

## UNITED STATES OF AMERICA

### DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

**Agenda Item 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-12*

**Section 9.1.8 of the CPM Report:** *Resolution 757 (WRC-12) Regulatory aspects for nanosatellites and picosatellites*

**Issue:** This issue under WRC-15 Agenda item 9 invites the ITU-R to examine the procedures for notifying space networks and consider possible modifications to enable the deployment and operation of nanosatellites and picosatellites, taking into account the short development time, short mission time and unique orbital characteristics and instructs the Director of the Radiocommunication Bureau to report to WRC-15 on the results of these studies.

**Background Information:** WRC-12 adopted Resolution **757 (WRC-12)** which resolves to invite WRC-15 to consider whether modifications to the regulatory procedures for notifying satellite networks are needed to facilitate the deployment and operation of nanosatellites and picosatellites, and to take appropriate actions. Resolution **757 (WRC-12)** further invites ITU-R studies to examine the procedures for notifying space networks and consider modifications to enable the deployment and operation of nanosatellites and picosatellites, taking into account the satellites' short development time, short mission time, and unique orbital characteristics. Resolution **757 (WRC-12)** recognizes that the missions of some nanosatellites and picosatellites are potentially inconsistent with the services in which they operate and/or have limited orbit control capabilities. The Resolution also instructs the Director of the Radiocommunication Bureau to report to WRC-15 on the results of these studies.

The regulatory procedures for notifying frequency assignments to satellite networks in unplanned bands apply to all satellite networks and systems in order to avoid causing or receiving harmful interference. Consistent with Resolution **757 (WRC-12)**, and in response to Question ITU-R 254/7, ITU-R Working Party 7B has developed Draft New Reports on technical and operational characteristics of nanosatellites and picosatellites as well as current practices for nanosatellite and picosatellite operators. Resolution **757 (WRC-12)** calls for consideration of regulatory aspects for nanosatellites and picosatellites.

The Draft New Reports prepared in ITU-R WP 7B have concluded that from the perspective of the Radio Regulations, nanosatellites and picosatellites are not significantly different from other classes of satellites. The main differences, from a regulatory aspect, are the short mission development times and mission operating lifetimes, compared with the time scale for registering satellite networks using ITU procedures, and the lack of knowledge of orbital parameters needed to register a satellite network with ITU until just before or just after launch for many of these missions.

Given the conclusions of the Reports, the United States proposes that a future conference agenda item dedicated to nanosatellite and picosatellite issues with filing procedures for registering satellite networks is not needed. Instead, these issues can be addressed under the WRC standing agenda item for issues pertaining to satellite networks pursuant to Resolution 86 (WRC-07) which is Item 8 in Resolution 808 (WRC-12). The United States is of the belief that a topic on regulatory issues faced by nanosatellites and picosatellites with respect to the filing procedures

for registering satellite networks with the ITU should be added to the standing agenda item for WRC-19 for issues pertaining to satellite networks.

**Proposal:**

**MOD** USA/9.1.8/1

**RESOLUTION 808 (WRC-12)**

**Preliminary agenda for the 2018 World Radiocommunication Conference**

The World Radiocommunication Conference (Geneva, 2012),

*resolves to give the view*

that the following items should be included in the preliminary agenda for WRC-18:

1 to take appropriate action in respect of those urgent issues that were specifically requested by WRC-15;

2 on the basis of proposals from administrations and the Report of the Conference Preparatory Meeting, and taking account of the results of WRC-15, to consider and take appropriate action in respect of the following items:

2.1 to consider regulatory actions, including spectrum allocations, to support GMDSS modernization and implementation of e-navigation in accordance with Resolution **359 (WRC-12)**;

~~2.2 to consider the appropriate regulatory procedures for notifying satellite networks needed to facilitate the deployment and operation of nano and picosatellites, in accordance with Resolution **757 (WRC-12)**;~~

3 to examine the revised ITU-R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with Resolution **28 (Rev.WRC-03)**, and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with the principles contained in Annex 1 to Resolution **27 (Rev.WRC-12)**;

4 to consider such consequential changes and amendments to the Radio Regulations as may be necessitated by the decisions of the Conference;

5 in accordance with Resolution **95 (Rev.WRC-07)**, to review the resolutions and recommendations of previous conferences with a view to their possible revision, replacement or abrogation;

6 to review, and take appropriate action on, the Report from the Radiocommunication Assembly submitted in accordance with Nos. 135 and 136 of the Convention;

7 to identify those items requiring urgent action by the Radiocommunication Study Groups;

8 to consider possible changes, and other options, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, an advance publication, coordination,

notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution **86 (Rev.WRC-07)** to facilitate the rational, efficient, and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit;

9 to consider and take appropriate action on requests from administrations to delete their country footnotes or to have their country name deleted from footnotes, if no longer required, taking into account Resolution **26 (Rev.WRC-07)**;

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

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

10.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations; and

10.3 on action in response to Resolution **80 (Rev.WRC-07)**;

11 to recommend to the Council items for inclusion in the agenda for the following WRC, in accordance with Article 7 of the Convention,

*invites the Council*  
to consider the views given in this Resolution,

*instructs the Director of the Radiocommunication Bureau*  
to make the necessary arrangements to convene meetings of the Conference Preparatory Meeting and to prepare a report to WRC-18,

*instructs the Secretary-General*  
to communicate this Resolution to international and regional organizations concerned.

**Reasons:** There is no need for a dedicated agenda item to address filing procedures for nanosatellites and picosatellites that could be addressed under the standing WRC agenda item for issues pertaining to satellite networks.

**SUP** USA/9.1.8/2

## RESOLUTION 757 (WRC-12)

### Regulatory aspects for nanosatellites and picosatellites

**Reasons:** The resolution instructs the Director of the Radiocommunication Bureau to report to WRC-15 on the results of studies. Those studies are complete. The regulatory aspects pertaining to filing procedures for nanosatellites and picosatellites can be addressed under the standing WRC agenda item for issues pertaining to satellite networks. Therefore, this resolution is no longer needed.