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SERIES E: OVERALL NETWORK OPERATION,
TELEPHONE SERVICE, SERVICE OPERATION AND
HUMAN FACTORS

International operation – Maritime mobile service and
public land mobile service

Maritime communications – Ship station identity

Recommendation ITU-T E.217

ITU-T E-SERIES RECOMMENDATIONS

OVERALL NETWORK OPERATION, TELEPHONE SERVICE, SERVICE OPERATION AND HUMAN FACTORS

INTERNATIONAL OPERATION

Definitions	E.100–E.103
General provisions concerning Administrations	E.104–E.119
General provisions concerning users	E.120–E.139
Operation of international telephone services	E.140–E.159
Numbering plan of the international telephone service	E.160–E.169
International routing plan	E.170–E.179
Tones in national signalling systems	E.180–E.189
Numbering plan of the international telephone service	E.190–E.199

Maritime mobile service and public land mobile service

E.200–E.229

OPERATIONAL PROVISIONS RELATING TO CHARGING AND ACCOUNTING IN THE INTERNATIONAL TELEPHONE SERVICE

Charging in the international telephone service	E.230–E.249
Measuring and recording call durations for accounting purposes	E.260–E.269

UTILIZATION OF THE INTERNATIONAL TELEPHONE NETWORK FOR NON-TELEPHONY APPLICATIONS

General	E.300–E.319
Phototelegraphy	E.320–E.329

ISDN PROVISIONS CONCERNING USERS

E.330–E.349

INTERNATIONAL ROUTING PLAN

E.350–E.399

NETWORK MANAGEMENT

International service statistics	E.400–E.404
International network management	E.405–E.419
Checking the quality of the international telephone service	E.420–E.489

TRAFFIC ENGINEERING

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.649
Traffic engineering for IP-networks	E.650–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

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
OTHER	E.900–E.999

INTERNATIONAL OPERATION

Numbering plan of the international telephone service	E.1100–E.1199
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NETWORK MANAGEMENT

International network management	E.4100–E.4199
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For further details, please refer to the list of ITU-T Recommendations.

Recommendation ITU-T E.217

Maritime communications – Ship station identity

Summary

For the purposes of international public correspondence telecommunication, the ship station identity is now only relevant for those existing systems that have the ship station identity embedded in the numbering scheme as illustrated in Annexes A and B. For future systems that will not embed the ship station identity in their numbering scheme, the ship station identity ceases to have any relevance for public correspondence telecommunication purposes.

This edition of ITU-T E.217 includes relevant text from ITU-T E.210, which document it cancels and replaces. In addition, ITU-T E.217 reflects changes that have occurred within the existing family of services provided by Inmarsat that impact the provision of global maritime distress and safety system (GMDSS).

For historical accuracy, this revised version also reflects details of the provision of Inmarsat services prior to the expansion of the numbering plan specified in ITU-T E.164 from a maximum of 12 to 15 digits.

History

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FOREWORD

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 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.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure, e.g., interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

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Table of Contents

		Page
1	Scope.....	1
2	References.....	1
3	Definitions	2
3.1	Terms defined elsewhere	2
3.2	Terms defined in this Recommendation	2
4	Abbreviations and acronyms	2
5	Conventions	3
6	The use of the ship station identity	3
7	Assignment of ship station identity maritime identification digits.....	3
8	Assignment of ship station identity blocks of numbers.....	4
9	Identification of ship geographical region in ship station identities.....	4
10	Identification of ship nationality within ship station identifiers.....	4
11	Group calls.....	5
12	Coast station identity	5
13	The global maritime distress and safety system	5
Annex A – Telephone/integrated service digital network numbering plan for the mobile-satellite services of Inmarsat.....		6
A.1	Introduction	6
A.2	Format of Inmarsat mobile international number.....	7
A.3	Format of Inmarsat mobile number	7
A.4	Digit analysis	10
A.5	Presentation of Inmarsat mobile numbers in directories	10
A.6	Use of ship station identification for maritime applications of systems operated by Inmarsat	10
A.7	Group call numbering scheme for Inmarsat systems	12
A.8	Structure of the on-board identification digits in the Inmarsat numbering plan	13
Annex B – Numbering plan for access to the mobile-satellite services of Inmarsat from the international telex service		15
B.1	Introduction	15
B.2	Format of Inmarsat mobile international number.....	16
B.3	Telex destination codes for Inmarsat.....	16
B.4	Format of Inmarsat mobile number	16
B.5	Digit analysis	18
B.6	Presentation of Inmarsat mobile numbers in directories	18
B.7	Use of ship station identification for maritime applications of systems operated by Inmarsat	18
B.8	Group call numbering scheme for the Inmarsat system	20

	Page
Bibliography.....	22

Introduction

The advent of a mobile satellite communication system designed to serve the maritime community, initially made it possible for ships to participate in the automatic international telex service and the automatic international telephone service. This gave rise to the need for a unique international identity for ship stations.

In anticipation of other communications methods becoming available to connect the maritime community with public telecommunication networks worldwide, it was decided to standardize a form of identification for ships for telecommunications purposes usable over both terrestrial radio and satellite systems. It was also recognized that unique station identities would be an integral component of the automated distress and safety communication functions underpinning the development of the global maritime distress and safety system (GMDSS). The ship station identity was therefore established as part of the maritime mobile service identity concept, which includes other elements of maritime communications (see the relevant *Radio regulations* [ITU RR] and ITU-R Recommendations). The intention was that there would always be a direct and obvious link between ship station identities and international telecommunications numbers in order to facilitate the control of distress communications.

Satellite systems have proved they are able to resolve the various billing, routing, charging and signalling aspects in a manner compatible with the networks serving the rest of the communications environment, although initially it did not prove feasible to establish single-stage connection procedures to ships over terrestrial radio paths that can satisfy all these aspects. Moreover, mobile satellite systems are now designed to offer service to a number of different sectors, not just the maritime sector, and as such cannot support embedding the ship station identity in the international telecommunications number of the ship. Embedding the ship station identity in the international telecommunication number is considered unreasonable and contrary to the principles given in [b-ITU-T E.190] with regard to the efficient and effective use of numbering resources.

For the purposes of international public correspondence telecommunication, the ship station identity is now only relevant for those existing systems that have the ship station identity embedded in the numbering scheme. For those later implementations that will not embed the ship station identity in their numbering scheme, the ship station identity ceases to have any relevance for public correspondence telecommunication purposes. For illustrative purposes, the use of the ship station identity in the numbering scheme associated with the international telephone service and the international telex service provided by means of the Inmarsat maritime mobile satellite system is shown in Annexes A and B.

This Recommendation also specifies a method by which an internationally unique ship station identification may be assigned to all the ships participating in maritime mobile services.

For ships participating in the GMDSS, link establishment between ship station identity and any telecommunication number associated with that ship remains essential. If the link cannot be readily ascertained by visual inspection of the number, it must be available through reference to a suitable database.

Recommendation ITU-T E.217

Maritime communications – Ship station identity

1 Scope

This Recommendation specifies methods for the use of ship station identities in maritime telecommunications and the relationship with international public correspondence telecommunications.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

- [ITU-T E.164] Recommendation ITU-T E.164 (2010), *The international public telecommunication numbering plan*.
- [ITU-T F.69] Recommendation ITU-T F.69 (1994), *The international telex service – Service and operational provisions of telex destination codes and telex network identification codes*.
- [ITU-T U.11] Recommendation ITU-T U.11 (1993), *Telex and gentex signalling on intercontinental circuits used for intercontinental automatic transit traffic (type C signalling)*.
- [ITU-T U.12] Recommendation ITU-T U.12 (1993), *Terminal and transit control signalling system for telex and similar services on international circuits (type D signalling)*.
- [ITU-T Comp E.212] Complement to Recommendation ITU-T E.212 (2004), *List of mobile country or geographical area codes*. Annex to ITU Operational Bulletin, No. 803. https://www.itu.int/itudoc/itu-t/ob-lists/icc/e212_685.pdf
- [ITU-R M.585-7] Recommendation ITU-R M.585-7 (2015), *Assignment and use of identities in the maritime mobile service*.
- [ITU CS and CV] ITU (2015). Constitution of the International Telecommunication Union; Convention of the International Telecommunication Union. In: *Collection of the basic texts adopted by the Plenipotentiary Conference*. Geneva: ITU. <http://search.itu.int/history/HistoryDigitalCollectionDocLibrary/5.21.61.en.100.pdf>
- [ITU MM] ITU (2016). *Manual for use by the maritime mobile and maritime mobile-satellite services (Maritime manual)*. Geneva: ITU Radiocommunication Bureau. <http://handle.itu.int/11.1002/pub/80db9f92-en>
- [ITU RR] ITU (2016). *Radio regulations*, 5 vols. Geneva: ITU. <http://handle.itu.int/11.1002/pub/80da2b36-en>

NOTE – [ITU MM] makes reference to ITU-T and ITU-R Recommendations concerned with the creation and use of maritime mobile service identities and international telecommunication numbers for ships. Attention is also drawn to relevant extracts from the [ITU CS and CV] and to [ITU RR]. (See, for example, [ITU-R M.585-7] and Article 19 of [ITU RR].)

3 Definitions

3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

3.1.1 coast earth station [ITU RR]: An earth station in the fixed-satellite service or, in some cases, in the maritime mobile-satellite service, located at a specified fixed point on land to provide a feeder link for the maritime mobile-satellite service.

3.1.2 coast station [ITU RR]: A land station in the maritime mobile service.

3.1.3 maritime mobile-satellite service [ITU RR]: A mobile-satellite service in which mobile earth stations are located on board ships; survival craft stations and emergency position-indicating radiobeacon stations may also participate in this service.

3.1.4 maritime mobile service [ITU RR]: A mobile service between coast stations and ship stations, or between ship stations, or between associated on-board communication stations; survival craft stations and emergency position-indicating radio beacon stations may also participate in this service.

NOTE – Examples of conventional maritime mobile (terrestrial) services are high-frequency (HF) maritime service and the very high-frequency (VHF) maritime service (as defined in [ITU RR]).

3.2 Terms defined in this Recommendation

This Recommendation defines the following terms:

3.2.1 coast station identity: The coast station identification $X_1, X_2 \dots X_k$ transmitted on the radio path.

NOTE – In this Recommendation, the term *coast station identity* is intended to also include, for simplicity, *coast earth station identity*.

3.2.2 Ship station identity (based on [ITU-R M.585-7]): A nine-digit numeric identifier that serves to uniquely identify a ship station, and which takes the following format:

$$M_1 I_2 D_3 X_4 X_5 X_6 X_7 X_8 X_9$$

The initial three digits denote the administration responsible for the ship and are known as the maritime identification digits (MIDs). The value of the first MID has the range 2 to 7. Of the remaining values: 0 has been reserved; 1 is reserved for expansion of the MID range; 8 and 9 are used for other purposes, but with a view to them becoming available for future expansion.

Restrictions may apply with respect to the maximum number of digits that can be transmitted on some national telex and phone networks for the purpose of ship station identification.

3.2.3 ship station number: The number that identifies a ship for access from a public network and forms part of the international number to be dialled or keyed by a public network subscriber.

NOTE – In this Recommendation, the term *ship station* is intended to also include for simplicity, *ship earth station*.

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

APC	Aeronautical Public Correspondence
BGAN	Broadband Global Area Network
DDI	Direct Dial-In
GES	Ground Earth Station