



MINUTES*

OF THE

88th MEETING OF THE RADIO REGULATIONS BOARD

11–15 October 2021 – Hybrid meeting

Present:

Members, RRB

Mr N. VARLAMOV, Chairman
Mr E. AZZOUZ, Vice-Chairman
Mr T. ALAMRI, Ms C. BEAUMIER, Mr L. F. BORJÓN FIGUEROA,
Ms S. HASANOVA, Mr A. HASHIMOTO, Mr Y. HENRI, Mr D.Q. HOAN,
Ms L. JEANTY, Mr S. M. MCHUNU, Mr H. TALIB

Executive Secretary, RRB

Mr M. MANIEWICZ, Director, BR

Précis-Writers

Ms S. MUTTI and Ms C. RAMAGE

Also present:

Mr A. VALLET, Chief, SSD
Mr C.C. LOO, Head, SSD/SPR
Mr M. SAKAMOTO, Head, SSD/SSC
Mr J. WANG, Head, SSD/SNP
Mr N. VASSILIEV, Chief, TSD
Mr K. BOGENS, Head, TSD/FMD
Mr B. BA, Head, TSD/TPR
Ms I. GHAZI, Head, TSD/BCD
Mr M. COSIC, Head, IAP/SAS
Mr D. BOTHA, SGD
Ms K. GOZAL, Administrative Secretary

* The minutes of the meeting reflect the detailed and comprehensive consideration by the members of the Radio Regulations Board of the items that were under consideration on the agenda of the 88th meeting of the Board. The official decisions of the 88th meeting of the Radio Regulations Board can be found in Document RRB 21-3/12.

Subjects discussed	Documents
1 Opening of the meeting	-
2 Adoption of the agenda and consideration of late submissions	RRB21-3/OJ/1(Rev.3) RRB21-3/DELAYED/4
3 Report by the Director of BR	RRB21-3/4 RRB21-3/4(Add.1) RRB21-3/4(Add.2) RRB21-3/4(Add.3) RRB21-3/4(Add.4) RRB21-3/4(Add.5) RRB21-3/DELAYED/1 RRB21-3/DELAYED/3 RRB21-3/DELAYED/5 RRB21-3/DELAYED/6
4 Rules of Procedure	RRB21-3/1 RRB20-2/1(Rev.4) CCRR/67 RRB21-3/5 RRB21-3/2 RRB21-3/3 RRB21-3/6 RRB21-3/7 RRB21-3/10 RRB21-3/11 RRB21-3/DELAYED/2
5 Issues and requests relating to the extension of regulatory time-limits to bring or to bring back into use frequency assignments to satellite networks	RRB21-3/9
6 Submission by the Administration of Qatar requesting a change of the notifying administration for the ESHAILSAT-26E-2 satellite network from QAT/ARB to QAT	RRB21-3/8
7 Submission by the Administration of China requesting recognition of the bringing into use of the frequency assignments to the satellite networks at orbital positions 163°E and 125°E	-
8 Election of the vice-chairman for 2022	-
9 Confirmation of the dates of the 89 th meeting of the Board and indicative dates for future meetings	-
10 Other business: Preparation and arrangements for WRC-23	-
11 Approval of the summary of decisions	RRB21-3/12
12 Closure of the meeting	-

1 Opening of the meeting

1.1 The **Chairman** opened the 88th meeting of the Radio Regulations Board at 0910 hours on Monday, 11 October 2021 and welcomed the Board members, almost all of whom were attending physically. He trusted that 2022 would see a return to easier forms of work.

1.2 The **Director**, also speaking on behalf of the Secretary-General, extended a warm welcome to the members of the Board and wished them a productive meeting. He was sorry that not all members were able to attend physically and hoped that the situation would increasingly return to normal in 2022 and 2023.

2 Adoption of the agenda and consideration of late submissions (Document RRB21-3/OJ/1(Rev.3) and RRB21-3/DELAYED/4)

2.1 **Mr Botha (SGD)** drew attention to four late submissions (Documents RRB21-3/DELAYED/1–4), three of which (Documents RRB21-3/DELAYED/1–3) were related to items already on the Board's agenda and had been received shortly before the start of the meeting. He suggested that the Board might consider assigning Documents RRB21-3/DELAYED/1 and 3 to agenda item 3 and Document RRB21-3/DELAYED/2 to agenda item 5.6.

2.2 It was so agreed.

2.3 **Mr Botha (SGD)** said that Document RRB21-3/DELAYED/4, a submission from the Administration of Saudi Arabia regarding registration of the frequency assignments for the ARABSAT-AXB30.5E satellite network, was unrelated to any item on the draft agenda.

2.4 In reply to a comment from **Mr Henri**, who was reluctant to discuss Document RRB21-3/DELAYED/4 at the present meeting as he was unsure about its relevance to the agenda items of the meeting, **Mr Vallet (Chief SSD)** explained that examination of the Part B information of the ARABSAT-AXB30.5E satellite network filing had shown that it was not in compliance with Article 6 of Appendix 30B (it affected an allotment). The Bureau had therefore returned the filing to the Administration of Saudi Arabia, by which time the eight-year time-limit for submitting Part B information had expired. The Administration of Saudi Arabia was therefore unable to resubmit the network, which was unfortunate because it operated a satellite at 30.5°E. The Bureau had informed the administration that it would suppress the network. The Administration of Saudi Arabia had indicated informally that it planned to submit the case to the Board, and had subsequently formally done so in Document RRB21-3/DELAYED/4. He suggested that the Board should defer consideration of the document to its next meeting and instruct the Bureau to maintain the satellite network's frequency assignments until it reached a decision on the case.

2.5 **Ms Beaumier** also expressed reluctance to consider the submission at the current meeting, as it was unrelated to any item on the agenda, and agreed that it should be deferred to the Board's next meeting, the Bureau having confirmed that doing so would not necessarily cause difficulties for the Administration of Saudi Arabia.

2.6 **Ms Jeanty, Mr Hashimoto, Mr Borjón, Ms Hasanova, Mr Hoan and Mr Mchunu** endorsed that approach.

2.7 The Board **decided** to defer discussion of Document RRB21-3/DELAYED/4 to its 89th meeting and to instruct the Bureau to maintain the relevant frequency assignments until that time.

2.8 Subsequently, after the Board had adopted its agenda, the Chairman drew attention to two other late submissions (Documents RRB21-3/DELAYED/5 and 6), which were related to item 3 of the agenda. As the new rule of procedure on delayed submissions would only enter into force at the end of the meeting, he suggested that the Board note both documents for information.

2.9 It was so **agreed**.

2.10 As a result, the Board ultimately **adopted** the draft agenda as modified in Document RRB21-3/OJ/1(Rev.3) and **decided** to include Documents RRB21-3/DELAYED/1, RRB21-3/DELAYED/3, RRB21-3/DELAYED/5 and RRB21-3/DELAYED/6 under agenda item 3, and Document RRB21-3/DELAYED/2 under agenda item 5.6 for information. The Board also **decided** to defer consideration of Document RRB21-3/DELAYED/4 to its 89th meeting and **instructed** the Bureau to add it to the agenda for that meeting and to maintain the frequency assignments to the ARABSAT-AXB30.5E satellite network until the end of the 89th Board meeting.

3 Report by the Director of BR (Documents RRB21-3/4 and Addenda 1 to 5, and RRB21-3/4/DELAYED/1, 3, 5 and 6)

3.1 The **Director** introduced his customary report in Document RRB21-3/4. Referring to § 1 and Annex 1 (§ 3s)), he reported that Document RRB21-3/4/DELAYED/1, from the Administration of China, constituted an encouraging reaction to the Board's efforts to help resolve the issue of harmful interference involving the Administrations of China and the United Kingdom, with the former pledging to intensify its monitoring campaign to that end.

3.2 Referring to § 3, he said that § 3.2, on Council activities in respect of cost recovery for satellite network filings, was equivalent to § 6 in previous reports and that, together with § 3.1, on the late payment of cost-recovery fees and the cancellation of satellite network filings on the grounds of non-payment of cost-recovery fees, it provided a consolidated overview of cost-recovery issues for satellite network filings.

3.3 Little or no progress had been made in the cases of harmful interference to broadcasting stations in the VHF/UHF bands between Italy and its neighbouring countries (§ 4.2); to analogue broadcasting stations of the Democratic People's Republic of Korea (§ 4.3); and to satellite networks of the United Arab Emirates (§ 4.4).

3.4 Referring to § 7, on the implementation of Resolution 85 (WRC-03), he pointed out that the table on the status of the Article 22 epfd reviews was longer in every successive report, reflecting the fact that a growing number of non-GSO satellite network filings were being submitted to the Bureau.

3.5 Referring to § 8, on Resolution 559 (WRC-19) submissions, he was pleased to report that the Administration of Papua New Guinea had agreed to the Bureau's proposal in respect of one of its Part B submissions and that, as a result, the equivalent protection margin (EPM) of the Resolution 559 submission of the Administration of Madagascar would not be degraded by more than 0.45 dB.

3.6 Referring to § 9, on Resolution 35 (WRC-19) submissions, he confirmed that the Bureau would continue to provide updates in that respect until WRC-23.

Actions arising from the last RRB meeting (§ 1 and Annex 1 of Document RRB21-3/4; Document RRB21-3/4(Add.5); Documents RRB21-3/DELAYED/1, 3, 5 and 6)

3.7 **Mr Vallet (Chief SSD)** reported that, with regard to coordination activities between the Administrations of France and Greece (§ 3p) of Annex 1), the two administrations had met on 16 September 2021 and had finalized the documents of their last meeting in June 2021. Their next meeting scheduled was from 30 November to 2 December 2021.

3.8 The Board **agreed** to conclude on the matter as follows:

“With reference to §3 p) regarding the coordination activities between the Administrations of France and Greece concerning the ATHENA-FIDUS-38E satellite network at 38°E and the HELLAS-SAT-2G satellite network at 39°E, the Board thanked the Bureau for the assistance provided to the two administrations. The Board again encouraged the Administrations of France and Greece to continue

their coordination efforts in good will to reach a successful outcome and instructed the Bureau to continue to assist the two administrations in these efforts and to report on any progress to the Board.”

3.9 **Mr Vallet (Chief SSD)**, referring to § 3q) of Annex 1, drew attention to Document 4A/402, which set out updated statistics on Resolution **40 (Rev. WRC-19)** submissions provided by the Bureau to ITU-R Working Party 4A. The statistics showed that, of the 674 submissions received under Resolution **40** between its entry into force on 28 November 2015 and 4 October 2021, 479 submissions (71.07 per cent) indicated that frequency assignments had been brought into or back into use by a satellite not previously used for that purpose at a different orbital position within the preceding three years. The other 195 submissions (28.93 per cent) indicated that frequency assignments had been brought into or back into use by a satellite used more than once during that time. While the vast majority of those had involved a satellite previously used at a maximum of three orbital positions, there were cases where a single satellite had been used to bring into or back into use assignments at 8, 9, 10, 11 and even 12 different orbital positions. The Bureau would continue to update the statistics to ensure that the most recent information was available for the Board’s report under Resolution **80 (Rev. WRC-07)** to WRC-23.

3.10 The **Chairman** said that the situation appeared quite normal, on the whole. However, the fact that a single satellite had been used up to 12 times for the purpose of bringing frequency assignments into or back into use might give rise to concerns that something was not quite right.

3.11 The Board **agreed** to conclude on the matter as follows:

“Under § 3 q) on the statistics regarding the data submitted under Resolution **40 (Rev.WRC-19)** to ITU-R Working Party 4A as contained in Document 4A/402 and subsequent updated information that the Bureau would provide, the Board thanked the Bureau for the information provided. The Board instructed the Bureau to provide updated information on this matter when available.”

3.12 **Mr Vallet (Chief SSD)**, referring to § 3.1 of Annex 1, which concerned the simultaneous bringing into use of multiple non-geostationary satellite systems with a single satellite, said that the Bureau required further time to conduct a more detailed analysis of bringing into use as defined under No. **11.44** of the Radio Regulations (RR), the linkage with Resolution **35 (WRC-19)** and Resolution **771 (WRC-19)**, and the studies requested by WRC-19 on tolerance of orbital parameters. Further information would be provided to the Board at its next meeting.

3.13 **Mr Vassiliev (Chief TSD)**, referring to § 3s) of Annex 1, drew attention to Document RRB21-3/DELAYED/1, which contained a submission from the Administration of China in response to the Board’s decision at its 87th meeting with respect to harmful interference to emissions of the United Kingdom’s high frequency broadcasting stations and the results of the international monitoring campaign. The Administration of China indicated that it had been strengthening communication with the Bureau and working with the Administration of the United Kingdom to resolve related issues. It would continue consultations with that administration through the High Frequency Coordination Conference for matters related to HF broadcasting stations.

3.14 In response to a question from **Ms Jeanty** as to whether “registered with the international High Frequency Coordination Conference” meant actually included in the HFBC schedule or something else, the **Chairman** said that it was his understanding that the frequencies referred to had been included in the seasonal broadcasting schedule for the autumn period.

3.15 **Mr Vassiliev (Chief TSD)** confirmed that understanding.

3.16 The Board **agreed** to conclude on the matter as follows:

“With reference to s) regarding harmful interference to emissions of United Kingdom high frequency broadcasting stations published in accordance with RR Article **12**, the Board noted Document RRB21-3/DELAYED/1 for information. The Board encouraged the Administration of China to

continue to find solutions to eliminate the harmful interference to the emissions of United Kingdom high frequency broadcasting stations.”

3.17 **Mr Vallet (Chief SSD)** drew attention to § 5.1 of Annex 1, which related to a submission from the Administration of India requesting the extension of the regulatory time-limit to bring into use the frequency assignments to the INSAT-KA68E satellite network. The decision of the Board at its 87th meeting had been communicated to the Administration of India on 19 July and, pursuant to that decision, the Bureau had retained the frequency assignments to the INSAT-KA68E satellite network. The Administration of India had continued the notification process, having resubmitted notification information under RR No. **11.32** on 17 August 2021, but had not provided additional information on the issues raised by the Board at its 87th meeting. It had, however, submitted Document RRB21-3/DELAYED/6, which the Board had agreed to note, and in which the Administration of India stated that it was not in a position to provide any additional information to the 88th meeting of the Board and requested a favourable decision. The Bureau sought guidance from the Board as to whether it should continue to maintain or suppress the frequency assignments to the INSAT-KA68E satellite network.

3.18 The **Chairman** asked whether the Board wished to take a decision at the current meeting or give the Administration of India more time to respond. He also sought clarification regarding the coverage area.

3.19 **Mr Vallet (Chief SSD)** said that the satellite coverage area was not restricted to India and was all visible Earth.

3.20 **Mr Henri**, recalling the Board’s decision at its 87th meeting, said that the failure of the Administration of India to provide further information was frustrating since the administration appeared not to have taken into account the Board’s conclusion from the last meeting, in particular the invitation to provide additional information. The administration had already had almost three months to respond to the Board’s invitation to provide additional information and, without it, he would not be inclined to grant the requested extension.

3.21 **Ms Jeanty** concurred. The Administration of India was familiar with the Board’s work and procedures and had presumably received the decisions of the Board’s 87th meeting. Accordingly, there was no reason to provide more time and a final decision on the matter should now be taken. She was also unclear as to what the Administration of India meant by a “favourable decision”.

3.22 **Ms Beaumier**, endorsing the views of the previous speakers, said that the Administration of India had always been quite diligent in meeting requests in the past. The request had been considered during at least one previous meeting, and she would therefore be reluctant to keep the situation in further abeyance by deferring a decision until the Board’s next meeting. Noting that the regulatory deadline had expired on 9 May 2021, she said that the Administration of India had not provided any additional information to demonstrate that all the conditions of *force majeure* had been met in support of its request.

3.23 **Ms Hasanova** and **Mr Alamri** said that the Administration of India had not provided the additional information sought by the Board and agreed that a decision should be taken at the current meeting.

3.24 **Mr Azzouz** said that the Administration of India had considerable experience with respect to satellite filings and had satisfied such requests from the Board in the past. A decision on the matter should be taken during the current meeting.

3.25 **Mr Hashimoto** and **Mr Hoan** said that a decision should be taken at the current meeting, as did **Mr Mchunu**, who added that it was important not to set a bad precedent.

3.26 **Mr Talib**, endorsing earlier comments, said that the Board should maintain its position to see whether any other relevant information was forthcoming. In its conclusion, the Board should send a positive signal to the Administration of India for providing a submission and indicate that it would take its decision at a later date in the light of the content of the delayed document received.

3.27 The **Chairman** said that the only new information provided by the Administration of India in Document RRB21-3/DELAYED 6 concerned a planned change in the national frequency allocation plan, which was not linked to *force majeure* and could not influence the Board's decision. As the Board had received no new information demonstrating that all the conditions of *force majeure* had been met, it might wish to decide to instruct the Bureau to suppress the frequency assignments to the INSAT-KA68E satellite network from the MIFR.

3.28 **Mr Hashimoto, Ms Hasanova, Mr Azzouz, Mr Mchunu, Mr Alamri and Mr Borjón** supported that approach.

3.29 **Mr Henri** said that the Administration of India had provided no new information related to the application of *force majeure* to the case under discussion, or to an alternative solution.

3.30 **Mr Hoan** considered that, since the Administration of India had not provided the additional information requested by the Board at its 87th meeting, the Board could not accede to the request and should instruct the Bureau to cancel the frequency assignments.

3.31 The **Chairman** proposed that the Board should conclude on the matter as follows:

“Regarding § 5.1 on the request from the Administration of India for an extension of the regulatory time-limit to bring into use the frequency assignments to the INSAT-KA68E satellite network, the Board noted Document RRB21-3/DELAYED/6 for information and further noted that the Administration of India did not provide any additional information to demonstrate that all the conditions of *force majeure* had been met in support of its request, as it had been invited to do by the Board at its 87th meeting. Consequently, the Board decided that it could not accede to the request from the Administration of India and instructed the Bureau to suppress the frequency assignments to the INSAT-KA68E satellite network from the MIFR.”

3.32 It was so **agreed**.

3.33 **Mr Vallet (Chief SSD)**, drawing attention to § 5.5 of Annex 1, said that the Administration of the United States had informed the Bureau that it did not wish to pursue its request and sought the suppression of the AFRIBSS satellite network. Accordingly, the case had been closed.

3.34 With regard to §§ 8.1. and 8.2 of Annex 1 concerning the coordination of the ARABSAT satellite networks 5A and 6A at 30.5°E, for which Saudi Arabia was the notifying administration, and the TURKSAT satellite networks at 31°E, for which Turkey was the notifying administration, he said that Addendum 5 to Document RRB21-3/4 presented the results of the coordination meeting between both administrations held on 28 and 29 September 2021 with the participation of the Bureau. With respect to the frequency bands 14–14.5 GHz/10.95–11.2 GHz and 11.45–11.7 GHz, the discussions had focused on an interim solution to avoid harmful interference in the short term. No final agreement had been reached, and the discussions would continue by correspondence. With regard to the frequency bands 13.75–14 GHz and 12.5–12.75 GHz, initial technical assessments had been carried out in order to identify the compatibilities and potential difficulties, and both satellite operators would consider the issue further to obtain a clearer understanding of their requirements. Fewer difficulties would be encountered if the operators agreed to use coverage areas that did not overlap. Both delegations had agreed to hold another coordination meeting with the participation of the Bureau at some stage after the current Board meeting.

3.35 The **Chairman** said that Document RRB21-3/DELAYED/5 contained a delayed submission by the Administration of Turkey as the notifying administration for the TURKSAT satellite networks and would, as agreed, be noted without any detailed discussion.

3.36 **Mr Vallet (Chief SSD)** introduced Document RRB21-3/DELAYED/3, which contained a submission by the Administration of Saudi Arabia, as the notifying administration for the ARABSAT satellite networks, summarizing developments since the Board's 87th meeting on the technical coexistence of ARABSAT and TURKSAT satellite networks at 30.5°E and 31°E. According to the document, Arabsat had taken all practical measures to avoid interference, and was concerned that, although both Arabsat and Turksat had indicated their willingness at the recent coordination meeting to reach a mutually agreeable solution for the technical coexistence of their respective satellites at those orbital positions, Turksat was ignoring the Board's decisions by not taking practical measures to avoid harmful interference to the ARABSAT-6A satellite; moreover, it was refusing to share some technical information for the TURKSAT-5A satellite. The document drew attention to the two frequency segmentation options that Arabsat had proposed as an interim solution, which had unfortunately not been considered by Turksat. In view of the situation, the Administration of Saudi Arabia invited the Board to consider requesting the Administration of Turkey : to eliminate the intentional harmful interference to the operation of Arabsat over the Middle East and North Africa region; to adopt the 50 per cent frequency segmentation scheme for each party as a way forward to ensure rational, equitable, efficient and economical use of the radio-frequency spectrum; and to instruct the Bureau to assist both administrations to continue coordination. Annex 1 to the document set out the comments of Arabsat on the Bureau's report on the outcome of investigations on the regulatory status of the relevant satellite associated with the TURKSAT-5A, ARABSAT-5A and ARABSAT-6A satellite networks. The Administration of Saudi Arabia considered that the names of the satellites used for bringing into or back into use the frequency assignments of the ARABSAT and TURKSAT satellite network filings should be provided.

3.37 The **Chairman** said that it was not for the Board to adopt a frequency segmentation scheme for each party. In such cases, the parties concerned usually worked together in a spirit of good will to reach agreement on how to use the frequency assignments so as to avoid interference. The situation was complex, and it was up to the parties themselves to find a compromise. The Board might wish to encourage the parties to continue their efforts to reach a mutually acceptable solution and request the Bureau to assist the administrations in their coordination efforts.

3.38 **Ms Jeanty** concurred with that view. While the Board could instruct the Bureau to assist both administrations to continue coordination, it could not go further and request the Turkish Administration to eliminate the interference to Arabsat's operation over the Middle East and North Africa region or to adopt a 50 per cent frequency segmentation scheme for each party.

3.39 **Mr Henri** said that, while he agreed with the Chairman's comments, he was concerned to learn from the submission about the claim that a "frequency-hopping tactic" seemed to be used to impact Arabsat carriers. The parties should not inflame the situation in order to serve their own interests. The Board should encourage both parties to take a responsible approach to eliminate the harmful interference and indicate that frequency band segmentation was a possible mutually acceptable technical solution. He would have no difficulty in making more public a document listing the names of the satellites that had brought into or back into use the different filings from Turkey and Saudi Arabia at different times.

3.40 The **Chairman** observed that frequency band segmentation along with service area definition and change of orbital position by 0.25° were some of the technical solutions that could be pursued to ensure the long-term, interference-free operation of the satellite networks.

3.41 **Ms Hasanova** said that significant investment had been involved for both administrations and, with the two satellites in operation with only 0.5° of separation, it was very difficult to find a

technical solution. Endorsing the comments of previous speakers, she said that both administrations should be urged to continue their coordination efforts with the support of the Bureau either by correspondence or through bilateral meetings.

3.42 The **Chairman** proposed that the Board should conclude on the matter as follows:

“With reference to §§ 8.1 and 8.2 concerning the coordination of the ARABSAT satellite networks 5A and 6A at 30.5°E, for which the Administration of Saudi Arabia was the notifying administration, and the TURKSAT-5A satellite network at 31°E, for which Turkey was the notifying administration, the Board considered Addendum 5 to Document RRB21-3/4 and also considered Documents RRB21-3/DELAYED/3 and RRB21-3/DELAYED/5 for information. The Board noted that both administrations had taken considerable measures to maintain their rights to these frequency assignments, but that these measures had led to the difficulties that the two administrations were currently facing. The Board encouraged the two administrations to:

- continue their coordination efforts in good will and in an equitable manner, taking into account the rules of procedure on RR No. **9.6**, to find mutually acceptable solutions that would eliminate all harmful interference on a permanent basis;
- pursue all possible technical solutions, including, but not limited to, frequency band segmentation, service area definition and change of orbital position by 0.25°.

The Board instructed the Bureau to continue to assist the two administrations in their coordination efforts, to continue to organize coordination meetings as required and to report on any progress to future meetings of the Board.”

3.43 It was so **agreed**.

3.44 **Mr Vallet (Chief SSD)**, referring to § 9 of Annex 1 concerning the implementation of Board decisions on the coordination of satellite networks at 25.5°E/26°E in the Ku and Ka bands, said that a coordination meeting for the administrations concerned, namely France, the Islamic Republic of Iran and Saudi Arabia, was planned for 29 November 2021.

3.45 The Board **agreed** to conclude as follows on § 9 of Annex 1:

“Regarding § 9 on the implementation of the decisions of the Board on the coordination of satellite networks at 25.5°E/26°E in the Ku and Ka bands, the Board thanked the Bureau for assisting the administrations in their coordination efforts. The Board reiterated its decision at the 87th meeting, namely to continue to encourage the Administrations of Saudi Arabia, France and the Islamic Republic of Iran to formalize the coordination of their satellite networks at the position 25.5°E/26°E in the Ku band, and the Administrations of Saudi Arabia and France to formalize the coordination of their satellite networks at the position 25.5°E/26°E in the Ka band as soon as possible. The Board further encouraged the administrations to continue to discuss the coordination efforts in the Ku and Ka bands in parallel and in a spirit of good will, with a view to finalizing the required coordination between their satellite networks to avoid harmful interference. The Board instructed the Bureau to continue to provide the necessary assistance to the administrations and to report on progress to the 89th meeting of the Board.”

Processing of filings for terrestrial and space systems (§ 2 and Annexes 2 and 3 of Document RRB21-3/4)

3.46 **Mr Vassiliev (Chief TSD)** and **Mr Vallet (Chief SSD)**, referring in turn to Annexes 2 and 3 of Document RRB21-3/4, on the processing of notices for terrestrial services and satellite networks, respectively, drew attention to the tables contained therein.

3.47 In reply to a question from the **Chairman**, **Mr Vallet (Chief SSD)** said that, according to the information contained in Table 6B2 of Annex 3 to Document RRB21-3/4, the average time needed

to process earth stations (not including those on disputed territories) was 17.9 months. The main reason for that relatively high value was that the Bureau calculated the average on the basis of all earth stations notified. In some cases, however, publication of the notification had to be suspended until the Bureau had completed its examination of the associated space station filing. One of two scenarios was possible: either the associated space station had not been notified, in which case the Bureau returned the earth station notification to the administration concerned; or the associated space station had been notified but the examination was not yet complete and the earth station notification remained pending – thereby prolonging the average processing time. In addition, administrations sometimes submitted multiple earth station notifications on the same day, as indicated in Table 6A of Annex 3. The Bureau was accustomed to processing 10 to 15 earth stations per month; the notification of upwards of 100 on a single day also added to the average processing time. The Bureau could, of course, consider producing a more detailed breakdown of the statistics differentiating between the various scenarios, but at the risk of confusing administrations unused to seeing the statistics presented in that manner and of making it impossible to compare figures from year to year.

3.48 In reply to a question from **Mr Alamri** concerning the steady increase in processing times under Articles 6 and 7 of Appendix **30B**, **Mr Vallet (Chief SSD)**, referring to Table 4 of Annex 3, pointed out that the latest date of receipt indicated was 24 June 2020, on which date the Bureau had received the last of seven Article 7 submissions from administrations without an allotment in Appendix **30B**. All those requests had now been published. In the meantime, however, requests from other administrations under Article 6 had been suspended in accordance with the Radio Regulations. The Bureau had now resumed their publication, but since some of them had been notified before 24 June 2020, the resulting processing time appeared long. The Bureau was gradually working through the backlog and in October 2021 had published networks notified in July 2020.

3.49 The **Chairman** pointed out that the issue was being discussed by Working Party 4A.

3.50 The Board **noted** § 2 of Document RRB21-3/4 dealing with the processing of filings for terrestrial and space systems.

Implementation of cost recovery for satellite network filings (§ 3 and Annex 4 of Document RRB21-3/4)

3.51 The Board **noted** § 3 of Document RRB21-3/4.

Reports of harmful interference and/or infringements of the Radio Regulations (Article 15 of the Radio Regulations) (§ 4.1 of Document RRB21-3/4)

3.52 The Board **noted** § 4.1 of Document RRB21-3/4.

Harmful interference to broadcasting stations in the VHF/UHF bands between Italy and its neighbouring countries (§ 4.2 and Addenda 2 to 4 of Document RRB21-3/4)

3.53 **Mr Vassiliev (Chief TSD)** said that, since the previous Board meeting, the Bureau had received communications from the Administrations of France, Malta, Italy and Slovenia. The severe interference caused to one French FM sound broadcasting station persisted, even though it had been on the priority list for a number of years, and the two administrations had exchanged proposals for its resolution. In Addendum 2 to Document RRB21-3/4, the Administration of Slovenia reported that there had been no improvement with regard to FM sound stations and that harmful interference persisted to DAB reception; the Administration of Italy, having stated at the most recent coordination meeting that it had about 16 000 FM transmitters in operation, should start resolving cases of harmful interference, commencing with stations on the priority list. Lastly, the Administration of Malta reported that radio monitoring campaign conducted in September 2021 to assess changes in the situation of harmful interference had not revealed any improvements (Addendum 4 to Document RRB21-3/4).

3.54 The Administration of Italy, for its part, had updated its roadmap for resolving outstanding cases of harmful interference (Addendum 3 to Document RRB21-3/4). Between June and September 2021, it had focused on television broadcasting, liberating the 700 MHz band and freeing up the frequencies allocated to neighbouring countries in view of European Commission decisions and taking advantage of the switch to the DVB-T2 standard with HEVC encoding. Unfortunately, many households did not have TV sets adapted to the new standard. With regard to DAB broadcasting, the group of Adriatic countries was working to define a channel allocation agreement for the VHF Band III. With regard to FM sound broadcasting, the Administration of Italy claimed that its possibilities for action in the brief period since the previous report had been greatly reduced during the summer period and because of the limitations imposed by the COVID-19 pandemic. In addition, its attempts to introduce regulatory changes were often successfully contested in the courts by the operators. In that respect, draft legislation currently before the Italian Parliament, if adopted, would empower the relevant ministry to take action to eliminate interference and would result in positive changes. The roadmap concluded with the administration's proposals for action in cross-border cases between Italy and its neighbours.

3.55 **Mr Azzouz**, noting the amount of time the Bureau spent dealing with the issues of harmful interference between Italy and its neighbouring countries, asked whether it was in a position to collect all the information it had on the sources of interference and the techniques applied to resolve them. If regularly updated and published, such information might help all concerned save time. Referring specifically to the case of harmful interference involving France and Italy, he suggested that the Administration of Italy should consider either reducing its transmit power at 88.2 MHz, where it was apparently emitting illegally, or agreeing to allow the Administration of France to transmit at 88.4 MHz.

3.56 **Mr Vassiliev (Chief TSD)** agreed that it would definitely help to collect information on all cases of harmful interference; indeed, the Bureau had already taken steps in that direction. The main problem remained the FM band in the GE84 Plan. At the two most recent coordination meetings, the administrations concerned had established the priority list of the most urgent cases in that regard; the list was updated by the Bureau before every Board meeting (a link was provided in § 4.2 of Document RRB21-3/4). Concerning mitigation techniques, he said that the well-qualified engineers in the countries concerned knew all the techniques that could be used (e.g. change of frequency or antenna diagram). That being said, the heart of the problem remained the number of frequencies used by Italy, for which it had regulator-issued licences, and the fact that the GE84 Plan was not strictly applied in Italy. As the Administration of Italy pointed out in the roadmap, its attempts to impose changes in the direction of power were often successfully contested by the operators in court. The problem was more legal and political than technical.

3.57 In reply to a question from **Mr Hashimoto**, the **Chairman** confirmed that a multilateral meeting was scheduled to take place in May 2022.

3.58 In reply to a query from **Mr Talib** about the situation in Slovenia and how the proposal set out in the roadmap would serve to resolve it, **Mr Vassiliev (Chief TSD)** said that the Administration of Italy had provided no detailed information on the work of its peripheral offices beyond what was stated in the updated roadmap and might itself not have more precise information to convey.

3.59 **Mr Hoan** observed that, according to the information provided by the Administrations of France, Malta and Slovenia, the situation overall had not changed significantly since the previous Board meeting. The Board should again encourage the Administration of Italy to take all possible measures to eliminate the harmful interference to FM sound broadcasting stations of neighbouring countries and instruct the Bureau to make preparations for the multilateral coordination meeting in 2022.

3.60 **Ms Beaumier** agreed. While the Administration of Italy had made some but limited progress in some areas, in particular with respect to TV broadcasting by moving up the reframing schedule to address the concerns of the Administration of Croatia and with respect to DAB, its efforts to address the harmful interference to FM sound broadcasting stations had not been as successful as anticipated. While the introduction of draft legislation to give more power to the regulator to resolve interference cases was a positive development, any impact lay far in the future. Given the situation, the Board should reiterate the concerns and conclusions it had expressed at its previous meeting.

3.61 **Ms Hasanova** fully endorsed that point of view. She hoped that the Administration of Italy would update the national roadmap in the near future and submit proposals to the Administrations of France and Slovenia in respect of their respective cross-border cases.

3.62 In reply to a question from **Mr Mchunu** about the deadline of June 2022 indicated in the roadmap, **Mr Vassiliev (Chief TSD)** said that the European Commission had set a deadline of June 2022 for implementation of the second Digital Dividend for Europe. By that date, all CEPT countries must have liberated the 700 MHz band, prompting the Administration of Italy to liberate the band internally for mobile as a first step. A second step – to free up frequencies that had been allocated to neighbouring countries through multilateral agreements – was very closely related thereto, and the Administration of Italy had committed unilaterally to complete it by June 2022.

3.63 The **Chairman** pointed out that both actions related to television broadcasting and were unrelated to DAB or FM broadcasting. He proposed that the Board should conclude as follows:

“In considering § 4.2 of Document RRB21-3/4 and its Addenda 2, 3 and 4 on the harmful interference to broadcasting stations in the VHF/UHF bands between Italy and its neighbouring countries, the Board thanked the Bureau for assisting the administrations in their efforts to resolve the cases of harmful interference and also thanked the Administration of Italy for the updated roadmap. The Board noted that though some progress had been made, there had been once more a lack of substantial progress in resolving cases of harmful interference to the FM sound, DAB and television broadcasting stations of the neighbouring countries of Italy. The Board urged the Administration of Italy to:

- take all possible measures to eliminate harmful interference to the FM sound, DAB and television broadcasting stations of its neighbouring countries;
- concentrate on the priority list of FM sound broadcasting stations in order to resolve these instances of harmful interference on a case-by-case basis.

The Board instructed the Bureau to:

- continue assisting the administrations concerned;
- undertake preparations for the coordination meeting in May 2022;
- continue reporting on any progress on this matter as well as on the outcome of the planned multilateral coordination meeting.”

3.64 It was so **agreed**.

Harmful interference to analogue broadcasting stations of the Democratic People’s Republic of Korea (§ 4.3 of Document RRB21-3/4 and Addendum 1)

3.65 **Mr Vassiliev (Chief TSD)** said that the Bureau had sent a second *note verbale* to the Permanent Mission of the Republic of Korea on 19 July 2021, forwarding a letter addressed to the Minister of Science and ICT conveying the Board’s grave concerns regarding the continued lack of response from the Administration of the Republic of Korea. Although the Bureau had been informed by *note verbale* of 23 July 2021 that its letter of 19 July 2021 had been forwarded to the Minister of Science and ICT of the Republic of Korea, it had yet to receive any response from the minister.

3.66 Addendum 1 to Document RRB21-3/4 contained a communication from the Administration of the Democratic People's Republic of Korea, indicating that the Administration of the Republic of Korea was also in contravention of RR Nos. **15.1** and **15.21** and No. 197 (Article 45) of the ITU Constitution, and noting that, although that administration had switched off TV analogue broadcasting in January 2013, it continued to broadcast signals on four channels using analogue TV broadcasting systems of the Democratic People's Republic of Korea. ITU was encouraged to take proactive action and strong measures to stop the harmful interference caused by the Administration of the Republic of Korea.

3.67 The **Chairman** said that the Board should once again convey its serious concerns at the continued absence of a formal response from the Administration of the Republic of Korea and at the persistence of the harmful interference.

3.68 **Mr Borjón** said that the Republic of Korea had been one of the first countries to complete the transition to digital TV broadcasting and had no reason to use analogue TV broadcasting. The Board should reiterate the importance of compliance by the Republic of Korea with all relevant principles of the treaties to which it was signatory and of the need to eliminate the harmful interference. It should instruct the Bureau to send a third *note verbale* requesting the Administration of the Republic of Korea to eliminate the harmful interference, which was not consistent with the principles of the ITU Constitution and in no way acceptable to the Board.

3.69 **Mr Mchunu, Mr Azzouz, Mr Talib, Mr Alamri and Ms Hasanova** agreed, as did **Mr Hashimoto**, who also agreed that the Board should once again express its grave concern.

3.70 **Mr Hoan**, endorsing the views of Mr Borjón, said that the Bureau should make every effort to obtain a response from the Ministry of Science and ICT of the Republic of Korea. A new issue had been raised by the Democratic People's Republic of Korea in Addendum 1 to Document RRB21-3/4, namely the contravention by the Republic of Korea of RR Nos. **15.1** and **15.21**. He asked whether analogue television assignments were still recorded in the MIFR for the Republic of Korea even though that administration was reported to have stopped such broadcasting in 2013.

3.71 **Mr Vassiliev (Chief TSD)** reported that 30 or so VHF frequency assignments were recorded in the MIFR on behalf of the Republic of Korea, of which only one corresponded to a station located at the site of the origin of the interference. Furthermore, the technical characteristics of the television broadcasting signals causing harmful interference to the Democratic People's Republic of Korea differed from those of the assignments recorded for the Republic of Korea in the Master Register.

3.72 The **Director** said that, in his view, it was pointless to send a third *note verbale* to the Administration of the Republic of Korea, which had so far chosen to ignore the Bureau's correspondence on the matter. The letter sent by the Bureau to all relevant administrations after each Board meeting conveying the Board's decisions should suffice to make the Administration of the Republic of Korea aware of the Board's continued concern and dissatisfaction. He understood that the issue was going to be included in the Board's report under Resolution **80 (Rev.WRC-07)** to WRC-23.

3.73 **Mr Borjón** endorsed those comments.

3.74 The **Chairman** proposed that the Board should conclude on the matter as follows:

“The Board considered in detail § 4.3 and Addendum 1 of Document RRB21-3/4 on harmful interference to analogue broadcasting stations of the Democratic People's Republic of Korea. The Board noted once more with extreme grave concern the continued lack of response from the Republic of Korea to the two *notes verbales* which the Bureau had sent to the Permanent Mission of the Republic of Korea requesting it to forward letters addressed to the Minister of Science and ICT of the Republic of Korea on this matter. The Board further noted that the technical characteristics of the

reported television signals from the Republic of Korea causing harmful interference differed from those assignments recorded for the Republic of Korea in the MIFR.

The Board agreed to:

- strongly encourage the Administration of the Republic of Korea to implement all measures to eliminate harmful interference to the television broadcasting stations of the Democratic People's Republic of Korea;
- indicate to the Administration of the Republic of Korea that it was in direct contravention of RR Nos. **15.1**, **15.2**, **15.21** and **23.3**, and No. 197 (Article 45) of the ITU Constitution;
- reiterate the extreme grave concern of the Board on the lack of response from the Administration of the Republic of Korea to the communications from the Board.

The Board invited both administrations to cooperate in a spirit of good will to eliminate all harmful interference.

The Board decided to include this issue in the Report on Resolution **80 (Rev.WRC-07)** to WRC-23.”

3.75 It was so **agreed**.

Harmful interference to the EMARSAT-1G, EMARSAT-5G, YAHSAT and MADAR-52.5E satellite networks from the Administration of the United Arab Emirates (§ 4.4 of Document RRB21-3/4)

3.76 **Mr Vallet (Chief SSD)**, introducing § 4.4 of Document RRB21-3/4, involving harmful interference to satellite networks of the Administration of the United Arab Emirates originating in the territory of the Administration of Ukraine and first reported on 25 January 2021, said that the harmful interference persisted and that no response had been received from the Administration of Ukraine to the Bureau's communications on the matter. The Bureau had therefore decided to submit the case to the Board under No. **13.2** of the Radio Regulations, with the recommendation that the Board request the Administration of Ukraine to communicate what action it had taken to resolve the interference problem and ask both administrations to continue to exercise good will and provide each other with mutual assistance to that end. In reply to a question from the **Chairman**, he added that, while other administrations had also complained about problems of harmful interference originating in the territory of the Administration of Ukraine, the Administration of the United Arab Emirates was the only one that had formally asked that the case be submitted to the Board under RR No. **13.2**. In addition, communication between the two administrations appeared to be completely blocked.

3.77 **Ms Hasanova** endorsed the Bureau's recommendations, adding that the Bureau should be requested to support the administrations' efforts to resolve the problem.

3.78 **Mr Hashimoto** agreed that both administrations should be encouraged to communicate directly.

3.79 **Mr Alamri, Ms Jeanty, Ms Beaumier, Mr Talib, Mr Mchunu, Mr Hoan and Mr Borjón** expressed support for the Bureau's recommendations.

3.80 **Mr Azzouz** also endorsed the Bureau's recommendations and suggested that the Bureau should look at the Administration of Ukraine's assignments in the MIFR, with a view to determining the source of the interference.

3.81 The Board **agreed** to conclude as follows on § 4.4 of Document RRB21-3/4:

“In considering § 4.4 on the harmful interference to the EMARSAT-1G, EMARSAT-5G, YAHSAT and MADAR-52.5E satellite networks from the Administration of the United Arab Emirates, the Board noted the lack of response from the Administration of Ukraine on communication on this

matter since 28 May 2021. The Board encouraged the Administrations of the United Arab Emirates and Ukraine to cooperate and to take all measures to eliminate the harmful interference.

The Board decided to:

- invite the Administration of Ukraine to take appropriate actions to resolve this interference problem and to communicate these actions to the Bureau;
- encourage both administrations to exercise the utmost good will and mutual assistance in the application of the provisions of Article 45 of the Constitution and of Section VI of Article 15 of the Radio Regulations.”

Implementation of Nos. 11.44.1, 11.47, 11.48, 11.49 and 9.38.1, Resolution 49 (Rev.WRC-19) and No. 13.6 of the Radio Regulations (§ 5 of Document RRB21-3/4)

3.82 The Board **noted** § 5 of Document RRB21-3/4.

Coordination meeting between the Administrations of Bahrain and the Islamic Republic of Iran (§ 6 of Document RRB21-3/4)

3.83 **Mr Vassiliev (Chief TSD)**, drawing attention to § 6 of the Director’s report, said that the Bureau had communicated the relevant conclusions of the Board’s previous meeting to the Administrations of Bahrain and the Islamic Republic of Iran. In a subsequent communication copied to the Bureau, the Administration of the Islamic Republic of Iran had claimed that it was not mandatory under the GE84 Regional Agreement to take terrain elevation data into account, and the Bureau understood that the administration preferred not to use terrain propagation models in its coordination efforts. The Bureau had not received any formal submissions from the administrations, which continued consulting on the methodology for coordination of FM assignments of the Bahraini Administration.

3.84 The **Chairman** proposed that the Board should conclude on § 6 of Document RRB21-3/4 as follows:

“The Board considered § 6 on the FM frequency coordination meeting between the Administrations of Bahrain and the Islamic Republic of Iran and noted that the two administrations were attempting to agree on the methodology to be used for the coordination. The Board encouraged the two administrations to continue to cooperate in order to resolve the coordination issues as soon as possible. The Board instructed the Bureau to continue to provide assistance to the two administrations in their coordination efforts.”

3.85 It was so **agreed**.

Review of findings for frequency assignments to non-GSO FSS satellite systems under Resolution 85 (WRC-03) (§ 7 of Document RRB21-3/4)

3.86 The Board **noted** § 7 of Document RRB21-3/4.

Progress of the work on Resolution 559 submissions (§ 8 of Document RRB21-3/4)

3.87 **Mr Vallet (Chief SSD)**, introducing § 8 of Document RRB21-3/4, said that, in addition to the positive development underscored by the Director concerning the Administrations of Papua New Guinea and Madagascar, a number of Part A networks had been cancelled thus reducing the risk that they might have a negative impact on the EPM of Resolution **559 (WRC-19)** submissions. Working Party 4A having also expressed interest in the implementation of Resolution **559 (WRC-19)**, the Bureau had submitted a progress report on implementation and coordination (Document 4A/404), which contained, inter alia, information on possible mechanisms for coordinating Resolution **559** submissions.

3.88 **Mr Alamri** thanked the Bureau for the actions taken in implementing the decisions of the Board and administrations for cooperating with the Bureau in regard to recommendations to facilitate the implementation of Resolution **559 (WRC-19)**. He stressed that continued support had to be provided by the Bureau to the notifying administrations of Resolution **559** submissions. That would allow coordination of their satellite network filings to be finalized before WRC-23 and for the conference to consider inclusion of their new BSS assignments in replacement of their degraded national assignments in Appendix **30 & 30A** Plans, according to additional temporary regulatory measures attached to the resolution.

3.89 **Mr Hashimoto** and **Mr Hoan** expressed appreciation to the Administration of Papua New Guinea for agreeing to the Bureau's proposal.

3.90 The Board **agreed** to conclude on § 8 of Document RRB21-3/4 as follows:

“In considering § 8 on the progress of work on Resolution **559 (WRC-19)** submissions, the Board noted with satisfaction the continued successful implementation of the procedures. The Board expressed its:

- gratitude to the Bureau for its actions in this matter and the support provided to the administrations;
- appreciation to administrations that were contributing to the better protection of satellite networks and new frequency assignments.”

Submissions under the provisions of Resolution 35 (WRC-19) (§ 9 of Document RRB21-3/4)

3.91 **Mr Vallet (Chief SSD)** introduced § 9 of the Director's report, which provided a status report on the various submissions under Resolution **35 (WRC-19)**. Drawing attention to the table, he said that as of 31 August 2021, the Bureau had received 17 submissions and published six special sections. Three satellite systems had completed their deployment. A number of systems had completed their first milestone and the list was likely to increase. The Board would continue to receive regular reports on the matter from the Bureau and might have to review certain cases in 2023 after expiry of the next milestone period in accordance with Resolution **35**.

3.92 **Mr Hashimoto** noted that such information would become more important as the number of administrations interested in non-GSO satellite networks increased.

3.93 The Board **agreed** to conclude on § 9 of Document RRB21-3/4 as follows:

“The Board noted § 9 on the submissions under the provisions of Resolution **35 (WRC-19)**, that the process was at its initial stage of implementation and that the number of systems was rapidly increasing.”

Frequency assignments retained past the regulatory deadlines and awaiting a request from the administration to be submitted to the Board (§ 10 of Document RRB21-3/4)

3.94 **Mr Vallet (Chief SSD)** said that § 10 of the Director's Report had been included pursuant to the Board's request to be kept informed of such cases. It contained information regarding some frequency assignments to the CHINASAT-D-125E and CHINASAT-D-163E satellite networks that had expired on 25 February 2021, but which the Bureau had indicated it would retain until the end of the current Board meeting. The submission by the Administration of China concerning the CHINASAT-D-125E and CHINASAT-D-163E satellite networks (Document RRB21-3/8) would be taken up by the Board later in the meeting.

3.95 Having considered in detail the Report of the Director as contained in Document RRB21-3/4 and Addenda 1 to 5, the Board **thanked** the Bureau for the extensive and detailed information provided.

4 Rules of Procedure (Documents RRB21-3/1(RRB20-2/1(Rev.4)), RRB21-3/5; Circular Letter CCRR/67)

List of rules of procedure (Documents RRB21-3/1(RRB20-2/1(Rev.4)), RRB21-3/5; Circular Letter CCRR/67)

4.1 Following a meeting of the Working Group on the Rules of Procedure on Wednesday 13 and Thursday 14 October, its Chairman, **Mr Henri**, reported that the group had reviewed the draft new rules concerning the simultaneous bringing into use of multiple geostationary satellite networks with a single satellite set out in Annex 4 to Document CCRR/67, taking account of the comments made by the Administration of the United States in Document RRB21-3/5. The working group had agreed to include reference to “bringing back into use” and RR No. **11.49** in the text as proposed by that administration. The group had also considered the application of the draft rule of procedure in the case of space stations on a single satellite located at less than 0.5° from two different nominal positions of two satellite networks to be used for bringing into use, bringing back into use or continuing use of frequency assignments under the notified characteristics of both satellite networks under RR Nos. **11.44**, **11.44B**, **11.49** or **13.6**. After an extensive discussion, the group had agreed that such an approach should be authorized for frequency assignments with non-overlapping bandwidths. Consequently, it had proposed a change in the wording of the last paragraph and agreed that the modified draft rule of procedure should be circulated to administrations in a CCRR for comment.

4.2 The working group had updated the list of proposed rules of procedure set out in Document RRB21-3/1(RRB20-2/1(Rev.4)) to reflect the decisions taken by the Board at the present meeting.

4.3 The working group had held extensive discussion on preliminary draft revised rules of procedure for the notification of frequency assignments to stations located in disputed territories. It thanked the Bureau for updating the text of the draft rule of procedure on Resolution **1 (Rev.WRC-97)**, in particular by specifying a standard way of processing notifications, providing a description of the situation for regional agreements and, with respect to the section on space services, finalizing items concerning the coordination of earth stations involving disputed territories. It had discussed at length certain specific aspects, including the treatment of objections and comments, artificial platforms at sea, the status of some territories and the application of the regulatory procedure for submissions under Articles **9** or **11** and plan modification procedures. The working group had agreed on the substance of the text of the draft rules of procedure on Resolution **1**. It had instructed the Bureau to refine the language accordingly and to have the draft text reviewed by the ITU Legal Department before consideration by the Board at the 89th meeting and circulation to administrations for comment.

4.4 The working group had also had a very interesting discussion on the treatment of modifications of assignments already recorded under RR Nos. **11.43A** and **11.43B** based on three questions from the Bureau. In reply to the first question, as to whether the difference in wording of the rules of procedure on Nos. **9.27** and **11.43B** of the Radio Regulations should imply a difference in processing by the Bureau, the group had considered that there should be no difference. In reply to the second, it had agreed that C/I ratios were one element to be taken into account in calculating the increase in the probability of harmful interference, but that other methods were acceptable for non-geostationary satellite systems, including those derived from Working Party 4A and others proposed by the notifying administration and agreed by the Bureau when conducting its examination. In response to the third, the group had agreed that the introduction of a new form of coordination by a WRC should not automatically lead to a new date of receipt. Although that question had been prompted by discussions at WRC-19 on the Q/V-band, the rules of procedure should be generic and should not apply to a specific frequency range. If administrations had questions concerning the Q/V-band, in particular the modification of recorded frequency assignments before WRC-19 and the relationship with the rules of procedure, the Board would be pleased to consider specific cases should

they arise in the future. The working group had instructed the Bureau to prepare the necessary draft modifications to the rules of procedure concerning Nos. **11.43A** and **11.43B** of the Radio Regulations taking account of the group's responses for circulation to administrations for comment and review by the Board at its next meeting.

4.5 The working group thanked the Bureau for its excellent work and assistance, including on the highly sensitive issue of the notification of frequency assignments to stations located in disputed territories.

4.6 The **Chairman**, having thanked Mr Henri for his work as the Chairman of the Working Group on the Rules of Procedure, proposed that the Board should conclude as follows:

“Following a meeting of the Working Group on the Rules of Procedure, under the chairmanship of Mr Y. Henri, the Board decided to accept the principles proposed by the Working Group for the modification of the rules of procedure on the treatment of modifications under RR Nos. **11.43A** and **11.43B** to frequency assignments already recorded in the MIFR, taking into account the comments from the Board members. Consequently, the Board instructed the Bureau to circulate these draft rules of procedure to the administrations for comments for consideration by the Board at its 89th meeting.

The Board further decided to update the list of proposed rules of procedure in Document RRB21-3/1 taking into account:

- the rules of procedure in CRR/67 that were adopted at the meeting;
- the decisions on the draft rules of procedure on the simultaneous bringing into use of multiple geostationary satellite networks with a single satellite;
- the draft rules of procedure on modifications under RR Nos. **11.43A** and **11.43B**;
- the draft rules of procedure on Resolution **1 (Rev.WRC-97)**.

The Board instructed the Bureau to publish the updated version of the document on the website.

On the issue of frequency assignments to stations located in disputed territories, the Board thanked the Bureau for the updated text of the draft rules of procedure on Resolution **1 (Rev.WRC-97)**. Following thorough discussions, the Board agreed on the elements to be included in the draft rules of procedure and instructed the Bureau to revise the text of the draft rules of procedure on Resolution **1 (Rev.WRC-97)** accordingly and to have the draft rules of procedure reviewed by the ITU Legal Department before consideration by the Board at its 89th meeting.”

4.7 It was so **agreed**.

Draft rules of procedure and comments from administrations (Document RRB21-3/5; Circular Letter CRR/67)

4.8 The **Chairman** drew attention to Circular Letter CRR/67, which contained draft new and modified rules of procedure circulated to administrations for comment. Document RRB21-3/5 contained in annex comments from the Administration of the United States on the proposed new rule of procedure for the simultaneous bringing into use of multiple geostationary satellite networks with a single satellite (Annex 4 to Circular Letter CRR/67).

MOD rules of procedure on RR Nos. 5.418C, 5.485 and 11.31 (Annex 1 to Circular Letter CRR/67)

4.9 **Approved**, with effective date of application immediately after approval.

ADD rule of procedure on submission of notification information of a non-geostationary satellite system before the publication of the coordination request of that system (Annex 2 to Circular Letter CCRR/67)

4.10 **Approved**, with effective date of application immediately after approval.

MOD rule of procedure on RR No. 9.11A – Table 9.11A-1 (Annex 3 to Circular Letter CCRR/67)

4.11 The modification to Table 9.11A-1 in the rule of procedure on RR No. **9.11A** was **approved**, with effective date of application immediately after approval.

ADD rule of procedure for the simultaneous bringing into use of multiple geostationary satellite networks with a single satellite (Annex 4 to Circular Letter CCRR/67)

4.12 The **Chairman**, recalling that the working group had decided to accept the changes proposed by the Administration of the United States in Document RRB21-3/5 but had proposed additional modifications concerning bandwidth overlap, suggested that the Board should instruct the Bureau to circulate the text of the draft rule of procedure with the new changes introduced by the working group to administrations for comment, with a view to its approval at the Board's 89th meeting.

4.13 Following a question from **Ms Beaumier** on how best to proceed, the **Chairman** said that, as the effective date of application was immediately after approval, it would be preferable to consult administrations on the additional modifications introduced and approve the draft rule of procedure once, rather than approving one version at the current meeting and a different version at a subsequent meeting. **Mr Botha (SGD)** pointed out that the Board had taken such an approach in the past.

4.14 The **Chairman** added that an explanatory note might be attached drawing attention to the relevant paragraph in the summary of decisions, so that administrations could see why the draft rule of procedure was being recirculated and what their comments should address.

4.15 The Board **agreed** to that approach.

SUP rule of procedure on Annex 2 to Appendix 4 related to *resolves* 1.4 of Resolution 156 (WRC-15) (Annex 5 to Circular Letter CCRR/67)

4.16 **Approved**, with effective date of application immediately after approval.

ADD rule of procedure on Resolution 32 (WRC-19) (Annex 6 to Circular Letter CCRR/67)

4.17 **Approved**, with effective date of application 23 November 2019.

SUP rule of procedure on Resolution 49 (Rev. WRC-15) (Annex 7 to Circular Letter CCRR/67)

4.18 **Approved**, with effective date of application immediately after approval.

ADD rule of procedure concerning the extension of the regulatory time-limit for bringing into use satellite assignments (Annex 8 to Circular Letter CCRR/67)

4.19 **Approved**, with effective date of application immediately after approval.

MOD rule of procedure concerning Part C on internal arrangements and working methods of the Radio Regulations Board (Annex 9 to Circular Letter CCRR/67)

4.20 **Approved**, with effective date of application immediately after approval.

4.21 The **Chairman** proposed that the Board should conclude as follows:

“The Board discussed the draft rules of procedure circulated to administrations in Circular Letter CCRR/67, along with the comments received from administrations as contained in Document

RRB21-3/5. The Board adopted these rules of procedure with modifications as contained in the Attachment to this summary of decisions.

After considering the draft rules of procedure for the simultaneous bringing into use of multiple geostationary satellite networks with a single satellite, the Board decided to include the specific reference to bringing back into use and RR No. **11.49** as proposed by the Administration of the United States of America. The Board also decided to add in the draft rules of procedure the possibility for space stations on a single satellite located at less than 0.5° from two different nominal positions of two satellite networks to be used for bringing into use, bringing back into use or continuing use of frequency assignments with non-overlapping bandwidths of both satellite networks under RR Nos. **11.44**, **11.44B**, **11.49** or **13.6**. Consequently, the Board decided that the additional modifications introduced during the Board meeting would require consultation with the Member States and instructed the Bureau to circulate the draft rules of procedure to the administrations for comments for consideration by the Board at its 89th meeting.”

4.22 It was so agreed.

5 Issues and requests relating to the extension of regulatory time-limits to bring or to bring back into use frequency assignments to satellite networks (Documents RRB21-3/2, RRB21-3/3, RRB21-3/6, RRB21-3/7, RRB21-3/10, RRB21-3/11 and RRB21-3/DELAYED/2)

Submission by the Administration of Papua New Guinea requesting the extension of the time-limit to bring back into use the frequency assignments to the NEW DAWN satellite network (Document RRB21-3/2)

5.1 **Mr Loo (Head SSD/SPR)** introduced Document RRB21-3/2, which contained a request from the Administration of Papua New Guinea for the extension of the regulatory time-limit to bring back into use the frequency assignments to the NEW DAWN 25 satellite network until 31 December 2024 because of a *force majeure* event. The filing had been brought into use with the Intelsat 29E (IS-29e) satellite, which had begun operations at 50°W on 21 March 2016. The satellite had operated at that location until 7 April 2019, when it had suffered an unexpected in-orbit catastrophic total failure, likely caused by an external object. While the operator had relocated in-orbit assets to 50°W and brought back into use certain frequency assignments in the C and Ku bands, the frequency assignments included in the NEW DAWN 25 filing were not on the assets moved to that orbital position and remained suspended; the time-limit for bringing them back into use was 7 April 2022. At the end of 2020, the operator had signed a contract with Airbus for the construction of two satellites, one of which would be located at 50°W, would have the capability to operate the frequency assignments of the NEW DAWN 25 filing and was contracted to be delivered in October 2023. Confirmation from Airbus was provided in the attachment. Although the operator had not yet signed a contract with the launch vehicle provider, the satellite was expected to be in orbit at 50°W by the end of 2024. The Administration of Papua New Guinea considered that the case clearly met the conditions to qualify as *force majeure* and that the operator had acted swiftly and in good faith to restore services and replace the IS-29e satellite.

5.2 The **Chairman** observed that an extension of more than two and a half years was being sought. While the in-orbit failure was a *force majeure* event, it was less clear whether the situation with regard to procurement of a replacement satellite could also be attributable to *force majeure*. The details provided, including with regard to the launch, were quite vague.

5.3 **Mr Talib** said that, although the administration had invoked *force majeure*, it had not provided a detailed explanation of the reasons why the satellite would not be delivered to the operator until October 2023, or indicated any problems on the operator or supplier side. Further information

and additional explanations, including on the launch process and the part played by the different stakeholders, were required.

5.4 **Ms Beaumier** said that, as the catastrophic in-orbit failure was not self-induced and irresistible, it clearly satisfied the first two conditions of *force majeure* and that she appreciated the efforts made to relocate a satellite to rapidly restore services in the C and Ku bands. However, it was unfortunate that the Administration of Papua New Guinea had not updated its request to provide additional information demonstrating how all four conditions of *force majeure* had been met, as it had been invited to do by the Board at its last meeting, and to justify the length of the requested extension. For example, it was not clear how the catastrophic failure had made it impossible to meet the time-limit for bringing back into use, and she wondered whether other decisions and delays might also be partly to blame. Furthermore, there was no explanation why it had taken 21 months to sign a contract to replace a four-year-old satellite; no information on the launch service provider that had still to be contracted; and no justification as to why the frequency assignments would be brought back into use more than a year after the expected delivery of the replacement satellite. Without such information, it would be difficult for the Board to determine at the present meeting whether the requested extension was justified, and she agreed that the Administration of Papua New Guinea should be requested to provide additional information and clarification.

5.5 **Mr Hashimoto** expressed sympathy with the Administration of Papua New Guinea and welcomed its efforts to recover the suspended satellite network. While the catastrophic failure could be regarded as a *force majeure* event, the reasons for the duration of the extension were not explained and it was questionable whether the case really qualified as *force majeure*. Before deciding to grant the requested extension of 32 months, the Board required further information, including on why it had taken around 20 months before signing a contract for the replacement satellite, and why the satellite was expected to be in orbit by the end of the second half of 2024 when the contract with the launch vehicle provider had still to be signed.

5.6 **Mr Azzouz** said that, in his view, the Administration of Papua New Guinea and the operator had not made every effort to meet the regulatory deadline for bringing back into use. The administration had not attempted to rely on another satellite and a contract with the launch vehicle provider had still not been signed. Furthermore, there was no relevant evidence to support the statement that the replacement satellite was expected to be in orbit by the end of the second half of 2024. Accordingly, the Board was not in a position to grant the requested extension or to consider that the case qualified as *force majeure*.

5.7 **Mr Hoan** expressed sympathy for the difficulties experienced by the Administration of Papua New Guinea and noted that the relevant filings had been suspended in accordance with the Radio Regulations. Details regarding the expected delivery of the replacement satellite in October 2023 were vague and he failed to understand why an extension until 31 December 2024 was being requested. He was concerned that the failure of a satellite in orbit before the suspension of frequency assignments was assumed to be justification for invoking *force majeure* to request an extension of the time-limit for bringing back into use, and wondered whether other factors, such as manufacturing issues, might also be responsible for the delay. As the reasons for invoking *force majeure* and the duration of the requested extension were not clear, the Board could not accede to the request at the present meeting and should instruct the Bureau to invite the Administration of Papua New Guinea to provide additional information.

5.8 **Ms Jeanty** agreed that much information was missing, as highlighted by Ms Beaumier, and called on the Administration of Papua New Guinea to respond to the points raised.

5.9 **Ms Hasanova**, supporting the views of previous speakers, noted that the Administration of Papua New Guinea had not provided any updated information to the Board. Accordingly, as there

was insufficient information in support of the request, she was not in favour of granting the requested extension.

5.10 **Mr Henri**, endorsing the views of previous speakers, said that based on the information provided, the Board was not able to determine whether the case qualified as a situation of *force majeure*. He noted, in particular, that when the contract had been signed, it would have been evident that the replacement satellite would not have met the bringing-back-into-use date of 7 April 2022, and that no specific efforts appeared to have been made to meet the regulatory deadline with an in-orbit satellite prior to the launch of the replacement satellite. Furthermore, no explanation had been provided for the length of time between the expected delivery of the satellite and its final in-orbit posting, which could give rise to questions about possible use at another orbital position prior to arrival at 50°W. He was not in a position to accede to the requested extension at the current meeting, but noted that the Administration of Papua New Guinea would have an opportunity to provide further information in response to the Board's questions at the 89th meeting, which would take place before the regulatory deadline of 7 April 2022 expired.

5.11 The **Chairman** recalled that the document had been a delayed submission to the Board's 87th meeting and had been added to the agenda of the current meeting. The period between the two Board meetings had given the Administration of Papua New Guinea time to provide further information in support of the requested extension.

5.12 **Mr Borjón** said that he concurred with previous speakers. The unfortunate in-orbit failure on 7 April 2019 had already resulted in the bringing-back-into-use date of 7 April 2022. He failed to see how the Board could grant an extension beyond that date on the grounds of *force majeure* and invited the Administration of Papua New Guinea to provide further clarification in support of its request.

5.13 **Mr Alamri** said that he shared the concerns of other Board members. Recalling RR No. **11.49**, which gave administrations the right to suspend the use of their frequency assignments for three years and which could be used to resolve any such difficulties, he said that the main question to be addressed was whether or not the in-orbit failure in 2019 met the conditions of *force majeure*. While he agreed that it satisfied the first two conditions, the link between the in-orbit failure and the ability of the Administration of Papua New Guinea to meet the April 2022 regulatory deadline was not clear. Accordingly, he agreed with Mr Azzouz and Mr Borjón that based on the information provided the case did not qualify as a situation of *force majeure*, and could not agree to grant the extension at the present meeting.

5.14 **Mr Mchunu** said that, given the insufficient information provided by the Administration of Papua New Guinea, the Board could not accede to the request for extension at the present meeting.

5.15 The **Chairman** proposed that the Board should conclude on the matter as follows:

“The Board carefully considered the submission from the Administration of Papua New Guinea as presented in Document RRB21-3/2. The Board expressed its sympathy with the Administration of Papua New Guinea for the catastrophic in-orbit event that resulted in the total failure of the Intelsat 29e satellite. The Board noted that this submission was a delayed submission to its 87th meeting, during which the Board had indicated that the Administration of Papua New Guinea could benefit by improving its submission with more detail and information, an option that the administration had chosen not to exercise. The Board further noted that:

- the frequency assignments to the NEW-DAWN 25 satellite network had been suspended and could remain suspended until 7 April 2022;
- while the catastrophic event met the first two conditions of a situation of *force majeure*, there was insufficient information provided to demonstrate how the case satisfied the other two conditions;

- there was no information to explain why it was impossible to meet the 7 April 2022 regulatory deadline, for instance with an in-orbit satellite, and to resume operations prior to the launch of the replacement satellite;
- no explanation was provided as to why it had taken 21 months to sign a contract to replace a new satellite that had been in orbit for only three years;
- there was no information on a launch provider, no contract had been signed to date and no explanation was provided to explain how the launch date had been decided;
- no justification was provided as to why the bringing back into use of the frequency assignments would occur more than a year after the delivery of the replacement satellite.

Consequently, the Board was not able to determine whether the case qualified as a situation of *force majeure* and whether the requested period for the extension of the regulatory deadline was fully justified. Therefore, the Board concluded that it was not in a position to accede to the request from the Administration of Papua New Guinea. The Board reiterated that the Administration of Papua New Guinea would need to provide additional information on the issues identified above should it wish to resubmit the request to a future Board meeting.”

5.16 It was so **agreed**.

Submission by the Administration of Malaysia withdrawing its request for the extension of the regulatory time-limit to bring back into use the frequency assignments to the MEASAT satellite network at 148°E (Document RRB21-3/3)

5.17 **Mr Loo (Head SSD/SPR)**, introducing Document RRB21-3/3, said that the request from the Administration of Malaysia for an extension of the regulatory time-limit to bring back into use the frequency assignments to the MEASAT satellite network at 148°E had been discussed at the 86th and 87th meetings of the Board. Unfortunately, the MEASAT-3 satellite had experienced an in-orbit anomaly on 21 June 2021 that prevented it from re-entering service and had since been deorbited. The operator having no other space assets that could be used to bring back into use the frequency assignments concerned, the Administration of Malaysia had decided to withdraw its request.

5.18 **Ms Hasanova** proposed that the Board should note the withdrawal and thank the Administration of Malaysia for its decision.

5.19 **Mr Hashimoto** agreed and expressed the hope that the Administration of Malaysia would be able to recover the satellite service in a revised plan in the near future.

5.20 **Mr Azzouz, Mr Hoan and Mr Borjón** agreed that the Administration of Malaysia should be thanked for its decision to withdraw the request.

5.21 **Ms Beaumier** expressed regret that the satellite service could not be re-established and that the satellite had had to be deorbited. The Administration of Malaysia was to be commended for its efforts to bring the relevant frequency assignments back into use.

5.22 The **Chairman** proposed that the Board should conclude as follows:

“The Board noted the withdrawal of the request from the Administration of Malaysia for the extension of the regulatory time-limit to bring back into use the frequency assignments to the MEASAT satellite network as presented in Document RRB21-3/3. The Board indicated its regrets that it had not been possible to re-establish the service on the MEASAT-3 satellite. The Board thanked the administration for its decision, for its transparency and for sharing the information, and commended the administration for its efforts to bring back into use the frequency assignments to the MEASAT satellite network, as well as its conscientious action to preserve the radio spectrum and orbital positions. The Board wished the Administration of Malaysia and its operator well in their future endeavours.”

5.23 It was so agreed.

Submission by the Administration of Norway requesting the extension of the regulatory time-limit to bring back into use the frequency assignments to the Se-Ka-28W satellite network (Document RRB21-3/6)

5.24 **Mr Loo (Head SSD/SPR)** introduced Document RRB21-3/6, which contained a submission from the Administration of Norway requesting a six-month extension, on the grounds of *force majeure*, of the regulatory time-limit to bring back into use the frequency assignments to the Se-Ka-28W satellite network, from 26 July 2023 to 26 January 2024. The administration had authorized publication of the confidential parts of the submission, according to which construction of the Inmarsat-6-F2 satellite had been substantially delayed by various types of *force majeure* events: COVID-19-related delays associated with the manufacturing facility's closure (two months); manufacturing loading delays caused by the unavailability of physical test resources and test personnel, also as a result of the pandemic (nine months); and various hardware and test challenges (11 months). A further delay of eight months was anticipated, pushing the expected spacecraft delivery date back from 1 April 2021 to 4 February 2023, to which had to be added a 30-day launch campaign. In an annex to the submission, the manufacturer, Airbus Defence and Space, confirmed the delivery date of 4 February 2023.

5.25 The **Chairman** observed that, according to the submission, the Inmarsat-6-F2 satellite had an all-electric orbit-raising propulsion system, which, combined with its large dry mass, resulted in a very long orbit-raising period (approximately 233 days post-launch).

5.26 **Ms Beaumier** said she recognized that the case involved a real project for a satellite that was nearly fully built but she was not convinced that all the delays in the satellite manufacturing process qualified as *force majeure* events, as opposed to being inherent to the complexity of the project: the 11 months of delays relating to hardware and test challenges appeared to have no connection to the pandemic, and the manufacturer indicated in the annex that the delays were due to the COVID-19 pandemic and programmatic/technical issues. Moreover, it was not clear whether the COVID-19-related delays of two and nine months were sequential or overlapping. Given the complexity of the project, contingencies for unforeseen delays were expected to have been built into the programme schedule. She noted that the rationale for the additional eight months of projected delay was quite vague and that, in previous cases, the Board had stated that it was not in a position to project future COVID-19-related delays, which might or might not materialize. Furthermore, the Administration of Norway had not explained why it would take 18 more months to complete testing and prepare for launch, or the difference between the original and revised timeline to complete orbit raising which had changed from four to six months when the manufacturing contract was announced in 2015 to eight months. There was also no information provided on the original and revised launch schedule nor on the selection of a launch provider.

In her view, although the programme had clearly experienced 9 to 11 months of delays that qualified as *force majeure* due to the pandemic, the remaining information provided to justify a six-month extension did not demonstrate that the *force majeure* conditions had been met. For those reasons, the Board could not grant an extension. The current time-limit of 26 July 2023 to bring back into use the frequency assignments gave the Administration of Norway the option of resubmitting the request with new information or clarifications, if and when it should prove necessary to do so, to a future Board meeting.

5.27 **Mr Talib** said that, while some of the arguments presented by the Administration of Norway were clearly related to the COVID-19 pandemic and therefore met the conditions for *force majeure*, such was not the case for the hardware and test challenges. He agreed that it would be useful to have

more information; on the other hand, the extension requested was not very long – six months – and he would therefore be in favour of granting it.

5.28 **Mr Hoan** said that, if the additional future delays of eight months were not taken into consideration, there would be no need for a six-month extension. If the Board was unwilling to grant an extension on the basis of projected future delays, it should review the case once the situation in respect of those delays had been clarified.

5.29 **Mr Azzouz** said that the case could be considered to meet the conditions for *force majeure* on the grounds of the COVID-19 pandemic, because the regulatory time-limit would have been met had the pandemic not caused delays. The extension requested by the Administration of Norway was reasonable and he therefore believed that the Board should grant it.

5.30 **Mr Hashimoto** said that the Board had to differentiate between actual and anticipated delays caused by the COVID-19 pandemic. While the extension requested was not too long, it should be carefully considered in the light of the amount of time actually needed, which in his view had been overestimated by the Administration of Norway.

5.31 **Mr Alamri** agreed with previous speakers that, based on the information provided regarding the new expected spacecraft delivery date confirmed by the satellite manufacturer and taking into account the complexity of the satellite being built, the request for a six-month extension was limited in nature. In his view, the case satisfied the conditions for *force majeure* and the Board could therefore grant the request.

5.32 **Ms Hasanova** said that the manufacturer having confirmed that the delays were related to the COVID-19 pandemic and the extension being limited to six months, the Board should grant the request.

5.33 **Mr Borjón** said that, while the hardware and test challenges might not be directly related to the COVID-19 pandemic, they could easily be an indirect result of it, as the manufacturer might well have experienced COVID-19-related delays in the delivery of hardware. In his view, the submission contained sufficient arguments explaining that the 14 months of delay were attributable to the pandemic and the Board could therefore grant the extension.

5.34 **Mr Henri** agreed with previous speakers that not all the delays in the manufacturing process seemed to be COVID-19-related and that the Board, as in previous similar requests, was not in a position to grant extensions for possible future COVID-19 related delays. The regulatory time-limit of 26 July 2023 to bring back into use the frequency assignments to the Se-Ka-28W satellite network might well be met despite all the indicated delays. Although the Administration of Norway had requested an extension of only a few months, there was also sufficient time until that date for the Administration of Norway to resubmit the request in 2022 or early 2023. He sympathized with the dilemma facing the administration, but considered that the request was premature and that more information was required before the Board could properly assess the case.

5.35 **Ms Jeanty** also considered that not all the arguments presented by the Administration of Norway were COVID-19-related. Moreover, the administration had failed to explain those arguments in detail: why it would take 22 months more to manufacture the satellite or why the new delivery date was in February 2023. It might well make up for the delays experienced in the time remaining until then. In her view, the Board should not grant the request at its current meeting but instead ask the Administration of Norway to provide further information.

5.36 **Mr Mchunu** said that, while the Administration of Norway had presented a breakdown of the delays experienced in its satellite project as a result of the COVID-19 pandemic, it had added several months to cover future delays – which could be over or underestimated. Nevertheless, given that it had requested an extension of only six months, he was in favour of granting it.

5.37 The **Chairman**, noting that the Board members' views diverged and that the Board's decision at the current meeting would have no consequences (the frequency assignments could remain suspended until 26 July 2023), proposed that the Board should conclude as follows:

"The Board considered in detail the submission from the Administration of Norway as contained in Document RRB21-3/6. The Board noted that:

- the case represented a real project and that the satellite was nearly fully constructed;
- the frequency assignments to the SE-KA-28W satellite network had been suspended and could remain suspended until 26 July 2023;
- some delays identified, such as hardware and test challenges, and programmatic and technical issues did not seem related to the impact of the global COVID-19 pandemic and were therefore unrelated to *force majeure*;
- some delays related to *force majeure* were identified, but it was not clear whether they were overlapping or sequential;
- no schedule had been provided for the manufacture and delivery of the satellite;
- no launch operator had been identified and no launch schedule had been provided;
- no explanation had been provided as to why an additional 18 months were required for testing and preparation for launch, given that the satellite was nearly constructed;
- when Airbus announced the contract, a period of 4 to 6 months had been foreseen for orbit raising, but in the request 8 months were foreseen for this purpose;
- it was not in a position to predict the consequences and the future impact of the global COVID-19 pandemic on future project timelines.

Consequently, the Board was not able to identify whether the case contained all the elements to qualify as a situation of *force majeure* and that the requested period for the extension of the regulatory time-limit was fully justified. Therefore, the Board concluded that it was not in a position to accede to the request from the Administration of Norway. The Board observed that the Administration of Norway would need to provide additional information on the issues identified above should it wish to resubmit its request to a future Board meeting."

5.38 It was so **agreed**.

Submission by the Administration of Israel requesting the extension of the regulatory deadline to bring back into use the frequency assignments to the AMS-B2-13.8E and AMS-B7-13.8 satellite networks (Document RRB21-3/7)

5.39 **Mr Loo (Head SSD/SPR)** introduced Document RRB21-3/7 and noted that the Administration of Israel had provided authorization to publish the confidential parts in the submission. The document contained a request from that administration to extend the regulatory deadline to bring back into use the suspended frequency assignments to the AMSB2-13.8E and AMS-B7-13.8E satellite networks in the Ka and Ku bands from 16 May 2022 and 13 November 2022 until 31 August 2023 due to a *force majeure* event. Providing background to the case, he said that the Israeli satellite operator, Spacecom, had been working closely with Viasat on the manufacture and deployment of a series of three high-speed broadband satellites. According to the original manufacturing schedule, the construction and testing of the second satellite, to be deployed at 13.8°E, was to have been completed by February 2021, six to eight months after the completion of construction and testing of the first satellite, and with sufficient time to meet the 16 May 2022 bringing-back-into-use deadline. Annex 1 set out the original milestones and schedule. However, the COVID-19 pandemic had had a significant adverse impact on the construction of the satellite and had delayed delivery of the payload, which was now expected in February 2022. Annex 2 contained a

letter from Viasat explaining the impact of the pandemic and mitigation efforts. As shown in Annex 3, the launch service provider, Arianespace, had intended to launch the satellite during the first commercial flight of the new Ariane 64 launcher (the third flight of an Ariane 6 launcher) before 31 December 2021, with enough time to meet the May 2022 regulatory deadline. In mid-2020, however, Arianespace had announced that the COVID-19 pandemic had resulted in a significant delay to the maiden flight of the Ariane 6 launch vehicle, as confirmed by the press release from the European Space Agency in Annex 4, making it impossible to meet the May 2022 deadline. In order to mitigate the impact of that delay, Viasat had changed the launch service provider to United Launch Alliance. The new provider had initially agreed to a launch period during the second quarter of 2022, but owing to the COVID-related delays with the satellite, had requested a launch period in the fourth quarter of 2022 so that all the necessary activities could be undertaken prior to launch, as shown in Annex 5. No launch period was available before the December 2022 – February 2023 time-frame. Owing to the additional time required for orbit raising with the new launch provider, a satellite launched in early 2023 was expected to be in service by August 2023. Annex 6 set out the original and revised project milestones for the construction and launch of the satellite at 13.8°E.

5.40 The Administration of Israel had then gone on to outline how the case met all four conditions of *force majeure*, stating that the COVID-19 pandemic, which was beyond the control of the obligator and unforeseen, had directly impacted the ability of Viasat to manufacture and deliver the payload and of Arianespace to launch in accordance with the initially contracted schedule. Accordingly, the obligator had been prevented from meeting its obligation to bring back into use the frequency assignments to the AMS-B2-13.8E and AMS-B7-13.8E satellite networks before the regulatory deadlines, despite its diligent efforts to mitigate the adverse impact of the pandemic.

5.41 In closing, he noted that the request concerned only the frequency assignments that had been suspended under No.11.49, although there were other frequency assignments to the AMS-B7-13.8E satellite network that had not yet been brought into use, for which the seven-year regulatory deadline would expire on 17 December 2021.

5.42 **Mr Alamri** said that, based on the information provided by the Administration of Israel, it was clear that the COVID-19 pandemic had had a significant impact on the satellite manufacturer and the initially contracted launch provider, and he drew attention to the revised date of payload delivery and the new launch window. Having recalled the Board's conclusion at its 84th meeting that the COVID-19 pandemic met the first two conditions of *force majeure*, he said that the direct causality between the pandemic and the failure of the obligator to meet the bringing-back-into-use deadline had made it impossible for the Administration of Israel to perform its obligation. He was in favour of granting an extension until 31 August 2023.

5.43 **Ms Beaumier** said that, while she agreed that the COVID-19 pandemic had had a significant impact on both the manufacturer and the launch service provider, it was not clear whether it was the direct and only cause of the delays. The case concerned a real project under construction, but no information had been provided on the status of the manufacture of the first two satellites and on whether or not the second satellite would have been on schedule to meet the May 2022 deadline in the absence of the pandemic. According to publicly available information, the payload manufacturer had reported in June 2019 that the launch of the first satellite had already slipped to the end of May 2021 because of problems with a supplier, and that the second satellite would launch between six to eight months later, which implied between late November 2021 and late January 2022, and not in March 2021, as indicated in the original schedule set out in Annex 1 to the document. Assuming that seven months were required for orbit raising and in-orbit testing based on information filed with the regulatory authority licensing the first satellite, the 16 May 2022 deadline could not have been met.

The information provided on the Ariane 6 delays, although helpful to appreciate the need to secure alternate launch options, provided no details or supporting evidence as to when they had actually occurred. While the change of launch provider would clearly impact orbit raising and the launch schedule, she considered that there was not enough detailed information on: the initial and revised project schedules to understand the payload manufacturing timelines, the integration, testing and launch readiness timelines prior to COVID, the launch campaign, duration of orbit raising and in-orbit testing timelines of the satellite, or the quantitative impact on the timelines of the change in the launch provider and on the mitigation measures implemented by the satellite manufacturer. There was also no supporting evidence provided to validate the original timelines. Given the missing details and the discrepancies between the submission and other credible publicly available sources, it would be difficult for the Board to conclude that all four conditions of *force majeure* had been met. Noting the imminent bringing-back-into-use deadline of May 2022, she said that the Board should instruct the Bureau to invite the Administration of Israel to provide further information and clarification.

5.44 The **Chairman** agreed that there was insufficient information on the time required for orbit raising and in-orbit testing. There was also a discrepancy in the length of time between the launch and on-station milestones in the original and revised schedules. It was not clear whether there would be sufficient time to complete all the necessary procedures under the revised schedule.

5.45 **Ms Jeanty** said that, although the requirements for *force majeure* had been well described with supporting documentation from stakeholders and the case had been well presented, information on the rationale for the length of the requested extension was missing. The administration should therefore be invited to submit additional information to the Board's next meeting.

5.46 **Mr Azzouz**, having thanked Ms Beaumier for her analysis, agreed that some information was missing. For example, it was not clear whether the project had originally been on track to meet the regulatory deadline, and no explanation had been given for the rescheduled date of completion of construction and testing. He was not in a position to grant the requested extension at the present meeting and said that the Bureau should be requested to invite the Administration of Israel to submit the missing information justifying its case to the next meeting of the Board.

5.47 **Mr Henri**, recalling the explanations provided about the impact of the COVID-19 pandemic on the manufacture of the satellite, which had resulted in delivery being delayed by 12 months, and on the maiden launch of Ariane 6, as well as the efforts of the operator and manufacturer to meet the deadline and overcome the difficulties, said that the situation, as described, met all the conditions to qualify as a case of *force majeure*. However, it was not clear from the information presented and in the light of publicly available reports on manufacturing delays whether the bringing-back-into-use deadline would have been met in the absence of the pandemic. The Administration of Israel should be requested to provide more detailed information regarding the actual date of availability of the two satellites before the COVID-19 pandemic and a more comprehensive timeline regarding the revised schedule for the second satellite, so that the Board was in a position to take a decision at its next meeting before expiry of the 16 May 2022 regulatory deadline.

5.48 **Mr Borjón** said that the case clearly met some conditions of *force majeure*. While he supported the request, he agreed with other speakers that further information should be provided to the next meeting.

5.49 **Mr Hashimoto** said that the 12-month delay in the delivery of the second satellite as a result of the COVID-19 pandemic might include elements of *force majeure*. However, it was questionable whether subsequent actions, including selecting a new launch provider, had been the best approach to minimize the delay. As things now stood, there were 10 months between the anticipated satellite delivery in February 2022 and the earliest rescheduled launch in December 2022. In its decision, the Board should consider whether the best approach had been taken in establishing the launch schedule

and if the duration of the requested extension was appropriate. Sufficient information should be provided to enable the Board to clarify those points.

5.50 **Mr Talib** said that, while certain aspects of the case clearly met the conditions of *force majeure*, others were less clear. He joined other speakers in requesting additional information and agreed that the Board should take its decision at a subsequent meeting.

5.51 **Mr Hoan** said that, although the Administration of Israel had provided detailed information on the satellite manufacturer and efforts to find an alternative launch provider, it should be requested to provide further explanations, including on the delays, in time for the Board's next meeting.

5.52 **Mr Mchunu** said that the information provided was insufficient for the Board to take a decision at the present meeting and that there would be no harm in deferring the decision until the 89th meeting. The administration should be requested to provide further information to that meeting.

5.53 **Ms Hasanova** agreed that the Administration of Israel should be requested to provide further information and that a decision on the request should be deferred to the next Board meeting.

5.54 The **Chairman** proposed that the Board should conclude on the matter as follows:

“The Board carefully considered the submission from the Administration of Israel as presented in Document RRB21-3/7. The Board noted that:

- the case represented a real project based on a satellite using electric propulsion;
- the global COVID-19 pandemic had had a significant impact on the manufacturer and launch service provider;
- a case of *force majeure* was invoked due to the impact of the global COVID-19 pandemic but from the information provided, it was not clear that the delays could all be ascribed to the global COVID-19 pandemic;
- no information was provided on the status of the two satellites' construction prior to the global COVID-19 pandemic;
- it was not clear that the 16 May 2022 regulatory time-limit would have been met in the absence of the global COVID-19 pandemic;
- the payload manufacturer had reported in June 2019 that the launch of the first satellite had already slipped to end of May 2021, implying that the second satellite would only be launched between the end of November 2021 and the end of January 2022;
- insufficient information was provided on the initial and revised timelines to understand the payload and satellite manufacturing timelines, the duration of orbit raising and the in-orbit testing of the satellite;
- the launch secured with Arianespace had slipped considerably and the operator had secured alternate launch options;
- no information was provided on the quantitative impact on the timelines of the change in the launch provider and on the mitigation techniques implemented by the satellite manufacturer.

Consequently, the Board concluded that, while the case contained some elements of *force majeure*, there was insufficient information at the present time to determine whether the situation met all the conditions of *force majeure*. Therefore, the Board concluded that it was not in a position to accede to the request from the Administration of Israel. The Board instructed the Bureau to invite the Administration of Israel to provide additional information, including supporting evidence, on the issues identified above to the 89th Board meeting.”

5.55 It was so **agreed**.

Submission by the Administration of France requesting the extension of the regulatory time-limit for bringing into use frequency assignments to the F-SAT-N5-7W satellite network (Document RRB21-3/10)

5.56 **Mr Loo (Head SSD/SPR)** introduced Document RRB21-3/10, in which the Administration of France requested a five-month extension of the regulatory time-limit for bringing into use certain frequency assignments (listed in the document) to the F-SAT-N5-7W satellite network, to 26 October 2022, on the grounds of two *force majeure* events: the COVID-19 pandemic and a flood at the manufacturer's premises (described in detail in the annexes to the document). Those two events had resulted in the launch window slipping to between 15 April and 15 August 2022. The extension would encompass a two-month margin for the new launch window, a one-month schedule risk requested by the manufacturer, and a standard one-month launch margin. The administration had authorized the publication of the confidential information in the submission.

5.57 **Ms Beaumier** considered that the request satisfied the conditions for *force majeure* due to the pandemic and the flood. The manufacturer had provided a clear and convincing description of the nature and impact of the delays and the efforts made to reduce them, which suggested to her that the remaining delays made it impossible for the operator to meet the regulatory deadline. The submission was well presented and provided all the information that the Board needed to reach a decision, although she would have preferred it if each of the four *force majeure* conditions had been addressed separately. She was in favour of granting an extension until the end of the new launch window, 15 August 2022, so as to be consistent with the Board's decisions in other recent cases. If additional delays occurred that were beyond the control of either the operator or the administration, the Administration of France could come back to the Board, which was not in a position to speculate on future additional delays. The launch window was large enough to accommodate some additional delays.

5.58 **Mr Alamri** said that, according to the information provided by the Administration of France, supported by letters from both the satellite manufacturer and the launch service provider, the two events of the COVID-19 pandemic and a flood at the manufacturer's premises causing the delays had had a direct impact on satellite delivery and launch. In his view, the request satisfied all the conditions for *force majeure* and he therefore supported an extension of the regulatory time-limit for bringing into use the related frequency assignments of F-SAT-N5-7W satellite network to 26 October 2022.

5.59 **Mr Hoan** agreed that the request satisfied the conditions for *force majeure* and was therefore in favour of extending the regulatory time-limit for bringing into use the frequency assignments indicated by the Administration of France.

5.60 **Mr Talib** said that it was clear from the submission and its annexes that all the conditions for *force majeure* were met; he therefore considered that the Board should grant the request for an extension to 26 October 2022, there being little difference between that date and the end of the launch window.

5.61 **Ms Jeanty**, observing that the information in the submission was well presented but somewhat lacking in detail, noted that the request for a five-month extension included a two-month contingency; the Board had not agreed to such contingencies in previous cases. However, the project was on a tight schedule and a contingency might in that case be justified.

5.62 **Mr Borjón** agreed that the Administration of France had presented the case well. The COVID-19 pandemic and the flood were clearly contributing *force majeure* factors and the Board should therefore grant an extension. The date of 26 October 2022 appeared reasonable and kept the project to a tight schedule. It was difficult to imagine what the Board would do if the deadline of 15 August 2022 was not met; the time-limit of 26 October 2022 expressed the usual margin of tolerance in such cases.

5.63 **Mr Azzouz** said that it was clear from the documents that there had been no options for mitigating the risk of missing the deadline and that the *force majeure* conditions were met. The Board should therefore grant the extension as requested by the Administration of France to 26 October 2022.

5.64 **Ms Hasanova** said that the delivery schedule provided by the Administration of France had clearly been affected by the COVID-19 pandemic and the flood. She therefore agreed that the Board should grant the extension.

5.65 **Mr Mchunu** considered that the Board had all the information it needed to grant an extension, which he believed should run to 26 October 2022, for the reasons put forward by Ms Jeanty and Mr Borjón.

5.66 **Mr Hashimoto** endorsed that view and agreed that the Board should grant the extension requested, which might include some extra margin for the launch.

5.67 The **Chairman** pointed out that, in the past, the Board had not made allowances for schedule risks; however, it also made its decisions on a case-by-case basis. It might consider making such an allowance in the present case on the grounds that the period of time involved was short and that the administration might be obliged to resubmit the case if the deadline of 15 August 2022 was not met. It might save time to grant an extension to 26 October 2022 at the present meeting.

5.68 **Ms Beaumier** agreed that the Board considered every case on its merits. That being said, if it decided to grant an extension to 26 October 2022, it should explain the rationale for its decision and how the current case differed from past ones. After all, all satellite projects faced schedule risks and possible launch delays. While it was true that the extension involved only a small amount of time, the Board had considered such requests in the past and had not made allowances for contingencies.

5.69 **Ms Jeanty** agreed that the Board should formulate its conclusion with care and explain why it allowed a two-month contingency in the current case, should it decide to do so. One possible reason was that the launch schedule was very tight.

5.70 **Mr Borjón**, noting that all project planners endeavoured to build some tolerance into their timelines, considered that while 15 August 2022 represented a reasonable deadline, the date of 26 October 2022 allowed a margin of tolerance in what the Board had acknowledged was a tight schedule.

5.71 The **Chairman** observed that, while Annex 1 to the document referred to a one-month residual schedule risk, it also stated that the satellite would be in position at the latest by 12 July 2022, which was one whole month before the end of the launch window of 15 August 2022. Annex 1 further stated that the satellite would take 11 days to reach its geostationary orbital position at 10.25°W, where it would undergo tests for 21 days. It would then take four more days to drift to 7°W. Added together, that amounted to 36 days. If those 36 days were counted from the end of the launch window, then an extension to 20 September 2022 was justified.

5.72 **Ms Beaumier** agreed with those calculations and that approach, given that a 15 August 2022 deadline corresponding to the end of launch window would assume that the launcher would be ready at the same time as the satellite and that the frequencies would be brought into use by 12 July 2022, leaving a one-month margin for any potential launch problem. A launch delay of more than one month was unlikely to be the fault of the operator and would qualify as a *force majeure* event, in which case the Administration of France could resubmit the request to the Board.

5.73 **Mr Azzouz** and **Mr Alamri** expressed support for the Chairman's mathematical approach to the case.

5.74 The **Chairman** proposed that the Board should conclude as follows:

“The Board considered in detail the submission from the Administration of France as contained in Document RRB21-3/10. The Board noted that:

- the case was the result of two *force majeure* events, i.e. flooding of the premises of the satellite manufacturer and the impact of the global COVID-19 pandemic;
- evidence was provided that the regulatory deadline of 26 May 2022 would have been met in the absence of the *force majeure* events;
- the satellite manufacturer provided information on measures taken to mitigate the impact of the *force majeure* events to the minimum, but that some delays remained that could not be further reduced;
- the requested date of 26 October 2022 for the extension of the regulatory time-limit to bring into use the frequency assignments to the F-SAT-N5-7W satellite network included contingencies for possible additional delays that could not be forecast and taken into account;
- the project schedule for the delivery of the satellite did not include orbit raising, in-orbit testing and drifting to the operational orbital position.

Based on the information provided, the Board concluded that the case met all the conditions to qualify as a situation of *force majeure*. Consequently, the Board decided to accede to the request from the Administration of France to grant an extension to the regulatory time-limit to bring into use the frequency assignments to the F-SAT-N5-7W satellite network to 20 September 2022.”

5.75 It was so agreed.

Submission by the administration of Bulgaria requesting the extension of the regulatory time-limit to bring into use the frequency assignments to the BALKANSAT AP30B satellite network (Documents RRB21-3/11 and RRB21-3/DELAYED/2)

5.76 **Mr Wang (Head SSD/SNP)** introduced Document RRB21-3/11, which contained a submission from the Administration of Bulgaria requesting the extension of the regulatory time-limit to bring into use the frequency assignments to the BALKANSAT AP30B network. In order to improve the telecommunication infrastructure of Bulgaria, the administration planned to bring into use its national allotment in the FSS Plan in Appendix **30B**. It had submitted to the Bureau the Part A information for the conversion of an allotment into an assignment in accordance with § 6.1 of Article 6 of Appendix **30B** on 2 June 2014. As the conversion was within the envelope characteristics of the initial allotment, no coordination was required. Following the Bureau’s subsequent examination of the Part B submission, the frequency assignments to the BALKANSAT AP30B network had been entered in the List on 24 November 2015. Notification for the network had been received by the Bureau and would be published shortly. The Administration of Bulgaria indicated that its efforts to bring into use the frequency assignments by 2 June 2022 had been adversely impacted by the COVID-19 pandemic. The repositioning of the gap-filler Eutelsat HOTBIRD 13 E satellite to bring into use the frequency assignments had been conditional on the launch during the first semester in 2021 of two replacement satellites of Eutelsat, which had been delayed because of COVID-19-related disruptions to the Ariane 6 launcher. The administration considered that the impossibility of meeting the bringing-into-use date of 2 June 2022 was the direct result of an uncontrollable chain of events driven by the COVID-19 pandemic and qualified as *force majeure*. The Administration of Bulgaria was requesting a 12-month extension until 2 June 2023, noting that no other administration would be affected as the assignments were within the envelope of the national allotment. If the extension was not granted, the assignment would have to be reinstated as an allotment and the conversion process would have to be repeated. Given the reported backlog for processing Appendix **30B** submissions, it would be too late for the administration to meet its objectives and fulfil its negotiated obligations.

5.77 Document RRB21-3/DELAYED/2 had been provided by the Administration of Bulgaria in response to an electronic communication from Eutelsat. It considered that parameters of cooperation between Balkansat and Eutelsat had been agreed in binding correspondence and that an agreement had been reached for the use of an in-orbit satellite of Eutelsat. Accordingly, Eutelsat's request that the Administration of Bulgaria withdraw its request or delete any reference to Eutelsat's satellites was unjustified.

5.78 In closing, he noted that the case was different to other requests for extension of the regulatory time-limit for bringing into use. The BALKANSAT AP30B satellite network was using the frequency resource in the Appendix 30B Plan and its right to do so had been derived from the space plan, not from coordination. The only limitation was the need to follow the procedure set out in Appendix 30B. If the Board did not agree to grant the extension, the Administration of Bulgaria would have to reinstate the allotment, and then would once again have to convert the allotment into assignments, entailing an administrative burden for the administration and the Bureau. Furthermore, in accordance with Council Decision 482 (modified 2020), the conversion of an allotment into a frequency assignment within the envelope characteristics of the initial allotment was not subject to cost-recovery charges.

5.79 The **Chairman** suggested that the case might relate less to *force majeure* and more to the fact that the relevant provisions of Appendix 30B had not been reviewed thoroughly enough in the past. Although such cases were rare, he understood that they had occurred before. Recalling the objective of the procedures in Appendix 30B, he said that the Board might wish to propose some changes to the relevant provisions in its report under Resolution 80 (Rev.WRC-07) to WRC-23.

5.80 **Ms Beaumier** said it was well known that Ariane 6 had experienced a number of delays that would qualify as *force majeure* and would impact the ability of the Administration of Bulgaria to finalize agreements and secure a gap-filler satellite. That said, the submission was not detailed enough for the Board to consider the request as a case of *force majeure* and to justify a 12-month extension. She agreed that the case had to do less with *force majeure* and more with an inconsistency in Appendix 30B. Indeed, if the intent of the Plan was to guarantee access to frequency assignments for ever, she wondered whether past conferences had really sought to establish a regulatory deadline for bringing into use frequency assignments from the conversion of allotments without any modification or with modifications within the envelope of the allotment characteristics. Maintaining the frequency assignments in the List would not impact the rights of other administrations. The only consequence of removing them would be to increase the burden on the administration and Bureau, which appeared to contradict the spirit and intent of Article 1 of Appendix 30B. It could also be perceived as an obstacle for administrations seeking to convert their allotments. The regulatory deadline might therefore be derived, not from the time-limit specified in Article 6, but from the date provided in the notification filing. The Board should include the issue and any possible modifications to Articles 6 and 8 of Appendix 30B in its Resolution 80 report to WRC-23 and should, pending consideration and decision by the conference, instruct the Bureau to maintain in the List the frequency assignments to the BALKANSAT AP30B satellite network.

5.81 **Mr Henri** observed that the HOTBIRD 13 E gap-filler satellite foreseen to bring into use the frequency assignments to the BALKANSAT AP30B satellite network would be 16 years old by June 2022, which raised questions regarding its capability for continuing operation and its soon-to-come end of life. The Administration of Bulgaria had not provided information on the plan to ensure the continued use of the frequency assignments, either by procuring a new satellite or identifying a suitable in-orbit satellite with a longer lifespan. Furthermore, the administration had failed to justify the 12-month extension request up to June 2023. Notwithstanding those uncertainties, Document RRB21-3/DELAYED/2 raised some doubts about a potential agreement between Balkansat and Eutelsat and about the overall approach presented. Recalling §§ 6.33 i) and c) of Article 6 of

Appendix **30B**, he said that if the frequency assignments were cancelled, the regulatory impact would be minimal as the allotment would be reinstated with the same orbital location and technical parameters of the cancelled frequency assignments, with the service area restricted to the national territory of Bulgaria. He would therefore not be in a position to accede at that stage to the request on the basis of *force majeure* due to the COVID-19 pandemic. However, he agreed that the case could be considered from a different perspective. Reinstatement of the allotment and resubmission would be of a purely administrative nature not requiring coordination with other satellite networks but would entail an additional administrative burden for both the administration and the Bureau. The only important drawback for the Administration of Bulgaria would be the time lost with the reinstatement process and the other commitments that the administration had had for the implementation of project. The Appendix 30B orbit/spectrum resources and access were allocated to the Administration of Bulgaria by a WRC, which was different from resources and access secured through a coordination procedure (first-come, first-served basis) for non-plan services or in the AP30B Plan for an additional system or for the conversion of an allotment into an assignment with modification to the characteristics which were beyond the envelope of the characteristics initially included in the allotment. Recalling § 1.2 of Article 1 of Appendix **30B**, which indicated that the procedures prescribed in Appendix **30B** should in no way prevent the implementation of frequency assignments in conformity with the national allotments of the Plan, he said that the conversion proposed by the Administration of Bulgaria was within the envelope characteristics of the initial allotment and consistent with that provision. However, if the administration had to reapply the provisions of Article 6, it might be construed that the procedures in Appendix **30B** could prevent the implementation of frequency assignments in conformity with the national allotments of the Plan. That obviously was not the intent of § 1.2 of Article 1, and consideration should be given to rectifying that shortcoming. Modifications might be proposed to Article 6 of Appendix **30B** to the effect that conversion of an allotment without any modification or with modification within the envelope of the characteristics of the initial allotment should not be subject to any time-limit for bringing into use and should benefit from immediate treatment by the Bureau. The Board should consider including the matter in its report to WRC-23 under Resolution **80**. Meanwhile the Board should instruct the Bureau to continue taking into account the BALKANSAT AP30B satellite network while processing other satellite networks and to retain the frequency assignments in the List until the end of WRC-23. The Board might, with the assistance of the Bureau, also wish to suggest in its report to WRC-23 draft modifications to Article 6 of Appendix **30B** to expedite the work of the conference.

5.82 **Mr Hoan** said that he recognized the difficulties faced by the Administration of Bulgaria in bringing into use the frequency assignments to the BALKANSAT AP30B satellite network and acknowledged the impact of the COVID-19 pandemic on many satellite programmes, including BALKANSAT AP30B. However, the Board did not have enough information to conclude that the regulatory deadline of 2 June 2022 would have been met in the absence of the pandemic, and some elements regarding the use of HOTBIRD 13 E as a gap-filler satellite required further explanation. Accordingly, it would be difficult for the Board to accede to the request from the Administration of Bulgaria on the basis of *force majeure*. However, endorsing the views of Ms Beaumier and Mr Henri, he said that the Board might consider the request positively in the light of § 1.2 of Article 1 of Appendix **30B** and in view of the fact that the conversion was within the envelope characteristics of the initial allotment, and thus, in accordance with the Board's conclusion at its 53rd meeting, did not require the agreement of other administrations. Reinstatement and resubmission would not constitute an efficient use of the time and resources of either the Administration of Bulgaria or the Bureau, and a decision to take into account the frequency assignments would not have any impact on other administrations. Recalling No. 96 (Article 14) of the ITU Constitution, he said that the Board had the authority to take a decision. It should instruct the Bureau to retain the frequency assignments in the List and include the matter in its report to WRC-23 under Resolution **80**.

5.83 **Mr Mchunu** endorsed the comments of Ms Beaumier and Mr Henri and agreed that the issue should be included in the Board's Resolution **80** report to WRC-23; a revision of planned band provisions, such as Article 6 of Appendix **30B**, might be required.

5.84 **Ms Jeanty** said that she, too, supported the analysis by Ms Beaumier and Mr Henri. The issue should be included in the report to WRC-23 under Resolution **80**, and the Bureau should be requested to continue to take into account the frequency assignments until that conference.

5.85 **Mr Hashimoto**, noting that the special case related to the conversion of a planned allotment into a frequency assignment without any change in characteristics, said that he agreed with previous speakers. Accordingly, the issue should be included in the Board's Resolution **80** report to WRC-23 with a view to the possible modification of the relevant provisions of Appendix **30B**, and the Bureau should be requested to continue to retain the frequency assignments until the end of WRC-23.

5.86 **Mr Alamri** agreed that the request from the Administration of Bulgaria to extend the regulatory time-limit for bringing into use its converted allotment was a special case. However, based on the information submitted, it was difficult to consider the request as a case of *force majeure*. No evidence had been provided from the launch service provider or the satellite operator demonstrating how the chain of events prompted by COVID-19-related delays concerning Ariane 6 had made it impossible to meet the deadline of 2 June 2022. The case had, however, highlighted a shortcoming with respect to Appendix **30B**. He asked how long it would take for the frequency assignments to be included in the List if the Administration of Bulgaria submitted a new Part A submission. He noted that following such approach would give the Administration of Bulgaria more time to bring into use frequency assignments compared to retaining them until the end of WRC-23

5.87 **Mr Wang (Head SSD/SNP)** said that the time required would depend on the Bureau's processing backlog, which was currently around 12 months but was gradually decreasing. Furthermore, as no coordination was required, the Administration of Bulgaria could submit the Part A and Part B submissions and the notification together. However, reinstatement of the allotment and resubmission presented no advantages for either party and would merely serve to increase the burden on the administration and the Bureau.

5.88 **Mr Henri** said that, although reinstatement would give the Administration of Bulgaria more time to bring into use its national allotment, it would not really be beneficial. More importantly, it would not overcome the existing shortcoming in Article 6 of Appendix **30B**.

5.89 **Mr Borjón** said that he supported the approach proposed by Ms Beaumier and Mr Henri.

5.90 **Ms Hasanova** agreed that the frequency assignments to BALKNASAT AP30B should be maintained until WRC-23 and that the issue should be included in the Board's Resolution **80** report.

5.91 **Mr Talib** said that he concurred with the views of the Chairman and other speakers.

5.92 **Mr Alamri** said that the shortcoming in Appendix **30B** could be resolved by including the issue in the Board's Resolution **80** report.

5.93 **Mr Azzouz** said that, although he did have some sympathy for the request, considerable information was missing from the submission, including on the satellite construction and launch procedures and the agreement with Eutelsat on the gap-filler satellite. There was insufficient information for the Board to accede to the request and he therefore suggested that the decision might be postponed pending finalization of the contract between Eutelsat and the Administration of Bulgaria and provision of all the necessary information. He agreed that the issue should be included in the Board's Resolution **80** report and that the frequency assignments should be retained until the end of WRC-23.

5.94 The **Chairman** proposed that the Board should conclude on the matter as follows:

“The Board considered in detail the submission from the Administration of Bulgaria as presented in Document RRB21-3/11 and also considered Document RRB21-3/DELAYED/2 for information. The Board noted that:

- the Administration of Bulgaria invoked a case of *force majeure* due to the impact of the global COVID-19 pandemic;
- while Ariane 6 had experienced a number of delays as a result of the global COVID-19 pandemic that could be considered as *force majeure*, the submission from the Administration of Bulgaria did not provide sufficient information to consider the request as a case of *force majeure*;
- the requested extension by 12 months of the regulatory time-limit to bring into use the frequency assignments to the BALKANSAT AP30B satellite network was not justified by the information in the submission;
- the Administration of Bulgaria provided no information on any efforts to procure a new replacement satellite for the in-orbit satellite or information on the long-term plan for the continuous use of the frequency assignments to the BALKANSAT AP30B satellite network;
- the intent of the FSS Plan in Appendix **30B** was to grant equitable access to spectrum and orbital resources via national allotments with no expiry date or regulatory deadline;
- the provision § 1.2 of Article 1 to Appendix **30B** indicated that the Appendix **30B** procedures should “in no way prevent the implementation of assignments in conformity with the national allotments of the Plan”;
- the conversion of a national allotment into frequency assignments in conformity with the Plan allotment required no coordination with other administrations;
- should frequency assignments that were in conformity with the Plan allotment not be brought into use before the regulatory time-limit specified in Articles 6 and 8 to Appendix **30B**, then the allotment would have to be reinstated, which would have no impact on other administrations, but would place additional administrative burdens on the notifying administration and on the Bureau.

Consequently, the Board concluded that:

- there was insufficient information to determine whether the request from the Administration of Bulgaria met all the conditions required to be considered as a case of *force majeure*;
- applying a regulatory time-limit to bring into use frequency assignments that were in conformity with the allotment in the Plan from which they had been derived was inconsistent with the purpose of Appendix **30B**.

The Board therefore decided:

- that it was not in a position to accede to the request from the Administration of Bulgaria on the basis of *force majeure* due to the global COVID-19 pandemic;
- to instruct the Bureau to continue taking into account the BALKANSAT AP30B satellite network while processing other satellite networks and to maintain in the List the frequency assignments to the BALKANSAT AP30B satellite network;
- to include the inconsistency related to the conversion of an allotment into assignment(s) without any modification or with modification within the envelope of the characteristics of an allotment in Appendix **30B** and any possible modifications to Articles 6, 7 and 8 of this Appendix in its Report on Resolution **80 (Rev.WRC-07)** to WRC-23.”

5.95 It was so **agreed**.

5.96 The **Director** commended the Board for having decided to include the issue in its report on Resolution **80 (Rev.WRC-07)** and to signal to WRC-23 the need to revise some articles in Appendix **30B**. One of the main duties of the Board was to identify elements to be corrected and improved in the Radio Regulations and its work would be welcomed by the membership. The Bureau fully supported the Board's decision.

6 Submission by the Administration of Qatar requesting a change of the notifying administration for the ESHAILSAT-26E-2 satellite network from QAT/ARB to QAT (Document RRB21-3/9)

6.1 **Mr Wang (Head SSD/SNP)** introduced Document RRB21-3/9, in which the Administration of Qatar requested a change of the notifying administration for the ESHAILSAT-26E-2 satellite network from QAT/ARB to QAT. The Board had discussed a similar request from the Administration of Qatar at its 76th meeting, in 2017, at which it had deemed that it could not accede to the request in the absence of a written agreement from other administrations concerned. It appeared from the document that such an agreement had now been reached: a letter from Arabsat annexed to the submission confirmed that the Arabsat General Assembly had unanimously agreed, with no conditions, to request the Board to change the code of the notifying administration for the ESHAILSAT-26E-2 satellite network from QAT/ARB to QAT. In reply to a question from **Mr Alamri, Mr Azzouz and Mr Talib**, he said that, while the agreement with Arabsat related to the ESHAILSAT-26E-2 and ESHAILSAT-26E-3 satellite networks, it had proven difficult to bring the latter into use within the regulatory eight-year time-limit and the network had been cancelled. The Administration of Qatar therefore requested no action in respect of the ESHAILSAT-26E-3 satellite network.

6.2 **Mr Hoan** recalled that, at the time of the first request, both parties had agreed to the change in notifying administration, but the rule of procedure in force then applied only to networks remaining within an intergovernmental satellite organization. In addition, the Administration of Saudi Arabia had strongly urged the Board to postpone any decision on the matter. The request currently before the Board was consistent with the decision of WRC-19 on requests for a transfer or change of notifying administration (see WRC-19 Document 569) and with Case 2-5 of the rules of procedure related to satellite systems submitted by an administration acting on behalf of a group of named administrations. He was therefore in favour of granting the request.

6.3 **Mr Alamri, Mr Azzouz, Mr Talib, Ms Hasanova, Mr Hashimoto, Mr Mchunu, Mr Henri and Ms Jeanty** all endorsed that point of view.

6.4 **Ms Beaumier** also endorsed that point of view, in particular as the agreement of Arabsat was unanimous and unconditional.

6.5 The **Chairman** proposed that the Board should conclude as follows on the matter:

“The Board carefully considered the submission from the Administration of Qatar as contained in Document RRB21-3/9. The Board noted that:

- a similar request had previously been received at its 76th meeting, during which the Board did not accede to the request on the basis of the Radio Regulations and the Rules of Procedure in force in 2017;
- the Administration of Qatar had provided a signed letter from the Arab Satellite Communications Organization, which agreed with no conditions to the change of the notifying administration for the ESHAILSAT-26E-2 satellite network from QAT/ARB to QAT.

Consequently, the Board concluded that the request from the Administration of Qatar:

- was consistent with the decisions of WRC-19;
- satisfied all the requirements of Case 2-5 of the Rules of Procedure related to satellite systems submitted by an administration acting on behalf of a group of named administrations.

The Board therefore decided to accede to the request from the Administration of Qatar and instructed the Bureau to change the symbol of the notifying administration for the ESHAILSAT-26E-2 satellite network from QAT/ARB to QAT.”

6.6 It was so **agreed**.

7 Submission by the Administration of China requesting recognition of the bringing into use of the frequency assignments to the satellite networks at orbital positions 163°E and 125°E (Document RRB21-3/8)

7.1 **Mr Loo (Head SSD/SPR)** introduced Document RRB21-3/8, in which the Administration of China requested the Board to review the validity of the bringing into use of frequency assignments to the CHINASAT-D-163E, CHINASAT-D-125E and CHINASAT-E-125E satellite networks, and to instruct the Bureau to accept the suspension of those assignments and to continue processing the notification information for the networks. The case concerned consideration of bringing into use under RR No. **11.44**, in particular compliance with RR No. **11.42B.2**. The Administration of China had authorized publication of the confidential parts of the document.

7.2 The frequency assignments to the CHINASAT-D-163E satellite network had been brought into use by the CHINASAT-17 and APSTAR-6 satellites on 25 April 2020, before the seven-year time-limit expired on 25 February 2021. The APSTAR-6 satellite had arrived at its orbital position at 163°E on 9 August 2019 and had operated there for nearly one year and four months. It had been deorbited on 2 December 2020 and had therefore provided services for 220 days since it had been brought into use in accordance with the Radio Regulations. The CHINASAT-17 satellite was in operation from 25 April 2020 to 9 August 2020 and had therefore provided services for 105 days since it had been brought into use in accordance with the Radio Regulations. The Administration of China had informed the Bureau that the frequency assignments had been brought into use by way of a letter on 23 August 2020 and that they had been suspended on 2 February 2021. It had planned to use CHINASAT-17 and APSTAR-6 only for the initial bringing into use and to have the suspended frequency assignments brought back into use by CHINASAT-19, which was currently under construction and planned to be launched in December 2022.

7.3 The seven-year time-limit for bringing into use the frequency assignments to the CHINASAT-D-125E satellite network had also expired on 25 February 2021. The frequency assignments had been brought into use by the CHINASAT-19A (SHIJIAN 20) satellite, from 10 April to 31 December 2020 for some frequency bands, and from 26 September to 31 December 2020 for other frequency bands. The Administration of China had informed the Bureau accordingly by letter on 21 January 2021 and 3 August 2020; it had informed the Bureau of the suspension of the assignments on 5 July 2021. It had submitted the Resolution **49 (Rev.WRC-19)** and Resolution **552 (Rev.WRC-19)** and notification information on 25 February 2021, i.e. after the CHINASAT-19A (SHIJIAN 20) satellite had drifted away from its orbital position at 125°E. The plan was to bring the suspended frequency assignments back into use using the CHINASAT-6D and CHINASAT-26 satellites, which were also currently under construction.

7.4 The situation for the CHINASAT-E-125E satellite network was similar to that of the CHINASAT-D-125E satellite network, except that the seven-year time-limit for bringing into use its frequency assignments would expire on 30 November 2022.

7.5 In the cases of the CHINASAT-D-163E and CHINASAT-D-125E satellite networks, the Bureau had subsequently informed the Administration of China that it considered that the frequency

assignments had not been brought into use before the end of the regulatory period stipulated in RR No. **11.44**, the space station in question having left its orbital position by the time that the notification information was submitted, and that the assignments would therefore be cancelled under RR No. **11.48**.

7.6 According to the Administration of China, the satellites used to bring into use the frequency assignments to the CHINASAT-D-163E and CHINASAT-D-125E satellite networks were supposed to have remained at their planned orbital positions and the notification submitted before the end of the seven-year regulatory period; however, the satellites had encountered insurmountable obstacles, including the risk of collision for the CHINASAT-17 satellites with other satellites at the same orbital position, risk of in-orbit failure of the APSTAR 6 satellite which resulted in it having to be deorbited, difficulty of providing service for the CHINASAT-19A as there were several warnings of it being too close to other operators' satellites, and it had had to be drifted away or deorbited. In the administration's view, both satellite networks had complied with all applicable procedures in the Radio Regulations. In addition, RR Nos. **11.44** and **11.44B.2** did not clearly stipulate that a frequency assignment to a GSO space station with a notified date of bringing into use more than 120 days prior to the date of receipt of the notification information was not to be considered by the Bureau as having been brought into use if a GSO space station with the capability of transmitting or receiving that frequency assignment had been deployed and maintained for a continuous period of more than 90 days, as required by RR No. **11.44B**, but had left the notified orbital position when the notification information was submitted. The Administration of China therefore considered that the frequency assignments to the satellite networks concerned had been validly brought into use. A similar situation existed with regard to the bringing into use of frequency assignments to the CHINASAT-D-115.5E satellite network (a point that the Bureau confirmed).

7.7 The Administration of China had engaged in coordination in respect of all three networks and had reached agreements with numerous administrations, in some cases involving only 1 degree of orbital separation.

7.8 In response to a number of questions and requests raised by several Board members, he subsequently made available to the Board a table indicating the satellites used to bring into use the frequency assignments to the CHINASAT-D-163E, CHINASAT-D-125E, CHINASAT-E-125E and CHINASAT-D-115.5E networks, the date on which the Bureau had been informed, the frequency bands concerned, the date on which the satellites had arrived at and left their orbital positions, their current positions and the date on which the Bureau had received the relevant notification.

7.9 In reply to a question from **Mr Hoan**, he said that, under the rules of procedure, the date of bringing into use the networks had to be provided in a notification submission. If the bringing into use was provisional, it could subsequently be confirmed within 90 days via letters, e-mail or fax. In the present case, informing the Bureau of the bringing into use of the frequency assignments to those satellites networks in letters was a misunderstanding of the rules on the part of the Administration of China.

7.10 The **Chairman** thanked the Bureau on behalf of the Board members for very quickly making available a table containing all relevant information.

7.11 **Mr Henri**, referring to the Rule of Procedure on RR No. **11.44**, observed that information on the bringing into use of frequency assignments had to be provided by the notifying administration in a notification submission under No. **11.15** of Article **11**. Under RR No. **11.44B.2**, in recognition that frequency assignments may have been brought into use more than 120 days before the date of the notification submission, a satellite had to be at and have stayed in the relevant position until the date of the notification submission. That was not the case in the situations presented by the Administration of China. For example, in the case of CHINASAT-D-163E, a satellite with the capability to transmit and receive the satellite network frequency assignments had been in position

up to 2 December 2020 (for APSTAR-6) and up to 9 August 2020 (for CHINASAT-17), but the notification had been submitted on 25 February 2021. There had been no satellite at 163°E for three and seven months, respectively, although nothing had been preventing the Administration of China from submitting the notification information at the time when the satellites were operating. Strictly speaking, therefore, the bringing into use of the relevant frequency assignments was not in conformity with the appropriate provisions of the Radio Regulations. Based on the information provided by the Administration of China and on the Board's experience of how the relevant provisions had been established, he could see no means for the Board to validate the dates of bringing into use, because they did not respect RR No. **11.44B.2** in particular. That being said, the Administration of China had made serious efforts to ensure the presence of a satellite at the positions concerned and to make continuous use of the frequency assignments in the long term. The Board should endeavour to further understand the specificity of each case presented in terms of frequency assignments and management of the different satellites involved and find some way to alleviate the consequences of the non-validation of the bringing into use of the satellite network frequency assignments for the administration.

7.12 **Ms Beaumier** noted that the Administration of China had submitted notification filings for the two networks in question at the end of the seven-year regulatory period. It was building replacement satellites for the orbital positions concerned and had completed coordination activities with several administrations. The Board should commend those efforts. It was clear to her, however, that the Bureau had applied RR Nos. **11.44**, **11.44B** and **11.44B.2** correctly. Under RR No. **8.1**, the right to use and claim protection for frequency assignments was derived from their recording in the MIFR, which was only achieved by the completion of the coordination and notification procedures. The validity of bringing into use frequency assignments prior to the submission of notification filings had been discussed at length in the study cycle leading up to WRC-15 and administrations had been informed of the link between the 90-day bringing-into-use period and the notification procedure in CR/343. In addition, a draft rule of procedure had been circulated to administrations on the matter. It was therefore surprising that the Administration of China was not aware of how RR No. **11.44B.2** was applied.

7.13 A clear consensus had emerged at a CPM meeting before WRC-15 that frequencies could be validly brought into use more than 120 days before the satellite network was notified only if the satellite used to do so was in continuous use at the requisite position up until the submission of the filing. That consensus had led WRC-15 to adopt RR No. **11.44B.2**, the text of which was very clear and had given rise to no difficulties to date that she was aware of. Indeed, the Board had stated as much in its Resolution **80 (Rev.WRC-07)** report to WRC-19. The Administration of China claimed that the Radio Regulations did not stipulate that those frequencies brought into use by a satellite that had not been in continuous use at the requisite position up until the submission of the filing would not be accepted; however, the Radio Regulations were written in such a way as to stipulate what was required of administrations, not what was not required.

7.14 She noted that the Administration of China had not been in a position to keep the satellites in use at the locations concerned and had eventually had to deorbit them, but failed to understand how that would have prevented it from submitting notification filings earlier. Deorbiting did not occur instantaneously; it involved controlled and planned manoeuvres and a number of months typically elapsed between when the need to deorbit became apparent and the actual deorbiting took place. Furthermore, the satellites in question were either quite old or the operational issues around a potential collision risk had been discussed over a period of time.

7.15 In conclusion, she said that the consensus at WRC-15 had been clear: bringing into use frequency assignments before notification filings were made gave rise to no rights under the Radio Regulations. The Board was therefore not in a position to grant the request, which was contrary to

the provisions of the Radio Regulations. It might, however, consider deferring cancellation of the frequencies involved so as to give the Administration of China time to present its case to WRC-23.

7.16 **Ms Jeanty** agreed with Ms Beaumier that the unfortunate events affecting the satellites did not justify the failure of the Administration of China to submit the notifications earlier. In her view, the administration's interpretation of the Radio Regulations was not correct. The provisions of RR No. **11.44B.2** were very clear and had earned widespread support at WRC-15. They had been discussed by the Board in 2018, in a case in which it had found that "the possibility of putting a satellite in position, moving it to another location and notifying the network's bringing into use at a later date had not been provided for either before or after WRC-15" (see Document RRB18-2/15). Moreover, in its Resolution **80** report to WRC-19, the Board had written that there did not appear to be any remaining ambiguities about how the Bureau or the Board should treat such cases. In conclusion, the Bureau had acted correctly in the case and the Board should instruct it to cancel the relevant frequency assignments. However, in view of the administration's efforts, consideration might be given to instructing the Bureau to maintain the frequency assignments until WRC-23, to give the administration time to submit the case for discussion – a solution that the Board had applied several times in the past.

7.17 **Mr Hoan** agreed with the previous speakers. The Bureau considered that the frequency assignments had not been brought into use before the end of the regulatory period under RR No. **11.44**. However, the Administration of China considered that it had informed the Bureau of the date of bringing into use and that the Bureau decision was based on the fact that the space station had left its orbital position when the notification was submitted and that RR No. **11.44B.2** therefore did not apply. He believed that the administration had misunderstood what constituted valid notification of the date of bringing into use – that point should be clarified. He agreed that the Board could suggest that the Administration of China place the case before WRC-23 and instruct the Bureau to maintain the assignments until the end of WRC-23.

7.18 **Mr Hashimoto** expressed sympathy with the dilemma facing the Administration of China, which may have misunderstood the requirement under RR No. **11.44B.2** – the only one to be met when the notification was received 120 days or more after the date of bringing into use. He considered that the Bureau had acted correctly in the case, which the Administration of China could submit to WRC-23 if it chose to do so.

7.19 **Ms Hasanova** also considered that the Bureau had applied RR Nos **11.44** and **11.44B.2** correctly. She agreed that the Board could not approve the request but that the Administration of China should be given the opportunity to submit the case to WRC-23.

7.20 **Mr Azzouz** agreed with the analyses of previous speakers and said that the Bureau had acted correctly in cancelling the frequency assignments concerned. However, in view of the actions taken by the Administration of China and the need for the Board to send a positive message in that regard, he proposed that the Bureau be instructed to maintain the frequency assignments in the MIFR until the end of WRC-23 and that the administration be allowed to submit the case to WRC-23 if it wished to do so.

7.21 **Mr Alamri** agreed that the frequency assignments concerned had not been brought into use in conformity with RR No. **11.44B.2**. The Administration of China had cited satellites which were used to bring into use frequency assignments that had been intended to remain at their planned orbital positions, but because of insurmountable obstacles had inevitably led the satellites in question to be drifted away from their intended orbital positions or to be deorbited. He also noted that the Administration of China had not clearly invoked *force majeure*. The Board should recognize the efforts it had made in terms of coordination and the construction of new satellites, instruct the Bureau to maintain the assignments until the end of WRC-23 and give the Administration of China the opportunity to bring the case before WRC-23.

7.22 **Mr Talib** agreed with the analyses of previous speakers and suggested that the Administration of China should be asked to provide more information about the case, especially as concerned the application of Article 11.

7.23 **Mr Borjón** agreed that the Bureau had acted correctly and that the Administration of China had made serious efforts to use the frequency assignments and satellite orbits concerned; those efforts did not suffice, however, to make it compliant with RR No. 11.44B.2. The Board could not, therefore, agree to the request, but it could instruct the Bureau to maintain the frequency assignments in the MIFR until the end of WRC-23.

7.24 **Mr Mchunu** also agreed that the Bureau had applied RR Nos. 11.44 and 11.44B.2 correctly and that the Board could not accede to the request. The Board should instruct the Bureau to maintain the frequency assignments in the MIFR so as to give the Administration of China the opportunity to bring the case before WRC-23.

7.25 In reply to a question from **Mr Vallet (Chief SSD)**, the **Chairman** confirmed that the Board would consider the case of the CHINASAT-D-115.5E satellite network, if and when it arose, on the merits, in line with its standard procedure to consider all submissions on a case-by-case basis.

7.26 That point of view was endorsed by **Ms Beaumier, Mr Henri, Mr Azzouz and Ms Jeanty**, who also suggested that the Board might consider taking up the general issue of RR No. 11.44B.2 in its Resolution 80 report to WRC-23, especially if it received more cases of a similar nature.

7.27 **Ms Beaumier** said that, before agreeing to give the Administration of China the opportunity to appeal to WRC-23, she wished to obtain confirmation from the Bureau that coordination of the networks was almost complete and that the CHINASAT-19A (SHIJIAN 20) satellite, which had been relocated, had not been used to bring into use other networks.

7.28 **Mr Loo (Head SSD/SPR)** confirmed that, while the CHINASAT-17 satellite had been drifted away and had not been used to bring into use any other networks that the Bureau was aware of, and that the APSTAR-6 satellite had been deorbited, the CHINASAT-19A (SHIJIAN 20) satellite had been drifted to 87.6°E and used to bring into use another satellite network at that location. In terms of coordination requirements, which tended to be complex in the case of geostationary satellite networks, more than 40 administrations were identified in the publication of the coordination request of the CHINASAT-D-163E network and according to the document from the Administration of China, coordination had been completed with eight of them – in some instances very challenging ones. The coordination status of the CHINASAT-E-125E network was similar. In fact, the coordination status of both networks was relatively well advanced compared to that of many other such networks.

7.29 **Ms Jeanty** agreed that it was important to include coordination efforts in the conclusions but expressed concern that the CHINASAT-19A (SHIJIAN 20) satellite had been used to bring into use another satellite network unrelated to the case.

7.30 **Ms Beaumier** said that RR No. 11.44B.2 had not been observed, for reasons that had not been clearly explained – the justifications provided by the Administration of China were not convincing. In addition, the CHINASAT-17 satellite, which had been maintained at 163°E for a bit longer than the minimum 90 days and then relocated to another position, had not been identified as bringing into use any frequency assignments at 117.5°, but that may well have been because another satellite had been moved out of that position. In that case, the Board could be perceived as endorsing satellite hopping were it not to instruct the Bureau to abide strictly by RR No. 11.44B.2 – which had been adopted by WRC-15 specifically to discourage that practice – and to cancel the frequency assignments immediately. The CHINASAT-19A (SHIJIAN-20) satellite constituted an even more flagrant example, as it had clearly been used to bring into use frequency assignments at 87.6°E. In those circumstances, it might be more appropriate for the Board to instruct the Bureau to defer

cancellation of the C and Ku bands at 163°E but not of the remaining frequency bands at that position. It should not, however, ask the Bureau to defer cancellation of the assignments at 125°E to the CHINASAT-E-125D satellite network. Regarding the CHINASAT-E-125E satellite network, the Bureau should not consider that it had been brought into use but had no reason to cancel the frequency assignments concerned, as the final date for bringing them into use was still a year away.

7.31 **Ms Jeanty, Mr Borjón and Mr Henri** endorsed that analysis.

7.32 **Mr Loo (Head SSD/SPR)** pointed out that, regarding the CHINASAT-E-125D satellite network, another satellite, CHINASAT-6A, had been used to bring into use many other frequency assignments – in the S, C parts of the Ku band, and Ka bands – at 125°E and was still at that location. The Bureau therefore considered that those frequency assignments had been brought into use by the time-limit of 25 February 2021.

7.33 **Ms Beaumier** thanked Mr. Loo for clarifying that point and agreed that the frequency assignments for those frequency bands brought into use by the CHINASAT-6A satellite should not be cancelled.

7.34 The **Chairman** proposed that the Board should conclude on the matter as follows:

“The Board carefully considered the submission from the Administration of China as contained in Document RRB21-3/8. The Board noted that:

- the submission of the notification filings for the CHINASAT-D-163E, CHINASAT-D-125E and CHINASAT-E-125E satellite networks occurred after the satellites used to bring into use the frequency assignments to these networks had left the orbital positions;
- an in-orbit malfunction had occurred requiring the APSTAR-6 satellite to be deorbited a few months before the notification information was submitted;
- the satellite networks at orbital positions 163°E and 125°E constituted real projects and the construction of two replacement satellites was under way;
- the Administration of China had successfully completed coordination requirements with a number of administrations;
- the reasons provided did not justify or explain the fact that the notification filings had not been submitted before the satellites that had been used to bring into use the frequency assignments were relocated or deorbited;
- the Chinasat-17 and Chinasat-19A satellites had been used to bring into use or maintain in use frequency assignments to several satellite networks at different orbital positions within a short period of time, which can be perceived as spectrum warehousing;
- as per RR No. **8.1**, the rights to use and claim protection to frequency assignments were derived from their recording in the MIFR, which was only achieved by the completion of the coordination and notification procedures;
- administrations had been informed in CR/343, CCRR/49 and CCRR/52 about the link between the 90-period for the bringing into use of frequency assignments and the notification procedure, and the matter had been discussed extensively within the relevant study groups, the RRB and at WRC-15.

The Board considered that:

- the Bureau had acted correctly in the application of RR Nos. **11.44**, **11.44B** and **11.44B.2**;
- the administration had not acted in conformity with RR No. **11.44B.2**;
- the reinstatement of frequency assignments that did not comply with RR No. **11.44B.2** would be contrary to the WRC-15 decision and the provisions of the Radio Regulations.

Consequently, the Board concluded that it could not accede to the request from the Administration of China and instructed the Bureau to suppress the frequency assignments to the CHINASAT-D-163E and CHINASAT-D-125E satellite networks from the MIFR, except for the frequency assignments to the CHINASAT-D-163E satellite network in the frequency bands 3 400– 4 200 MHz, 5 850– 6 725 MHz, 12 250–12 750 MHz and 14 000 – 14 500 MHz, for which the suppression was to be deferred until the end of WRC-23, and except for the frequency assignments to the CHINASAT-D-125E satellite network in the frequency bands indicated in Table 1.

Table 1

1 980 – 2 010 MHz	2 170 – 2 200 MHz	3 400 – 3 700 MHz
3 700 – 4 200 MHz	5 850 – 5 925 MHz	5 925 – 6 425 MHz
6 425 – 6 725 MHz	10 950 – 11 200 MHz	11 450 – 11 700 MHz
12 200 – 12 250 MHz	12 250 – 12 290 MHz	12 290 – 12 750 MHz
13 750 – 14 000 MHz	14 000 – 14 040 MHz	14 040 – 14 500 MHz
17 700 – 20 200 MHz	27 500 – 30 000 MHz	

The Board also instructed the Bureau not to recognize the bringing into use of the frequency assignments to the CHINASAT-E-125E in the frequency bands 13.4 – 13.65 GHz, 14.5 – 14.8 GHz, 37.5 – 43.5 GHz and 47.2 – 50.2 GHz.

Furthermore, the Board decided to include this issue in the Report on Resolution **80 (Rev.WRC-07)** to WRC-23.”

7.35 It was so **agreed**.

8 Election of the vice-chairman for 2022

8.1 The **Chairman**, having reminded the Board that its vice-chairman for 2022 would be elected from among the Board members from Region E, said that Mr Hoan and Mr Hashimoto had agreed to put forward the candidacy of Mr Alamri. The current vice-chairman, Mr Azzouz, would, however, be unable to serve as chairman in 2022 on health grounds. Accordingly, it was proposed that Mr Alamri should serve as chairman and that Mr Azzouz should continue to serve as vice-chairman in 2022. It was hoped that Mr Azzouz would be well enough to serve as the Board’s chairman in 2023.

8.2 Having regard to No. 144 of the ITU Convention, and given the special circumstances, the Board **agreed** that Mr Azzouz, who would normally have served as its chairman in 2022, should serve as vice-chairman of the Board for 2022.

8.3 The Board **agreed** to elect Mr Alamri as its chairman for 2022.

8.4 Board members congratulated Mr Alamri on his election and wished Mr Azzouz a speedy recovery.

8.5 **Mr Alamri** said that he considered his election a great honour and thanked Board members for the trust they had placed in him.

8.6 The **Director** congratulated Mr Alamri on his election and assured him of the Bureau’s full support.

9 Confirmation of the dates of the 89th meeting of the Board and indicative dates for future meetings

9.1 **Mr Botha (SGD)** said that the Board would not be able to meet on ITU premises when the Varembe building was demolished. Given the limited availability of external venues, every effort should be made not to change the dates of the Board's meetings once an external venue had been reserved.

9.2 The Board **agreed** to confirm the dates for its 89th meeting as 14-18 March 2022 in Room L and to tentatively confirm the dates of its subsequent meetings in 2022 and 2023 as:

90 th meeting	27 June – 1 July 2022 (Room CCV Genève, if Room L not available)
91 st meeting	31 October – 4 November 2022 (Room CCV Genève, if Room L not available)
92 nd meeting	20–24 March 2023 (Room CCV Genève)
93 rd meeting	26 June – 4 July 2023 (Room CCV Genève)
94 th meeting	16–20 October 2023 (Room CCV Genève)

10 Other business: Preparation and arrangements for WRC-23

10.1 Under the chairmanship of Ms Beaumier of the Working Group on the Report on Resolution **80 (Rev.WRC-07)** to WRC-23, the Board established the draft list of issues to be included in the report and identified elements to be included in it for each of those issues.

11 Approval of the summary of decisions (Document RRB21-3/12)

11.1 The Board **approved** the summary of decisions as contained in Document RRB21-3/12.

12 Closure of the meeting

12.1 The **Chairman** said that he had been honoured to chair the Board in 2021 and thanked his colleagues on the Board for their teamwork and collaborative spirit, which had enabled the Board to hold successful meetings despite the challenging circumstances. He was grateful for the wise counsel of the Director and support of the Bureau staff. He thanked all those who had contributed to the smooth running of the first hybrid meeting in ITU's history and wished the incoming chairman, Mr Alamri, every success.

12.2 Board members took the floor to thank the Chairman for his hard work, outstanding leadership, guidance and sensitivity, which had delivered fair, clear and positive results in the Board's work throughout 2021. They thanked Ms Beaumier and Mr Henri for their contributions in chairing their respective working groups and the Bureau and other ITU staff for their assistance. They assured the incoming chairman of their support.

12.3 The **Director** praised the Chairman for his able leadership and excellent work and assured Board members that it was a pleasure for the Bureau to serve such serious, committed and hard-working colleagues. Organizing the hybrid meeting had been challenging, but worthwhile, and he hoped that it would be possible for all members to be present in Geneva for the Board's next meeting.

12.4 The **Chairman** thanked speakers for their kind words and closed the meeting at 1145 hours on Friday, 15 October 2021.

The Executive Secretary:
M. MANIEWICZ

The Chairman:
N. VARLAMOV