

**Implementation of
ENV 41210:1991**

Information Systems Interconnection — Directory Access

Cooperating organizations

The joint European Standards Organization (CEN/CENELEC), under whose supervision this European Prestandard was prepared, comprises the National Committees of the following countries:

Austria	Italy
Belgium	Luxembourg
Denmark	Netherlands
Finland	Norway
France	Portugal
Germany	Spain
Greece	Sweden
Iceland	Switzerland
Ireland	United Kingdom

This Draft for Development was published under the authority of the Standards Board and comes into effect on 29 November 1991

© BSI 04-2000

The following BSI reference relates to the work on this Draft for Development:
Committee reference IST/21

ISBN 0 580 20342 5

Amendments issued since publication

Amd. No.	Date	Comments

Contents

	Page
Cooperating organizations	Inside front cover
National foreword	ii
Foreword	2
Text of ENV 41210	3

National foreword

This Draft for Development is identical with the European Prestandard ENV 41210:1991 “*Information Systems Interconnection — Directory Access*”, 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 IST/21 has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on interpretation, or proposals for change, and to 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 BSI Sales Department, 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 16 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.

UDC 681.324.016:681.327.8

Descriptors: Data Processing, Open Systems Interconnection, Directories, Services, Protocols, Ports: Opening

English Version

Information Systems Interconnection — Directory Access

Interconnexion de systèmes d'information —
Accès à l'Annuaire

Kommunikation von Informationssystemen —
Zugriff zu dem Verzeichnisdienst

This European Prestandard (ENV) was approved by CEN/CENELEC on 1991-06-26 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 an 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 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

The Joint European Standards Institution
Organisation Commune Européenne de Normalisation
Die Gemeinsame Europäische Normungsorganisation

Central Secretariat: rue de Stassart 36, B-1050 Brussels

© CEN/CENELEC 1991 Copyright reserved to all CEN and CENELEC members

Foreword

The work on this Functional Standard was assigned to EWOS and elaborated by EWOS/ETSI EG DIR.

The final draft was distributed for ballot to the CEN and CENELEC members with cover letters dated 1990-11-06. The result of the ballot was positive but with many comments.

In order to discuss the comments received and if possible to incorporate them into the ENV, it was decided to bring the comments to EWOS/ETSI EG DIR. After discussion in that body it was decided to hold a voting/resolution meeting to decide upon the inclusion of the comments into the already adopted ENV.

This meeting was held during the EWOS Workshop week on 1991-06-25 when the comments were unanimously accepted by the delegates present. The result of the voting/resolution meeting was sent out to the members by the CEN CS on 1991-07-12.

This work falls under the mandate from the EC Commission and EFTA, referred to as BC-IT-108A.

Contents

	Page
Foreword	2
0 Introduction	3
1 Scope and field of application	3
2 Conformity	3
3 Document references	4
4 Definitions	5
5 Abbreviations	5
6 Scenario description	5
7 Directory models	6
8 Directory service	6
9 Directory protocol	7
10 Use of underlying services	15
Annex A X.500 conformance	16
Annex B DUA conformance	16
Figure 6.1 — Scenario Description	5
Figure 6.2 — Model Description	6
Table 7.1 — Model support	6
Table 8.1 — Service support	7
Table 9.1 — Protocol support	8

0 Introduction

The concept and structure of Functional Standards for Information Systems are laid down in the CEN/CENELEC/CEPT Memorandum M-IT-01. The purpose of a Functional Standard is to recommend when and how certain Information Technology standards should be used. This Functional Standard specifies Application function A/DI1 as defined in the CEN/CENELEC/CEPT Memorandum M-IT-02. This Functional Standard is one of a set of Functional Standards relating to the Directory, ETG 005 gives an overview of these Functional Standards.

For a centralised Directory this Functional Standard by itself profiles the externally visible behaviour of the accessed centralised DSA.

1 Scope and field of application

This specification profiles the interworking between a Directory and a DUA: the Directory Access Protocol (DAP). The Directory may be realised by one or more DSAs. The interworking that is described is the externally visible behaviour of a Directory as seen between the DUA and a DSA.

This Functional Standard describes the services that will be made available by the Directory to the DUA. It requires the Directory to support the Read-, Search- and Modify Application Service Elements.

This Functional Standard gives no requirements for DUAs over and above the requirements specified by the base standard. For the rationale for this approach see Annex B.

The base Directory standards for this Functional Standard are ISO/IEC 9594 and the CCITT X.500 series.

2 Conformity

2.1 DUA Conformity to DAP

A DUA shall satisfy the basic conformance requirements for DUAs as specified in the base standard [ISO/IEC 9594-5 | CCITT X.519], Clause 9.1.

2.2 DSA Conformity to DAP

A DSA shall satisfy the basic conformance requirements for DSAs as specified in the base standard [ISO/IEC 9594-5 | CCITT X.519], Clause 9.2.

In addition a DSA conforming to this Functional Standard shall support:

- Elements of Directory Models as defined in clause 7 and
- Elements of Directory Service as defined in clause 8 and
- Elements of Directory Protocol as defined in clause 9 and
- Elements of underlying services as defined in clause 10.

The corresponding conformance claim must additionally state:

- whether ISO/IEC or CCITT or both base standards are used
- that the implementation supports the DirectoryAccess Application Context in the DSA role
- whether it is a centralised or a cooperating DSA.

2.3 Clarifications

2.3.1 Meaning of “supported”

The term “supported” used above means that interworking is possible, in the sense that the corresponding operation or protocol element can be generated and/or recognised and be acted upon as stated in the standard to achieve the function associated by the standard with that operation or protocol element.

Note that this requirement exceeds the minimal requirements defined in the base standards, which only require a conformant implementation to return a protocol conformant result in response to a protocol conformant invocation. Thus the base standards allow always returning the response “unwillingTo Perform” or similar, which does not achieve the function associated by the standard with that operation or protocol element.

This requirement relates to static capability; in a specific instance this capability may be overwritten by the policy of the administrative authority involved.