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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

ITU-T Recommendation E.156

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ITU-T Recommendation E.156

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

Summary

This Recommendation outlines the procedures that the TSB Director should undertake when he has received reports of alleged misuse from members, including methods to address and counter any alleged misuse when such reports are brought to his attention.

Source

ITU-T Recommendation E.156 was approved on 11 May 2006 by ITU-T Study Group 2 (2005-2008) under the Resolution 1 procedure.

Keywords

Numbering.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. 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 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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As of the date of approval of this Recommendation, 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.

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ITU-T Recommendation E.156

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

1 Scope

This Recommendation provides guidelines for actions by the TSB Director upon receipt of reports of alleged misuse of E.164 telephone numbering resources, as indicated in Resolution 20 of the WTSA (Florianópolis, 2004).

The actions that the TSB Director can take with respect to each type of an E.164 numbering resource are limited by the extent to which the ITU-T has responsibility for allocation and management over that numbering resource.

These different types of numbering resources are:

- Country Code for Geographic Areas.
- Codes for Inmarsat and Groups Of Countries (e.g., +388).
- Country Code for Networks (e.g., +882), Country Codes for Global Services (e.g., +800, +878, etc.), Country Codes for GMSS Operators (e.g., +881).
- Country Codes for trials (e.g., +991).
- Unassigned Country Codes.

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 Recommendation E.152 (2006), *International freephone service*.

– ITU-T Recommendation E.154 (1998), *International Shared Cost Service*.

– ITU-T Recommendation E.155 (1998), *International Premium Rate Service*.

– ITU-T Recommendation E.164 (2005), *The international public telecommunication numbering plan*.

– ITU-T Recommendation E.164.1 (2006), *Criteria and procedures for the reservation, assignment and reclamation of E.164 country codes and associated identification codes (ICs)*.

– ITU-T Recommendation E.164.2 (2001), *E.164 numbering resources for trials*.

– ITU-T Recommendation E.164.3 (2001), *Principles, criteria and procedures for the assignment and reclamation of E.164 country codes and associated identification codes for groups of countries*.

– ITU-T Recommendation E.168 (2002), *Application of E.164 numbering plan for UPT*.

– ITU-T Recommendation E.169 (2002), *Application of Recommendation E.164 numbering plan for universal international numbers for international telecommunications services using country codes for global services*.

– ITU-T Recommendation E.169.1 (2001), *Application of Recommendation E.164 numbering plan for universal international freephone numbers for international freephone service*.

– ITU-T Recommendation E.169.2 (2000), *Application of Recommendation E.164 numbering plan for universal international premium rate numbers for the international premium rate service*.

– ITU-T Recommendation E.169.3 (2000), *Application of Recommendation E.164 numbering plan for universal international shared cost numbers for international shared cost service*.

– ITU-T Recommendation E.190 (1997), *Principles and responsibilities for the management, assignment and reclamation of E-series international numbering resources*.

3 Abbreviations and acronyms

This Recommendation uses the following abbreviations:

ITU International Telecommunication Union

NCT Numbering Coordination Team

OA Operating Agency

ROA Recognized Operating Agency

TIES Telecommunication Information Exchange Services

TSB Telecommunication Standardization Bureau

4 Misuse of E.164 numbers

A misuse of an E.164 international numbering resource occurs where the use of that numbering resource does not conform to the relevant ITU-T Recommendation(s) assignment criteria for which it was assigned or when an unassigned numbering resource is used in the provision of a telecommunication service. Different groups of E.164 international numbering resources have different assignment criteria, and therefore different forms of misuse may be identified. Where the misuse is alleged to occur in relation to the use of an international numbering resource, then the procedures in this Recommendation shall apply.

In cases where such misuse is deemed to be occurring nationally, then the issue should be raised with the relevant national numbering plan administrator. Issues regarding national numbering plans are outside the scope of this Recommendation.

5 Procedures on reported misuse of E.164 numbers

The procedures detailed in this Recommendation are intended to assist the TSB Director to gather and disseminate reports from Member States, or Recognized Operating Agencies (ROAs) concerning alleged misuse of numbering resources with the intention of stopping such misuse where it has been determined to exist. In this context, "Misuse of numbering resources" means that they are not being used in accordance with the relevant ITU-T Recommendation(s). In this respect, attention is drawn to 6.2.5 and 6.2.6/E.190.

An Assessment Committee will be formed, comprising of the Chairman of the lead ITU-T Study Group on numbering, and designated advisors/representatives, drawn from members of that Study Group. The role of the Assessment Committee will be to advise the TSB Director on actions relating to misuses of a numbering resource.

The following scenarios have been identified.

5.1 Numbering resources for geographic areas

A Member State or a Recognized Operating Agency which believes misuse of a numbering resource is occurring should contact the TSB Director (see clause 8).

1) On receipt of a report from a Member State or a Recognized Operating Agency of a possible misuse of a numbering resource, the TSB Director, as a follow-up, will inform:
   a) The Assessment Committee, who may provide additional information to the TSB Director that could be used by the concerned Member States informed in b) and c).
   b) The Member State from whose jurisdiction the report is initiated.
   c) The Member State in whose jurisdiction the alleged misuse is occurring (if different from b) above).
2) It should be noted that the TSB Director will not act as mediator to resolve the misuse (as stated in Council Resolution 262), but if asked by the involved Member States, may provide such guidance and expert advice as appropriate.
3) The TSB Director will notify the initiator of the report of the progress and outcome of the steps outlined above, and update the website.
4) The TSB Director will inform the Assessment Committee of the determination reached based on the steps outlined above.
5) The Assessment Committee will report to the next meeting of the lead numbering Study Group.

5.2 Numbering resources for Inmarsat and groups of countries

For the purposes of this clause, Inmarsat and Groups of Countries are responsible for follow-up actions regarding alleged misuse of numbering resources for which they are assignees:

a) Codes for Inmarsat (e.g., +870).

b) Codes for Groups Of Countries (e.g., +388).

A Member State or a Recognized Operating Agency that believes misuse of a numbering resource is occurring should contact the TSB Director (see clause 8).

1) On receipt of a report from a Member State or a Recognized Operating Agency of a possible misuse of an Inmarsat or Group of Countries Code, the TSB Director will inform the Assessment Committee and the Member State from whose jurisdiction the report is initiated. Originators of reports may request to remain anonymous, in which case their name shall remain confidential within TSB.
2) On conclusion of the discussions of the Assessment Committee, that there are basis for the alleged misuse of a numbering resource, the TSB Director will write to the assignee, requesting clarification from the assignee.
3) The letter shall:
   - identify the issue of alleged misuse to the assignee;
   - remind the assignee of the relevant conditions associated with assignment, and ask for a response within 45 days as to whether the assignee:
     – is aware of the reported alleged misuse; or
     – considers that there is no misuse; or
     – if aware of the misuse, how the assignee will proceed in rectifying the issue and in what times-cales.

4) On receipt of a response from the assignee, the TSB Director will inform the Assessment Committee and the Member State from whose jurisdiction the report is initiated, and monitor any further actions as notified.

5) The Assessment Committee will make a recommendation to the TSB Director with respect to what, if any, actions to take.

It should be noted that the TSB Director will not act as a mediator to resolve the misuse.

6) The TSB Director will notify the initiator of the report of the progress and outcome of the steps outlined above and update the website.

7) When the TSB Director decides on an action, the Assessment Committee and the Member State from whose jurisdiction the report is initiated will be informed with the details of the action. The Assessment Committee will report to the next meeting of the lead numbering Study Group.

5.3 Numbering resources for global services and networks

For the purposes of this clause, the TSB Director is considered to be the assignee for the Country Codes for global services and networks (see Figures 2 and 3/E.164). These numbering resources include:

a) Shared Network codes refer to those numbering resources that exist behind country code 882.

b) Universal Service Numbers refer to those numbering resources that exist behind various country codes that include +800, +808 and +979.

c) Universal Personal Telecommunications refers to those numbering resources that exist behind +878.

d) Global Mobile Satellite System refers to those numbering resources that exist behind +881.

A Member State or a Recognized Operating Agency that believes that misuse of a numbering resource is occurring should contact the TSB Director (see clause 8).

1) On receipt of a report from a Member State or a Recognized Operating Agency of a possible misuse of a shared Network code, or Global Service Code, the TSB Director will inform the Assessment Committee and the Member State from whose jurisdiction the report is initiated. Originators of reports may request to remain anonymous, in which case their name will remain confidential within TSB.

NOTE – In the case of a +882 numbering resource, the Numbering Coordination Team (NCT) will make an initial determination of the validity of the complaint.

2) On conclusion of the discussions of the Assessment Committee, that there are basis for the alleged misuse of a numbering resource, the TSB Director will write to the assignee, requesting clarification from the assignee.

3) The letter shall:

- identify the issue of alleged misuse to the assignee;
- remind the assignee of the relevant conditions associated with the assignment, and ask for a response within 45 days as to whether the assignee:
  - is aware of the reported alleged misuse; or
  - considers that there is no misuse; or
  - if aware of the misuse, how the assignee will proceed in rectifying the issue and in what time-scales.

4) On receipt of a response from the assignee, the TSB Director will inform the Assessment Committee and the Member State from whose jurisdiction the report is initiated, and monitor any further actions as notified.

5) The Assessment Committee will make a recommendation to the TSB Director with respect to what, if any, actions to take.

It should be noted that the TSB Director will not act as mediator to resolve the misuse.

6) The TSB Director will notify the initiator of the report of the progress and outcome of the steps outlined above and update the website.

7) When the TSB Director decides on an action, the Assessment Committee and the Member State from whose jurisdiction the report is initiated will be informed with the details of the action. The Assessment Committee will report to the next meeting of the lead numbering Study Group.

5.4 Numbering resources for trials

For the purposes of this clause, the TSB Director is considered to be, in effect, the assignee for Country Codes for trials.

A Member State or a Recognized Operating Agency that believes that misuse of a numbering resource is occurring should contact the TSB Director (see clause 8).

1) On receipt of a report from a Member State or a Recognized Operating Agency of a possible misuse of a numbering resource for trials, the TSB Director will inform the Assessment Committee and the Member State from whose jurisdiction the report is initiated. Originators of reports may request to remain anonymous, in which case their name shall remain confidential within TSB.

2) On conclusion of the discussions of the Assessment Committee, that there are basis for the alleged misuse of a numbering resource, the TSB Director will write to the assignee, requesting clarification from the assignee.

3) The letter shall:

- identify the issue of alleged misuse to the assignee;
- remind the assignee of the relevant conditions associated with assignment, and ask for a response within 45 days as to whether the assignee:
  - is aware of the reported alleged misuse; or
  - considers that there is no misuse; or
  - if aware of the misuse, how the assignee will proceed in rectifying the issue and in what time-scales.

4) On receipt of a response from the assignee, the TSB Director will inform the Assessment Committee and the Member State from whose jurisdiction the report is initiated, and monitor any further actions as notified.

5) The Assessment Committee will make a recommendation to the TSB Director with respect to what, if any, actions to take.

It should be noted that the TSB Director will not be required to act as mediator to resolve the misuse.

6) The TSB Director will notify the initiator of the report of the progress and outcome of the steps outlined above, and update the website.

7) When the TSB Director decides on an action, the Assessment Committee and the Member State from whose jurisdiction the report is initiated will be informed with the details of the action. The Assessment Committee will report to the next meeting of the lead numbering Study Group.

5.5 Numbering resources that have not been assigned

These numbering resources are listed as "spare" or "reserved" in the ITU publications, and for the purposes of this clause, the TSB Director is considered to be the assignee for these numbering resources.

A Member State or a Recognized Operating Agency that believes that misuse of a numbering resource is occurring should contact the TSB Director (see clause 8).

1) On receipt of a report from a Member State or a Recognized Operating Agency of a possible use of an unassigned country code, the TSB Director will inform the Assessment Committee and the Member State from whose jurisdiction the report is initiated. Originators of reports may request to remain anonymous, in which case their name shall remain confidential within TSB.

2) On conclusion of the discussion of the Assessment Committee, that there is basis to believe use of an unassigned numbering resource is occurring, the TSB Director will write to the entity believed to be using the resource, requesting clarification of their use. A copy of the letter sent to the user will be sent to the Member State with appropriate jurisdictional authority over the entity which is allegedly using the resource.

3) The letter shall:
   - identify the issue to the entity determined to be using the resource;
   - remind the user the country code has not been assigned, and ask for a response within 45 days as to whether the user:
     – is aware of the reported alleged misuse;
     – if so, ask the user to either provide a reason as to why an unassigned numbering resource is being used, and/or require that the user ceases to use the numbering resource.

4) On receipt of a response from the alleged user or from the relevant Member State, the TSB Director will inform the Assessment Committee and the Member State from whose jurisdiction the report is initiated, and monitor any further actions as notified.

5) The Assessment Committee will make a recommendation to the TSB Director with respect to what, if any, actions to take.

6) It should be noted that the TSB Director will not be required to act as mediator to resolve the misuse.

7) The TSB Director will notify the initiator of the report of the progress and outcome of the steps outlined above, and update the website.

8) When the TSB Director decides on an action, the Assessment Committee and the Member State from whose jurisdiction the report is initiated will be informed with the details of the action. The Assessment Committee will report to the next meeting of the lead numbering Study Group.

6 Measures available to address reported misuse of E.164 numbers

6.1 Numbering resources for geographic areas

The TSB Director's role will be limited to notifying the concerned Member States, as described in this Recommendation.

The TSB Director will not intervene in any disputes concerning such numbering resources. Nonetheless, the TSB Director, if asked, can provide technical assistance to the concerned Member States to assist them in finding a solution. This assistance can be on a confidential basis.

Member States may publicize via the ITU Operational Bulletin such communications as they think appropriate in connection with alleged misuse of numbering resources that are within their control, for example, pointing out that particular numbering ranges are not assigned and therefore should not be used for routeing.

6.2 Numbering resources for global services and networks

Potential remedial actions could be either or all (but not limited) to:

- withdrawal of the assignment;
- publicize the misuse via the Operational Bulletin;
- publicize the misuse via an electronic mail exploder list;
- publicize measures, via the Operational Bulletin and/or the electronic mail exploder list, as advised by the assignee, so that originating networks are aware and can take actions to avoid routeing calls to the numbers that are being misused.

6.3 Numbering resources for Inmarsat and group of countries

Potential remedial actions could be either or all (but not limited) to:

- withdrawal of the assignment;

  NOTE – Inmarsat's role as the provider of the Maritime emergency distress service negates the application of this remedial action upon Inmarsat's code allocation.
- publicize the misuse via the Operational Bulletin;
- publicize the misuse via an electronic mail exploder list;
- publicize measures, via the Operational Bulletin and/or the electronic mail exploder list, as advised by the assignee, so that originating networks are aware and can take actions to avoid routeing calls to the numbers that are being misused.

6.4 Numbering resources for trials

Potential remedial actions could be either or all (but not limited) to:

- withdrawal of the assignment;
- publicize the misuse via the Operational Bulletin;
- publicize the misuse via an electronic mail exploder list;
- publicize measures, via the Operational Bulletin and/or the electronic mail exploder list, as advised by the assignee, so that originating networks are aware and can take actions to avoid routeing calls to the numbers that are being misused.

6.5 Numbering resources that have not been assigned

Potential remedial actions could be either or all (but not limited) to:

- publicize the misuse via the Operational Bulletin;
- publicize the misuse via an electronic mail exploder list;
- publicize measures, via the Operational Bulletin and/or the electronic mail exploder list, so that originating networks are aware and can take actions to avoid routeing calls to the numbers that are being misused.

7 Availability of reports and replies

All reports, and any replies, will be posted by the TSB Director on a website accessible by TIES users. Originators of reports may request to remain anonymous, in which case their name shall remain confidential and not be included in the published report.

8 Submission of reports of possible misuse

Member States or Recognized Operating Agencies are requested to report alleged misuse by using the form available on the ITU website.

For those ROAs who are either Sector Members or Associates, the notification of alleged misuse may be made directly to the TSB Director and copied to the Member State of the ROA making the notification.

For those Operating Agencies (OAs) who are not Sector Members or Associates of the ITU, notification should be submitted via its Member State.

Any reported case of alleged misuse will be processed in accordance with clauses 5 and 6 above.

Member States or Recognized Operating Agencies may consult the ITU website for information regarding reported cases and the actions taken in response to those reports.

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