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Report on Frequency Management related topics

This report will provide an overview on the outcome of the following meeting/conferences on issues of interest to CGMS:

- 44th annual meeting of the Space Frequency Coordination Group (SFCG), 10 –18 June 2025;
- 7th meeting of WMO Expert Team on Radio Frequency Coordination (ET-RFC), 4 – 6 February 2026.

Issues worth noting by CGMS WG-I that were discussed and progressed at SFCG-44 and the 7th meeting of the WMO ET-RFC are the following:

- Progress in SFCG and WMO on their objectives/positions for WRC-27 agenda items of interest/concern to CGMS (as listed in the HLPP).
- OSCAR Database updates and changes

Actions proposed: CGMS is invited to note this report and provide feedback and information on its activities via the CGMS/SFCG Liaison Officer to SFCG-45 (June 2026) on any frequency related matter.

REPORT ON FREQUENCY MANAGEMENT RELATED TOPICS

1 INTRODUCTION

This report will provide an overview on the outcome of the following meeting/conferences on issues of interest to CGMS:

- 44th annual meeting of the Space Frequency Coordination Group (SFCG), 10 – 18 June 2025;
- 7th meeting of WMO Expert Team on Radio Frequency Coordination (ET-RFC), 4 – 6 February 2026.

Issues worth noting by CGMS WG-I that were discussed and progressed at SFCG-44 and/or the 7th meeting of the WMO ET-RFC are the following:

- Progress in SFCG and WMO on their objectives/positions for WRC-27 agenda items of interest/concern to CGMS, see sections 3.1 to 3.5 (limited to those listed in the HLPP);
    - Including issues related to the preliminary agenda items WRC-31 of interest and potential new items discussed in SFCG, see section 3.6;
- OSCAR Database updates and changes.

2 UPDATES AND CHANGES TO THE OSCAR DATABASE

SFCG action item 43/12 called for SFCG member agencies to check the information about their passive and active sensors in the WMO OSCAR database and provide corrections and additions as needed.

In response to requests from SFCG-43, WMO confirmed that all requested updates to existing information in OSCAR/Space have been implemented. Key changes include a new structure for separating responsible and cooperating agencies (meanwhile already implemented) and a refined approach to the visibility of frequency data as proposed by SFCG and agreed with WMO:

- TT&C information will be hidden from public view but retained for logged-in users;
- data downlink frequency information will be restricted to allocated frequency bands, with exact frequencies hidden;
- DCP frequency information remains publicly visible.

Furthermore, WMO informed SFCG about its plans to integrate an RFI reporting module into OSCAR/Space, designed to facilitate reporting from WMO Members (National Meteorological and Hydrological Services). This integration necessitates a significant redesign to store detailed instrument channel information in a relational database, ensuring consistency across the platform and supporting both scientific and frequency management aspects of RFI reporting.

SFCG was invited to provide feedback for the design of this new module and to review the correct categorization of frequency information (sensors, TT&C, and DCP/data downlink). Scope of what can be reported, RFI only or also other anomalies/instances leading to loss of data, is not yet fully clear and requires further discussion.

3 WRC-27 AGENDA ITEMS OF INTEREST/CONCERN TO CGMS

Section 2.2.1 of the HLPP stipulates to facilitate an effective preparation of national and ITU-R regional groups' positions for the World Radiocommunication Conference (WRC) 2027 favourable for CGMS-related issues, in particular but not exclusively with regard to the:

- Establishment of protection for passive microwave sensors in the bands 50.2-50.4 GHz, 52.6-54.25 GHz and in bands above 86 GHz from unwanted emissions from active services in neighbouring frequency bands (WRC-27 agenda items 1.1, 1.3, 1.8 and 1.18);

- Possible new primary frequency allocations to EESS (passive) in the bands 4200-4400 MHZ and 8400-8500 MHz for Sea Surface Temperature (SST) measurements to complement the SST measurements in the 6/7 GHz range (WRC-27 agenda item 1.19);

- Protection of the frequency bands 7450-7550 MHz, 7750-7900 MHz and 8025-8400 MHz, used for the downlink from MetSat and EO satellites, from possible future frequency usage by International Mobile Telecommunications (IMT) (WRC-27 agenda item 1.7).

The following sections 3.1 to 3.5 provide a short overview on the relevant WRC-27 agenda items and the corresponding SFCG objectives from the 44th annual meeting of the Space Frequency Coordination Group (SFCG), 10 – 18 June 2025 and the preliminary positions of WMO as updated at the recent 7th meeting of WMO Expert Team on Radio Frequency Coordination (ET-RFC), 4 – 6 February 2026.

Section 3.6 provides an outlook and Preliminary SFCG objectives and Preliminary WMO on positions on WRC-31 agenda items of relevance.

3.1 WRC-27 Agenda Items 1.1 and 1.3 (New satellite agenda items with need to protect passive sensors)

Agenda items 1.1 and 1.3 regarding new satellite applications in existing allocations to the fixed-satellite service (FSS) requiring the establishment/update of limits to protect passive sensors in the bands 50.2-50.4 GHz and above 52.6 GHz, relevant for many operational and planned passive microwave sensors on non-geostationary MetSat.

Similarly to what was studied already in the past which led to the establishment of unwanted emission limits in Resolution 750 in the Radio Regulations to protect the bands 50.2-50.4 GHz and 52.6-54.25 GHz, studies will now have to be completed for these new satellite applications. Taking into account aggregation effects on potential

RFI with already existing satellite applications, those existing limits will now have to be reviewed and potentially revised.

Both, the preliminary SFCG objective and the preliminary WMO position as quoted below, are in line with the CGMS HLPP.

Preliminary SFCG Objective on WRC-27 agenda item 1.1:

SFCG does not oppose the operation of ESIMs in the bands 47.2-50.2 GHz and 50.4-51.4 GHz (Earth-to-space) provided that the protection of the EESS (passive) in the adjacent frequency band 50.2-50.4 GHz continues to be ensured through mandatory unwanted emission limits in Resolution 750 (Rev. WRC-19).

Preliminary WMO Position on WRC-27 agenda item 1.1:

WMO does not oppose the operation of ESIMs in the bands 47.2-50.2 GHz and 50.4-51.4 GHz (Earth-to-space) provided that the protection of the EESS (passive) in the adjacent frequency band 50.2-50.4 GHz continues to be ensured. This may require revision of existing mandatory unwanted emission limits in Resolution 750 (Rev. WRC-19), taking into account the aggregate interference from ESIMs and non-GSO FSS systems and GSO FSS networks into the EESS (passive).

Preliminary SFCG Objective on WRC-27 agenda item 1.3:

SFCG does not oppose the use of the frequency band 51.4-52.4 GHz by gateway earth stations transmitting to non-GSO systems in the FSS (Earth-to-space) provided that the protection of the EESS (passive) in the frequency band 52.6–54.25 GHz continues to be ensured through mandatory unwanted emission limits in Resolution 750 (Rev. WRC-19). These mandatory limits must account for aggregate interference from GSO and non-GSO FSS systems into the EESS (passive). Revisions to Resolution 750 (Rev.WRC-19) may require both addition of unwanted emission limits for the non-GSO Earth stations as well as revision of the existing unwanted emission limits applicable to the GSO Earth stations.

Preliminary WMO Position on WRC-27 agenda item 1.3:

WMO is not opposed to the use of the frequency band 51.4-52.4 GHz for gateway Earth stations transmitting to non-GSO systems in the FSS (Earth-to-space) provided that the protection of the EESS (passive) in the frequency band 52.6-54.25 GHz is ensured. This may require inclusion of relevant mandatory unwanted emission limits for non-GSO FSS and, if necessary, adjustments to the existing GSO FSS limits in Resolution **750 (Rev. WRC-19)**, taking into account the aggregate interference from GSO FSS networks and non-GSO FSS systems into the EESS (passive).

3.2 WRC-27 Agenda Item 1.7 (IMT in the 4.4-4.8 GHz, 7.125-8.4 GHz and 14.8-15.35 GHz bands)

Despite the fact that there are already a number of bands identified for IMT, including the newly identified bands, 6425-7125 MHz in Region 1 and 7025-7125 MHz in Region

3, there was still a large majority of countries at WRC-23 insisting to study even more bands for International Mobile Telecommunication (IMT). As a result of that WRC-27 agenda item 1.7 was established.

Under this new agenda item for IMT, sharing and compatibility studies are currently under development, with a view to ensuring the protection of services to which the frequency band is allocated on a primary basis, without imposing additional regulatory or technical constraints on those services, and also on services in adjacent bands. Study results currently diverge extensively depending on the origin of the study. Proponents of an IMT introduction conclude on separation distances of down to 1 km, while all the other studies (e.g. from China, France, Germany, Russia, NOAA, ESA, EUMETSAT) conclude that several tens of km up to 200km are required to ensure the protection of a receiving Earth stations.

Among the bands studied in the range 7125-8400 MHz are also the bands:

- 7450-7550 MHz for the data downlink from geostationary MetSats;
- 7750-7900 MHz for the data downlink from non-geostationary MetSats;
- 8025-8400 MHz for the downlink from Earth Observation (EO) satellites.

Most of today's MetSat and EO missions are using one of the above bands in the 7/8 GHz range for the downlink and/or broadcast of the measured data. Thus, studies for a possible identification for IMT concern nearly all these missions.

Both, the preliminary SFCG objective and the preliminary WMO position as quoted below, are in line with the CGMS HLPP.

<u>Preliminary SFCG Objective on WRC-27 agenda item 1.7:</u>

SFCG opposes the identification for IMT in the bands 7125 – 8400 MHz and 14.8 – 15.35 GHz unless EESS, SRS, SOS and MetSat are fully protected and no additional constraints are placed on their current operations and future development, including unconstrained ubiquitous worldwide deployment of EESS and MetSat receiving earth stations in those bands.

In addition, studies are necessary to ensure that the IMT operators are fully aware of the impact of coexistence with high power uplinks from SRS, SOS, MetSat and EESS earth stations.

Considering the impacts mentioned above, regulatory provisions for possible IMT identifications should not establish any priority over incumbent services, to ensure the continuous use and development of existing and future space science stations operations.

SFCG recognises the linkage to Agenda Item 1.19 and supports study of the potential impact from IMT operations in the frequency ranges 4400-4800 MHz and 8215-8400 MHz to potential new EESS (passive) allocations in the frequency bands 4200-4400 MHz and 8400-8500 MHz.

> In this context, SFCG-44 discussed the initial studies and methodologies developed by SFCG Members and determined that continued dialogue throughout the year is needed to coordinate study methodology and potential CPM text

proposals. To facilitate that, action item SFCG 44/4 was established with the aim to coordinate contributions to the ITU-R responsible group Working Party 5D.

Preliminary WMO Position on WRC-27 agenda item 1.7:

WMO opposes any IMT identification:

- in the 7 450-7 550 MHz frequency band to ensure the protection of MetSat (space-to-Earth) allocations used for the transmission of data collected from GSO MetSat systems.
- in the 7 750-7 900 MHz frequency band to ensure the protection of MetSat (space-to-Earth) allocations used for the transmission of data collected from non-GSO MetSat systems for direct broadcasting to end-user Earth stations to comply with low latency data access requirements for meteorological applications.
- in the 8 025-8 400 MHz frequency band to ensure the protection of EESS (space-to-Earth) allocations used for the transmission of data collected from Earth exploration satellites. Additionally, within the 8 175-8 215 MHz portion of this frequency band, an IMT identification could constrain the future deployment of MetSat (Earth-to-space) stations used for uplink of processed High Resolution Image Transmission (HRIT) data to GSO meteorological satellites.

Introduction of widely deployed IMT networks would limit future deployment of MetSat and EESS Earth stations that are essential for the distribution of meteorological, related environmental (including space weather) and Earth observation data to the WMO user community.

WMO stresses the importance and value of protecting the significant investments that many administrations have made in both satellite systems and earth stations operating in the EESS and MetSat services that provide significant socio-economic benefits via the availability of EESS/MetSat data as a free public service to the global community.

Additionally, WMO does not support an IMT identification in the 7 125-7 250 MHz frequency band since sea surface temperature (SST) measurements, performed in the overlapping 7 075-7 250 MHz frequency range, are of prime importance for weather forecasting, early warnings and climate monitoring. The 7 075-7 250 MHz frequency range used for SST measurements will always be needed to ensure continuity with past and current SST measurements. Combining this frequency range with nearby channels considered under agenda item 1.19 is required to improve science retrievals and to mitigate RFI.

WMO considers that, due to the specific characteristics and deployment of IMT, a potential IMT identification in the 7 190-7 250 MHz frequency band cannot be regarded as an extension of the mobile service as defined by Recommendation ITU-R M.1825. As a result, the constraint preventing EESS space stations from claiming protection from mobile stations, as specified in RR No. **5.460A**, does not apply.

WMO supports the development of ITU-R studies to determine the potential for interference from EESS and MetSat Earth stations in the Earth-to-space direction into IMT systems.

WMO requests that the impact of the potential new IMT identifications in the frequency ranges 4 400-4 800 MHz and 8 215-8 400 MHz on the potential new EESS (passive) allocations under agenda item 1.19 be taken into consideration. In particular, the definition of appropriate out of band emission limits for IMT would be required to ensure the protection of EESS (passive) operations in the 4 200-4 400 MHz and 8 400-8 500 MHz bands.

3.3 WRC-27 Agenda Item 1.8 (Radiolocation service in the 231.5-275 GHz and 275-700 GHz ranges)

For these new applications in the Radiolocation service (RLS) compatibility with passive sensors has to be ensured.

Therefore, sharing and compatibility studies (in-band and adjacent bands) are performed for active millimetric and sub-millimetric wave RLS systems in bands above 231.5 GHz with passive sensors. This is relevant for many planned passive microwave sensors, such as Ice Cloud Imagers on non-geostationary MetSat. Results so far indicate that frequency overlap between these new RLS systems and passive sensors should be avoided (at least in bands below 356 GHz) due to RFI being caused to passive sensors. Furthermore, for some RLS applications such as vehicular and aeronautical RLS systems, a significant restriction of their unwanted/out-of-band emissions will be required to be established in the Radio Regulations in order to protect passive sensors in neighbouring bands.

Both, the preliminary SFCG objective and the preliminary WMO position as quoted below, are in line with the CGMS HLPP.

Preliminary SFCG Objective on WRC-27 agenda item 1.8:

SFCG supports the protection of passive services using this spectrum, particularly in bands subject to RR No.5.340, where all emissions are prohibited.

Further studies may be required with respect to compatibility between the radiolocation service and EESS/SRS (passive) both within band and in adjacent bands.

SFCG opposes any new allocations to the radiolocation service in the frequency band 250-252 GHz where footnote RR No. 5.340 applies.

SFCG is not opposed to new allocations to the radiolocation service on a primary basis in the frequency range 231.5-275 GHz, except for 250-252 GHz as noted above, or to new identifications in the frequency range 275-700 GHz, provided that the protection of the existing allocations/identifications to the EESS (passive) and the EESS (active) is ensured, from both in-band and/or out-of-band emissions of these possible new radiolocation service applications.

SFCG is of the view that potential active applications, such as UWB, not falling within the radiolocation service, should not be considered under WRC-27 Agenda Item 1.8.

Preliminary WMO Position on WRC-27 agenda item 1.8:

WMO opposes any new allocations to the radiolocation service in the frequency band 250-252 GHz where RR No. 5.340 applies and in frequency bands overlapping with nadir and/or conical scanning EESS (passive) sensors in the frequency range 296-356 GHz. This means consideration of new allocations/identifications to the radiolocation service should be focused on the frequency ranges 252-296 GHz and 356-439 GHz, provided that the protection of the existing allocations/identifications to the EESS (passive) is ensured, from both in-band and/or out of band emissions. In particular, such protection will require appropriate unwanted emission limits to be applied to RLS systems, taking into account aggregate interference from widely deployed RLS systems.

WMO is of the view that short-range devices and ultra-wideband applications are not considered to operate under a radiocommunication service and therefore are not within the scope of this agenda item.

WMO is also of the view that consideration should be given to the protection of ground-based passive atmospheric sensing in the bands 235-238 GHz, 250-252 GHz and 265-275 GHz.

3.4 WRC-27 Agenda Item 1.18 (resolves 1) (Protection of EESS (passive) sensors from active services in adjacent bands above 86 GHz)

The work under this WRC-27 Agenda item 1.18 is split into two topics, protection of particular bands for EESS (passive) (resolves 1) and particular bands for Radioastronomy (resolves 2). The interest of CGMS is related to the protection of EESS (passive) under resolves 1 from unwanted emissions of active services operating in frequency bands adjacent to the EESS (passive) allocations as outlined in the table below, where No. 5.340 applies.

Resolution 750 (Rev. WRC-19) is to be updated should any regulatory measures be required to ensure the protection of the EESS (passive).

Establishment of unwanted emission limits in Resolution 750 in the Radio Regulations for the passive bands 86-92 GHz, 114.25-116 GHz, 164-167 GHz, 200-209 GHz, all covered by 5.340 (all emissions are prohibited), proactively before the active services are deployed, would be beneficial for many operational and planned passive microwave sensors on non-geostationary MetSat satellite systems.

The following EESS (passive) bands and adjacent active services are to be studied:

EESS (passive) frequency band	Active service frequency band	Active service
86-92 GHz	81-86 GHz	Fixed-satellite service (FSS) (Earth-to-space), mobile service (MS)
	92-94 GHz	MS, radiolocation service (RLS)
114.25-116 GHz	111.8-114.25 GHz	Fixed service (FS), MS
164-167 GHz	158.5-164 GHz	FS, FSS (space-to-Earth), MS, mobile-satellite service (MSS) (space-to-Earth)
	167-174.5 GHz	FS, FSS (space-to-Earth), inter-satellite service (ISS), MS
200-209 GHz	191.8-200 GHz	FS, ISS, MS, MSS, radionavigation service (RNS), radionavigation-satellite service (RNSS)
	209-217 GHz	FS, FSS (Earth-to-space), MS

Both, the preliminary SFCG objective and the preliminary WMO position as quoted below, are in line with the CGMS HLPP.

Preliminary SFCG Objective on WRC-27 agenda item 1.18 (resolves 1):

SFCG supports mandatory unwanted emissions limits applied to active services to protect EESS (passive) operations in the bands 86-92 GHz, 114.25-116 GHz, 164-167 GHz and 200-209 GHz allocated to EESS (passive) on a primary basis and subject to RR No. 5.340.

These limits should be included in a revision to Resolution 750 (Rev. WRC-19).

SFCG believes that this issue should be fully addressed by WRC-27 by establishing appropriate unwanted emissions limits for protection of EESS (passive) before there is widespread deployment of active services. This also applies to the active services for which no characteristics are currently available to perform compatibility studies.

Preliminary WMO Position on WRC-27 agenda item 1.18 (resolves 1):

WMO supports the implementation of new mandatory unwanted emission limits in Resolution 750 (Rev. WRC-19) applicable to active services operating in adjacent frequency bands, in order to ensure the protection and long-term usability of EESS (passive) in the frequency bands 86-92 GHz, 114.25-116 GHz, 164-167 GHz and 200-209 GHz.

WMO also supports the need to develop appropriate regulatory provisions to ensure the long-term protection of EESS (passive) in the frequency bands listed above from unwanted emissions of active services allocated in adjacent frequency bands where no parameters have been provided.

WMO stresses the need to address this issue by WRC-27 before there is widespread deployment of active services in the bands to be studied.

3.5 WRC-27 Agenda Item 1.19 (possible new primary allocations to EESS (passive) in the 4.2-4.4 GHz and 8.4-8.5 GHz bands for SST)

As a consequential action to the outcome of WRC-23 Agenda item 1.2 for IMT/5G identification in the 6/7 GHz range and its possible impact on SST measurements, WRC-23 established agenda item agenda item 1.19 on possible new frequency allocations to the EESS (passive) in the bands 4200-4400 MHz and 8400-8500 MHz.

The aim of the studies under WRC-27 agenda item 1.19 is to determine the conditions of usage of the frequency bands 4 200-4 400 MHz and 8 400-8 500 MHz by the EESS (passive) which would then be used in conjunction with the 6/7 GHz frequency range. In this context also the merits of a multichannel instrument for future SST measurements has to be assessed.

Both, the preliminary SFCG objective and the preliminary WMO position as quoted below, are in line with the CGMS HLPP.

Preliminary SFCG Objective on WRC-27 agenda item 1.19:

SFCG supports additional global primary allocations to the EESS (passive) in the frequency bands 4200-4400 MHz and 8400-8500 MHz in order to ensure the long-term continuity of sea surface temperature (SST) measurements, in conjunction with the existing 6/7 GHz frequency range, without placing any additional constraints on existing services.

SFCG also supports the protection of these new EESS (passive) allocations from any possible new IMT identifications in adjacent bands under WRC-27 AI 1.7.

Preliminary WMO Position on WRC-27 agenda item 1.19:

WMO supports new primary EESS (passive) allocations in the frequency bands 4 200-4 400 MHz and 8 400-8 500 MHz in order to ensure the long-term continuity of sea surface temperature (SST) measurements in conjunction with the existing 6/7 GHz frequency range.

Protection of these new primary EESS (passive) allocations in the frequency bands 4 200-4 400 MHz and 8 400-8 500 MHz from the potential new IMT identifications in adjacent bands (as considered by agenda item 1.7) should be ensured by appropriate mandatory regulatory provisions.

WMO also supports the development and implementation of appropriate regulatory provisions to ensure that high-density mobile systems shall not be introduced in the 8 400-8 500 MHz frequency band allocated to mobile, except aeronautical mobile, service.

3.6 WRC-27 Agenda Item 10 (Preliminary agenda for WRC-31)

Under the standing agenda item 10 of a WRC, also the preliminary agenda for the next but one WRC is discussed and established, in this case for WRC-31. The following provides a list of items of potential relevance with the preliminary SFCG objectives and preliminary WMO positions.

2.1: New allocations in 275-325 GHz for passive and active services

Preliminary SFCG objective:

SFCG is of the opinion that justification is needed before considering any extension of the Table of Frequency Allocations in Article 5 of the Radio Regulations up to 325 GHz. It should be noted that RR No. 5.565 includes the required identifications for passive service applications above 275 GHz and that RR No. 5.564A includes identifications to active services, with conditions to protect the EESS (passive), SRS (passive) and radio astronomy. If any extension of the Table of Frequency Allocations in Article 5 of the Radio Regulations up to 325 GHz is considered:

- Identifications to EESS (passive) and SRS (passive) between 275 GHz and 325 GHz should be converted into primary allocations;

- potential frequency allocations for EESS (active) in the range 275-325 GHz should also be considered.

Preliminary WMO position:

WMO is not opposed to assessing the possibility of new allocations in the frequency range 275-325 GHz provided that the existing EESS (passive) identifications (RR No. 5.565) are upgraded to primary allocations and their protection is ensured.

2.6: IMT in bands [102-109.5 GHz, 151.5-164 GHz, 167-174.8 GHz, 209-226 GHz and 252-275 GHz]

Preliminary SFCG objective:

SFCG is concerned about ensuring protection of the EESS (passive) from IMT unwanted emissions, noting that WP5D has already begun work on this frequency range. SFCG notes that each of the proposed frequency bands is adjacent to an EESS (passive) allocation on either the lower and/or upper end. Furthermore, many of the EESS (passive) frequency bands are subject to RR No. 5.340.

Preliminary WMO position:

WMO is concerned with the protection of the EESS (passive) from IMT unwanted emissions, noting that each of the proposed frequency bands is adjacent to an EESS (passive) allocation that is subject to RR No. 5.340.

2.10: EESS (Earth-to-space) in the frequency band 22.55-23.15 GHz

Preliminary SFCG objective:

SFCG supports a WRC-31 agenda item for the creation of a new primary allocation to the Earth exploration-satellite service (Earth-to-space) in the frequency band 22.55-23.15 GHz.

A new primary EESS (Earth-space) allocation in the band 22.55-23.15 GHz will pair with the band 25.5-27 GHz EESS (space-to-Earth) allowing uplinks and downlinks on the same transponder. Such an allocation will also provide future capacity for telemetry

and telecommand as demand increases, as well as other potential benefits such as improved security.

Preliminary WMO position:

WMO supports the preliminary agenda item for a new primary allocation to the EESS (Earth-to-space) in the frequency band 22.55-23.15 GHz. Such a new allocation will pair with the existing EESS (space-to-Earth) allocation in 25.5-27 GHz, allowing uplinks and downlinks on the same transponder. It will also provide future capacity for TT&C as demand increases.

2.11: EESS (space-to-Earth) for EO payload data in bands within the range 37.5-52.4 GHz

Preliminary SFCG objective:

SFCG supports the WRC-31 agenda item for the upgrade of the secondary allocation to the EESS (space-to-Earth) in the frequency band 37.5-40.5 GHz or possible new worldwide frequency allocations on a primary basis to the EESS (space-to-Earth) in certain frequency bands within the frequency range 40.5-52.4 GHz, taking into account the increased EESS payload data capacity requirements. It is expected that preliminary studies during the cycle 2024-2027 would help in refining the scope of the item and clarifying the exact frequency bands for consideration.

In the context of this preliminary WRC-31 agenda item 2.11, SFCG discussed and concluded that the technological capability to allow increased data downlink rates for frequencies above 37.5 GHz could be one effective argument in favour of this preliminary WRC-31.

It was emphasized and mutually agreed that this potential new allocation to EESS is meant to complement the existing bands allocated to EESS in X-band and Ka-band. At the same time, SFCG members noted the current lack of specific missions that are planned to operate in this frequency range.

It was agreed to further work on this topic by defining potential characteristics of EESS systems which will operate in these frequencies as well as by identifying the best suitable frequency range between 40.5 – 52.4 GHz for a potential new EESS (space-to-Earth) allocation. For this purpose action item SFCG 44/7 was established.

Other possible agenda items for WRC-31 supported by SFCG:

In the context of WRC-31, ROSCOSMOS brought forward the idea for an agenda item for WRC-31 for a possible new worldwide allocation to the Earth exploration-satellite service (space-to-Earth) in the frequency band 7900-8025 MHz band. This would bridge the gap between the band allocated to MetSat at 7750-7900 MHz and the allocation to EESS at 8025-8400 MHz, which also includes MetSat.

SFCG-44 agreed on action item 44/5 to study the possible use cases of the 7900-8025 MHz band under EESS (space-to-Earth), including possible use together with existing allocations to EESS and Metsat in the adjacent frequency bands, as well as consider

possible conditions of sharing with existing radiocommunication services in the overlapping band with a view to develop new SFCG Report.

Interested SFCG member agencies were invited to provide feedback on:

- Possible future use cases of the 7900-8025 MHz (space-to-Earth) for MetSat/EESS satellites in conjunction with existing adjacent allocations and associated technical and operational characteristics;

- Possible sharing conditions and interference mitigation techniques with existing radiocommunication services in the overlapping band.

4 WMO ON FREQUENCY RELATED MATTERS

The seventh meeting of the Expert Team on Radio Frequency Coordination (ET-RFC) was held at the National Centre of Meteorology, Abu Dhabi, United Arab Emirates from 4 to 6 February 2026 in conjunction with a training workshop on Radio Frequency matters for the Arab states from 9 to 10 February 2026. This workshop was intended for national focal points for radio frequency matters from the Arab states.

One essential task and outcome of this ET-RFC meeting was the development of the updated version of the preliminary WMO positions for WRC-27. Relevant extracts are provided in sections 3.1 to 3.6 above.

At the training workshop for Arab states, presentations of national weather services from Arab states reported about two RFI issues common to most of these countries:

- RFI from RLAN into terrestrial meteorological Radars operating in the 5 GHz range (not further discussed here);
- RFI from unwanted/out-of-band emissions of 5G base stations operating below 3800 MHz into EUMETCast in C-Band (3849 MHz). This RFI results from aggregation of such emissions of several 5G base stations of different operators in the vicinity of a EUMETCast Africa reception antenna. This issue is increasingly observed as more and more countries license spectrum for 5G up to 3800 MHz and above.