ISO/IEC 9594-5:2008-12 (E)

Information technology_- Open Systems Interconnection_- The Directory: Protocol specifications

CONTENTS

Page

Foreword v
Introduction vi

1 Scope 1
2 References 1
2.1 Normative references 1
2.2 Non-normative references 2
3 Definitions 2
3.1 Basic Directory definitions 3
3.2 Distributed Operation Definitions 3
3.3 Protocol specification definitions 3
4 Abbreviations 4
5 Conventions 4
6 Common protocol specification 5
6.1 Directory associations and operations 5
6.2 Specification for Directory operations 5
6.3 Directory protocol overview 7
6.4 Operation codes 8
6.5 Error codes 8
6.6 Abstract syntaxes 9
7 Directory protocols using the OSI stack 9
7.1 OSI-PDUs 9
7.2 Directory PDU structure 9
7.3 Session PDUs 10
7.4 OSI addressing 10
7.5 Procedure and sequencing 10
7.6 Directory PDU specifications 11
8 Directory protocol mapping onto OSI services 24
8.1 Abstract syntaxes and transfer syntaxes 24
8.2 Application-contexts 25
8.3 Session Layer specification 26
8.4 Use of transport service 32
8.5 OSI Transport Layer on top of TCP 33
9 IDM protocol 47
9.1 IDM-PDUs 47
9.2 Sequencing requirements 49
9.3 Protocols 49
9.4 Reject reasons 50
9.5 Abort reasons 50
9.6 Mapping onto TCP/IP 51
9.7 Addressing 51
9.8 Use of TLS 51
10 Directory protocol mapping onto the IDM protocol 52
10.1 DAP-IP protocol 52
10.2 DSP-IP protocol 52
10.3 DISP-IP protocol 52
10.4 DOP-IP protocol 53

Page

11 Protocol stack coexistence 53
11.1 Coexistence between OSI and IDM stacks 53
11.2 Coexistence in the presence of LDAP 53
11.3 Defining network addresses for Internet Protocol, Version 4 support 53
11.4 Definition of NSAP like address for long addressing information 54

12 Versions and the rules for extensibility 55
12.1 DUA to DSA 55
12.2 DSA to DSA 56
12.3 Rules of extensibility for NSAP addresses 57
12.4 Rules of extensibility for object classes 57
12.5 Rules of extensibility for user attribute types 57

13 Conformance 57
13.1 Conformance by DUAs 57
13.2 Conformance by DSAs 58
13.3 Conformance by a shadow supplier 62
13.4 Conformance by a shadow consumer 62

Annex A – Common protocol specifications in ASN.1 64

Annex B – OSI Protocol in ASN.1 66

Annex C – Directory OSI Protocols in ASN.1 72

Annex D – IDM Protocol in ASN.1 75

Annex E – Directory IDM Protocols in ASN.1 78

Annex F – Directory operational binding types 80

Annex G – Amendments and corrigenda 81