Resolutions
20, 88, 92 and 93

Resolution 20 – Procedures for allocation and management of international telecommunication numbering, naming, addressing and identification resources

Essence of the Resolution

- NNAI resources are the building blocks of international telecommunication.
- NNAI includes telephone numbers, network identifiers, service codes, and more.
- These resources are essential for routing calls, sending messages, and connecting to networks across borders.
- NNAI resources are the invisible infrastructure that makes international communication possible.
- NNAI resources are a limited set of resources.

Emphasizes that the Study Group 2 advises Dir TSB on technical, functional and operational aspects in the assignment, reassignment and/or reclamation of international telecommunication NNAI resources based on technology development

Limitations of the resolution

- Focused on NNAI resource allocation and management based on the older technologies
- The current resolution does not cater for the impact of different technological developments where NNAI resources needs to take care of global interoperability
- Since newer technologies are not part of consideration of the current Resolution, newer implementation challenges need to be catered as well
- Current Resolution is only limited to sharing of experiences by the member states with no action by them

A more comprehensive and inclusive approach is crucial for effectively utilizing NNAI resources keeping the technological growth and its adoption

Modifications proposed

- Focus on both flexibility and adaptability in a timely fashion by regulators in managing NNAI for different resources to include Machine-to-machine (M2M) and Internet of Things (IoT)
- Encourages Study Group 2 and member states to consider management of voice services using over the top (OTT) platforms
- Encouraging transparency and interoperability across telecommunication applications using OTT platforms that have become ubiquitous and essential globally to meet the evolving needs of crucial services like financial inclusion
- Provisioning of IMSI for wearable, portable, M2M/IoT devices and systems using ESIMs

Objective is to make this resolution more effective and inclusive tool for allocation and management of NNAI resources

Resolution 88 – International mobile roaming

Essence of the Resolution

- International mobile roaming aspects
- Dependency of economy on reliable, cost-effective, competitive and affordable mobile communications technology on a global scale
- Significant differences persist between national prices and IMR prices
- Differences in costs between countries and regions
- Need of collaborative approach in the efforts to lower IMR rates by taking regulatory measures when applicable

As part of this resolution, the concerned study group, SG3 of ITU-T, emphasizes on the economic effects of IMR rates to ensure a comprehensive understanding of the challenges and potential solutions

Limitations of the resolution

- IMT has grown multifold
- Developing countries are leading this IMT adoption
- Now the adoption is beyond traditional voice services
- IMT provides access to different personal services (healthcare, financial, etc) which are always required by users including while roaming internationally
- High international roaming charges impact personalized usages of key services
- International mobile roaming rates need to be reviewed keeping these new trends of technology adoption

A more comprehensive and inclusive approach is crucial for reviewing the international mobile roaming rates keeping in view the global trends of adoption of IMT

Modifications proposed

- Updates regarding adoption of IMT which has expanded beyond traditional voice services into newer applications including use cases like data tracker, health tracker, IoT
- Member States to take proactive measures for the implementation of Recommendations ITU T D.98 and ITU T D.97, and to collaborate in efforts to lower IMR rates
- Proposed reducing IMR rates keeping in view the widespread adoption and usage of IMT technologies

Objective is to study the economic effects of IMR rates based on understanding of the challenges of adoption IMT globally by SG-3 of ITU-T

Resolution 92 – Enhancing the standardization activities in the ITU Telecommunication Standardization Sector related to non-radio aspects of international mobile telecommunications

Essence of the Resolution

- Aims to enhance standardization activities within the ITU-T related to the non-radio aspects of IMT

- Encompasses non-radio aspects IMT-2000, IMT-Advanced, IMT-2020 and IMT-2030

- Coordination of ITU-R and ITU-T to ensure full alignment and harmonization of the work programmes

- Standardization activities related to the non-radio side of IMT systems

- Collaboration among relevant ITU-T study groups and with relevant SDOs and forums and consortia for open and interoperable network technologies and solutions

This resolution focuses on coordination of the standardization activities related to the non-radio side of IMT amongst various study and focus groups

Limitations of the resolution

- With further enhancements and new versions of IMT, the resolution needs to be updated

- New reports and recommendations have been developed in ITU-R which needs to be incorporated in ITU-T work

- The impact of new evolution providing diverse usage scenarios and applications such as immersive communication, hyper-reliable and low-latency communication, massive communication, ubiquitous connectivity, artificial intelligence and communication and integrated sensing and communication also needs to be studied in ITU-T

Updates required to align with new development in IMT which need to be reflected in ITU-T

Modifications proposed

- Inclusion of references to new reports and recommendations of ITU-R to support work in ITU-T with respect to IMT systems

- Updates for inclusion of newer generation of IMT for aligning the non-radio aspects

- Other updates to remove obsolete material

Update the reports and recommendations in ITU-T to help member states regarding their adoption of non-radio aspects of IMT systems

Resolution 93 – Interconnection of 4G, IMT-2020 networks and beyond

Essence of the Resolution

- Resolution - 93 highlights the importance of interconnection for IP-based networks like 4G, IMT-2020 (5G), and beyond

- Different IMT systems face challenges of interconnection, as different network architectures, roaming principles, numbering issues, and security mechanisms

- There is need for agreed-upon interconnection mechanisms to avoid issues with numbering, roaming, charging, and security

As part of this resolution, ITU-T Study Groups to collaborate with stakeholders and develop specific Recommendations for network interconnection frameworks, ENUM architecture, and administrative control over international telecommunication resources

Limitations of the resolution

- Last update was of 2016

- Does not cover 5G related aspects

- Reference to ENUM needs to be reviewed

- Importance of non-radio interconnection of 4G and 5G

- Widespread migration from circuit-switched to packet-switched networks, particularly the prevalence of Internet Protocol (IP) based networks needs to be considered

- LTE is now a key technology for delivering Voice over IP (VoIP) services, necessitating an address to challenges related to network architectures, roaming, numbering, charging, and security

Current network architectures, roaming principles, numbering schemes, and security mechanisms are often incompatible with seamless interconnection of IP-based networks like 4G and 5G

Modifications proposed

- Study Group 2 – to develop Recommendations for the ENUM architecture for non-radio interconnection, as ENUM is not a commonly used solution for E.164/URI transfer

- Conduct exploratory activities among telecommunication operators, prioritizing the identification of issues related to IP-based network interconnection

- Deletion of obsolete material as part of revision since 2016

Objective is to direct study groups to identify future ITU-T Recommendations associated with non-radio interconnection and collaborate with stakeholders to optimize studies

Thanks