



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

I.375.1

(06/98)

SERIES I: INTEGRATED SERVICES DIGITAL NETWORK

Overall network aspects and functions – General network
requirements and functions

Network capabilities to support multimedia services: general aspects

ITU-T Recommendation I.375.1

(Previously CCITT Recommendation)

ITU-T I-SERIES RECOMMENDATIONS
INTEGRATED SERVICES DIGITAL NETWORK

GENERAL STRUCTURE

Terminology	I.110-I.119
Description of ISDNs	I.120-I.129
General modelling methods	I.130-I.139
Telecommunication network and service attributes	I.140-I.149
General description of asynchronous transfer mode	I.150-I.199

SERVICE CAPABILITIES

Scope	I.200-I.209
General aspects of services in ISDN	I.210-I.219
Common aspects of services in the ISDN	I.220-I.229
Bearer services supported by an ISDN	I.230-I.239
Teleservices supported by an ISDN	I.240-I.249
Supplementary services in ISDN	I.250-I.299

OVERALL NETWORK ASPECTS AND FUNCTIONS

Network functional principles	I.310-I.319
Reference models	I.320-I.329
Numbering, addressing and routing	I.330-I.339
Connection types	I.340-I.349
Performance objectives	I.350-I.359
Protocol layer requirements	I.360-I.369

General network requirements and functions **I.370-I.399**

ISDN USER-NETWORK INTERFACES

Application of I-series Recommendations to ISDN user-network interfaces	I.420-I.429
Layer 1 Recommendations	I.430-I.439
Layer 2 Recommendations	I.440-I.449
Layer 3 Recommendations	I.450-I.459
Multiplexing, rate adaption and support of existing interfaces	I.460-I.469
Aspects of ISDN affecting terminal requirements	I.470-I.499

INTERNETWORK INTERFACES

I.500-I.599

MAINTENANCE PRINCIPLES

I.600-I.699

B-ISDN EQUIPMENT ASPECTS

ATM equipment	I.730-I.739
Transport functions	I.740-I.749
Management of ATM equipment	I.750-I.799

For further details, please refer to ITU-T List of Recommendations.

ITU-T RECOMMENDATION I.375.1

NETWORK CAPABILITIES TO SUPPORT MULTIMEDIA SERVICES: GENERAL ASPECTS

Summary

This Recommendation specifies the general aspects of network capabilities for the support of multimedia services, including audiovisual services. Network capabilities to support multimedia services and applications are described by means of reference configurations and corresponding network architectures. Functional blocks in the architecture are identified and the physical and logical relationships among these blocks are described. Although assumptions must necessarily be made regarding the functionality of Customer Premises Equipment (CPE), specific requirements for CPE are outside the scope of this Recommendation.

Source

ITU-T Recommendation I.375.1 was prepared by ITU-T Study Group 13 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 1st of June 1998.

Keywords

Functional groups, Multimedia services, Network capabilities, Reference configuration.

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

INTELLECTUAL PROPERTY RIGHTS

The ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. The ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, the ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

© ITU 1998

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the ITU.

CONTENTS

	<i>Page</i>
1 Scope	1
2 General network requirements for multimedia service classes.....	1
2.1 Multimedia conference services class	3
2.2 Multimedia conversation services class	5
2.3 Multimedia distribution services class	6
2.4 Multimedia retrieval services class	8
2.5 Multimedia collection services class	9
2.6 Multimedia message services class	11

Recommendation I.375.1**NETWORK CAPABILITIES TO SUPPORT MULTIMEDIA SERVICES:
GENERAL ASPECTS¹***(Geneva, 1998)***1 Scope**

This Recommendation specifies the general aspects of network capabilities for the support of multimedia services, including audiovisual services. Network capabilities to support multimedia services and applications are described by means of reference configurations and corresponding network architectures. Functional blocks in the architecture are identified and the physical and logical relationships among these blocks are described. Although assumptions must necessarily be made regarding the functionality of Customer Premises Equipment (CPE), specific requirements for CPE are outside the scope of this Recommendation.

Relationships between service provider(s), content provider(s) and network provider(s) are outside the scope of this Recommendation.

2 General network requirements for multimedia service classes

According to Recommendation F.700 (Framework for Multimedia Services), the following multimedia service classes are considered:

- conference services;
- conversation services;
- distribution services;
- retrieval services;
- collection services;
- message services.

Figure 1 shows the reference configuration which is applicable to all multimedia service classes.

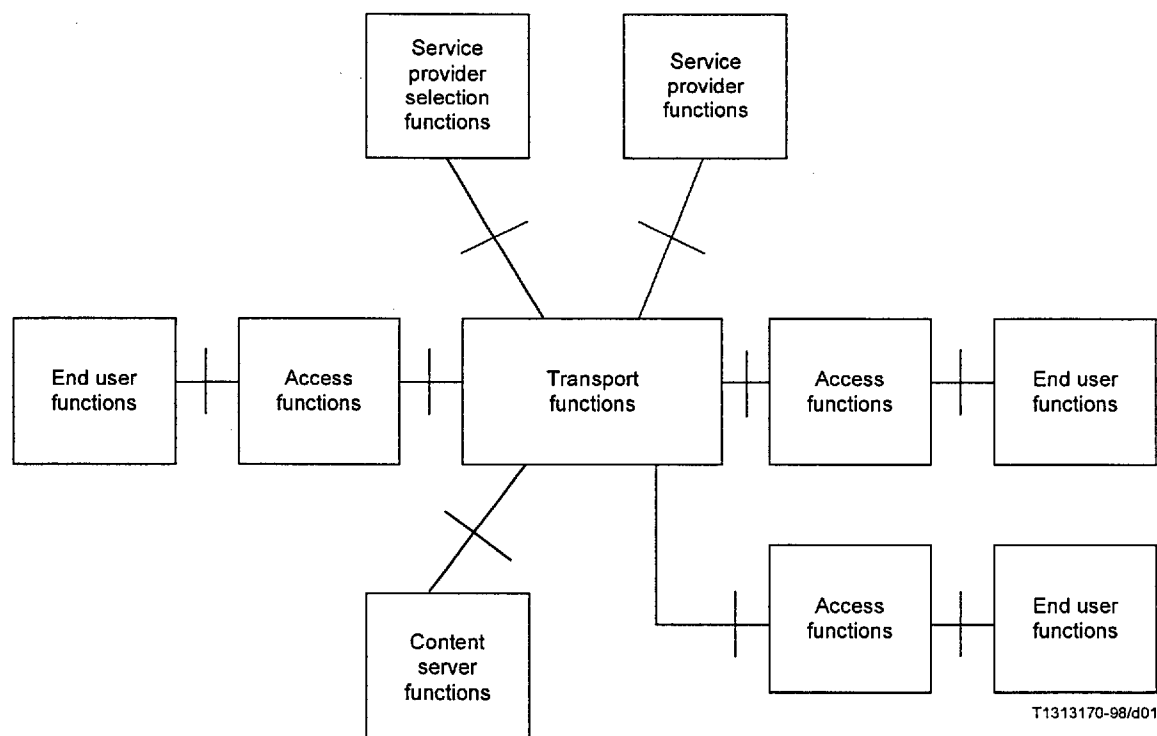


Figure 1/L.375.1 – Reference configuration applicable to all classes of multimedia services

¹ This Recommendation replaces Recommendation I.374: *Network Capabilities to support multimedia services*.