

UNITED STATES OF AMERICA

PRELIMINARY VIEWS ON WRC-11

AGENDA ITEM 1.7: To consider the results of ITU-R studies in accordance with Resolution 222 (Rev. WRC-07) in order to ensure long term spectrum availability and access to spectrum necessary to meet requirements for the aeronautical mobile-satellite (R) service and to take action on this subject, while retaining unchanged the generic allocation to the mobile-satellite service in the bands 1 525-1 559 MHz and 1 626.5-1 660.5 MHz.

ISSUE: No specific aeronautical mobile-satellite (R) service (AMS(R)S) requirements or methodologies for ensuring long term spectrum availability and access to spectrum have been identified in the ITU-R studies.

BACKGROUND: WRC-07 considered the matter of long-term spectrum availability for AMS(R)S and as a result adopted Resolution 222 (Rev. WRC-07). Resolution 222 (Rev. WRC-07) invites the ITU-R to conduct, in time for consideration by WRC-11, technical, operational and regulatory studies to ensure long-term spectrum availability for the AMS(R)S including studies of:

- the existing and future spectrum requirements of the AMS(R)S;
- whether the long-term requirements of the AMS(R)S can be met within the existing allocations with respect to No. **5.357A** while retaining unchanged the generic allocation for the mobile-satellite service in the bands 1525 - 1559 MHz and 1626.5 - 1660.5 MHz;
- to determine the feasibility and practicality of technical or regulatory means, other than the coordination process, in order to ensure adequate access to spectrum to accommodate the AMS(R)S requirements;
- to study existing MSS allocations or possible new allocations only for satisfying the requirements of the AMS(R)S for communications with priority categories 1 to 6 of Article **44** (*of the Radio Regulations*) (if it is determined that AMS(R)S requirements cannot be met).¹

Additionally, ICAO has released for consultation by Member States its draft positions on Agenda Item 1.7. ICAO states:

“Taking into account the results of ITU-R studies, support further regulatory provisions to strengthen AMS(R)S access to the bands 1 545 - 1 555 MHz and 1 646.5 -1 656.5

¹ See generally Int'l Telecomm. Union [ITU], *Use of the Bands 1 525-1 559 MHz and 1 626.5-1 660.5 MHz by the Mobile-Satellite Service, and Studies to Ensure Long-Term Spectrum Availability for the Aeronautical Mobile-Satellite (R) Service*, Resolution 222 (Rev. WRC-07) (2007).

MHz including, if required, changes to No. **5.357A**, No. **5.362A** and Resolution **222**² and,

“If the studies identified by Res. **222 (Rev. WRC-07)** indicate that the long term needs of AMS(R)S cannot be satisfied in the bands 1 545 - 1 555 MHz and 1 646.5 - 1 656.5 MHz, then support AMS(R)S in other frequency bands through appropriate regulatory provisions.”³

ICAO’s Air Navigation Commission and its Council will consider Member State comments and will develop its final position in the second quarter of 2009.⁴

With respect to ITU-R studies called for in Resolution 222 (Rev.WRC-07), ITU-R Working Party 4C (WP 4C) has developed a work plan covering its next four meetings.⁵ WP 4C has also developed a PDNR addressing the “Methodology for the estimation of aeronautical mobile satellite (R) service spectrum requirements.”⁶ To date, however, there has been no analysis of the inadequacy of the current MSS allocations in 1525 - 1559 MHz and 1626.5 - 1660.5 MHz bands for accommodating AMS(R)S requirements. Additionally, there has been no information or quantitative analysis presented regarding present and future AMS(R)S spectrum requirements.

DISCUSSION: After a decade or more of debate, WRC-97 allocated the bands 1525 - 1559 MHz (space-to-Earth) and 1626.5 - 1660.5 MHz (Earth-to-space) to the mobile-satellite service (MSS) to facilitate the efficient use of that spectrum. Formerly, the bands 1530 - 1544 MHz (space-to-Earth) and 1626.5 - 1645.5 MHz (Earth-to-space) were allocated to the maritime mobile-satellite service and the bands 1545 - 1555 MHz (space-to-Earth) and 1646.5 - 1656.5 MHz (Earth-to-space) were allocated on an exclusive basis to the AMS(R)S. Since WRC-97, there has been no evidence that the near or long term requirements of AMS(R)S are not being satisfied within the generic MSS allocations listed above. There is no operational evidence of AMS(R)S requirements going unmet, and at this time there have been no studies completed to suggest a change of the current situation, or to indicate a need to allocate exclusive AMS(R)S spectrum.

² International Civil Aviation Organization [ICAO], *Draft ICAO Position for the International Telecommunication Union (ITU) World Radiocommunication Conference 2011 (WRC-11)*, at A-17 (2008), available at [www.icao.int/anb/panels/acp/repository/DraftPosWRC2011\(nov2008\).doc](http://www.icao.int/anb/panels/acp/repository/DraftPosWRC2011(nov2008).doc) (emphasis in original).

³ *Id.* (emphasis in original).

⁴ The ICAO Aeronautical Communications Panel (ACP) Working Party F is to consider comments received to this Draft ICAO position at its next meeting March 24, 2009.

⁵ ITU, *Work Plan for WRC-11 Agenda Item 1.7 (Resolution 222 (Rev. WRC-07))*, Annex 9 to Document 4C/146-E (2008).

⁶ ITU, *Working Document Towards a Preliminary Draft New Recommendation ITU-R M.[AMS(R)S SPECTRUM]*, Annex 8 to Document 4C/146-E (2008).

U.S. VIEW: The United States is of the view that the current provisions in Resolution 222 (REV. WRC-07) *resolves* and the Radio Regulations are sufficient to adequately provide for AMS(R)S and to ensure the long term availability and adequate access to spectrum for AMS(R)S in the 1525 - 1559 and 1626.5 - 1660.5 MHz bands. Consequently, absent ITU-R studies and sufficient justification to the contrary, the United States is also of the view that no changes are required in the Radio Regulations in 1525 - 1559 MHz and 1626.5 - 1660.5 MHz.