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ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

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SERIES E: TELEPHONE NETWORK AND ISDN

Quality of service, network management and traffic
engineering – Traffic engineering – Mobile network traffic
engineering

Reference connections for traffic engineering of maritime and aeronautical systems

ITU-T Recommendation E.752

(Previously CCITT Recommendation)

ITU-T E-SERIES RECOMMENDATIONS
TELEPHONE NETWORK AND ISDN

OPERATION, NUMBERING, ROUTING AND MOBILE SERVICES

INTERNATIONAL OPERATION	E.100–E.229
OPERATIONAL PROVISIONS RELATING TO CHARGING AND ACCOUNTING IN THE INTERNATIONAL TELEPHONE SERVICE	E.230–E.299
UTILIZATION OF THE INTERNATIONAL TELEPHONE NETWORK FOR NON-TELEPHONY APPLICATIONS	E.300–E.329
ISDN PROVISIONS CONCERNING USERS	E.330–E.399

QUALITY OF SERVICE, NETWORK MANAGEMENT AND TRAFFIC ENGINEERING

NETWORK MANAGEMENT	E.400–E.489
International service statistics	E.400–E.409
International network management	E.410–E.419
Checking the quality of the international telephone service	E.420–E.489
TRAFFIC ENGINEERING	E.490–E.799
Measurement and recording of traffic	E.490–E.505
Forecasting of traffic	E.506–E.509
Determination of the number of circuits in manual operation	E.510–E.519
Determination of the number of circuits in automatic and semi-automatic operation	E.520–E.539
Grade of service	E.540–E.599
Definitions	E.600–E.699
ISDN traffic engineering	E.700–E.749

Mobile network traffic engineering **E.750–E.799**

QUALITY OF TELECOMMUNICATION SERVICES: CONCEPTS, MODELS, OBJECTIVES AND DEPENDABILITY PLANNING	E.800–E.899
Terms and definitions related to the quality of telecommunication services	E.800–E.809
Models for telecommunication services	E.810–E.844
Objectives for quality of service and related concepts of telecommunication services	E.845–E.859
Use of quality of service objectives for planning of telecommunication networks	E.860–E.879
Field data collection and evaluation on the performance of equipment, networks and services	E.880–E.899

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

ITU-T RECOMMENDATION E.752**REFERENCE CONNECTIONS FOR TRAFFIC ENGINEERING OF MARITIME AND AERONAUTICAL SYSTEMS****Summary**

This Recommendation provides a reference architecture for existing maritime and aeronautical systems and also provides high-level reference connections for maritime and aeronautical call/connection set-up. The primary purpose of the reference connections for maritime and aeronautical systems is to provide a basis for developing related-traffic Grade of Service (GOS) Recommendations. The underlying call flow model in the reference connections should be used as a basis for more implementation-specific configurations for detailed performance analysis and GOS target setting.

This Recommendation is initially focused on satellite based systems and circuit-switched user plane traffic.

Source

ITU-T Recommendation E.752 was prepared by ITU-T Study Group 2 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 8th of October 1996.

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 (Helsinki, March 1-12, 1993).

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.

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CONTENTS

	Page
1 Objective and scope	1
2 Related Recommendations	2
3 Definitions	2
4 Abbreviations.....	3
5 Satellite-based systems	3
5.1 Reference architecture.....	3
5.1.1 Reference architecture for interconnection of Maritime/Aeronautical Domain and the Fixed Domain.....	3
5.2 Types of connections	6
5.3 Reference connections	6
5.3.1 Reference connection for maritime user to land user	6
5.3.2 Reference connection for maritime user to maritime user.....	7
5.3.3 Reference connection for aeronautical user to land user	8
6 Terrestrial based systems	8
7 History.....	8
Appendix I - Example implementations (Inmarsat systems)	11
I.1 General.....	11
I.2 Abbreviations.....	11
I.3 Architecture.....	12
I.3.1 Architecture for intercommunication between Maritime Inmarsat-A system and fixed domain	12
I.3.2 Architecture for intercommunication between Inmarsat Aeronautical System Aircraft Earth Stations (Inmarsat-Aero) and fixed domain.....	12
I.3.3 Architecture for intercommunication between Maritime Inmarsat-M system and fixed domain	13
I.3.4 Architecture for intercommunication between maritime Inmarsat-B system and fixed domain	14
I.4 Remarks	15

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Page IV

Recommendation E.752**REFERENCE CONNECTIONS FOR TRAFFIC ENGINEERING OF MARITIME
AND AERONAUTICAL SYSTEMS***(Geneva, 1996)***1 Objective and scope**

Users of mobile systems may be classified as: land, maritime and aeronautical depending on whether they move in land, sea or free space. Mobile users are connected to the fixed network through terrestrial or satellite based transport infrastructure.

This Recommendation provides a reference architecture for existing maritime and aeronautical systems and also provides high-level reference connections for maritime and aeronautical call/connection set-up. Reference connections for land mobile networks are covered in Recommendation E.751. The primary purpose of the reference connections for maritime and aeronautical systems is to provide a basis for developing related-traffic Grade of Service (GOS) Recommendations. The underlying call flow model in the reference connections should be used as a basis for more implementation-specific configurations for detailed performance analysis and GOS target setting (Recommendation E.774).

Service to users of maritime and aeronautical systems is provided by:

- signalling and interfacing function;
- switching; and
- terrestrial or satellite transmission, linking the maritime and aeronautical mobile users with the PSTN and PSDN network in the fixed domain.

The elements which constitute the terrestrial part of the maritime/aeronautical domain, before interfacing with the fixed domain, may be owned and operated by one or more system operators. Similarly, mobile services may be provided by one or more service providers.

This Recommendation is initially focused on satellite-based maritime and aeronautical systems. Terrestrial based systems are for further study.

Mobile services in terrestrial and satellite-based systems can be circuit- or packet-switched. This Recommendation is initially concerned with circuit-switched, normal (as opposed to distress and safety) traffic in the user plane. Packet-switched traffic is for further study.

Table 1 shows the current scope of this Recommendation.

TABLE 1/E.752
Scope of Recommendation E.752

Maritime systems				Aeronautical systems			
Terrestrial based		Satellite based		Terrestrial based		Satellite based	
Circuit switching	Packet switching	Circuit switching	Packet switching	Circuit switching	Packet switching	Circuit switching	Packet switching
Speech, fax, dial-up data	Data	Speech, fax, dial-up data	Data, telex	Speech, fax, dial-up data	Data	Speech, fax, dial-up data	Data
ffs	ffs	Rec. E.752	ffs	ffs	ffs	Rec. E.752	ffs
ffs: for further study							