



Iridium - WRC-23 Preparations

Dr Abdou Lo
June 2020

▀ Iridium's WRC-23 Objectives

- Consider the agenda items of interest
- Identify the Working Party where studies will be carried out
- Conclude

Agenda Item 1.11 - GMDSS

- AI 1.11: Modernization of the Global Maritime Distress and Safety Service (GMDSS) and the addition of new satellite systems.
- China proactive, seeking spectrum for its COMPASS system (currently being assessed by the IMO)
- Globalstar likely to jostle for position to protect their spectrum assignments
- Iridium seeks to:
 - Protect 1621.35 - 1626.5 MHz, identified for GMDSS at WRC-19, and
 - Protect 1618.25 – 1626.5 MHz, identified by ICAO for AMS(R)S
- Iridium welcomes opportunities to expand GMDSS, provided that existing MSS uses are protected.
- The agenda item is being studied in WP4C.

Agenda Item 1.18 – New MSS Allocations

- Identifies spectrum in the L- and S-bands for mobile satellite systems for the provision of “Internet of Things” (IoT) services
- Several small frequency bands around 1700 MHz earmarked in Resolution
- The agenda item is proposed by the “small-sat” industry, seeking to expand IoT services
- Iridium welcomes new spectrum capacity for the satellite industry
- The agenda item is being studied by WP4C.



Agenda Item 1.7 – Aeronautical Satellite VHF

- Identify a new satellite allocation (AMS(R)S) to support aircraft-to-satellite links in the 118–137 MHz band.
- Currently used for aeronautical mobile - proponents seeking a new allocation to support air traffic control (ATC) via satellite, using the same radios.
- Focus is on remote and underserved areas – of interest to ATC across Africa
- Iridium supports additional satellite connectivity for aircraft communications
- Technical studies required by ITU and by ICAO
- At the ITU, the agenda item is being studied at WP5B.

Agenda Item 1.8 – Unmanned Aircraft

- Seeking to identify existing FSS allocations for the support of unmanned aerial vehicles (UAV)
- This agenda item has a difficult history:
 - Was introduced at WRC-15, but resulted in an unsatisfactory outcome
 - Studies have been slow to progress in ITU Working Parties
- Proponents of the agenda item include UAS manufacturers
- Significant input expected from ICAO.
- The agenda item is being studied at WP5B.

Agenda Item 1.6 – Suborbital Vehicles

- Identify frequency allocations to support sub-orbital vehicles
- Proponents of the agenda item include Virgin Galactic and Blue Origin.
- Iridium supports this agenda item and promote the inclusion of its frequencies to support communications with sub-orbital vehicles
- The agenda item is being studied at WP5B.



Agenda Item 1.17 – Inter-Satellite Links

- Seeking to identify frequency bands for use by inter-satellite links
- Increased interest in interconnection between NGSO/GSO and NGSO/NGSO satellite systems but ...
- Radio Regulations has specific allocations for inter-satellite links
- Agenda item will consider any changes necessary to support this
- Iridium is concerned that its feeder link frequency bands (29.1–29.3 GHz and 19.4–19.6 GHz) fall within the scope of this agenda item – protection of these is critical to safe and reliable operation
- The agenda item is being studied at WP4A



In summary

- WRC-23 will consider a diverse set of agenda items
- Iridium is supportive of new applications but urges administrations to ensure existing networks like its own are not impacted
- We will engage in all of the work of the relevant Work Parties, and will update EACO on developments of each item



Access Partnership



North America

Europe

Middle East

Africa

Asia

Washington DC

Suite 803
1730 Rhode Island Ave N.W.
Washington DC 20036
USA

Tel: +1 202 503 1570
Fax: +1 202 223 2009

London

9th Floor, Southside
105 Victoria Street
London, SW1E 6QT
UK

Tel: +44 (0) 20 8600 0630
Fax: +44 (0) 20 8748 8572

Brussels

Rue des Sablons 11
1000 Brussels
Belgium

Tel: +32 2 502 0982
Fax: +32 2 515 0019

Abu Dhabi

Al Wahda City Tower, 20th Floor
Hazaa Bin Zayed The First Street
PO Box 127432
Abu Dhabi, UAE

Tel: +971 2 815 7811
Fax: +971 2 815 7888

Dakar

Mermoz Extension, Lot 12, N 05
BP: 45680 Dakar -Fann,
Senegal

Tel: +221 33 827 52 54
Fax: +221 33 827 52 55

Singapore

1 Keong Saik Road
Singapore
089109

Tel: +65 9145 6137

Thank You

