Australian Government

Australian Preliminary Views on WRC-19 agenda items

July 2019

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Agenda item 1.1

Allocation of 50–54 MHz to the amateur service in Region 1

to consider an allocation of the frequency band 50–54 MHz to the amateur service in Region 1, in accordance with Resolution **658 (WRC 15)**.

Australian preliminary view

Noting this is a Region 1 issue, any changes made to the Radio Regulations under WRC-19 agenda item 1.1 must not adversely impact incumbent services in the 50–54 MHz frequency band and adjacent frequency bands in Australia.

Agenda item 1.2

In-band power limits for MSS, MetSat and EESS earth stations 401–403 MHz and 399.9–400.05 MHz

to consider in-band power limits for earth stations operating in the mobile-satellite service, meteorological-satellite service and Earth exploration-satellite service in the frequency bands 401–403 MHz and 399.9–400.05 MHz, in accordance with Resolution **765 (WRC-15)**.

Australian preliminary view

Australia supports the establishment of in-band power limits as described in the preliminary draft new Report ITU-R SA.[400 MHz-LIMITS] for MSS, MetSat and EESS earth stations operating in the 401–403 MHz and 399.9–400.05 MHz frequency bands (Earth-to-space).

Appropriate e.i.r.p. limits can be applied by adding a new footnote in the frequency bands 399.9–400.05 MHz and 401–403 MHz in the Table of Frequency Allocations in RR Article 5. Furthermore, specific transitional measures are to be agreed to accommodate, on a limited timeframe, operation of existing TT&C systems.

Australia supports Methods C and E in the CPM Report.

Agenda item 1.3

Primary allocation MetSat (space-to-Earth) and possible primary allocation to the EESS (space-to-Earth) 460–470 MHz

to consider possible upgrading of the secondary allocation to the meteorological-satellite service (space-to-Earth) to primary status and a possible primary allocation to the Earth exploration-satellite service (space-to-Earth) in the frequency band 460–470 MHz, in accordance with Resolution **766 (WRC-15)**.

Australian preliminary view

Australia supports the upgrading of the secondary MetSat (space-to-Earth) allocation to primary, and adding a primary EESS (space-to-Earth) allocation in the frequency band 460–470 MHz, while providing protection and not imposing any additional constraints on existing primary services to which the frequency band is already allocated and in the adjacent frequency bands, and maintaining the conditions contained in Radio Regulations No. **5.289**, subject to appropriate ITU-R sharing and compatibility studies.

Australia supports Method C in the CPM Report, while noting that resolves 5 in the associated Draft New Resolution [B13] requires further consideration as it may act to restrict future development of the MetSat service and EESS in the frequency band.

Agenda item 1.4

Review limitations of Annex 7 to Appendix 30 (Rev.WRC-12)

to consider the results of studies in accordance with Resolution **557 (WRC 15)**, and review, and revise if necessary, the limitations mentioned in **Annex 7** to **Appendix 30 (Rev.WRC-12)**, while ensuring the protection of, and without imposing additional constraints on, assignments in the Plan and the List and the future development of the broadcasting-satellite service within the Plan, and existing and planned fixed-satellite service networks

Australian preliminary view

Australia has considered the proposed revision of some of the limitations in **Annex 7** of Radio Regulations **Appendix 30** in the context of its compatibility with Australia's current and future FSS/BSS usage in the 11.7–12.75 GHz frequency band.

Australia does not have a view on the relaxation of orbital restrictions where Australia will not be visible.

Australia can support either of the two Methods in the CPM Report but prefers Method B.

Agenda item 1.5

ESIMs use of 17.7–19.7 GHz (space-to-Earth) and 27.5–29.5 GHz (Earth-to-space)

to consider the use of the frequency bands 17.7–19.7 GHz (space-to-Earth) and 27.5 29.5 GHz (Earth-to-space) by earth stations in motion communicating with geostationary space stations in the fixed-satellite service and take appropriate action, in accordance with Resolution **158 (WRC-15)**.

Australian preliminary view

Australia supports development of appropriate technical and operational requirements for earth stations in motion (ESIM) that operate or plan to operate in the frequency bands 17.7–19.7 GHz and 27.5–29.5 GHz, taking into account studies under Resolution **158 (WRC-15)** while ensuring protection of, and not imposing undue constraints on, services already allocated in the frequency bands.

ITU-R Working Party 4A and CPM have developed a draft example WRC Resolution as a means to address the agenda item (see CPM Report). A similar approach was used at WRC-15 in the FSS 29.5–30 GHz and 19.720.2 GHz frequency bands included in Resolution **156 (WRC-15)**.

Australia supports the approach of a new WRC Resolution to address the agenda item noting the protection requirements stated above and included in Resolution **158 (WRC-15)**. Also noting that the draft example WRC Resolution was preliminarily agreed but not finalised (due to different options/views, studies yet to be completed, and discussions yet to be concluded), Australia is actively engaged in further work on this Resolution.

Australia supports Method B of the CPM Report subject to the conditions mentioned above.

Agenda item 1.6

Regulatory framework for non-GSO FSS satellite systems 37.5–39.5 GHz (space-to-Earth), 39.5–42.5 GHz (space-to-Earth), 47.2–50.2 GHz (Earth-to-space) and 50.4–51.4 GHz (Earth-to-space)

to consider the development of a regulatory frame work for non-GSO FSS satellite systems that may operate in the frequency bands 37.5–39.5 GHz (space-to-Earth), 39.5–42.5 GHz (space-to-Earth), 47.2–50.2 GHz (Earth-to-space) and 50.4–51.4 GHz (Earth-to-space), in accordance with Resolution **159 (WRC-15)**.

Australian preliminary view

Australia supports establishment of a regulatory and procedural framework to accommodate non-GSO FSS satellite systems in the frequency bands 37.5–39.5 GHz (space-to-Earth), 39.5–42.5 GHz (space-to-Earth), 47.2–50.2 GHz (Earth-to-space) and 50.4–51.4 GHz (Earth-to-space), in accordance with Resolution **159 (WRC-15)**.

Australia supports Method A of the CPM Report to WRC-19. Method A proposes two new RR footnotes **5.A16** and **5.A16B** with various options for each. Australia has yet to decide on a preferred option for each footnote and will consider further progress in ITU-R WP 4A on this issue.

In relation to the protection of GSO networks, Australia notes ITU-R studies concluding that implementation of epfd limits may result in spectrum inefficiencies. Regulation aimed at limiting the aggregate impact from NGSO systems to a maximum allowable capacity and availability loss is a practical alternative approach for achieving the required protection of GSO networks. To this extent Australia supports progressing work in ITU-R WP 4A on new Recommendation ITU-R S.[50/40 GHz Sharing Methodology] using the statistics of degradations due to the non-GSO system interference and the influence of fading from the latest versions of Recommendations ITU-R S.1503 and P.618, respectively.

In relation to the protection of EESS (passive) in the adjacent band, Australia notes ITU-R studies indicating that the current limits in Resolution **750 (Rev.WRC-15)** are insufficient. Australia supports a strengthening of those limits but only to the extent deemed essential for protection of the passive service. In relation to the protection of RAS Australia notes the information now contained in a Draft New Report ITU-R S.[50/40 GHz ADJACENT BAND STUDIES].

Australia has yet to decide on a preferred Option in respect of revision of Resolution **750 (Rev,WRC-15)** or what limits might be applicable and an appropriate time-frame for revisions to come into effect.

Agenda item 1.7

Regulation and possible allocations below 1 GHz for telemetry, tracking and command for non-GSO short duration mission satellite services in the space operation service

to study the spectrum needs for telemetry, tracking and command in the space operation service for non-GSO satellites with short duration missions, to assess the suitability of existing allocations to the space operation service and, if necessary, to consider new allocations, in accordance with Resolution **659 (WRC-15)**.

Australian preliminary view

Australia notes that current allocations below 1 GHz have been found to not fully meet requirements for the space operation service (SOS) for telemetry, tracking and command for non-GSO satellites with short duration missions.

Australia supports Method C of the CPM Report subject to the condition that satisfactory measures are agreed to ensure protection of AM(R)S systems below 137 MHz.

Agenda item 1.8

Possible regulatory actions to support GMDSS modernisation and additional satellite systems for GMDSS in accordance with Resolution 359 (Rev.WRC-15)

to consider possible regulatory actions to support Global Maritime Distress Safety Systems (GMDSS) modernization and to support the introduction of additional satellite systems into the GMDSS, in accordance with Resolution **359 (Rev.WRC-15)**.

Australian preliminary view

Australia supports necessary regulatory action to modernise the Global Maritime Distress and Safety Systems (GMDSS) and introduce additional satellite systems into the GMDSS, in accordance with Resolution **359 (Rev.WRC-15)**.

For Issue A, Australia supports Method A2 in the CPM Report.

For Issue B, Australia supports necessary regulatory action to provide for one additional satellite system in the GMDSS operating in the 1616–1626.5 MHz band.

Agenda item 1.9.1

Regulatory actions for autonomous maritime radio devices to protect the GMDSS and automatic identifications system (AIS) in the band 156–162.05 MHz

to consider, based on the results of ITU R studies: regulatory actions within the frequency band 156–162.05 MHz for autonomous maritime radio devices to protect the GMDSS and automatic identifications system (AIS), in accordance with Resolution **362 (WRC-15)**.

Australian preliminary view

Australia supports appropriate categorisation, informed by the International Maritime Organisation (IMO), and the development of appropriate technical and operational characteristics, of autonomous maritime radio devices (AMRDs) operating in the frequency band 156–162.05 MHz in accordance with Resolution **362 (WRC-15)**.

The technical and operational characteristics of AMRD should ensure that no constraints are placed on the Global Maritime Distress and Safety System (GMDSS), Digital Selective Calling (DSC) and Automatic Identification System (AIS).

Australia supports the categorisation of autonomous maritime radio devices (AMRDs) into two groups to be defined in an ITU-R Recommendation:

Group A AMRD that enhance the safety of navigation,

Group B AMRD that do not enhance the safety of navigation (AMRD which deliver signals or information which do not concern the navigation of the vessel or do not complement vessel traffic safety in waterways).

Australia supports CPM Report Method A for AMRD Group A, and Method B1 for AMRD Group B

Agenda item 1.9.2

Appendix 18 new VHF data exchange system (VDES) satellite issues including possible new allocations to the MMSS

to consider, based on the results of ITU R studies:

modifications of the Radio Regulations, including new spectrum allocations to the maritime mobile-satellite service (Earth to space and space-to-Earth), preferably within the frequency bands 156.0125–157.4375 MHz and 160.6125–162.0375 MHz of **Appendix 18**, to enable a new VHF data exchange system

(VDES) satellite component, while ensuring that this component will not degrade the current terrestrial VDES components, applications specific messages (ASM) and AIS operations and not impose any additional constraints on existing services in these and adjacent frequency bands as stated in recognizing d) and e) of Resolution **360 (Rev.WRC-15)**.

Australian preliminary view

Australia supports facilitating the introduction of the satellite component of the VHF data exchange system (VDES) in accordance with Resolution **360 (Rev.WRC-15)**.

Any maritime-mobile satellite service allocation should coexist and be compatible with services allocated in the same and adjacent frequency bands without imposing additional constraints on those services.

Agenda item 1.10

Spectrum and regulatory provisions Global Aeronautical Distress and Safety System (GADSS)

to consider spectrum needs and regulatory provisions for the introduction and use of the Global Aeronautical Distress and Safety System (GADSS), in accordance with Resolution **426 (WRC-15)**.

Australian preliminary view

Australia supports Method A of the CPM Report. GADSS is a system of systems using existing frequency allocations. Method A allows GADSS to evolve with minimal need to change the Radio Regulations.

Agenda item 1.11

Regional spectrum harmonisation of railway radiocommunication systems in existing MS allocations

to take necessary actions, as appropriate, to facilitate global or regional harmonized frequency bands to support railway radiocommunication systems between train and trackside within existing mobile service allocations, in accordance with Resolution **236 (WRC-15)**.

Australian preliminary view

Australia supports Method A in the CPM Report (no change to the Radio Regulations) as harmonisation of radiocommunication applications should not be a mandatory requirement via the Radio Regulations.

Any future ITU-R studies on technical and operational characteristics for RSTT should not be restricted to, or preclude, any particular relevant technology or delivery model.

Agenda item 1.12

Harmonisation of Intelligent Transport Systems in MS allocations

to consider possible global or regional harmonized frequency bands, to the maximum extent possible, for the implementation of evolving Intelligent Transport Systems (ITS) under existing mobile-service allocations, in accordance with Resolution **237 (WRC-15)**.

Australian preliminary view

Australia supports Method A in the CPM Report (no change to the Radio Regulations).

Selection of preferred ITS technology is solely a matter for national administrations, is beyond the scope of Resolution **237 (WRC-15)**, and should not be addressed in any Resolution or ITU-R Recommendation.

Agenda item 1.13

IMT in various bands above 24.25 GHz

to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution **238 (WRC-15)**.

Australian preliminary view

Australia's position for each of the bands under consideration is summarised in the table below with reference to the Methods and Conditions in the CPM Report.

Australian preliminary view

Band	Method	Conditions	Option	Comments
24.25–27.5 GHz	Method A2 Alternative 2	A2a	Option 1	Australia supports limits on IMT unwanted emissions to protect EESS(passive). Limits of -37 dBW/200 MHz and -33 dBW/200 MHz for BS and UE respectively are considered to be sufficient for expected deployments within Australia. Australia believes less stringent levels can be applied, and still provide adequate protection to EESS(passive), if additional restrictions are placed on outdoor IMT such as BS deployment density limits, or if devices are located indoors. Australia supports unwanted emission limits applying to IMT operating across the entire 24.25–27.5 GHz band.
24.25–27.5 GHz	Method A2 Alternative 2	A2b	Option 2	A considering in a new WRC Resolution that states spurious emission limits of Recommendation ITU-R SM.329 Category B are sufficient to protect the EESS (passive) from the second harmonic.
24.25–27.5 GHz	Method A2 Alternative 2	A2c	Option 5	No condition necessary, interference can be managed via domestic regulation.
24.25–27.5 GHz	Method A2 Alternative 2	A2d	Option 4	No condition necessary, interference can be managed via domestic regulation.
24.25–27.5 GHz	Method A2 Alternative 2	A2e	Option 9	No condition necessary, interference can be managed via domestic regulation.

Band	Method	Conditions	Option	Comments
24.25–27.5 GHz	Method A2 Alternative 2	A2f	Option 3	No condition necessary, interference can be managed via domestic regulation.
24.25–27.5 GHz	Method A2 Alternative 2	A2g	Option 5	No condition necessary, interference can be managed via domestic regulation.
31.8–33.4 GHz	Method B1	N/A	N/A	NOC is the only method proposed.
37–40.5 GHz	—	N/A	N/A	Australia would not oppose a global or regional IMT identification in the band.
40.5–42.5 GHz	Method D2 Alternative 2	D2a	Option 6	No condition necessary, interference can be managed via domestic regulation.
40.5–42.5 GHz	Method D2 Alternative 2	D2b	Option 3	No condition necessary, interference can be managed via domestic regulation.
40.5–42.5 GHz	Method D2 Alternative 2	D2c	Option 3	No condition necessary, interference can be managed via domestic regulation.
42.5–43.5 GHz	Method E2 Alternative 2	E2a	Option 7	No condition necessary, interference can be managed via domestic regulation.
42.5–43.5 GHz	Method E2 Alternative 2	E2b	Option 3	No condition necessary, interference can be managed via domestic regulation.
42.5–43.5 GHz	Method E2 Alternative 2	E2c	Option 5	No condition necessary, interference can be managed via domestic regulation.
45.5–47 GHz	—	N/A	N/A	Australia would not oppose a global or regional IMT identification in the band.
47–47.2 GHz	—	N/A	N/A	Australia would not oppose a global or regional IMT identification in the 47–47.2 GHz bands if suitable studies are performed before WRC-19 that show sharing is possible with incumbent primary services and appropriate regulatory measures are developed as a result.
47.2–50.2 GHz	Method H2 Alternative 2 In all or part of the band	H2a	Option 2	Australia is still considering what limits on IMT unwanted emissions should apply. If only part of the band is identified (e.g. 47.2–48.2 GHz), Australia is still considering whether any emission limits on IMT in Res 750 are required.
47.2–50.2 GHz	Method H2 Alternative 2 In all or part of the band	H2b	Option 7	No condition necessary, interference can be managed via domestic regulation.
47.2–50.2 GHz	Method H2 Alternative 2 In all or part of the band	H2c	Option 5	No condition necessary, interference can be managed via domestic regulation.

Band	Method	Conditions	Option	Comments
47.2–50.2 GHz	Method H2 Alternative 2 In all or part of the band	H2d	Option 5	No condition necessary, interference can be managed via domestic regulation.
50.4–52.6 GHz	—	N/A	N/A	Australia would not oppose a global or regional IMT identification in the band provided adjacent band EESS(passive) are adequately protected, taking into account RR No. 340.1.
66–71 GHz	Method J4	J4a	Option 4	No condition necessary, interference can be managed via domestic regulation.
66–71 GHz	Method J4	J4b	N/A	Australia believes no regulatory measures are required to protect the MSS in this band.
71–76 GHz	Method K2	K2a	N/A	Australian support for an IMT identification is on the basis that suitable unwanted emission limits are defined for the protection of automotive radars in the 76–81 GHz.
71–76 GHz	Method K2	K2b	Option 3	No condition necessary, interference can be managed via domestic regulation.
71–76 GHz	Method K2	K2c	Option 3	No condition necessary, interference can be managed via domestic regulation.
81–86 GHz	—	N/A	N/A	Australia would not oppose a global or regional IMT identification in the band provided adequate limits on IMT unwanted emissions are applied to ensure coexistence with adjacent band automotive radar services and EESS(passive).

Agenda item 1.14

Regulatory actions for HAPS in certain existing FS allocations above 5 GHz

to consider, on the basis of ITU R studies in accordance with Resolution **160 (WRC-15)**, appropriate regulatory actions for high-altitude platform stations (HAPS), within existing fixed-service allocations.

Australian preliminary view

Australia supports consideration of use of gateway and fixed terminal links for HAPS in the frequency band 38–39.5 GHz on a global basis noting this band is already allocated to the fixed service on a primary basis and is not subject to **Appendices 30, 30A, and 30B** in any region. This is addressed by Method B Option B2.

Agenda item 1.15

Land-mobile and FS applications 275–450 GHz

to consider identification of frequency bands for use by administrations for the land-mobile and fixed services applications operating in the frequency range 275–450 GHz, in accordance with Resolution **767 (WRC-15)**.

Australian preliminary view

Australia supports Method G for this agenda item. That is, identify frequency bands that are compatible with both EESS (passive) and RAS with respect to the land-mobile and fixed services applications in a new footnote in the Radio Regulations.

Preliminary studies show compatibility between EESS (passive) and RAS in all bands in the range 275–450 GHz except 296–306 GHz, 313–320 GHz and 331–356 GHz. The bands proposed by Method G avoid these ranges and provide for 58 GHz of spectrum, which is more than the 50 GHz estimated by Study Group 5 needed to support active services.

Agenda item 1.16

WAS/RLAN between 5150 MHz and 5925 MHz

to consider issues related to wireless access systems, including radio local area networks (WAS/RLAN), in the frequency bands between 5150 MHz and 5925 MHz, and take the appropriate regulatory actions, including additional spectrum allocations to the mobile service, in accordance with Resolution **239 (WRC-15)**.

Australian preliminary view

Australia supports Methods A1, B, C, D1 and E, no change, in the respective frequency bands 5 150–5 250 MHz, 5 250–5 350 MHz, 5 350–5 470 MHz, 5 725–5 850 MHz and 5 850–5 925 MHz. ITU-R sharing and compatibility studies have failed to confirm that incumbent services would be adequately protected and hence no regulatory actions are required in these frequency ranges.

Australia notes that, in the lower 5 150–5 250 MHz band, Working Party 5A's final meeting in May, 2019 could not agree on how incumbent services would be protected if the regulatory conditions of Resolution **229 (Rev.WRC-12)** were relaxed, as required by invites ITU-R b) of Resolution **239 (WRC-15)**, with sharing and compatibility studies not completed for this frequency band.

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 Resolution **28 (Rev.WRC-15)**, and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with the principles contained in Annex 1 to Resolution **27 (Rev.WRC-12)**.

Australian preliminary view

Australia supports examination and review of ITU-R Recommendations incorporated by reference and the corresponding references in the Radio Regulations in accordance with Resolution **28 (Rev.WRC-15)** and the principles contained in Annex 1 to Resolution **27 (Rev.WRC-12)**.

Australia supports revision of the references to the following ITU-R Recommendations revised and approved since WRC-15, already incorporated by reference in the Radio Regulations and included in Volume 4; Rec. ITU-R P.525–2 "Calculation of free-space attenuation' to ITU-R P.525–3, Rec. ITU-R P.526–13 'Propagation by diffraction' to ITU-R P.526–14 and Rec. ITU-R RS.1260–1 'Feasibility of sharing between active spacebourne sensors and other services in the range 420–470 MHz' to ITU-R RS.1260–2.

Australia also notes that some ITU-R Recommendations incorporated by reference in RR provisions or WRC Resolutions may be considered under specific WRC-19 agenda items, and that other possible draft revisions to ITU-R Recommendations incorporated by reference in the RR may be in the course of the ITU-R approval process to be concluded before WRC-19.

Australia supports the merging of Resolutions **27 (Rev.WRC-12)** and **28 (Rev.WRC-15)** in order to have a single Resolution that refers to incorporation by reference in the Radio Regulations.

Agenda item 4

Review of Resolutions and Recommendations

in accordance with Resolution **95 (Rev.WRC-07)**, to review the Resolutions and Recommendations of previous conferences with a view to their possible revision, replacement or abrogation.

Australian preliminary view

Australia supports WRC modification or suppression as appropriate of Resolutions and Recommendations contained in **Volume 3** of the Radio Regulations and the work of the Director of the Radiocommunication Bureau in conducting a general review of Resolutions and Recommendations of previous conferences.

Australia will support proposals that have the effect of maintaining relevancy of the Resolutions and Recommendations in Volume 3 of the Radio Regulations.

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 view

Australia supports consideration of possible changes to improve advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks/systems.

Australia does not support changes to allocations in Article 5 of the Radio Regulations under this agenda item.

Australia retains the view that no new WRC-19 agenda item 7 Issues should be raised at this point in the WRC cycle to ensure Administrations have time to consider issues in preparation for WRC-19.

Issue A

Australia supports a BIU requirement and a milestone-based approach to deployment of non-GSO systems, to provide regulatory certainty and recognition that constellations of non-GSO satellites may take time to be fully deployed. Any regulatory changes should not disadvantage existing or future GSO satellite systems and smaller (e.g. 10 or less) non-GSO constellations.

Bringing into use: Australia supports Option A, deployment for a continuous period of 90 days within the 7-year regulatory time limit in order to bring into use a non-GSO filing.

Milestone-based approach: Australia supports a milestone regime for deployment of non-GSO systems that requires a minimum percentage of a satellite system to be deployed within certain timeframes, full system deployment at the final milestone, and imposes penalties should milestones not be met (i.e. a 'deployment factor').

Transitional measures: Australia supports Option 1 for its simplicity. Australia will determine its preferred commencement date when final milestone timing and deployment percentages are settled.

Frequency bands and services: Australia supports application of the milestone-based approach to non-GSO systems operating in the FSS, BSS and MSS, but not those operating in the RNSS. In particular, Australia supports application of the approach to the following MSS frequency bands listed in the CPM Report: 137–137.025 MHz, 137.025–137.175 MHz, 137.175–137.825 MHz, 137.825–138 MHz, 148–149.9 MHz, 149.9–150.05 MHz (this band appears to have been mistakenly listed in the CPM Report as 137–138 MHz), 399.9–400.05 MHz, and 400.15–401 MHz. Australia does not support application of the milestone approach to the following frequency bands listed in the CPM Report: 1980–2010 MHz, 2170–2200 MHz, 7250–7750 MHz, 7900–8400 MHz, 20.2–21.2 GHz, and 30–31 GHz.

Issue B

Australia supports the application of coordination triggers in the Ka-band to MSS networks, for coordination between MSS-MSS and MSS-FSS networks, noting that any procedures developed should not compromise the protection of a primary service from a secondary service. Australia supports the single Method of the CPM Report text for this Issue.

Issue C (sub-issues C1, C2, C3, C4, C5, C6, C7)

Australia supports the single Method of the CPM Report text for these Issues.

Issue D

Australia supports the identification of potentially affected networks for which coordination is be effected under RR Nos. **9.12**, **9.12A** and **9.13**. Therefore, Australia prefers Method D1.

Issue E

Australia supports the single Method of the CPM Report text for this Issue.

Issue F

Australia can support either Method F1, F2 or F3 as it is of the view that these would help to alleviate the difficulties faced by administrations in attempting to enter assignments into the Appendix 30B List and to facilitate coordination of networks.

Issue G

Australia is of the view that when a network in Region 1 and 3 enters the List under § **4.1.18** of **Appendix 30** or **30A**, the reference situation of the interfered-with network shall only be updated if and when the Bureau is informed that the agreement has been obtained, or if there is still disagreement that the reference situation of the interfered-with network shall only be updated if and when the Bureau is informed by the affected administration to do so. Australia accordingly supports Method G1 in the CPM report text with modification of § **4.1.18**.

Issue H

Australia supports the single Method of the CPM Report text.

Issue I

Australia supports Method I2, the establishment of a new Resolution for non-GSO satellites with short duration missions, provided that the Resolution applies only where the notifying Administration identifies its system as a short duration mission, and does not create unreasonable obligations for operators of existing satellite services. Australia also supports the retention of the typical 4 month commenting period from the date of BR IFIC containing information published under No. **9.2B**.

Issue J

Australia will consider support for Method J1 but requires further information on the magnitude of exceedance of the pfd limit, and technical measures to contain exceedance to particular territory.

Issue K

Australia supports the single Method of the CPM Report text.

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-07)**.

Australian preliminary view

Australia supports the principles and intent of Resolution **26 (Rev.WRC-07)** 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.

This agenda item is not intended for adding country names to existing footnotes. However, WRCs in the past have deliberated on proposals from administrations to add country names to the existing footnotes on a case by case basis, subject to no objections from affected countries. Australia is open to consideration of regulatory options that might better address this practice for the benefit of future conferences and administrations.

Recent conferences have considered the issues described above at short notice and often raised within the conference. This presents difficulties for administrations during the conference, as the addition or deletion of country names to existing footnotes can have considerable impact to existing allocations and the management of spectrum in other (often neighbouring) countries. Australia is of the view that the proposals under this WRC standing agenda item, should be available in a timely and efficient manner before a conference for due consideration of administrations. To address the issue of timely consideration of administrations requests to vary footnotes in accordance with Resolution **26 (Rev.WRC-07)**, one option might be to apply a final deadline of 21 calendar days before a conference, as applies to all WRC contributions (consistent with resolves 1 of Resolution **165 (Rev. Dubai, 2018)**) for matters to be accepted for consideration by a WRC under this agenda item.

Notwithstanding, Australia is of the view that this agenda item is not intended for the addition of new country footnotes. Australia is open to a revision of Resolution **26 (Rev. WRC-07)** to reflect this for clarity.

Given suggestions above it would be necessary to revise the agenda item description as shown in Resolution **809 (WRC-15)** as follows:

> *to consider and take appropriate action on ~~requests~~* ***proposals*** *from administrations to delete their country footnotes or to have their country name deleted from footnotes, if no longer required, ~~taking into account~~* ***or to add their country name to footnotes in accordance with further resolves of*** *Resolution* ***26 (Rev.WRC-07)***.

Agenda item 9.1

Issue: 9.1.1—Compatibility between terrestrial and satellite IMT in the bands 1885–2025 MHz and 2110–2200 MHz

Resolution **212 (Rev.WRC-15)** Implementation of International Mobile Telecommunications in the frequency bands 1885–2025 MHz and 2110–2200 MHz.

Australian preliminary view

Australia supports development of appropriate technical and operational measures to ensure coexistence and compatibility between the terrestrial component of IMT (in the mobile service) and the satellite component of IMT (in the mobile service and the mobile-satellite service) in the frequency bands 1980–2010 MHz and 2170–2200 MHz in accordance with **Resolution 212 (Rev.WRC-15)**.

Outcomes on this Issue should result in no change to the Radio Regulations. This Issue may be addressed by appropriate technical and operational measures in new or revised ITU-R Recommendations or Reports.

Issue: 9.1.2—Compatibility of IMT and BSS (sound) in the band 1452–1492 MHz in Regions 1 and 3

Resolution **761 (WRC-15)** Compatibility of International Mobile Telecommunications and broadcasting-satellite service (sound) in the frequency band 1452–1492 MHz in Regions 1 and 3.

Australian preliminary view

Australia will monitor debate on this agenda item.

Issue: 9.1.3—Technical, operational and regulatory provisions for new non-GSO systems in the 3700–4200 MHz, 4500–4800 MHz, 5925–6425 MHz and 6725–7025 MHz FSS frequency bands

Resolution **157 (WRC-15)** Study of technical and operational issues and regulatory provisions for new non-geostationary-satellite orbit systems in the 3700–4200 MHz, 4500–4800 MHz, 5925–6425 MHz and 6725–7025 MHz frequency bands allocated to the fixed-satellite service.

Australian preliminary view

Australia supports no change to the Radio Regulations at WRC-19, as per the conclusions provided in the CPM Report, that there is no need to review the values of the existing limits presented in RR **Article 22** (epfd) and RR **Article 21** (pfd) for the 3 700–4 200 MHz, 4 500–4 800 MHz, 5 925–6 425 MHz and 6 725–7 025 MHz frequency bands.

Issue: 9.1.4—Spectrum, operational and technical requirements for stations on board sub-orbital vehicles above 100 kilometres

Resolution **763 (WRC-15)** Stations on board sub-orbital vehicles.

Australian preliminary view

Australia supports no change to the Radio Regulations for WRC-19, as per the conclusions provided in the CPM Report. Australia notes that additional operational, technical and regulatory studies may be required on sub-orbital vehicles, in accordance with Resolution **763 (WRC-15)**.

Issue: 9.1.5—Referencing revised Recommendations ITU-R M.1638–1 and M.1849–1 in RR Nos. 5.447F and 5.450A

Resolution **764 (WRC-15)** Consideration of the technical and regulatory impacts of referencing Recommendations ITU R M.1638 1 and ITU R M.1849 1 in Nos. 5.447F and 5.450A of the Radio Regulations.

Australian preliminary view

Australia supports a long-term solution that requires less regulation should Recommendations ITU-R M.1638 or M.1849 be updated again in the future, while creating no additional constraints to the mobile service, and also ensuring protection of the radiolocation service.

Australia supports CPM report Approach A.

Issue: 9.1.6—Wireless Power Transmission (WPT) for electric vehicles

Issue 1) in the Annex to Resolution **958 (WRC-15)**.

Australian preliminary view

Australia is of the view that all radiocommunication services must be adequately protected from harmful interference generated by any WPT-EV system at the fundamental frequency and from spurious and out-of-band emissions.

Australia supports the ongoing studies being carried out by the ITU-R in accordance with paragraph 1) of the Annex to Resolution **958 (WRC-15)**.

As studies have not been completed, Australia supports no change to the Radio Regulations.

Issue: 9.1.7—Unauthorised operation of earth station terminals

Issue 2) in the Annex to Resolution **958 (WRC-15)**.

Australian preliminary view

For Issue 2a, Australia is of the view that earth station licensing is the responsibility of administrations and no changes to the Radio Regulations are necessary. **Article 18** sufficiently addresses the required regulatory measures. This is consistent with Option 1 for Issue 2a in the CPM Report.

For Issue 2b, Australia is of the view that further assistance to administrations in managing (identifying and geo-locating) unauthorized operation of earth station terminals deployed within their territory can be accommodated in ITU-R guidelines on satellite monitoring capabilities and ITU-R Reports or Handbooks as appropriate. This is consistent with the singular Option for Issue 2b in the CPM Report.

Paragraph 2) of the Annex to Resolution **958 (WRC-15)** can be suppressed.

Issue: 9.1.8—Implementation of narrowband and broadband machine-type communication infrastructures

Issue 3) in the Annex to Resolution **958 (WRC-15)**.

Australian preliminary view

Australia is of the view that there should be no change to the Radio Regulations with respect to specific spectrum for the use of narrowband and broadband machine-type communication applications, consistent with the CPM Report conclusion.

Australia supports the development of appropriate ITU-R Recommendations, Reports and/or Handbooks on technical and operational aspects of using different radio networks and systems for the implementation of narrowband and broadband machine-type communication infrastructures.

Any future study can be accommodated in the scope of work of the ITU Radiocommunication Sector (ITU-R).

Paragraph 3) of the Annex to Resolution **958 (WRC-15)** can be suppressed.

Issue: 9.1.9—Regulatory and allocation issues FSS (Earth to space) 51.4–52.4 GHz

Resolution **162 (WRC-15)**

Studies relating to spectrum needs and possible allocation of the frequency band 51.4–52.4 GHz to the fixed-satellite service (Earth-to-space).

Australian preliminary view

Australia supports the possibility of an allocation to the fixed-satellite service (Earth-to-space) in the frequency band 51.4–52.4 GHz in accordance with Resolution **162 (WRC-15)**.

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.

Australian preliminary view

Australia supports measures to address any difficulties or inconsistencies encountered in the application of the Radio Regulations.

Agenda item 9.3

Action in response to Resolution 80 (Rev.WRC-07)

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

Australian preliminary view

Australia will monitor progress on this agenda item including development of reports to WRC-19 on action in response to Resolution **80 (Rev.WRC-07)** from:

- the Radio Regulations Board;
- the Radiocommunication Bureau Director's Report to WRC-19; and,
- any activity from ITU-R Working Party 4A and the Radiocommunication Advisory Group relevant 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 to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, in accordance with Article 7 of the Convention.

Australian preliminary view

In developing new WRC agenda items Australia supports the 'Principles for establishing agendas for WRCs' as detailed in Annex 1 to Resolution **804 (Rev.WRC-12)**.