



ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY



ICAO WRC-27 Preparatory Workshop

2

Relevant ICAO Provisions

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Presentation Overview

1

ICAO Frequency Spectrum **Strategy & Policy**

2

ICAO **Position** for WRC & Relevant State Letters

3

Assembly Resolution A42-7

Management and Defence of Aviation Frequency Spectrum

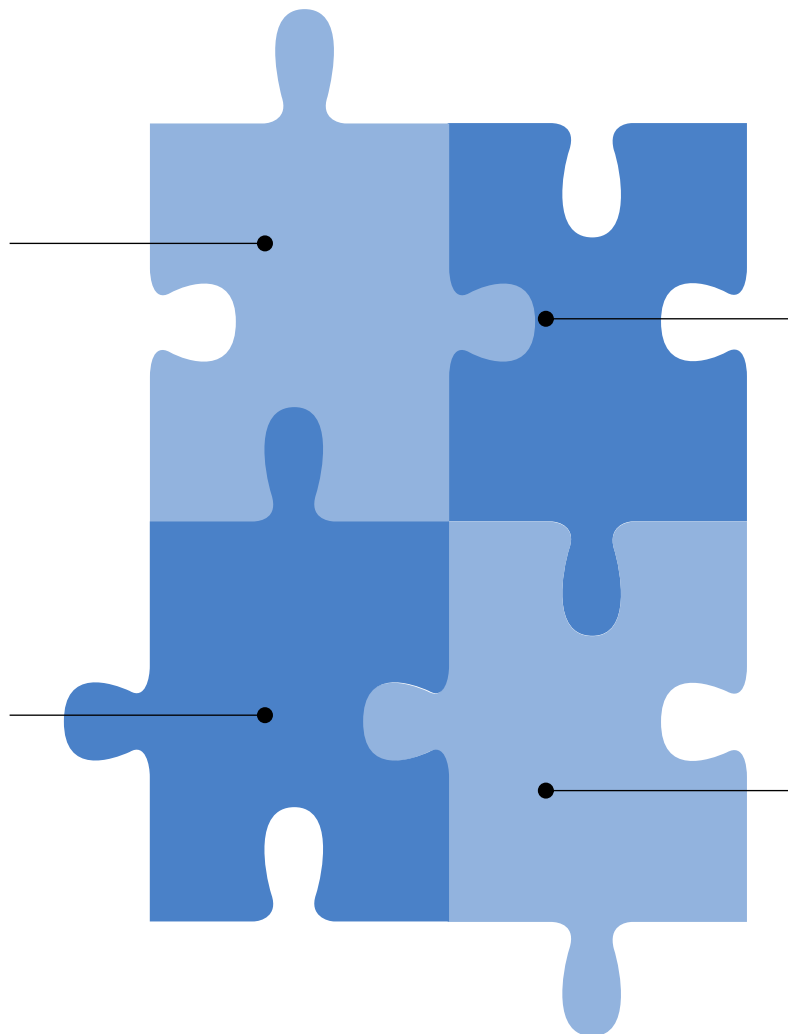
1

ICAO Frequency Spectrum Strategy

High level vision on existing and future spectrum requirements in support of the evolving CNS systems and infrastructure requirements

ICAO Frequency Policy Statements

Statements of official policy on each and every frequency band used by aeronautical systems for the provision of CNS



ICAO Position for WRC

ICAO Position on the specific agenda items of the upcoming ITU WRC to ensure that aeronautical requirements and safety concerns are met

Strategy for establishing and promoting the ICAO WRC Position

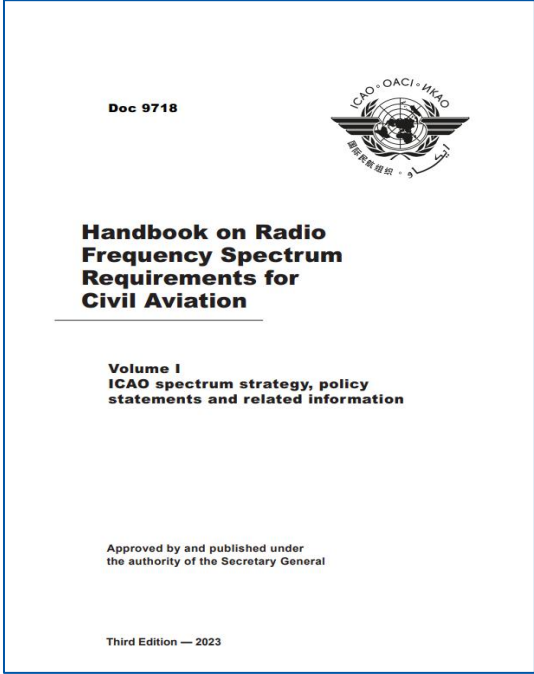
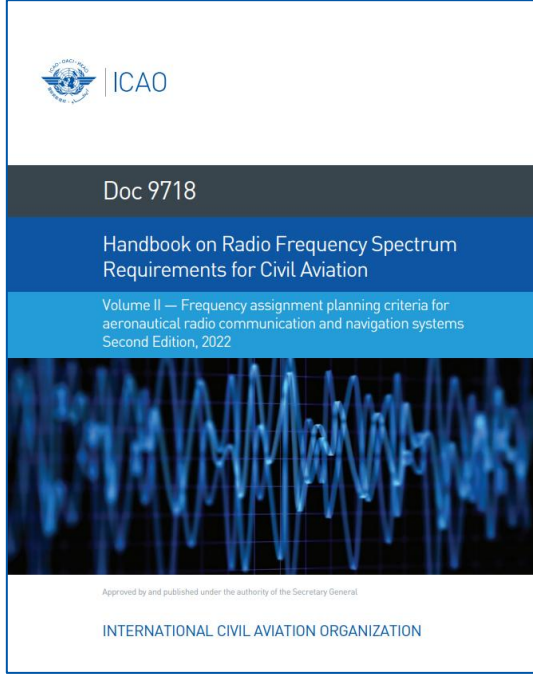
(including **Assembly Resolution A42-7**)

2

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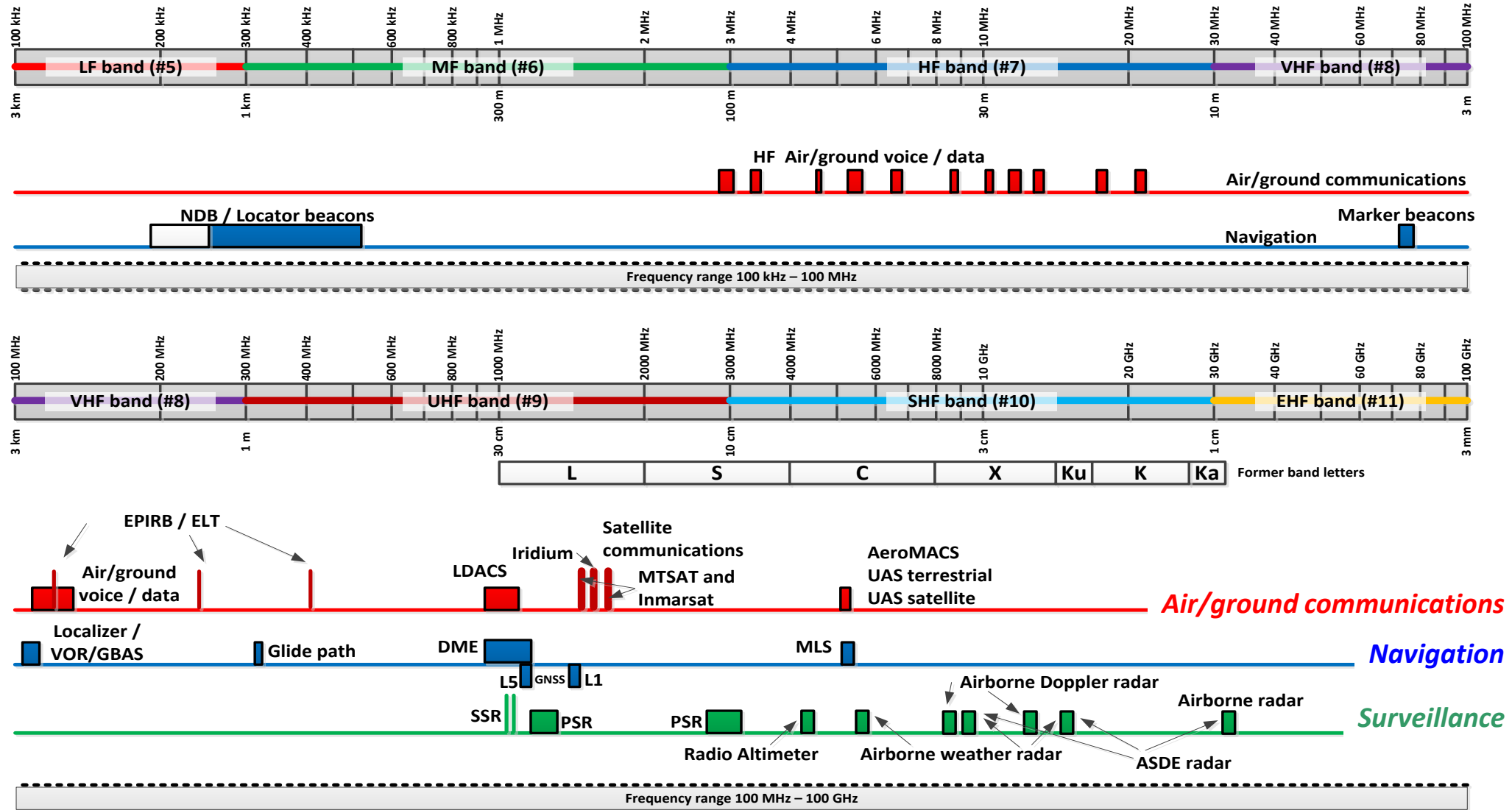
ICAO Doc 9718

Handbook on Radio Frequency Spectrum Requirements for Civil Aviation

Vol. I - ICAO Spectrum Strategy and Policy	Vol. II - Frequency Assignment Planning
 Doc 9718 Handbook on Radio Frequency Spectrum Requirements for Civil Aviation Volume I ICAO spectrum strategy, policy statements and related information Approved by and published under the authority of the Secretary General Third Edition — 2023 3rd edition (2023)	 ICAO Doc 9718 Handbook on Radio Frequency Spectrum Requirements for Civil Aviation Volume II — Frequency assignment planning criteria for aeronautical radio communication and navigation systems Second Edition, 2022 Approved by and published under the authority of the Secretary General INTERNATIONAL CIVIL AVIATION ORGANIZATION 2nd edition (2022)
Handbook on Radio Frequency Spectrum Requirements for Civil Aviation - Volume I — ICAO spectrum strategy, policy statements and related information (Doc 9718-1) ICAO Store	Handbook on Radio Frequency Spectrum Requirements for Civil Aviation - Volume II — Frequency assignment planning criteria for aeronautical radio communication and navigation systems (Doc 9718-2) ICAO Store

Doc 9718 and other relevant draft material can be downloaded from the FSMP website (Documents section) at <https://www.icao.int/FSMP/documents>

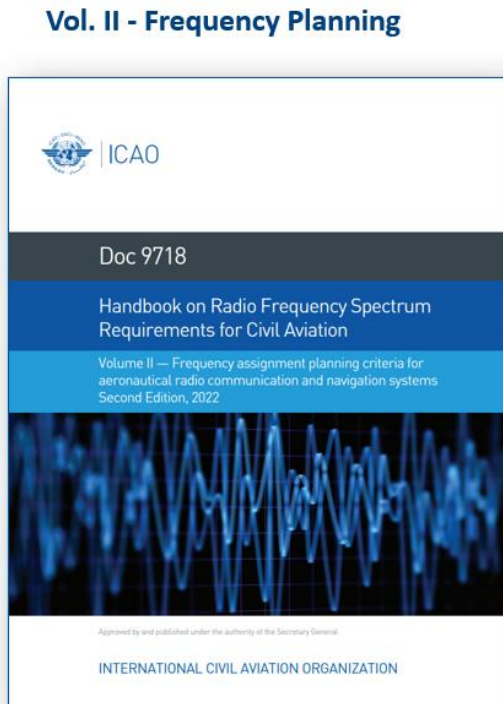
Over 1 GHz of frequency spectrum in global allocations to aeronautical safety services



Notes:
 Drawing not to scale
 Not all Regional or sub-Regional allocations are shown
 Band identification (e.g. VHF) and band # per Radio Regulations
 The satellite communication bands used by MTSAT and Inmarsat are not allocated the the Aeronautical Mobile Satellite (R) Service

Doc 9718 Volume II

Frequency assignment planning



Published for the first time in 2013,

Updated in 2017 and 2022

Provides globally harmonized frequency assignment planning criteria and guidance material to support the application of SARPs in Annex 10, Vol. V

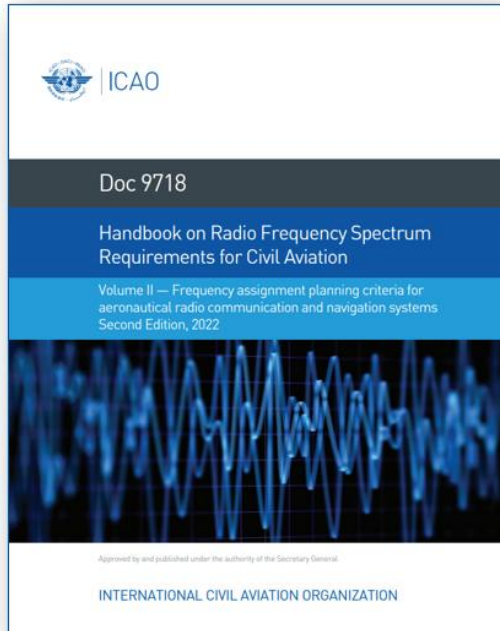
- Developed in conjunction with the revisions to Annex 10, Vol. V
- Developed by FSMP (previously ACP Working Group F) and NSP
- **Implementation through Regional Air Navigation Agreement by PIRG**
- Frequency Assignment Planning criteria is used by the ICAO Frequency Assignment Planning software: **Frequency Finder (FF)**

Doc 9718 Volume II

Frequency assignment planning

Future work

Vol. II - Frequency Planning



- The 2022 update added material on radionavigation systems (ILS, VOR, DME and GBAS), as developed with the help of NSP. Some additional updates of this material is planned in Q2 2025 (Currently it is in the ICAO publication process)
- Future work will concentrate on refining the existing criteria and adding criteria for systems such as Space-based VHF and LDACS



Doc 9718 Volume I

Spectrum Strategy and Policies

Overall ICAO Spectrum Policy (approved by Council)

- 1
 - ICAO Spectrum **Strategy**
 - Long term spectrum use of current and future radio systems
 - ICAO Spectrum **Policy** Statements
 - Specific actions to assist in meeting the Strategic Objectives
- 2
 - ICAO **Position** for future WRC's
 - Medium and long term availability of spectrum for aviation

ICAO Position and WRC preparations



ICAO position established
after WRC agenda established

FSMP is the focal point on
all aspects related to
development of ICAO's position

Reviewed by ANC,
State Letter process,
Approved by Council



The Position presents ICAO
views on all WRC agenda items
of interest to international civil
aviation, with particular regard
to safety and regularity of flight

ITU WRC Agenda established

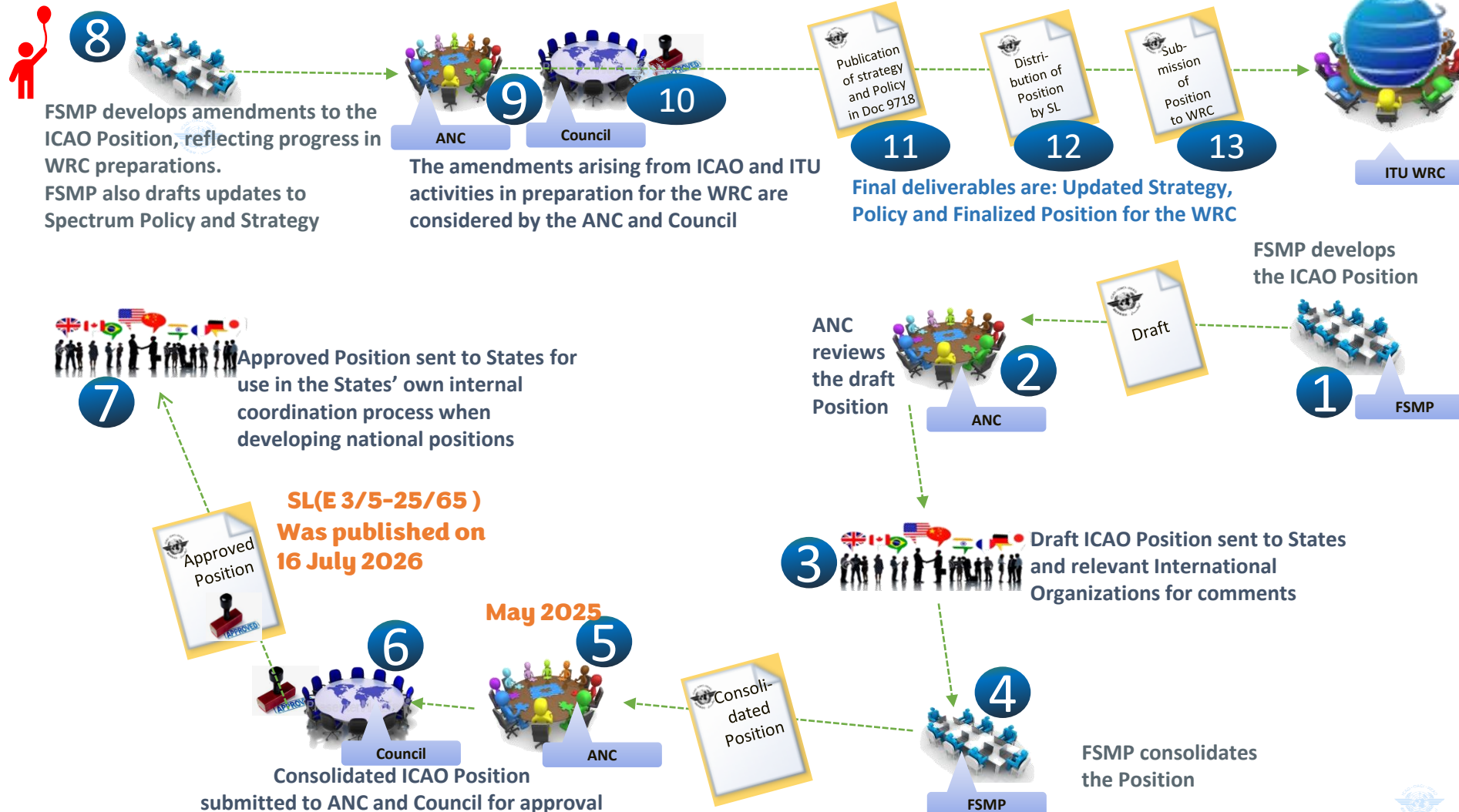


Proper co-ordination
with the 7 ICAO
Regional Offices



WE ARE HERE
(Aug/Sep 2026)

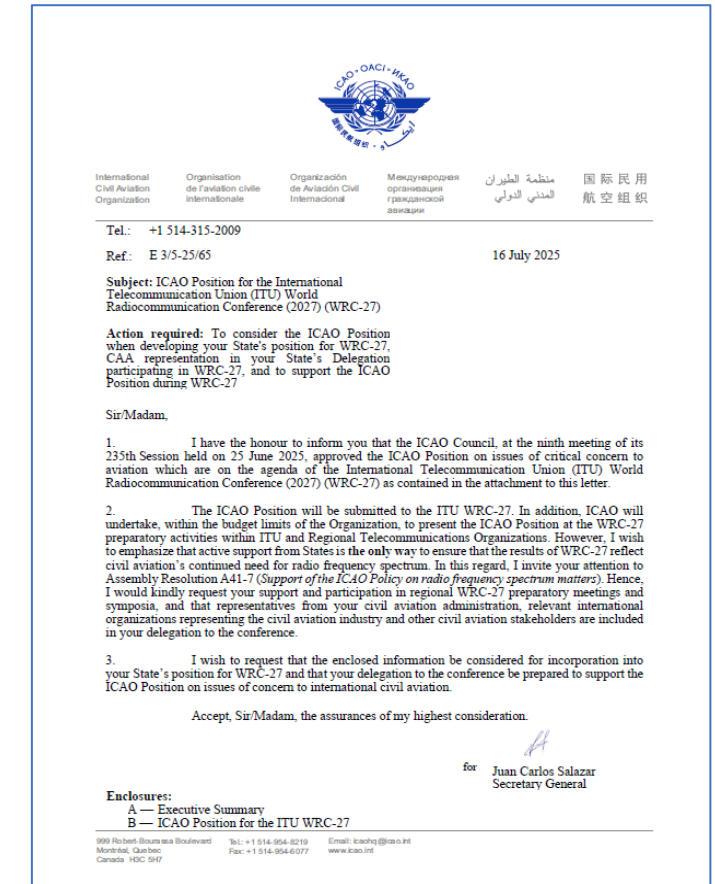
ICAO Position and WRC preparations





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

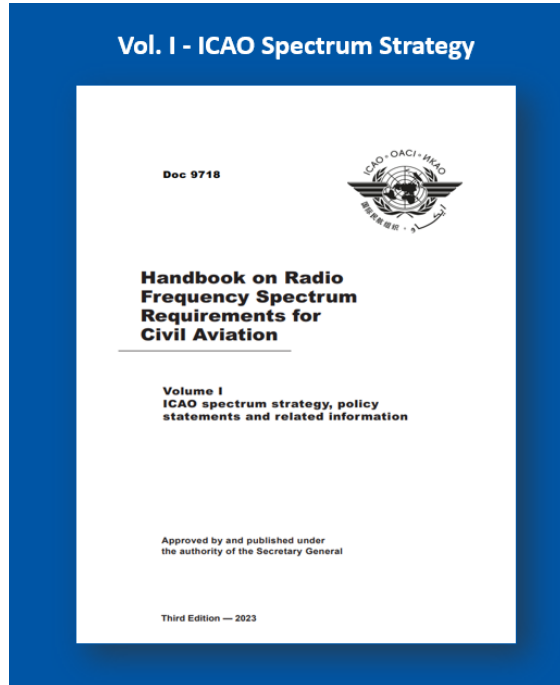
- The ICAO Council, at the ninth meeting of its 235th Session held on 25 June 2025, approved the ICAO Position for ITU WRC-27.
 - The relevant State Letter was published on 16 July 2025.
- States and Int Orgs are requested to take into account the ICAO Position, to the maximum extent possible,
- in their 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.



State Letter 24/93 (ICAO-NET)

[SL.2025.65 E](#) [ar](#) [es](#) [fr](#) [ru](#) [zh](#)

(To promote ICAO's Position, ICAO plans to organize four regional WRC-27 preparatory workshops, including this workshop in Mar 2026.)



Doc 9718 Volume I

Spectrum Strategy and Policies

Future work

- Inclusion of the **ICAO position** for WRC-27 and other additional updates of this material is planned in Q2 2026 (*now it is in the publication process*)

ICAO Assembly 42nd Session (A42)

(23 Sep to 03 Oct 2025)

- At the Technical Commission of the 42nd Assembly, Spectrum and CNS-related issues were discussed, and the attached report was approved at the Plenary. (refer to the [A42-WP/696](#))
- Related topics discussed under the Agenda Item 24 are as follows.
 - 1) **ICAO Policy on Radio Frequency (RF) Spectrum Matters;**
 - 2) GNSS vulnerabilities and resilience; and
 - 3) Other CNS issues

The assembly acknowledge that **GNSS interference and unresolved radio frequency spectrum issues such as potential interference with radio altimeters, have a significant impact on aviation safety, security, and efficiency.** With **the endorsement of amendments to relevant Assembly resolutions on this subject, the Assembly reiterated the vital and increasing importance of the radio frequency spectrum and requested States' active engagement to ensure that resilient CNS capabilities remain available to maintain aviation safety.**

Furthermore, the Technical Commission acknowledged the urgency of this subject and agreed that the contents of A42-WP/329 and A42-WP/348 be brought to the attention of appropriate expert group(s) for further consideration and actions.

ICAO Assembly 42nd Session (A42)

(23 Sep to 03 Oct 2025) Cont.

17

- At the Technical Commission of the 42nd Assembly, Spectrum and CNS-related issues were discussed, and the attached report was approved at the Plenary. (refer to the [A42-WP/696](#))
- **The following WPs were allocated to a sub-batch, “ICAO Policy on Radio Frequency Spectrum Matters” of the Agenda Item 24 at the Technical Commission.**

ICAO Policy on Radio Frequency (RF) Spectrum Matters;

WP/33	ICAO Council	SUPPORT OF THE ICAO POLICY ON RADIO FREQUENCY (RF) SPECTRUM MATTERS
WP329	IATA	SPECTRUM RESILIENCE: BALANCING SPECTRUM EFFICIENCY WITH AVIATION SAFETY
WP/348	Brazil	DEFENCE OF THE ICAO POSITION ON THE AERONAUTICAL FREQUENCY SPECTRUM FOR THE WORLD RADIOCOMMUNICATION CONFERENCE (WRC/27)

Also, IPs provided by Saudi Arabia (A42-[WP/115](#) and [A42-WP/157](#)) are noted.

- **The Assembly endorsed the amendment to Assembly resolution 41-7.**
Resolution A42-7: Support of the ICAO policy on radio frequency spectrum matters

FREQUENCY SPECTRUM MANAGEMENT

18

42nd ICAO Assembly (A42) (23 Sep to 03 Oct 2025)

255 WPs* were addressed by the Technical Commission of the A42. As a result, the Assembly adopted following six Assembly Resolutions, which were discussed and recommended by the Technical Commission.

Resolution A42-6: ICAO global planning for safety and air navigation

Resolution A42-9: Consolidated statement of continuing ICAO policies and associated practices related specifically to air navigation

Resolution A42-7: Support of the ICAO policy on radio frequency spectrum matters

Resolution A42-8: Consolidated statement of continuing ICAO policies and practices related to a global air traffic management (ATM) system and communications, navigation, and surveillance/air traffic management (CNS/ATM) systems

Resolution A42-10: Regional cooperation and assistance to resolve safety deficiencies

Resolution A42-11: Halon replacement

* A total of 706 working papers were discussed at A42

FREQUENCY SPECTRUM MANAGEMENT

Assembly Resolution A42-7

1. Encourages Member States to foster an environment that enables national radio regulatory authorities to work in close coordination with civil aviation authorities, thereby ensuring that aviation interests are properly reflected in national spectrum policies and State positions in preparation for and during ITU WRCs;

**Newly added
by A42**

FREQUENCY SPECTRUM MANAGEMENT

Assembly Resolution A42-7

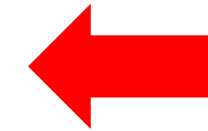
2. Urges Member States, international organizations and other civil aviation stakeholders to support firmly the ICAO frequency spectrum strategy and the ICAO position at WRCs and in regional and other international activities conducted in preparation for WRCs, including by the following means:

BE RESPONSIBLE	working together to deliver spectrum-efficient aeronautical systems as well as frequency management that meet current best practices
BE ACCOUNTABLE	supporting ICAO activities relating to the aviation frequency spectrum strategy and policy through relevant expert group meetings and regional planning groups
ADOPT A COMMON AVIATION POSITION	undertaking to provide for aviation interests to be fully integrated in the development of their positions presented to regional telecommunications fora involved in the preparation of joint proposals to the WRC including in their proposals to the WRC, to the extent possible, material consistent with the ICAO position
SUPPORT	supporting the ICAO position and the ICAO policy statements at ITU WRCs as approved by Council and incorporated in the Handbook on Radio Frequency Spectrum Requirements for Civil Aviation (Doc 9718)
PARTICIPATE	undertaking to provide civil aviation experts to fully participate in the development of States' and regional positions and development of aviation interests at the ITU
REPRESENT AVIATION INTERESTS	ensuring, to the maximum extent possible, that their delegations to regional conferences, ITU study groups and WRCs include experts from their civil aviation authorities and other civil aviation stakeholders who are fully prepared to represent aviation interests

FREQUENCY SPECTRUM MANAGEMENT

Assembly Resolution A42-7

3. ***Urges Member States to actively engage with their radio regulatory authorities in order to incorporate aviation interests with other national interests***, especially in preparation for and during ITU WRCs;



**Newly added
by A42**

4. ***Urges Member States to consider***, as a priority, ***public and aviation safety*** when deciding how to enable new or additional services, and to consult with aviation safety regulators, subject matter experts and airspace users, ***to provide all necessary considerations and to establish regulatory measures to ensure that incumbent aviation systems and services are free from harmful interference:***

5. ***Requests the Secretary General*** to bring to the attention of ITU the importance of adequate radio frequency spectrum allocation and protection for the safety of aviation; and

6. ***Instructs the Council and the Secretary General***, as a matter of high priority within the budget adopted by the Assembly, to ensure that the resources necessary to support the development and implementation of a comprehensive aviation frequency spectrum strategy, as well as increased participation by ICAO in international and regional spectrum management activities are made available



Thank You!