



ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY

GLOBAL DEVELOPMENTS
RELATED TO FREQUENCY
SPECTRUM MANAGEMENT

RECONNECTING **THE** WORLD

GLOBAL DEVELOPMENTS RELATED TO FREQUENCY SPECTRUM MANAGEMENT

BY Mie Utsunomiya CNSS SECTION

FREQUENCY SPECTRUM MANAGEMENT

3

ICAO Position for the International Telecommunication Union (ITU) World Radiocommunication Conference 2027 (WRC-27)

- The initial ICAO Position was presented at 227th ANC (Oct 2024). It then was circulated to States/international organizations for their comments.
- ANC will review comments and update it in May 2025, then it will be processed to the Council approval in June/Jul 2025



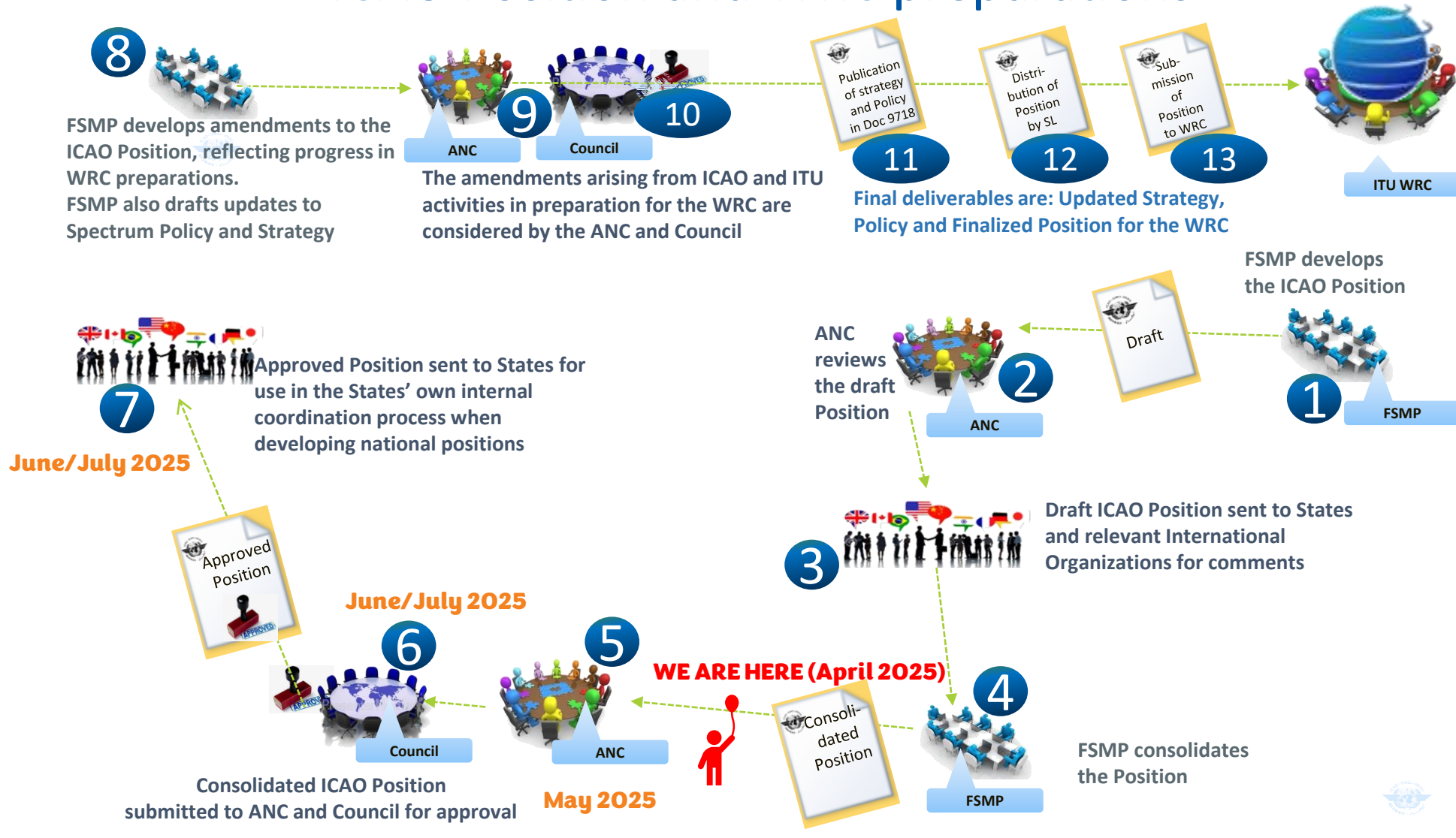
State Letter 24/93 (ICAO-NET)

En SL 2024.93	fr	es	ru	ar	zh
--	--------------------	--------------------	--------------------	--------------------	--------------------

FREQUENCY SPECTRUM MANAGEMENT

4

ICAO Position and WRC preparations



FREQUENCY SPECTRUM MANAGEMENT

5

ICAO Position for the International Telecommunication Union (ITU) World Radiocommunication Conference 2027 (WRC-27)

- States and Int Orgs are requested to take into account the ICAO Position, to the maximum extent possible,
 - in their prep activities for the WRC-27 at the national level,
 - in the activities of the regional telecommunication organizations and
 - in the relevant meetings of the ITU.
- In addition to the first workshop held in APAC RO, to promote ICAO position and increase awareness of WRC-27 agenda items related to aviation, Frequency Spectrum Management Panel (FSMP) will organize 3 more workshops in total in 2025/2026.

The next WRC27 Workshop for MID+EUR/NAT will be held at ICAO Paris office.

- WRC27 Workshop 06-07 Oct 2025
- FSMP-WG/21 08 -17 Oct 2025

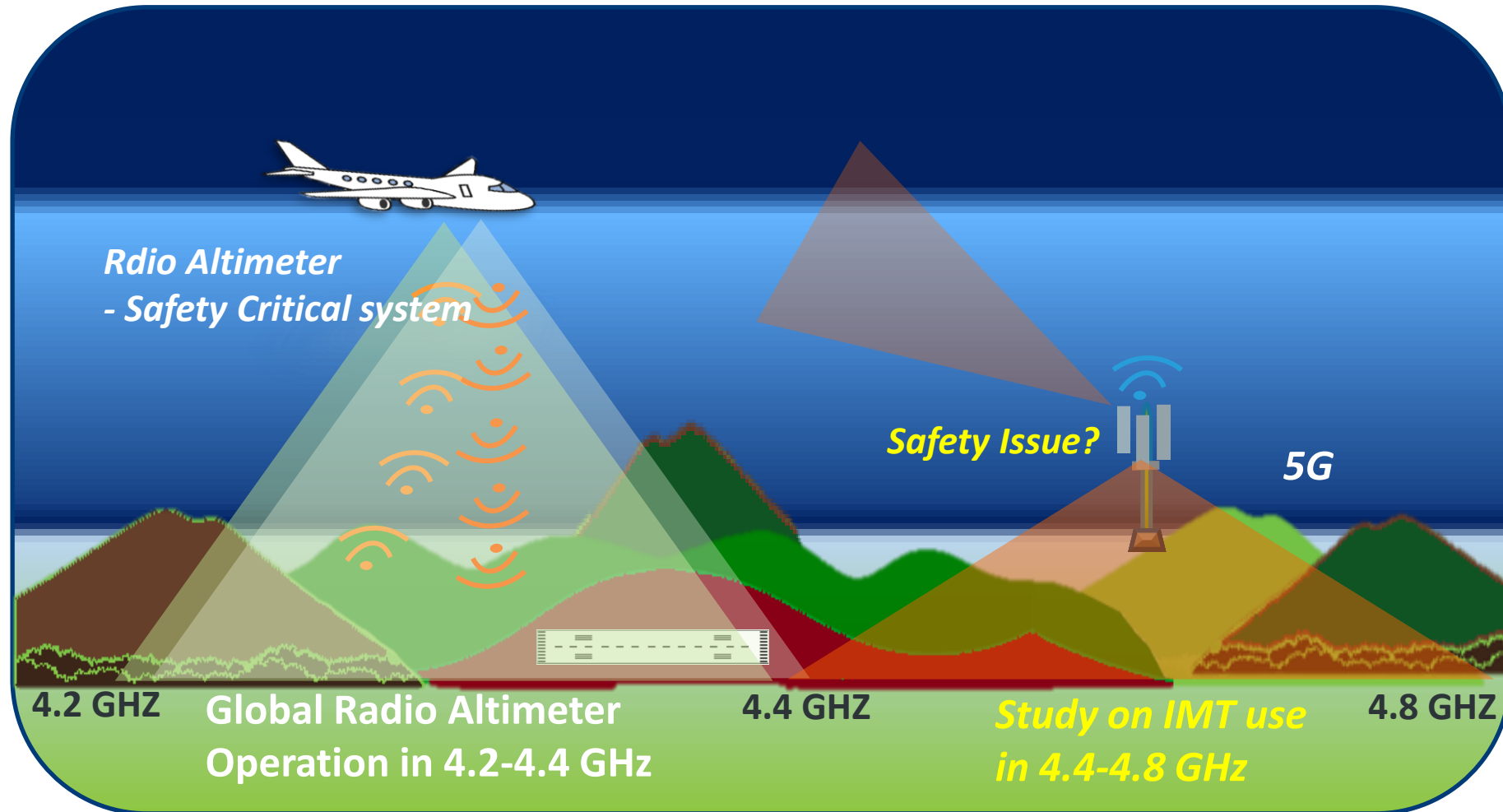
**Many WRC agenda items
could affect
aeronautical safety
services!**

- ***Further collaboration
is needed!***

**WRC-27**

WRC-27 Agenda Item 1.7:

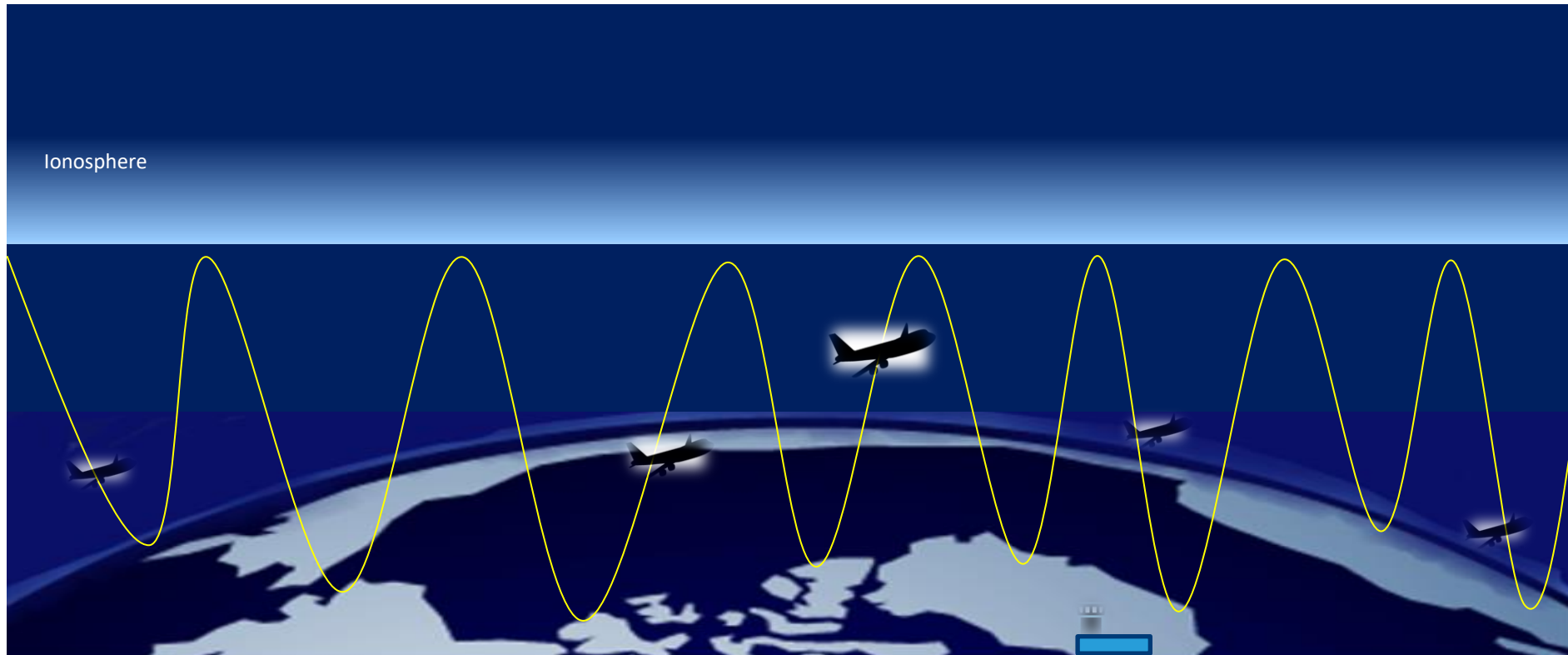
Study on IMT Use in the frequency bands 4400-4800 MHz





WRC-27

WRC-27 Agenda Item 1.9: Update Appendix 26 in support of aeronautical mobile (OR) high frequency modernization



WRC-27

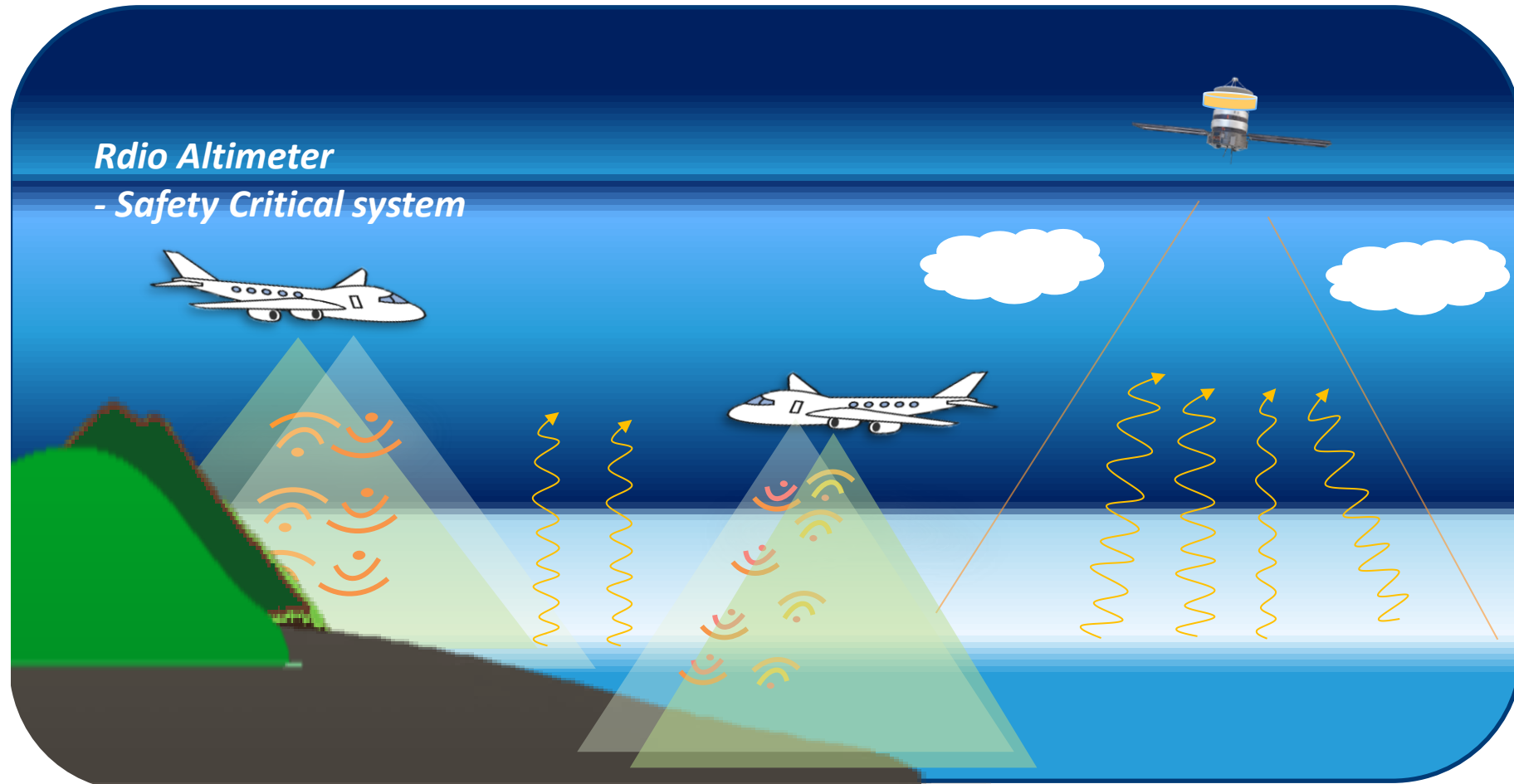
WRC-27 Agenda Item 1.17: Space Weather Sensors





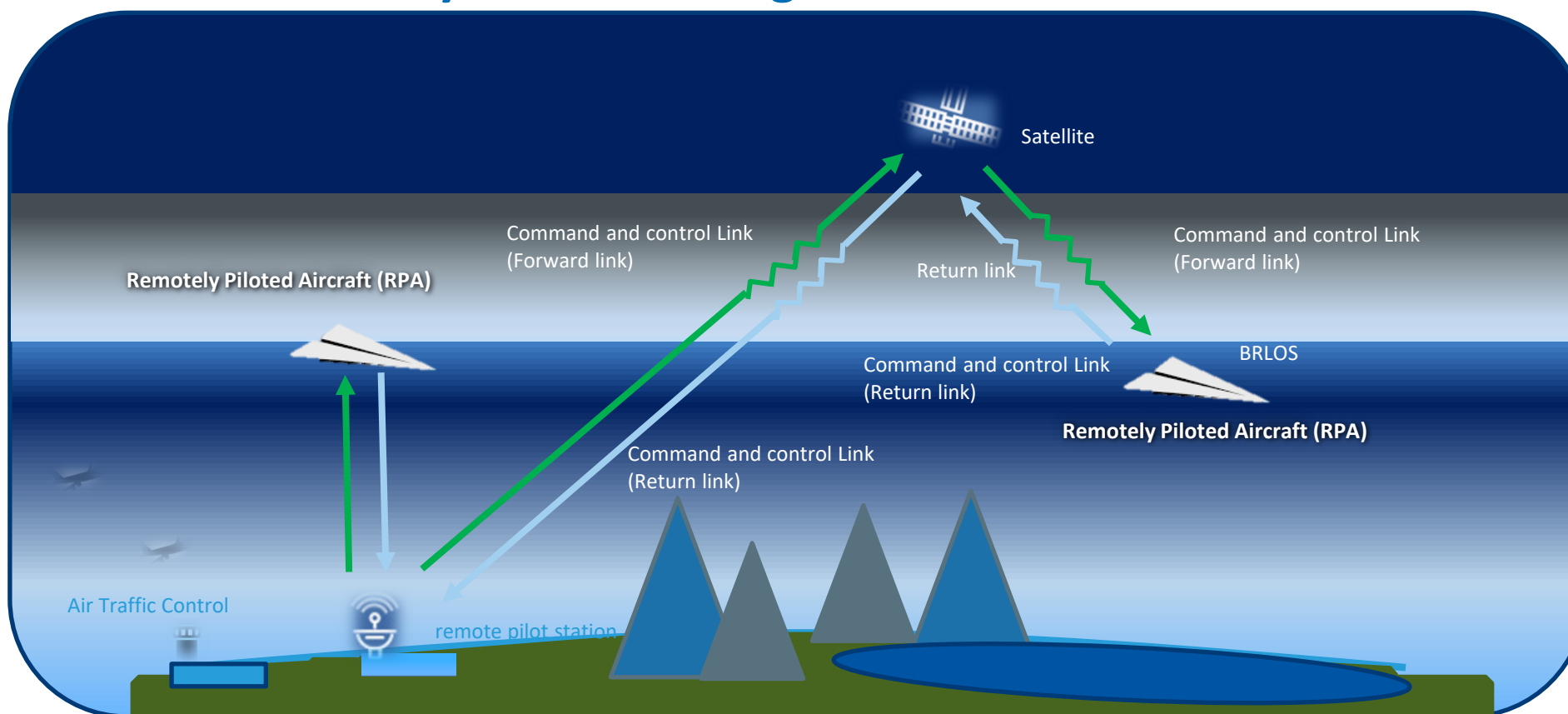
WRC-27

WRC-27 Agenda Item 1.19: Primary allocations to the EESS passive in the bands 4200-4400



**WRC-27**

WRC-27 Agenda Item 9.1: Urgent action by Study groups in prep for the next WRC beyond-line-of-sight C2-link for RPAS



FREQUENCY SPECTRUM MANAGEMENT

42nd ICAO Assembly (23 Sep to 03 Oct 2025)

- Spectrum and CNS related issues might be discussed at the Technical commissions of the 42nd Assembly.

Such as...

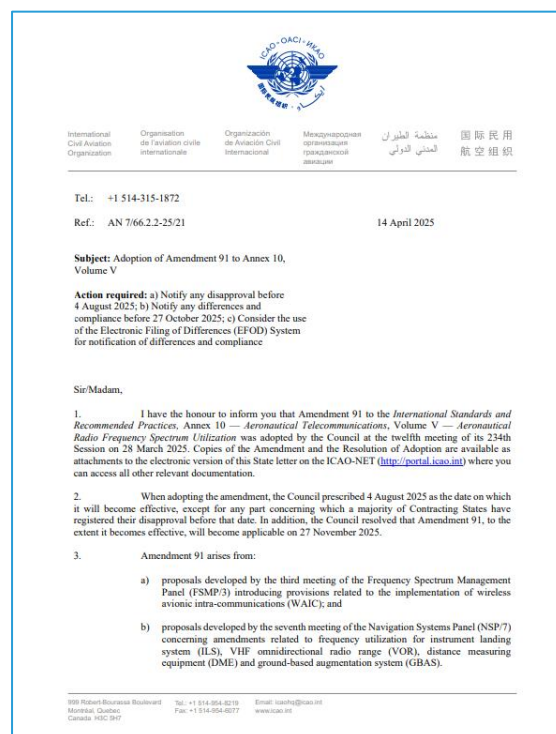
- ❖ GNSS Interference,
- ❖ ITU WRC-27 agenda items, including potential interference concerns to radio altimeter/ WAIC, and
- ❖ Integrated Communications, Navigation and Surveillance & Spectrum (ICNSS)

FREQUENCY SPECTRUM MANAGEMENT

12

Adoption of Amendment 91 to Annex 10, Volume V related to WAIC

- Digital transformation is occurring not only outside world but also inside of the aircraft! -



On 28 March 2025, the Council adopted Amendment 91 to A10V5 on new provisions of related to wireless avionic intracommunications (WAIC).

- ❖ WAIC is a wireless data links for communications between various safety-of-flight related functions on-board a single aircraft, typically replacing wiring for sensing and monitoring capabilities.
- ❖ The WAIC SARPs, while ensuring protection to radio altimeters, facilitate WAIC sharing the frequency band 4200-4400 MHz with the Radio Altimeter.
- ❖ Implementing WAIC is expected to provide benefit for aircraft operation, especially through reduction of CO2 emission due to reduction of aircraft weight and associated fuel consumption from saved wiring runs.

Ref.: AN 7/66.2.2-25/21

Amendment 91 will become applicable on 27 November 2025.



Thank You