|  |  |
| --- | --- |
| **World Radiocommunication Conference (WRC-19)Sharm el-Sheikh, Egypt, 28 October – 22 November 2019** |  |
|  |  |
|  |  |
| PLENARY MEETING | **Document 573-E** |
|  | **18 December 2019** |
|  | **Original: English/French** |
|  |

|  |
| --- |
| MINUTESOF THEtwelfth plenary meeting |
| Thursday, 21 November 2019, at 0800 hours |
| **Chairman:** Mr A. BADAWI (Egypt) |

|  |  |  |
| --- | --- | --- |
|  | Subjects discussed | Documents |
| 1 | Statement by the Director of BR | - |
| 2 | Approval of amendments to Resolution 12 (Rev.WRC-15) – first and second readings | 530 |
| 3 | Documents for approval | 283, 515, 518+Corr.1 +2, 521, 535, 550, 551 |
| 4 | Fourteenth series of texts submitted by the Editorial Committee for first reading (B14) | 287(Rev.1) |
| 5 | Fourteenth series of texts submitted by the Editorial Committee(B14) – second reading | 287(Rev.1) |
| 6 | Forty-first series of texts submitted by the Editorial Committee for first reading (B41)  | 503(Rev.1) |
| 7 | Forty-first series of texts submitted by the Editorial Committee (B41) – second reading | 503(Rev.1) |
| 8 | Forty-second series of texts submitted by the Editorial Committee for first reading (B42) | 504(Rev.1) |
| 9 | Forty-second series of texts submitted by the Editorial Committee (B42) – second reading | 504(Rev.1) |
| 10 | Forty-third series of texts submitted by the Editorial Committee for first reading (B43) | 505(Rev.1) |
| 11 | Forty-third series of texts submitted by the Editorial Committee (B43) – second reading | 505(Rev.1) |
| 12 | Forty-fourth series of texts submitted by the Editorial Committee for first reading (B44) | 506(Rev.1) |
| 13 | Forty-fourth series of texts submitted by the Editorial Committee (B44) – second reading | 506(Rev.1) |
| 14 | Forty-eighth series of texts submitted by the Editorial Committee for first reading (B48) | 513 |
| 15 | Forty-eighth series of texts submitted by the Editorial Committee (B48) – second reading | 513 |
| 16 | Fifty-third series of texts submitted by the Editorial Committee for first reading (B53) | 536 |
| 17 | Fifty-third series of texts submitted by the Editorial Committee (B53) – second reading | 521, 536 |
| 18 | Fifty-fourth series of texts submitted by the Editorial Committee for first reading (B54) | 537 |
| 19 | Fifty-fourth series of texts submitted by the Editorial Committee (B54) – second reading | 537 |
| 20 | Fifty-fifth series of texts submitted by the Editorial Committee for first reading (B55) | 539 |
| 21 | Fifty-fifth series of texts submitted by the Editorial Committee (B55) – second reading | 539 |
| 22 | Fifth series of texts submitted by the Editorial Committee for second reading (R5) | 540 |
| 23 | Fifty-sixth series of texts submitted by the Editorial Committee for first reading (B56) | 541 |
| 24 | Fifty-sixth series of texts submitted by the Editorial Committee (B56) – second reading | 541 |
| 25 | Fifty-seventh series of texts submitted by the Editorial Committee for first reading (B57) | 552 |
| 26 | Fifty-eighth series of texts submitted by the Editorial Committee for first reading (B58) | 553 |
| 27 | Additional documents for approval | 563 |
| 28 | Fifty-ninth series of texts submitted by the Editorial Committee for first reading (B59) | 554 + Corr.1 |
| 29 | Fifty-ninth series of texts submitted by the Editorial Committee (B59) – second reading | 554 + Corr.1 |
| 30 | Sixty-first series of texts submitted by the Editorial Committee for first reading (B61) | 556 |
| 31 | Sixty-first series of texts submitted by the Editorial Committee (B61) – second reading | 556 |
| 32 | Sixty-second series of texts submitted by the Editorial Committee for first reading (B62) | 557 |
| 33 | Statement by the delegate of Egypt | - |
| 34 | Sixtieth series of texts submitted by the Editorial Committee for first reading (B60) | 555 |
| 35 | Sixtieth series of texts submitted by the Editorial Committee (B60) – second reading | 535, 555 |
| 36 | Financial implications of certain decisions of the conference | 528, 542 |
| 37 | Sixty-third series of texts submitted by the Editorial Committee for first reading (B63) | 558 |
| 38 | Sixty-third series of texts submitted by the Editorial Committee (B63) – second reading | 558 |
| 39 | Additional documents for approval (resumed) | 561 |
| 40 | Fifty-eighth series of texts submitted by the Editorial Committee for first reading (B58) (resumed) | 553 |
| 41 | Fifty-eighth series of texts submitted by the Editorial Committee (B58) – second reading | 553 |
| 42 | Fifty-seventh series of texts submitted by the Editorial Committee for first reading (B57) (resumed) | 552 |
| 43 | Fifty-seventh series of texts submitted by the Editorial Committee (B57) – second reading  | 552 |
| 44 | Sixty-second series of texts submitted by the Editorial Committee (B62) – second reading | 557 |
| 45 | Announcement by the delegate of Switzerland | – |
| 46 | Consideration of an outstanding matter regarding Article 5 (MOD 5.453) | – |
| 47 | Deadline for the deposit of additional declarations and reservations | – |

# 1 Statement by the Director of BR

1.1 The **Director of BR** delivered the statement on World Television Day reproduced in Annex A.

# 2 Approval of amendments to Resolution 12 (Rev.WRC-15) – first and second readings (Document 530)

2.1 The **Chairman** introduced Document 530 setting out proposed amendments to Resolution 12 (Rev.WRC-15) on assistance and support to Palestine. He thanked the Arab group, State of Palestine, Israel, Egypt and the United States for the outstanding spirit of cooperation and compromise demonstrated in reaching consensus on the amended resolution, and commended the pivotal role played by the Secretary-General. The compromise had been reached after lengthy and delicate discussions and the text was presented directly for approval.

2.2 The proposed amendments to Resolution 12 (Rev.WRC-15) (Document 530) were **approved** on first and second readings.

2.3 The **Secretary-General** thanked all those who had supported and been engaged in the successful conclusion of the negotiations. He reiterated the secretariat’s and his full personal commitment to implementing the resolution in the interests of the Palestinian people, and said he would support all efforts to deploy 4G and 5G in the State of Palestine.

# 3 Documents for approval (Documents 283, 515, 518 and Corrigenda 1+2, 521, 535, 550, 551)

3.1 The **Chairman of Committee** 4 requested that consideration of Document 283 be deferred pending approval of the fourteenth series of texts (B14) (Document 287(Rev.1)), as both documents related to agenda item 1.1.

3.2 It was so **agreed**.

3.3 The **Chairman of Committee 6** introduced Document 515, containing the eighth report of Committee 6 to the Plenary, relating to the consolidated text on entry into force and provisional application of the Radio Regulations. The annex had been superseded by the fifty-eighth series of texts (B58) (Document 553) to be taken up later at the present meeting.

3.4 The **delegate of China** expressed the hope that the additional allocation in the frequency band 51.4 -52.4 GHz under agenda item 9.1.9 would be put into effect by 23 November 2019.

3.5 The **delegate of the United States** noted that some additional provisions appeared to be missing and should be added editorially to revised Resolution 99.

3.6 The **Chairman of Ad hoc Group of the Plenary 4C** dealing with agenda item 1.8 (Issue B) said that consideration should also be given to the possibility of applying the allocation to the maritime mobile-satellite service for GMDSS on a primary basis from the end of the conference.

3.7 The **delegate of the Russian Federation** suggested that the revision of Resolution 99 should be considered once all decisions on the provisions of the Radio Regulations had been taken. The **delegate of France** agreed.

3.8 The **delegate of the** **Republic of Korea** said that No. 5.A15 should be deleted from the *resolves* section of Resolution 99 since the effective date of application for that footnote had not been discussed under agenda item 1.5.

3.9 The **delegate of the Russian Federation** opposed that suggestion and proposed that reference to No 5.A15 be retained.

3.10 The **Chairman** suggested that the Plenary agree that the secretariat should complete the list of relevant provisions, resolutions and Recommendations in the appropriate parts of Article 59 and Resolution 99 to take into account the subsequent relevant decisions of the conference.

3.11 The **Secretary of the Plenary** reminded participants that comments on Article 59 and Resolution 99 as set out in annex to Document 515 should be made when the fifty-eighth series of texts B58 (Document 553) was considered later in the present meeting.

3.12 It was so **agreed**.

3.13 Turning to Document 518, the **Chairman** recalled that the text therein had been approved at the tenth plenary meeting for inclusion in the minutes of that plenary, with the exception of the final paragraph of the document pending further coordination between Mongolia and other affected administrations.

3.14 The **Chairman of Committee 5** introduced Document 518(Corr.1). It was proposed that the last paragraph of Document 518 should be replaced by the following text, to be included in the minutes of the plenary meeting as a decision of the conference:

“Request for MNG00000 and SANSAR-1 (113.6° E) satellite networks

WRC‑19 considered the specific request made by Mongolia in Document 164 regarding the reference situation of the Mongolian satellite system (113.6° E) in the FSS Plan. WRC‑19 instructs the Radiocommunication Bureau to apply with respect to the MNG00000 and SANSAR-1 networks of Mongolia the criteria in § 2.1 of Annex **4** to RR Appendix **30B** (as revised by WRC‑19) when performing examination of the assignments submitted under § 6.17 of RR Appendix **30B** after 22 November 2019 and related to assignments which were submitted under § 6.1 of RR Appendix **30B** before 23 November 2019.”

3.15 It was so **agreed.**

3.16 Document 518(Corr.1) was **approved**.

3.17 The **Chairman of Committee 5** introduced Document 518(Corr.2), in which it was proposed that the following additional text be approved and included in the minutes of the plenary meeting as a decision of the conference:

“Request for PSN-146E (146° E) satellite network

WRC‑19 considered the specific request made by Indonesia in Document 35(Add.25) regarding the extension of the regulatory time limit for bringing into use frequency assignments to the PSN-146E (146° E) satellite network in the frequency bands: 17.7-21.2 GHz and 27.0-31.0 GHz from 25 October 2019 to 31 March 2023. WRC‑19 agreed to accede to this limited time extension request, having confirmed that all frequency coordination activities requested by other administrations during WRC‑19 had been completed for this satellite network.

Request for GARUDA-2 (123° E) satellite network

WRC‑19 considered the specific request made by Indonesia in Document 35(Add.25) regarding the extension of the regulatory time limit for bringing back into use the frequency assignments to the GARUDA-2 (123° E) satellite network in the frequency bands: 1 530-1 559 MHz, 1 626.5-1 660.5 MHz, from 1 November 2020 to 1 November 2024. WRC‑19 agreed to accede to this time extension request and the continued inclusion of the GARUDA-2 frequency assignments in the MIFR, both of which are conditional to the adherence by Indonesia to the coordination agreement reached with the United Arab Emirates. Furthermore, WRC‑19 confirmed that all frequency coordination activities requested by other administrations during WRC-19 had been completed for this satellite network.”

3.18 It was so agreed.

3.19 Document 518(Corr.2) was **approved**.

3.20 The **delegate of Indonesia** expressed appreciation to the conference for agreeing to its requests with respect to the PSN-146E (146° E) and GARUDA-2 (123° E) satellite networks, which were of great importance in providing connectivity in his country, in particular to remote islands and rural areas. He thanked the Administrations of Australia, the United Arab Emirates, the Islamic Republic of Iran, China, Luxembourg, Malaysia, Samoa, South Africa, the United Kingdom, France, the Russian Federation and other administrations for their cooperation and support. He also thanked the Chairman, the Chairman of Committee 5, the Chairman of Working Group 5B and Chairman of Sub-Working Group 5B1, the Director of BR, ITU staff and members of the Radio Regulations Board for their assistance.

3.21 The **Chairman of Ad hoc Group of the Plenary 5A** introduced Document 521, which contained the group’s report on agenda item 9.1 (9.1.3). The group had concluded that, other than the consequential suppression of Resolution 157 (WRC.15), no changes to the Radio Regulations were required. He requested that Document 521 be approved after adoption of the fifty-third series of texts (B53) (Document 536), which addressed the same agenda item and would be taken up later in the present meeting.

3.22 It was so **agreed**.

3.23 The **Chairman of Ad hoc Group of the Plenary 5A** introduced Document 535, which contained the group’s report on agenda item 1.6 and included in annex proposed text for inclusion in the minutes of the plenary meeting on application of the rules of procedure on No. 9.11A and protection of EESS in the frequency band 36-37 GHz. He requested that Document 535 be approved after the adoption of the sixtieth series of texts (B60)(Document 555), which would be taken up later in the present meeting.

3.24 It was so **agreed**.

3.25 The **Chairman of Ad hoc Group of the Plenary 4A** introduced Document 550 on agenda item 1.13. It was proposed that the following text set out in the annex to Document 550 be approved and included in the minutes of the meeting as a decision of the conference:

“Verification of No. 21.5 for the notification of IMT stations operating in the frequency band 24.45-27.5 GHz which use an antenna
that consists of an array of active elements

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.”

3.26 It was so **agreed**.

3.27 Document 550 was **approved**.

3.28 The **Chairman of Ad hoc Group of the Plenary 4A** introducedDocument 551 relating to agenda item 1.13. The ad hoc group had concluded that no changes were required to the Radio Regulations under agenda item 1.13 for frequency bands 48.2-50.2 GHz and 50.4-52.6 GHz. That conclusion formed part of the overall agreement on various bands under agenda item 1.13 and on various proposals for identifications.

3.29 Document 551 was **approved**.

3.30 The **Chairman** thanked the Chairman of Ad hoc Group of the Plenary 4A for his efforts in reaching a conclusion on such an important item.

3.31 The **Chairman of Ad hoc Group of the Plenary 4A** said that further outputs from the group would be forthcoming from the Editorial Committee. He thanked all those involved in the group’s work for their hard work and spirit of compromise.

3.32 The **delegate of the Islamic Republic of Iran** thanked the Chairman of Ad hoc Group of the Plenary 4A for his hard work not only during WRC-19 but also in ITU-R over the preceding four-year period.

# 4 Fourteenth series of texts submitted by the Editorial Committee for first reading (B14) (Document 287(Rev.1))

4.1 The **Chairman of the Editorial Committee** introduced Document 287(Rev.1).

4.2 The **Chairman** invited participants to consider Document 287(Rev.1).

Article 5 (MOD Table 47-75.2 MHz, ADD 5.A11, ADD 5.A11*bis*, ADD 5.B11, ADD 5.C11, ADD 5.D11, ADD 5.E11, ADD 5.169*bis*, MOD 5.169); SUP Resolution 658 (WRC-15)

4.3 **Approved**.

4.4 The fourteenth series of texts submitted by the Editorial Committee for first reading (B14) (Document 287(Rev.1)) was **approved**.

# 5 Fourteenth series of texts submitted by the Editorial Committee (B14) – second reading (Document 287(Rev.1))

5.1 The fourteenth series of texts submitted by the Editorial Committee (B14) (Document 287(Rev.1)) was **approved** on second reading.

5.2 The **Chairman** invited participants to take up Document 283, approval of which had been deferred from earlier in the meeting.

5.3 The **Chairman of Committee 4** introduced Document 283, which contained the tenth report from Committee 4 to the Plenary. It was proposed that the following text set out in Document 283 be approved and included in the minutes of the meeting as a decision of the conference:

“The administrations of Region 1 wishing to allocate the frequency band 50-54 MHz, or portions thereof, to the amateur service exclusively on a primary basis at future WRCs are invited to add their names to footnote RR No. **5.169*bis*** and not to footnote RR No. **5.169**, due to its special historical status. BR shall take all necessary actions to guide such administrations to propose addition of their names only to footnote RR No. **5.169*bis***.”

5.4 It was so **agreed**.

5.5 Document 283 was **approved**.

# 6 Forty-first series of texts submitted by the Editorial Committee for first reading (B41) (Document 503(Rev.1))

6.1 The **Chairman of the Editorial Committee** introduced Document 503(Rev.1), which contained proposals relating to agenda item 1.14. He reminded delegates that agenda item 1.14 concerned a number of frequency bands and would be dealt with through several different documents to be presented to the Plenary.

6.2 The **Chairman** invited participants to consider Document 503(Rev.1).

Article 5 (MOD Table 18.4-22 GHz, ADD 5.B114, MOD Table 40-47.5 GHz, MOD 5.552A, MOD Table 47.5-51.4 GHz; MOD Resolution 122 (Rev.WRC-07); MOD Resolution 150 (WRC-12); ADD Resolution COM4/3 (WRC-19) – Use of the frequency band 21.4-22 GHz by high altitude platform stations in the fixed service in Region 2

6.3 **Approved**.

6.4 The forty-first series of texts submitted by the Editorial Committee for first reading (B41) (Document 503(Rev.1)) was **approved**.

# 7 Forty-first series of texts submitted by the Editorial Committee (B41) – second reading (Document 503(Rev.1))

7.1 The forty-first series of texts submitted by the Editorial Committee (B41) (Document 503(Rev.1)) was **approved** on second reading.

# 8 Forty-second series of texts submitted by the Editorial Committee for first reading (B42) (Document 504(Rev.1))

8.1 The **Chairman of the Editorial Committee** introduced Document 504(Rev.1).

8.2 The **Chairman** invited participants to consider Document 504(Rev.1).

Article 5 (MOD Table 22-24.75 GHz, ADD 5.C114, MOD Table 24.75-29.9 GHz (B42/504/3), MOD Table 24.75-29.9 GHz (B42/504/4), ADD 5.D114; ADD Resolution COM4/4 (WRC-19) – Use of the frequency band 24.25 – 24.75 GHz by high-altitude platform stations in the fixed service in Region 2

8.3 **Approved**.

8.4 The forty-second series of texts submitted by the Editorial Committee for first reading (B42) (Document 504(Rev.1)) was **approved**.

# 9 Forty-second series of texts submitted by the Editorial Committee (B42) – second reading (Document 504(Rev.1))

9.1 The forty-second series of texts submitted by the Editorial Committee (B42) (Document 504(Rev.1)) was **approved** on second reading.

# 10 Forty-third series of texts submitted by the Editorial Committee for first reading (B43) (Document 505(Rev.1))

10.1 The **Chairman of the Editorial Committee** introduced Document 505(Rev.1).

10.2 The **Chairman** invited participants to consider Document 505(Rev.1).

Article 5 (MOD Table 29.9-34.2 GHz, ADD 5.F114, SUP 5.543A)

10.3 **Approved.**

MOD Resolution 145 (Rev.WRC-12)

10.4 The **delegate of China** requested that his country’s name be added to footnote 5.537A to which Resolution 145 (Rev.WRC-12) referred.

10.5 The **delegate of the Islamic Republic of Iran**, observing that he would have no difficulty with the addition of China to footnote 5.537A, asked whether the document relating to that footnote had already been approved on second reading. He also asked whether the action under *invites ITU-R* 1 and 2 was to be considered by WRC-23 or to be included in relevant reports and Recommendations.

10.6 The **delegate of France**, speaking on behalf of the Chairman of Ad hoc Group of the Plenary 4B1, said that although China had not originally indicated its wish to be added to footnote 5.537A, a revised document could be prepared including its name. The only real modification made to *invites ITU-R* 1and 2 was the deletion of “and 31-31.3 GHz”. It might be prudent to simply delete the two paragraphs in the interests of clarity.

10.7 The **delegate of the** **Republic of Korea** explained that China sought to be added to footnote 5.537A following the decision to make no change to the 10 GHz band, which had been a candidate band for HAPS. Her country supported China’s request to be added to the footnote.

10.8 The **Chairman of the Editorial Committee** confirmed that footnote 5.537A had not yet been submitted for first reading. He proposed submitting a revised version of footnote 5.537A with the addition of China for first and second readings later in the present meeting.

10.9 The **Chairman** took it that there was no objection to the addition of China to footnote 5.537A and to the consideration of a revised version of that footnote later in the meeting.

10.10 It was so **agreed**.

10.11 The **delegate of the Islamic Republic of Iran** said that he did not support the deletion of *invites ITU-R* 1 and 2 and suggested that the following words should be added at the end of *invites ITU-R* 2: “and include the results of these studies in ITU-R reports/Recommendations, as appropriate.”.

10.12 The **delegate of the United Kingdom** proposed drafting a new document to confirm that, with the exception of the addition of China to footnote 5.537A, no change would be made to either the 6 GHz or the 27.8-28.2 frequency bands, thereby reflecting in its entirety the decision of the conference regarding all bands under agenda item 1.14.

10.13 The **delegate of France**, speaking on behalf of the Chairman of Ad hoc Group of the Plenary 4B1, confirmed that it would be possible to draft a new document to that effect.

10.14 The **Secretary of the Plenary** said that such a document, containing text for inclusion in the minutes of the plenary meeting, should be separate to a document including the addition of a country name to a footnote, which had to be submitted by the Editorial Committee for first and second readings.

10.15 The **delegate of the Islamic Republic of Iran** endorsed the statement of the Secretary of the Plenary.

10.16 The **delegate of the United States** said that footnote 5.537A was referred to in Resolution 145, which provided the parameters for HAPS operation in the 28 GHz band. Any revision of footnote 5.537A could necessitate an update to that resolution. He also commented that, as a Recommendation on developing the mobile receiver characteristics protection criteria for the mobile service systems concerned in the 27.5-29.5 GHz frequency band already existed, he was not sure whether the changes proposed by the Islamic Republic of Iran were necessary.

10.17 The **delegate of the Russian Federation** said that in order to address the concerns of the United States, the text proposed by the Islamic Republic of Iran might be further amended to read “and include the result of these studies in existing or new ITU-R reports/Recommendations, as appropriate.”

10.18 The delegate of the **Islamic Republic of Iran** supported that proposal.

10.19 The **Chairman** suggested that the meeting approve Resolution 145 as amended by the delegates of the Islamic Republic of Iran and the Russian Federation.

10.19 It was so **agreed**.

10.20 MOD Resolution 145 (Rev.WRC-12), as amended, was **approved**.

ADD Resolution COM4/5 (WRC-19) – Use of the frequency band 31-31.3 GHz by high-altitude platform stations in the fixed service

10.21 **Approved**.

10.22 The forty-third series of texts submitted by the Editorial Committee for first reading (B43) (Document 505(Rev.1)), as amended, was **approved**.

# 11 Forty-third series of texts submitted by the Editorial Committee (B43) – second reading (Document 505(Rev.1))

11.1 The forty-third series of texts submitted by the Editorial Committee (B43) (Document 505 (Rev.1)), as amended on first reading, was **approved** on second reading.

11.2 The **delegate of Botswana** said it had become clear that agenda item 1.14 was very challenging, despite the volume of work carried out during the study cycle. On behalf of Botswana and the African Telecommunications Union, she thanked RCC, CEPT, in particular France and the United Kingdom, and CITEL, notably Canada, Brazil and Mexico, for their support for high-altitude platforms. She also thanked the delegates of France and Canada and the Access Partnership Limited for their efforts and expertise, and the delegate of the Islamic Republic of Iran for ensuring a delicate compromise acceptable to all parties.

**The meeting was suspended at 0925 hours and resumed at 1005 hours.**

# 12 Forty-fourth series of texts submitted by the Editorial Committee for first reading (B44) (Document 506(Rev.1))

12.1The **Chairman of the Editorial Committee** introduced Document 506(Rev.1).

12.2 The **Chairman** invited participants to consider Document 506(Rev.1).

Article 5 (MOD 5.441A)

12.3 **Approved**, subject to an editorial amendment pointed out by the **delegate of Uruguay**.

12.4The forty-fourth series of texts submitted by the Editorial Committee for first reading (B44) (Document 506 (Rev.1)) was **approved**, subject to editorial amendment.

# 13 Forty-fourth series of texts submitted by the Editorial Committee (B44) – second reading (Document 506(Rev.1))

13.1 Subject to editorial amendment, the forty-fourth series of texts submitted by the Editorial Committee (B44) (Document 506(Rev.1)) was **approved** on second reading.

13.2 The **delegate of Brazil** made the following statement:

“Regarding discussions on footnote 5.441A, Brazil would like to thank France for its indulgence and comprehension about the importance of giving equal rights and opportunities to regions and municipalities inside a country. Brazil and French Guyana are neighbours. From the Brazilian side we have one city, Oiapoque, with 27,000 inhabitants and currently only six base stations cover this city. Oiapoque is surrounded by forest and a river that divides Brazil and French Guyana. Brazil and France will work together in order to protect the aeronautical mobile service operations in French Guyana, without imposing undue constraints to portions of the frequency band 4 800-4 900 MHz, that may be used by commercial IMT operations in Brazil, specifically in the border between Brazil and French Guyana.”

# 14 Forty-eighth series of texts submitted by the Editorial Committee for first reading (B48) (Document 513)

14.1The **Chairman of the Editorial Committee** introduced Document 513.

14.2 The **Chairman** invited participants to consider Document 513.

Article 5 (MOD Table 4 800-5 250 MHz)

14.3 **Approved**.

Article 5 (MOD 5.441B)

14.4 The **delegate of Mongolia** requested the inclusion of his country’s name in footnote 5.441B.

14.5It was so **agreed**.

14.6 MOD 5.441B, as amended, was **approved.**

MOD Resolution 223 (Rev.WRC-15)

14.7 **Approved**.

14.8 The forty-eighth series of texts submitted by the Editorial Committee for first reading (B48) (Document 513), as amended, was **approved**.

# 15 Forty-eighth series of texts submitted by the Editorial Committee (B48) – second reading (Document 513)

15.1The forty-eighth series of texts submitted by the Editorial Committee (B48) (Document 513), as amended on first reading, was **approved** on second reading.

# 16 Fifty-third series of texts submitted by the Editorial Committee for first reading (B53) (Document 536)

16.1The **Chairman of the Editorial Committee** introduced Document 536.

16.2 The **Chairman** invited participants to consider Document 536.

SUP Resolution 157 (WRC-15)

16.3 **Approved.**

16.4 The fifty-third series of texts submitted by the Editorial Committee for first reading (B53) (Document 536) was **approved.**

# 17 Fifty-third series of texts submitted by the Editorial Committee (B53) – second reading (Documents 521 and 536)

17.1 The fifty-third series of texts submitted by the Editorial Committee (B53) (Document 536) was **approved** on second reading.

17.2 The **delegate of the Islamic Republic of Iran** commended the spirit of compromise that had prevailed.

17.3The **Chairman** invited participants to consider Document 521, the approval of which had been deferred from earlier in the meeting, and which related to the consequential suppression of Resolution 157 (WRC-15)

17.4 Document 521 was **approved.**

# 18 Fifty-fourth series of texts submitted by the Editorial Committee for first reading (B54) (Document 537)

18.1The **Chairman of the Editorial Committee** introduced Document 537.

18.2 The **Chairman** invited participants to consider Document 537.

Article 5 (MOD Table 34.2-40 GHz, ADD 5.G114); ADD Resolution COM4/6 (WRC-19) – Use of the frequency band 38-39.5 GHz by high altitude platform stations in the fixed service

18.3 **Approved**.

18.4 The **delegate of Iraq** said that, while Iraq understood that the text was the result of a delicate compromise,it had some difficulty with the amendments adopted and requested the inclusion of the following statement in the minutes of the plenary:

“Iraq has concerns regarding the resolution and in particular the use of HAPS systems, which may interfere with current and future services in the region.”

18.5 The **delegate of Lebanon** expressed his delegation’s concerns regarding potential interference from HAPS on current and future services in the 38 GHz band.

18.6 The fifty-fourth series of texts submitted by the Editorial Committee for first reading (B54) (Document 537) was **approved.**

# 19 Fifty-fourth series of texts submitted by the Editorial Committee (B54) – second reading (Document 537)

19.1 The fifty-fourth series of texts submitted by the Editorial Committee (B54) (Document 537) was **approved** on second reading.

# 20 Fifty-fifth series of texts submitted by the Editorial Committee for first reading (B55) (Document 539)

20.1The **Chairman of the Editorial Committee** introduced Document 539.

20.2 The **Chairman** invited participants to consider Document 539.

Article 11 (MOD 11.9, MOD 11.26); Appendix 7 (MOD Table 7c)

20.3A**pproved**.

20.4 The fifty-fifth series of texts submitted by the Editorial Committee for first reading (B55) (Document 539) was **approved.**

# 21 Fifty-fifth series of texts submitted by the Editorial Committee (B55) – second reading (Document 539)

21.1The fifty-fifth series of texts submitted by the Editorial Committee (B55) (Document 539) was **approved** on second reading.

# 22 Fifth series of texts submitted by the Editorial Committee for second reading (R5) (Document 540)

22.1The **Chairman of the Editorial Committee** introduced Document 540, which contained a consolidated version of the two versions of No. 11.49, presented in Documents 502 and 512 considered at the tenth and eleventh plenary meetings, respectively. The versions had been consolidated with the assistance of the Chairman of Committee 5 and verified by the Bureau. Responding to a question from the **delegate of the Russian Federation**,heexplained that footnotes ADDDD–ADDGG had been approved on second reading during consideration of the fortieth series of texts (Document 502) at the tenth plenary meeting, and therefore had not been reproduced in Document 540.

22.2 The **Chairman of Committee 5** thanked the chairmen of Working Group 5B, the sub-working group and the drafting groups for the spirit of cooperation and compromise they had ensured on such difficult and sensitive items.

22.3The fifth series of texts submitted by the Editorial Committee for second reading (R5) (Document 540) was **approved.**

# 23 Fifty-sixth series of texts submitted by the Editorial Committee for first reading (B56) (Document 541)

23.1 The **Chairman of the Editorial Committee** introduced Document 541, which was the last document from his committee pertaining to agenda item 1.14.

23.2 The **Chairman** invited participants to consider Document 541.

Appendix 4 (Annex 1 - MOD footnotes to Tables 1 and 2)

23.3 **Approved.**

23.4 The fifty-sixth series of texts submitted by the Editorial Committee for first reading (B56) (Document 541) was **approved.**

# 24 Fifty-sixth series of texts submitted by the Editorial Committee (B56) – second reading (Document 541)

24.1The fifty-sixth series of texts submitted by the Editorial Committee (B56) (Document 541) was **approved** on second reading.

# 25 Fifty-seventh series of texts submitted by the Editorial Committee for first reading (B57) (Document 552)

25.1 The **Chairman of Committee 6,** supported by the **delegate of the Russian Federation**, proposed postponing consideration of Document 552, which contained a series of resolutions relating to the preliminary agenda and work of WRC-27, pending consideration of Document 563, which pertained to items for inclusion on the agenda of WRC-23.

25.2 It was so **agreed**.

25.3 The **delegate of the Islamic Republic of Iran** suggested that, as time was short, only the titles of the agenda items and associated resolutions for WRC-27 should be discussed. Priority should be given to discussing the agenda for WRC-23.

25.4 The **Chairman** endorsed that suggestion.

# 26 Fifty-eighth series of texts submitted by the Editorial Committee for first reading (B58) (Document 553)

26.1The **Chairman of the Editorial Committee** introduced Document 553, which comprised the results of the work of Committee 6 on entry into force and application of the Radio Regulations. As suggested during the discussion on Document 515, the Plenary might wish to postpone its consideration of Document 553 until decisions on other provisions had been taken, in case any further revision was required.

26.2 The **delegate of the Islamic Republic of Iran** said that initial discussion of the document at the present juncture would be useful.

26.3 The **Chairman** invited delegates to consider Document 553.

26.4 The **delegate of the Russian Federation** said that No. 5.441B should be included in the list of provisionsto provisionally apply from 23 November 2019 set out in the *resolves* section of MOD Resolution 99 (WRC-15).

26.5 The **delegate of the Republic of Korea** said that methodology for implementation had not yet been developed with respect to No. 5.A15. Accordingly, that provision should not be included in the *resolves* section to apply provisionally as of 23 November 2019, but should be listed to apply provisionally as of 1 July 2020. He requested inclusion of the following text in the minutes of the meeting: “As of 23 November 2019, taking into account Resolution COM5/6 (WRC-19), it is agreed at WRC-19 that ITU-R is invited to develop as a matter of urgency the methodology with respect to examination by the Bureau.”

26.6 The **delegate of China** requested clarification as to whether the allocation in the frequency band 51.4-52.4 GHz (agenda item 9.1 (9.1.9)) would be added to the list of provisions to apply provisionally as of 23 November 2019.

26.7 The **delegate of Japan** expressed concerns regarding the provisional application of No. 5.A15, which went far beyond the compromise to which Japan had reluctantly agreed. Noting that most of the provisions considered by Committee 5 were not expected to enter into force until 1 January 2021, he pointed out that the Bureau would not be undertaking the examination with respect to conformity with the pfd limits specified in Part II of Annex 2 to Resolution COM5/6 until the methodology had been developed by ITU-R.

26.8 The **delegate of the Islamic Republic of Iran** said that the date of application of 1 July 2020 for No. 5.A15 suggested by the Republic of Korea could provide a way forward.

26.9 The **Chairman**, noting the suggestions made by China and the Republic of Korea, requested the Chairman of the Editorial Committee to keep track of any changes with a view to preparing a final version of the document for approval. He proposed to suspend discussion of Document 553 for the time being.

26.10 It was so **agreed**.

# 27 Additional documents for approval (Document 563)

27.1 The **Chairman of Committee 6**, speaking in his capacity as Chairman of Ad-Hoc Group of the Plenary 6, introduced Document 563 containing the group’s report on agenda item 10. The group had considered the proposed agenda for WRC-23 and the preliminary agenda for WRC‑27. Despite the suggestion that the ad-hoc group should only consider titles of the agenda items and associated resolutions for WRC-27, it had considered all elements of the agenda for WRC-27. It was proposed that the following text, contained in the document, be approved and included in the minutes of the plenary meeting for consideration as a possible future issue during the studies under WRC-23 agenda item 7:

“To consider the protection of geostationary satellite networks in the MSS operating in 7/8 and 20/30 GHz from emissions of non-geostationary satellite systems operating in the same frequency bands and identical directions”.

27.2 It was so **agreed**.

27.3 The **delegate of the Islamic Republic of Iran** proposed that an instruction from the conference to the Bureau be included in the minutes of the plenary meeting to read: “WRC-19 therefore instructs the Radiocommunication Bureau to convey this statement to the relevant ITU-R study group for necessary action, as appropriate”.

27.4 It was so **agreed.**

27.5 Document 563 was **approved.**

# 28 Fifty-ninth series of texts submitted by the Editorial Committee for first reading (B59) (Document 554 and Corrigendum 1)

28.1 The **Chairman of the Editorial Committee** introduced Document 554, containing the resolution on the agenda for WRC-23 and all resolutions relating to it.

28.2 The **Chairman** invited participants to consider Document 554.

MOD Resolution 361 (WRC-15); MOD Resolution 656 (WRC-15); MOD Resolution 657 (WRC-15)

28.3 **Approved**.

ADD Resolution COM6/2 (WRC-19) – Studies on frequency-related matters for the terrestrial component of International Mobile Telecommunications identification in 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

28.4 The **delegate of Uzbekistan** suggested that a reference to No. 5.249 be added to the footnote to *resolves to invite ITU-R* 2.

28.5 The **delegate of the Russian Federation** pointed out that the frequency bands mentioned in the title of the resolution differed slightly from those referred to in *resolves to invite ITU-R* 2 for the different regions. He therefore proposed that, in the title, “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” should be replaced by “frequency range 3-11 GHz”.

28.6 The **delegate of Samoa** proposed that in *resolves to invite ITU-R* 2 the frequency band 6 425-7 025 MHz should be either deleted or limited to 6 825-7 025 MHz, as 200 MHz of bandwidth were sufficient for the studies envisaged.

28.7 The **Chairman** pointed out that the series of texts under consideration was the result of the work carried out by experts and the heads of the regional groups. The meeting should therefore not be reopening the discussions, but correcting errors or omissions.

28.8 The **delegates of the United States, Cameroon, the United Arab Emirates, the Islamic Republic of Iran** and **Lebanon** agreed with the Chairman and recalled that agreement had been reached on the document following long discussions in Ad hoc Group of the Plenary 6 and between the heads of the regional groups. It should therefore be approved without change.

28.9 The **delegate of the United Kingdom** recognized that the document under consideration reflected a delicate compromise, but expressed doubts as to whether it would be possible to produce concrete results in the 6 GHz band. He supported the proposal by the delegate of Samoa. To facilitate matters, however, he would not press the point.

28.10 The **delegate of Nigeria**, recalling that the texts in Document 554 had been approved at a late stage following a full debate, requested the Chairman to invite the Plenary to approve the document without change.

28.11 The **delegate of South Africa** added that the Plenary should do nothing more than correct errors.

28.12 The **delegate of the Russian Federation**, in a bid to facilitate agreement, withdrew his proposal to change the title of the resolution.

28.13 The **delegate of the Islamic Republic of Iran** recalled that the title of a resolution should be identical to the wording of the corresponding agenda item.

28.14 ADD Resolution COM6/2 (WRC-19) was **approved**.

ADD Resolution COM6/1 (WRC-19) – Agenda for the 2023 world radiocommunication conference

28.15 The **delegate of China** said that in *resolves* 1.4, “3.7 GHz” should be replaced by “2.7 GHz”. He also noted several errors in the Chinese version of the resolution.

28.16 The correction to *resolves* 1.4 was **approved**.

28.17 The **Chairman** invited the delegate of China to submit his comments on the Chinese version to the Chairman of the Editorial Committee.

28.18 The **Chairman of Committee 6** read out editorial modifications to *resolves* 7, which would now read as follows: “to consider a new aeronautical mobile-satellite (R) service (AMS(R)S) allocation in accordance with Resolution COM6/6 (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”.

28.19 The modifications were **approved**.

28.20 The **delegate of Germany** expressed surprise that the proposal to add aeronautical IMT in square brackets to the agenda for WRC-23 failed to appear in the text under consideration, even though agreement had been reached to include it at the meeting of Ad hoc Group of the Plenary 6.

28.21 The **Chairman of Committee 6,** speaking as the Chairman of Ad hoc Group of the Plenary 6, said that to his recollection the group had debated the matter and decided not to submit the proposal in square brackets.

28.22 The **delegate of the Islamic Republic of Iran** stressed that in order to deal with the item aeronautical IMT, the study groups must first have criteria, characteristics and parameters at their disposal in order to undertake sharing and compatibility studies. Thus, if an item on aeronautical IMT was added to the agenda for WRC-23, the following comment should be taken into account: “Consideration for a study related to aeronautical IMT is subject to the timely availability of characteristics and parameters of IMT in order to permit the due commencement of the sharing and compatibility studies”.

28.23 The **delegate of Samoa** expressed surprise that consideration was being given to adding a new item to the WRC-23 agenda whereas his delegation’s proposal to include studies for mobile-satellite service inter-satellite links on the agenda of the same WRC had been put off to WRC-27.

28.24 The **delegate of Germany** requested confirmation that the question under debate was whether or not to add a new item 1.20 to the agenda for WRC-23 on aeronautical IMT, along with a note containing the comment proposed by the delegate of the Islamic Republic of Iran. He added that the IMT specifications were contained in Recommendation ITU-R M.1305 and would be used for the studies.

28.25 The **delegate of France** said that, according to his delegation, Committee 6 had decided that the matter should be discussed and decided at the present conference. The comment by the delegate of the Islamic Republic of Iran appeared to him to be balanced. Some countries had already started dealing with the characteristics of such systems, and obviously there could be no studies without parameters and characteristics. Regarding the comment by the delegate of Samoa, it would be preferable not to reopen debate on the items that had been carried over to the agenda for WRC-27.

28.26 The **delegate of the Islamic Republic of Iran** explained that CPM23-1 would set the date by which the characteristics and parameters decided by ITU-R and agreed to by all parties should be available in order to launch the sharing and compatibility studies. The purpose of his previous intervention had been to stress that if the characteristics were not available by the date set by CPM23-1, no study could be undertaken.

28.27 The **delegate of the Russian Federation** recognized the need to have the required characteristics as soon as possible in order to allow the next conference to take decisions, but deemed it preferable to include aeronautical IMT on the agenda for WRC-27, given the time and efforts required.

28.28 The **delegate of France** stressed the urgency of the studies and considered it acceptable to set a deadline for submission of the characteristics, as proposed by the delegate of the Islamic Republic of Iran. He suggested that 31 December 2020 be set as the deadline for submitting the IMT characteristics to ITU-R, which would allow the studies to commence at the beginning of the following year so that WRC-23 could decide on the matter.

28.29 The **delegate of Slovenia,** returning to the statement made by the delegate of Samoa, recalled that her delegation had raised the question of aeronautical IMT in Ad hoc Group of the Plenary 6 and it had been agreed to include it on the agenda for WRC-23. Nevertheless, given the need to have the systems’ characteristics, she endorsed the proposals made by the delegates of the Islamic Republic of Iran and France.

28.30 The **delegate of Finland** supported the inclusion of the item under discussion on the agenda for WRC-23 and the setting of a deadline for submitting the characteristics prior to commencing the studies.

28.31 The **delegate of Samoa** objected that participants were now envisaging the inclusion of a new item on the agenda for WRC-23, whereas his delegation had been refused that possibility.

28.32 The **delegate of Germany** said that the matter under discussion concerned Region 1, in which studies on IMT had already been carried out. Regarding the comment by the delegate of the Islamic Republic of Iran, he pointed out that *resolves* 1 of Resolution COM6/2 (WRC-19) invited CPM-23 to define the date by which technical and operational characteristics needed for sharing and compatibility studies were to be available. Lastly, he reiterated that to his mind the ad hoc group had decided that the proposal to include aeronautical IMT as a separate item on the agenda for WRC-23 would appear in square brackets. That proposal seemed to have been left completely to one side, as it appeared neither on the agenda for WRC-23 nor on the agenda for WRC-27.

28.33 The **delegate of the Islamic Republic of Iran** explained that it was up to the CPM, not the WRC, to set a deadline for submitting the characteristics, but that the deadline proposed by the delegate of France could be approved by CPM-23. If, however, the required information was not available by the deadline set, the studies would not be able to begin.

28.34 The **delegate of the United Arab Emirates,** responding to the delegate of Samoa, recalled that all the regional groups had agreed that MSS inter-satellite links would be studied in 2027, in view of the frequencies concerned. He suggested that consultations be held to reach consensus on aeronautical IMT.

28.35 The **delegate of the Russian Federation** said that the RCC administrations were in agreement to study the item in 2027 and were prepared to participate in the consultations to find a satisfactory solution.

28.36 The **delegate of Samoa** recognized that he had agreed to defer the study to 2027, but reiterated that the conference was now envisaging the addition of new agenda items.

28.37 The **Chairman** suggested that informal consultations be held, and that the matter be returned to subsequently.

28.38 It was so **agreed**.

28.39 Following the informal consultations, it was **agreed** to defer the study of aeronautical IMT to WRC-27.

28.40 The **delegate of Australia** drew attention to an editorial modification required to the English version of §8 of the text under consideration.

28.41 ADD Resolution COM6/1 (WRC-19), as amended, was **approved**.

ADD Resolution COM6/4 (WRC-19) – Facilitating mobile connectivity in certain frequency bands below 2.7 GHz using high-altitude platform stations as International Mobile Telecommunications base stations

28.42 The **delegate of the Russian Federation** recalled that the numerous bilateral agreements relating to that frequency range could prove problematic for IMTs; he proposed to specify, in *resolves to invite ITU-R* 2 in regard to the band 694-960 MHz, “in Regions 2 and 3 and also for the uplink only in Region 1”.

28.43 The **delegate of Brazil** stressed that the text of that resolution was the result of a compromise, and that in order to reach agreement all parties had had to make concessions – his country had made several. He invited the previous speaker not to reopen the question of HIBS.

28.44 The **Chairman** shared that viewpoint and recalled that delegates had agreed not to re-examine those frequency bands.

28.45 The **delegate of the Russian Federation** reiterated that his proposal regarding the band 694-960 MHz concerned the difficulties in Region 1 in that band, which was why it was restricted to only the uplink in Region 1.

28.46 The **delegate of Japan** said that the text had been discussed in depth and had been agreed to both at interregional level and in the ad hoc group. It therefore could not be modified.

28.47 The **delegates of Kenya** and **France** shared that point of view.

28.48 The **delegate of the Russian Federation** considered that the frequency band in question was related to aeronautical IMT and proposed that a compromise be found.

28.49 The **observer for CITEL** objected that the text had been approved by the regional groups and that the question of HIBS must not be reopened.

28.50 The **delegate of France** added that the text had been agreed to by Committee 6.

28.51 ADD Resolution COM6/4 (WRC-19) was **approved**.

ADD Resolution COM6/3 (WRC-19) – 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 ; ADD Resolution COM6/5 (WRC-19) – Consideration of regulatory provisions to facilitate the introduction of sub-orbital vehicles; ADD Resolution COM6/7 (WRC-19) – Review and possible revision of Resolution 155 (WRC-15) and No. 5.484B in the frequency bands to which they apply; ADD Resolution COM6/6 (WRC-19) – Studies on a possible new allocation to the aeronautical mobile satellite (R) service within the frequency band 117.975-137 MHz in order to support aeronautical VHF communications in the Earth-to-space and space-to-Earth directions; ADD Resolution COM6/8 (WRC-19) – Consideration of regulatory provisions for updating Appendix 27 of the Radio Regulations in support of aeronautical HF modernization

28.52 **Approved**.

ADD Resolution COM6/9 (WRC-19) – Studies on frequency-related matters, including possible additional allocations, for the possible introduction of new non-safety aeronautical mobile applications

28.53 The **Chairman of Committee 6** said that the square brackets around the frequency band 15.4-15.7 GHz in *resolves to invite ITU-R* 3 should be removed.

28.54 On that understanding, ADD Resolution COM6/9 (WRC-19) was **approved**.

ADD Resolution COM6/11 (WRC-19) – Review of frequency allocations for EESS (passive) in the frequency range 231.5-252 GHz and consider possible adjustment according to observation requirements of passive microwave sensors

28.55 **Approved**.

ADD Resolution COM6/10 (WRC-19) – Examination of the question of a possible upgrade to primary status of the secondary allocation to the space research service in the frequency band 14.8‑15.35 GHz

28.56 The **delegate of the Islamic Republic of Iran** said that the words “of the question” in the title of the resolution were superfluous and could be deleted.

The **Chairman**, agreeing with that comment, proposed the following title: “Examination of a possible upgrade to primary status of the secondary allocation to the space research service in the frequency band 14.8-15.35 GHz”.

28.57 It was so **agreed**.

28.58 ADD Resolution COM6/10 (WRC-19), as amended, was **approved**.

ADD Resolution COM6/12 (WRC-19) – Operation of earth stations on aircraft and vessels communicating with geostationary space stations in the fixed-satellite service in the frequency band 12.75-13.25 GHz (Earth-to-space)

28.59 **Approved**.

ADD Resolution COM6/16 (WRC-19) – Primary allocation to the fixed-satellite service in the space-to-Earth direction in the frequency 17.3-17.7 GHz in Region 2

28.60 The **Chairman of Committee 6** said that consideration of that resolution should be deferred until the corresponding corrigendum was published.

ADD Resolution COM6/15 (WRC-19) – Studies relating to spectrum needs and potential new allocations to the mobile-satellite service in the frequency bands 1 695-1 710 MHz, 2 010‑2 025 MHz, 3 300-3 315 MHz and 3 385-3 400 MHz for future development of narrowband mobile-satellite systems

28.61 The **Chairman of Committee 6** explained that the square brackets had been placed around the frequency band “1 675-1 697 MHz in Region 1” in *resolves to invite ITU-R* 2 in response to requests for clarification on the part of certain administrations.

28.62 The **delegate of the Netherlands** said that his delegation had proposed the addition of that band in Region 1, and that proposal had met with objections. As it had not been possible to have those objections withdrawn, he withdrew the suggested addition and proposed to delete the text between square brackets. He nevertheless noted that it would useful, for WRC-27, to put forward a proposal at global level similar to the proposal his delegation had put forward at regional level.

28.63 The **Chairman of Committee 6** said that that suggestion should be studied when taking up the agenda for WRC-27.

28.64 It was **agreed** to delete the text in square brackets in *resolves to invite ITU-R* 2*.*

28.65 The **delegate of the Islamic Republic of Iran** suggested that the frequency band in question should be discussed informally and included in the relevant parts of texts or resolutions for WRC-27.

28.66 The **Chairman** invited interested participants to meet with a view to submitting a proposal along those lines subsequently.

28.67 ADD Resolution COM6/15, as amended, was **approved**.

ADD Resolution COM6/14 (WRC-19) – Study of technical and operational issues, and regulatory provisions for satellite-to-satellite links in the frequency bands 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8‑20.2 GHz and 27.5-30 GHz

28.68 **Approved**.

ADD Resolution COM6/13 (WRC-19) – 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 earth stations in motion communicating with non-geostationary space stations in the fixed-satellite service

28.69 The **delegate of the Islamic Republic of Iran** said that the wording of *resolves to invite ITU-R* 5 was inappropriate and failed to involve Sector Members. He therefore proposed the following simpler, more general wording: “to ensure that the results of ITU-R studies are agreed by consensus”.

28.70 The **delegate of France** proposed to delete the words “by Member States” and retain the rest of the sentence.

28.71 The **delegate of the Islamic Republic of Iran** replied that his proposal was simpler and complied with the rules of procedure of ITU-R.

28.72 The **delegate of Brazil** said that the item in question was not indispensable as all ITU-R work had to meet with consensus; it could therefore be deleted.

28.73 The **delegate of Germany** shared that point of view, as the principle of consensus was well established within ITU-R; Member States were well aware of its importance.

28.74 The **delegate of the Islamic Republic of Iran** said that, given the concessions made by his administration on that item, his delegation attached great importance to mentioning the notion of consensus explicitly in the present text, using the wording he proposed. Otherwise, he would categorically oppose the operation of ESIMs in the frequency bands concerned.

28.75 The **delegate of Guinea** recalled that it had been agreed at the beginning of the present meeting to make only editorial changes to the document under consideration. The item should therefore be retained.

28.76 The **delegate of the Islamic Republic of Iran** rephrased his proposal as follows: “to ensure that the results of ITU-R studies are agreed by Member States by consensus”. If that modification was not approved, his delegation would not accept the text.

28.77 The **Director of BR** highlighted the fact that the item under discussion was identical to *resolves to invite ITU-R*8 in Resolution COM6/12 (WRC-19), which had already been approved. For consistency, it would be preferable not to modify the text. If it was to be modified, “Member States” might be replaced by “membership”, thus including Sector Members.

28.78 The **delegate of Cuba** supported the proposal by the delegate of the Islamic Republic of Iran.

28.79 The **delegate of Germany** said that the proposals by the delegate of the Islamic Republic of Iran and the Director of BR appeared to be acceptable.

28.80 The **delegate of the Islamic Republic of Iran**, in reply to the comments made by the Director of BR, indicated that replacing “Member States” by “membership” would extend the consensus process to Associates and Academia, which were not intended to be involved in the process.

28.81 The **delegate of France** explained that he had difficulty with the wording “approved by consensus”, as in his view it gave the wrong impression that changes were being made to the rules of procedure governing the adoption of ITU-R reports and Recommendations. The rules of procedure did indeed refer to the principle of consensus; however, the WRC could not make such a modification given that the rules of procedure were adopted by the RA when revising Resolution ITU-R 1-8. In the specific case under consideration, the idea of consensus was very important and should be highlighted. He therefore proposed the following wording: “to ensure that the results of ITU‑R studies are agreed by Member States by consensus, taking into account the required consensus on this matter when conducting the above ITU-R studies”.

28.82 The **delegate of the Islamic Republic of Iran** questioned the interpretation put forward by the delegate of France and reasserted that if his proposal was not accepted, the item would be carried over to the agenda for WRC-27.

28.83 The new wording proposed by the delegate of the Islamic Republic of Iran (“to ensure that the results of ITU-R studies are agreed by Member States by consensus”) was **approved**.

28.84 ADD Resolution COM6/13 (WRC-19), as amended, was **approved**.

ADD Resolution COM6/18 (WRC-19) – Use of International Mobile Telecommunication systems for fixed wireless broadband in the frequency bands allocated to the fixed service on primary basis

28.85 The **delegate of Italy** said that he was extremely concerned by the reference to the frequency band 10.7-11.7 GHz in *recognizing* d).

28.86 The **delegate of Nigeria** said that he did not wish to see that text re-debated, as it was the result of a delicate compromise following long discussions; he requested delegates to approve it as it stood.

28.87 The **delegates of the United Arab Emirates, Bahrain** and **Cameroon** agreed with the previous speaker. The resolution had been debated at length and the consensus achieved was fragile. The discussions should therefore not be reopened, and the text should be approved without change.

28.88 The **Chairman** recalled that it had been agreed that the substance of the texts submitted should not be re-examined. The present series of texts must be approved as a package, and the Plenary should not serve as the opportunity to prolong the debates that had been held in Committee 6 and Ad hoc Group of the Plenary 6. He therefore invited the delegate of Italy to align himself with the other delegates and approve the text as it stood.

28.89 The **delegate of the United Kingdom** said that the fact that the text had been discussed so late into the night in the final week of the conference posed a problem. He shared the concerns expressed by Italy, and requested that the reference to the frequency band in question be deleted.

28.90 The **delegate of Pakistan** expressed serious reservations regarding the resolution, and was not in favour of studies on the use of IMTs for fixed wireless broadband, especially in that frequency band.

28.91 The **Chairman** reiterated that the text under consideration was part of a package deal and it was not possible to go back on the consensus reached. The principle established at the beginning of the meeting must be respected. The item would be considered in 2023, at which point delegations would have the opportunity to express their concerns and take the necessary precautions to protect their existing systems.

28.92 The **delegate of Egypt** said that the debate on that item had continued very late into the night. Even if not all the questions had been resolved, the resolution must be adopted without change. The **delegate of the Islamic Republic of Iran** agreed.

28.93 The **delegate of Finland** said that the resolution had been dealt with separately; he requested that the reference to the frequency band be deleted.

28.94 The **delegate of Switzerland** said that he shared the concerns of Italy, the United Kingdom and Finland. Supported by the **delegate of India**, he requested that the reference to the frequency band be deleted in a spirit of compromise.

28.95 The **delegate of the United Arab Emirates** recalled that the subject was not new; it had already been considered by the regional groups and appeared in the draft resolution on the agenda for WRC-23; the text had therefore not been dealt with separately. Moreover, it would be unfair to accept certain aspects of the consensus and reject others. The text should therefore be adopted without change and the debate should not be reopened.

28.96  The **delegate of the Islamic Republic of Iran** asked what impact deletion of the frequency band in *recognizing* d) would have on the studies referred to in *resolves to invite ITU-R.*

28.97 The **Chairman** repeated that deletion of the reference to the frequency band was not an editorial amendment; it would violate the principle established previously and could have disastrous consequences for the work of the conference.

28.98 The **delegate of Côte d'Ivoire** noted that the frequency band was mentioned in *recognizing* d) but not in the title of the resolution. Either it should be deleted from the body of the resolution or a full list should be provided of the Recommendations dealing with the frequency bands covered by the resolution.

28.99 The **delegate of Liechtenstein** considered that any reference to a specific frequency band in the resolution should be deleted.

28.100 The **delegate of the United Kingdom** said that the reference to the frequency band in question could be misleading and draw unwarranted attention to it. The *resolves to invite ITU-R* section, on the other hand, was more general. That lack of consistency could lead to errors of interpretation.

28.101 The **delegate of the Islamic Republic of Iran** commented that the preamble and operative part of a resolution should have the same scope and degree of precision.

28.102 The **Chairman** proposed to invite interested participants to meet informally in an effort to reach agreement on the matter.

28.103 It was so **agreed.**

**The meeting was suspended at 1405 hours and resumed at 1535 hours.**

28.104 Following the informal consultations, the **Chairman** announced that consensus had been reached to delete *recognizing* d) in draft Resolution COM6/18.

28.105 In order to cater for the concerns of those administrations wishing to retain the reference to the frequency band, the **delegate of the United Arab Emirates** requested that the following text be included in the minutes of the meeting to reflect decisions taken by the conference:

“Agenda item 9.1 x invites ITU-R to conduct studies to identify the potential frequency bands for the use of IMT for fixed wireless broadband within the frequency bands allocated to the fixed service on a primary basis. Accordingly, an agenda item for WRC-27 will be developed to consider those identified bands.”

28.106 It was so **agreed**.

28.107 The **delegate of the Islamic Republic of Iran** stressed that the addition of that agenda item presupposed that, as a first step, studies should be carried out on the frequency bands in which IMTs could be used for wireless broadband and that, as a second step, an item should be included on the agenda for WRC-27 on the frequency bands thus identified, to the extent possible.

28.108 The **delegate of Spain** stated that the studies carried out in implementation of that resolution would have no consequences at the regulatory level. The **delegates of Sweden, the Islamic Republic of Iran** and **Turkey** endorsed that statement.

28.109 The **delegates of Italy** and **Pakistan** thanked other delegations for their cooperation, especially that of the United Arab Emirates.

28.110 Subject to the deletion of *recognizing* d), ADD Resolution COM6/18 (WRC-19) was **approved**.

ADD Resolution COM6/17 (WRC-19) – Studies on technical and operational measures to be applied in the frequency band 1 240-1 300 MHz to ensure the protection of the radionavigation-satellite service (space-to-Earth)

28.111 **Approved**.

ADD Resolution COM6/16 (WRC-19) – 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

28.112 The **Chairman of Committee 6** introduced Corrigendum 1 to Document 554, containing modifications to ADD Resolution COM6/16. *Noting* b) had been moved to *considering* d), a new *resolves* paragraph had been added, and the content of *invites ITU-R* had been modified. A new *invites WRC-23* had also been added.

28.113 Subject to the modifications presented in Corrigendum 1 to Document 554, ADD Resolution COM6/16 (WRC-19)was **approved**.

28.114 The fifty-ninth series of texts submitted by the Editorial Committee for first reading (B59) (Document 554+Corr.1), as amended, was **approved**.

# 29 Fifty-ninth series of texts submitted by the Editorial Committee (B59) – second reading (Document 554 and Corrigendum 1)

29.1 The fifty-ninth series of texts submitted by the Editorial Committee (B59) (Document 554 + Corr.1), as amended on first reading, was **approved** on second reading.

# 30 Sixty-first series of texts submitted by the Editorial Committee for first reading (B61) (Document 556)

30.1 The **Chairman of the Editorial Committee** introduced Document 556, which contained texts relating to agenda items 1.13 and 1.8. He noted that the document, together with Document 557 (sixty-second series of texts (B62)), had not been submitted in time for review by the Editorial Committee. He therefore suggested that, following the conclusion of the conference, he and the vice-chairmen of the Editorial Committee should assist the secretariat to ensure that all the language versions of those documents were aligned, with support from the chairmen of Committees 4, 5 and 6, where necessary.

30.2 It was so **agreed.**

30.3 The **Chairman** invited participants to consider Document 556.

Article 5 (MOD 5.338A, MOD Table 1 610-1 660 MHz, ADD 5.ADJBAND, ADD 5.INBAND, MOD 5.368)

30.4 **Approved**.

Article 5 (MOD 5.372)

30.5 The **delegate of Japan** raised a concern regarding the incorporation by reference of Recommendation ITU-R RA.769-2 in footnote 5.372 and requested confirmation that only those parts of the Recommendation relevant to that footnote were deemed to be incorporated. She outlined those parts she considered relevant.

30.6 The **Chairman of the Ad Hoc Group of the Plenary 4C** confirmed the understanding of the delegate of Japan.

30.7 The **delegate of the Islamic Republic of Iran** suggested that the concerns raised by the delegate of Japan might be covered by stipulating in the minutes of the meeting that the incorporation by reference of Recommendation ITU-R RA.769-2 in footnote 5.372 was limited to those parts relevant to the protection of radio astronomy services.

30.8 It was so **agreed**.

30.9 On that understanding, MOD 5.372 was **approved**.

Article 5 (MOD Table 22-24.75 GHz, ADD 5.A113, MOD Table 24.75-29.9 GHz, MOD 5.536A, MOD 5.536B, MOD Table 34.2-40 GHz, ADD 5.BCD113, MOD Table 40-47.5 GHz); Article 33 (MOD 33.50, MOD 33.53); Appendix 4 (MOD Table A); MOD Appendix 15; MOD Resolution 739 (Rev.WRC-15); MOD Resolution 750 (Rev.WRC-15); ADD Resolution COM4/9 (WRC-19) – Terrestrial component of International Mobile Telecommunications within the frequency bands 37-43.5 GHz and 47.2-48.2 GHz; ADD Resolution COM4/8 (WRC-19) – Terrestrial component of International Mobile Telecommunications in the frequency band 24.25-27.5 GHz; SUP Resolution 238 (WRC-15); SUP Resolution 359 (Rev.WRC-15)

30.10 **Approved**.

30.11 The sixty-first series of text submitted by the Editorial Committee for first reading (B61) (Document 556) was **approved**.

30.12 The **delegate of the United States** submitted the following statement for inclusion in the minutes of the plenary meeting:

“The IMO, in its Resolution MSC.451(99), Annex 19, adopted 24 May 2018, recognizes an existing non-geostationary satellite system as an additional satellite provider in the Global Maritime Distress and Safety System (GMDSS), providing for competitive provision of GMDSS and maritime-mobile satellite services, and, for the first time, global GMDSS coverage, including in polar regions.

The United States congratulates the WRC for its endorsement of the IMO’s decision, through allocating on a primary basis over 5 MHz of spectrum to the maritime-mobile satellite service, and identifying that spectrum for provision of GMDSS. The identification of the band 1 621.35-1 626.5 MHz for GMDSS, in combination with the adjacent 1 616-1 621.35 MHz band already used by the new GMDSS satellite provider, provides a total of 10.5 MHz of spectrum to provide GMDSS and maritime safety services.

This decision of the WRC provides for increased maritime safety in a complete global coverage GMDSS.”

30.13 The **Chairman of Ad Hoc Group of the Plenary 4C**, which had considered agenda item 1.8, Issue B, said that when considering revisions to Resolution 99, the ad hoc Group had agreed to propose that the primary allocation to the MSS in the downlink direction, as well as the associated provisions relating to the identification of the frequency band 1 621.35-1 626.5 MHz, in both directions, for the needs of GMDSS, should apply provisionally as of the end of the conference.

30.14 The **delegate of the Islamic Republic of Iran** said that it was his understanding that, in the context of the conference’s decision to upgrade the allocation to downlink MSS in the frequency band 1 621.35-1 626.5 MHz, the Bureau would implement the relevant rules of procedure. He also sought clarification from the Legal Adviser as to whether including the statement of the United States in the minutes of the meeting would serve as an agreement by the Plenary or merely as a statement by the Administration of the United States.

30.15 The **Legal Adviser** said that there was no legal impediment to including the statement of the United States in the minutes of the meeting. It was the sovereign right of the United States delegation to include in its statement whatever content it wished. That statement had the legal value of a unilateral declaration and would only reflect the United States’ position on the matter under discussion.

30.16 The **delegate of the United States** confirmed that the statement he had made was solely intended to establish the position of his administration.

30.17 The **Chairman** welcomed the approval of Document 556, noting that it included two of the most important agenda items on which it had been difficult to reach consensus. He welcomed the flexibility of all involved, in particular the compromise made by the Administration of the United States on agenda item 1.8 (Issue B).

# 31 Sixty-first series of texts submitted by the Editorial Committee (B61) – second reading (Document 556)

31.1 The sixty-first series of texts submitted by the Editorial Committee (B61) (Document 556) was **approved** on second reading.

31.2 The **observer for the World Meteorological Organization (WMO)**, noting the longstanding partnership between ITU and WMO, read out the text of an e-mail that had been sent by the Secretary-General of WMO to the Secretary-General of ITU that morning, and requested that it be included in the minutes of the meeting.

31.3 The **Director of BR** noted that the inclusion in the minutes of the statement by the observer for WMO needed to be approved by the Plenary.

31.4 The **Chairman** took it that the Plenary agreed to include the statement made by the observer for WMO in the minutes of the meeting.

31.5 It was so **agreed** (see Annex B).

31.6 The **delegate of the Netherlands**, also speaking on behalf of the delegation of Switzerland, made the following statement:

“We accept the decision of the conference. At the same time, we are concerned that the conference has not provided the required protection to the passive satellite sensors. In particular, we fear that the limits endorsed by the WRC-19 will result in increasing the noise-floor into the 24 GHz passive band. Consequently, the reliability of the meteorological measurements will be impaired. This contradicts with the increasing needs of the world population for accurate weather and climate change predictions.”

31.7 The **delegates of Germany, the Russian Federation,** also speaking on behalf of RCC, **France, Belgium, Portugal, Ireland, Slovakia, Liechtenstein, Italy, India, Czech Republic, Kazakhstan** and **Austria** supported the statement made by the delegate of the Netherlands.

31.8 In the interest of saving time, the **Chairman** invited any other delegates wishing to support the statement made by the delegate of the Netherlands to submit their names in writing to the secretariat. The delegates of the following countries submitted their names: Vatican City State, Denmark, Spain, Estonia, Iceland, Lithuania, Luxembourg, Malta, Moldova, Norway, Samoa, Serbia, Slovenia and Turkey. Croatia submitted its name in support of the statement made by the observer from WMO.

# 32 Sixty-second series of texts submitted by the Editorial Committee for first reading (B62) (Document 557)

32.1 The **Chairman of the Editorial Committee** introduced Document 557.

32.2 The **Chairman** invited participants to consider Document 557.

Article 5 (MOD Table 4 800-5 250 MHz, ADD 5.A116, MOD 5.446A, MOD 5.446C, MOD 5.447, MOD Table 40-47.5 GHz (B62/557/6), MOD Table 40-47.5 GHz) (B62/557/7))

32.3 **Approved.**

Article 5 (ADD 5.F113)

32.4 The **delegate of the Republic of Korea** requested deletion of the square brackets from around her country’s name in footnote 5.F113.

32.5 The **delegate of Zimbabwe**, speaking in his capacity as the coordinator of ATU for agenda item 1.13, requested on behalf of the Democratic Republic of the Congo the removal of that country’s name from the footnote.

32.6 In the absence of any objections, the **Chairman** took it that the meeting wished to approve those two requests.

32.7 It was so **agreed.**

32.8 The **delegates of Slovakia, Egypt, the Lao People’s Democratic Republic, Viet Nam, the Democratic People’s Republic of Korea, the Czech Republic, the Syrian Arab Republic** and **Lebanon** requested the inclusion of their countries in footnote 5.F113.

32.9 The **delegate of China** said that the complex issues relating to agenda item 1.13 had been resolved through compromise only the previous evening following prolonged discussion over the past weeks. As the resulting global package reflected a fine balance that might be upset by any revision of the texts concerned, there should be no reopening of the discussion, including in respect of footnotes and frequency bands.

32.10 The **Chairman** confirmed that discussions on the frequency band would not be reopened but noted that countries had the right to request their inclusion in footnotes. Any particular objection should be clearly stated.

32.11 The **delegate of China** said that footnote 5.F113 identified the frequency band 45.5-47 GHz for the implementation of IMT, taking into account No. 5.553. However, as no technical specifications were indicated, it would be difficult for administrations to determine the origin of any harmful interference if additional country names were included in footnote 5.F113. The potential for such interference was a major concern. If other country names were to be included, IMT limits would need to be specified, as in the case of other similar frequency bands.

32.12 The **Director of BR**, clarifying a comment by the **Chairman**, said that countries could legitimately oppose the inclusion of additional country names in footnotes, even if they themselves were not listed therein. As he understood it, China was seeking to protect its satellite services from potential IMT interference caused if a large number of countries joined footnote 5.F113. The overriding consideration was maintenance of the delicate compromise reflected in the global package agreed to in connection with agenda item 1.13.

32.13 The **Chairman of Ad hoc Group of the Plenary 4A**, providing further clarification, said that the references to No. 5.553 and No. 9.21 had been included in footnote 5.F113 to allay concerns expressed by China during the sensitive discussion of the text. The addition of further country names to the existing list might therefore jeopardize the agreed global package, which should preferably be left as it stood. No more than a limited number of country names, if any, should be added to the footnote.

32.14 The **delegate of the Russian Federation**, supported by the **delegate of Turkey**, shared the view that no new country names should be added to footnote 5.F113. To do so would risk upsetting the delicate agreement reached.

32.15 The **delegate of Sweden**, supported by the **delegate of Nigeria**, suggested that any potential solutions, such as limiting the number of countries listed in the footnote, should be set out in the minutes of the plenary meeting and be addressed accordingly. It would be preferable, however, not to revise the text of footnote 5.F113, which was part of a package on agenda item 1.13.

32.16 The **delegate of China** stressed that his opposition to the inclusion of further country names in footnote 5.F113 was not aimed at any specific country or countries but related solely to the issue of numbers. The text should be retained as it currently stood.

32.17 The **delegate of the Islamic Republic of Iran** recalled that the addition of country names to footnotes was governed by Resolution 26 (Rev.WRC-07) and suggested that, in view of the time constraint, the meeting should approve footnote 5.F113 on first reading and that, prior to the second reading, countries requesting the inclusion of their names therein should consult with the delegation of China to ascertain whether it was amenable to their requests.

32.18 In response to a suggestion from the **delegate of Turkey**, the **Chairman** said that time constraints made it impractical to seek the views of all other delegations potentially concerned, especially as none, other than China, had vocalized opposition to the addition of country names in footnote 5.F113. He proposed that the Plenary approve ADD 5.F113, as amended, on the understanding that it would be subject to further informal consultations before Document 557 was submitted for second reading.

32.19 It was so **agreed**.

Article 5 (ADD 5.H113)

32.20 The **delegate of Lebanon**, supported by the **delegate of Poland**, said that the provisions of Resolution 26(Rev.WRC-07), referred to earlier, applied only to existing footnotes and not to new footnotes. That being so, there should be no obstacle to the addition of further country names to new footnote 5.H113 at the present stage. He therefore requested the inclusion of Lebanon therein.

32.21 The **Chairman**, responding to a request for clarification from the **delegate of Thailand**, encouraged those requesting the addition of their country names to footnote 5.H113 to follow the procedure agreed for footnote 5.F113 by consulting informally with any delegations opposed to their request.

32.22 The **delegates of Indonesia, Thailand, Bangladesh, Poland** and **the Democratic People’s Republic of Korea** requested the inclusion of their countries in footnote 5.H113.

32.23 The **delegate of Denmark**,supported by the **delegates of Estonia** and **Poland**, said that no technical study findings had been cited to justify the opposition to the addition of country names to the footnotes under consideration. It was therefore difficult to understand the reason for that opposition, especially from a country not located in proximity to those seeking to add their names to the footnotes in question. In the absence of such a reason, he supported those countries in their requests.

32.24 The **delegate of Slovakia** endorsed the comments by the delegate of Denmark, adding that small delegations such as his were unable to attend all meetings. As a result, they were not always best placed to declare at the first available opportunity their wish to be included in specific footnotes.

32.25 The **delegate of Poland** endorsed that view, adding that the text of footnote 5.H113 had been agreed very late the previous evening, which had left insufficient time for delegations to consider their positions on the matter.

32.26 The **delegate of China** said that the frequency band covered in footnote 5.H113 was another part of the global package agreed as part of a delicate compromise. Hence, as in the case of footnote 5.F113, the text should remain unchanged, except for the removal of the square brackets.

32.27 The **delegate of the Russian Federation** agreed with that view, noting that regional organizations - some of which included countries now requesting the addition of their country names to the footnote - had agreed to the compromise solution reflected in Document 557. He furthermore suggested that the matter was indeed global insofar as interference would be caused by the fixed-satellite service and aggregate interference from countries named in the footnote might lead to a situation where it was impossible to maintain systems that were already operational or launch new fixed-satellite system services.

32.28 In the light of those comments, the **Chairman** took it that the meeting could agree to remove the square brackets in footnote 5.H113 from around the names of the Republic of Korea, India, Japan and Malaysia.

32.29 It was so **agreed**.

32.30 The **delegate of the United States** said that the aim of developing and approving at the present conference a resolution to protect services in the frequency band 47.2‑48.2 GHz had already been achieved. A proposal originating from the Inter-American Telecommunication Commission (CITEL), which represented Region 2 countries, including his, had been incorporated into Document 557. Delegates from 18 countries had worked collegially over the past weeks to develop a compromise package reflecting the views of all regions and countries, none of which other than those represented in the discussions had had the occasion to consider the solutions arrived at and opportunities for international harmonization, which was the goal of agenda item 1.13. On 10 December 2019, the United States would be auctioning the frequency band for 5G use. It was unclear, however, why administrations were being prevented from seeking the same international harmonization opportunities that Region 2 had been able to secure simply because CITEL representatives had been present at a particular meeting. He urged the conference to do its utmost to find a solution to the problem.

32.31 The **delegate of the Islamic Republic of Iran,** noting that all of the views put forward were valid and therefore difficult to reconcile satisfactorily, suggested that an alternative solution for accommodating countries wishing to be covered by the provisions of footnote 5.H113 might be found if time were allowed for informal consultations before Document 557 was presented for second reading. One possible option, provided that those countries were not too numerous, would be to add another sentence to the footnote that might read: “Moreover, the use of the frequency band [*xxx*] MHz in [*country name(s)*] for IMT is subject to the agreement of [*country name(s)*].” The time allowed would furthermore give countries the opportunity to evaluate the type, cause and amount of potential interference about which they were concerned.

32.32 ADD 5.H113, as amended (removal of square brackets), was **approved,** on the understanding that it would be subject to further informal consultations before Document 557 was taken up on second reading.

Article 5 (MOD Table 47.5-51.4 GHz, MOD Table 66-81 GHz)

32.33 **Approved**.

Article 5 (ADD 5.J113)

32.34 The **observer for CITEL** thanked the Chairman of Ad hoc Group of the Plenary 4A and all colleagues for their efforts in reaching the compromise package pertaining to agenda item 1.13. Concerning footnote 5.J113, CITEL’s position had been that there should be no change with respect to the frequency band 66-71 GHz. Following inter-regional dialogue and numerous other discussions concerning the compromise package, CITEL suggested that the square brackets around Region 2 in the footnote should be removed. Region 2 administrations, whether CITEL members or not, might nevertheless wish to comment further.

32.35 The **Chairman of Ad hoc Group of the Plenary 4A** said that, were the footnote also to apply to Region 2, it would not be necessary to mention any region, meaning that the text could instead begin with “The frequency band 66-71 GHz…”. In that event, it would most likely be necessary to follow the usual practice of naming countries that wished to be excluded from the provisions of the footnote by inserting in parentheses, after the word “identified”, text that read “except in [*country name(s)*]”. The decision to be taken was therefore whether to retain within the footnote the reference to Regions 1 and 3, and Brazil, with the possible addition of other country names at that juncture, or whether to remove the regional reference and specify by name those countries wishing to be excluded from the provisions of the footnote. The views of CITEL administrations on the matter would be welcome.

32.36 The **delegate of Mexico** said that it would complicate matters for his administration to concur with the regional position expressed by CITEL. For the sake of unity, however, Mexico consented to the removal of the square brackets from the footnote.

32.37 The **delegate of Colombia** said that his administration had concerns relating to the identification of the frequency band 66-71 GHz but wished to maintain the spirit of compromise. It therefore likewise consented to the removal of the square brackets.

32.38 The **Chairman** took it that the meeting wished to approve the removal of the square brackets from around Region 2 in footnote 5.J113, on the understanding that the names of countries having notified the conference secretariat that they wished to be excluded from application of the provision would be incorporated into the text in the manner explained.

32.39 It was so **agreed**.

32.40 ADD 5.J113, as amended, was **approved**.

MOD Resolution 229 (Rev.WRC-12)

32.41 The **Chairman of Ad hoc Group of the Plenary 4B2,** responding to a request for clarification from the **delegate of Nigeria** concerning two of the dBm figures mentioned in *resolves 3* of Resolution 229 (WRC-15), said that the maximum mean e.i.r.p. of 30 dBm was the correct limit and that the figure of 23 dBm referred to the maximum e.i.r.p at any elevation angle above 5 degrees. He added that his ad hoc group had been among the last to submit documents to the meeting and noted that some proposals had prompted further informal discussion. It might therefore be worthwhile to allow some time for further consultation on matters relating to agenda item 1.16.

32.42 The **delegate of Nigeria** confirmed that the explanation provided had clarified his concern.

32.43 The **delegate** of **Belarus** said that an editorial amendment was required in the Russian version of *resolves 3*.

32.44 Subject to that editorial amendment, MOD Resolution 229 (Rev.WRC-12) was **approved**.

32.45 The **delegate of the United States** said that his delegation wished to express a reservation regarding MOD Resolution 229 (Rev.WRC-12) and provided the following statement for inclusion in the minutes of the plenary meeting:

“The United States would like to provide its views with respect to the process for consideration of outdoor WAS/RLAN use in 5 150-5 250 MHz under WRC-19 agenda item 1.16. It has been nearly 20 years since spectrum was last made available for WAS/RLAN technologies such as Wi-Fi in the Radio Regulations. Delegates from various administrations have expended considerable resources on studies regarding this matter for the entire study cycle. In addition, many discussions occurred over 4 weeks at WRC-19, primarily to progress one option for consideration. Yesterday higher level discussions on a way forward for 5 150-5 250 MHz finally occurred, and CITEL’s compromise proposal was able to be considered. We would like to express our disappointment that important portions of that compromise for higher power use were not provided to the plenary meeting for full consideration of all delegations. The United States will take a reservation on the relevant provisions.

Regarding the modifications in *resolves 3* of Resolution 229, we emphasize the fundamental challenges associated with establishing reliable estimates of the total amount of such stations. In addition, the Resolution appears to be overly prescriptive in terms of specifying mechanisms for the mandatory control of devices.”

32.46 The **delegate of Canada** said that her delegation also wished to express a reservation regarding MOD Resolution 229 (Rev.WRC-12) and provided the following statement for inclusion in the minutes of the plenary meeting:

“Canada is of the view that the outcome presented to the Plenary for modifications to Resolution 229 under agenda item 1.16 is not in line with discussions that were held amongst regional participants and the Chairman on Wednesday afternoon, November 20th. It was our understanding that a sentence would be considered for inclusion in *resolves* 3 of the text as follows: "Maximum e.i.r.p. limits above 30dB e.i.r.p shall be permitted by those administrations which have implemented rules before 28 October, 2019." Although we would prefer that this recognition be included in the revision of Resolution 229, Canada is not objecting to the approval of the proposed changes as we recognize these will benefit other administrations and regions. Canada will, however, be taking a reservation on the decisions for the frequency band 5 150-5 250 MHz.”

32.47 The **delegate of the Republic of Korea** said that her delegation had been involved from the outset in the discussion of agenda item 1.16 and had not expected that discussion to continue until the eleventh hour before the deadline for the submission of documents to the Plenary. The sharing conditions for the use of WAS/RLAN in the mobile service were now very stringent. She suggested that the satellite and mobile communities should in future collaborate on such agenda items. Her delegation also wished to express a reservation regarding MOD Resolution 229 (Rev.WRC-12) and provided the following statement for inclusion in the minutes of the plenary meeting:

**“The Republic of Korea reserves the right to operate stations in the mobile service in the band 5 150-5 250 MHz [under] other conditions** than **those contained in Resolution 229 (Rev.Sharm el-Sheikh, 2019) and RR No. 5446A.”**

32.48 The **delegates of Mexico** and **Colombia** said that their delegations would each submit for inclusion in the minutes of the plenary meeting a written statement expressing a reservation regarding MOD Resolution 229 (Rev.WRC-12).

32.49 The **delegate of Brazil** said that his delegation likewise wished to express a reservation regarding MOD Resolution 229 (Rev.WRC-12) and provided the following statement for inclusion in the minutes of the plenary meeting:

“The Federative Republic of Brazil, referring to Resolution 229 (Rev.Sharm el-Sheikh, 2019) and RR No. 5446A, reserve the right of their respective Administration to allow operation of stations in the mobile service in the band 5 150-5 250 MHz at higher power levels and subject to other conditions than those contained in that Resolution.”

32.50 The **Chairman** said that the statements made would be noted[[1]](#footnote-1).

ADD Resolution COM4/7 (WRC-19) – Use of the frequency band 66-71 GHz for International Mobile Telecommunications (IMT) and coexistence with other applications of the mobile service; ADD Resolution COM4/10 (WRC-19) – International Mobile Telecommunications in the frequency band 45.5-47 GHz; SUP Resolution 239 (WRC-15)

32.51 **Approved**.

32.52 The sixty-second series of texts submitted by the Editorial Committee for first reading (B62) (Document 557), as amended, was **approved.**

# 33 Statement by the delegation of Egypt

33.1 The **delegate of Egypt**, referring to Document 526 approved at the eleventh plenary meeting, provided the following statement in respect of the conclusions reached relating to agenda item 1.3 for inclusion in the minutes of the plenary meeting:

“Some administrations are of the view, in reference to agenda item 1.3, that Report ITU-R SA.2429, indicates potential for harmful interference on stations of the incumbent terrestrial services operating in the frequency band 460 – 470 MHz, if more than one non-geostationary and one geostationary satellite, operating in the EESS or MetSat service, simultaneously transmits in overlapping frequency channels within the same service area.

Therefore, ITU-R is invited to conduct relevant studies with a view to develop an ITU-R Recommendation, with respect to the implementation of sharing of the 460-470 MHz frequency band between geostationary satellite networks and non-geostationary satellite networks for future meteorological satellite (space-to-Earth) and Earth exploration satellite (space-to-Earth) systems, including general partitioning of the band. Finally, administrations are urged to take into consideration the results of Report ITU-R SA.2429 when implementing future systems”

33.2 The **delegate of Germany** said that other administrations might wish to align themselves with that statement[[2]](#footnote-2).

**The meeting was suspended at 1800 and resumed at 1835 hours.**

# 34 Sixtieth series of texts submitted by the Editorial Committee for first reading (B60) (Document 555)

34.1 The **Chairman of the Editorial Committee** introduced Document 555.

34.2 The **Chairman** invited participants to consider Document 555.

Article 5 (MOD 5.338A, MOD Table 34.2-40 GHz, ADD 5.A16, ADD 5.B16, MOD Table 40-47.5 GHz, MOD Table 47.5-51.4 GHz); Article 9 (MOD 9.35, MOD 9.35.1); Article 22 (ADD 22.5L, ADD 22.5L.1, ADD 22.5M); Appendix 4 (MOD Table A, MOD Table B, MOD Table C); MOD Resolution 750 (Rev.WRC-15); ADD Resolution COM5/10 (WRC-19) – Protection of geostationary fixed-satellite service, broadcasting-satellite service, and mobile-satellite service networks from the aggregate interference produced by multiple non-GSO FSS systems in the frequency bands 37.5-39.5 GHz, 39.5-42.5 GHz, 47.2-50.2 GHz and 50.4-51.4 GHz; ADD Resolution COM5/11 (WRC-19) – Application of Article 22 of the Radio Regulations to the protection of geostationary fixed-satellite service and broadcasting-satellite service networks from non-geostationary fixed-satellite service systems in the frequency bands 37.5-39.5 GHz, 39.5-42.5 GHz, 47.2-50.2 GHz and 50.4-51.4 GHz; ADD Resolution COM5/12 (WRC-19) – Use of the frequency bands 37.5-42.5 GHz (space-to-Earth) and 47.2-48.9 GHz, 48.9-50.2 GHz and 50.4-51.4 GHz (Earth-to-space) by non-geostationary satellite systems in the fixed-satellite service and 39.5-40.5 GHz (space-to-Earth) by non-geostationary satellite systems in the mobile-satellite service; SUP RESOLUTION 159 (WRC-15)

34.3 **Approved**.

34.4 The **delegate of China** said that he would submit some editorial corrections to the Chinese version of the document to the Editorial Committee.

34.5 The sixtieth series of texts submitted by the Editorial Committee for first reading (B60) (Document 555) was **approved.**

# 35 Sixtieth series of texts submitted by the Editorial Committee (B60) – second reading (Documents 535 and 555)

35.1 The sixtieth series of texts submitted by the Editorial Committee (B60) (Document 555) was **approved** on second reading.

35.2 The **Chairman** invited participants to take up Document 535, the consideration of which had been deferred from earlier in the meeting pending the approval of Document 555. It was proposed that the following text, contained in the document, be approved for inclusion in the minutes of the plenary meeting as a decision of the conference:

“Application of Rules of Procedure on RR No. 9.11A

It is proposed that RR No. **9.12** does not apply to frequency assignments of stations operating in the space research or earth exploration-satellite services. Therefore, the Bureau is requested under the Rule of Procedure for RR No. **9.11A** to not apply coordination under RR No. **9.12** for frequency assignments of stations operating in the space research and Earth exploration-satellite service as part of RR No. **5.A16** and RR No. **5.B16**.

Protection of EESS in the frequency band 36-37 GHz

Under studies considered for WRC‑19 agenda item 1.6, a preliminary study on the protection of EESS (passive) sensors operating in the 36-37 GHz was submitted to the ITU-R. This preliminary study indicated that it may be necessary to not exceed an out-of-band e.i.r.p of −34 dBW/100 MHz, for all angles greater than 71.4 degrees from nadir, for FSS non-GSO space stations operating in the frequency band 37.5-38 GHz. In addition, interference into the cold calibration channel of the EESS (passive) sensor operating in the frequency band 36-37 GHz has not been studied.

WRC‑19 invites ITU-R to conduct further study of this topic and develop Recommendations and/or Reports, as appropriate, and Report back to WRC‑23 to take action, if necessary.

Furthermore, WRC‑19 agreed that modifications to Resolution **750 (Rev WRC-19)** should not be considered under these studies since the frequency band 36-37 GHz is not referenced in No. **5.340**.”

35.3 It was so **agreed**.

35.4 Document 535 was **approved**.

35.5 The **Chairman of Committee 5** thanked the Chairman of Working Group 5A and the chairmen of the sub-working groups. Excellent solutions had been found to various satellite allocation issues, paving the way for new and improved use of FSS and BSS. Although consultations on agenda item 1.6 had stretched into the final hours of the conference, consensus had been achieved.

# 36 Financial implications of certain decisions of the conference (Documents 528 and 542)

36.1 The **Chairman of Ad hoc Group of the Plenary 5A** said that, given the late agreement reached on agenda item 1.6 the previous evening, decisions taken under that agenda item had not been taken into account in the report of Committee 3 on the financial implications of decisions taken by the Plenary. He therefore sought the agreement of the meeting to send a note to the Chairman of Committee 3, prepared in consultation with the Bureau, on the potential financial implications of the decision taken on agenda item 1.6, as contained in Document 542.

36.2 The **Chairman of Committee 3** said that implementation of the proposals contained in Document 542 and of the resolutions in Document 528 might well entail financial implications. He therefore requested the plenary meeting’s authorization for his committee to consider Documents 528 and 542, examine the cost implications of the provisions therein and further update its report, as contained in Document 337(Rev.1), accordingly. The updated report would then be transmitted to the Secretary-General for submission to the ITU Council at its next ordinary session.

36.3 The **delegate of the Islamic Republic of Iran** endorsed the way forward proposed by the Chairman of Committee 3, noting that time constraints made it important to avoid returning to those issues in plenary.

36.4 The **Chairman** took it that the Plenary wished to authorize Committee 3 to examine Documents 528 and 542, update its report accordingly and transmit it to the Secretary-General for submission to Council-20.

36.5 It was so **agreed**.

# 37 Sixty-third series of texts submitted by the Editorial Committee for first reading (B63) (Document 558)

37.1 The **Chairman of the Editorial Committee** introduced Document 558, which had been prepared following the request made by China earlier in the meeting to be added to footnote 5.537A.

Article 5 (MOD 5.537A)

37.2 **Approved**.

37.3 The sixty-third series of texts submitted by the Editorial Committee for first reading (B63) (Document 558) was **approved**.

# 38 Sixty-third series of texts submitted by the Editorial Committee (B63) – second reading (Document 558)

38.1 The sixty-third series of texts submitted by the Editorial Committee (B63) (Document 558) was **approved** on second reading.

# 39 Additional documents for approval (resumed) (Document 561)

39.1 Introducing Document 561, the **delegate of France,** speaking on behalf of the Chairman of Ad hoc Group of the Plenary 4B1, said that the ad hoc group had agreed that no changes were required to the Radio Regulations under agenda item 1.14 for the frequency bands 6 440-6 520 MHz and 6 560-6 640 MHz. He thanked all those who had contributed to the successful outcome of discussions on agenda item 1.14.

39.2 Document 561 was **approved**.

# 40 Fifty-eighth series of texts submitted by the Editorial Committee for first reading (B58) (resumed) (Document 553)

40.1 The **Chairman** invited participants to resume consideration of Document 553, whose consideration had been deferred pending the consideration and approval of other documents on the agenda.

Article 59 (MOD 59.1, MOD 59.14, ADD 59.15 and ADD 59.16)

40.2 **Approved.**

MOD Resolution 99 (WRC-15)

40.3 The **Chairman of the Editorial Committee** recalled that a number of proposals had been made during the meeting regarding the date of application of certain provisions of the Radio Regulations, and noted that modifications would be required to Resolution 99. He invited administrations to reiterate their proposals regarding provisions 5.441B and 5.A15, so that they could be taken into account in the final version of the resolution.

40.4 The **delegate of the Russian Federation** reiterated his earlier request to include No. 5.441B in the list of provisions in the *resolves* section that would provisionally apply as of 23 November 2019. He sought confirmation from the Chairman of the Editorial Committee that that modification would be introduced.

40.5 The **Chairman of the Editorial Committee** said that No 5.441B would be incorporated, subject to the approval of the Plenary.

40.6 The **Chairman** took it that, in the absence of any objections, the Plenary could agree to include No. 5.441B in Resolution 99.

40.7 It was so **agreed**.

40.8 The **Chairman of the Editorial Committee** recalled that a request had been made for No. 5.A15 to apply provisionally as of 1 July 2020. He sought the approval of the Plenary for that modification.

40.9 It was so **agreed**.

40.10 The **Chairman of Ad hoc Group of the Plenary 4C** said that his group had requested the Plenary to consider applying the allocation to the maritime mobile-satellite services for GMDSS on a primary basis from the end of the conference.

40.11 The **Chairman of Committee 5** recalled that a request had been made earlier in the meeting for the provisions relating to agenda item 9.1 (9.1.9) to be added to those to apply provisionally as of 23 November 2019. Moreover, provisions relating to agenda item 1.6 had also recently been approved and might need to be added to Resolution 99.

40.12 The **delegate of the Islamic Republic of Iran** said that, as mentioned earlier in the meeting, it was necessary for the upgrading of the downlink for the maritime mobile-satellite services from secondary to primary to be followed by the application of appropriate rules of procedure. The Bureau would presumably take up that matter.

40.13 The **delegate of Luxembourg** said that the early entry into force of the provision relating to 9.1.9 had not been raised during previous discussions on that topic. Given the procedural considerations required to implement a change of date involving a new frequency band for FSS, his delegation strongly opposed the earlier entry into force of the footnote relating to item 9.1.9.

40.14 The **Chairman of the Editorial Committee** read out a list of proposed additions to the *resolves* section of Resolution 99, namely: Table of Frequency Allocations 1 621.35-1 626.5 MHz, Nos. 5.368, 5.372, 5.ADJBAND and 5.INBAND, and reference to Appendix 15. Recalling the comments of the Chairman of Committee 5, he said that supplementary elements could be added, but he noted the comments of the delegate of Luxembourg.

40.15 The **delegate of the United States** proposed the addition in the *resolves* section of Resolution 99 of the following regulatory provisions relating to agenda item 1.6 listed in Document 535: Nos. 5.A16, 5.B16, 22.5L, 9.35, 9.35.1, 22.5L.1 and 22.5M.

40.16 The **Chairman** said that the Editorial Committee would take note of those footnotes and update the resolution accordingly.

40.17 The **delegate of Germany** said that concerns had been raised by the CEPT countries concerning the inclusion of footnote 5.A919. He requested clarification regarding the status of that provision.

40.18 The **Chairman of Committee 5** said that, given the objections raised, the provision relating to the item 9.1.9 should not be included.

40.19 It was so **agreed**.

40.20 The **Chairman** said that the provisions in MOD Resolution 99 would be updated by the Editorial Committee in the light of the discussion in plenary.

40.21 On that understanding, MOD Resolution 99 (WRC-15), as amended, was **approved**.

40.22 The fifty-eighth series of texts submitted by the Editorial Committee for first reading (B58) (Document 553), as amended, was **approved**.

# 41 Fifty-eighth series of texts submitted by the Editorial Committee (B58) – second reading (Document 553)

41.1 The fifty-eighth series of texts submitted by the Editorial Committee (B58) (Document 553), as amended on first reading, was **approved** on second reading.

# 42 Fifty-seventh series of texts submitted by the Editorial Committee for first reading (B57) (resumed) (Document 552)

42.1 The **Chairman of the Editorial Committee** said that Document 552 contained the preliminary agenda for WRC-27 and associated resolutions, consideration of which had been deferred from earlier in the present meeting.

42.2 The **delegate of the Islamic Republic of Iran** said that, as the agenda for WRC-27 and associated resolutions would be considered in detail at WRC-23, it was only necessary to verify that the titles of the agenda items were consistent with those of the resolutions set out in the document. He suggested that where appropriate, a footnote should be added indicating that the appearance of square brackets around certain frequency bands in a resolution was understood to mean that those frequency bands would be considered and reviewed by WRC-23, as appropriate.

42.3 The **Chairman** invited participants to consider Document 552 on that basis.

ADD Resolution COM6/19 (WRC-19) – Preliminary agenda for the 2027 world radio communication conference; ADD Resolution COM6/20 (WRC-19) – New allocations for the radiolocation service in the frequency band 231.5-275 GHz, and new identification for radiolocation service applications of frequency bands in the range 275-700 GHz; ADD Resolution COM6/21 (WRC-19) – Use of the frequency bands 37.5-39.5 GHz (space-to-Earth), 40.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space) by aeronautical and maritime earth stations in motion communicating with geostationary space stations in the fixed-satellite service; ADD Resolution COM6/22 (WRC‑19) – Studies relating to spectrum needs and possible allocation of the frequency band 43.5-45.5 GHz to the fixed-satellite service; ADD Resolution COM6/23 (WRC-19) – Sharing between stations in the fixed service and satellite services in the frequency bands 71-76 GHz and 81-86 GHz; ADD Resolution COM6/24 (WRC-19) – Conditions for the use of the frequency bands 71-76 GHz and 81-86 GHz by stations in the satellite services to ensure compatibility with passive services; ADD Resolution COM6/25 (WRC-19) – Studies of technical, operational issues and regulatory provisions for non-geostationary fixed-satellite service satellite system feeder links in the frequency bands 71-76 GHz (space-to-Earth and proposed new Earth-to-space) and 81-86 GHz (Earth-to-space)

42.4 **Approved**.

ADD Resolution COM6/26 (WRC-19) – Study of technical and operational matters, and regulatory provisions, for space-to-space transmissions in the Earth-to-space direction in the frequency bands [1 610-1 645.5 and 1 646.5-1 660.5 MHz] and space-to-Earth direction in the frequency bands [1 525-1 544 MHz], [1 545-1 559 MHz], [1 613.8-1 626.5 MHz] and [2 483.5‑2 500 MHz] among non-geostationary and geostationary satellites operating in the mobile-satellite service

42.5 Following a comment from the **delegate of Samoa,** the **Chairman of Committee 6** said that while the removal of the square brackets from the title of Resolution COM6/26 had been discussed, no decision had been taken.

42.6 The **Chairman** reminded the meeting that the issue would be discussed at WRC-23.

42.7 ADD Resolution COM6/26 (WRC-19) was **approved**.

ADD Resolution COM6/27 (WRC-19) – Studies on possible allocations to the land mobile service (excluding IMT) in the frequency band 1 300-1 350 MHz for use by administrations for the future development of terrestrial mobile-service applications; ADD Resolution COM6/28 (WRC-19) – Considerations to improve the utilization of the VHF maritime frequencies in Appendix 18; ADD Resolution COM6/29 (WRC-19) – Use of the frequency band 22.55-23.15 GHz by the Earth exploration-satellite service (Earth-to-space)

42.8 **Approved**.

42.9 The **delegate of the United Arab Emirates** said that, following agreement between regional groups, a new agenda item (ADD Resolution COM6/30 (WRC-19), projected on-screen in the meeting room), on the removal of the limitation regarding aeronautical mobile in the frequency range 694-960 MHz for user equipment non-safety IMT applications, which had initially been proposed for inclusion in the WRC-23 agenda, should be included as an item on the preliminary agenda of WRC-27.

42.10 The **delegate of the** **Islamic Republic of Iran** said that he had no objection to the proposal of the United Arab Emirates.

42.11 The **Chairman** took it that the item proposed by the United Arab Emirates should be included on the preliminary agenda of WRC-27.

42.12 It was so **agreed**.

42.13 The **delegate of the Netherlands**, recalling the discussion of Document 554 earlier in the meeting, requested confirmation that the reference to the frequency bands 1 675-1 697 MHz in Region 1 had been removed from *resolves to invite ITU-R* 2 in Resolution COM6/15. He also proposed that the following be included as an additional agenda item for WRC-27: “To consider a possible worldwide allocation to the mobile satellite service for the future development of narrowband mobile satellite systems in frequency bands between the range 1.5 to 5 GHz in accordance with Resolution COM6/15 (WRC-19).”

42.14 It was so **agreed**.

42.15 The fifty-seventh series of texts submitted by the Editorial Committee for first reading (B57) (Document 552), as amended,was **approved**, including the two new agenda items agreed to during the discussion**.**

# 43 Fifty-seventh series of texts submitted by the Editorial Committee (B57) – second reading (Document 552)

43.1 The **Chairman** invited participants to consider on second reading the texts in Document 552, as amended on first reading, including the two new agenda items agreed to during the discussion.

43.2 Noting that the frequency bands for MSS narrowband in the new agenda item proposed by the Netherlands were broad, the **delegate of the United States** suggested awaiting the outcome of discussions on specific frequencies in Regions 1 and 2 at WRC-23 before designating bands for discussion at WRC-27.

43.3 The **delegate of the Russian Federation** said that he did not object to the proposal by the Netherlands, but suggested that the frequency band proposed should be placed in square brackets pending review by WRC-23. The **delegate of Samoa** supported that suggestion.

43.4 The **delegate of the United States** supported the suggestion of the Russian Federation. It was unusual for such a proposal to be made so late in the proceedings, particularly as the matter had not been discussed in Committee 6 or in Ad hoc Group of the Plenary 6.

43.5 The **delegate of Mexico** agreed that it was unusual to approve the addition of a proposal that had not been reviewed during the preparatory process; all contributions should be treated equally.

43.6 The **delegate of the Islamic Republic of Iran** said that the item might be considered as a possible agenda item for WRC-27. He agreed that the frequency bands suggested should be placed in square brackets pending further discussion at WRC-23.

43.7 The **delegate of the Russian Federation** stated that, as there was no resolution accompanying the proposed new agenda item, it would be difficult to decide to include it in the agenda of WRC-27 at the present juncture. He suggested reflecting the proposal from the Netherlands in the minutes of the meeting rather than as an addition to the agenda for WRC-27; the Netherlands should send a relevant proposal directly to WRC-23.

43.8 The **delegate of the Netherlands** explained that, in discussions on Document 554 earlier in the meeting, there had been no objections to the proposal to consider a possible worldwide allocation for MSS in an agenda item for WRC-27. He suggested proceeding in the manner proposed by the delegate of the Islamic Republic of Iran.

43.9 The **delegate of the Islamic Republic of Iran** noted that the term “possible” in the title might allay the concerns of the meeting. Furthermore, a footnote might be added indicating that no resolution had been submitted, and referring to the minutes of the Plenary. He urged participants to demonstrate a spirit of consensus.

43.10 The **Chairman**, supported by the **delegates of Samoa** and **Egypt**, proposed to retain the new WRC-27 agenda item proposed by the Netherlands with the addition of square brackets around the bands.

43.11 It was so **agreed**.

43.12 The **delegate of Germany** expressed his thanks to the Chairman, the Plenary and the delegate of the United Arab Emirates for their support on the inclusion of the aeronautical-IMT proposal in the agenda for WRC-27. He made the following statement:

“As it was decided already yesterday to remove the proposed agenda item on the protection of GSO in the bands 7/8 and 20/30 GHz from the provisional agenda of the WRC-27. This was covered already by the COM6 chairman in his report and we would like to clarify the reason for this proposal.

The main concern of the proposal is the growing number of non-geostationary satellite systems planning the use of the frequency bands 7 250-7 750 MHz (space-to-Earth), 7 900-8 400 MHz (Earth-to-space), 20.2-21.2 GHz (space-to-Earth) and 30-31 GHz (Earth-to-space). Article **22.2** states that non-geostationary satellite systems shall not cause unacceptable interference to and shall not claim protection from geostationary satellite networks in the fixed-satellite service and in the broadcasting-satellite service, but this provision does not apply to the mobile-satellite service.

Due to the current and expected large number of space stations in the non-geostationary satellite systems in these bands, the applicability of the current regulatory framework needs to be studied to verify whether the provisions of **9.3**, **9.21** and **22.2** are sufficient to protect the geostationary orbit from emissions of the non-geostationary satellite systems.

With this, Mr Chairman, we are of the view that the issues should be covered under AI 7 for WRC‑23. We are therefore inviting you to record this in the minutes of the plenary to highlight this issue for the WP4A contribution of the BR related to the list of issues to be covered under WRC-23 agenda item 7.”

43.13 The **delegate of the Islamic Republic of Iran** said that agenda item 7 related to protection criteria and observed that Germany could submit a proposal for consideration in due course.

43.14 The fifty-seventh series of texts submitted by the Editorial Committee (B57) (Document 552), as amended on first and second readings, was **approved** on second reading.

# 44 Sixty-second series of texts submitted by the Editorial Committee (B62) – second reading (Document 557)

44.1 The **Chairman** invited the Plenary to consider Document 557 on second reading, recalling that ADD 5.F113 and ADD 5.H113 had been subject to further informal consultations after the first reading of the document.

44.2 The **Chairman of Ad Hoc Group of the Plenary 4A,** clarifying the situation, said that there had been substantial opposition during the development of the footnotes in question, although the number of countries included had remained relatively stable. Technical conditions to protect the services in the band, as part of a so-called “global package”, had therefore been established based on that number of countries in an attempt to address the concerns raised. Representatives of one or two additional countries had asked whether they could request to be added to the footnote, and the ad hoc group had agreed that they could submit that request to the Plenary for decision. However, the growing number of countries requesting to be added to the footnote meant that the technical conditions that had been developed would have to be revised. Since it was not possible, in the time available, to decide how many more countries could be added before the conditions became invalid, the only way forward would be to continue with the text as approved on first reading. Requests from those countries wishing to be added could be recorded in the minutes of the meeting and then included in a proposal for WRC-23, possibly under agenda item 8, with a view to developing new conditions that would reflect the situation with a larger number of countries.

44.3 The **delegate of the Islamic Republic of Iran** agreed with the course of action proposed by the Chairman of the ad hoc group. In addition, he suggested that, prior to WRC-23, countries wishing to be added to the footnote could carry out studies in order to be better prepared for the discussion.

44.4 The **delegate of the United States** said that he would not oppose the proposed course of action but was concerned about the precedent being set. The regulatory and technical conditions established for the 47.2-48.2 GHz frequency band were exactly the same as those established for the 37-43.5 GHz band, and protected the same services. There had been more than 15 studies submitted to Task Group 5/1 that had shown compatibility. Although the international community had come together to identify the band for IMT, it appeared that some administrations wishing to join footnote 5.H113 were unable to do so at WRC-19. He failed to see why more countries could not join the footnote.

44.5 The **delegate of Togo** supported the comments of the delegate of the United States, particularly with regard to footnote 5.H113, and questioned whether countries would be able to add their names at WRC-23 if the same technical conditions applied. Criteria had already been established to ensure no interference with the mobile-satellite service in the frequency band in question. All Togo’s neighbouring countries – Burkina Faso, Benin and Ghana – were already included in the footnote, and he requested that his country’s name be added.

44.6 The **delegate of Slovenia** supported the delegate of the United States. It was a concern that two countries were blocking the addition of other countries to the footnotes in question when they had been allowed to add their own names to other footnotes.

44.7 The **Chairman** said that if, over the next four years, studies proved that more countries could be included, those countries that had expressed a wish to join the footnotes could then do so.

44.8 The **delegate of Denmark** said that he would not oppose the proposed course of action. However, it was unsatisfactory that decisions were not being made on a technical basis and he trusted that such action would not set a precedent for the future work of the Union. When additional countries submitted their names at WRC-23, those requests should be dealt with on a technical basis.

44.9 The **delegate of Nigeria** said that the African common proposal regarding footnote 5.H113 had included all countries in the Economic Community of West African States (ECOWAS). Togo should therefore be included in the footnote, as its exclusion was obviously a straightforward oversight.

44.10 The **delegate of Slovakia** endorsed the comments of previous speakers. It was difficult to accept that his country’s inclusion in the footnote had been blocked in such a way.

44.11 The **delegate of Lithuania** supported the delegate of Denmark and considered that the approach taken was unfair. He recalled that countries could deploy their IMT networks without identification.

44.12 The **delegate of Brazil** said that he could go along with the proposed course of action but cautioned against creating an issue similar to that generated by footnote 5.441B. Countries were being encouraged to add their names under agenda item 8 of WRC-23, which was something that had been expressly avoided throughout the conference. The issue deserved further reflection.

44.13 The **delegate of Thailand** said that although Thailand would abide by the decision not to add new countries, its request to be added to footnote 5.H113 should be recorded in the minutes.

44.14 The **delegate of Zimbabwe**, speaking on behalf of ATU, recalled that an African common proposal had been presented to the conference identifying the band up to 50.2 GHz for IMT. African Member States wishing to join the footnote should be treated exceptionally, since they had been omitted owing to a lack of communication.

44.15 The **delegate of Bangladesh** said that Bangladesh had proposed the band in question for IMT in an APT common proposal and should therefore be allowed to join the footnote, subject to the protection of existing services. Resolution 26 (Rev.WRC-07) was applicable to existing footnotes only. As India and China were included in the footnote, there should not be any problem in adding Bangladesh.

44.16 The **delegate of Togo** reiterated that his country’s name should be added to the footnote, since it been omitted in error, as the delegate of Nigeria had noted.

44.17 The **delegate of the Islamic Republic of Iran** said that the meeting would have to decide whether to make an exception for the African countries that had been omitted from the footnote. Recalling the comments of the delegate of Brazil, he said that the names of those countries wishing to join the footnotes in question had been communicated to the secretariat. WRC-23 should be invited to consider those requests favourably. He urged countries to provide the necessary technical justification for their objections in order to facilitate the task of WRC-23.

44.18 The **Chairman of Ad Hoc Group of the Plenary** **4A** confirmed that the inadvertent removal of any country from the list during the preparation of the documents could be rectified editorially based on the input documents.

44.19 On the understanding that any inadvertent omissions from the list of countries in footnotes 5.F113 and 5.H113 would be corrected, and that the requests of those additional countries wishing to be added to those footnotes, as reflected in the minutes of the meeting, would be forwarded to WRC-23 for consideration, the sixty-second series of texts submitted by the Editorial Committee (B62) (Document 557), as amended on first reading, was **approved** on second reading.

44.20 The **delegate of Sweden** thanked all those that had been involved in the identification of the 45.5-47 GHz band and all the countries that had joined footnote 5.F113. He hoped that other countries would be able to add their names at WRC-23.

44.21 The **Chairman of Committee 4** thanked all the chairmen of the ad hoc groups of the plenary and the BR team who had supported the work of Committee 4.

# 45 Announcement by the delegate of Switzerland

45.1 The **delegate of Switzerland**, speaking in his capacity as the representative of a notifying administration, announced that on the final day of the conference – 22 November – Inmarsat would be launching a new satellite working in the Ka-band, adding to its Global Xpress (GX) constellation. The launch would be an opportunity to celebrate the good work that had been accomplished both during WRC-19 and since WRC-15. The launch would also include a new satellite from Egypt, the host administration.

45.2 The GX5 satellite would provide a significant increase in the capacity and functionality of the Global Xpress constellation, providing aviation, maritime and terrestrial broadband connections. It would also provide a significant improvement for the region as a whole, made possible by the regulatory framework for Earth stations in motion (ESIM) communicating with geostationary space stations, as established by WRC-15 and expanded by WRC-19. The new regulations benefitted the whole satellite industry and would contribute towards the achievement of the United Nations Sustainable Development Goals.

45.3 **Dr Azzouz**, speaking on behalf of the Egyptian Administration, wished the Egyptian satellite launch every success. He thanked ITU for its support, in particular RRB, which had taken exceptional measures by extending the relevant network’s regulatory deadline. He hoped that the satellite would be brought into use within that extended deadline.

# 46 Consideration of an outstanding matter regarding Article 5 (MOD 5.453)

46.1 The **Chairman of Committee 6** drew attention to MOD 5.453, which had not yet been considered by the Plenary.

46.2 The **delegate of the United Kingdom** said that it was his understanding that, following bilateral discussions, all outstanding issues and objections regarding MOD 5.453 had been resolved through modification to the text. Some of the countries listed would benefit from identification in the footnote, since it addressed the provision of broadband services in developing and predominantly rural areas. He therefore proposed that the conference consider and approve the following text, as projected on the screen in the meeting room:

**“MOD WG4B/352/12**

**5.453** *Additional allocation:* in Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Cameroon, China, Congo (Rep. of the), Korea (Rep. of), Côte d’Ivoire, Djibouti, Egypt, the United Arab Emirates, Eswatini, Gabon, Guinea, Equatorial Guinea, India, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Japan, Jordan, Kenya, Kuwait, Lebanon, Libya, Madagascar, Malaysia, Niger, Nigeria, Oman, Uganda, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, the Dem. People’s Rep. of Korea, Singapore, Sri Lanka, Tanzania, Chad, Thailand, Togo, Viet Nam and Yemen, the band 5 650-5 850 MHz is also allocated to the fixed and mobile services on a primary basis. In this case, the provisions of Resolution **229** **(Rev.WRC‑12)** do not apply. In addition, in Angola, Afghanistan, Bhutan, Fiji, Kiribati, Maldives, Micronesia, Mongolia, Myanmar, Nauru, New Zealand, Papua New Guinea, Solomon Islands, Tonga, Vanuatu, Benin, Botswana, Burkina Faso, Burundi, Dem. Rep. of the Congo, Ghana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Zambia and Zimbabwe, the band 5 725-5 850 MHz is allocated to the fixed service on a primary basis, and stations operating in the fixed service shall not cause harmful interference to and shall not claim protection from other primary services in the frequency band (WRC‑19)”

46.3 The **Chairman of Committee 6** said that several different versions of the footnote had been produced during the conference, but confirmed that the text projected on the screen was the latest version. However, Israel’s request to remove its name from the footnote should be reflected.

46.4 The **Chairman of Committee 4** confirmed that Israel had been removed from the text in an earlier version.

46.5 The **delegate of Burkina Faso** sought clarification regarding the allocation of the band 5 725-5 850 MHz to the fixed service.

46.6 The **delegate of Rwanda** said that the reference to the fixed service represented a compromise reached in order to address objections raised to some countries joining the footnote.

46.7 The **delegate of the United Kingdom** said that if any country listed in the footnote objected to the reference to the fixed service, the footnote would have to remain unchanged.

46.8 The **Chairman**, noting that there were no objections, proposed that the footnote be approved on the understanding that Israel would be removed from it.

46.9 It was so **agreed**.

46.10MOD 5.453, as amended, was **approved** on first and second readings.

# 47 Deadline for the deposit of additional declarations and reservations

47.1 The **Secretary of the Plenary** said that, in accordance with Document 316 (Final days of the Conference), the revised deadline for submission of additional declarations and reservations would be midnight (2400 hours) that same day, Sharm el-Sheikh time.

47.2 It was so **agreed**.

**The meeting rose at 2040 hours**.

The Secretary-General: The Chairman:

H. ZHAO A. BADAWI

**Annexes: 2**

Original: English

Annex A

Statement by the Director of BR on World Television Day

As you know, on 21st of November we celebrate World Television Day. This year, we mark 70 years since ITU released the first Recommendation on TV broadcasting (related to the use of coaxial pairs of telephone cables for the transmission of moving pictures).

We can be proud today of the work of ITU over the last 70 years in developing new standards and systems for broadcasting, bringing them in line with the latest cutting edge technologies designed to make high quality television coverage available in affordable ways to people all over the world, especially in the remotest areas.

Indeed, since it first released technical standards for television 70 years ago in 1949, ITU has strived to develop globally harmonized standards that have progressively enhanced television viewing experience in terms of both visual and audio quality. From early standards for colour TV to developing parameters for 4:3 and widescreen 16:9 aspect ratio television, ITU has championed the switch to digital TV broadcasting and High Definition Television (HDTV), enabling more services, better picture and sound quality and improved coverage owing to an increase in capacity with higher spectrum efficiency, advanced network planning and transmission methods. Building further on the superior colour fidelity of ITU's Ultra-High Definition Television (UHDTV), ITU introduced High Dynamic Range Television (HDR-TV) bringing increased realism to images.

Today, the convergence of traditional broadcasting and Internet services is leading to the further merging of media content, data, and applications using broadband networks delivered over a combination of terrestrial, satellite and Internet platforms. It is already a reality that streaming onto multiple portable devices has made TV an integral part of life, accounting for 80 per cent of all consumer Internet traffic.

And just a few weeks ago, the ITU Radiocommunication Assembly developed two Resolutions: ITU-R 70 and 71 that deal with “Principles for the future development of broadcasting” and the “Role of ITU-R on the ongoing development of television, sound and multimedia broadcasting”.

Ladies and gentlemen, please join me in celebrating World TV Day and in applauding the path-breaking achievements in broadcast technologies that have helped connect our world to information and knowledge, transforming it into a global village.

Original: English

Annex B

Correspondence from the Secretary-General of WMO to the Secretary-General of ITU

Dear Mr Houlin Zhao,

First of all, congratulations on the success to date in conducting the 2019 World Radiocommunication Conference. I understand that it is one of the largest WRCs held, with over 3 300 participants, debating and collaborating to maintain and update the Radio Regulations.

Radio spectrum is a limited resource and as technology advances, the demands on this spectrum are increasing. As such, I was very pleased to hear of the strong recognition expressed by many delegations at WRC-19, during the constructive discussions on the risk of modern communication technologies to our passive bands that are so critical to the work of WMO members’ national meteorological and hydrological services.

I have been informed that the WRC-19 is near to approving levels of out-of-band emissions from 5G systems planned to operate in the band adjacent to the Earth observation passive frequency band 23.6 to 24 GHz, that are much higher than the levels proposed by WMO in this conference.

I understand that these very relaxed constraints to 5G systems will be applicable until the end of 2027 and that even if these levels will become more stringent, they will remain higher than the proposed limits in the WMO proposal. These levels are also higher than the majority of ITU-R studies conducted during the last four years. Such high levels during the eight-year transition period are a grave concern for WMO and the global meteorological community.

We recall that the frequency band specifically and appropriately identified in the Radio Regulations cannot be replaced by other part of microwave spectrum due to its physical and radiation characteristics and that it represents an important natural resource. Even low levels of interference received by passive sensor may degrade its data.

In addition, in most cases, these sensors are not able to discriminate between natural and man-made radiation. Furthermore, the weather forecasts generated by the national weather services are primarily based on the results of numerical weather prediction. In this context, the observations of weather satellites are a critical input and it should be noted that across all the main numerical weather prediction centres, microwave observations have the greatest impact on accuracy, providing 30 to 40% of all forecasts from observations.

It should be further noted that numerical weather prediction is critical for predicting severe meteorological disasters, such as tropical cyclones, flooding and heatwaves. The WRC-19 decision has the potential to significantly degrade the accuracy of data collected in this frequency band, which would jeopardize the operation of existing earth observation satellite systems, essential for all weather forecasting and warning activities of the national weather services. The potential effects of this could be felt across multiple impact areas including aviation, shipping, agricultural meteorology and warning of extreme events, as well as our common ability to monitor climate change in the future.

In this light of the cooperation and collaboration, I request that you invite the Chairman of WRC-19 to present this statement to the Plenary, when issue 1.13 is being considered.

Yours sincerely,

Petteri Taalas

Secretary-General of the World Meteorological Organization (WMO).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Following the meeting, the delegation of Thailand submitted the following reservation to the secretariat: “Thailand would like to join the reservations signed by several countries referring to Resolution 229 and RR No. 5.446A which reserve the right of the administrations to allow operation of stations in the mobile service in the band 5 150-5 250 MHz subject to other conditions than those contained in that Resolution, including higher power levels.”

Also following the meeting, the delegation of Mozambique submitted the following reservation to the secretariat: “The delegations of the above-mentioned States, referring to Resolution 229 (Rev.Sharm el-Sheikh, 2019) and RR No. 5.446A, reserve the right of their respective Governments to operate stations in the mobile service in the band 5 150-5 250 MHz at higher power levels and subject to other conditions than those contained in that Resolution.” [↑](#footnote-ref-1)
2. Following the meeting, the delegate of Singaporeinformed the secretariat that his country wished to align itself with the statement by the delegate of Egypt. [↑](#footnote-ref-2)