

WORLD TELECOMMUNICATION STANDARDIZATION  
ASSEMBLY  
New Delhi, 15-24 October 2024

---

**Resolution 65 – Calling party number delivery,  
calling line identification and origin  
identification information**

## FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, and 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.

© ITU 2024

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

## RESOLUTION 65 (Rev. New Delhi, 2024)

### **Calling party number delivery, calling line identification and origin identification information**

*(Johannesburg, 2008; Dubai, 2012; Hammamet, 2016; Geneva, 2022; New Delhi, 2024)*

The World Telecommunication Standardization Assembly (New Delhi, 2024),

*concerned*

- a)* that there appears to be a trend to either suppress or amend the transmission across international boundaries of calling party number (CPN), calling line identification (CLI) and origin identification (OI) information, in particular the country code and the national destination code;
- b)* that such practices have an unfavourable effect on security and economic issues, in particular for developing countries<sup>1</sup>;
- c)* about the number of cases reported to the Director of the Telecommunication Standardization Bureau on ITU-T E.164 numbering misappropriation and misuse related to CPN non-delivery or spoofing for which there is no indication that the problem has completely stopped;
- d)* that previous-generation signalling protocols and telecommunication networks need to consider emerging requirements;
- e)* that there is an ever-increasing use of spoofed CPN and CLI, short-message service (SMS) interception, voice cloning technologies, etc.;
- f)* that work on this topic in Study Group 2 of the ITU Telecommunication Standardization Sector (ITU-T) needs to be expedited and expanded to cater for the changing environment of service delivery and network infrastructures, including emerging telecommunications/information and communication technologies and services, such as next-generation networks and future networks,

*noting*

- a)* No. 32 (Article 3.6) of the International Telecommunication Regulations (Dubai, 2012) (ITRs) regarding the provision of international CLI by the signatory Member States to the ITRs;
- b)* relevant resolutions:
- i)* Resolution 61 (Rev. New Delhi, 2024) of this assembly, on countering and combating misappropriation and misuse of international telecommunication numbering, naming, addressing and identification resources;

---

<sup>1</sup> These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

- ii) Resolution 21 (Rev. Bucharest, 2022) of the Plenipotentiary Conference, on measures concerning alternative calling procedures on international telecommunication networks;
- iii) Resolution 29 (Rev. New Delhi, 2024) of this assembly, on alternative calling procedures on international telecommunication networks;
- c) relevant ITU-T Recommendations,

*noting further*

- a) that some countries and regions have adopted national laws, directives and recommendations regarding CPN non-delivery and spoofing, and/or on ensuring confidence in OI, and that some countries have national data-protection and data-privacy laws, directives and recommendations;
- b) that the CPN makes it possible to identify the party responsible for making the call;
- c) that the presence of verification mechanisms for the various calling party identifiers may increase the reliability of the information transmitted;
- d) that the implementation of the reference architecture specified in Recommendation ITU-T Q.3057 and other relevant ITU-T Recommendations for the interconnection between trustable network entities may ensure the security of signalling information transmitted over telecommunication networks;
- e) that digital signatures (digital certificates) used in signalling exchanges should be globally interoperable;
- f) that users should be aware that CPN/OI may be spoofed,

*reaffirming*

that it is the sovereign right of each country to regulate its telecommunications and, as such, regulate the provision of CLI, CPN delivery and OI information, taking into account the Preamble to the ITU Constitution and the relevant provisions of the ITRs related to the provision of CLI information,

*resolves*

- 1 that international CPN delivery shall be provided on the basis of the relevant ITU-T Recommendations;
- 2 that international CLI and OI delivery shall be provided on the basis of the relevant ITU-T Recommendations where technically possible;
- 3 that the delivered CPN should contain at least either the calling party number or the specially allocated number of the operator/service provider responsible for making the call, so that a terminating country can identify the operator/service provider of the outgoing call, or identify the terminal that originates the call, before it is delivered from the originating country to that terminating country;

4 that the delivered CPN and the CLI, if delivered, shall include sufficient information to allow proper billing and accounting, for each international call;

5 that the OI information in a heterogeneous networking environment shall, where technically possible, be an identifier assigned to a subscriber by the originating service provider, or be replaced by a default identifier by the originating provider to identify the origin of the call, if specified by the administration;

6 that the CPN, CLI and OI information shall be transmitted transparently by transit networks (including hubs);

7 to encourage operators/service providers to make OI information, wherever applicable, CPN and CLI reliable and verifiable in order to combat spoofing and other forms of numbering misuse,

*instructs*

1 ITU-T Study Group 2, ITU-T Study Group 3 and, where required, ITU-T Study Groups 11 and 17 to strengthen cooperation on and further study the emerging issues of CPN delivery, CLI and OI information, in particular for a heterogeneous networking environment, including security methods and possible validation techniques;

2 ITU-T Study Group 2, in close collaboration with ITU-T Study Group 11, to develop, deploy and maintain a procedure, in accordance with ITU-T Recommendations, for selecting registration authorities, including the selection of trusted signalling certification authorities, to support the allocation of digital public certificates to be used in the signalling exchange of telecommunication networks;

3 the study groups concerned to expedite work on ITU-T Recommendations that would provide additional detail and guidance for the implementation of this resolution,

*instructs the Director of the Telecommunication Standardization Bureau*

1 to report on the progress achieved by the study groups in implementing this resolution, which is intended to improve security and minimize fraud, and minimize technical harm as called for by Article 42 of the Constitution;

2 to share information on country experiences regarding the implementation of this resolution, in a centralized location;

3 in collaboration with ITU-T Study Groups 2 and 3, to review the current reporting mechanism and to promote awareness among all Member States affected by the misuse of numbering resources,

*encourages the Director of the Telecommunication Standardization Bureau*

to urge the regional groups of ITU-T Study Group 2 to organize workshops that focus on the various reports aimed at encouraging increased awareness and enhancing strategies to address the misuse of numbering resources,

*invites Member States, Sector Members and Associate Members*

- 1 to contribute to this work, to share information regarding their experiences in implementing this resolution and to cooperate in the implementation of this resolution;
- 2 to consider developing, within their national regulatory and legal frameworks, guidelines or other means for implementing this resolution;
- 3 to encourage service providers to utilize public-key certificates (e.g. ITU-T X.509) in order to sign CLI and other information in the signalling exchange;
- 4 to encourage all stakeholders to make efforts towards the early implementation of the trust framework and signalling security mechanisms specified in Recommendation ITU-T Q.3057 and other relevant ITU-T Recommendations;
- 5 to collaborate on public awareness-raising campaigns aimed at educating users about spoofing tactics and the importance of verifying CPN;
- 6 to develop CPN delivery within their national regulatory and legal frameworks.