achieve faster and more efficient standardization
- launching of projects for the effective application of standards in the Member States (user guides etc.)
- information activities (particularly in respect of the countries of Central and Eastern Europe).

Even though the Single Market has been completed, further work still needs to be done to eliminate the technical barriers to trade and in particular to prevent them from arising in the first place.

The activities already reported in the report for 1990-1991 must therefore be continued in future :

- the effective application of Council Decision 87/95/EEC in all Member States, particularly in the field of public procurement.
- the conversion of European standards into national standards.
- increasing the awareness of standardization and the penetration of (European and national) standards into the industrial fabric of the Member States - these measures should be aimed in particular at SMEs which have neither the financial resources nor the means of communication to have access to the requisite knowledge.
- in the field of public contracts : publication of lists of software and hardware which meet European standards and publication of the titles of these standards, in particular in the Official Journal of the European Communities (Supplement).
- Central and Eastern European countries : intensification of the contacts already established and inclusion of further countries in the information about Council Decision 87/95/EEC.

A suitable political framework is required for the information activities relating to the countries of Central and Eastern Europe. This has been realized through these countries' interest in converting their economic system to market economy conditions. Information about Council Decision 87/95/EEC is the only measure so far. Association with other suitable European Union aid projects should, however, be sought. Synergistic effects can be employed in this way. Although IT and T standardization is

only one facet of standardization in general, information about it is a priority for the countries of Central and Eastern Europe for two reasons :

- it contributes towards the introduction of market economy conditions, as described above;

- it promotes technological progress in those countries in the IT and T sector.

If such projects are undertaken on a larger scale, consideration must be given to adjusting the financial resources at the appropriate time.

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Annex 1, Part 1: Standardization and study commissions awarded in the regulated field

Annex 1, Part 2: Standardization and study commissions awarded in the non-regulated field

Annex 2: Standards published in the period under review: IT field (EN,ENV)

Annex 3: Standards published in the period under review: Telecommunications field (ETS)

Annex 4: EPHOS - Progress of work on the technical contributions for the specifications

Annex 5: EUROMETHOD - Contents of each of the handbooks

PART 1

OPEN NETWORK PROVISION

BC-T-297	ONP higher order leased lines
BC-T-298	Automatic reverse charging on the fixed public telephone network
BC-T-299	CTRs for ONP higher order leased lines
BC-T-030-SI	ONP study on U-type interfaces
BC-T-031-SI	ONP study on M-type interfaces
BC-T-033-SI	Harmonisation of plug and socket on the PSTN
BC-T-034-SI	ONP study into the interconnection of PSDN's using X.75
BC-T-036-SI	Calling line identification on the fixed public telephone network

TERMINAL TYPE APPROVAL

BC-T-037-SI	CTRs in the Satellite Earth Station Equipment field

PART 2

CONFORMANCE TESTING

BC-T-292	Test specifications for DECT
BC-T-293	Test specifications for ISUP protocols
BC-T-294	Test specifications for ISDN videophone
BC-T-295	Test specifications for VSAT
BC-T-296	Test specifications for ISDN-PCI

MOBILE COMMUNICATIONS

BC-T-042-SI	Improvement on the methods of measurement for radiation
BC-T-300	CODEC for TETRA (Trans European TRunked Radio)
BC-T-029-SI	Interworking between X.25, NB-ISDN and VSAT networks
BC-T-035-SI	Establishment of a work programme for Low Earth Orbiting satellite systems
BC-T-043-SI	Architecture of HIPERLAN

MISCELLANEOUS

BC-T-301	Application of ETS 300 075 on the ISDN
BC-T-032-SI	ETSI work programme and user requirements
BC-T-038-SI	Implications of human ageing on telephone design
BC-T-039-SI	Establishment of a work programme for Rehabilitation Technology

Results of Standardization Work covered by Order Vouchers in Information Technologies and Telecommunications
Published Standards (EN)

02-Mar-94

Standard		Title
EN	27816-3	Identification & payments cards. ICC with contacts
EN	28630-1	Magnetic support media. ISO 8630/1
EN	28630-2	Magnetic support media. ISO 8630/2
EN	28630-3	Magnetic support media. ISO 8630/3
EN	28632-1	Information processing systems computer graphics. Part 1
EN	28632-2	Information processing systems computer graphics. Part 2
EN	28632-3	Information processing systems computer graphics. Part 3
EN	28632-4	Computer Graphics. Clear text encoding
EN	28651-1	Computer Graphics. GKS language bindings. FORTRAN
EN	28651-2	Computer Graphics. GKS language bindings. PASCAL
EN	28651-3	Computer Graphics. GKS language bindings. ADA
EN	28805	Information Processing Systems - Computer Graphics. GKS-3D
EN	29070	SGML. Support facilities. Registr. proc. for public text
EN	29241-1	VDU - Ergonomics requirements. General introduction (9241/1)
EN	29241-2	VDU - Ergonomics requirements. Task requirements (9241/2)
EN	29241-3	VDU - Ergonomics requirements. Visual requirements (9241/3)
EN	29315	Systems interfaces. Interfaces betwen flex. cartr. & host
EN	29646-1	OSI testing methodology. General concepts
EN	29646-2	OSI testing methodology. Abstract test suite specifications
EN	29646-4	OSI testing methodology. Test realisation
EN	29646-5	OSI testing methodology. Requirements on test laboratories

Results of Standardization Work covered by Order Vouchers in Information Technologies and Telecommunications
Published Standards (ENV)

02-Mar-94

Standard		Title
ENV	41114	TOKEN-BUS : multiple LAN
ENV	41114	TOKEN-BUS : simple LAN
ENV	41211-x	Basic class VT, A-mode, X.3 PAD compatible
ENV	41212	Directory access to centralized directory
ENV	41213-x	Basic class VT, A-mode, TELNET
ENV	41214	MHS - IPM: IDM end system to IPM end system
ENV	41215	Directory. Behaviour of DSA's for distributed operations
ENV	41513	VT control objects, VT font assignment type, type N° 1
ENV	41801-x	Relay LAN/LAN - CLNS
ENV	606	Bar coding. Transport label for steel products

Results of Standardization Work entrusted to ETSI in Telecommunications
Published Standards (ETS) and Technical Basis for Regulations (TBR)

02-Mar-94

Standard		Title
ETS	300 246	Business Telecommunications (BT); Open Network Provision Technical Requirements; 2048 kbit/s Digital Unstructured Leased Line (D2048U); Network Interface Presentation
ETS	300 247	Business Telecommunications (BT); Open Network Provision Technical Requirements; 2048 kbit/s Digital Unstructured Leased Line (D2048U); Connection Characteristics
ETS	300 248	Business Telecommunications (BT); Open Network Provision Technical Requirements; 2048 kbit/s Digital Unstructured Leased Line (D2048U); Terminal Equipment interface
ETS	300 254	Satellite Earth Stations (SES); Land Mobile Earth Stations (LMESs) operating in the 1,5/1,6/2,5 GHz bands providing low bit rate data communications (LBRDCs)
ETS	300 255	Satellite Earth Stations (SES); Land Mobile Earth Stations (LMESs) operating in the 11/12/14 GHz bands providing low bit rate datacommunications (LBRDCs)
ETS	300 282	Satellite Earth Stations (SES); Network Control Facilities (NCF) for Land Mobile Earth Stations (LMESs) Operating in the 1.5/1.6/2.5 GHz and 11/12/14 GHz bands providing low bit rate data communications (LBRDCs)
ETS	300 288	Business Telecommunications (BT); Open Network Provision (ONP) Technical Requirements; 64 kbit/s Digital Unrestricted Leased Line with octet integrity (D64U); Network Interface Presentation
ETS	300 289	Business Telecommunications (BT); Open Network Provision (ONP) Technical Requirements; 64 kbit/s Digital Unrestricted Leased Line with octet integrity (D64U); Connection Characteristics
ETS	300 290	Business Telecommunications (BT); Open Network Provision Technical Requirements; 64 kbit/s Digital Unstructured Leased Line with octet integrity (D64U); Terminal Equipment interface
ETS	300 327	Satellite Earth Stations (SES); Satellite NEws Gathering (SNG) Transportable Earth Stations (TES) (13-14/11-12 Ghz)
ETS	300 383	Integrated Services Digital Network (ISDN); File Transfer over the ISDN EUROFILE transfer profile
ETS	300 388	Integrated Services Digital Network (ISDN); File Transfer & Access Management (FTAM) over ISDN based on simple file transfer profile
ETS	T/TE 04-37	Attachment requirements for terminal equipments employing switched access to Packet Switched Data Network (PSPDN) according to CCITT Recommendation X.32
I-ETS	300 026	Terminal Equipment (TE); Syntax-based Videotex protocol Terminal Conformance Testing
TBR	10	DECT Telephony terminal requirements
TBR	11	DECT Public Network Profiles
TBR	12	Open Network Provision Technical Requirements; 2048 kbit/s Digital Unstructured Leased Line (D2048U); Terminal Equipment Attachment Requirements
TBR	15/16	Open Network Provision Technical Requirements; Ordinary Quality and special voice bandwidth 2-wire beased Lines (A2O and A2S); Terminal equipment interface

Standard		Title
TBR	17/18	Open Network Provision Technical Requirements; Ordinary and special quality voice bandwidth 4-wire leased line (A4O and A4S); Terminal equipment interface
TBR	5 phase 1	GSM access for non-voice terminals
TBR	6	DECT Access for non-voice terminals
TBR	7	ERMES Receive only access
TBR	8	NET33 Digital telephony over ISDN
TBR	9 phase 1	European digital cellular telecommunication system; Attachment requirements for Global System for Mobile communications (GSM) mobile stations; Telephony
TBR	9bis phase 1	European digital cellular telecommunication system; Attachment requirements for Global System for Mobile communications (GSM) mobile stations; Short Message Services (SMS)
TBR	9quad phase 1	European digital cellular telecommunication system; Attachment requirements for Global System for Mobile communications (GSM) mobile stations; Dual Tone Multi Frequency (DTMF) transmissions
TBR	9ter phase 1	European digital cellular telecommunication system; Attachment requirements for Global System for Mobile communications (GSM) mobile stations; Supplementary Services (SS)

Individual copies of the *"EPHOS - At a Glance"* guide can be obtained free of charge on application to:

EPHOS Awareness Office
54 rue d'Angoussart
B - 1301 Bierges, Belgium
Tel. + 32/10/41.11.72, Fax: + 32/10/41.17.42

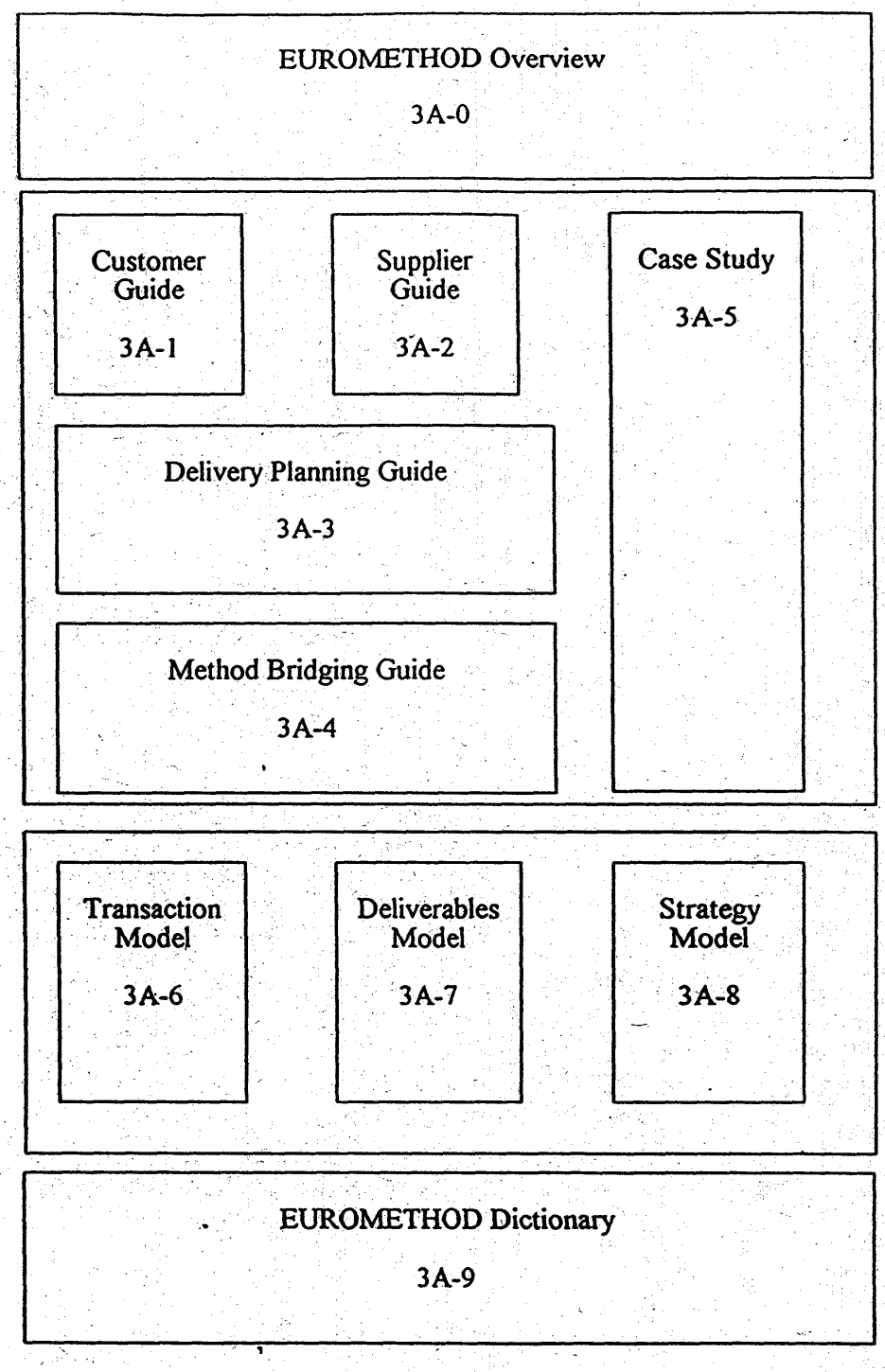
The series of *EPHOS Handbooks* cover the following topics.
The first version is currently available from CEC official outlets in the Member States at a price of 10 ECUs plus VAT.

EPHOS 1 (printed) *EUR 14021 EN +*	*EPHOS 2 (first half 1994)* *EUR 14021/I ... EN +*	*EPHOS 2 bis (during 1995)*
X.25	Document Format	Operating Systems and POSIX
MHS	Character Repertoire	Database Enquiry
FTAM	Electronic Data Interchange	Metropolitan Area Networks
	Virtual Terminal	RISK - Security in business
	FTAM maintenance	Transaction Processing
	MHS maintenance	Network Management
	Directory Services	X.25 maintenance
	Local Area Networks	ISDN
	Data Cabling	
	LAN/WAN	
	NET Management	

Related publication: "A Guide to the Requirements of the IT Standards Decision and the Revised Supplies Directive", EUR 13678 EN +, second edition, 5 ECUs plus VAT

Annex 4

ANNEX 5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