

-01

TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU



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

International operation – Operation of international telephone services

Guidelines for ITU-T action on reported misuse of E.164 number resources

Supplement 2 – Possible actions to counter misuse

Recommendation ITU-T E.156 - Supplement 2



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	Е.700-Е.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
NETWORK MANAGEMENT	
International network management	E.4100-E.4199

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

Recommendation ITU-T E.156

Guidelines for ITU-T action on reported misuse of E.164 number resources

Supplement 2

Possible actions to counter misuse

Summary

This supplement to Recommendation ITU-T E.156 identifies possible actions that are open to Member States and Sector Members when perceived or potential misuse of national ITU-T E.164 numbers occurs. The decision to publish this supplement was taken by ITU-T in order for guidance to be provided immediately. The intention is to further develop this supplement with a detailed review of Recommendation ITU-T E.156, based on contributions received in the future.

This supplement is a first step towards identifying possible actions that might be taken to counter misuse, in advance of discussions over the suitability of including such information within Recommendation ITU-T E.156.

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T E.156	2006-05-11	2
1.1	ITU-T E.156 Suppl. 1	2007-11-08	2
1.2	ITU-T E.156 Suppl. 2	2011-06-10	2

i

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. 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 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 publication, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this publication is voluntary. However, the publication may contain certain mandatory provisions (to ensure, e.g., interoperability or applicability) and compliance with the publication 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 publication is required of any party.

INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this publication may involve the use of a claimed Intellectual Property Right. 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 publication development process.

As of the date of approval of this publication, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this publication. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database at <u>http://www.itu.int/ITU-T/ipr/</u>.

© ITU 2011

All rights reserved. No part of this publication may be reproduced, by any means whatsoever, without the prior written permission of ITU.

Recommendation ITU-T E.156

Guidelines for ITU-T action on reported misuse of E.164 number resources

Supplement 2

Possible actions to counter misuse

1 Scope

This supplement to Recommendation ITU-T E.156 identifies possible actions that are open to Member States and Sector Members when perceived or potential misuse of national E.164 numbers occurs. The decision to publish this supplement was taken by ITU-T in order for guidance to be provided immediately. The intention is to further develop this supplement with a detailed review of Recommendation ITU-T E.156, based on contributions received in the future.

This supplement is a first step towards identifying possible actions that might be taken to counter misuse, in advance of discussions over the suitability of including such information within Recommendation ITU-T E.156.

2 Practical steps to take when confronted with misuse or misappropriation

Step	Action
1	Ask the originating operator, also known as carrier, how they routed the call and for details of the Call Detail Record (CDR) (also known as a call data record or charging data record). If the originating carrier is unwilling to do so, it usually helps to invoke WTSA Resolution 61. Generally, if the originating carrier is made aware of the circumstances concerning a perceived or potential misuse of ITU-T E.164 number resources, and is advised that the matter will escalate unless routing and CDR details are provided, they will provide the information. The relevant entities (for example the national regulator) may be asked to give advice, to intervene or even to request the information in their own name, but it has in the past proved to be most effective when the receiving carrier requests such information.
2	Once the carrier to whom the originating carrier routed the call has been identified, they should be contacted and, if necessary, the process should be repeated until the offending carrier is known. Although the process is not easy, in practice it has proved successful in many cases. Once the offending carrier has been identified, the relevant national agency, which must be located in the country where the misuse/misappropriation originated (country of jurisdiction), can be informed. It may be helpful to use a large, well-established carrier to identify the originating carrier and obtain detailed information.
3	 The entity that has discovered and/or suffered the misuse, should explain to the originating carrier: a) the problems that have been caused, b) possible counter measures, and c) ways in which their routing of calls could be changed to a higher quality circuit. This may work, but (i) the originator of the misuse (perpetrator) goes free and is able to continue the misuse through a different node, and (ii) the problem may be settled for a short time, but the original situation may occur again within a short time.

Step	Action	
4	In addition, as appropriate under relevant laws and regulations, a country or group of countries, or Sector Members, might establish a function/resource to act as a focal point for numbering misuse issues. Such an entity would in particular:	
	i. receive reports of misuse	
	ii. format the reports and post them on the ITU's misuse report site (http://www.itu.int/ITU-T/secured/misuse/index.html)	
	iii. monitor responses published on the ITU's misuse site and send them to the source of the misuse report	
	iv. monitor websites for offers of premium rate numbers based on misuse of numbers	
	v. send a notification to assignees of the resources to inform that such resources might have been misused	
	vi. contact the operators of websites mentioned under 4 iv. above to complain about the misuse	
	vii. contact the source of reported misuse and take actions to request that the misuse be stopped	
	viii. investigate to find out which intermediate carriers are involved in the misuse and contact them to request that the misuse be stopped	

Further information concerning the possible or perceived misuse of numbers can be notified to ITU by duly authorized parties for publication in the ITU Operational Bulletin (<u>http://www.itu.int/pub/T-SP/e</u>).

The need to continually monitor perceived and potential misuse of numbers is recognised, as is the need to share information where parties should learn by the activities that they encounter. In utilising the exchange of information afforded by the Operational Bulletin, there should be increased avoidance of perceived misuse.

SERIES OF ITU-T RECOMMENDATIONS

- Series A Organization of the work of ITU-T
- Series D General tariff principles
- Series E Overall network operation, telephone service, service operation and human factors
- Series F Non-telephone telecommunication services
- Series G Transmission systems and media, digital systems and networks
- Series H Audiovisual and multimedia systems
- Series I Integrated services digital network
- Series J Cable networks and transmission of television, sound programme and other multimedia signals
- Series K Protection against interference
- Series L Construction, installation and protection of cables and other elements of outside plant
- Series M Telecommunication management, including TMN and network maintenance
- Series N Maintenance: international sound programme and television transmission circuits
- Series O Specifications of measuring equipment
- Series P Terminals and subjective and objective assessment methods
- Series Q Switching and signalling
- Series R Telegraph transmission
- Series S Telegraph services terminal equipment
- Series T Terminals for telematic services
- Series U Telegraph switching
- Series V Data communication over the telephone network
- Series X Data networks, open system communications and security
- Series Y Global information infrastructure, Internet protocol aspects and next-generation networks
- Series Z Languages and general software aspects for telecommunication systems