

ISO 8648:1988-02 (E)

Information processing systems; open systems interconnection; internal organization of the network layer

Contents		Page
0	Introduction.....	1
1	Scope and field of application	1
2	References	2
3	Definitions	2
3.1	Reference model definitions	2
3.2	Service Conventions definitions.....	2
3.3	Network Layer architecture definitions.....	2
4	Abbreviations.....	3
5	Network Layer concepts and terminology.....	3
5.1	Real world objects and abstract elements	3
5.2	End systems and intermediate systems	3
5.2.1	End system considerations.....	3
5.2.2	Intermediate system considerations	3
5.3	Real subnetworks and subnetworks	3
5.4	Relay systems and interworking units.....	5
5.5	Data transmission Service and subnetwork Service.....	5
5	0 Service types	5
6	Organization of the Network Layer.....	5
6.1	Factors which influence the Internal Organization of the Network Layer	10
6.2	Description of the possible roles for a Network Layer protocol	10
6.3	Subnetwork access protocols	11
6.4	Subnetwork independent convergence protocols.....	11
6.5	Subnetwork dependent convergence protocols.....	11
6.5.1	Relationship of SNDCP to SNICP	11
6.5.2	Relationship of SNDCP to the OSI Network Service.....	11
6.6	Relaying and routing.....	11
6.7	Single Network Layer protocol fulfilling all protocol roles	12
7	Application of the Network Layer Internal Organization	12
7.1	Interconnection of subnetworks supporting all elements of the OSI Network Service.....	12
7.2	Hop-by-hop harmonization.....	12
7.3	Use of an internetworking protocol approach	12
7	4 Combinations of approaches for interconnecting subnetworks	13
8	Interconnection scenarios.....	13
8.1	Single data-link/single subnetwork interconnection	13
8.2	Interconnections involving subnetworks which Support all elements of the Network Service.....	14
8.3	Interconnections involving multiple protocol combinations.....	14