



Australian Government

**Department of Infrastructure, Transport,
Regional Development, Communications and the Arts**

Australian preliminary positions on WRC-23 agenda items—February 2023

February 2023



Ownership of intellectual property rights in this publication

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia (referred to below as the Commonwealth).

Disclaimer

The material contained in this publication is made available on the understanding that the Commonwealth is not providing professional advice, and that users exercise their own skill and care with respect to its use, and seek independent advice if necessary.

The Commonwealth makes no representations or warranties as to the contents or accuracy of the information contained in this publication. To the extent permitted by law, the Commonwealth disclaims liability to any person or organisation in respect of anything done, or omitted to be done, in reliance upon information contained in this publication.

Use of the Coat of Arms

The Department of the Prime Minister and Cabinet sets the terms under which the Coat of Arms is used. Please refer to the Commonwealth Coat of Arms—Information and Guidelines publication available at <http://www.pmc.gov.au>.

Use of the Coat of Arms

The Department of the Prime Minister and Cabinet sets the terms under which the Coat of Arms is used. Please refer to the Commonwealth Coat of Arms—Information and Guidelines publication available at <http://www.pmc.gov.au>.

Contact us

This publication is available in *PDF format and Word format*. All other rights are reserved, including in relation to any departmental logos or trademarks which may exist. For enquiries regarding the licence and any use of this publication, please contact:

Email: WRC@communications.gov.au

Website: <https://www.infrastructure.gov.au/media-technology-communications/spectrum/international-radiocommunications>

Table of contents

Agenda item 1.1—Protection of aeronautical and maritime mobile services in 4 800-4 990 MHz located in international airspace and waters	5
Agenda item 1.2—IMT in various bands between 3 300 MHz and 10.5 GHz	5
Agenda item 1.3—Studies to consider possible allocation of the frequency band 3 600-3 800 MHz to the mobile, except aeronautical mobile, service on a primary basis within Region 1	6
Agenda item 1.4—High-altitude platform stations for IMT base stations (HIBS) in certain frequency bands below 2.7 GHz	6
Agenda item 1.5—Review of 470—960 MHz in Region 1 and possible regulatory actions in 470—694 MHz in Region 1	6
Agenda item 1.6—Regulatory provisions for sub-orbital vehicles	7
Agenda item 1.7—New aeronautical mobile satellite (R) service (AMS(R)S) allocation in 117.975–137 MHz	7
Agenda item 1.8—Use of fixed-satellite service (FSS) networks by control and non-payload communications of unmanned aircraft systems	8
Agenda item 1.9—Digital commercial aviation safety-of-life applications in existing HF bands allocated to the aeronautical mobile (route) service	8
Agenda item 1.10—New allocations for the aeronautical mobile service for the use of non-safety aeronautical mobile applications	9
Agenda item 1.11—Modernization of the Global Maritime Distress and Safety System and the implementation of e-navigation	10
Agenda item 1.12—New secondary allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders around 45 MHz	11
Agenda item 1.13—Upgrade of the allocation for the frequency band 14.8-15.35 GHz to the space research service	11
Agenda item 1.14—Possible new allocations from 231.5–252 GHz	11
Agenda item 1.15—Use of the Ku-band (12.75-13.25 GHz) FSS by ESIM	12
Agenda item 1.16—Use of the Ka-band by non-GSO FSS ESIM	13
Agenda item 1.17—Provision of inter-satellite links in specific frequency bands	14
Agenda item 1.18—New allocations to the mobile-satellite service for future development of narrowband mobile-satellite systems	15
Agenda item 1.19—New primary allocation to the fixed-satellite service in the space-to-Earth direction in the frequency band 17.3-17.7 GHz in Region 2	15
Agenda item 2—Incorporation by reference	15
Agenda item 4—Review of Resolutions and Recommendations in RR Vol 3	16
Agenda item 7—Satellite regulatory and procedural issues	16
Agenda item 8—Deletion of country footnotes	19
Agenda item 9.1a—Recognition and protection of space weather sensors	20
Agenda item 9.1b—Review of the amateur and amateur-satellite services in 1 240-1 300 MHz to ensure protection of the radionavigation-satellite (space-to-Earth) service	20

Agenda item 9.1c—Use of IMT systems for fixed wireless broadband in bands allocated to the fixed service on a primary basis	21
Agenda item 9.1d—Protection of EESS (passive) in the frequency band 36-37 GHz from non-GSO FSS space stations	21
Agenda item 9.2—Difficulties or inconsistencies encountered in the application of the Radio Regulations	22
Review of Article 21.5	22
Issue from Resolution 427	23
Agenda item 9.3—Action in response to Resolution 80	23
Agenda item 10—Future agenda items	24

Agenda item 1.1—Protection of aeronautical and maritime mobile services in 4 800–4 990 MHz located in international airspace and waters

to consider, based on the results of the ITU R studies, possible measures to address, in the frequency band 4 800–4 990 MHz, protection of stations of the aeronautical and maritime mobile services located in international airspace and waters from other stations located within national territories, and to review the pfd criteria in No. **5.441B** in accordance with Resolution **223 (Rev.WRC-19)**;

Australian preliminary position

Australia supports protection of aeronautical mobile service (AMS) and the maritime mobile service (MMS) located in international airspace or waters (i.e. outside national territories) and operated in the 4 800–4 990 MHz frequency band (from other stations located within national territories) through application of an appropriate PFD limit applied at the 12nm territorial coastal boundary of countries listed in RR 5.441B. Australia does not support protection methods that rely solely on use of 9.21 or agreements between countries.

Agenda item 1.2—IMT in various bands between 3 300 MHz and 10.5 GHz

to consider identification of the frequency bands 3 300–3 400 MHz, 3 600–3 800 MHz, 6 425–7 025 MHz, 7 025–7 125 MHz and 10.0–10.5 GHz for International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution **245 (WRC-19)**;

Australian preliminary position

Australia's objective is to encourage improvements in IMT capabilities and economies of scale through increased spectrum efficiency and harmonisation, subject to coexistence with other services to which the frequency bands are allocated on a primary basis (and in adjacent bands, as appropriate), being technically feasible. Australia will consider the outcome of studies in developing its position on this agenda item. Australia supports the protection of existing primary services and to allow for their future development.

Australia supports the APT Preliminary View as agreed at APG23-4, which includes support for the potential identification of IMT in the 7 025–7 125 MHz band. This support remains contingent on ITU-R studies showing that coexistence is technically feasible and subject to appropriate regulatory and technical conditions being in place to protect existing primary services in this band (and in adjacent bands, as appropriate) now and into the future.

Agenda item 1.3—Studies to consider possible allocation of the frequency band 3 600-3 800 MHz to the mobile, except aeronautical mobile, service on a primary basis within Region 1

to consider primary allocation of the frequency band 3 600-3 800 MHz to the mobile service in Region 1 and take appropriate regulatory actions, in accordance with Resolution **246 (WRC-19)**;

Australian preliminary position

Australia notes that this is a Region 1 issue and does not have a position on this agenda item. ITU-R studies including adjacent band services in accordance with Resolution **246 (WRC-19)** may assist to inform a decision on allocation of the 3.6-3.8 GHz band to the mobile, except aeronautical mobile, service on a primary basis within Region 1.

Agenda item 1.4—High-altitude platform stations for IMT base stations (HIBS) in certain frequency bands below 2.7 GHz

to consider, in accordance with Resolution **247 (WRC-19)**, the use of high-altitude platform stations as IMT base stations (HIBS) in the mobile service in certain frequency bands below 2.7 GHz already identified for IMT, on a global or regional level;

Australian preliminary position

Australia supports establishing a new globally or regionally harmonised regulatory framework that responds to changing technology and improves the efficient use of frequency bands below 2.7GHz already identified for IMT, by facilitating the use of HIBS. Australia notes that any change must ensure the protection of services to which the bands are allocated and should not give priority to HIBS over existing IMT identifications. Also, there should be no additional regulatory or technical constraints imposed on the deployment of terrestrial IMT in the frequency bands used by HIBS.

Agenda item 1.5—Review of 470—960 MHz in Region 1 and possible regulatory actions in 470—694 MHz in Region 1

to review the spectrum use and spectrum needs of existing services in the frequency band 470-960 MHz in Region 1 and consider possible regulatory actions in the frequency band 470-694 MHz in Region 1 on the basis of the review in accordance with Resolution **235 (WRC-15)**;

Australian preliminary position

Australia notes that this is a Region 1 issue, and possible regulatory actions focus on Region 1. While studies may assist, where these have implications in other regions in the frequency band 470-694 MHz, possible regulatory actions in Region 1 under this agenda item should recognise existing provisions in Region 3.

Australia supports the APT Preliminary View for this agenda item, as developed at APG23-4.

Agenda item 1.6—Regulatory provisions for sub-orbital vehicles

to consider, in accordance with Resolution **772 (WRC 19)**, regulatory provisions to facilitate radiocommunications for sub-orbital vehicles;

Australian preliminary position

Australia supports continuation of the current operations of stations on-board sub-orbital vehicles whereby they may be terrestrial stations (No. **1.62**) and earth stations (No. **1.63**) and can be used in all phases of flight, within their respective service allocations.

Suborbital vehicles shall ensure protection of, and not impose, any additional constraints on other services or applications services used by conventional aircraft.

Australia is of the view that no changes to Article 5 of the Radio Regulations are required to satisfy this agenda item.

Agenda item 1.7—New aeronautical mobile satellite (R) service (AMS(R)S) allocation in 117.975–137 MHz

to consider a new aeronautical mobile-satellite (R) service (AMS(R)S) allocation in accordance with Resolution **428 (WRC-19)** for both the Earth-to-space and space-to-Earth directions of aeronautical VHF communications in all or part of the frequency band 117.975–137 MHz, while preventing any undue constraints on existing VHF systems operating in the AM(R)S, the ARNS, and in adjacent frequency bands;

Australian preliminary position

Australia supports an AMS(R)S allocation for both the Earth-to-space and space-to-Earth directions in all or part of the frequency band 117.975–137 MHz while limiting the use of the new AMS(R)S allocation to internationally standardised aeronautical systems consistent with draft CPM text for agenda item 1.7 Method B1 (Document [5B/649 Annex 02](#)). Support for the new allocation is subject to sharing and compatibility studies showing no adverse impact to services in adjacent bands.

Agenda item 1.8—Use of fixed-satellite service (FSS) networks by control and non-payload communications of unmanned aircraft systems

to consider, on the basis of ITU R studies in accordance with Resolution **171 (WRC 19)**, appropriate regulatory actions, with a view to reviewing and, if necessary, revising Resolution **155 (Rev.WRC 19)** and No. **5.484B** to accommodate the use of fixed-satellite service (FSS) networks by control and non-payload communications of unmanned aircraft systems;

Australian preliminary position

Australia supports progressing work in the ITU-R under this agenda item and supports the Key Principles for UAS CNPC operation as outlined in the draft CPM text (Document 5B/649N3).

Australia supports the development of the Standards and Recommended Practices (SARPs) by the ICAO to be established for the use of FSS networks by UAS CNPC links.

The SARPs established by ICAO for UAS CNPC should have no impact on existing agreements for FSS networks between notifying administrations reached during the coordination process, nor future coordination of FSS networks in accordance with RR Articles **9** and **11**.

Agenda item 1.9—Digital commercial aviation safety-of-life applications in existing HF bands allocated to the aeronautical mobile (route) service

to review Appendix **27** of the Radio Regulations and consider appropriate regulatory actions and updates based on ITU R studies, in order to accommodate digital technologies for commercial aviation safety-of-life applications in existing HF bands allocated to the aeronautical mobile (route) service and ensure coexistence of current HF systems alongside modernized HF systems, in accordance with Resolution **429 (WRC 19)**;

Australian preliminary position

Australia supports modification of RR Appendix 27 to accommodate new technologically neutral digital applications and regulatory provisions that ensure compatibility with incumbent primary services within the frequency bands under Resolution **429 (WRC-19)** and adjacent bands.

Australia supports draft CPM text Method B for WRC-23 agenda item 1.9 ([Annex 4](#) to Document 5B/649-E).

Agenda item 1.10—New allocations for the aeronautical mobile service for the use of non-safety aeronautical mobile applications

to conduct studies on spectrum needs, coexistence with radiocommunication services and regulatory measures for possible new allocations for the aeronautical mobile service for the use of non-safety aeronautical mobile applications, in accordance with Resolution **430 (WRC-19)**;

Australian preliminary position

Australia supports studies on spectrum needs for new non-safety aeronautical mobile applications as well as sharing and compatibility studies in the 15.4–15.7 GHz and 22–22.21 GHz frequency bands to evaluate possible primary allocations to aeronautical mobile services, while ensuring the protection of primary services in these bands and, as appropriate, in adjacent frequency bands.

Agenda item 1.11—Modernization of the Global Maritime Distress and Safety System and the implementation of e-navigation

to consider possible regulatory actions to support the modernization of the Global Maritime Distress and Safety System (GMDSS), implementation of e-navigation and the introduction of additional satellite systems into the GMDSS, in accordance with Resolution **361 (Rev.WRC-19)**;

Australian preliminary position

Issue A/resolves 1—GMDSS modernisation

Australia supports regulatory action to progress modernisation of the Global Maritime Distress and Safety System (GMDSS), taking into consideration the decisions of the International Maritime Organization (IMO), by:

- deleting narrow-band direct-printing (NBDP) for distress and safety communications from Appendix 15 and 17, and implement an automatic channel selection (ACS) using digital-selective calling (DSC) technology for those frequencies via a footnote in Article 5 of the Radio Regulations,
- implementing AIS-SART (automatic identification system search and rescue transmitter) as locating equipment in Appendix 15 of the Radio Regulations,
- removing satellite emergency position-indicating radio beacons (EPIRBs) in the frequency band 1 645.5–1 646.5 MHz (E-s) while leaving the band available for GMDSS by modifying Appendix 15 of the Radio Regulations.

Issue B/resolves 2—e-navigation

Australia supports no change (NOC) for Issue B.

Issue C/resolves 3—new satellite systems

Australia supports no change (NOC) for Issue C until the candidate system can demonstrate:

- coordination in accordance with the relevant and applicable provisions of Articles 9 and 11 of the Radio Regulations and associated Rules of Procedure, and
- its spectrum requirements to provide a GMDSS service.

Agenda item 1.12—New secondary allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders around 45 MHz

to conduct, and complete in time for WRC-23, studies for a possible new secondary allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders within the range of frequencies around 45 MHz, taking into account the protection of incumbent services, including in adjacent bands, in accordance with Resolution **656 (Rev.WRC-19)**;

Australian preliminary position

Australia supports a secondary allocation to EESS (active) in the 40-50 MHz frequency range. Protection should be ensured for existing services, including in adjacent bands, while not imposing any additional restrictions onto those services.

Agenda item 1.13—Upgrade of the allocation for the frequency band 14.8-15.35 GHz to the space research service

to consider a possible upgrade of the allocation of the frequency band 14.8-15.35 GHz to the space research service, in accordance with Resolution **661 (WRC-19)**;

Australian preliminary position

Australia supports the upgrade of the SRS allocation from secondary to primary status in the band 14.8–15.35 GHz. Compatibility must be ensured between SRS and the mobile service and fixed service in the band 14.8–15.35 GHz, and between SRS and the radio astronomy service in the adjacent band 15.35–15.4 GHz.

Agenda item 1.14—Possible new allocations from 231.5–252 GHz

to review and consider possible adjustments of the existing or possible new primary frequency allocations to EESS (passive) in the frequency range 231.5–252 GHz, to ensure alignment with more up-to-date remote-sensing observation requirements, in accordance with Resolution **662 (WRC 19)**;

Australian preliminary position

Australia supports the addition of new primary allocations to the EESS (passive) in the bands 239.2–242.2 GHz and 244.2–247.2 GHz, and possible adjustments to the existing Fixed Service and Mobile Service allocations in the 239.2–241 GHz band, in order to maximise the benefit to all involved services. Australia supports the proposed Method B as the most comprehensive and useful way to achieve this outcome.

Agenda item 1.15—Use of the Ku-band (12.75-13.25 GHz) FSS by ESIM

to harmonize the use of the frequency band 12.75-13.25 GHz (Earth-to-space) by earth stations on aircraft and vessels communicating with geostationary space stations in the fixed-satellite service globally, in accordance with Resolution **172 (WRC-19)**;

Australian preliminary position

Australia supports Method B which refers to the establishment of a new regulatory framework (including technical and operational requirements) that improves the efficiency of use of the 12.75-13.25 GHz band by facilitating Aeronautical Earth Stations in Motion (A-ESIM) and Maritime Earth Stations in Motion (M-ESIM) to use the frequency bands. The framework for this type of ESIM use must ensure protection of services allocated in the 12.75-13.25 GHz band and should not impact the usability of the allotments in the Plan, and assignments in the List under Appendix **30B** of the Radio Regulations. Australia supports the development of a methodology regarding examination by the Bureau of compliance with PFD limits by A-ESIM for protecting terrestrial services, or of adequate transitional measures should WRC-23 not finalise the methodology.

Agenda item 1.16—Use of the Ka-band by non-GSO FSS ESIM

to study and develop technical, operational and regulatory measures, as appropriate, to facilitate the use of the frequency bands 17.7-18.6 GHz and 18.8-19.3 GHz and 19.7-20.2 GHz (space-to-Earth) and 27.5-29.1 GHz and 29.5-30 GHz (Earth-to-space) by non-GSO FSS earth stations in motion, while ensuring due protection of existing services in those frequency bands, in accordance with Resolution **173 (WRC-19)**;

Australian preliminary position

Australia supports the establishment of a harmonised regulatory framework and technical and operational measures that facilitate the use of non-geostationary (non-GSO) earth-stations in motion (ESIM) in the fixed-satellite service in the 17.7-18.6 GHz and 18.8-19.3 GHz and 19.7-20.2 GHz (space-to-Earth) and 27.5-29.1 GHz and 29.5-30 GHz (Earth-to-space) frequency bands; while ensuring protection of services allocated in the bands and, as appropriate in the adjacent bands, and shall not adversely affect the operation of terrestrial services on territories of those administrations mentioned in No. 5.542 operating in the 29.5-30.0 GHz band as an additional secondary allocation.

Further Australia supports the inclusion of the results of the sharing studies which have been transferred in to the Draft New Resolution, as well as PFD limits which have been included for the purpose of protection of terrestrial services. The use of regulatory options in the Draft New Resolution to ensure deployed non-GSO FSS ESIM in the bands 17.7-18.6 GHz and 18.8-19.3 GHz (space-to-Earth) will not result in increased adjacent band interference to EESS (passive) operations in the 18.6-18.8 GHz band is also supported, as well as conditions for the non-GSO ESIM to comply with all provisions applicable to the typical earth station, including: existing epfd limit, pfd limit, GSO arc exclusion zone etc., such that ESIM will not cause more interference and will not need more protection than a typical earth station.

The developed Draft New Resolution includes a PFD limit compliance examination methodology for the Bureau, in addition to adequate transitional measures in case WRC-23 could not agree on the methodology. Australia supports the development of such a methodology under WRC-23 AI 1.16. Australia is of the view that the progress on WRC-23 agenda item 1.16 should not be conditional upon the development of the methodology under Resolution **169 (WRC-19)**, which relates to a PFD examination for GSO ESIM operations.

Australia supports the developed Draft New Resolution included in Method B in the draft CPM text.

Agenda item 1.17—Provision of inter-satellite links in specific frequency bands

to determine and carry out, on the basis of the ITU R studies in accordance with Resolution **773 (WRC-19)**, the appropriate regulatory actions for the provision of inter-satellite links in specific frequency bands, or portions thereof, by adding an inter-satellite service allocation where appropriate;

Australian preliminary position

Australia supports the development of technical conditions and regulatory provisions that establish a harmonised framework which facilitates the use of satellite-to-satellite operations in the 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8-20.2 GHz and 27.5-30 GHz frequency bands. Such use shall protect and impose no additional regulatory or technical constraints on services to which the frequency band is currently allocated on a primary basis in accordance with Resolution **773 (WRC-19)**.

Regulatory recognition of satellite-to-satellite operations under this agenda item should be conditional on these operations being contained within the cone of coverage towards earth of the FSS GSO/non-GSO service provider space station and further restricted to ensure that in the FSS (E-s) allocated portions of the band transmissions from a user space station to a service provider space station only occurs when the users apogee is lower than the service providers minimum operational altitude, and that for the FSS (s-E) portions of the band transmissions from a service provider space station to a user space station only occurs when the user space station apogee is lower than the service providers station minimum operational altitude

Australia is of the view that further work is required for the development of a practical regulatory regime to facilitate the introduction of space-to-space operations that would ensure that no unacceptable interference is caused to other space services, while at the same time providing reasonable scope to implement viable links between both GSO and non-GSO service provider space stations and associated user non-GSO space stations.

Australia could support changes to the Table of Frequency Allocations to include space-to-space operation under the FSS allocation associated with appropriate regulatory measures (including further consideration of the applicability of limits as contained in Table 22-2) within a draft new Resolution.

Agenda item 1.18—New allocations to the mobile-satellite service for future development of narrowband mobile-satellite systems

to consider studies relating to spectrum needs and potential new allocations to the mobile-satellite service for future development of narrowband mobile-satellite systems, in accordance with Resolution **248 (WRC-19)**;

Australian preliminary position

Noting that this is a Region 1 and 2 issue, Australia supports sharing and compatibility studies with existing primary services to determine the suitability of new allocations to the mobile-satellite service (MSS), with a view to protecting the primary services, in the relevant frequency bands and adjacent frequency bands, without causing undue constraints on their further development.

Agenda item 1.19—New primary allocation to the fixed-satellite service in the space-to-Earth direction in the frequency band 17.3-17.7 GHz in Region 2

to consider a new primary allocation to the fixed-satellite service in the space-to-Earth direction in the frequency band 17.3-17.7 GHz in Region 2, while protecting existing primary services in the band, in accordance with Resolution **174 (WRC-19)**;

Australian preliminary position

Australia supports arrangements that are consistent with the rational and efficient use of Australia's sovereign assets in the radiofrequency spectrum. Noting that this is a Region 2 issue, Australia does not currently have a position on the proposed new primary allocation, however, protection for existing Appendix 30A satellite networks should be ensured.

Agenda item 2—Incorporation by reference

to examine the revised ITU R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with further resolves of Resolution **27 (Rev.WRC-19)**, and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with the principles contained in resolves of that Resolution;

Australian preliminary position

Australia supports the examination and review of ITU-R Recommendations incorporated by reference into the Radio Regulations and, where appropriate, the updating of these references.

Agenda item 4—Review of Resolutions and Recommendations in RR Vol 3

in accordance with Resolution **95 (Rev.WRC-19)**, to review the Resolutions and Recommendations of previous conferences with a view to their possible revision, replacement or abrogation;

Australian preliminary position

Australia supports the principle and intent of Resolution **95 (Rev.WRC-19)**, to ensure Resolutions and Recommendations of past WRCs are relevant and kept up to date. Australia's positions on specific proposals will be developed as these proposals arise during the cycle.

Agenda item 7—Satellite regulatory and procedural issues

to consider possible changes, and other options, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, an advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution 86 (Rev.WRC 07) to facilitate rational, efficient, and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit.

Australian preliminary position

Australia supports consideration of possible changes to improve advance publication, coordination, notification and recording procedures for space services in the Radio Regulations in accordance with Resolution 86 (**Rev.WRC 07**), provided that such changes do not result in modification of frequency allocations in Article 5 of the Radio Regulations.

Topic A—Tolerances for certain orbital characteristics of non-GSO space stations in the FSS, BSS, and MSS

The scope of any studies should be limited to the differences between the notified and deployed non-GSO orbital characteristics for the inclination of the orbital plane, the altitude of the apogee of the space station, the altitude of the perigee of the space station and the argument of the perigee of the orbital plane. Australia supports regulatory methods that are not too stringent on operators that they can make genuine adjustments to the orbits of NGSO satellites based on the operational requirements. Australia does not support the expansion of the scope of this topic outside those frequencies in Resolution **35 (WRC-19)**. In this regard, Australian view mostly aligns with the Method A2 as proposed in the draft CPM text.

Topic B—Non-GSO system post milestone reporting

Australia supports the development of the final post-milestone procedures at WRC-23 to supplement what was considered the temporary post-milestone procedures as contained in resolves 19 of Resolution **35 (WRC-19)**. Australia supports Method B2 that scales according to the size of the constellation. Large constellations that have claimed BIU should maintain higher percentage of satellites before notifying BR on partial-suspensions. Australian view mostly aligns with either Options B2a or B2b as proposed in the draft CPM text.

Topic C—Protection of GSO satellite networks in the MSS operating in 7/8 GHz and 20/30 GHz from emissions of non-GSO satellite systems operating in the same frequency bands and identical directions

Australia supports necessary regulatory changes to protect GSO satellite networks in the MSS in 7/8GHz and 20/30 GHz bands from emissions of NSGO satellite systems. Australia will support Methods that modifies relevant provisions of Article 22 and Article 5 footnotes as long as such modifications do not modify frequency allocations. Hence Australia supports preservation of MSS allocation made subject to RR.9.21. The Australian view mostly aligns with the versions of Method C2 as proposed in the draft CPM text.

Topic D—[Simple Topics]

D1—Modifications to Appendix 1 to Annex 4 of Appendix 30B

Australia supports the single Method as proposed in the draft CPM text

D2—New AP4 parameters for Recommendation S.1503 updates

Australia supports the single Method as proposed in the draft CPM text

D3—BR reminders for BIU/BBIU

Australia supports the single Method as proposed in the draft CPM text

Topic E—Improved procedures under RR Appendix 30B for new ITU Member States

Australia supports technical assessments of the interference scenarios for new ITU Member States and analysis of the affect to existing allotments in the Plan and assignments in the List of Appendix 30B. Australia supports the need to determine a case-by-case solution for a number of new ITU Member States having difficulty to **obtain** national allotment that is implementable to protect national allotments and additional systems in the List. Australia does not support a generic approach to make amendments to procedures within RR Appendix 30B that may not address these specific cases. In this regard, Australia view mostly aligns with the Method E2 as proposed in the draft CPM text.

Australia supports development of improved procedures under RR Appendix 30B for new ITU Member States while retaining existing protection arrangements for the Australian allotments in the Appendix 30B Plan. Australia supports the new improved procedures to be included into RR Appendix 30B.

Topic F—Impact of excluding feeder-link/Up-link service and coverage areas in the bands subject to RR Appendix 30A and RR Appendix 30B

Australia supports studies towards finding an appropriate regulatory measure for facilitation of equitable feeder-link/uplink spectrum access while taking into consideration existing assignment and allotments in RR Appendices 30A and 30B.

Australia supports the development of a procedure that allows an administration included in the service area of the uplink to be excluded from this service area when requested. Australia support development of a simple definition of the coverage area that is the smallest area practicable.

Topic G—Improved procedures under RR Appendix 30B for new ITU Member States (Resolution 770)

Australia could accept either method G2 or G3 as proposed in the draft CPM text.

Topic H—Enhanced protection of RR Appendices 30/30A in Regions 1 and 3 and RR Appendix 30B (Implicit agreement)

Australia support development of procedures that will remove implicit agreement scenarios.

Australia supports technical studies on a rationale for changes to the EPM degradation tolerances.

Topic I—Special agreements under RR Appendix 30B

Australia supports Method I2 as proposed in the draft CPM text.

Topic J—Protection of GSO FSS and BSS from aggregate NGSO EPFD (Resolution 76)

Australia supports the amendments to Resolution **76 (Rev.WRC-15)** to establish a consultation process that is not too prescriptive to ensure aggregate EPFD limits are in compliance with limits as outlined in Annex 1 to Resolution **76 (Rev.WRC-15)**. Also, Australia believes that ITU-R should continue to develop necessary Recommendations to calculate aggregate EPFD limits. At this stage, Australian position mostly aligns with Method J3 or J5 as proposed in the draft CPM text.

Topic K—Equitable access to the frequency band 21.4-22 GHz (Resolution 553)

Australia may wish to consider the proposed removal of the two restrictions independently.

Removal of the first restriction may be aligned with the desired effect of Resolution **553**; however, removal of the second restriction could be considered an expansion of the Resolution. Australia may also wish to consider whether there is any unintentional potential for misuse, for example by repeated use of Resolution (this may be unlikely if territory is limited to national coverage)

Topic L—TT&C for NGSO in-orbit servicing

Suppressed.

Agenda item 8—Deletion of country footnotes

to consider and take appropriate action on requests from administrations to delete their country footnotes or to have their country name deleted from footnotes, if no longer required, taking into account Resolution 26 (Rev.WRC-19);

Australian preliminary position

Issue A—Deletion of country footnotes or country names from footnotes

Australia supports the principles and intent of Resolution 26 (Rev. WRC-19) and the WRC standing agenda item for administrations to remove their country footnotes or their country names associated with specific footnotes of the Table of Frequency Allocations in Article 5 of the Radio Regulations when no longer required.

Australia supports Administrations taking the initiative to review footnotes containing their country names and to propose the deletion of their country names or the deletion of country footnotes, if no longer required.

Issue B—Addition of country names into existing footnotes

Australia is of the view that this standing agenda item is not intended for adding country names to existing footnotes.

Australia is of the view that should a WRC have proposals from Administrations to add country names to existing footnotes such proposals should only be considered by the conference on a case by case basis, and any modification of a footnote is subject to the express condition that there are no objections from affected countries (as indicated in Annex 1 A) i) of Resolution 26 (Rev. WRC 19)).

Issue C—Addition of new country footnotes

Australia is of the view that this standing agenda item is not intended for addition of new country footnotes and therefore proposals for the addition of new country footnotes which are not related to agenda items of a WRC should not be considered (as indicated in of Annex 1 A) iv) to Resolution 26 (Rev. WRC-19)).

Issue D—Availability of proposals

Australia supports Administrations, where possible, bringing their proposals on this standing agenda item to the attention of other Administrations with a view to address any potential difficulties before a WRC.

Issue E—Possible revision of Resolution 26 (Rev. WRC-19)

Noting the valuable modifications to Resolution 26 at WRC-19, Australia is of the view no further revision of the Resolution is required at WRC-23.

Agenda item 9.1a—Recognition and protection of space weather sensors

9 to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention;

9.1 on the activities of the Radiocommunication Sector since WRC 19:

a) In accordance with Resolution **657 (Rev.WRC-19)**, review the results of studies relating to the technical and operational characteristics, spectrum requirements and appropriate radio service designations for space weather sensors with a view to describing appropriate recognition and protection in the Radio Regulations without placing additional constraints on incumbent services;

Australian preliminary position

Australia supports studies addressing space weather sensors with a view to ensuring the Radio Regulations include appropriate recognition and future protection for space weather sensors. These studies should ensure that additional constraints are not placed on incumbent services.

Australia supports the definition of space weather as proposed in the draft CPM text and the inclusion of space weather systems under the MetAids, with a subset of the MetAids (space weather) in order to accommodate all space weather sensors.

Agenda item 9.1b—Review of the amateur and amateur-satellite services in 1 240-1 300 MHz to ensure protection of the radionavigation-satellite (space-to-Earth) service

b) Review of the amateur service and the amateur-satellite service allocations in the frequency band 1 240 1 300 MHz to determine if additional measures are required to ensure protection of the radionavigation-satellite (space-to-Earth) service operating in the same band in accordance with Resolution **774 (WRC 19)**;

Australian preliminary position

Australia supports studies in line with Resolution **774 (WRC-19)** to protect RNSS receivers while supporting the continued use of these frequency bands by the amateur and amateur-satellite services.

Agenda item 9.1c—Use of IMT systems for fixed wireless broadband in bands allocated to the fixed service on a primary basis

c) Study the use of International Mobile Telecommunication systems for fixed wireless broadband in the frequency bands allocated to the fixed service on a primary basis, in accordance with Resolution **175 (WRC-19)**

Australian preliminary position

Australia supports studies in accordance with Resolution **175 (WRC-19)**. Australia also supports the modification of existing or, if required, the development of new ITU-R Recommendations, Reports and/ or Handbooks as a result of these studies, in line with Approach 2 as outlined in the draft CPM text. Australia also shares the same view as indicated in Alternative 2 in the draft CPM text that there is no need to have any draft new or revised Resolution on this matter. Except for the suppression of Resolution **175 (WRC-19)**, Australia opposes any changes to the Radio Regulations being made under this topic.

Australia is of the view that the term “fixed wireless broadband” is understood to mean fixed wireless access supporting broadband applications. The use of IMT as a technology for the deployment of fixed wireless broadband is no different to the use of any other radio interface technologies for fixed wireless broadband in bands allocated to the fixed service on a primary basis provided that such use is in accordance with the Radio Regulations.

Agenda item 9.1d—Protection of EESS (passive) in the frequency band 36-37 GHz from non-GSO FSS space stations

d) Protection of EESS (passive) in the frequency band 36-37 GHz from non-GSO FSS space stations;

Australian preliminary position

Australia supports the protection of EESS (passive) sensors including cold-sky calibration in the band 36–37 GHz from non-GSO FSS operations in the band 37.5–38 GHz. Australia supports an approach of implementing the conditions identified in the results of ITU-R studies conducted under this agenda item as regulatory provisions to protect EESS (passive) sensors.

Agenda item 9.2—Difficulties or inconsistencies encountered in the application of the Radio Regulations

on any difficulties or inconsistencies encountered in the application of the Radio Regulations;

Note that this agenda sub-item is strictly limited to the Report of the Director on any difficulties or inconsistencies encountered in the application of the Radio Regulations and the comments from administrations. Administrations are invited to inform the Director of the Radiocommunication Bureau of any difficulties or inconsistencies encountered in the Radio Regulations.

Note that the following issues are being dealt with separately in dedicated agenda item briefs:

- 1) Issue review of Article **21.5**
- 2) Issue from Resolution **427 (WRC-19)**

Australian preliminary position

TBD

Review of Article 21.5

ITU-R is invited to study, as a matter of urgency, the applicability of the limit specified in **No. 21.5** of the Radio Regulations to IMT stations, that use an antenna that consists of an array of active elements, with a view to recommend ways for its possible replacement or revision for such stations, as well as any necessary updates to Table 21-2 related to terrestrial and space services sharing frequency bands.

Furthermore, the ITU-R is invited to study, as a matter of urgency, verification of **No. 21.5** regarding the notification of IMT stations that use an antenna that consists of an array of active elements, as appropriate (WRC-19 Document 550)

Australian preliminary position

Australia supports studies being conducted to address the applicability of No. **21.5** to clarify its operation in order to provide regulatory certainty for the deployment of IMT stations using active antenna systems (AAS).

For IMT stations with AAS operating in the band 24.25-27.5 GHz, Australia supports using a total radiated power within a defined reference bandwidth to capture the "power delivered to the antenna of a station" in No. **21.5**. Australia has not yet formed a view on what reference bandwidth should apply.

Issue from Resolution 427

to study the Articles, limited to Chapters IV, V, VI and VIII of Volume I of the Radio Regulations and their associated Appendices, as appropriate, in order to identify outdated aeronautical provisions with respect to ICAO standards and recommended practices and to develop examples of regulatory texts for updating these provisions, while ensuring that potential changes to such provisions will not impact any other systems or services operating in accordance with the Radio Regulations

Australian preliminary position

Australia supports ITU-R studies on the relevant Articles of Volume I of the Radio Regulations and their associated appendices to identify outdated aeronautical provisions, and the development of regulatory texts for updating these provisions. It is a priority for Australia that proposed changes should not impact current or planned aeronautical systems or applications.

Agenda item 9.3—Action in response to Resolution 80

on action in response to Resolution **80 (Rev.WRC 07)**

Australian preliminary position

Australia will monitor outcomes of the Radio Regulations Board (RRB) (and the Report by the RRB to WRC 23 when it becomes available in 2023) with respect to Resolution **80 (Rev.WRC-07)**.

Agenda item 10—Future agenda items

to recommend to the Council items for inclusion in the agenda for the next WRC, and items for the preliminary agenda of future conferences, in accordance with Article 7 of the Convention and Resolution **804 (Rev.WRC-19)**;

Australian preliminary positions

Australia supports ITU-R studies on the relevant Articles of Volume I of the Radio Regulations and their associated appendices to identify outdated aeronautical provisions, and the development of regulatory texts for updating these provisions. It is a priority for Australia that proposed changes should not impact current or planned aeronautical systems or applications.

Australia supports an agenda for WRC-27 that is consistent with Australia's long-term objectives for spectrum management. In developing new WRC Agenda items, Australia supports the consideration of items that are of international and regional importance, which can only be effectively addressed through a WRC, and which are likely to be resolved within the available time and resources.

Australia does not support an APT Common Proposal for a new WRC-27 agenda item that intends to relax the limits set out in RR No. 5.502, on the basis that there has been no change to protection requirements for the radiolocation service that initially informed those limits.

Australia is of the view that any future agenda item towards a potential IMT identification needs to be focussed on frequency ranges that have been assessed as being feasible for study, taking into account the potential for coexistence with incumbent services. Australia would not support an APT Common Proposal for a new WRC-27 agenda item which proposes that the entire 7—24 GHz frequency range be in scope of that item.

Preliminary positions on Resolution 812

Australia has considered the preliminary agenda items contained in Resolution **812**, as agreed to at WRC-19 and formed some preliminary positions on a number of those agenda items, including:

- Modification of item 2.2, to include non-geostationary space stations.

New preliminary agenda item for WRC-27

Australia proposes the following new preliminary agenda item be included in the agenda for WRC-27:

- 1) To consider a new primary allocation to the fixed-satellite service in the space-to-Earth direction in the frequency band 17.3-17.7 GHz in Region 3, while ensuring the protection of existing primary allocations in the same and adjacent frequency bands.