INTERNATIONAL STANDARD

ISO 8648

First edition 1988-02-15



INTERNATIONAL ORGANIZATION FOR STANDARDIZATION ORGANISATION INTERNATIONALE DE NORMALISATION МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Information processing systems — Open Systems Interconnection — Internal organization of the Network Layer

Systèmes de traitement de l'information — Interconnexion de systèmes ouverts — Organisation interne de la Couche Réseau

Reference number ISO 8648: 1988 (E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8648 was prepared by Technical Committee ISO/TC 97, *Information processing systems*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Contents	Page
0 Introduction	. 1
1 Scope and field of application	. 1
2 References	. 2
3 Definitions	. 2
4 Abbreviations	. 3
5 Network Layer concepts and terminology 5.1 Real world objects and abstract elements 5.2 End systems and intermediate systems 5.2.1 End system considerations 5.2.2 Intermediate system considerations 5.3 Real subnetworks and subnetworks 5.4 Relay systems and interworking units 5.5 Data transmission service and subnetwork service 5.6 Service types	. 3 . 3 . 3 . 3 . 5
6 Organization of the Network Layer 6.1 Factors which influence the Internal organization of the Network Lay 6.2 Description of the possible roles for a Network Layer protocol 6.3 Subnetwork access protocols 6.4 Subnetwork independent convergence protocols 6.5 Subnetwork dependent convergence protocols 6.5.1 Relationship of SNDCP to SNICP 6.5.2 Relationship of SNDCP to the OSI Network Service 6.6 Relaying and routeing 6.7 Single Network Layer protocol fulfilling all protocol roles	er 10 . 10 . 11 . 11 . 11 . 11
7 Application of the Network Layer Internal organization	. 12 . 12
8 Interconnection scenarios	. 13