
PLENARY MEETING

**Addendum 8 to
Document 11(Add.21)-E
24 June 2019
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Member States of the Inter-American Telecommunication Commission (CITEL)

PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda item 9.1(9.1.8)

9 to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention:

9.1 on the activities of the Radiocommunication Sector since WRC-15;

9.1 (9.1.8) Resolution **958 (WRC-15)** – Annex item 3) Studies on the technical and operational aspects of radio networks and systems, as well as spectrum needed, including possible harmonized use of spectrum to support the implementation of narrowband and broadband machine-type communication infrastructures, in order to develop Recommendations, Reports and/or Handbooks, as appropriate, and to take appropriate actions within the ITU Radiocommunication Sector (ITU-R) scope of work;

Background

WRC-19 Agenda item 9.1, issue 9.1.8 calls for studies on the technical and operational aspects of radio networks and systems, as well as spectrum needed, including possible harmonized use of spectrum to support the implementation of narrowband and broadband machine-type communication infrastructures, in order to develop Recommendations, Reports and/or Handbooks, as appropriate, and to take appropriate actions within the ITU Radiocommunication Sector (ITU-R) scope of work.

Machine-type communication (MTC), machine-to-machine (M2M), and Internet of Things (IoT) are all different names for the same type of application that enables machines to communicate with each other. In this proposal, MTC is the common reference for these forms of communication. In the ITU-R, these types of applications already take advantage of spectrum allocated to the mobile service, including frequency ranges identified for International Mobile Telecommunications (IMT). Input from industry and other groups developing MTC technologies, including presentations at the ITU Workshop on Spectrum Management for Internet of Things Deployment (November 2016, Geneva, Switzerland), indicated overwhelmingly that identifying specific frequency bands for MTC applications may delay or unnecessarily restrict innovation, and may cause an inefficient use of the spectrum.

CITEL Administrations have analysed the current and future spectrum use for narrowband and broadband MTC, as expressed in Resolution **958 (WRC-15)**, with the conclusion that there is no need to identify specific spectrum for those applications.

IMT systems have been developed over years to satisfy various broadband and narrowband requirements and use cases. The support of massive MTC is one of the usage scenarios of IMT-2020. Studies that support new spectrum requirements for mobile communications, such IMT-2020, already considered massive MTC applications as one of the reasons for increase in the capacity of the IMT networks.

ITU-R Working Party 5D (WP 5D) is the responsible group to develop relevant studies on issue 9.1.8 for WRC-19. As such, WP 5D has initiated the work on this topic, with the development of technical reports. The content being developed in these reports fulfil the studies invited in Resolution **958 (WRC-15)**.

MTC applications and devices can be used effectively with all the benefits of the existent mobile broadband bands and the new frequency bands under study for IMT.

Therefore, having spectrum identified specifically for MTC is neither desired, nor necessary, and thus no changes are needed in the Radio Regulations (RR).

INTER-AMERICAN PROPOSALS

NOC **IAP/11A21A8/1**

ARTICLES

Reasons: Analysis of the current and future spectrum use for narrowband and broadband machine type communications (MTC), also known as machine-to-machine (M2M) or Internet of Things (IoT), concluded that there is no need to identify specific spectrum for those applications. Therefore, no change to the Radio Regulations or regulatory action is required.

NOC **IAP/11A21A8/2**

APPENDICES

Reasons: Analysis of the current and future spectrum use for narrowband and broadband machine type communications (MTC), also known as machine-to-machine (M2M) or Internet of Things (IoT), concluded that there is no need to identify specific spectrum for those applications. Therefore, no change to the Radio Regulations or regulatory action is required.

RESOLUTION 958 (WRC-15)

**Urgent studies required in preparation for the
2019 World Radiocommunication Conference**

SUP IAP/11A21A8/3

ANNEX TO RESOLUTION 958 (WRC-15)

**Urgent studies required in preparation for the
2019 World Radiocommunication Conference**

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3) Studies on the technical and operational aspects of radio networks and systems, as well as spectrum needed, including possible harmonized use of spectrum to support the implementation of narrowband and broadband machine-type communication infrastructures, in order to develop Recommendations, Reports and/or Handbooks, as appropriate, and to take appropriate actions within the ITU Radiocommunication Sector (ITU-R) scope of work.

Reasons: Analysis of the current and future spectrum use for narrowband and broadband machine type communications (MTC), also known as machine-to-machine (M2M) or Internet of Things (IoT), concluded that there is no need to identify specific spectrum for those applications. Therefore, no change to the Radio Regulations or regulatory action is required. No changes also apply to RR Volume 3, apart from the suppression proposed to parts of Resolution 958 (WRC-15).