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| PLENARY MEETING | | Addendum 28 to Document 42-E | |
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| African Telecommunication Union Administrations | | | |
| Proposed modification of Resolution 61 - Countering and combating misappropriation and misuse of international telecommunication numbering resources | | | |
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| **Abstract:** | This contribution proposes a revision to Resolution 61 to encourage studies in ITU-T study groups to assist in resolving misuse and misappropriation cases that result in or are enablers for fraud instances, and to enhance the role of ITU‑T to help in combating misuse and misappropriation of numbering resources. It also addresses the difficulties of Member States, in particular developing countries, to combat misuse and misappropriation as a result of complexity of modern infrastructures and means of services provisioning, and due to the imbalance in significant international market power compared to major operating agencies who are mostly operating internationally and/or across-borders. |

# 1 Introduction

This contribution is to address the issue of misuse and misappropriation in international telecommunication numbering resources, where it is noted that, while misuse continues, many cases appear not to be reported to ITU-T, either due to unawareness of the role of ITU-T or due to insufficiency of the measure that are taken by ITU-T to combat misuse and misappropriation.

# 2 Challenges

It is noted also that due to the increasing complexity of the state-of-the-art telecommunication/ICT infrastructures and the advances in the methodologies and technologies involved in services provisioning (including fixed and mobile IP‑based infrastructures and ample of innovative services) it became more difficult to identify and trace misuse and misappropriation cases, especially by developing countries with limited technical and human resources and low‑significant market power of their operators, and this is evident from ITU-T statistics, which indicate that the most affected countries are those from the developing world.

# 3 Discussion

Some of the proposals and contributions to ITU-T along the years, and to this Assembly, do not appear to be conductive in letting ITU-T have a reasonable role to combat misuse, whereas most alleged misuse cases are directed against developing countries. Also, there are efforts to disjoin the relation between misuse and the resulting fraud, whereas it is very evident that misuse is at many times commensurate with fraud, which is an adverse result of misuse, hence should stimulate ITU to take serious actions to help in combating misuse to decrease and deter fraud.

It is noted also that the ITU Constitution (CS) never mentioned the offering of services at the “Lowest Cost” solely, instead the CS focused on improving efficiency of services, usefulness and availability, which can be interpreted as providing services at the highest quality at affordable prices to the users. Amendment to Resolution 61 is accordingly made.

# 4 Proposal

The proposed revision to Resolution 61 addresses strengthening the role of ITU-T to combat misuse and misappropriation of numbering resources. This should take into consideration the difficulties facing the developing countries to identify and to combat misuse and misappropriation with its limited resources and experience and usually low SMP of its operating agencies; and therefore is in need of significant support from ITU-T in this regard, whereas they are the predominate victim of such fraudulent misuse activities.

MOD AFCP/42A28/1

RESOLUTION 61 (REV.HAMMAMET, 2016)

Countering and combating misappropriation and misuse of international telecommunication numbering resources

(Johannesburg, 2008; Dubai, 2012; Hammamet, 2016)

The World Telecommunication Standardization Assembly (Hammamet, 2016),

recalling

*a)* Resolution 29 (Rev. Hammamet, 2016) of this assembly, on alternative calling procedures on international telecommunication networks, which (citing ITU Council Resolution 1099) urged the ITU Telecommunication Standardization Sector (ITU‑T) to develop, as soon as possible, the appropriate Recommendations concerning alternative calling procedures;

*b)* Recommendation ITU‑T E.156, which sets out guidelines for ITU‑T action on reported misuse of ITU-T E.164 numbering resources, and Recommendation ITU‑T E.156 Supplement 1, which provides a best-practice guide on countering misuse of ITU-T E.164 numbering resources;

*c)* the purposes of the Union to promote the development of technical facilities and their most efficient operation with a view to improving the efficiency of telecommunication services, increasing their usefulness and making them, as far as possible, generally available to the public;

*d)* the purpose of the Union to harmonize the actions of Member States, and its mandate to coordinate efforts to harmonize the development of telecommunication facilities, …, with a view to full advantage being taken of their possibilities;

*e)* the commitment of signatory Member States to the ITRs (Dubai, 2012) to endeavour to ensure that authorized operating agencies cooperate in the establishment, operation and maintenance of the international network to provide a satisfactory quality of service;

*f)* the commitment of signatory Member States to the ITRs (Dubai, 2012) to endeavour to ensure that international telecommunication numbering resources specified in ITU-T Recommendations are used only by the assignees and only for the purposes for which they were assigned; and that unassigned resources are not used,

noting

*a)* the cases reported to the Director of the Telecommunication Standardization Bureau (TSB) regarding misappropriation and misuse of ITU-T E.164 numbers;

*b)* that many Administrations and operating agencies are still not aware of the reporting mechanism for misuse of ITU-T E.164 resources operated by TSB, and that there are many other numbering misuse cases not reported to the Director of TSB,

recognizing

*a)* that the misuse and the fraudulent misappropriation of national telephone numbers and country codes is harmful;

*b)* that numbering resource misuse is a key factor in fraud perpetrated against mobile networks and their customers;

*c)* that the blocking of calls by barring the country code to a country in order to avoid fraud is harmful, whereas other options are the selective blocking or the withholding of interconnection payments, for particular international numbers, under a case by case authorization from national regulators;

*d)* that operating agencies, entities or individuals engaged in the misappropriation and misuse of numbering resources are continually enhancing their capabilities and developing innovative fraudulent techniques and practices to circumvent Member States’ and other affected parties’ efforts to combat misuse and misappropriation of their numbering resources;

*e)* the difficulties that face Member States and their operating agencies, particularly in developing countries, to identify, analyse and discover cases of numbering misuse and misappropriation, due to the complexity of current infrastructures and services provisioning, as well as the innovative techniques used by entities engaged in these fraudulent activities;

*f)* that inappropriate activities causing loss of revenue, and which are continually developing, are an important issue to be studied;

*g)* the important role of the relevant ITU-T study groups in providing guidance to the Director of TSB in analysing reported cases of numbering misuse and misappropriation to help affected Member States in resolving these cases;

*h)* that the noticeable proliferation of cross-border networks and service provisioning by multinational operating agencies and traffic aggregators, especially those having Significant International Market Power (SIMP), has made it more difficult for developing countries and their operating agencies with much less power to negotiate for the alleviation and combat of misuse and misappropriation of their numbering resources;

*i)* that extraterritorial use of numbering resources are considered illegal misuse by several Administrations;

*j)* that bypassing of calls, although using the country code under which national operator have drawn their number block, is a fraudulent activity, where those national operators are being defrauded of legitimate settlement revenues through the misuse of the number block drawn from their country code;

*k)* relevant provisions of the ITU Constitution, Convention and the International Telecommunication Regulations (ITRs),

aware of

*a)* the difficulties that face Member States and their operating agencies, particularly of the developing countries, to discover, analyse and identify cases of numbering misuse and misappropriation, due to the complexity of current infrastructures and services provisioning, as well as to the innovative fraudulent techniques used by entities engaged in such activities;

*b)* the current complexities in determining valid telephone numbering details,

resolves to invite Member States

1 to ensure that ITU-T E.164 numbering resources are used only by the assignees and only for the purposes for which they were assigned, and that unassigned resources are not used;

2 to endeavour to ensure that operating agencies authorized by Member States release routing information to duly authorized agencies in cases of fraud, numbers misappropriation or misuse, in accordance with national law;

3 to encourage administrations and national regulators to collaborate and share information on fraudulent activities related to misappropriation and misuse of international numbering resources, and to collaborate to counter and combat such activities;

4 to encourage all international telecommunication operators to enhance the effectiveness of ITU's role and to give effect to its Recommendations, particularly those of ITU‑T Study Group 2, in order to promote a new and more effective basis to counter and combat fraudulent activities due to number misappropriation and misuse, which would help limit the negative effects of these fraudulent activities and the blocking of international calls;

5 to encourage administrations and international telecommunication operators to implement ITU‑T Recommendations in order to mitigate the adverse effects of fraudulent number misappropriation and misuse, including blocking of calls to certain countries, and blocking or withholding of interconnection payments of international calls, under a case by case authorization from national regulators,

resolves further

1 that administrations and operating agencies authorized by Member States take, to the furthest extent practicable, all reasonable measures to provide information necessary to address issues related to number misappropriation and misuse;

2 that administrations and operating agencies authorized by Member States should take note of and consider, to the furthest extent practicable, the "Suggested guidelines for regulators, administrations and operating agencies authorized by Member States for dealing with number misappropriation", in accordance with the attachment to this resolution;

3 that Member States and national regulators should take note of instances of activities related to the misappropriation and misuse of international numbering resources, in accordance with Recommendation ITU‑T E.164, through relevant ITU‑T resources (e.g. the ITU-T Operational Bulletin);

4 to request Study Group 2 to continue to study all aspects and forms and mechanisms of misappropriation and misuse of numbering resources, in particular of international country codes, with a view to amending Recommendation ITU‑T E.156 and its supplements and guidelines to support countering and combating these activities, including withholding of interconnection payments of international calls, and in particular to amend that Recommendation so that it states that Member States shall endeavour to ensure that international telecommunication numbering resources specified in ITU-T Recommendations are used only by the assignees and only for the purposes for which they were assigned, and that unassigned resources are not used;

5 that misuse reports should continue to be submitted to the Director of TSB and published on the ITU-T website, so that a record can be kept of misuse activities;

6 to request ITU-T Study Group 3, in collaboration with Study Group 2, to develop definitions for inappropriate activities, including inappropriate activities causing loss of revenue, related to misappropriation and misuse of international numbering resources specified in the relevant ITU-T Recommendations, and to continue to study such matters;

7 to request Study Group 3 to study the economic effects resulting from misappropriation and misuse of numbering resources, including call blocking and withholding of interconnection payments.

Attachment   
(to Resolution 61)

Suggested guidelines for regulators, administrations and operating agencies authorized by Member States for dealing with number misappropriation

In the interest of global development of international telecommunications, it is desirable for regulators, administrations and operating agencies authorized by Member States to cooperate with others and to take a collaborative and reasonable approach to avoid the blocking of country codes, whereas other options are the selective blocking or the withholding of interconnection payments for particular international numbers, under a case by case authorization from national regulators. Cooperation and subsequent actions would have to take account of the constraints of national regulatory frameworks and laws. It is recommended that the following guidelines be applied in country X (the location of the calling party), country Y (the country through which the call is routed) and country Z (the country to which the call was originally destined) regarding number misappropriation.

SCENARIO 1. Complaints received on the destination side

| Country X (location of call origination) | Country Y (country through  which the call is routed) | Country Z  (country to which the call was originally destined) | Director of ITU-T  (TSB) |
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|  |  | On receipt of a complaint, the national regulator finds the information: name of the carrier from which the call originated, time of the call and called number, and passes this information to the national regulator in country X. | A Member State or a Recognized Operating Agency that believes misuse of a numbering resource is occurring should notify the TSB Director.  The notification is published on the ITU-T website and in the ITU Operational Bulletin.  Further actions by TSB are detailed in ITU-T Recommendation E.156. |
| When a complaint is received, the first information that is required is the name of the carrier from which the call originated, the time of the call and the called number. |  |  |  |
| Once the call details are known, the national regulator requests relevant information from the carrier from which the call originated, to determine the next carrier through which the call was routed. |  |  |  |
| Once the relevant information has been found, the national regulator is to advise the national regulator of the next country of the call details (including the call detail record) and request the national regulator to request further information. | The national regulator asks the other carriers for relevant information. This process continues until the information on where the call was misappropriated is found. |  |  |
| Cooperation from national regulators, as appropriate, to manage these issues. | Cooperation is required from entities involved, to attempt to bring a criminal case against the perpetrators. | Cooperation is encouraged between and among national regulators involved, to resolve these issues. |  |

SCENARIO 2. Complaints received on the origination side

| Country X (location of call origination) | Country Y (country through  which the call is routed) | Country Z  (country to which the call was originally destined) | Director of ITU-T  (TSB) |
| --- | --- | --- | --- |
| On receipt of a complaint, the national regulator requires the name of the carrier from which the call originated, the time of the call and the called number.  It also requires the name of the carrier to whom the call is destined, time of the call and called number, and passes it to the national regulator in country Z. |  |  | A Member State or a Recognized Operating Agency that believes misuse of a numbering resource is occurring should notify the TSB Director.  The notification is published on the ITU-T website and in the ITU Operational Bulletin.  Further actions by TSB are detailed in ITU-T Recommendation E.156. |
| Once the call details are known, the national regulator requests relevant information from the carrier from which the call originated, to determine the next carrier through which the call was routed. |  |  |  |
| The national regulator may also advise the national regulator of the next country of the call details (including the call detail record) and, if needed, requests the national regulator to request further information. | The national regulator may ask the other carriers for relevant information. This process may continue until all the countries through which the call is routed are advised. |  |  |
| Cooperation from national regulators, as appropriate, to manage these issues.  Inform the relevant national regulators on the measures taken, (e.g. blocking of calls, withholding of interconnection payments). | Cooperation is required from entities involved. | Cooperation is encouraged between and among national regulators involved, to resolve these issues. |  |

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