



ICAO

الهيئة العامة للطيران المدني
GENERAL CIVIL AVIATION AUTHORITY



ATM SG/11 & CNS SG/14

19-23 Oct. 2025 **MEETINGS** Abu Dhabi, UAE





ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY



MIDANPIRG Communication, Navigation and Surveillance Sub-Group Fourteenth Meeting

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الهيئة العامة للطيران المدني
GENERAL CIVIL AVIATION AUTHORITY



Eng. Mohamed Iheb Hamdi

ICAO MID Regional Officer for Aerodromes and Ground Aids
& MID Region CNS Focal Point

On behalf of

Mie Utsunomiya

CNS Technical Officer, Air Navigation Bureau
International Civil Aviation Organization (ICAO)

Frequency Spectrum Management: Updates on the ICAO Position for the WRC27

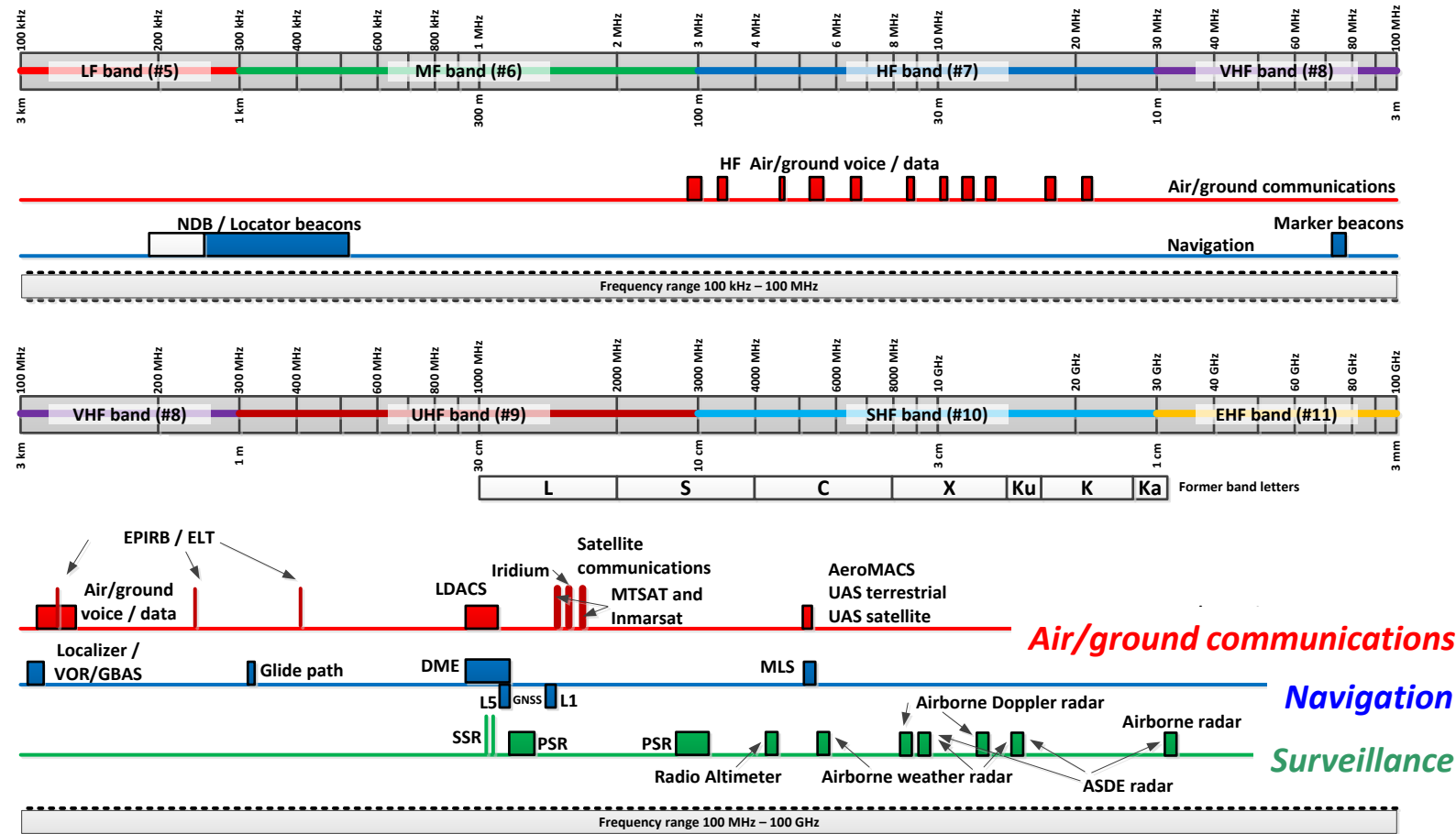


ITU
WRC-27

Aeronautical Frequency Spectrum Management

5

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 Aeronautical Mobile Satellite (R) Service

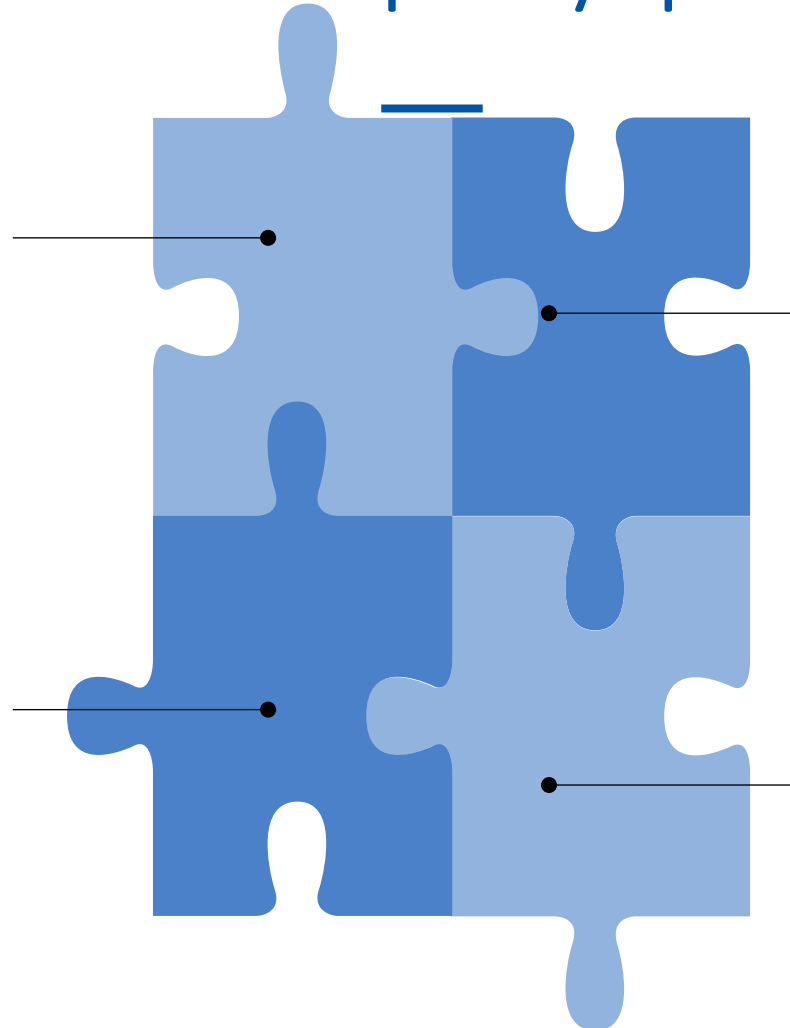
Management and Defence of Aviation Frequency Spectrum

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

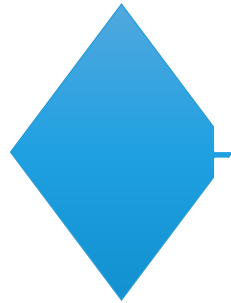
ICAO Position on the
specific agenda items of
the upcoming ITU WRC to
ensure that aeronautical
requirements and safety
concerns are met

Strategy for establishing and promoting the ICAO WRC Position

(including Assembly
Resolution A41-7)

ICAO Spectrum Strategy

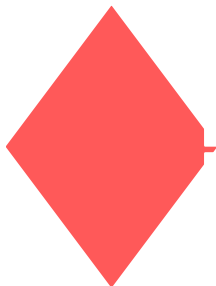
AN-Conf/12 Recommendation 1/12



- › timely availability and appropriate protection of adequate spectrum
- › create a sustainable environment for growth and technology development to support safety and operational effectiveness for current and future operational systems
- › allow for the transition between present and next generation technologies



- › demonstrate efficient use of the spectrum allocated through efficient frequency management and use of best practice.



- › clearly state in the strategy the need for aeronautical systems to operate in spectrum allocated to an appropriate aeronautical safety service



Develop and implement a comprehensive aviation frequency spectrum strategy to be referenced in the GANP



GLOBAL STRATEGIC
GLOBAL TECHNICAL
REGIONAL
NATIONAL

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



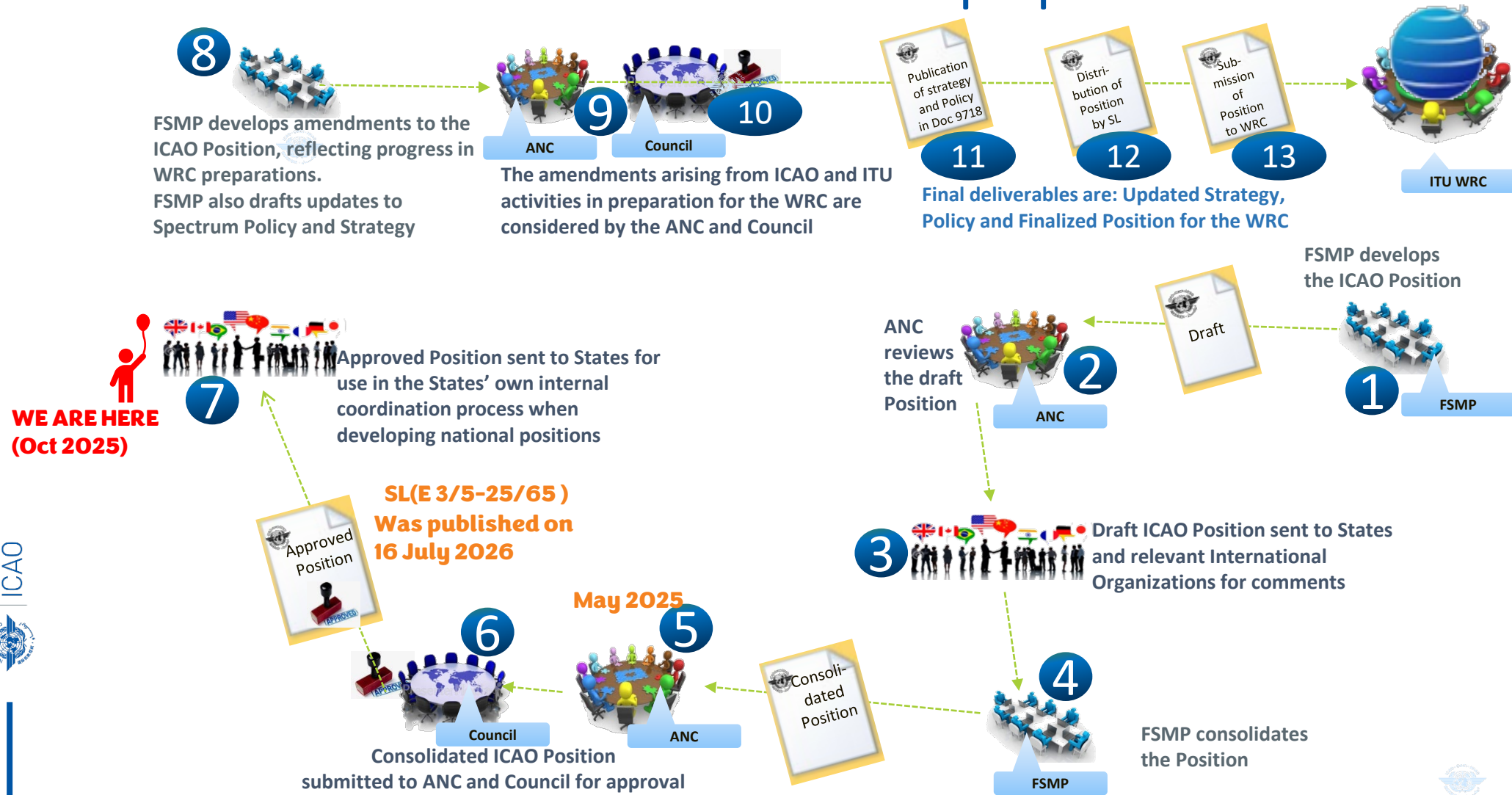
The Position presents ICAO
views on all WRC agenda items
of interest to international civil
aviation, with particular regard
to safety and regularity of flight

ITU WRC Agenda established




Proper co-ordination
with the 7 ICAO
Regional Offices

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.



International
Civil Aviation
Organization
Organisation
de l'aviation civile
internationale
Organización
de Aviación Civil
Internacional
Международная
организация
гражданской
авиации
منظمة الطيران
المدني الدولي
国际民用
航空组织

Tel.: +1 514-315-2009
Ref.: E 3/5-25/65 16 July 2025


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

Action required: To consider the ICAO Position when developing your State's position for WRC-27, CAA representation in your State's Delegation participating in WRC-27, and to support the ICAO Position during WRC-27

Sir/Madam,

- I have the honour to inform you that the ICAO Council, at the ninth meeting of its 235th Session held on 25 June 2025, approved the ICAO Position on issues of critical concern to aviation which are on the agenda of the International Telecommunication Union (ITU) World Radiocommunication Conference (2027) (WRC-27) as contained in the attachment to this letter.
- The ICAO Position will be submitted to the ITU WRC-27. In addition, ICAO will undertake, within the budget limits of the Organization, to present the ICAO Position at the WRC-27 preparatory activities within ITU and Regional Telecommunications Organizations. However, I wish to emphasize that active support from States is the only way to ensure that the results of WRC-27 reflect civil aviation's continued need for radio frequency spectrum. In this regard, I invite your attention to Assembly Resolution A41-7 (Support of the ICAO Policy on radio frequency spectrum matters). Hence, I would kindly request your support and participation in regional WRC-27 preparatory meetings and symposia, and that representatives from your civil aviation administration, relevant international organizations representing the civil aviation industry and other civil aviation stakeholders are included in your delegation to the conference.
- I wish to request that the enclosed information be considered for incorporation into your State's position for WRC-27 and that your delegation to the conference be prepared to support the ICAO Position on issues of concern to international civil aviation.

Accept, Sir/Madam, the assurances of my highest consideration.


 for Juan Carlos Salazar
 Secretary General

Enclosures:
 A — Executive Summary
 B — ICAO Position for the ITU WRC-27

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State Letter 24/93 (ICAO-NET)

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Assembly Resolution A41-7

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	<p>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</p> <p>including in their proposals to the WRC, to the extent possible, material consistent with the ICAO position</p>
SUPPORT	supporting the ICAO position and the ICAO policy statements at ITU WRCs
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



Assembly Resolution A41-7

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:

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

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

Long Term Evolution of CNS and Spectrum matters

In addition to the continued engagement in the ITU spectrum management process, aviation also needs to engage in a proactive and long-term evolution of the CNS systems

AN-Conf/13 Recommendation 2.2/1



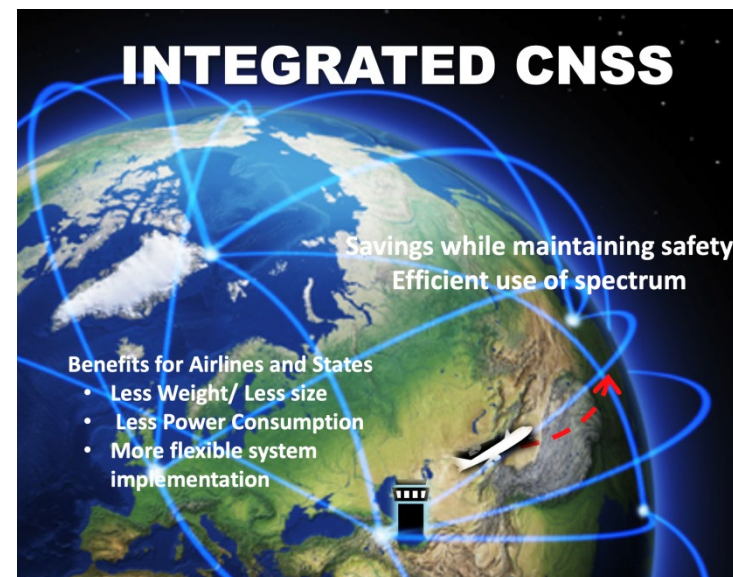
- › ICAO to launch a study on evolving the required CNS and spectrum access strategy in the long term, to ensure that CNS systems remain efficient users of the spectrum resource



- › request States to engage in the spectrum regulatory process to ensure the continued necessary access and protection of the safety critical aeronautical CNS systems



Work is being initiated to undertake this study. This activity is expected to benefit the development of aeronautical CNS systems and their spectrum use in the medium to longer term and eventually the formulation of the ICAO spectrum policy for future WRCs



Current status of work

- WRC-27 preparations are on-track, as per the instructions given in Assembly Resolution 41-7
- The Position for WRC-27 developed by FSMP was reviewed by the ANC, and it was approved by the ICAO Council on 25 June 2025. The relevant State Letter was published on 16 July 2025.
- ITU-R studies are supported by ICAO Secretariat
- A new task has been initiated in coordination with ANC, looking into the long-term evolution of CNS and spectrum matters, as per AN-Conf/13 Recommendation 2/2.1:
 - ✓ Initially this task is being progressed using a small informal taskforce, consisting of select industry representatives, CNS panel participants and Secretariat.
 - ✓ Taskforce is foreseen to be taken over by ANC. The initial outcome of the Study will be presented at the future Assembly.

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.

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- 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 24/2: Support of the ICAO policy on radio frequency spectrum matters

A42 endorsed amendments to the Assembly Resolution A41-7

Support of the ICAO policy on radio frequency spectrum matters

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
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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

***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 at the A42**

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:

***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*

***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*

Action by the Meeting

The meeting is invited to:

- a) Invite MID States to actively participate in the WRC-27 process, including preparatory activities and coordination meetings at both national and regional levels;
- b) Encourage MID States to support the ICAO Position on aeronautical frequency spectrum matters during the ITU World Radiocommunication Conference 2027 (WRC-27); and
- c) Urge MID States to engage closely with their national radio-regulatory authorities to ensure that aviation interests are effectively reflected and safeguarded within national positions and during deliberations at ITU WRC-27.

Thank You

