

Implementation of
ENV 41113:1994

**Information
technology —
Functional standard for
profiles T/C 4311
and T/D 4311 — ISDN
(Public/Private) —
Packet mode service —
D-channel —
Virtual call (VC)**

UDC 34.100.30

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National foreword

This Draft for Development is identical with the European prestandard ENV 41113:1994 prepared by CEN/CENELEC whose members have committed themselves to making it available in an appropriate form. In the UK the Draft for Development is the form now chosen for ENVs in the information technology area.

This Draft for Development is published under the direction of the Information Systems Technology Standards Policy Committee whose Technical Committee has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any queries on interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

NOTE International and European Standards, as well as overseas standards, are available from Customer Services, Publications, BSI, Linford Wood, Milton Keynes, MK14 6LE.

After two years this ENV will be reviewed by CEN/CENELEC members with a view to its

- conversion into a European Standard (which would be implemented in the UK as a British Standard);
- extension once for a further two years;
- replacement by a revised ENV (which would be published in the UK as a revised Draft for Development);
- withdrawal.

The future of this Draft for Development is therefore bound to that of the ENV and the Draft for Development will not be reviewed or developed separately.

This publication is not to be regarded as a British Standard.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the ENV title page, pages 2 to 18, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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Descriptors: Data processing, information interchange, data transfer, open systems interconnection, communication procedures, connection oriented transmission, packet transmission, services, network layer, transport layer

English version

Information technology — Functional standard
for profiles T/C 4311 and T/D 4311 —
ISDN (Public/Private) — Packet mode service —
D-channel — Virtual call (VC)

Technologie de l'information — Normes
fonctionnelles pour les profils T/C 4311 et
T/D 4311 — RNIS (Public/Privé) — Service en
mode paquet — Canal D — Communication
virtuelle

Informationstechnik — Funktionelle Norm für
die Profile T/C 4311 und T/D 4311 — ISDN
(Öffentlich/Privat) — D-Kanal — Virtuelle
Wählverbindung

This European Prestandard (ENV) was approved by CEN/CENELEC on 1991-11-25 as a prospective standard for provisional application. The period of validity of this ENV is limited initially to three years. After two years the members of CEN/CENELEC will be requested to submit their comments, particularly on the question whether the ENV can be converted into a European Standard (EN).

CEN/CENELEC members are required to announce the existence of this ENV in the same way as for an EN and to make the ENV available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the ENV) until the final decision about the possible conversion of the ENV into an EN is reached.

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

CEN/CENELEC

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Die Gemeinsame Europäische Normungsorganisation

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Foreword

This European Prestandard was submitted for formal vote by the CEN Central Secretariat to the members of CEN/CENELEC on 1991-07-10 with the deadline of 1991-10-10. The result of the formal vote was positive.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to announce the existence of this European Prestandard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

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0 Introduction

This is one of a set of Functional Standards that specify requirements across a number of layers of the OSI Reference Model [ISO 7498] for systems wishing to implement a particular function. The standard specifies these requirements by reference to the base standards for various layers, thereby providing references to standards for procurement purposes.

This standard makes specific choices concerning the implementation of options in the base standards to achieve interworking by the minimization of incompatible systems with the respect to communication. This makes it possible to tailor the requirements in the base standards to the particular function for which this standard is designed and relieves purchasers from the need to select options across the range of base standards.

Functional Standards in no way eliminate the need for base standards as the latter, taken together, provide a common infrastructure for a wide variety of potential uses.

This Functional Standard specifies telecommunication function T/C 4311 and T/D 4311 as defined in the CEN/CENELEC/ETSI Memorandum M-IT-02.

The two following access methods are supported: Semipermanent Access and PLL Access. They are both specified in prETS 300099.

1 Scope

This European Prestandard specifies a set of protocols to provide the function defined below. The requirements placed on an end system in this European Prestandard are solely those necessary for operation of the protocol set specified. It does not specify total end system capability.

This European Prestandard is defined in terms of the use of a D channel for communications between end systems using the “no notification class”. No distinction is made in this European Prestandard between the use of a D channel provided by a Basic interface and the use of a D channel provided by a Primary Rate interface.

This European Prestandard specifies:

- a) the provision of the OSI Connection-mode Transport Service ISO 8072 between an end system (the “reference end system”) attached to an ISDN, and another end system (the “compatible end system”) which is either attached to the same ISDN, or is indirectly accessible through the provided network service;
- b) the provision of the OSI Connection-mode Network Service [ISO 8348] between the reference end system and the compatible end system.

This European Prestandard uses the X.25 PLP operating in the D channel to convey all the elements, of all three phases, of the OSI CONS. In this access case, no Q 931 or prETS 300102 call control message are needed at any point before or after the establishment of a virtual call or during the data transfer phase on an established virtual call.

The use of PVC is not within the scope of this European Prestandard because the OSI CONS is provided only by the use of Virtual Calls.

2 Normative references

The following standards are directly referenced in this European Prestandard and are essential for the operation of this European Prestandard.

ISO 7498	<i>Information Processing Systems — Open Systems Interconnection Basic reference model</i>
ISO 8072:1986	<i>Information Processing Systems — Open Systems Interconnection Transport Service Definition</i>
ISO/IEC 8073:1988	<i>Information Processing Systems — Open Systems Interconnection Connection-oriented Transport Protocol specification</i>
ISO/IEC 8073/AD1:1988	<i>Information Processing Systems — Open Systems Interconnection Connection-oriented Transport Protocol Specification — Addendum 1: Network Connection Management Subprotocol</i>

ISO/IEC 8073/PDAD3	<i>Information Processing Systems — Open System Interconnection Connection-oriented Transport Protocol Specification — Addendum 3: Protocol for Implementation Conformance Statement Proforma.</i>
ISO/IEC 8208:1989	<i>Information Processing Systems — Data Communication X.25 Packet Level Protocol for DTE</i>
ISO/IEC 8208/AD3:1989	<i>Information Processing Systems — Data Communications X.25 Packet Level Protocol for DTE — Addendum 3: Conformance Requirements</i>
ISO 8348:1987	<i>Information Processing Systems — Data Communications — Network Service definition</i>
ISO 8878:1987	<i>Information Processing Systems — Data Communications — Use of X.25 to provide the OSI Connection-Oriented Network Service</i>
E.164:1984	<i>Numbering Plan for the ISDN Era</i>
I.430:1988	<i>ISDN Basic User-network Interface — Layer 1 Specification</i>
I.431:1988	<i>ISDN Primary Rate User-network Interface — Layer 1 Specification</i>
pr ETS 300099	<i>Specification of the Packet Handler Access Point Interface (PHI) for the provision of pr ETS 300007 (CCITT Recommendation X.31) Packet Mode Services</i>
Q.921:1988	<i>ISDN User-network Interface Data Link Layer Specification</i>
Q.931:1988	<i>ISDN User-network Interface Layer 3 Specification for Basic Call Control Procedures</i>
X.2:1988	<i>International data transmission services and optional user facilities in Public Data Network (PDNs)</i>
X.25:1988	<i>Interface between-Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for Terminals operating in the Packet Mode and connected to Public Data Networks by dedicated Circuit</i>
X.121:1988	<i>International Numbering Plan for Public Data Networks</i>
X.224:1988	<i>Transport Protocol Definition for Open Systems Interconnection for CCITT Application</i>
prETS 300012	<i>Layer 1 of the ISDN basic user network interface. Application of CCITT Recommendation 1.430</i>
prETS 300011	<i>Layer 1 of the ISDN primary rate user network interface. Application of CCITT Recommendation 1.431</i>
prETS 300125	<i>ISDN User-Network interface data link layer specification. Application of CCITT Recommendations Q.920/I.440 and Q.921/I.441</i>
prETS 300102	<i>ISDN User-Network interface layer 3 specification for basic call control. Application of CCITT Recommendations Q.930/I.450 and Q.931/I.451</i>
M-IT-02 Issue 5	<i>CEN/CENELEC/ETSI Memorandum on the Directory of Functional Standards (August 1989).</i>
ENV 41104	<i>Information Systems Interconnection — Packet Switched Data — Networks: Permanent Access</i>

3 Definitions

None

4 Abbreviations

<CAC>	In CALL ACCEPTED packet
<CLI>	In CLEAR INDICATION packet
<CLR>	In CLEAR REQUEST packet
<CON>	In CALL CONNECTED packet
<CRQ>	In CALL REQUEST packet
<INC>	In INCOMING CALL packet