



Editor, Drafting Group

DRAFT PRELIMINARY APT COMMON PROPOSAL
PROPOSED MODIFICATION TO WTSA-16 RESOLUTION 60

**Responding to the challenges of the evolution of the identification/numbering system and
its convergence with IP-based systems/networks**

Abstract

Based on the consideration of the standardization progress of identification/numbering related subjects, Resolution 60 is proposed to be revised to enhance the standardization work on identification/numbering for emerging networks. The main modifications include: addressing identification/numbering related subjects for next-generation networks evolution (NGNe) and future networks (FN) including IMT-2020 and beyond; addressing the subjects on applying new technologies in identification/numbering system; promoting the coordination and cooperation on identification/numbering; and other editorial changes.

Introduction

In recent years, ITU-T has led the standardization work on identification/numbering, including the allocation and management of identification/numbering, and the evolution of the identification/numbering system and its convergence with emerging networks, considering NGNe and FN including IMT-2020 as the working environment of the identification/numbering system.

At the same time, the transition from traditional networks to IP-based networks is taking place at a fast pace. There exist the issues concerning the convergence of identification/numbering system along with the development of NGNe and FN including IMT-2020 and beyond, and

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associated issues concerning security, signalling, protocol, portability, and migration. Considering the standardization work in the aspects of requirements, architecture, signalling, and protocol for NGNe and FN including IMT-2020 and beyond have made great progress in ITU-T SG13, SG11, and other study groups in this study period, it would be of great value to address and enhance the standardization work on identification/numbering for emerging networks in ITU-T.

In the next study period, the new subjects on identification/numbering are as follows.

- 1) New identification/numbering introduced in IMT-2020/5G networks and future networks;
- 2) New identification/numbering introduced in NGNe;
- 3) Applying new technologies such as artificial intelligence (AI) / machine learning (ML) and distributed ledger technology (DLT) in identification/numbering system.

In addition, the coordination and cooperation on identification/numbering are to be promoted.

Proposal

APT members propose to revise Resolution 60 in following aspects:

- 1) To address the standardization work on identification/numbering related subjects for NGNe and FN including IMT-2020 and beyond.
- 2) To address the standardization work on applying new technologies such as AI/ML and DLT in identification/numbering system.
- 3) To promote the coordination and cooperation on identification/numbering in various study groups of ITU-T, and among ITU-T and other SDOs.

MOD

RESOLUTION 60 (HYDERABAD, 2020)

**Responding to the challenges of the evolution of the
identification/numbering system and its convergence with IP-based
systems/networks**

(Johannesburg, 2008; Dubai, 2012; Hyderabad, 2020)

The World Telecommunication Standardization Assembly (Hyderabad, 2020),

recognizing

- a) Resolution 133 (Rev. DUBAI, 2018) of the Plenipotentiary Conference, with regard to the continuing progress towards integration of telecommunications and the Internet;
- b) Resolutions 101 and 102 (Rev. DUBAI, 2018) of the Plenipotentiary Conference;
- c) the evolving role of the World Telecommunication Standardization Assembly, as reflected in Resolution 122 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference,

considering

that International Mobile Telecommunications (IMT), especially IMT-2020 and beyond, is being utilized widely to build a user-centred information ecosystem, and it makes a positive and important contribution to the United Nations Sustainable Development Goals (SDGs) and World Summit on the Information Society (WSIS) action lines,

noting

- a) the work in Study Group 2 of the ITU Telecommunication Standardization Sector (ITU-T), on investigating the evolutionary aspect of the identification/numbering system, including the "future of numbering", considering next-generation networks evolution (NGNe) and future networks (FN) including IMT-2020 as the working environment of the identification/numbering system in the future;
- b) the work in Study Group 13 of ITU-T, on investigating the upcoming network technologies for FN including IMT-2020 and beyond, with Information Centric Networking (ICN) being considered as a potential networking scheme;
- c) that the transition from traditional networks to IP-based networks is taking place at a fast pace, whilst there is a transition to NGNe and FN including IMT-2020;
- d) the emerging issues concerning administrative control for international telecommunication service-based numbers;
- e) the forthcoming issues concerning the convergence of numbering, naming, addressing and identification systems along with the development of NGNe and FN including IMT-2020 and beyond, and associated issues concerning security, signalling, protocol, portability and migration;
- f) the growing demand for identification/numbering resources for communications referred to as Internet of things (IoT);

g) the need for principles and a roadmap for the evolution of international telecommunication resources, which would be expected to help the timely, predictable deployment of advanced identification/numbering technologies,

resolves to instruct ITU-T Study Group 2, within the mandate of ITU-T

1 to continue studying, in liaison with the other relevant study groups, the necessary requirements for the structure and maintenance of telecommunication identification/numbering resources in relation to the deployment of IP-based networks and the transition to NGNe and FN including IMT-2020 and beyond;

2 to ensure the development of the administrative requirements for identification/numbering resource management systems in NGNe and FN including IMT-2020 and beyond;

3 to continue developing guidelines, as well as a framework, for the evolution of the international telecommunication identification/numbering system and its convergence with IP-based systems, in coordination with related study groups and associated regional groups, so that a basis for any new application can be provided;

4 to address the standardization work on applying new technologies such as artificial intelligence (AI) / machine learning (ML) and distributed ledger technology (DLT) in identification/numbering system;

5 to promote the coordination and cooperation on identification/numbering in various study groups of ITU-T, and with other standards development organizations (SDOs),

instructs relevant study groups, and in particular ITU-T Study Group 13 and Study Group 11

to support the work of Study Group 2, to ensure that such applications are based on appropriate guidelines, as well as a framework, for the evolution of the international telecommunication identification/numbering system, and to help investigate their impact on the identification/numbering system in the aspects of requirements, architecture, signalling, and protocol of network, especially for NGNe and FN including IMT-2020 and beyond,

instructs the Director of the Telecommunication Standardization Bureau

to take appropriate action to facilitate the foregoing work regarding the evolution of the identification/numbering system or its converged applications,

invites Member States and Sector Members

1 to contribute to these activities, taking into consideration their national concerns and experiences;

2 to participate in and to contribute to regional groups discussing the identification/numbering issues, and to promote the participation of developing countries in those discussions.