



MINUTES*

OF THE

89th MEETING OF THE RADIO REGULATIONS BOARD

14–18 March 2022

(Commencing at 0900 hours, Room L, Montbrillant building)

Present: Members, RRB
Mr T. ALAMRI, Chairman
Mr E. AZZOUZ, Vice-Chairman
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, Mr N. VARLAMOV

Executive Secretary, RRB
Mr M. MANIEWICZ, Director, BR

Précis-writers
Ms S. MUTTI and Ms C. RAMAGE

Also present: Ms J. WILSON, Deputy to the Director, BR and Chief IAP
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 89th meeting of the Board. The official decisions of the 89th meeting of the Radio Regulations Board can be found in Document RRB 22-1/18.

Subjects discussed	Documents
1 Opening of the meeting	-
2 Adoption of the agenda	RRB22-1/OJ/1 RRB22-1/DELAYED/2 RRB22-1/DELAYED/2(Corr.1)
3 Report by the Director, BR	RRB22-1/4 RRB22-1/4(Add.1) RRB22-1/4(Add.2) RRB22-1/4(Add.3) RRB22-1/4(Add.4) RRB22-1/4(Add.5) RRB22-1/4(Add.6) RRB22-1/4(Add.7) RRB22-1/4(Add.10)
4 Rules of procedure	RRB22-1/1 RRB20-2/1(Rev.5) CCRR/68 RRB22-1/3
5 Requests relating to the registration of frequency assignments to satellite networks	-
5.1 Submission by the Administration of Saudi Arabia (Kingdom of) regarding the registration of frequency assignments of the ARABSAT-AXB30.5E satellite network submitted under Article 6 of Appendix 30B of the Radio Regulations	RRB22-1/2
Further submission by the Administration of Saudi Arabia (Kingdom of) regarding the registration of frequency assignments of the ARABSAT-AXB30.5E satellite network submitted under Article 6 of Appendix 30B of the Radio Regulations	RRB22-1/11
6 Request for the cancellation of frequency assignments to satellite networks under No. 13.6 of the Radio Regulations	-
6.1 Request for a decision by the Radio Regulations Board for the cancellation of the frequency assignments to the LM-RPS-133W satellite network at 133°W under No. 13.6 of the Radio Regulations	RRB22-1/5
6.2 Request for a decision by the Radio Regulations Board for the cancellation of some frequency assignments to the NEW DAWN 23 satellite network at 64°E under No. 13.6 of the Radio Regulations	RRB22-1/6
7 Issues and requests relating to the extension of regulatory time-limits to bring or to bring back into use frequency assignments to satellite networks	-
7.1 Submission by the Administration of Papua New Guinea requesting the extension of the time-limit to bring back into use	RRB22-1/8

the frequency assignments to the NEW DAWN 25 satellite network

- 7.2** Submission by the Administration of the State of Israel requesting the extension of the regulatory time-limit to bring back into use the frequency assignments to the AMS-B2-13.8E and AMS-B7-13.8 satellite networks [RRB22-1/9](#)
[RRB22-1/DELAYED/6](#)
- 7.3** Submission by the Administration of Turkey requesting the extension of the regulatory time-limit to bring into use the frequency assignments to the TURKSAT-42E-F satellite network at 42°E [RRB22-1/10](#)
- 7.4** Submission by the Administration of Luxembourg requesting the extension of the regulatory time-limit to bring into use the frequency assignments to the CLEOSAT satellite network [RRB22-1/13](#)
[RRB22-1/DELAYED/5](#)
- 8** Cases of harmful interference -
- 8.1** Submission by the Administration of the United Kingdom of Great Britain and Northern Ireland regarding harmful interference to emissions of United Kingdom high frequency broadcasting stations published in accordance with RR Article 12 [RRB22-1/7](#)
[RRB22-1/DELAYED/3](#)
- 8.2** Submissions regarding harmful interference to ARABSAT satellite networks at 30.5°E and TURKSAT satellite networks at 31°E [RRB22-1/14](#)
[RRB22-1/4\(Add.8\)](#)
[RRB22-1/4\(Add.9\)\(Rev.1\)](#)
[RRB22-1/DELAYED/4](#)
[RRB22-1/DELAYED/7](#)
- 8.3** Submission by the Administration of the United Arab Emirates regarding harmful interference to the AL YAH-1 (52.5E) satellite network [RRB22-1/17](#)
- 9** Submission by the Administrations of Bosnia and Herzegovina, Croatia (Republic of), North Macedonia (Republic of), Moldova (Republic of), Rwanda (Republic of), Serbia (Republic of) and South Sudan (Republic of) regarding WRC-23 agenda item 7, Topic E [RRB22-1/12](#)
- 10** Submission by the Administrations of Angola (Republic of), Botswana (Republic of), Cameroon (Republic of), Democratic Republic of the Congo, Comoros (Union of the), Djibouti (Republic of), Eswatini (Kingdom of), Gabonese Republic, Kenya (Republic of), Lesotho (Kingdom of), Malawi, Mali (Republic of), Madagascar (Republic of), Mauritius (Republic of), Mozambique (Republic of), Moldova (Republic of), Niger (Republic of the), Namibia (Republic of), North Macedonia (Republic of), Poland (Republic of), Romania, Rwanda (Republic of), Senegal (Republic of), Serbia (Republic of), Somalia (Federal Republic of), South Africa (Republic of), South Sudan (Republic of), Tanzania (United Republic of), Tunisia, Uganda (Republic of), Zambia (Republic of), Zimbabwe (Republic of) regarding the examination by the [RRB22-1/15](#)

Bureau of Part B submissions in accordance with Resolution 559 (WRC-19)

[RRB22-1/16](#)
[RRB22-1/DELAYED/1](#)

- 11 Submission by the Administrations of Angola (Republic of), Botswana (Republic of), Cameroon (Republic of), Democratic Republic of the Congo, Comoros (Union of the), Djibouti (Republic of), Eswatini (Kingdom of), Gabonese Republic, Kenya (Republic of), Lesotho (Kingdom of), Malawi, Mali (Republic of), Madagascar (Republic of), Mauritius (Republic of), Mozambique (Republic of), Niger (Republic of the), Namibia (Republic of), Rwanda (Republic of), Senegal (Republic of), Somalia (Federal Republic of), South Africa (Republic of), South Sudan (Republic of), Tanzania (United Republic of), Tunisia, Uganda (Republic of), Zambia (Republic of), Zimbabwe (Republic of) regarding the long-term protection of frequency assignments in the Regions 1 and 3 BSS Plans, allotments in the FSS Plan and those intended to enter into these plans from an incoming network
- 12 Consideration of issues related to Resolution 80 (Rev.WRC-07) -
- 13 The RRB participation in the Plenipotentiary Conference 2022 (PP-22) and the World Radiocommunication Seminar 2022 (WRS-22) -
- 14 Confirmation of the next meeting for 2022 and indicative dates for future meetings -
- 15 Other business: new composition of the Board -
- 16 Approval of the summary of decisions -
- 17 Closure of the meeting -

1 Opening of the meeting

1.1 The **Chairman** opened the 89th meeting of the Radio Regulations Board at 0900 hours on Monday, 14 March 2022. He welcomed the Board members and noted with satisfaction that the present meeting of the Board was the first since October 2019 attended by all Board members in person.

1.2 The **Director**, also speaking on behalf of the Secretary-General, likewise extended a warm welcome to the members of the Board. He was pleased to see everyone in person, including members of the Bureau's staff, after two years of virtual and hybrid meetings, and assured the Board of the Bureau's full support during the meeting.

2 Adoption of the agenda (Documents RRB22-1/OJ/1, RRB22-1/DELAYED/2 and RRB22-1/DELAYED/2(Corr.1))

2.1 At the request of the **Chairman**, and in accordance with the working methods of the Board, the discussion of all items of the agenda pertaining to the Administration of Saudi Arabia, including with regard to the consideration of late submissions, was presided over by the **Vice-Chairman**.

2.2 **Mr Botha (SGD)** drew attention to four late submissions. Document RRB22-1/DELAYED/1 supplemented Document RRB22-1/16, which had been submitted seconds before the deadline under the rules of procedure, unfortunately without its annexes. The 27 submitting administrations had agreed to maintain the original contribution as it was and to submit the annexes as a delayed contribution, so as not to postpone consideration of their concerns to the next meeting. Documents RRB22-1/DELAYED/6 and RRB22-1/DELAYED/5 contained information additional to that provided by the administration concerned in its initial submission and were therefore not subject to the deadline set out in the rules of procedure. Document RRB22-1/DELAYED/3 had been submitted within the deadline in response to a submission by another administration.

2.3 In view of the above, he suggested that the Board might wish to consider Document RRB22-1/DELAYED/6 under agenda item 7.2, Document RRB22-1/DELAYED/5 under agenda item 7.4, Document RRB22-1/DELAYED/3 under agenda item 8.1 and Document RRB22-1/DELAYED/1 under agenda item 11 for information.

2.4 It was so **agreed**.

2.5 **Mr Botha (SGD)** further drew attention to Document RRB22-1/DELAYED/2, in which the Administration of the United Arab Emirates commented on the comments made by another administration in Document RRB22-1/3 on the draft rules of procedure. The document had arrived after the deadline stipulated in the rules of procedure on RR No. 13.12A and would therefore normally not be considered admissible. However, the rules of procedure were silent on the subject of comments by one administration on the comments of another, and the Board might therefore wish to review the question of the delayed contribution's admissibility further. The contribution contained confidential information, publication of which had been authorized by the Administration of the United Arab Emirates (as indicated in Document RRB22-1/DELAYED/2(Corr.1)).

2.6 **Mr Azzouz** considered that if Document RRB22-1/DELAYED/2 contained information that would be helpful in terms of making decisions, especially in cases of harmful interference, it might be useful to note it for information.

2.7 **Ms Jeanty** said that she would prefer to take the document on board since the rules of procedure gave administrations no other option for making comments on comments and any such comments would automatically almost always arrive after the deadline.

2.8 **Ms Hasanova** considered that, in view of the Board's working methods and the deadline stipulated in the rules of procedure, Document RRB22-1/DELAYED/2 should not be taken into account. That being said, she would not object if the Board decided differently.

2.9 **Mr Talib** considered that there was no harm in considering Document RRB22-1/DELAYED/2, even though it had been received after the deadline, either for information or as a contribution.

2.10 **Mr Varlamov** and **Mr Hoan** said that Document RRB22-1/DELAYED/2 should be considered for information in the discussion on the rule of procedure concerned, as it was not, strictly speaking, a response to a circular letter or a comment on a rule of procedure, both of which were subject to a deadline.

2.11 **Mr Hashimoto** said that Document RRB22-1/DELAYED/2 should not be considered as having been received after the deadline.

2.12 **Mr Henri** said that, as a matter of principle, he would prefer not to take into account Document RRB22-1/DELAYED/2 and set a precedent that would lead to a cascade of late comments on comments. Consideration of rules of procedure was a lengthy and thorough process and comments had to arrive well in advance in order to allow time for translation and due consideration, hence the submission at least four weeks before the start of the Board meeting (§ 2.2.1.3 of Part C of the Rules of Procedure). That being said, it was also the role of the Board to consider all comments. The Board members had had an opportunity to read the late document and were free to bear in mind its substantive comments if they so wished.

2.13 **Mr Mchunu, Ms Beaumier** and **Mr Borjón** agreed that taking into account Document RRB22-1/DELAYED/2 would set a precedent and that it would therefore be preferable for it not to be considered by the Board. The members of the Board were in any event aware of its contents.

2.14 The **Chairman**, referring to RR No. 13.12A *d)* and *f)*, said that the Administration of the United Arab Emirates had not commented directly on a draft rule of procedure but that its submission nevertheless concerned such a rule. Mr Henri had made a valid point: it was the role of the Board to evaluate all comments with a view to reaching a decision in conformity with the spirit and principle of the ITU Constitution and Convention, and the Radio Regulations. In addition, the comments of the Administration of the United Arab Emirates on the rules of procedure concerned were set out in Document RRB22-1/3. He therefore proposed that Document RRB22-1/DELAYED/2 and Document RRB22-1/DELAYED/2(Corr.1) should not be considered by the Board at its present meeting.

2.15 It was so **decided**.

2.16 **Mr Botha (SGD)** said that, in keeping with the Board's past practice, both documents would be listed under item 2 of the revised agenda, so as to reflect the decision taken in that respect.

2.17 Turning to Document RRB22-1/DELAYED/4, **Mr Botha (SGD)** said that it had been submitted by the Administration of Saudi Arabia in response to Document RRB22-1/14 from the Administration of Turkey, but after the deadline stipulated in the rules of procedure.

2.18 **Ms Hasanova** said that Document RRB22-1/DELAYED/4 should be considered for information only.

2.19 **Mr Hashimoto** said that taking account of § 1.6 of the rules of procedure on submissions, the comments on a submission from another Administrations could only be conceded if received at least 10 days before the start of the Board meeting. The Bureau had received delayed Document RRB22-1/DELAYED/4 on 9 March, i.e., five days before the Board meeting. Therefore, Document RRB22-1/DELAYED/4 did not explicitly refer to a specific agenda item; the Board might wish simply to refer to it as required in the summary of decisions.

2.20 **Mr Henri** observed that cases of harmful interference were always very sensitive and that the more information the Board had, the better it would be to find a solution. He was therefore in favour of considering the delayed document for information.

2.21 **Ms Beaumier** said that the consideration of Document RRB22-1/DELAYED/4 posed a problem because the rules of procedure had only recently been modified to establish a deadline for delayed submissions and it provided no information on the cause of the delay. She agreed with Mr Henri that cases of harmful interference were sensitive in nature and that additional information could be helpful in furthering understanding of the perspectives of the parties involved. If the Board decided to make an exception in the case of Document RRB22-1/DELAYED/4, it should have a clear rationale for doing so.

2.22 **Mr Talib** and **Ms Jeanty** agreed with Mr Henri and Ms Beaumier. Document RRB22-1/DELAYED/4 should be considered on an exceptional basis as a delayed contribution if it provided complementary information.

2.23 **Mr Varlamov**, recalling that it was the mandate of the Board to resolve cases of harmful interference, observed that agenda item 8.2 related to a complex and sensitive situation that the Board had been considering over several meetings. In order to make progress, it should take into account all the information provided by the administrations and should therefore exceptionally add the document to the agenda, and not consider it just for information.

2.24 **Ms Beaumier** and **Mr Henri** pointed out that, in order to be added to the agenda as a contribution, the document would have had to arrive before the deadline.

2.25 The **Vice-Chairman** proposed that the Board consider Document RRB22-1/DELAYED/4 as a delayed document providing information on a case of harmful interference.

2.26 It was so **decided**.

2.27 Turning to Document RRB22-1/DELAYED/7, submitted by the Administration of Saudi Arabia, the **Vice-Chairman** said that it was his understanding that it supplemented the information provided in Documents RRB22-1/14 and RRB22-1/DELAYED/4 with regard to agenda item 8.2, on harmful interference between the ARABSAT satellite networks at 30.5°E and TURKSAT satellite networks at 31°E.

2.28 **Ms Jeanty** said that it was her understanding that, although Document RRB22-1/DELAYED/7 concerned the same frequency assignments as the other two documents, it was related to a completely separate issue of intentional harmful interference.

2.29 **Mr Vallet (Chief SSD)** confirmed that Document RRB22-1/DELAYED/7 concerned the same networks as Documents RRB22-1/14 and RRB22-1/DELAYED/4, but reported on interference that did not appear to be related to a problem of coordination.

2.30 **Ms Beaumier** said that it was her understanding that Document RRB22-1/DELAYED/7 was more closely related to the comments made in Addendum 9(Rev.1) to the Director's report than to the other two documents and had been received before the start of the Board meeting. It could therefore be accepted as a delayed document for information, to be considered in conjunction with Addendum 9(Rev.1). The question remained under what agenda item it should be considered.

2.31 **Mr Talib** agreed that Document RRB22-1/DELAYED/7 was linked to Addendum 9(Rev.1) to the Director's report. It should be considered as a delayed contribution under agenda item 8.2, for information, but be the subject of a separate conclusion.

2.32 **Mr Varlamov** agreed.

2.33 **Mr Henri** pointed out that Document RRB22-1/14 had been submitted on time, on 21 February 2022, and that its title had been used to word the agenda item. On 8 March 2022, the Bureau

had submitted Addenda 8 and 9(Rev.1) to the Director's report. The Administration of Saudi Arabia had reacted by sending additional information, in Documents RRB22-1/DELAYED/4 and RRB22-1/DELAYED/7. All four documents were related to agenda item 8.2 and should therefore be considered together; consideration might also be given to changing the wording of the agenda item.

2.34 **Mr Talib** and **Ms Beaumier** proposed that the wording of agenda item 8.2 be changed to the more generic "submissions regarding harmful interference to ARABSAT satellite networks at 30.5°E and TURKSAT satellite networks at 31°E" and that Addenda 8 and 9(Rev.1) be listed under that agenda item.

2.35 It was so **decided**.

2.36 As a result, the Board ultimately **adopted** the draft agenda with modifications as provided in Document RRB22-1/OJ/1(Rev.1). It **decided** to include Documents RRB22-1/DELAYED/6 under agenda item 7.2, RRB22-1/DELAYED/5 under agenda item 7.4, RRB22-1/DELAYED/3 under agenda item 8.1, RRB22-1/DELAYED/4 and RRB22-1/DELAYED/7 under agenda item 8.2, and RRB22-1/DELAYED/1 under agenda item 11 for information. In compliance with RR No. **13.12A**, the Board furthermore **decided** not to consider Documents RRB22-1/DELAYED/2 and RRB22-1/DELAYED/2(Corr.1). The Board further **noted** that the Administration of the United Arab Emirates had submitted its comments to the draft rules of procedure as published in Circular Letter CCRR/68 and that those comments were contained in Document RRB22-1/3.

3 Report by the Director, BR (Documents RRB22-1/4 and Addenda 1 to 7 and 10)

3.1 The **Director** introduced his customary report in Document RRB22-1/4. Referring to § 2, on the processing of filings for terrestrial and space systems, he said that because of budgetary constraints at ITU, several posts in space-related departments were currently frozen. Every effort was being made to ensure that the unexpected situation would have a minimal impact on processing times.

3.2 Referring to § 4, on reports of harmful interference and/or infringements of the Radio Regulations (RR Article 15), he said that little or no progress had been made in the cases of harmful interference in the VHF/UHF bands between Italy and its neighbouring countries (§ 4.2). Reports that Italy was objecting to assignments of Slovenia in the GE84 Plan were worrisome. In response to reports of harmful interference affecting the RNSS in the 1 559–1 610 MHz band (§ 4.6) and the failure to inform air navigation authorities in advance, the Bureau had held a meeting with the European Organisation for the Safety of Air Navigation (EUROCONTROL).

3.3 Referring to § 6, he said that work on Resolution 559 (WRC-19) submissions continued to advance well; all the Bureau's suggestions to further facilitate coordination had been endorsed by ITU-R Working Party 4A at its meeting in October–November 2021.

3.4 Referring to § 7, on the review of findings to frequency assignments to non-GSO FSS satellite systems under Resolution 85 (WRC-03), he said that since the 88th Board meeting, the Bureau had published around 20 non-GSO satellite systems.

3.5 Addendum 10 reported on a recent request from the Administration of Ukraine and would be discussed later in the meeting. Because of the prevailing situation and a limited ability to carry out the procedures related to the international coordination of frequency assignments, the objection requested might pertain to all frequency assignments identified as affecting Ukraine, not just to those of the Russian Federation.

3.6 In response to comments from **Mr Azzouz**, who also praised the efforts of the Bureau to improve processing times, the **Director** said that the issue of budgetary constraints was likely to be raised during discussion of the draft financial plan for 2024–2027 at Council-22. While the Board was free to inform him of any comments it wished him to convey to the Council, he was confident

that administrations would express concern about the possibility of reduced resources for the Bureau generating a backlog in its activities.

Actions arising from the last RRB meeting (§ 1 and Annex 1 of Document RRB22-1/4)

3.7 The Board **noted** § 1 and Annex 1 of Document RRB22-1/4.

Processing of filings for terrestrial and space systems (§ 2 and Annexes 2 and 3 of Document RRB22-1/4)

3.8 **Mr Vassiliev (Chief TSD) and Mr Vallet (Chief SSD)**, referring in turn to Annexes 2 and 3 of Document RRB22-1/4, on the processing of notices for terrestrial services and satellite networks, respectively, drew attention to the tables contained therein.

The Board **noted** § 2 and Annexes 2 and 3 of Document RRB22-1/4.

Implementation of cost recovery for satellite network filings (§ 3 and Annex 4 of Document RRB22-1/4)

3.9 **Mr Vallet (Chief SSD)**, referring to Annex 4 to Document RRB22-1/4, said that two satellite networks had been cancelled because of non- or late payment since the Board's 88th meeting.

3.10 The Board **noted** §§ 3.1 and 3.2 of Document RRB22-1/4, concerning late payments and Council activities, respectively, relating to the implementation of cost recovery for satellite network filings.

Reports of harmful interference and/or infringements of the Radio Regulations (Article 15 of the Radio Regulations) (§ 4.1 of Document RRB22-1/4)

3.11 **Mr Vassiliev (Chief TSD)**, drawing attention to Tables 1 to 4 in the Director's report, noted that a total of 329 communications concerning reports of harmful interference and/or infringements had been received by the Bureau between 1 February 2021 and 31 January 2022.

3.12 The Board **noted** the information provided in § 4.1 of Document RRB22-1/4.

Harmful interference to broadcasting stations in the VHF/UHF bands between Italy and its neighbouring countries (§ 4.2 and Addenda 1, 2 and 4 of Document RRB22-1/4)

3.13 **Mr Vassiliev (Chief TSD)** said that since the Director's report had been prepared, the Bureau had also received communications from the Administrations of Croatia, Slovenia and Italy, set out in Addenda 1, 2 and 4 respectively. According to the Administration of Croatia (Addendum 1), harmful interference to Croatian sound, FM and TV broadcasting stations persisted. Following the migration of TV transmissions operating in the 700 MHz band, Italian stations continued to operate on channels allocated under the GE06 Plan to mobile network operators in Croatia. Furthermore, Italy did not follow the opinion of the Radio Spectrum Policy Group proposing a coordinated solution to cross-border harmful interference. Uncoordinated operation of Italian T-DAB stations had also been reported. In Addendum 2 to Document RRB22-1/4, the Administration of Slovenia reported that there had been no improvement in the FM interference situation. The Italian Administration was using the rights from the GE84 Agreement and objecting to Slovenian stations, while completely ignoring the obligations arising from that agreement. Interference to T-DAB also persisted.

3.14 Addendum 4 contained an updated roadmap from the Administration of Italy. Between October 2021 and February 2022, the focus had been on television broadcasting in order to achieve the release of the 700 MHz band and reorganize transmissions in the sub-700 MHz band within the regulatory framework. Channels 51 and 53 belonging to Croatia had now been released and action was also being taken to meet the 30 June 2022 deadline for the Italian Government's internal roadmap. With regard to DAB broadcasting, the group of Adriatic countries was continuing its work

on the channel allocation agreement for VHF Band III and was confident that it would be signed in mid-2022. Pending signature, the Administration of Italy intended to move the interfering stations temporarily from frequency block 12C to frequency block 7C. With regard to FM broadcasting, new legislation had been adopted that would empower the relevant ministry to take action to eliminate interference and a working group had been established to identify steps to be taken. The roadmap concluded with the administration's summary of cross-border cases between Italy and France, Switzerland, Slovenia, Croatia and Malta. Responding to a question from **Ms Jeanty** concerning the Italy-France cross-border case, he said that the Bureau had received no information on the bilateral meeting at the beginning of March, to which Addendum 4 referred.

3.15 The **Chairman** said that the May 2022 multilateral meeting between the administrations of Italy and its neighbouring countries could provide a good opportunity to resolve the cases of harmful interference, which did not appear to have improved since the Board's previous meeting.

3.16 **Mr Hashimoto** thanked the Bureau for its efforts on the long-standing issue and trusted that the May 2022 multilateral coordination meeting would resolve issues between Italy and its neighbouring countries.

3.17 In reply to a query from **Mr Talib, Mr Vassiliev (Chief TSD)** said that the Bureau did not have its own radio monitoring facilities but received documentation with measurements from the countries concerned confirming the interference. The Administration of Italy did not usually deny the reports of harmful interference and sometimes also sent measurements and reports indicating that its stations were also receiving interference.

3.18 **Mr Azzouz** said that he would welcome information on the bilateral meeting between the Administrations of Italy and France at the beginning of March and on the multilateral coordination meeting scheduled for May 2022. The Bureau should encourage the administrations concerned to exchange all the necessary information and identify the best way to resolve the long-standing interference issues.

3.19 **Ms Hasanova** welcomed the entry into force of the bilateral agreement between the Administrations of Italy and San Marino and hoped that other positive results would be achieved. She asked whether there had been any further developments with respect to Croatia resulting from this agreement.

3.20 **Mr Vassiliev (Chief TSD)** said that the administrations concerned were contacted one month before the Board meeting and requested to provide updates on the interference situation, which were set out in the addenda to the Director's report. No additional updates were available afterwards. It was hoped that further information would be provided at the multilateral meeting in May 2022.

3.21 **Ms Jeanty** observed that there had been no noticeable improvement in the interference situation. Furthermore, Slovenia's report that the Italian Administration was ignoring the obligations from the GE84 Agreement and objecting to its stations was a concern, and attention should be drawn to the Bureau's 2017 analysis relating to the application of that agreement. She welcomed the bilateral agreement with San Marino. Although the Administration of Italy had not implemented the opinion of the Radio Spectrum Policy Group, it had acknowledged the June 2022 deadline set by the European Union, and she hoped that further information would be forthcoming for the Board's next meeting.

3.22 **Ms Beaumier** said that although some progress had been made, she remained very concerned at the slow pace in resolving the cases of harmful interference.

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

"The Board considered in detail § 4.2 of Document RRB22-1/4 and its Addenda 1, 2 and 4, on harmful interference to broadcasting stations in the VHF/UHF bands between Italy and its neighbouring countries. The Board thanked the Bureau for the information provided and for assisting

administrations in their efforts to resolve the cases of harmful interference. Based on the reports from the neighbouring countries, the Board continued to be very concerned about the absence of progress in resolving the cases of harmful interference. Consequently, the Board once again 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 those instances of harmful interference on a case-by-case basis.

The Board, having noted with concern the recent objections of Italy to the notification of assignments of the Administration of Slovenia, decided again to draw the attention of the Administration of Italy to the fact that for an administration to enjoy the rights associated with the GE84 Terrestrial Broadcasting Agreement, the Administration of Italy needed to comply with the obligations of the agreement, as had been indicated in the analysis relating to the application of the GE84 Regional Agreement (see [Addendum 3 to Document RRB17-3/2](#)), by ceasing harmful interference on the channels used by neighbouring administrations in conformity with the GE84 Regional Agreement.

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 the matter and on the outcome of the planned multilateral coordination meeting.”

3.24 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 (§ 4.3 of Document RRB22-1/4)

3.25 It was **agreed** that the matter would be taken up under item 8.3 of the agenda (See §§ 8.3.1-8.3.12 below).

Harmful interference to the EXPRESS-7B and EXPRESS-7C satellite networks from the Administration of the Russian Federation (§ 4.4 of Document RRB22-1/4)

3.26 **Mr Vallet (Chief SSD)** introduced § 4.4 of Document RRB22-1/4, involving harmful interference to the Yamal-401 spacecraft located at 90°E and operating under the EXPRESS-7B and EXPRESS-7C satellite networks notified by the Administration of the Russian Federation. According to that administration, the harmful interference was caused by a station located in territory under the jurisdiction of the Administration of Ukraine. For its part, the Administration of Ukraine had found no source of harmful interference as experienced by the Yamal-401 spacecraft. The Administration of the Russian Federation having requested the Bureau’s assistance under RR No. 13.2, the Bureau had sent a first request for cooperation to the Administration of Ukraine on 24 February 2021 and a reminder on 21 April 2021. It had also requested further information from the Administration of the Russian Federation, in particular relating to geolocation plots as mentioned in Report ITU-R SM.2181.

3.27 On 25 May 2021, the Administration of the Russian Federation had provided the Bureau with detailed spectrum plots and geolocation information on the sources of interference, which the Bureau had forwarded to the Administration of Ukraine. On 26 October 2021, there being no response from the Administration of Ukraine, the Administration of the Russian Federation had requested further assistance from the Bureau, including submission of the case to the Board. Accordingly, the Bureau had written to the Administration of Ukraine on 2 November 2021 but had received no response to

date. In accordance with RR No. 13.2, the Bureau recommended that the Administration of Ukraine be asked promptly to communicate what action it had taken to resolve the interference problem and that both administrations be requested to continue to exercise the utmost good will and engage in mutual assistance in the application of the provisions of Article 45 of the Constitution and Section VI of Article 15 of the Radio Regulations.

3.28 The **Chairman** considered that it might not be appropriate to encourage both administrations to engage in mutual assistance in the current circumstances and proposed that the two recommendations be reformulated in a more appropriate way.

3.29 **Ms Jeanty** considered that the Bureau's recommendation to the Board was inappropriate in the current circumstances. She would be in favour of deferring consideration of the item to a future meeting or of taking some action other than that proposed by the Bureau.

3.30 **Mr Hoan** said that the absence of a response from the Administration of Ukraine should be of concern to the Board's members, but nevertheless agreed with Ms Jeanty: it would be difficult for the Board to make recommendations given the current situation. The Board should note the Bureau's report and defer its decision to its next meeting.

3.31 **Mr Henri** said that, in principle, he was not in favour of the Board deferring decisions because of circumstances, in particular on harmful interference issues. At the same time, the Board clearly could not take a decision that it knew would be difficult for an administration to implement. It should perhaps draft a more generic decision, recalling the principle set out in the Radio Regulations regarding cases of harmful interference without specifically mentioning administrations involved.

3.32 The **Chairman** observed that recordings of frequency assignments in the MIFR gave administrations rights that they must be allowed to enjoy. A deferred decision was not a positive step on the part of the Board, whose approach should be technical and regulatory. Mr Henri's proposal might constitute a middle way between deferral and a decision that would be difficult to implement.

3.33 **Mr Borjón** was not sure how useful it would be to quote principles in the current circumstances, which were akin to a situation of *force majeure* for both administrations. He believed that it would be insensitive to encourage the Administration of Ukraine to resolve an issue of interference at the present time and therefore leaned towards deferring the decision in order properly to analyse the case.

3.34 **Ms Hasanova** said that, on the one hand, given the circumstances, and in view of the request submitted by the Administration of Ukraine in Addendum 10 to the Director's report (see §§ 3.118-3.128 below), the decision was best deferred to the next Board meeting. On the other hand, under the Constitution, the Board could not ignore issues of interference. Moreover, if it deferred a decision to the 90th meeting, other issues might have arisen in the interval. While it was true that the Board could not, in the circumstances, encourage the administrations involved to resolve the issue, it could draft a decision based on the rules of procedure, along the lines suggested by Mr Henri.

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

“With reference to § 4.4 of Document RRB22-1/4, the Board reminded the administrations concerned of the provisions of Nos. 37 and 197, § 1 of Article 1 of the ITU Constitution and Section VI of Article 15 of the Radio Regulations. Recognizing at this time the limited ability of the Administration of Ukraine to carry out the procedures of Article 15 of the Radio Regulations, the Board instructed the Bureau to continue following any development on the matter.”

Harmful interference to the JCSAT-3A satellite network from the Administration of Japan (§4.5 of Document RRB22-1/4)

3.36 **Mr Vallet (Chief SSD)** introduced § 4.5 of Document RRB22-1/4, involving harmful interference by the Administration of the Russian Federation to the Japanese JCSAT-3A satellite at 128°E in the frequency band 6 225–6 265 MHz. The Administration of Japan had requested the Bureau's assistance under RR No. 13.2 in June 2021, indicating that the harmful interference had stopped on 13 February 2020 after it had informed the Administration of the Russian Federation, only to resume on 21 October 2020. Spectrum plots and geolocation information indicated that the source might be an earth station located in the territory of the Russian Federation and intended to communicate with the COSMOS-2526 satellite, co-located with the JCSAT-3A satellite at 128°E and operating under the BV-SAT-128E satellite network notified by the Administration of the Russian Federation. In response to the request for assistance, the Bureau had written to both administrations. On 6 October 2021, the Administration of Japan had replied that the harmful interference persisted and had requested the Bureau to submit the case to the Board if no positive response was received from the Russian Federation.

3.37 On two later occasions in 2021, the Administration of the Russian Federation had replied that it had been unable to confirm that the interference to the JCSAT-3A satellite was caused by earth stations in the territory under its jurisdiction and suggested that it might be caused by other satellites in the vicinity of 128°E. On 17 December 2021 the Bureau had sent inquiries to the Administrations of China, the Lao People's Democratic Republic and Viet Nam, asking them to investigate whether the harmful interference experienced by the Administration of Japan might originate from an earth station intended to communicate with a satellite network notified by their administration. The Administration of China had since provided spectrum plots, which the Bureau had verified, ruling out the possibility that its satellites at 128°E were the source of the interference. The Administration of the Lao People's Democratic Republic had indicated that the uplink of the LAOSAT-1 satellite was operating in a different frequency range (i.e. 6 485–6 785 MHz) and therefore could not be the source of the harmful interference; it had also requested the Bureau's assistance to eliminate harmful interference to the LAOSAT-1 satellite network in the downlink in the band 3 465–3 473 MHz, which it believed was likely caused by the satellite of the Russian Federation located at 128°E. Lastly, the Administration of Viet Nam had communicated operational frequencies of its satellites close to 128°E did not overlap with the frequency band 6 225 – 6 265 MHz. No reaction had been received to date from the Administration of the Russian Federation about the harmful interference to the LAOSAT-1 satellite network.

3.38 On 4 February 2022, the Bureau had requested the cooperation of the Administrations of China and the Republic of Korea under the Memorandum of Understanding on Space Monitoring signed by both administrations with ITU. The Administration of China had since reported that it was unable to locate the interfering signal, and the Administration of the Republic of Korea had asked for additional technical parameters from the Administration of Japan.

3.39 The Bureau recommended that the Administration of the Russian Federation be asked to continue investigating whether the harmful interference to the Japanese networks originated from earth station(s) located in the territory under its jurisdiction and that both the Administrations of the Russian Federation and Japan be asked to continue exercising the utmost good will and mutual assistance in the application of the provisions of Article 45 of the Constitution and Section VI of Article 15 of the Radio Regulations. The case of harmful interference to the LAOSAT-1 satellite remained pending.

3.40 **Ms Hasanova** expressed support for the recommendation that both administrations should continue to exercise the utmost good will and engage in mutual assistance in the application of the

provisions of Article 45 of the Constitution and Section VI of Article 15 of the Radio Regulations and asked the Bureau to report on developments in the case at the next Board meeting.

3.41 **Ms Jeanty**, having listened to the Bureau's presentation of the case, agreed with both recommendations.

3.42 **Mr Hoan** said that, based on the background, spectrum and geolocation information provided and on the fact that the harmful interference did not appear to originate from an earth station in the Lao People's Democratic Republic or Viet Nam, he supported both recommendations. However, until such time as the source of the interference had been located, it was impossible to rule out that it might be an earth station on the territory of another country. The Bureau should therefore pursue its cooperation with the Administrations of China and the Republic of Korea with a view to obtaining geolocation measurements and identifying the source of the harmful interference.

3.43 **Mr Talib** expressed support for both of the Bureau's recommendations and asked that it report on the case at the next meeting of the Board.

3.44 Referring to the proposal made by Mr Hoan, **Mr Azzouz** pointed out that the Administration of China had said that the signal level was too weak to monitor. It was therefore difficult to see how the Bureau could pursue its cooperation to that end with that administration.

3.45 **Ms Jeanty** said that, in that case, the Board's decision should be worded in more general terms and refer only to a progress report on monitoring to be provided by the Bureau at the next meeting.

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

"The Board considered in detail § 4.5 of Document RRB22-1/4, on harmful interference to the JCSAT-3A satellite network of the Administration of Japan, and noted that the Administration of the Lao People's Democratic Republic had also requested the assistance of the Bureau to eliminate the harmful interference to its LAOSAT-1 satellite network in the band 3 465–3 473 MHz. Based on the information provided, and in accordance with RR No. **13.2**, the Board decided to request:

- the Administration of the Russian Federation to investigate if harmful interference could originate from earth station(s) located on the territory under its jurisdiction, as displayed in the geolocation information provided by the Administration of Japan. When informing the Board of the results of its investigation, the Administration of the Russian Federation should also indicate the reasons for the conclusion in order to facilitate further investigation, as necessary;
- both Administrations to continue 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.

The Board instructed the Bureau to:

- request the cooperation of administrations that were signatories to the Memorandum of Understanding on Space Monitoring to assist in performing geolocation measurements to identify the source of harmful interference;
- report on progress to the 90th Board meeting."

Harmful interference affecting RNSS in 1 559–1 610 MHz band (§ 4.6 of Document RRB22-1/4)

3.47 **Mr Vallet (Chief SSD)**, introducing § 4.6 of Document RRB22-1/4, recalled that in 2018, the Bureau had received reports from the Administration of Cyprus of harmful interference of the type described in RR No. 15.1 to RNSS receivers on board aircraft flying over the flight information region under its responsibility. WRC-19 had been informed of the issue and the Bureau had received no further reports until April and August 2020. On 11 November 2021, EUROCONTROL had written

to the Bureau alerting it to widespread radio-frequency interference affecting the operation of aircraft stations receiving RNSS signals in the 1 559–1 610 MHz band and requesting support. The letter had subsequently been endorsed by requests for assistance under RR No.13.2 from the Administrations of Cyprus and Poland. The aviation community had also informed the International Civil Aviation Authority (ICAO), which had called for appropriate mitigation actions. The Bureau recommended that Member States should be requested to ensure that their operating agencies complied with the applicable provisions of ITU instruments, notably Articles 45, 47 and 48 of the Constitution and RR No. 15.28, and to exercise the utmost good will in their application. The Bureau intended to inform Member States of the Board’s decision and other relevant background information on the safety of RNSS receivers via circular letter.

3.48 The **Chairman** emphasized the importance of protecting safety frequencies from any type of interference.

3.49 **Mr Azzouz**, noting the criticality and importance of distress and safety frequencies, said that he fully supported the Bureau’s recommendation and agreed that the Board’s decision should be communicated by a circular letter.

3.50 **Mr Hoan** said that such interference since April 2020 was deeply worrying and stressed that administrations must cooperate to resolve the situation as soon as possible given the potential safety consequences. As provided for in ITU legal instruments, the operation of radio equipment, including for national defence, must not cause harmful interference to radio services operating in accordance with the provisions of the Radio Regulations. He supported the recommendation of the Bureau, which would ensure safe aircraft operations and preserve the utility of significant investments in space-based radionavigation capability.

3.51 **Mr Talib** thanked the Bureau and expressed support for its recommendation. The Board’s decision should be communicated in a circular letter that reflected the sensitivity and importance of the issue and the fact that all stations, including installations for national defence services, must not cause harmful interference to the radio services or communications of other Member States.

3.52 **Mr Hashimoto**, noting the importance of the situation and the safety implications, said that he expected the Bureau to investigate the cases further and cooperate with ICAO. He supported the recommended action proposed.

3.53 **Ms Hasanova** expressed support for the approach set out by the Bureau and agreed that the Board’s decision should be communicated by circular letter.

3.54 In reply to a query from **Mr Varlamov** regarding the ICAO rules for pilots flying over the Nicosia Flight Information Region affected by the harmful interference, and the special application of instrument flight rules set out in § 1.2.1 of the European Regional Supplementary Procedures (ICAO/7030 issue 5), **Mr Vallet (Chief SSD)** said that following the interference reports, the Cypriot authorities had issued an advisory note to pilots to indicate that RNSS receivers might not be available over the region, which was likely to prompt a switch to manual instrumentation over that area. Interference to RNSS receivers did not present an immediate risk to life and would not cause a plane to crash; pilots would be required to navigate manually, which would necessitate greater security distances and thus considerably reduce air traffic in the region. The ICAO Regional Supplementary Procedures were intended to support the Procedures for Air Navigation Services and did not obviate the need for correctly functioning GNSS services on aircraft, including over the Nicosia Flight Information Region.

3.55 **Mr Varlamov**, having thanked the Bureau for the information, said that services must operate without interference and endorsed the views already expressed by other Board members.

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

“In considering § 4.6 of Document RRB22-1/4, on harmful interference affecting the RNSS in the 1 559–1 610 MHz band, the Board noted with concern the impact of such harmful interference on radiocommunication services ensuring safety of life and the navigation of aircraft. In accordance with RR No. **13.2**, the Board decided to request Member States to ensure that their operating agencies complied with the applicable provisions of the ITU legal instruments:

- ‘All stations, whatever their purpose, must be established and operated in such a manner as not to cause harmful interference to the radio services or communications of other Member States or of recognized operating agencies, or of other duly authorized operating agencies which carry on a radio service, and which operate in accordance with the provisions of the Radio Regulations.’ (Article 45 of the ITU Constitution)
- ‘to take the steps required to prevent the transmission or circulation of false or deceptive distress, urgency, safety or identification signals, and to collaborate in locating and identifying stations under their jurisdiction transmitting such signals.’ (Article 47 of the ITU Constitution)
- ‘1 Member States retain their entire freedom with regard to military radio installations.’; ‘2 Nevertheless, these installations must, so far as possible, observe statutory provisions relative to giving assistance in case of distress and to the measures to be taken to prevent harmful interference, and the provisions of the Administrative Regulations concerning the types of emission and the frequencies to be used, according to the nature of the service performed by such installations.’; ‘3 Moreover, when these installations take part in the service of public correspondence or other services governed by the Administrative Regulations, they must, in general, comply with the regulatory provisions for the conduct of such services.’ (Article 48 of the ITU Constitution)
- ‘Recognizing that transmissions on distress and safety frequencies and frequencies used for the safety and regularity of flight (see Article **31** and Appendix **27**) require absolute international protection and that the elimination of harmful interference to such transmissions is imperative, administrations undertake to act immediately when their attention is drawn to any such harmful interference.’ (RR No. **15.28**)

The Board further decided to request Member States to continue 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.

The Board instructed the Bureau to issue a circular letter to the Member States to disseminate the decision and other background information about the prevention of harmful interference to RNSS receivers.”

3.57 It was so agreed.

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 RRB22-1/4)

3.58 Following a comment from **Mr Azzouz, Mr Vallet (Chief SSD)**, referring to Table 5, confirmed that the number of partial suppressions in 2016 should read 103, not 106.

3.59 With that clarification, the Board **noted** § 5 of Document RRB22-1/4.

Progress of the work on Resolution 559 submissions (§ 6 of Document RRB22-1/4)

3.60 **Mr Vallet (Chief SSD)**, introducing § 6 of Document RRB22-1/4, said that at its October–November 2021 meeting, ITU-R Working Party 4A had endorsed all of the suggestions submitted by the Bureau to further facilitate the coordination of Resolution 559 (WRC-19) submissions. The Board might wish to reflect those measures and progress in its report to WRC-23 under Resolution 80

(Rev.WRC-07). While coordination of Resolution 559 submissions was progressing well and there were no major difficulties to report, some administrations were slightly late in engaging in coordination. The Bureau continued to assist relevant administrations in the coordination process and had participated in a workshop organized by the Southern African Development Community (SADC) in January 2022. The Bureau had received two Part B submissions that could have affected the EPM of some Resolution 559 submissions but, as the two notifying administrations had agreed to accept the measures proposed by the Bureau, degradation had not exceeded 0.45 dB. One Part A satellite network that might have had an impact on Resolution 559 submissions had been cancelled due to the expiry of the time-limit for bringing into use.

3.61 **Ms Beaumier**, noting that the overall situation continued to improve, welcomed the Bureau's continued efforts to implement Resolution 559 (WRC-19) and assist administrations in mitigating any negative impact from new Part B submissions. She also thanked administrations for their cooperation. In its report under Resolution 80 (Rev.WRC-07) to WRC-23, the Board would reflect the endorsement by Working Party 4A of the measures suggested by the Bureau, which was a positive development but also showed that several measures had been required to implement in a meaningful way the intent of WRC-19 with regard to Resolution 559.

3.62 **Mr Henri** commended Bureau staff for their work and assistance with respect to Resolution 559 (WRC-19) and thanked administrations for their cooperation.

3.63 **Mr Hoan** thanked the Bureau for its efforts to implement Resolution 559 (WRC-19) and propose measures to ensure that EPM was not degraded by more than 0.45dB. He welcomed the Bureau's active participation in a workshop organized by the SADC and Working Party 4A's endorsement of the Bureau's suggestions. He also recognized the good will exercised by administrations in protecting submissions.

3.64 Following a comment from **Mr Azzouz**, who also praised the efforts of the Bureau concerning Resolution 559 submissions and the administrations for their cooperation, the **Chairman** said that Documents RRB22-1/15 and RRB22-1/16, which concerned some of the administrations benefiting from Resolution 559 (WRC-19), would be taken up under the relevant agenda items.

3.65 **Mr Hashimoto**, noting that the spirit of Resolution 559 (WRC-19) was to promote equitable access to the satellite orbits, expressed great appreciation for the Bureau's work and trusted that it would continue to assist administrations in their submissions under the resolution.

3.66 **Mr Varlamov** noted with satisfaction the Bureau's work on Resolution 559 submissions and thanked those administrations that had accepted the mitigation measures proposed by the Bureau. Such action clearly showed that countries were complying with the basic provisions of the Constitution concerning equitable access to orbits and frequencies and that such situations could be regulated through good will.

3.67 **Ms Hasanova**, noting that Resolution 559 (WRC-19) was particularly important for developing countries, thanked the Bureau for its work on Resolution 559 submissions and for taking part in the SADC workshop. She was grateful to administrations for accepting measures proposed by the Bureau to ensure that degradation did not exceed 0.45 dB.

3.68 **Ms Jeanty**, having commended Bureau staff for their work on Resolution 559 (WRC-19), thanked the Administrations of the United Kingdom and United States for having accepted the measures proposed by the Bureau and expressed satisfaction that Working Party 4A had endorsed all the Bureau's suggestions.

3.69 **Mr Mchunu** welcomed the Bureau's efforts and participation in the workshop. He thanked those administrations that had responded positively in modifying their Part B submissions on the advice of the Bureau and hoped that others would be encouraged to do likewise.

3.70 **Mr Talib** thanked the Bureau for its work on the implementation of Resolution 559 (WRC-19), which was of such importance to developing countries, and welcomed the Bureau's participation in the SADC workshop. He also thanked administrations for their cooperation.

3.71 The **Director**, having thanked Board members for their kind words, said that the Bureau undertook the work on Resolution 559 submissions with great pleasure since it really made a difference to the 45 administrations that had seen their orbital position degraded over the years. Administrations had also demonstrated good will, and the exercise provided a good example of the collective spirit of ITU to improve the use of satellite orbits in an equitable manner.

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

"The Board considered in detail § 6 of Document RRB22-1/4 on the progress of the work on Resolution **559 (WRC-19)** submissions and noted with satisfaction the continued successful implementation of the procedure and the good will that administrations had exercised in protecting submissions under Resolution **559 (WRC-19)**. The Board recognized with gratitude:

- the efforts of the Bureau in the implementation of the Resolution **559 (WRC-19)** procedure and the support provided to administrations in their submissions under this resolution;
- the continued support provided by the Bureau during a workshop organized by a regional group.

The Board also recognized the importance of the endorsement by ITU-R Working Party 4A of all the measures suggested by the Bureau to facilitate the coordination of submissions under Resolution **559 (WRC-19)** and reaffirmed its intention to report those measures and progress in its Report under Resolution **80 (Rev.WRC-07)** to WRC-23. Furthermore, the Board expressed its appreciation for the cooperation of administrations in accepting to implement the mitigation measures that would avoid further degradation of the reference situation of submissions of other administrations under Resolution **559 (WRC-19)**. The Board encouraged administrations to further cooperate and participate actively in the coordination activities and instructed the Bureau to continue to provide support to the administrations in those efforts."

3.73 It was so agreed.

Review of findings for frequency assignments to non-GSO FSS satellite systems under Resolution 85 (WRC-03) (§ 7 of Document RRB22-1/4)

3.74 **Mr Vallet (Chief SSD)**, introducing § 7 of Document RRB22-1/4, was pleased to report that the Bureau's review of findings to frequency assignments to non-GSO FSS satellite systems was progressing well. The Bureau had received two new servers in 2021 and had therefore been able to conduct the reviews at an accelerated pace, publishing 18 such systems since the Director's report to the 88th Board meeting. In addition, ITU-R Working Party 4A had recently completed its work on Recommendation ITU-R.S.1714 and ITU-R Study Group 4 had approved a revision to the recommendation rectifying an incorrect assumption for all GSO systems using masks presented in the alpha versus delta longitude format. The Bureau would thus henceforth review coordination requirements under RR No. 9.7B using the methodology set out in revised Recommendation ITU-R S.1714-1. That outcome was a good example of cooperation between the Bureau, ITU-R and the Board.

3.75 In reply to questions from **Mr Varlamov, Mr Henri** and **Ms Hasanova**, he said that the Bureau's new servers had doubled its processing capacity and that implementation of Resolution 85 (WRC-03) remained stable despite the current budget constraints, the number of Bureau positions involved having neither increased nor decreased. In addition, the review of findings pertaining to the USASAT-NGSO-4 satellite system had yet to be done, as the filing had been attributed a new date of receipt. Only then would the system be republished pursuant to the decision of the 84th Board meeting.

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

“In considering § 7 of Document RRB22-1/4, on the review of findings to frequency assignments to non-GSO FSS satellite systems under Resolution **85 (WRC-03)**, the Board noted with satisfaction the acceleration in the treatment of filings by the Bureau and instructed the Bureau to continue its efforts to improve the speed of processing such filings and to report progress to future meetings of the Board.”

Submissions under the provisions of Resolution 35 (WRC-19) (§ 8 of Document RRB22-1/4)

3.77 The Board **noted** § 8 of Document RRB22-1/4.

Resubmission of notified frequency assignments to the UKMMSAT-B_1 satellite network (§ 9 of Document RRB22-1/4)

3.78 **Mr Vallet (Chief SSD)**, introducing § 9 of the Director’s report, relating to frequency assignments to the UKMMSAT-B_1 satellite network, said that the notifying administration – the Administration of the United Kingdom – had resubmitted the frequency assignments for further examination under RR No. 11.41 on 11 October 2021, four days after the six-month deadline stipulated in RR No. 11.46. On 12 October 2021, the notifying administration had provided a detailed description of the special circumstances leading to the late resubmission. The Bureau had taken note of those circumstances and, given that the satellite network’s operational status was compliant with the relevant provisions of Article 11, had decided, on 22 October 2021 and on an exceptional basis, to accept the late resubmission under RR No. 11.46 of the relevant frequency assignments.

3.79 The Board **noted** § 9 of Document RRB22-1/4.

New date of receipt of the Part B and notification of the NEW DAWN FSS-3 satellite network (§ 10 of Document RRB22-1/4)

3.80 **Mr Vallet (Chief SSD)** said that the Bureau had received the Part A submission for the NEW DAWN FSS-3 satellite network from Papua New Guinea on 8 November 2012. On 30 October 2020, the notifying administration had submitted a single notice containing the Part B information and the notification. It had replied in time to the Bureau’s first inquiry for clarification but had missed the 15-day deadline for replying to the second inquiry by nine days, citing a COVID-19 lockdown as the reason for the delay. The delayed reply had included further modifications to the characteristics of the network. Thus, according to § 3.7 of the rules of procedure concerning the receivability of forms of notice and the Bureau’s practice, a new formal date of receipt of 28 October 2021 would have to be established. However, that would be beyond the original eight-year regulatory time-limit of 8 November 2020, and the satellite network would have to be cancelled. In the absence of a clear provision to follow, the Bureau had suspended processing of the submissions. However, as a space station capable of receiving and transmitting the notified frequency assignments had already been deployed at the orbital position, and in accordance with the Board’s previous decisions on other similar cases, the Bureau proposed to resume processing the submissions for the NEW DAWN FSS-3 satellite network with the newly submitted characteristics, considering the date of receipt of the two submissions as 18 March 2022, i.e. the last day of the Board’s meeting.

3.81 The **Chairman** observed that the notifying administration had submitted the Part B information and notification on 30 October 2020, i.e. before the expiry of the eight-year regulatory deadline but had missed the deadline for replying to the second inquiry of the Bureau by nine days.

3.82 **Mr Henri** noted that the 15-day period for replying to second completeness inquiries of the Bureau was based on the Bureau’s general practice and not on an RR provision or rules of procedure requirement and that the notifying administration had missed the deadline by only nine days during the exceptional circumstances of the pandemic. Changing the date of receipt of both submissions to

18 March 2022 would lighten the Bureau's workload as it would not have to review any examinations undertaken between 28 October 2021 and the present Board meeting and would not have any adverse impact on the submission or on other administrations. Moreover, the Board had already taken similar action in the past and he could therefore agree to the proposed approach.

3.83 **Ms Beaumier** said that the late reply should be accepted and the date of receipt should be considered as 18 March 2022 for the reasons outlined by Mr Henri.

3.84 **Ms Jeanty** endorsed the Bureau's proposal, as did **Ms Hasanova**, who pointed out that the notifying administration had missed the deadline by only nine days and a space station capable of receiving and transmitting the notified frequency assignments had already been deployed.

3.85 **Mr Azzouz** said that the Board should accept the Bureau's proposal provided that the modifications had no impact on coordination requirements.

3.86 **Mr Vallet (Chief SSD)** confirmed that the modifications would not affect the coordination requirements, which were currently covered by Part A (which had not yet been suppressed).

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

"In considering § 10 of Document RRB22-1/4, on a new date of receipt of the Part B and notification of the NEW DAWN FSS-3 satellite network of the Administration of Papua New Guinea, the Board noted that:

- the administration had replied in a timely manner to the first inquiry of the Bureau but had missed the deadline for replying to the second inquiry of the Bureau by nine days;
- the 15-day period for replying to second inquiries of the Bureau was based on the general practice of the Bureau;
- a space station was currently in operation in compliance with the relevant provisions of the Radio Regulations;
- the modified technical characteristics would have no impact on the coordination requirements for the satellite network.

Consequently, the Board decided to instruct the Bureau to resume the processing of the submissions under § 6.17 and § 8.1 of Appendix **30B** for the NEW DAWN FSS-3 satellite network with the newly submitted characteristics and to change the date of receipt of those two submissions to 18 March 2022."

3.88 It was so **agreed**.

Coordination discussion between the Administrations of Saudi Arabia, France and the Islamic Republic of Iran (Addenda 3 and 6 to Document RRB22-1/4)

3.89 **Mr Vallet (Chief SSD)** introduced Addendum 3 to Document RRB22-1/4, which reported on the discussions between the Administrations of Saudi Arabia (the notifying administration for the satellite networks of the ARABSAT intergovernmental satellite organization), France (the notifying administration for its own satellite networks and for EUTELSAT) and the Islamic Republic of Iran concerning the coordination of their satellite networks at the orbital positions 25.5°E and 26°E in the Ku frequency band. Pursuant to the Board's request at its 88th meeting, the three administrations had continued their discussions and had held two virtual meetings in November 2021 and January 2022 in the presence of the Bureau. Agreement had been reached on a mutually acceptable frequency segmentation arrangement and the Administrations of Saudi Arabia and the Islamic Republic of Iran had agreed to commence the process of formalizing the coordination agreement. The Administration of France, for its part, had indicated its readiness to commence the process of formalizing the coordination agreement within the overall coordination of the satellite networks at 25.5°E and 26°E in the Ku and Ka frequency bands.

3.90 Addendum 6 reported on the discussions between the Administrations of Saudi Arabia and France concerning the coordination of their satellite networks at the orbital positions 25.5°E and 26°E in the Ka frequency band, which had been conducted in parallel with the discussions on the Ku frequency band. At the virtual meeting held in November 2021, the administrations had discussed the list of specific Ka frequency bands and relevant satellite networks to be included in the coordination agreement. They had expressed diverging views on the scope of the discussions, with the Administration of Saudi Arabia wishing to discuss the coordination of the Ku and Ka frequency bands at 11°E and 34.5°E during further coordination meetings and the Administration of France preferring to focus on 25.5°E and 26°E. That administration had, however, agreed to hold a further coordination meeting in the second quarter of 2022 for the other pending issues at 11°E and 34.5°E. Both administrations had exchanged further detailed technical and operational information for different orbital slots and the next coordination meeting with the presence of the Bureau would take place on 21 and 22 March.

3.91 The **Vice-Chairman** welcomed the progress made. He hoped that the pending issues in the Ka frequency band would be resolved shortly so that the coordination agreements for the Ku and Ka frequency bands could be signed after the second quarter of 2022.

3.92 **Ms Beaumier** welcomed the encouraging reports. The conclusion of discussions on the Ku frequency band was a major achievement, and she thanked the Bureau for its continued assistance. She was pleased that progress was being made with respect to the Ka frequency band and the two administrations concerned should be encouraged to continue their efforts in good will to reach a successful outcome. She hoped that further progress would be made at the March meeting and that the agreements would be signed shortly.

3.93 **Mr Hashimoto** said that the Bureau's efforts to assist the administrations concerned in their coordination activities were highly appreciated. He welcomed the progress made and hoped that final agreement on both bands would be reached shortly.

3.94 **Mr Talib** welcomed the positive results achieved, in particular with regard to the Ku frequency band, and thanked the Bureau for its efforts. Discussions on the Ka frequency band should continue with the assistance of the Bureau if required, and he hoped that agreement would be reached at the meeting in March. He recommended signing the agreements on the Ku and Ka frequency bands separately, noting that the agreement on the Ku frequency band was ready for signature.

3.95 **Mr Varlamov** said that the results regarding the Ku frequency band showed that the Board's decisions were achievable. He thanked the administrations involved and the Bureau for its assistance, and hoped that the issues relating to the Ka frequency band would be resolved shortly. He would be reluctant to make any further recommendations to the administrations concerned as they understood each other and recognized that agreement would not be reached without negotiation.

3.96 **Ms Hasanova** congratulated the three administrations concerned on reaching agreement on the Ku frequency band and encouraged the conclusion of the coordination issues on the Ka frequency band with the support of the Bureau.

3.97 **Ms Jeanty** thanked the Bureau for its assistance and the administrations for their coordination efforts. As had been discussed at previous meetings, the Board should refrain from making any recommendations indicating an order for signature of the agreements, particularly as the discussions appeared to be going in the right direction.

3.98 **Mr Borjón** endorsed those comments. The progress made demonstrated that the Board was offering good solutions to complex matters and he congratulated the Bureau on its excellent work.

3.99 The **Vice-Chairman** proposed that the Board conclude on the matter as follows:

“The Board considered in detail Addenda 3 and 6 to Document RRB22-1/4 reporting on the coordination efforts of the satellite networks of the Administrations of Saudi Arabia (the notifying administration for the satellite networks of the intergovernmental satellite organization ARABSAT), France (the notifying administration for its own satellite networks and for EUTELSAT satellite networks) and the Islamic Republic of Iran in the Ku band, and the Administrations of Saudi Arabia (the notifying administration for the satellite networks of the intergovernmental satellite organization ARABSAT) and France (the notifying administration for its own satellite networks) in the Ka band, respectively. The Board noted with satisfaction that:

- the coordination efforts between the three administrations had concluded successfully for the satellite networks with frequency assignments in the Ku band and an agreement was ready for signature;
- the coordination efforts between the two administrations in the Ka band had made good progress;
- a further coordination meeting had been scheduled for the period 21–22 March 2022 between the Administrations of Saudi Arabia and France.

The Board expressed its appreciation for the cooperation between the administrations and their coordination efforts in good will and thanked the Bureau for its assistance to the administrations in those efforts. The Board encouraged the Administrations of Saudi Arabia and France to continue their coordination efforts in the Ka band and instructed the Bureau to continue to provide the necessary support to the administrations and to report any progress to the 90th Board meeting.”

3.100 It was so agreed.

Activities between the Administrations of France and Greece (Addendum 5 to Document RRB22-1/4)

3.101 **Mr Vallet (Chief SSD)** introduced Addendum 5 to Document RRB22-1/4, which reported on 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. At the most recent coordination meeting, from 30 November to 2 December 2021, both delegations had completed consideration of a number of items and agreed on certain power levels. However, in order to reach a mutually acceptable overall agreement, the parties had agreed to exchange certain detailed technical and operational information by the end of January 2022, continue their assessment of proposals and technical conditions discussed during the meeting, and hold their next coordination meeting with the participation of the Bureau from 10 to 12 May 2022. The delegations were keen to meet in person, and the location and format would be decided three weeks before the meeting. Observing that modalities concerning the coordination agreement had yet to be determined, he concluded by noting that the process had been supported by the Board from the outset and continued to advance.

3.102 The **Chairman** thanked the Bureau for its support to the two administrations and welcomed the progress made in the coordination activities between the two administrations.

3.103 **Mr Talib** thanked the Bureau for its efforts to facilitate coordination between the two administrations and welcomed the progress made. He hoped that further results would be achieved at the May meeting and looked forward to the development of a coordination agreement.

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

“In relation to Addendum 5 to Document RRB22-1/4, on 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 noted with satisfaction the progress made in those efforts and that another coordination meeting was planned with the support

of the Bureau, and thanked the Bureau for its support to the two administrations. The Board encouraged the Administrations of France and Greece to continue their coordination efforts in good will and instructed the Bureau to continue providing support for those efforts and to report on any progress to the 90th Board meeting.”

3.105 It was so **agreed**.

Status of the BALKANSAT AP30B satellite network (Addendum 7 to Document RRB22-1/4)

3.106 **Mr Vallet (Chief SSD)** introduced Addendum 7 to Document RRB22-1/4, which reported on the extension of the regulatory deadline for submitting the information under Resolution 49 (Rev.WRC-19) of the BALKANSAT AP30B satellite network. He recalled that, at its 88th meeting, the Board had considered the request of the Administration of Bulgaria for the extension of the regulatory time-limit to bring into use the frequency assignments to the BALKANSAT AP30B network, which had concerned the conversion of a national allotment in Appendix 30B into an assignment within the envelope characteristics of the initial allotment. The Bureau had begun to implement the Board’s decision and, taking into account the rules of procedure concerning RR No. 11.48, had sent the Administration of Bulgaria a reminder to submit the due diligence information relating to the network not later than 30 days following the end of the period established as a limit for bringing into use frequency assignments in accordance with § 6.1 of Article 6 of Appendix 30B, i.e. 2 July 2022. The Administration of Bulgaria had written to the Bureau on 17 February 2022 indicating its understanding that, since the Board’s decision at its 88th meeting had not been taken on the basis of *force majeure*, but because of an inconsistency in the application of the provisions of Appendix 30B, the Bureau should not refer to the rules of procedure on RR No. 11.48. It also considered that, in accordance with the Board’s decision, the regulatory time-limit for bringing into use the frequency assignments to the BALKANSAT AP30B network should be 15 December 2023 (the last day of WRC-23) and that the deadline for submission of Resolution 49 information should be based on that new time-limit. The absence of Resolution 49 information would normally result in the deletion of the satellite network and subsequent reinstatement of the Bulgarian allotment in the FSS Plan. Resubmission would, however, entail an additional administrative burden for both the administration and the Bureau, which was what the Board had sought to avoid at its previous meeting.

3.107 **Ms Jeanty** said that the rules of procedure on RR No. 11.48 explicitly mentioned *force majeure* but the Board’s decision at its 88th meeting had not been based on those grounds. Requesting the Resolution 49 information for the BALKANSAT AP30B satellite network at the present juncture would serve no purpose, and she agreed that the deadline for the submission of such information should be the last day of WRC-23, i.e. 15 December 2023.

3.108 **Mr Henri** said that, following the Bureau’s clear explanations, he could agree to the request from the Administration of Bulgaria. The time-limit for the submission of Resolution 49 information in cases concerning the conversion of a national allotment without any modification or with modification within the envelope of the initial allotment should be included for possible review and adjustment considerations in the Board’s report on Resolution 80 (Rev.WRC-07) to WRC-23.

3.109 **Mr Hoan** agreed that the rules of procedure on RR No. 11.48 should not be applicable to BALKANSAT AP30B, as the case had not been classified by the Board as *force majeure*. Should the current deadline of 2 July 2022 for the provision of Resolution 49 information not be met, the BALKANSAT AP30B satellite network would have to be deleted and the allotment reinstated, meaning that the Administration of Bulgaria would have to restart the process of conversion, which was precisely the reason for the Board’s conclusion at the 88th meeting. He also asked how the Board would report the case to WRC-23 in that event. The deadline for bringing into use the frequency assignments to the BALKANSAT AP30B network and for submitting the Resolution 49 information should be 15 December 2023, and the Board should include in its report on Resolution 80 (Rev.WRC-

07) to WRC-23 the requirement for submitting Resolution 49 information in cases concerning the conversion of a national allotment without modification or within the existing envelope.

3.110 **Ms Beaumier** said that she had similar views to previous speakers. She agreed with the Administration of Bulgaria that the case had not been treated as an extension request, but as an inconsistency with respect to regulatory time-limits for bringing into use an assignment from the conversion of allotments without any modification or with modifications within the envelope of the allotment characteristics, and considered that the rules of procedure on RR No. 11.48 were therefore not applicable. The consequences of not providing the information required under Resolution 49 (Rev.WRC-19) should not be the cancellation of the frequency assignments and the requirement to restart the process, as currently stipulated in Article 8 of Appendix 30B. Accordingly, the Board's report on Resolution 80 (Rev.WRC-07) to WRC-23 should make recommendations concerning the date of application of deadlines for bringing into use provided for in Articles 6 and 8 of Appendix 30B and the implications for the submission of Resolution 49 information. She would support the proposed deadline of 15 December 2023 pending a decision from WRC-23 on how to address such cases. She also noted that consideration might be given to discussing the possibility of setting the same deadline for bringing into use and submitting the Resolution 49 information when assignments had been provisionally recorded in the Master Register.

3.111 **Mr Hashimoto** said that the deadline for bringing into use the frequency assignments and for submitting the Resolution 49 information should be set as 15 December 2023. The issue, together with background information, should be presented in the Board's report on Resolution 80 (Rev.WRC-07) to WRC-23.

3.112 **Ms Hasanova** agreed with previous speakers; the case had not been classified as *force majeure* but had instead been based on a regulatory inconsistency with respect to Appendix 30B. She would support the proposed deadline of 15 December 2023.

3.113 **Mr Talib**, endorsing the views of previous speakers, said that the assignments should be maintained until the last day of WRC-23 and the issue raised in the Board's report on Resolution 80 (Rev.WRC-07) to WRC-23.

3.114 **Mr Varlamov**, noting that he had no objection to the proposed approach, recalled that the Administration of Bulgaria had requested an extension until 2 June 2023 at the 88th meeting. Should the frequency assignments be brought into use before 15 December 2023, the administration would be expected to also provide the information required under Resolution 49 (Rev.WRC-19) no later than the date on which the assignments were brought into use. **Ms Beaumier** endorsed that view.

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

“The Board considered in detail Addendum 7 to Document RRB22-1/4 regarding the dates of the deadline for bringing into use the frequency assignments to the BALKANSAT AP30B satellite network from the Administration of Bulgaria and for submitting the required information under Resolution 49 (Rev.WRC-19) for that satellite network. In reference to its decision at the 88th Board meeting regarding that satellite network, the Board reiterated that its decision had not been based on an extension of the regulatory time-limit to bring into use the frequency assignments to the satellite network as a case of *force majeure*, but instead had been based on a regulatory inconsistency with the purpose of Appendix 30B. Furthermore, the Board noted that the rules of procedure on RR No. 11.48 were not applicable in this case. The Board concluded that the consequence of not providing the information required under Resolution 49 (Rev.WRC-19) for frequency assignments that were in conformity with a Plan allotment should not be the cancellation of the frequency assignments. Consequently, the Board decided to:

- accede to the request from the Administration of Bulgaria to set the regulatory time-limit for the submission of the information required under Resolution **49 (Rev.WRC-19)** for the BALKANSAT AP30B satellite network to the last day of WRC-23, 15 December 2023;
- include this aspect in its Report on Resolution **80 (Rev.WRC-07)** to WRC-23.

The Board reminded the Administration of Bulgaria that should the frequency assignments that were in conformity with the Plan allotment be brought into use before 15 December 2023, the administration would be expected to provide also the information required under Resolution **49 (Rev.WRC-19)** no later than the date on which the assignments were brought into use.”

3.116 It was so **agreed**.

Communication from the Administration of Ukraine (Addendum 10 to Document RRB22-1/4)

3.117 **Mr Vallet (Chief SSD)** introduced Addendum 10 to Document RRB22-1/4, containing a request from the Administration of Ukraine dated 27 February 2022. The administration indicated that, in view of the prevailing situation in the country, the ability of the Ukrainian State Centre of Radio Frequencies to conduct the procedures related to international coordination of frequency assignments was currently limited. It requested that all frequency assignments of the Russian Federation for which Ukraine was identified by the Bureau as affected be considered as having received an objection and that such status be reflected in the corresponding special section publications. It would notify the Bureau when the procedure could be discontinued.

3.118 The **Chairman** said that all members understood the current situation and that the ability of the Administration of Ukraine to apply the provisions of the Radio Regulations and regional agreements was currently limited. As the Director had suggested earlier in the meeting, the same approach should be followed with respect to the relevant frequency assignments of all administrations, not only those of the Russian Federation.

3.119 The **Director** said that it was the general practice of the Bureau to exercise flexibility and accept late replies when an administration was unable to respond due to extreme circumstances; the most recent example was when the Administration of Tonga had been affected by a natural disaster. Although the request from the Administration of Ukraine clearly fell in that category, the Bureau did not have a precedent for such a blanket option. Given the situation, it would be logical that the request should apply to all cases where the Administration of Ukraine was identified as potentially affected, not just to assignments of the Russian Federation.

3.120 **Ms Jeanty** said that she fully supported the request from the Administration of Ukraine and understood the specific reference to the Russian Federation. However, in the light of the Director’s comments, she could agree to treat all cases where the Administration of Ukraine was identified as affected as having received an objection.

3.121 **Ms Beaumier** said that she sympathized with the situation and recognized the limited ability of the administration to carry out coordination activities. She could agree to the request, which should also apply to submissions from other administrations. She asked whether the practice to be followed would cause difficulties in the long term for the application of procedures where agreement was required to complete a process.

3.122 **Mr Borjón**, having expressed support for the Director’s suggestion, said that the extraordinary situation could be qualified as *force majeure* and that the Bureau should be encouraged to continue its useful, proven and flexible approach for extreme circumstances. In order to ensure proper control and oversight, each case would have to be considered individually once the procedure was discontinued.

3.123 **Mr Henri** said that he could accept the request from the Administration of Ukraine for all regulatory cases where that administration was identified as potentially affected, which should apply in respect of relevant frequency assignments from all ITU Member States, as suggested by the Director. A list of procedures to which that exceptional procedure applied would be useful and a case-by-case approach should be adopted. The Board should also reassess the situation at its next meeting.

3.124 **Mr Vallet (Chief SSD)** said that, following the volcanic eruption and tsunami in Tonga on 15 January 2022, the Administration of Tonga, which usually provided its responses in a timely manner, had been unable to submit comments regarding special sections contained in BR IFICs 2955 to 2958. It had informed the Bureau of its intention to send delayed comments, which the Bureau would accept given the *force majeure* event in the country. The official request from the Administration of Tonga was available on the sharepoint.

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

“With reference to Addendum 10 to Document RRB22-1/4 and the request from the Administration of Ukraine received on 27 February 2022, the Board indicated its understanding of the situation that the administration was experiencing. The Board recognized at this time the limited ability of the Administration of Ukraine to carry out the regulatory procedures to protect its frequency assignments and allotments. The Board noted with appreciation the general practice of the Bureau to accept late replies to BR IFIC publications when an administration was unable to respond due to extreme circumstances to such publications in cases where it had been identified as potentially affected by the frequency assignments or allotments of another administration, as was recently the case when the Administration of Tonga had been affected by a natural disaster. The Board considered that the same practice should be followed with respect to other administrations’ submissions where the Administration of Ukraine was identified as affected. The Board furthermore considered that this case qualified as a situation of *force majeure*. Consequently, the Board decided to:

- accede to the request from the Administration of Ukraine to treat all cases, as of 27 February 2022, where the Administration of Ukraine was identified as potentially affected by the submissions of frequency assignments and allotments of another administration as having received an objection from the Administration of Ukraine;
- reassess the situation at its 90th meeting.”

3.126 It was so **agreed**.

3.127 Having considered in detail the Report of the Director as contained in Document RRB22-1/4 and Addenda 1 to 7 and 10, the Board **thanked** the Bureau for the extensive and detailed information provided.

4 Rules of procedure (Documents RRB22-1/1, RRB20-2/1(Rev.5), RRB22-1/3; Circular Letter CCRR/68)

List of rules of procedure (Documents RRB22-1/1, RRB20-2/1(Rev.5) and RRB22-1/3; Circular Letter CCRR/68)

4.1 The **Chairman** drew attention to Circular Letter CCRR/68, which contained draft new and modified rules of procedure circulated to administrations for comment. The annexes to Document RRB22-1/3 contained the comments received from administrations.

4.2 **Mr Henri**, the Chairman of the Working Group on the Rules of Procedure, said that Document RRB22-1/3 still listed two new rules of procedure, on RR Nos. 5.218A and 5.564A, respectively, which, in keeping with the past decision of the Board, would not be finalized until such time as the Bureau had to resolve a case related thereto.

4.3 The general content of the draft rules of procedure contained in Circular Letter CCRR/68 had been endorsed by all the administrations making comments on them. One comment, from the Administration of Canada, nevertheless addressed an issue of substance, namely the scope of the new rules of procedure for the simultaneous bringing into use of multiple geostationary satellite networks with a single satellite (Annex 1 to Circular Letter CCRR/68). The administration suggested that the title be changed to exempt GSO networks with a single satellite in frequency bands subject to Appendices 30, 30A and 30B, in the light of the Bureau's current practice in respect of Appendices 30 and 30A as reported to WRC-15 and of the grouping concept set out in Resolution 548 (Rev.WRC-12). Under that concept, networks with an overall separation of not more than 0.4° in the geostationary arc could be grouped and a single satellite used to bring them into use, even if they had overlapping frequency assignments. No grouping concept existed as such for Appendix 30B, but the Bureau's practice was to allow satellites located within 0.5° of the nominal orbital position to be used to bring into use satellite networks. The issues involved the same concept from an operational and regulatory perspective, the orbital tolerance and station keeping; the goal of the rule of procedure in question was to clarify the orbital tolerance for bringing or bringing back into use frequency assignments with a single satellite, without altering the existing station-keeping regulatory limits, whereas the station keeping was a means of assessing potential interference.

4.4 **Mr Vallet (Chief SSD)** said that the provisions of Article 22 and of Appendices 30 and 30A were mainly related to station-keeping limits and were not changed by the rule of procedure in question, which concerned the tolerance level for the satellite's nodal or nominal position and the main rationale for which was to ensure that administrations did not take risks that might entail physical collisions of satellites in orbit. Were the rule of procedure to tolerate an increase in terms of the station-keeping window, it would run counter to that rationale. However, Appendices 30 and 30A contained specific provisions for different regions (Appendix 30B contained no such specific provisions). The Region 2 Plan was based on clusters of + or -0.2° (for example, under Annex 7 to Appendix 30: "Administrations may locate those satellites within a cluster at any orbital position within that cluster, provided they obtain the agreement of administrations having assignments to space stations in the same cluster"). Similarly, in Appendices 30 and 30A, the Region 1 and 3 Plans provided that several networks at different orbital positions could be grouped in line with Resolution 548 (Rev.WRC-12) provided that the difference was not more than 0.4°. Such networks – but only such networks – could be brought into use utilizing the same satellite.

4.5 It was also the Bureau's practice to apply the same rules in respect of Appendix 30B.

4.6 Regarding the proposal by the Administration of Canada, he suggested that, instead of completely exempting Appendices 30, 30A and 30B from application of the rule of procedure, it would be better to add a footnote to the title and to refer in the footnote to the appropriate provisions of Appendices 30 and 30A.

4.7 **Ms Beaumier** said that she could understand the potential for confusion between station-keeping requirements and orbital tolerance. Nonetheless, the aim of the rule of procedure was to focus on orbital tolerance and the proposal to include a footnote to signal exceptions in respect of grouping of networks would make the rule of procedure clearer.

4.8 The **Chairman** observed that the matter would be discussed in detail by the Working Group on the Rules of Procedure.

4.9 Later in the meeting, **Mr Henri**, the Chairman of the Working Group on the Rules of Procedure, reported that the group had met twice, on Wednesday 16 and Thursday 17 March. During the first session, it had carefully considered the draft rules of procedure set out in Circular Letter CCRR/68 and the comments from administrations contained in Document RRB22-1/3. It had taken due account of all the modifications proposed and had agreed on the texts reproduced in the annex to the summary of decisions (Document RRB22-1/18). During the second session, it had made progress

on the substance of the text of the draft rules of procedure on Resolution 1 (Rev.WRC-97), thanks to the update provided by the Bureau, but had been unable to finalize them pending the Bureau's completion of the list of disputed territories. In addition, owing to the sensitive nature of the text, those rules would have to be reviewed once more by the Legal Affairs Unit before the next meeting of the Board, at which time, it was hoped, the Board would approve them for circulation in a circular letter and for comment by administrations, with a view to reaching a final decision at the Board's 91st meeting.

4.10 The group had also updated the list of proposed rules of procedure (Document RRB22-1/1), to reflect developments in respect of Circular Letter CCRR/68 and Resolution 1 (Rev.WRC-97).

4.11 **Mr Borjón** suggested that a representative of the Legal Affairs Unit be invited to attend the group's sessions at the next meeting of the Board, to ensure that any modifications to the text of the rules of procedure on Resolution 1 (Rev.WRC-97) could be incorporated without further delay.

4.12 **Mr Henri** agreed with that suggestion and said that he would contact the Bureau to that end.

4.13 The **Chairman** proposed that the Board should conclude on the matter 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 update the list of proposed rules of procedure in Document RRB22-1/1 taking into account:

- the rules of procedure in CCRR/68 that were approved at the meeting;
- the draft rules of procedure on Resolution 1 (**Rev.WRC-97**).

On the issue of frequency assignments to stations located on disputed territories, the Board thanked the Bureau for the additional 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 complemented by the list of disputed territories and instructed the Bureau to have the draft rules of procedure and the list of disputed territories reviewed by the ITU Legal Affairs Unit before consideration by the Board at its 90th meeting.”

4.14 It was so **agreed**.

Draft rules of procedure and comments from administrations (Circular Letter CCRR/68 and Document RRB22-1/3)

ADD rules of procedure for the simultaneous bringing into use of multiple geostationary satellite networks with a single satellite (Annex 1 to Circular Letter CCRR/68)

4.15 **Approved** as amended, with effective date of application immediately after approval.

MOD rules of procedure on RR Nos. 11.43A and 11.43B (Annex 2 to Circular Letter CCRR/68)

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

4.17 The Board, having discussed the draft rules of procedure circulated to administrations in Circular Letter CCRR/68, along with the comments received from administrations as contained in Document RRB22-1/3, **approved** those rules of procedure as contained in the attachment to the summary of decisions (Document RRB22-1/18).

5 Requests relating to the registration of frequency assignments to satellite networks

5.1 Submission by the Administration of Saudi Arabia (Kingdom of) regarding the registration of frequency assignments of the ARABSAT-AXB30.5E satellite network submitted under Article 6 of Appendix 30B of the Radio Regulations (Document RRB22-1/2)

Further submission by the Administration of Saudi Arabia (Kingdom of) regarding the registration of frequency assignments of the ARABSAT-AXB30.5E satellite network submitted under Article 6 of Appendix 30B of the Radio Regulations (Document RRB22-1/11)

5.1.1 **Mr Wang (Head SSD/SNP)** introduced Document RRB22-1/2, in which the Administration of Saudi Arabia, as the notifying administration for the satellite networks of the ARABSAT intergovernmental satellite organization, requested that the frequency assignments to the ARABSAT-AXB30.5E satellite network not be cancelled and that the Bureau be instructed to accept the submission of revised Appendix 4 data and complete the satellite network's registration in the MIFR. Indeed, the Appendix 4 information required under Articles 6 and 8 of Appendix 30B had been submitted in time but was incomplete and clarification had to be made. The Bureau, which had had a backlog of filings to process, had notified the administration accordingly but not before the eight-year regulatory time-limit for the satellite network filing had expired. Document RRB22-1/11 contained additional information from ARABSAT on the case, notably with regard to the satellite network's importance to multiple administrations, the amount already invested in it, and the successful efforts made by ARABSAT to coordinate with other administrations.

5.1.2 In reply to a question from the **Vice-Chairman**, he added that the missing information related to the agreements with administrations affected by the filing; § 6.25 of Appendix 30B, on provisional entries in the MIFR, could not be applied in the absence of agreements from administrations whose allotments had been identified as affected and the Bureau had therefore returned the notice. In Document RRB22-1/11, ARABSAT said that it was ready to submit a new notice containing revised Appendix 4 data where the administration that did not give agreement would not be affected by the filing. However, because the eight-year time-limit had expired in the meantime, a resubmission under Appendix 30B was not receivable. The Board had to decide whether to allow that resubmission; examination of the information it contained was a separate issue.

5.1.3 **Mr Henri** observed that the Part B information had been submitted at a late stage just three weeks before the expiry of the eight-year time-limit. The Bureau had, however, replied in timely fashion in view of its resources and the constraints imposed by the COVID-19 pandemic. Subsequently, both ARABSAT and the Administration of Saudi Arabia had stated their willingness to submit revised Appendix 4 data ensuring that there would be no degradation to national allotments and to provide additional information, in particular on the agreements reached with other administrations, including Yemen. Moreover, a satellite was currently operating at 30.5°E and the Administration of Saudi Arabia had submitted the Article 8 notices. In view of all those points, he was prepared to respond favourably to the request of the Administration of Saudi Arabia.

5.1.4 **Mr Hoan** observed that the Administration of Saudi Arabia was not entirely at fault in the matter, given the serious impact of the COVID-19 pandemic. There were two problems inherent to the Article 6 procedure under Appendix 30B. The first concerned a possible new date of receipt under § 6.13 in accordance with § 6.24 (“When the examination under § 6.21 or 6.22 leads to an unfavourable finding, the Bureau shall return the notice received under § 6.17 to the notifying administration together with the names of the administrations with which necessary agreements under § 6.21 or 6.22 have not been provided and with an indication that subsequent resubmission under § 6.17 will be considered with a new date of receipt.”) The concepts of “unfavourable finding” and “return” were borrowed from non-planned services, where the original date of submission was

maintained if the resubmission was received within six months of the date of return, allowing the notifying administration to review and resubmit its filing even if the regulatory time-limit had expired. That approach had not been retained in Article 6 of Appendix 30B. Secondly, the possibility for the notifying administration to further change a Part B submission in order to obtain a favourable finding without losing the original date of the Part B submission was not allowed under the Bureau's current practice in respect of Appendices 30 and 30A. The Board had dealt with a similar case in the past (Document RRB16-2/15) and had decided in favour of the Administration of Malaysia; it could therefore base its decision on that precedent. Noting that the ARABSAT-AXB30.5E satellite network had been brought into use, he expressed support for the request of the Administration of Saudi Arabia. In addition, either the Board or the Bureau should ask WRC-23 to provide administrations with the same possibility to resubmit Appendix 4 data under Appendix 30B as they already had under Appendices 30 and 30A and in respect of unplanned services.

5.1.5 **Mr Talib** said that, given the sequence of events as presented, it could be considered that the delays experienced by both the Administration of Saudi Arabia and the Bureau had resulted from a *force majeure* event, the COVID-19 pandemic. Therefore, in view of the interpretation of Appendix 30B provided by Mr Hoan and the latter's reference to a precedent, and taking into account that a satellite was in operation and providing services to many administrations, he was prepared to grant the Saudi request and consider the resubmission receivable.

5.1.6 **Mr Hashimoto** said that, according to the Bureau, it had received the Appendix 4 information just before the expiry of the eight-year time-limit. That information being incomplete, it had requested further information. It was not clear how the COVID-19 pandemic had affected communication between the Administration of Saudi Arabia and the Bureau, and more information was required before it could be considered that the situation was one of *force majeure*. That being said, the actual satellite to be used for the frequency assignment was already in orbit and ready for use. If its situation was compatible with the parameters notified and there was no expectation of interference to other satellite networks, he could accede to the request of the Saudi Administration.

5.1.7 **Mr Varlamov** agreed with the comments of previous speakers on the delays in the procedure. A satellite was already in orbit, and the correct decision was therefore to agree to the request and to accept the filing and complete the registration in the MIFR. The Bureau would then process the filing as usual.

5.1.8 **Ms Hasanova** agreed with Mr Hashimoto and Mr Varlamov. She observed that, according to ARABSAT, all coordination agreements had been reached. If there was no expectation of interference to other satellite networks, the Board should agree to the request.

5.1.9 **Ms Beaumier** said that, in her view, the Bureau had acted diligently but it had been difficult for the Administration of Saudi Arabia to provide all the information in a timely manner, given the impact of the COVID-19 pandemic. At the end of the day, the satellite was in orbit and operational, and, more importantly, coordination agreements had been obtained. In view of the precedent cited by Mr Hoan, she supported the Board's favourable consideration of the request.

5.1.10 **Mr Borjón** agreed with previous speakers that the Bureau had acted correctly. The enforcement of time-limits in the case was complex, but the Board could be tolerant, given that the satellite system was already providing services to multiple administrations. He therefore agreed to accede to the request.

5.1.11 **Ms Jeanty** also stressed that the Bureau had acted correctly and swiftly, given that the Part B information had only been provided on 18 May 2020 and the regulatory deadline was 20 June 2020. She agreed with previous speakers that, given that a satellite was in orbit, coordination agreements had been reached with other administrations and no interference was expected to other systems, the Board could accede to the request of the Saudi Administration.

5.1.12 The **Vice-Chairman** proposed that the Board should conclude as follows in the case:

“The Board considered in detail the submissions of the Administration of Saudi Arabia as contained in Documents RRB22-1/2 and RRB22-1/11. Furthermore, the Board considered that the Bureau had acted correctly and in accordance with the Radio Regulations. Based on the information provided, the Board noted that:

- the global COVID-19 pandemic had adversely impacted communication between the Bureau and the Administration of Saudi Arabia;
- a satellite was already operational and in orbit at 30.5°E, and was providing service to several countries, including developing countries;
- the Administration of Saudi Arabia had made considerable efforts to complete coordination requirements with other administrations and no cases of harmful interference had been reported;
- Appendix **30B** provided no opportunity to apply § 6.25 for the resubmission of a returned notice when an allotment was identified as affected.

Consequently, the Board decided to accede to the request from the Administration of Saudi Arabia and instructed the Bureau to:

- maintain the ARABSAT-AXB30.5E satellite network filing;
- accept the new notices containing the revised Appendix **4** data of that satellite network and to proceed with the further processing thereof.”

5.1.13 It was so **agreed**.

6 Request for the cancellation of frequency assignments to satellite networks under No. 13.6 of the Radio Regulations

6.1 Request for a decision by the Radio Regulations Board for the cancellation of the frequency assignments to the LM-RPS-133W satellite network at 133°W under No. 13.6 of the Radio Regulations (Document RRB22-1/5)

6.1.1 The request was withdrawn since the Bureau had received a request during the 89th Board meeting from the Administration of the United States of America to suppress the frequency assignments to the LM-RPS-133W satellite network at 133°W.

6.2 Request for a decision by the Radio Regulations Board for the cancellation of some frequency assignments to the NEW DAWN 23 satellite network at 64°E under No. 13.6 of the Radio Regulations (Document RRB22-1/6)

6.2.1 **Mr Loo (Head SSD/SPR)** introduced Document RRB22-1/6, containing the Bureau’s request for cancellation of frequency assignments to the NEW DAWN 23 satellite network at 64°E in the frequency band 6 485–6 725 MHz in accordance with RR No. 13.6.

6.2.2 The Board **agreed** to conclude on the request as follows:

“The Board considered the request by the Bureau for a decision on the cancellation of the frequency assignments to the NEW DAWN 23 satellite network at 64°E under RR No. **13.6**. The Board further considered that the Bureau had acted in accordance with RR No. **13.6** and had sent requests to the Administration of Papua New Guinea to provide evidence as to whether the frequency assignments to the NEW DAWN 23 satellite network in the frequency band 6 485–6 725 MHz had been brought into use or continued to be in use and to identify the actual satellite which was currently in operation, followed by two reminder letters, to which no response had been received. Consequently, the Board

instructed the Bureau to cancel in the MIFR the frequency assignments to the NEW DAWN 23 satellite network in the frequency band 6 485–6 725 MHz.”

7 Issues and requests relating to the extension of regulatory time-limits to bring or to bring back into use frequency assignments to satellite networks

7.1 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 25 satellite network (Document RRB22-1/8)

7.1.1 **Mr Loo (Head SSD/SPR)** introduced Document RRB22-1/8, which related to a request from the Administration of Papua New Guinea concerning the extension of the regulatory time-limit to bring back into use the frequency assignments to the NEW DAWN 25 satellite network following the catastrophic in-orbit failure of the Intelsat 29-E (IS-29e) satellite and first submitted to the Board as a delayed document at its 87th meeting. The Board had requested further information from the administration and had deferred formal consideration of the case until the 88th meeting. The additional information provided at that time had been insufficient, however, and the Board had again requested further information in response to the issues identified, which was presented in Document RRB22-1/8. According to the administration, the reasons why it had not been possible to meet the 7 April 2022 regulatory deadline were complex. After the failure of the IS-29e satellite, the operator’s primary concern had been to ensure continuation of services, including by relocating in-orbit assets. However, neither of the two satellites identified for redeployment had included the 19.7–20.2 GHz and 29.5 – 30.0 GHz bands required to bring back into use the NEW DAWN 25 satellite network, and other in-orbit satellites containing those frequency bands could not be redeployed. At the same time, the satellite operator had been designing a purpose-built replacement satellite, but the contract had not been signed until December 2020 because of COVID-19-related delays. In line with common industry practice, the operator expected to sign a satellite launch contract approximately one year before delivery (in Q4 2022 in advance of anticipated delivery in Q4 2023). The replacement satellite would rely on electric orbit raising, which could take up to 190 days, and additional time would be required to drift the satellite to its orbital position should in-orbit testing be performed at a different orbital location. Accordingly, the administration was requesting an extension of the regulatory time-limit for bringing back into use until 31 December 2024, which also took into account unforeseen slight launch delays. Related correspondence between the Bureau and the administration, including confirmation from Airbus of the contracted delivery in October 2023, was set out in annex to the document.

7.1.2 Following a request for clarification from **Ms Beaumier** regarding the meaning of a purpose-built replacement satellite, **Mr Loo (Head SSD/SPR)** said that based on the information provided, it was his understanding that the administration had actually contracted a satellite for that specific orbital position.

7.1.3 **Mr Henri** said that it was frustrating that the Administration of Papua New Guinea had presented the same information and arguments as set out in its contribution to the 88th meeting (Document RRB21-3/2). No detailed information or timeline had been provided, as expected, on a number of issues, including satellite design, launch provider and the launch contract signature planned in Q4 2022. Furthermore, there was no detailed explanation of why more than one year would be required to post the satellite at its final orbital position, given that any unforeseen launch delays would already have been taken into account in the launch contract. The period of 190 days indicated for orbit raising also appeared lengthy, particularly in the absence of more detailed information about the launch, in particular the location of the launch facility, and there were uncertainties regarding the conduct and sequence of in-orbit testing. A responsible operator should ensure that the satellite was at the orbital position as soon as possible to keep the requested extension to an absolute minimum.

As no new information and clear response had been provided to the issues identified by the Board at its 88th meeting, he was not currently in a position to accede to the request at the current meeting.

7.1.4 **Ms Beaumier** said that she had similar views to Mr Henri. While the initial focus had been on restoration of service and relocating satellites from their own satellite fleet, it had not been possible for the operator to redeploy a satellite with the Ka frequency bands but, no information had been provided on interim solutions, such as satellite leasing, or on the nature of the purpose-built replacement satellite. Was that a new design and if so, why, given that the satellite was a new satellite? The timelines for contract design and negotiation were still missing. Although the reason for the length of the extension had been clarified, the rationale provided was not necessarily justified. There were many unknown elements, including the launch provider, launch window, time required for orbit raising and in-orbit testing and the possibility of additional time for satellite drifting. Although in the past, the Board had indeed recognized that three years might not be sufficient for bringing assignments back into use, especially when the suspension had been the result of an unexpected failure, the administration was expected to do its utmost to limit the duration of the requested extension; that did not appear to be the case in the present submission, which provided for worst-case scenarios. The information given was not sufficient for the Board to determine that all the conditions of *force majeure* had been met or to justify the length of the requested extension.

7.1.5 **Mr Azzouz** said that the situation with regard to the disrupted services in the Ka frequency band was not clear and noted that before using a gap filler, the satellite characteristics, frequency bands and coverage should be clear. He also asked whether coordination agreements had still to be finalized. In his view, the evidence was not sufficient to justify the requested extension, which was too long.

7.1.6 **Mr Hashimoto** said that the entire delay in signing the contract for the replacement satellite could not be attributable to COVID-19, since the impact of the pandemic on satellite projects began only in early 2020 and the in-orbit failure of IS-29e had taken place in April 2019. He expressed sympathy with the Administration of Papua New Guinea and, noting that the suspension had been caused by an in-orbit failure that met some of the conditions of *force majeure*, said that he was in favour of granting an extension. However, given the lack of clarity in the submission, the extension requested was rather long and included extra margins; a shorter extension might be more appropriate.

7.1.7 **Mr Hoan** agreed that the Administration of Papua New Guinea had not clarified the issues identified by the Board at its 88th meeting. Although he could accept that COVID-19 had delayed signature of the contract for the replacement satellite and that the launch contract was expected to be signed around a year before delivery, an extension until 31 December 2024 was difficult to justify given the lack of information provided on several aspects. While some of the conditions of *force majeure* had been met and he was in favour of an extension, it was very difficult to determine the duration.

7.1.8 **Ms Hasanova** agreed that the administration had provided no new information, including on the launch company and schedule, and she would have difficulty in granting the requested extension.

7.1.9 **Ms Jeanty** said that, although the administration had replied to the Board's questions, some issues remained to be clarified. For example, it was not clear why certain matters had taken so long, including 21 months to sign the contract for a replacement satellite, and why in-orbit testing might be performed at a different orbital location, thus adding to the timeline. She could reluctantly accept an extension, but not until 31 December 2024.

7.1.10 **Mr Talib** said that, although the Board had requested specific information and timelines, several elements were missing from the submission, and it was not clear whether the project was feasible. Although he sympathized with the Administration of Papua New Guinea, the Board should not grant the extension requested. It might, however, decide to grant a more appropriate extension.

7.1.11 **Ms Beaumier** said that, although the Administration of Papua New Guinea had attempted to respond to the Board's questions, the answers were not sufficient to enable the Board to conclude that the case satisfied all the conditions to qualify as a situation of *force majeure*. The administration had provided only a partial response to the Board's questions as to why it was impossible to meet the regulatory deadline, for instance with an in-orbit satellite, and to resume operations prior to the launch of the replacement satellite. Although COVID-19 would undoubtedly have caused some delays, she did not know why it had taken so long to sign a contract to replace a satellite that had already been in orbit. Furthermore, the design of the replacement satellite was not clear. Based on the information provided, the Board was not in a position to justify and grant the extension requested. It might wish to grant an extension to later in 2022 so that the administration could provide a subsequent meeting with further details regarding the satellite launch, or an extension until the end of WRC-23 to enable the conference to decide on the matter. The Board might also wish to specify exactly what information the administration should provide.

7.1.12 **Mr Varlamov** agreed that, based on the information provided, the Board was not able to conclude that the case satisfied all the conditions to qualify as a situation of *force majeure*. While COVID-19 had undoubtedly contributed to the delays, the Board did not have all the information required to determine the duration of any extension. To enable it to take a decision, the Board might wish to grant the Administration of Papua New Guinea further time to provide information on elements in support of its request, including through a staged process. The administration should be able to provide information to the Board's next meeting to justify the time taken to sign a contract with a satellite manufacturer but might need to wait until the Board's 91st meeting to provide further information regarding the launch. In that event, the Bureau should be requested to maintain the frequency assignments to the NEW DAWN 25 satellite network. The case should not be deferred to WRC-23 for decision; the agenda of the conference was already very heavy and there might not be enough time to consider the case in sufficient detail.

7.1.13 The **Chairman** said that the administration had already had time to provide the required information to justify its request, the submission having been deferred from the Board's 87th meeting and considered at the 88th meeting.

7.1.14 **Ms Jeanty** agreed that it was very difficult to determine the relevant duration of an extension based on such limited information. The Board might wish to give the administration one more chance to clarify specific issues in support of the request. It could then decide on future steps at its next meeting after considering the information provided.

7.1.15 **Ms Hasanova**, noting that the operator expected to sign the launch contract in Q4 of 2022, said that she could agree to grant an extension until the end of the Board's first meeting in 2023, giving the administration time to provide detailed information on the launch schedule.

7.1.16 **Mr Henri**, noting that the case had first come to the Board as a delayed submission to the 87th meeting, recalled that the Administration of Papua New Guinea had already been given extra time to provide further information given the lack of clear evidence to classify the case as *force majeure* and to clarify the time requested to post a new Ka satellite at 50°W. In his view, the administration and operator were aware of the type of information the Board was requesting. However, no new information had been forthcoming in response to the issues identified by the Board at its 88th meeting. It would appear that the Ku and C bands had been the priority and that there had been less effort by the operator to find a solution for the Ka band and ensure that the requested extension was as short as possible. In his view, a solution would have been to file a Ka frequency band satellite network at 50°W once again. He would have great difficulty in granting an extension, even a shorter one, in the absence of detailed information on the timeline for the satellite development. However, in the light of the discussion, he would, be ready to give the administration until the 90th Board meeting to provide the missing information.

7.1.17 The **Chairman**, noting the differing views expressed, said that before considering the length of any extension the Board had to determine whether the case met all four conditions to qualify as a situation of *force majeure*. Based on the information submitted thus far, that did not appear to be the case. However, as Mr Henri had suggested, the Board might wish to give the Administration of Papua New Guinea one more chance to provide further information in support of its request demonstrating that the case met all four conditions of *force majeure* and justifying the length of the requested extension. In that event, the Board should clearly specify in its decision the information sought.

7.1.18 **Mr Borjón** agreed that the Board must first determine whether the case qualified as *force majeure* and that it did not yet have all the information required to make that assessment. It should clearly indicate in its decision the elements to be addressed, including why it had taken so long to sign the contract with the satellite manufacturer, and the need for further information on orbit raising. The Board should instruct the Bureau to maintain the frequency assignments to the NEW DAWN 25 satellite network until the end of the 90th Board meeting.

7.1.19 **Mr Henri** said that the Board should clearly specify in its decision the information required for it to determine whether the case qualified as a situation of *force majeure*, including the reason for the delay in signing the contract and a clearer timeline for the manufacturing, launching and posting of the satellite. Should the Board conclude at its next meeting that the case met all the conditions to qualify as a situation of *force majeure*, it could then decide on an appropriate extension.

7.1.20 **Ms Beaumier** said that, although the administration had had multiple opportunities to address the issues, its failure to do so might have been the result of a misunderstanding. She could therefore agree that the Board should clearly indicate in its conclusion the supporting information to be provided by the administration to the 90th meeting to demonstrate that the situation met all the conditions of *force majeure*. Should the Board then conclude that the case qualified as *force majeure*, it might grant an interim extension that would be revised subject to the submission of concrete launch timelines, which were unlikely to be available before the expected signature of the launch contract in Q4 2022 and should be provided no later than the Board's 92nd meeting in March 2023.

7.1.21 **Mr Henri** said that he would be reluctant to grant more time beyond the 90th meeting for the administration to provide further information, noting the time that had elapsed since the satellite failure and the opportunities already provided by the Board to that administration to clarify the issue. The notifying administration and operator had a responsibility to make every effort to respect the regulatory framework and provide all the information required by the Board to the greatest possible extent. The Board should take a decision at its 90th meeting and, should it conclude that the situation qualified as a case of *force majeure*, grant an extension based on the information available to it at that time.

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

“The Board considered the submission from the Administration of Papua New Guinea, as contained in Document RRB22-1/8, in response to the request from the Board for further information in support of the request received from that administration at its 88th meeting and thanked the administration for the information provided. The Board noted, however, that:

- the answers to the questions raised by the Board at its 88th meeting did not contain new information that provided additional support for the request from the Administration of Papua New Guinea;
- no evidence was provided that the case satisfied all the conditions to qualify as a situation of *force majeure*;
- insufficient justification was provided for the requested extension of the regulatory time-limit to 31 December 2024 to bring back into use the frequency assignments to the NEW DAWN 25 satellite network.

Consequently, the Board concluded that it was still unable to accede to the request from the Administration of Papua New Guinea based on the information provided. Since the time-limit to bring back into use the frequency assignments to the NEW DAWN 25 satellite network was 7 April 2022, the Board decided to instruct the Bureau to maintain the frequency assignments to the NEW DAWN 25 satellite network until the end of the 90th Board meeting. Furthermore, the Board instructed the Bureau to invite the Administration of Papua New Guinea to provide information to the 90th Board meeting on the following issues in support of its request:

- whether, and to what extent, other interim solutions had been considered beyond the relocation of satellites owned by the operator;
- clarifications on the nature and rationale for designing a purpose-built replacement satellite;
- the timelines for the design development and the contract negotiations to justify the period of 21 months that had been required to sign a contract with a satellite manufacturer;
- concrete information to justify the length of the extension requested, based on the actual or anticipated launch contract;
- substantive proof, with supporting documentation, that the last two conditions had been met for the case to qualify as a situation of *force majeure* noting that the catastrophic event having met the first two conditions of a situation of *force majeure*.”

7.1.23 It was so **agreed**.

7.2 Submission by the Administration of the State of Israel requesting the extension of the regulatory time-limit to bring back into use the frequency assignments to the AMS-B2-13.8E and AMS-B7-13.8 satellite networks (Documents RRB22-1/9 and RRB22-1/DELAYED/6)

7.2.1 **Mr Loo (Head SSD/SPR)** recalled that the request from the Administration of Israel for an extension of the regulatory time-limit to bring back into use the Ka band frequency assignments to the AMS-B2-13.8E and AMS-B7-13.8 satellite networks and the Ku band frequency assignments to the AMS-B7-13.8 satellite network was pending from the Board’s previous meeting, at which time the Board had requested further information and supporting evidence so as to be able to determine whether the situation met all the conditions of *force majeure*. In its response (Document RRB22-1/9), the Administration of Israel provided a schedule of dates (Table 1) clearly indicating that the AMS-B2-13.8E and AMS-B7-13.8 filings had been on schedule to be brought back into use by the regulatory deadline of 16 May 2022 with the initial launch vehicle. However, owing to the impact of the COVID-19 pandemic and the pandemic-induced switch to the United Launch Alliance launch vehicle, they were now scheduled to be brought back into use by 31 August 2023, as more time would be required for orbit raising than with the previously selected Ariane 64 launch vehicle. The document contained an annex in which the payload manufacturer, Viasat, confirmed the impact of the COVID-19 pandemic on the process of assembling the ViaSat-3 EMEA satellite and described the efforts taken to mitigate that impact.

7.2.2 In Document RRB22-1/DELAYED/6, which was being considered for information, the Administration of Israel forwarded more recent information from Viasat, to the effect that, before the outbreak of the COVID-19 pandemic, the ViaSat-3 EMEA satellite had completed all preliminary and critical design reviews and was undergoing payload manufacturing, assembly and testing; it would therefore have been able to bring the frequency assignments concerned back into use by the regulatory deadline of 16 May 2022. The requested extension of 16 months had been calculated as follows: 10 months for delays in construction and testing; two months arising from the switch in launch vehicle; three months for the additional time needed for orbit raising as a result; and one month of margin.

7.2.3 In reply to a question from the **Chairman**, he added that the Israeli request concerned all suspended frequency assignments in the Ka and Ku frequency bands; the information on the relevant filings was summarized in a table made available via the Board's sharepoint site.

7.2.4 **Mr Henri**, referring to the extension for the frequency assignments in the Ka frequency band, said that, in view of the explanations provided at the previous meeting and the statement in Document RRB22-1/9 that the delays associated with the ViaSat-3 Americas satellite in a different context in 2019 would not have prevented the ViaSat-3 EMEA satellite from being on station by the deadline of 16 May 2022, it was understood that the original deadline for bringing back into use the frequency assignments in the Ka frequency band would have been met were it not for the COVID-19 pandemic. In addition, the switch in launch vehicle would affect the time needed for orbit raising (mainly because of the launch location and characteristics of the launcher). Taking all those elements into account, he agreed that the situation could qualify as a case of *force majeure* and therefore to grant the extension for the Ka band frequency assignments.

7.2.5 Turning to the Ku frequency band, he observed that the justification for the extension was the delayed launch of the ViaSat-3 EMEA satellite, which was a Ka communication satellite with some TT&C capability in the Ku frequency band. It would be interesting to know the range of that TT&C capability, as he anticipated that it was smaller, about one tenth of the range for which the Administration of Israel was requesting an extension, namely 10.95–11.2 and 14–14.500 GHz. He was therefore doubtful that the ViaSat-3 EMEA satellite had the capability to transmit the entire frequency range in the Ku frequency band indicated in the filing.

7.2.6 **Mr Varlamov** said that he did not recall that the satellite's TT&C capability, which he did not consider a major issue, had arisen at the 88th Board meeting. The Bureau could be asked to obtain the information requested by Mr Henri from the filing. In addition, when the satellite was brought into use, the administration would automatically provide information under Resolution 49 (Rev.WRC-19) and the Bureau would carry out an assessment under RR No. 13.6 and cancel any frequency assignments that were not in use. Moreover, if the Board were to take a positive decision with regard to the Ka frequency band but not the Ku frequency band, how would the satellite operate?

7.2.7 **Mr Loo (Head SSD/SPR)** said that a verification of the satellite characteristics notified in the MIFR showed that in the downlink, even for the TT&C beam, the frequency assignments at 10.95–11.2 and 11.45–11.7 GHz had a bandwidth of 250 MHz each; they were therefore using the full 500 MHz downlink. In the uplink, however, the satellite had a TT&C beam with six assigned frequencies of 1 MHz each. It nevertheless had another beam in the Ku frequency band uplink at 14 – 14.5 GHz that covered the entire 500 MHz band. Unless the Board provided the Bureau with specific instructions to do otherwise, the Bureau would implement the frequency bands as stated in the sharepoint document. He confirmed that, at the actual bringing-back-into-use stage, when the ViaSat-3 EMEA satellite was launched, the Bureau would carry out the usual checks and investigate the satellite's capabilities.

7.2.8 **Ms Beaumier** said that the information provided by the Administration of Israel at the current meeting showed that in April 2020 satellite construction and testing had been on schedule to be completed by January 2022, with the launch following a few months later and the satellite arriving on station at the end of April 2022 before the bringing back into use deadline. The new schedule showed a delay of 10 months or so for the construction, which was justified considering the quantitative impact of the COVID-19 delays and taking into account the measures taken to mitigate the delays, for a planned launch at the end of March 2023, whereas the submission made at the previous meeting had indicated a launch at the end of February 2023. She noted that no explanation was provided as to why the launch date was now later than the launch window provided by the launch service provider at the previous meeting. The administration had moreover indicated no plans for in-orbit testing and so required no extra time for that. In addition, the planned date of bringing back into

use was 29 July 2023, but the extension requested was to 31 August 2023, to allow time for possible additional delays. At previous meetings, however, the Board had indicated that it was not in a position to grant extensions for unforeseen contingencies. In her view, therefore, the situation met the conditions to qualify as *force majeure* and an extension to 29 July 2023 was justified, but not beyond.

7.2.9 **Mr Borjón** said that the Board's main concern had been addressed: the project would have met the deadlines were it not for the impact of the COVID-19 pandemic on the payload manufacturer. Since the pandemic was a *force majeure* trigger, the request for an extension based on the change in the payload manufacturer's schedule was justified. In addition, the need to change launch company had had consequences in terms of the site and time required for the satellite to be on station. In his view, therefore, the conditions for *force majeure* were met and the Board should grant the extension. He nonetheless agreed with Ms Beaumier that the Board did not grant margins for unforeseen contingencies – the extension should be to 29 July 2023.

7.2.10 **Mr Hashimoto**, noting that the updated schedule provided by the Administration of Israel in Document RRB22-1/9 was confirmed by Viasat, said that he was in favour of acceding to the request.

7.2.11 **Mr Varlamov** considered that the Board had received all the information it had requested and that the Administration of Israel would clearly have met the original schedule were it not for the COVID-19 pandemic. He agreed with previous speakers that the Board should grant the extension but without the extra month for unforeseen contingencies.

7.2.12 **Ms Jeanty** agreed that the explanations furnished in the documents provided a complete picture of the situation and that the Board was not in a position to grant extensions for unforeseen contingencies. She also agreed with Mr Varlamov that the question of the satellite's TT&C capability in the Ku frequency band would be resolved during the Bureau's routine verification.

7.2.13 **Mr Talib** said that the complete information provided by the Administration of Israel showed that the COVID-19 pandemic had clearly had an impact on the project. While it might be interesting to clarify the difference in respect of the Ka and Ku frequency bands, he considered that the extension should be granted, but only to 29 July 2023.

7.2.14 **Mr Hoan** agreed with previous speakers that the conditions for *force majeure* were met and was therefore in favour of granting the extension. In his experience, it was not excessive to request a one-month margin for unforeseen contingencies (the launch window could be affected by the weather, for example) and he would therefore agree to a 16-month extension.

7.2.15 **Ms Hasanova** said that she sympathized with the Administration of Israel, whose project had clearly been affected by the COVID-19 pandemic. The administration had furthermore provided a schedule for launch and bringing back into use. She was therefore willing to grant an extension for both satellite networks.

7.2.16 **Mr Azzouz**, observing that the COVID-19 pandemic had affected the manufacture of the satellite and that the change in launch company had resulted in a longer time for orbit raising and in-orbit testing, said that he agreed to grant the extension. That being said, there appeared to be a discrepancy in the dates indicated: if the original time-limit for bringing the frequency assignments back into use was 16 May 2022, as indicated in Document RRB22-1/9, then an extension of 16 months would establish the new deadline as 15 September 2023.

7.2.17 **Mr Loo (Head SSD/SPR)** said that the end date of the extension depended on whether the 16 months were counted from 29 April 2022 (time-limit for the satellite to be on station) or 16 May 2022 (time-limit for bringing the frequency assignments back into use).

7.2.18 **Mr Henri** said that he could agree to grant the extension to a date to be determined, until 29 July 2023, for both frequency bands, on the understanding that the frequency assignments to the AMS-B7-13.8E satellite network in the Ku frequency band were adjusted to the Ku band frequency

range of the TT&C of the Viasat-3 EMEA satellite once the manufacturer had decided on the final frequency assignment details of the TT&C prior to the time of launch and before the frequency assignments were brought back into use. While it was true that the status of those frequencies would be ultimately reviewed by the Bureau, he preferred administrations to take a proactive approach in matching the frequency ranges of their filings with the in-orbit satellite frequency capability, as soon as the information was available. That was a useful information that would facilitate the Ku band coordination of neighbouring satellites with the Israeli satellite in question.

7.2.19 **Mr Varlamov**, observing that there was one band in the fixed satellite service, at 500 MHz, proposed that the Board should invite the Administration of Israel to correct the filing when the satellite was brought into use. That would signal to those involved in coordination that, while the Board had reached a decision, it did not entirely understand how the frequency plan would work. Failing that, under RR No. 13.6 the Bureau could present the Board with its findings and cancel the assignments.

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

“The Board considered in detail the submission from the Administration of Israel as contained in Document RRB22-1/9 and considered Document RRB22-1/DELAYED/6 for information. The Board thanked the administration for the information provided, based on which it noted that:

- substantive evidence was provided to prove that all conditions were satisfied for the case to qualify as a situation of *force majeure*;
- the timelines for the project and the status of the satellite construction prior to the pandemic would have enabled the administration to comply with the regulatory time-limit to bring back into use the frequency assignments to the AMS-B2-13.8E and AMS-B7-13.8E satellite networks, had the COVID-19 pandemic not occurred;
- the length of the extension of the regulatory time-limit was justified, including the time required for orbit raising and in-orbit testing;
- it was not able to grant extensions of regulatory time-limits based on additional contingencies.

Consequently, the Board decided to accede to the request from the Administration of Israel to extend the regulatory time-limit to bring back into use the frequency assignments to the AMS-B2-13.8E and AMS-B7-13.8E satellite networks until 29 July 2023. The Board reminded the Administration of Israel that the frequency assignments to the AMS-B7-13.8E satellite network in the Ku band should be adjusted to the Ku band frequency range of the TT&C of the Viasat-3 EMEA satellite as soon as that information became available, at the latest at the time of bringing back into use the frequency assignments.”

7.2.21 It was so agreed.

7.3 Submission by the Administration of Turkey requesting the extension of the regulatory time-limit to bring into use the frequency assignments to the TURKSAT-42E-F satellite network at 42°E (Document RRB22-1/10)

7.3.1 **Mr Loo (Head SSD/SPR)** introduced Document RRB22-1/10, in which the Administration of Turkey requested a three-month extension of the regulatory time-limit for bringing into use the frequency assignments in the bands 13.4–13.65 GHz and 14.5–14.75 GHz to the TURKSAT-42E-F satellite network to 19 June 2022 on the grounds of *force majeure* as a result of the COVID-19 pandemic. The satellite manufacturing contract had been signed on 26 October 2017 and Airbus had committed to deliver the Turksat-5B satellite into orbit on 4 July 2021; the satellite would have reached its orbital location in early February 2022, i.e. well before the 19 March 2022 regulatory deadline. However, as indicated in the letter from Airbus in annex to the submission, that delivery

date had not been met because of the impact of the COVID-19 pandemic. The Turksat-5B satellite had been successfully launched on 18 December 2021 and was expected to arrive at the 42°E orbital position in early June 2022. The administration explained how the case met the four conditions of *force majeure* and outlined the precautionary measures it had taken to meet the regulatory deadline for bringing into use. He informed the Board that the notification and Resolution 49 (Rev.WRC-19) information had been received by the Bureau on 11 March and pointed out that the notification letter had provided additional information, including the fact that a Turksat satellite with other frequency bands had been operating at that orbital position for a long time.

7.3.2 **Mr Henri** said that, taking into account all the information provided by the administration and the supporting documentation from the manufacturer, he understood that, were it not for the delays caused by the COVID-19 pandemic, the administration would have been able to comply with the regulatory time-limit to bring into use the frequency assignments in conformity with the Radio Regulations. He considered that the case qualified as a situation of *force majeure* and could agree to the three-month extension requested.

7.3.3 **Mr Hoan** expressed appreciation for the administration's efforts to comply with the regulatory time-limit for bringing into use the frequency assignments and considered that the conditions of *force majeure* had been met. He therefore supported the requested extension.

7.3.4 **Ms Jeanty**, noting that the administration had endeavoured to keep the delay to a minimum, agreed that the short extension should be granted. The request had been well prepared and explained how the four conditions of *force majeure* had been met.

7.3.5 **Ms Hasanova** observed that the satellite had already been launched and the Resolution 49 information submitted to the Bureau. Taking into account the attached letter from the satellite manufacturer and the impact of the delays caused by the COVID-19 pandemic, she said that the case qualified as a situation of *force majeure*. The extension requested was reasonable and should be granted.

7.3.6 **Mr Talib** said that the Administration of Turkey had demonstrated that COVID-19 had made it impossible to meet the regulatory time-limit and agreed that the case should qualify as a situation of *force majeure*. He supported granting the short extension.

7.3.7 **Mr Borjón** thanked the Administration of Turkey for its well-presented submission and welcomed all the efforts it had made to comply with the regulatory time-limit, which would have been met in the absence of the COVID-19 pandemic. Noting that the satellite had already been launched and the time required for electric orbit raising, he supported the very short extension requested.

7.3.8 **Mr Azzouz**, having praised the efforts of the Administration of Turkey, said that he was in favour of granting the short extension; the satellite had already been launched and the case clearly qualified as a situation of *force majeure*.

7.3.9 **Mr Hashimoto**, noting that COVID-19 had impacted many satellite projects over the previous two years, said that he was satisfied that the present case met the conditions of *force majeure*. He supported the requested extension, which was short, reasonable and had been justified by the attached letter from the manufacturer.

7.3.10 **Ms Beaumier** said that the well-prepared submission demonstrated that the project had experienced delays due to COVID-19 and agreed that the case qualified as a situation of *force majeure*. Airbus had indicated that its schedule and supply chain were robust and mature and had been able to tolerate manufacturing delays with built-in contingencies. While the COVID-19 related delays had been articulated, their impact on construction had not been clearly quantified. However,

it was reasonable to conclude that the failure to meet the regulatory time-limit was directly related to COVID-19 and thus she was in favour of the three-month extension requested.

7.3.11 **Mr Varlamov** thanked the Administration of Turkey for its detailed submission. The case clearly qualified as a situation of *force majeure*. With the satellite launched on 18 December 2021 and electric orbit raising expected to take 168 days, the satellite would arrive at the orbital position on 4 June 2022. He assumed that the extra 15 days requested were for in-orbit testing. Like others, he could agree to extend the regulatory time-limit to bring into use the frequency assignments until 19 June 2022.

7.3.12 **Mr Mchunu** said that the case met all the conditions to qualify as *force majeure* and he supported the requested extension, which was limited and fully justified.

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

“The Board considered the request from the Administration of Turkey as contained in Document RRB22-1/10 and thanked the administration for the detailed and complete information provided in the submission. The Board noted that:

- the Administration of Turkey demonstrated that in the absence of the impact of the delays caused by the COVID-19 pandemic, it would have been able to comply with the regulatory time-limit to bring into use the frequency assignments to the TURKSAT-42E-F satellite network at 42°E in conformity with the Radio Regulations;
- substantive evidence was provided to prove that all the conditions were satisfied for the case to qualify as a situation of *force majeure*;
- the requested extension of the regulatory time-limit was limited, defined and fully justified;
- a satellite, Turksat-5B, had been launched on 18 December 2021 and was in the process of orbit raising.
- Consequently, the Board decided to accede to the request from the Administration of Turkey to extend the regulatory time-limit to bring into use the frequency assignments to the TURKSAT-42E-F satellite network at 42°E in the bands 13.4–13.65 GHz and 14.5–14.75 GHz until 19 June 2022.”

7.3.14 It was so **agreed**.

7.4 Submission by the Administration of Luxembourg requesting the extension of the regulatory time-limit to bring into use the frequency assignments to the CLEOSAT satellite network (Documents RRB22-1/13 and RRB22-1/DELAYED/5)

7.4.1 **Mr Loo (Head SSD/SPR)** introduced Document RRB2-1/13, in which the Administration of Luxembourg requested an extension of the regulatory time-limit for bringing into use the frequency assignments to the CLEOSAT satellite network on the grounds of *force majeure*. The administration had submitted the filing in May 2015 on behalf of the operator, Luxembourg Space Telecommunications SA (LST), but had discovered mid-2021 that LST was no longer operational in Luxembourg and indeed did not respond to inquiries. The administration also outlined the reasons why it considered that the request met the conditions of *force majeure*. In Document RRB22-1/DELAYED/5, which was being considered for information, the administration informed the Board that the satellite manufacturer, Solar Space EOOD, had entered into a contract for the procurement and launch of a satellite with a new operator whose name could not yet be disclosed, for reasons of confidentiality. In a letter appended to Document RRB22-1/DELAYED/5 and dated 10 March 2022, Solar Space EOOD confirmed that it had signed a contract for the procurement and launch of a satellite platform able to transmit in a subset of the frequencies concerned. The contractual launch window was October 2022 or January 2023.

7.4.2 **Mr Botha (SDG)** pointed out that some of the contents (the name of the new operator) of Document RRB22-1/DELAYED/5 had been redacted. In keeping with previous practice, the Bureau had nevertheless decided to publish the document in the absence of any indication on the part of the Administration of Luxembourg that it was confidential.

7.4.3 **Ms Beaumier** said that it would be difficult to say that the first condition for a situation to qualify as *force majeure* – that the event was beyond the administration’s control and not self-induced – was met: when a regulator submitted filings on behalf of an operator, it was deemed to be jointly responsible for meeting all international regulatory requirements. During the licensing process, it selected the operator and established the terms and conditions for use of the spectrum and for fulfilling ITU obligations, including completing the regulatory procedures for the recording of assignments. Regulators would also determine the reporting requirements to monitor progress on satellite projects and on coordination discussions. The decision by the operator not to follow through on the project was not a *force majeure* event. Ultimately, the decision to allow an operator to implement a filing rested with the administrations and there was never any guarantee that it would actually lead to a satellite network or system being built and launched, especially for a new operator. It was thus also difficult to consider that the second condition – that the situation was unforeseen or inevitable – had been met. She was therefore not in favour of granting the extension.

7.4.4 **Mr Henri** agreed with Ms Beaumier. Although the Administration of Luxembourg claimed in its submission that the CLEOSAT satellite system was an important asset for it, it had apparently made no effort to manage that asset during the seven-year period leading up to the time-limit for bringing it into use – which was the main responsibility of administrations submitting satellite networks or systems under the Radio Regulations. The submission moreover presented no evidence of the existence of a real satellite project corresponding to the original concept of the filing, beyond the late call for expressions of interest and the identification of a number of options for the operation of only a subset of the frequencies concerned. In his view, therefore, the situation could not qualify as one of *force majeure* and thus there was no reason to grant the extension.

7.4.5 **Ms Jeanty** agreed that the conditions for *force majeure* to apply had not been met. In terms of the first condition, the Administration of Luxembourg should have made a greater effort to investigate the situation of the operator. With regard to the second, the situation may not have been foreseeable but the administration had had many years to check on progress. If it had acted earlier, it would have had more time to launch the call for expressions of interest. In the circumstances, no extension could be granted.

7.4.6 **Mr Hoan** agreed with the previous speakers that the conditions for *force majeure* were not met. In regard to the first condition, the fact that an administration did not monitor an operator’s behaviour for a long time did not constitute *force majeure*. He did not see that the Administration of Luxembourg had made any effort to manage its obligations and was therefore not in a position to grant the extension.

7.4.7 **Mr Borjón** said that it was important to understand the respective roles of the operator and the administration when analysing a case in terms of *force majeure*. The administration licensed an operator to fulfil an obligation, but that did not relieve the administration of its responsibilities. Clearly an event like the disappearance of an operator was not like a hurricane or a pandemic – to say that it was unforeseen was tantamount to saying that the administration had failed in its responsibility to know whom it had hired. He considered that the case contained no elements justifying an extension on the grounds of *force majeure* and was therefore against granting one.

7.4.8 **Mr Hashimoto** also questioned whether the case met the first two conditions for *force majeure*. In view of the limited information provided in Document RRB22-1/DELAYED/5, in particular with regard to the launch schedule, he found it difficult to consider that the conditions for *force majeure* were satisfied.

7.4.9 **Mr Varlamov** agreed with the previous speakers that the case was not one of *force majeure*. He was therefore not prepared to grant an extension.

7.4.10 **Mr Talib** said that, while he could sympathize with the plight of the Administration of Luxembourg, it was clear that the first condition for *force majeure* was not met, as the Administration had failed in its direct responsibility. It was also clear that the third condition – that the event must make it impossible for the administration to fulfil its obligation – had not been met, as management of all stakeholders was also the responsibility of the administration. He was therefore not in a position to grant the extension.

7.4.11 **Mr Azzouz** agreed that the case did not meet the conditions to qualify as a situation of *force majeure* and was therefore not in favour of granting the extension. On the other hand, since the current time-limit for bringing the filings into use was May 2022, the Board might also consider deferring a decision on the case to its next meeting.

7.4.12 **Ms Hasanova** said that, while she empathized with the situation of the Administration of Luxembourg, the administration had provided no information on the launch schedule. In her view, the situation did not meet the conditions for *force majeure* and there was therefore no reason to accede to the request.

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

“The Board considered the submission from the Administration of Luxembourg as contained in Document RRB22-1/13 and also considered Document RRB22-1/DELAYED/5 for information. The Board noted that:

- it was the responsibility of the administration to comply with the Radio Regulations, to observe the regulatory time-limits and to monitor fulfilment of the regulatory obligations that would have allowed it to intervene earlier and thus to ensure the bringing into use of the frequency assignments within the time-limit;
- from the information provided, all conditions were not satisfied for the case to qualify as a situation of *force majeure*.

Consequently, the Board decided not to accede to the request from the Administration of Luxembourg to extend the regulatory time-limit to bring into use the frequency assignments to the CLEOSAT satellite network.”

7.4.14 It was so **agreed**.

8 Cases of harmful interference

8.1 Submission by the Administration of the United Kingdom of Great Britain and Northern Ireland regarding harmful interference to emissions of United Kingdom high frequency broadcasting stations published in accordance with RR Article 12 (Documents RRB22-1/7 and RRB22-1/DELAYED/3)

8.1.1 **Mr Ba (Head TSD/TDR)**, outlining the background to the case, said that, following the Board’s decision at its 87th meeting instructing the Bureau to discontinue the monitoring campaign, to bring the results to the attention of the Administrations of China and the United Kingdom and to invite the Administration of China to take every possible measure to eliminate the harmful interference, the two administrations had exchanged correspondence, which had been copied to the Bureau. In Document RRB22-1/7, the Administration of the United Kingdom indicated that the Administration of China had not addressed the points raised and attributed the interference to stations using adjacent channels. It also indicated that there continued to be no acknowledgement of the co-frequency, co-timeslot interference confirmed to be emanating from within the territory of China. The

Administration of the United Kingdom, having already requested action under No. 173 of the Convention, invited the Board to consider including a statement in the minutes that the Administration of China was in breach of RR No. 15.1.

8.1.2 He drew attention, for information, to Document RRB22-1/DELAYED/3, in which the Administration of China commented on the submission in Document RRB22-1/7. The administration indicated that it had seriously followed the decisions of the 87th meeting of the Board by actively engaging with the Administration of the United Kingdom in search of a solution. In its view, the Administration of the United Kingdom had failed to abide by the Board's decision by resubmitting the same issue to the current meeting without proactive communication or in-depth coordination. The Chinese Administration refuted the claim that it was in breach of RR No. 15.1, indicating that it had been operating various radiocommunication services, including high-frequency broadcasting services, in compliance with the Radio Regulations, and asserted that the Administration of the United Kingdom had failed to provide detailed and comprehensive information, such as field strength or power-flux density, on the affected stations to enable the Administration of China to take the necessary steps to determine the interference source. The Chinese Administration expressed its commitment to implementing the decisions of the 87th meeting and to continuing bilateral discussions to resolve the interference.

8.1.3 In reply to questions from **Mr Borjón, Ms Jeanty, Mr Hoan and Mr Talib**, he said that, in its letter of January 2022 to the Chinese Administration, the Administration of the United Kingdom had identified 19 frequencies receiving interference, but only seven of those had been measured in the monitoring campaign. He recalled that four of the 10 administrations requested to provide assistance with the international monitoring campaign had agreed to do so, and that the campaign had run between May and June 2021, with the Board having decided at its 87th meeting that no further monitoring results were required. The Chinese Administration claimed that the co-frequency interference was not emanating from within its territory, the administration had only recognised two frequencies as being affected by high-power adjacent frequency transmissions from China. It was difficult for the Bureau to conclude that the situation had improved as the Administration of the United Kingdom tended to indicate priority frequencies in its communications and did not provide information on the status of other frequencies, i.e. whether they were affected by the change in the seasonal broadcasting schedule. None of the interference reports from the Administration of the United Kingdom received before the 87th meeting of the Board had contained information on field strength or power-flux density. It was for the Board to determine if this information were to be requested from the Administration of the United Kingdom.

8.1.4 The **Director** recalled that the issue had been considered by the Board at several meetings and the results of the international monitoring campaign had confirmed the claim of the Administration of the United Kingdom. The Board had requested the Chinese Administration to take every possible measure to eliminate the harmful interference. However, as the administration was now contesting the results of the campaign, he suggested that a bilateral meeting with the participation and assistance of the Bureau might help to break the deadlock.

8.1.5 **Mr Hoan** observed that the two administrations had responded differently to the Board's decision taken at the 87th meeting. At the 88th meeting, the Administration of China had not denied the results of the international monitoring campaign and had submitted a relatively positive response, indicating that it had been strengthening communication with the Bureau and working with the Administration of the United Kingdom to resolve related issues, and that it would continue consultations with that administration through the High Frequency Coordination Conference. However, in its response to the Administration of the United Kingdom it attributed the interference solely to China's high frequency broadcasting stations published under Article 12, which might be another aspect the Chinese Administration wished to raise. Document RRB22-1/7 did not provide the

current status of interference and there was insufficient information for the Board to make a judgement. In its delayed document, the Administration of China indicated its commitment to implementing the decisions of the 87th Board meeting and to continuing bilateral discussions. It had also continued to conduct investigation activities despite the COVID-19 pandemic. The Board did not have sufficient grounds to state that the Administration of China was in breach of RR No. 15.1, and he expressed full support for the approach put forward by the Director.

8.1.6 **Mr Azzouz** said that he fully supported the Director's suggestion to hold a bilateral meeting with the guidance of the Bureau. He encouraged both administrations to exchange the information required and take all possible measures to eliminate the harmful interference.

8.1.7 **Ms Jeanty** said that the parties appeared to be in deadlock. According to the Administration of the United Kingdom, the Chinese Administration had not addressed the points it had raised and had not acknowledged the outcome of the monitoring campaign; the Administration of China, for its part, indicated that the United Kingdom had failed to provide detailed information on the affected stations. However, recalling Document RRB19-1/DELAYED/4, which indicated that according to the Radio Regulations of the People's Republic of China no overseas organizations or individuals were allowed to conduct radio parameter testing or radio monitoring within the territory of China, she noted that it would be very difficult for the United Kingdom to provide the information requested. As efforts to resolve the issue bilaterally had not been successful, she would support the convening of a bilateral coordination meeting with the participation and assistance of the Bureau.

8.1.8 **Mr Talib** said that he fully supported the convening of a face-to-face bilateral coordination meeting with the participation and assistance of the Bureau, as suggested by the Director. At the meeting, account should be taken of the change in the seasonal broadcasting schedule, and consideration might be given to using the equipment of other administrations to try to provide the information requested by the Chinese Administration.

8.1.9 **Mr Hashimoto** said that it was regrettable that, despite the Board's clear conclusion at its 87th meeting inviting the Administration of China to take every possible measure to eliminate the harmful interference, little progress was being made. The Board might wish to reiterate that conclusion in stronger terms, noting the new inputs received, and facilitate communication between the two administrations.

8.1.10 **Mr Borjón** supported the convening of a bilateral meeting with the assistance and participation of the Bureau. The Board should not be seen to favour any one administration in its conclusion and should encourage both to find a solution.

8.1.11 **Mr Varlamov** said that he, too, would support the holding of a bilateral meeting and encouraged the Bureau to undertake preliminary consultations to that end. Copies of the correspondence between the two administrations would be useful.

8.1.12 **Ms Beaumier**, noting that efforts to resolve the long-standing harmful interference issue bilaterally had not been successful, expressed support for the convening of a meeting under the auspices of the Bureau. As the Board had, at its 87th meeting, invited the Administration of China to take every possible measure to eliminate the harmful interference, it could not now consider that the interference simply did not exist. The Board should note that the claims by the Administration of the United Kingdom as to the source of the harmful interference had been confirmed by the results of international monitoring and the fact that the Administration of China had not acknowledged the results of the international monitoring and had requested further information.

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

“The Board considered the submission from the Administration of the United Kingdom as contained in Document RRB22-1/7 and also considered Document RRB22-1/DELAYED/3 for information. The Board noted that:

- the Bureau continued to receive reports of harmful interference to emissions of high frequency broadcasting stations of the Administration of the United Kingdom published in accordance with RR Article 12;
- the claims by the Administration of the United Kingdom as to the source of the harmful interference had been confirmed by the results of international monitoring provided to the 87th Board meeting;
- the Administration of China neither acknowledged nor denied the results of the international monitoring, which had identified the sources of the harmful interference as locations within its territory;
- the Administration of China requested additional information to enable it to take measures to identify the source of the harmful interference;
- efforts to resolve the matter bilaterally had not been successful.

Consequently, the Board decided to encourage the Administration of China again to continue to find solutions to eliminate the harmful interference to the emissions of United Kingdom high frequency broadcasting stations. The Board encouraged the administrations to exchange the information required to enable them to resolve the cases of harmful interference and to pursue their coordination efforts in good will and cooperation. The Board instructed the Bureau to:

- convene a bilateral coordination meeting with the participation and assistance of the Bureau;
- continue to provide support to the two administrations in their coordination efforts;
- report on progress to the 90th Board meeting.”

8.1.14 It was so **agreed**.

8.2 Submissions regarding harmful interference to ARABSAT satellite networks at 30.5°E and TURKSAT satellite networks at 31°E (Document RRB22-1/14, Addenda 8 and 9(Rev.1) to Document RRB22-1/4, and Documents RRB22-1/DELAYED/4 and RRB22-1/DELAYED/7)

8.2.1 **Mr Vallet (Chief SSD)** introduced Document RRB22-1/14, in which the Administration of Turkey, referring to its ongoing dispute with the Administration of Saudi Arabia on coordination issues, said that uncoordinated carriers of ARABSAT satellites at 30.5°E continued to cause harmful interference to TURKSAT satellite networks at 31°E, intentionally using modulated and unmodulated transmissions, both stable and sweeping, to cause total outages of TURKSAT services in the standard Ku frequency band (sample spectrum measurements were provided in the annex to the document). The Administration of Turkey said that it had made every effort to find a solution to the problem, including by changing the orbital position by 0.25°, as suggested by the Board at its 88th meeting, a solution that it had been unable to apply because of the situation at 31°E. It furthermore stated that it failed to understand why the Board had not considered both administrations’ responsibilities under RR Nos. 11.41, 11.42 and 11.42A in its decision at that meeting. The document concluded with the administration requesting that the Board confirm those responsibilities, that the Administration of Saudi Arabia be required to take immediate measures to eliminate the harmful interference, and that the Board take action pursuant to RR No. 11.42A.

8.2.2 In its response (Document RRB22-1/DELAYED/4), the Administration of Saudi Arabia said that TURKSAT insisted on pursuing coordination based on the satellite filing date of protection, disregarding the Board’s advice that it should focus on ensuring compatible use, and that TURKSAT

had not shared its system's operational arrangements and technical information. The Administration of Saudi Arabia considered that coordination under RR No. 9.6 was the best and only way forward. The Turksat-5A satellite was operating throughout the Ku frequency band to trace ARABSAT services, using unmodulated carriers to sweep broad spectrum ranges and degrade the operations of the Arabsat-6A and -5A satellites (an example of a harmful interference report submitted by the Saudi Administration was appended as Annex 1 to the document). Consequently, the Administration of Saudi Arabia proposed that the Administration of Turkey be asked immediately to stop all harmful interference to ARABSAT satellites and engage in serious coordination efforts; that 50 per cent frequency segmentation be adopted in the Ku frequency band; and that the Bureau be requested to continue assisting both administrations in their coordination efforts.

8.2.3 The Administration of Saudi Arabia had also submitted Document RRB22-1/DELAYED/7, in which it said that the ARABSAT-5A satellite network was the target of deliberate harmful interference in the uplink band 13.75–14 GHz from modulated and unmodulated carriers originating from the territory of Turkey and that the interference was severely affecting ARABSAT services in the downlink band 12.5–12.75 GHz. Since Turksat-5A had no active transponders receiving in the frequency band 13.75 – 14 GHz over the Middle East and North Africa region, the harmful interference was not a coordination issue. TURKSAT had confirmed that it was not the entity transmitting those carriers; however, the source of the interference, according to the Administration of Saudi Arabia, had been geolocated in the same area as TURKSAT operation facilities (evidence was provided in Annex 1 to the document). As a result, the Administration of Saudi Arabia asked the Board to consider the case set out in Document RRB22-1/DELAYED/7 as one involving unnecessary transmissions to cause deliberate interference, which was prohibited under RR No. 15.1, and to call for the immediate cessation of those transmissions.

8.2.4 Turning to Addendum 8 to Document RRB22-1/4, which reported on developments since the Board's 88th meeting in the coordination discussions between the Administrations of Saudi Arabia and Turkey, he said that the summary record of the coordination meeting that had taken place in September 2021, which had been finalized in December 2021, reflected the willingness of both administrations to continue coordination discussions by correspondence and at a future meeting to be held with the participation of the Bureau and at a date to be mutually agreed at a later point in time. That expression of willingness would seem to be contradicted by the subsequent reports of harmful interference involving unmodulated carriers.

8.2.5 Addendum 9(Rev.1) to Document RRB22-1/4 summarized the reports of harmful interference exchanged between the two administrations and the Bureau between June 2021 and February 2022. Even though an unusually high number of documents (more than 30 reports of harmful interference and acknowledgement thereof, spectrum and geolocation plots, etc.) had been exchanged, the problem remained unresolved. The Bureau therefore recommended that, under RR No. 13.2, both administrations should be urged to pursue their coordination efforts and to exercise the utmost good will and mutual assistance to prevent interference.

8.2.6 In reply to a question from **Ms Beaumier**, he added that the two administrations had started to discuss – but failed to agree on – an interim action plan to avoid actual interference pending the conclusion of coordination agreements. They had agreed that they would communicate via their operational centres. In January 2022, however, communication between the administrations had stopped and many interference events had since been reported.

8.2.7 In reply to questions from **Mr Talib** and the **Vice-Chairman**, he said that the 13.75-14 GHz band was present on the Turksat-5A satellite but the transponders were associated with a beam covering southern Africa. It was not possible to transmit from the territory of Turkey to Turksat-5A to provide a service. If the carriers being transmitted were located in the territory of Turkey, they were clearly not intending to communicate with Turksat-5A. In exceptional cases (e.g. in-orbit

testing), transmissions could be unmodulated or carrier-wave only. As a rule, however, such transmissions were prohibited under RR No. 15.1 as unnecessary – there was no need to transmit something that carried no information.

8.2.8 **Mr Talib** considered that the Board had before it two separate issues: one relating to a coordination process (Documents RRB22-1/14 and RRB22-1/DELAYED/4, and Addendum 8 to Document RRB22-1/4); the other related to instances of intentional harmful interference (Documents RRB22-1/DELAYED/7 and Addendum 9 to Document RRB22-1/4).

8.2.9 **Ms Hasanova** said that the case was a sensitive and complicated one involving two administrations that both had satellites in orbit operating on the same frequencies, covering the same area and experiencing interference problems. ARABSAT had registered its satellite network under RR No. 11.41; under RR No. 11.42, should harmful interference actually be caused by an assignment recorded under No. 11.41, the administration responsible for the station using the relevant frequency assignment must immediately eliminate that harmful interference. RR No. 11.42A further stipulated that the administrations involved should cooperate to that end, with the support of the Bureau. She therefore proposed that the Administrations of Saudi Arabia and Turkey should exchange the technical and operational information required to resolve the issues between them, with the support of the Bureau and demonstrating good will and a spirit of mutual assistance.

8.2.10 **Mr Varlamov** said that, while he had also concluded that there were two separate cases, he believed that they were interlinked, as the deliberate interference by one satellite network to another affected the coordination efforts and was aimed at prompting a reaction from the other administration. Such an approach fell outside the framework of the Radio Regulations and even the norms of decency in international relations. He had been disturbed by the comments made by the Administration of Turkey in Document RRB22-1/14, all of which boiled down to saying that the Board's proposals were incorrect. In fact, the two administrations were expected to sit down at the negotiating table and look at all possible options together with the Bureau, in application of RR Nos. 11.42 and 11.42A. The Constitution and the Convention – which took precedence – both stipulated equitable access to the radio spectrum, and the Board's position would logically be to uphold that principle. The fact that one administration had been the first at a specific orbital position did not relieve it of the responsibility to negotiate with other administrations arriving subsequently in the vicinity. The spectrum was a limited resource that could not be privatized or nationalized.

8.2.11 On the question of coordination, the Board had to urge both administrations more firmly to seek a compromise. On the question of deliberate harmful interference that one of the administrations did not recognize as having originated in its territory, the Bureau had mechanisms for obtaining corroboration that the interference had occurred. He therefore suggested that independent monitoring be conducted using the International Monitoring Service to ascertain whether there were operational reasons for the interference. In addition, the Board should urge both administrations to put a stop to the harmful interference.

8.2.12 The proposal to have recourse to the International Monitoring Service was endorsed by **Mr Hoan, Ms Hasanova, Ms Jeanty, Mr Hashimoto, Mr Borjón, Mr Henri and Ms Beaumier.**

8.2.13 **Mr Hoan** agreed that the case involved both harmful interference and coordination issues. Regarding the coordination issues, the case was basically a dispute between two administrations over the right to use a frequency. At its previous meeting, the Board had acknowledged the complexity arising from the history of frequency use and the past application of provisions of the Radio Regulations. It had ignored none of the rights of either administration. If the parties insisted on protecting their rights, it would be very difficult to resolve the problem. The Board had called on both sides to negotiate and find a suitable solution. The two sides had then sat down together but the distance between them remained too far. The Board must therefore persist in its request that they coordinate and find a solution. The Board had also asked the Bureau to help the administrations

explore technical solutions including, but not limited to, frequency band segmentation, service area definition and change of orbital position by 0.25°.

8.2.14 With regard to the complaints – from both sides – of intentional harmful interference, he observed that such interference was never acceptable, no matter what the cause. He therefore proposed that the Board should remind both parties of that fact and ask them to comply with the Radio Regulations, in particular No. 15.1.

8.2.15 **Mr Talib** noted that, while little progress had been made since the previous meeting in terms of coordination, at least the two administrations had sat down together under the auspices of the Bureau and better results could be hoped for at the next meeting. The matter of deliberate interference, on the other hand, was of grave concern.

8.2.16 **Ms Jeanty** agreed with previous speakers that both administrations had to continue their bilateral coordination meetings with the help of the Bureau – it was better to invest in coordination than to make things worse by alleging intentional interference and rendering each other's services impossible. The Administration of Turkey was right about the application of RR No. 11.41, but in such cases the Bureau's strategy was first to explore all options and find a coordination solution; that strategy generally worked in the end.

8.2.17 **Mr Hashimoto**, noting that the 89th meeting was the third at which the Board considered the case, said that there was no reason to change the decision taken at the 87th meeting that the focus should be on ensuring compatible use rather than on the date of protection of frequency assignments. Therefore, and in line with the Bureau's suggestions in Addenda 8 and 9 to Document RRB22-1/4, the Board should again encourage both parties to continue their coordination efforts in good will.

8.2.18 **Mr Borjón** agreed that the two aspects of the situation were linked. Moreover, the issue of harmful interference was becoming more complicated because of the lack of progress on coordination. The parties should be strongly encouraged to pursue their negotiations. He expressed surprise that the Administration of Turkey should apparently engage in deliberate harmful interference when both parties claimed that they were happy to continue negotiating. He encouraged both administrations to find solutions to the very complicated problem of overlapping frequencies; it was not always easy to reach coordination agreements, but that was where the Bureau had a role to play as a neutral facilitator. Moreover, under No. 197 of the Constitution, stations must not operate in such a manner as to cause intentional harmful interference. Both parties had to be encouraged to cease any such interference, in line with RR No. 15.

8.2.19 **Mr Henri** agreed with Mr Varlamov's perception that the Turkish submission in Document RRB22-1/14 was disparaging of the Board and used disturbing language. The Board had always worked to assist all administrations in an equitable, cooperative and independent manner and defend the principle of equitable access for all to the radio spectrum and orbit. Suggestions by the Board for solving issues might not always achieve their goal and did not necessarily have to be agreed upon, but they were always balanced and should at least be thoroughly studied as a means to progress on a delicate issue. Regarding the issue of coordination, and looking beyond the application of RR No. 11.41, both administrations, and that of Turkey in particular, should be reminded once again of §§ *c*) and *d*) of the rule of procedure on RR No. 9.6.

8.2.20 Regarding the intentional harmful interference, the Board should stress in the strongest possible terms its deep concern at the deliberate use of unmodulated carriers to harm the transmissions of other administrations' satellites that had been functioning for many years, as ARABSAT's had. The fact that ARABSAT had been operating in the frequencies concerned for many years without interference did not provide any particular priority nor meant that possible sharing of those frequency bands was not achievable, but the manner and details of that sharing had to be discussed at the negotiating table during coordination meetings.

8.2.21 **Ms Beaumier** said that she also found the tone of the Turkish submission in Document RRB22-1/14 disconcerting – perhaps the Board’s objectives had not been well understood by the administration. The deterioration in the situation since December 2021 was extremely worrisome and the deliberate use of carriers to cause interference absolutely unacceptable and in contravention of the Radio Regulations, in particular No. 15.1. The Board had to demand that the instances of harmful interference – which appeared to be reported on a tit-for-tat basis – cease immediately: such behaviour was not productive and undermined the chances for successful coordination – in which both administrations ultimately still had to engage.

8.2.22 In terms of coordination, the immediate priority was to come to an interim agreement ensuring that existing services were not comprised; it was inexplicable that the two administrations and their operators had failed so far to do so. In terms of long-term coordination, the Board should reiterate that the focus should be, not on the date of protection of the filings, but on ensuring compatible use and explain the rule of procedure on RR No. 9.6, as Mr Henri had pointed out. Those rules simply meant that the administration making a later filing had to initiate coordination; it did not give the administration with the earlier filings *carte blanche* to demand that everyone else work around those filings and make all the concessions. The coordination had to take account of a number of factors, including the extent of the services being provided by earlier filings and the fact that the longer a frequency band was left unused following the recording of assignments, the more the parties would be considered as being on an equal footing.

8.2.23 RR Nos. 11.41 and 11.42 existed because sometimes the parties could not agree to coordinate before the end of their regulatory deadline. In the present case, both parties would have to make more extensive efforts to coordinate before the Board would consider the application thereof. Given the instances of deliberate harmful interference being reported by both parties, the Board was even less likely to apply RR No. 11.42A. Obviously, coordination would not be easy in the case, and frequency segmentation might be the only option, although the solution might not be 50/50 as proposed by ARABSAT.

8.2.24 The **Vice-Chairman** pointed out that the Saudi Arabian Administration’s request for 50/50 frequency segmentation had not been accepted.

8.2.25 **Mr Hoan** agreed with previous speakers that coordination would be very difficult in the current case, in particular because of the parties’ attitude towards their rights. At its previous meeting, the Board had merely noted that the focus should not be on the date of protection of the frequency assignments concerned but rather on ensuring compatible use. Its decision at the current meeting should be more affirmative and assert that coordination should not be in terms of the date of protection.

8.2.26 The **Vice-Chairman** having summed up the Board’s conclusions in the case, **Ms Beaumier** stressed the need for forceful wording on the question of deliberate harmful interference; for references to §§ *c*) and *d*) of the rule of procedure on RR No. 9.6 and to the expectation that the parties would agree to an action plan enabling the satellites to operate without interference on an interim basis; and for the Board to note that, while RR No. 11.41 was applicable, it was important first to give coordination discussions a chance.

8.2.27 **Mr Talib**, **Ms Jeanty** and **Mr Henri** endorsed those comments.

8.2.28 The **Vice-Chairman** proposed that the Board conclude as follows in the matter:

“The Board considered in detail Addenda 8 and 9 to Document RRB22-1/4 and the submission of the Administration of Turkey as contained in Document RRB22-1/14, and also considered, for information, Documents RRB22-1/DELAYED/4 and RRB22-1/DELAYED/7 from the Administration of Saudi Arabia relating to harmful interference to ARABSAT satellite networks at 30.5°E and TURKSAT satellite networks at 31°E, and the uncoordinated use of spectrum resources

by those satellites systems. The Board thanked the Bureau for the reports provided on the status of coordination discussions and on reports of harmful interference that it had received since the 88th meeting of the Board, and for its support to the two administrations.

The Board noted that:

- no new coordination meeting had been convened between the Administrations of Turkey and Saudi Arabia with the participation and support of the Bureau since the last meeting in September 2021;
- no progress had been made to resolve the harmful interference as a result of uncoordinated use of the frequency assignments to the ARABSAT satellite networks at 30.5°E and TURKSAT satellite networks at 31°E;
- two satellites were operational at the positions of 30.5°E and 31°E with overlapping frequency assignments and overlapping service areas;
- both administrations had submitted several reports to the Bureau of harmful interference to the services of those satellite systems;
- deliberate actions had been taken to cause harmful interference to services provided by the ARABSAT and TURKSAT satellite networks.

The Board expressed its grave concern regarding the use of unmodulated signals to cause intentional harmful interference to the radiocommunication services of another administration and condemned such actions in the strictest terms, indicating that such behaviour was in direct contravention of No. **15.1** of the Radio Regulations. Furthermore, the Board viewed the deliberate actions to cause harmful interference to the ARABSAT 5A satellite network in the bands 13.75–14.0 GHz and 12.5 – 12.75 GHz, which seemed to originate from earth station(s) located on the territory under the jurisdiction of the Administration of Turkey (as displayed in the geolocation information provided by the Administration of Saudi Arabia) and which was not linked to networks that were the subject of the coordination discussions, as extremely worrisome and unacceptable. Noting that there had been no recognition of such actions by the Administration of Turkey and that there was a need to identify the source of the intentional harmful interference in the bands 13.75–14.0 GHz and 12.5–12.75 GHz, the Board decided to instruct the Bureau to:

- request the cooperation of administrations that were signatories to the Memorandum of Understanding on Space Monitoring to assist in performing geolocation measurements to identify the sources of the intentional harmful interference;
- report on progress on international monitoring to the 90th Board meeting.

In addition, the Board strongly urged both administrations to:

- immediately cease any deliberate action to cause harmful interference to frequency assignments of the other administration;
- exercise the utmost good will and mutual assistance in the application of the provisions of Article 45 of the Constitution and Section VI of Article **15** of the Radio Regulations to eliminate all harmful interference;
- promptly establish an interim agreement to allow the operation of the two satellite systems free of harmful interference, while coordination efforts for their long-term operation was pursued;
- 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 and service area definition.

The Board reminded both administrations that while RR No. **11.41** was applicable, its use required the notifying administration, when submitting notices in application of No. **11.41**, to indicate to the Bureau that efforts had been made to effect coordination with those administrations whose assignments were the basis of the unfavourable findings without success, usually reflecting insufficient and/or difficult coordination discussions. As such, the application of RR Nos. **11.42** and **11.42A** should not precede or exclude seeking solutions through exhaustive coordination efforts. Given that the two administrations had only recently begun coordination discussions under the auspices of the Bureau, the Board decided that it was premature to refer to the application of RR No. **11.42A**. The Board emphasized again that the focus of those efforts should not be on the date of protection of frequency assignments but instead on ensuring that compatible use of the orbital and spectrum resources should be the priority. Furthermore, the Board reminded both administrations of the rules of procedure under RR No. **9.6**:

- c) that the ‘coordination process is a two way process’ as established at WARC Orb-88;
- d) ‘in the application of Article **9** no administration obtains any particular priority as a result of being the first to start either the advance publication phase (Section I of Article **9**) or the request for coordination procedure (Section II of Article **9**).’

Consequently, the Board also decided to instruct the Bureau to:

- continue to support the two administrations in their coordination efforts;
- convene bilateral coordination meetings with the participation and support of the Bureau;
- report on progress on coordination to the 90th Board meeting.”

8.2.29 It was so **agreed**.

8.3 Submission by the Administration of the United Arab Emirates regarding harmful interference to the AL YAH-1 (52.5E) satellite network (Document RRB22-1/17)

8.3.1 **Mr Sakamoto (Head SSD/SSC)**, introducing the item, recalled that § 4.3 of Document RRB22-1/4 was very closely related to the submission under discussion since it presented a summary of the harmful interference to satellite networks of the Administration of the United Arab Emirates and set out the Board’s decision on the matter at the 88th meeting. The Bureau had received two communications from the Administration of Ukraine, in November 2021 and January 2022, in which that administration indicated that it had taken appropriate actions to identify the source of interference allegedly located in the territory of Ukraine and provided information about the elimination of the possible source of unauthorized emission in the frequency band 6 439–6 457 MHz. The administration had also indicated that it remained open for further cooperation.

8.3.2 After Document RRB22-1/4 had been prepared, the Bureau had received a communication from the Administration of the United Arab Emirates, set out in Document RRB22-1/17, indicating that, despite action taken by the Administration of Ukraine, harmful interference to the AL YAH-1 satellite network in the band 6 439–6 457 MHz persisted and requesting the Bureau’s assistance. On 23 February 2022, the Bureau had sent a letter to the Administration of Ukraine requesting an acknowledgement of its correspondence and cooperation with the United Arab Emirates but had not yet received a response.

8.3.3 **Ms Hasanova** said that, in view of the current situation in Ukraine, the Board might wish to draw the same conclusion as for § 4.4 of Document RRB22-1/4. It should also encourage both administrations to exercise the utmost good will and mutual assistance, as it had done in its decision at the 88th meeting.

8.3.4 **Ms Jeanty** agreed that wording similar to that used in the conclusion for § 4.4 of Document RRB22-1/4 might be used.

8.3.5 **Mr Hoan**, having thanked the Administration of Ukraine for its actions in response to the Board's decision at its 88th meeting, said that the Board should request that administration to continue to identify and eliminate the interference source.

8.3.6 **Mr Hashimoto**, having expressed support for the Bureau's actions in accordance with RR No. 13.2, said that, despite the communications between the two administrations, the interference situation basically remained unchanged. He trusted that further communication with the support of the Bureau would be possible when the situation in Ukraine allowed; the Board's decision should be the same as the one adopted at its 88th meeting.

8.3.7 **Mr Talib** said that, despite the welcome exchanges between the two administrations and the actions undertaken to identify the source, interference to the AL YAH-1 satellite network persisted. In its conclusion, the Board should reproduce part of its decision at the 88th meeting. It should also recognize the difficulties currently faced by the Administration of Ukraine and send a positive signal to that administration, which had engaged in cooperation prior to the current situation.

8.3.8 **Mr Azzouz**, recognizing the difficulties facing the Ukrainian Administration at present, said that the Board should encourage both administrations to exercise utmost good will to eliminate the interference, not just minimize it. The Bureau should update the Board on the situation at the 90th meeting.

8.3.9 **Ms Beaumier** said that she recognized the Ukrainian Administration's efforts and willingness to cooperate. It would be difficult in the present circumstances to invite the Ukrainian Administration to take appropriate actions to resolve the interference problem. The Board should recognize the difficult situation facing that administration and its limited ability to address the issue at the present time.

8.3.10 **Mr Borjón** said that the Bureau should report on the matter when appropriate.

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

"In considering the submission from the Administration of the United Arab Emirates as contained in Document RRB22-1/17 as well as § 4.3 of Document RRB22-1/4, the Board expressed its appreciation for the cooperation between the Administrations of the United Arab Emirates and Ukraine. The Board recognized the initial efforts of the Administration of Ukraine to identify and eliminate the source of interference. However, the Board noted that the source of harmful interference had returned, as reported by the Administration of the United Arab Emirates. The Board encouraged both administrations to continue exercising the utmost good will and mutual assistance in the application of the provisions of Article 45 of the Constitution and Section VI of Article 15 of the Radio Regulations. Furthermore, the Board reminded both administrations of the provisions of Nos. 37 and 197, and § 1 of Article 1 of the ITU Constitution. Recognizing at this time the limited ability of the Administration of Ukraine to carry out the procedures of Article 15 of the Radio Regulations, the Board instructed the Bureau to continue following any development in this matter."

8.3.12 It was so **agreed**.

9 Submission by the Administrations of Bosnia and Herzegovina, Croatia (Republic of), North Macedonia (Republic of), Moldova (Republic of), Rwanda (Republic of), Serbia (Republic of) and South Sudan (Republic of) regarding WRC-23 agenda item 7, Topic E (Document RRB22-1/12)

9.1 **Mr Wang (Head SSD/SNP)** introduced Document RRB22-1/12 containing a joint contribution from seven administrations regarding allotments in the Appendix 30B FSS Plan for new

ITU Member States. As the seven new Member States did not have national allotments under the Appendix 30B Plan or assignments stemming from the conversion of allotments, they had submitted requests for national allotments in the Plan (a right granted to all other ITU Member States to fulfil the objectives of Article 1 of Appendix 30B). In accordance with Article 7 of Appendix 30B, the Bureau had identified prospective orbital locations for the seven administrations. However, numerous satellite networks were considered as potentially affected, notably assignments entered in the List after WRC-07 and new submissions for additional systems under Article 6. The Bureau had published the requests in A6A Special Sections indicating the coordination requirements to be completed before the Article 7 requests could become national allotments in the Appendix 30B Plan. On the other hand, statistics submitted by the Director to ITU-R Working Party 4A in May and July 2021 showed that all new ITU Member States that had requested new allotments under Article 7 of Appendix 30B before WRC-07 had received new allotments without the need to complete any frequency coordination.

9.2 Working Party 4A had agreed to create a new topic (E) under WRC-23 agenda item 7 to address improvements to the Article 7 procedure and thereby reduce the difficulty in getting new Plan allotments for new Member States. The administrations concerned noted that, in establishing the reference situation (aggregate *C/I*) of the recent seven Article 7 requests, the Bureau had not considered pending satellite networks processed by the Bureau before the date of receipt of those requests. However, such networks, if located within the relevant coordination arc, could degrade the reference situation of the Article 7 requests upon entry into the List and would make the requested new allotments for new Member States unusable. As any regulatory improvements made under Topic E by WRC-23 would enter into force only after the conference, the seven administrations proposed that the Board should consider providing instructions to the Bureau to apply measures similar to those for submissions under Resolution 559 (WRC-19) until the last day of WRC-23 to avoid degradation of the aggregate *C/I* levels of the Article 7 requests. Those instructions included reviewing Part B submissions received after 12 March 2020 (date of the first Article 7 submission received after WRC-19) associated with Part A submissions received before that date.

9.3 The **Chairman** said that the Board should recognize the Bureau's efforts in helping the seven new Member States to have access to frequency bands under Appendix 30B.

9.4 In response to questions from the **Chairman** and **Mr Azzouz, Mr Wang (Head SSD/SNP)** said that each of the seven administrations had submitted its Article 7 requests on a different date, and the publication dates were set out in Table 1 of Document RRB22-1/12. Measures similar to those taken by the Board in respect of Resolution 559 (WRC-19) submissions could be applied to submissions not yet published; it would, however, be difficult for the Bureau to go back and re-examine already published networks.

9.5 The **Chairman** said that it would be useful for the Board to have information on the current status of the Article 7 submissions under discussion, which would help in formulating additional regulatory measures that should be followed once agreed upon by the Board at the current meeting.

9.6 **Mr Henri** said that he would also welcome such information. The seven new Member States should have fair access to Appendix 30B resources, and the rationale for assisting the administrations benefiting from Resolution 559 (WRC-19) in securing fair access to Appendix 30B should also be applicable in the present case. Accordingly, a similar approach to that already agreed in respect of Resolution 559 should be followed and the measures should be implemented on a temporary basis until the end of WRC-23.

9.7 **Ms Beaumier** said that the objective of Appendix 30B to guarantee equitable access to the geostationary-satellite orbit in the FSS bands covered by the appendix, including for new Member States, through the Article 7 procedure had been difficult to fulfil since WRC-07 given the significant number of additional system submissions. WRC-23 would consider possible improvements to the

Article 7 procedure of Appendix 30B to alleviate the impact of the numerous additional system submissions on new Plan allotments. Accordingly, she considered that the Board could support the proposals set out in Document RRB22-1/12 and instruct the Bureau to apply special measures until the end of WRC-23. However, it would require more information on the status of the Article 7 submissions under discussion before taking its decision so as to confirm to which submissions any temporary regulatory measures would apply.

9.8 **Mr Hashimoto** recalled that the Board's previous decisions with respect to submissions under Resolution 559 (WRC-19) had helped to facilitate coordination activity between concerned administrations. If the Board considered that Article 7 of Appendix 30B had elements in common with Resolution 559, and the Bureau was prepared to analyse the interference situation between the Part B and Article 7 submissions and identify possible mitigation measures, it might be possible to accept the proposal put forward by the seven administrations as a temporary solution.

9.9 **Ms Jeanty** expressed support for the proposed action, pointing out that the new Member States should be given a fair chance to access Appendix 30B resources. As improvements to the Article 7 procedure of Appendix 30B would be considered under agenda item 7, Topic E, at WRC-23, she could agree to the application by the Bureau of temporary measures until that conference. However, the Board should await further information from the Bureau before taking its decision.

9.10 **Mr Hoan** thanked the administrations concerned for bringing the issue to the Board's attention. He could support the request, noting that the action proposed was similar to the Board's previous decision with respect to Resolution 559 (WRC-19) submissions, and that the aforementioned resolution and the Article 7 procedure of Appendix 30B had a common objective of ensuring the right of each ITU Member State to the BSS and FSS plans.

9.11 In reply to a question from **Mr Hoan**, the **Chairman** said that any decision by the Board would be implemented by the Bureau on a temporary basis until WRC-23.

9.12 **Mr Wang (Head SSD/SNP)** said that very few of the Part B submissions received had an impact on the Article 7 requests. The last one not yet published had been received on 28 October 2021, and the Bureau would have no difficulty in reviewing Part B submissions received after that date.

9.13 **Mr Talib** said that access to Appendix 30B resources should be given to as many administrations as possible, notably developing countries, in line with the objective of Resolution 559 (WRC-19); however, the plans were dynamic and existing systems must be protected. The Board should instruct the Bureau to implement the additional regulatory measures until WRC-23.

9.14 **Mr Varlamov**, having expressed support for the proposed measures, asked the Bureau to provide an analysis of the degradation of the reference situation of the Article 7 requests caused by Part B submissions published since 12 March 2020.

9.15 The **Chairman** agreed that it would be useful to have that information.

9.16 **Mr Azzouz** said that the Board should accept the proposal. The additional regulatory measures proposed, which were similar to those for Resolution 559 submissions, should be applied by the Bureau until WRC-23 to Part B submissions received after 28 October 2021, since those submissions had not yet been published.

9.17 **Ms Hasanova**, thanking the seven administrations for raising the issue, said that it was vital for all Member States to have a national allotment. Accordingly, she supported the proposed measures, which should be implemented until WRC-23.

9.18 **Mr Mchunu** recalled that the Board had already instructed the Bureau to implement similar measures in respect of Resolution 559 submissions. He supported the request, which addressed the

key principle of equitable access to orbital resources; the Bureau should be instructed to report on its implementation.

9.19 **Mr Wang (Head SSD/SNP)** presented a summary table showing the 12 Part B submissions received after 12 March 2020. Of the seven already published, only one caused degradation (0.54 dB in the Ku frequency band) to an Article 7 request. However, the minimum aggregate *C/I* level of the affected Article 7 request was calculated to be 20.4dB, which was only 0.6 dB below the 21 dB criterion. Degradation to the Article 7 requests was also caused by two other Part-B networks not yet published: NEW DAWN FSS-3, the new date of receipt of which, pursuant to the Board's decision, was now 18 March 2022, and BLR-FSS251.5E, the Bureau registration date for which was 28 October 2021. Given the relatively few Part B submissions received, the increased workload from the implementation of the proposed measures would be manageable for the Bureau from whatever date the Board decided the measures should be applicable.

9.20 **Mr Varlamov** considered that the proposed date of 28 October 2021 was acceptable. Only one Part B submission published before that date affected an Article 7 submission, and the notifying administration had already modified the characteristics to reduce the impact on the proposed allotment.

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

“The Board considered in detail the submission from seven administrations as contained in Document RRB22-1/12 and thanked those administrations for having brought this issue to its attention. The Board recognized that the main objective of the FSS Plan was to guarantee equitable access to orbital and spectrum resources to all administrations for future use. The Board noted that:

- this objective was difficult to fulfil given the significant number of additional systems that needed to be coordinated with the Article 7 submissions to be entered in the Plan;
- WRC-23 agenda item 7, Topic E was intended to address the improvements to the Article 7 procedure of Appendix **30B** needed to reduce the impact of numerous additional systems on new Plan allotments from new Member States of the Union;
- it had instructed the Bureau to implement similar measures for submissions under Resolution **559 (WRC-19)** at the 84th Board meeting.

Consequently, the Board decided to accede to the request from the administrations and instructed the Bureau to implement, as an interim measure until WRC-23, the following additional regulatory measures:

- to review Part B submissions received after 28 October 2021 associated with Part A submissions received before 12 March 2020 during the completeness process of those Part B submissions, and to identify additional measures that could be implemented by the notifying administrations to avoid degradation of the aggregate *C/I* levels of the Article 7 requests;
- to request the notifying administrations, following the review of completeness of Part B submissions, to make their utmost efforts to take into account such Article 7 requests and the results of the Bureau's analysis with measures to avoid further degrading aggregate *C/I* levels;
- to analyse the impact of the above-mentioned Part B submissions on the aggregate *C/I* levels of such Article 7 requests and to report the results, together with the efforts undertaken by those Part B administrations, to the next meetings of the Board for further consideration.”

9.22 It was so **agreed**.

10 Submission by the Administrations of Angola (Republic of), Botswana (Republic of), Cameroon (Republic of), Democratic Republic of the Congo, Comoros (Union of the), Djibouti (Republic of), Eswatini (Kingdom of), Gabonese Republic, Kenya (Republic of), Lesotho (Kingdom of), Malawi, Mali (Republic of), Madagascar (Republic of), Mauritius (Republic of), Mozambique (Republic of), Moldova (Republic of), Niger (Republic of the), Namibia (Republic of), North Macedonia (Republic of), Poland (Republic of), Romania, Rwanda (Republic of), Senegal (Republic of), Serbia (Republic of), Somalia (Federal Republic of), South Africa (Republic of), South Sudan (Republic of), Tanzania (United Republic of), Tunisia, Uganda (Republic of), Zambia (Republic of), Zimbabwe (Republic of) regarding the examination by the Bureau of Part B submissions in accordance with Resolution 559 (WRC-19) (Document RRB22-1/15)

10.1 **Mr Wang (Head SSD/SNP)** said that, in Document RRB22-1/15, 32 administrations proposed that the Board consider giving the following instructions to the Bureau: “When examining Part B of submissions made in accordance with Resolution 559 (WRC-19) in respect of BSS assignments for additional uses in Regions 1 and 3, the Bureau shall not take into account test points of those BSS assignments for additional uses that are located inside the territories of any of the 45 administrations that have applied Resolution 559 (WRC-19) in determining if those BSS assignments are still affected by the Part B as well as the level of degradation if any.” According to the administrations concerned, the proposal would allow Part B of Resolution 559 submissions to obtain the same benefits as from the application of RR No. 23.13 without affecting the service and coverage areas of incumbent additional uses. The document went on to describe the advantages of the method proposed and listed a number of additional supporting elements.

10.2 In reply to a question from the **Chairman**, he added that, while it was difficult to analyse the proposal’s advantages in detail, the conclusion was correct: its application would be better than the application of RR No. 23.13, the method was simple, applicable and would save processing time, and the burden on notifying administrations would be eased.

10.3 In reply to a question from **Mr Varlamov** about the real situation of networks working within the coverage area, he pointed out that notifying administrations were free to exceed the pdf hard limits on their territory; nor did the alignment of the coverage and service areas pose a problem, as there would be no change in the service area in applying the proposed method. Therefore, since there was no change to the coverage/service area and no change to the test points, the proposed new method would have no impact on other Article 4 submissions.

10.4 **Mr Azzouz** observed that Resolution 559 (WRC-19) had been introduced to help developing countries, in particular the 45 developing countries applying the resolution. If the method proposed was adopted, how would the Bureau handle coordination between the administration of one of those 45 countries and another administration?

10.5 In reply, **Mr Wang (Head SSD/SNP)** said that the proposal required clarification to avoid misunderstandings. The Bureau’s implementation of the method would be similar to the new procedure for § 6.16 of Appendix 30B. The proposed method did not change anything; it would apply only if a test point in the territory of a Resolution 559 administration was identified as being affected by the test point of another network on the territory. There would be no change in the examination procedure, only in the formulation of the finding for test points located in the territory of the Resolution 559 notifying administration – there would be no unfavourable finding in such cases.

10.6 **Mr Varlamov** asked what the consequences would be for stations in neighbouring regions if the pdf hard limit was exceeded, as the document asserted it could be. He recalled that the issue had arisen at WRC-19 in respect of Japan and that no solution had been found at that time, even though Japan was an island State. When the pdf hard limit was exceeded, the coordination arc

decreased; as a result, stations and assignments that had previously been unaffected would suddenly be affected.

10.7 **Mr Wang (Head SSD/SNP)** explained that the document referred to the pfd hard limit only to show that the Radio Regulations contained provisions allowing notifying administrations to exceed that limit on their own territory, in support of the proposal for special treatment of test points on the notifying administration's own territory.

10.8 The **Chairman** shared that understanding.

10.9 **Ms Beaumier** considered that the proposal would facilitate the processing of Resolution 559 submissions. She commended the administrations concerned for putting forward what was a win-win solution to address the concerns of Resolution 559 submitting administrations. The exact wording of the proposal remained to be determined, but in principle she considered that the Board could be supportive of it.

10.10 **Mr Hoan** agreed that the proposal was a win-win solution for both Resolution 559 administrations and additional use administrations affected by their filings. The application of RR No. 23.13 had been requested at WRC-19 by the Resolution 559 administrations. Given the need to assist the developing countries concerned, and given that Resolution 559 submissions would eventually become assignments in the Region 1 and 3 Plans, he supported the proposal.

10.11 **Mr Henri** considered that the proposal allowed a Resolution 559 administration to avoid the burden of applying RR No. 23.13 while being also indirectly beneficial to and without adversely impacting administrations having submitted additional uses. Regarding the possibility of exceeding the pfd hard limit over its own territory, as indicated under § 5.2.1 d) of Article 5 of Appendix 30, he understood that the proposal was to apply the same possibility in advance of Resolution 559 submissions, before their notification and recording in the MIFR under Article 5, because they would eventually become assignments in the Region 1 and 3 Plans. While the wording could be clarified, he agreed with the content of the proposal.

10.12 **Mr Talib** also commended the administrations that had proposed the new method, which had clear advantages over the application of RR No. 23.13 and entailed no negative consequences for other administrations. Together with **Mr Azzouz**, he supported the proposal, on the condition that it was worded in such a way as to leave no room for ambiguity or misunderstanding in terms of the implementation of Resolution 559 (WRC-19).

10.13 **Mr Hashimoto** and **Ms Hasanova** agreed with previous speakers that the proposal was in line with the spirit of Resolution 559 (WRC-19), the aim of which was to assist developing countries, and therefore expressed support for it.

10.14 **Ms Jeanty** considered that overall, and despite the fact that it contained some unclear language, the proposal was a positive one that could improve the situation. She therefore supported it.

10.15 **Mr Wang (Head SSD/SNP)** suggested that, for the sake of clarity, the proposal should be reworded to read as follows: "When examining Part B of submissions made in accordance with Resolution 559 (WRC-19) in respect of BSS assignments for additional uses in Regions 1 and 3, the affected test point of the additional use that is located inside the territory of the notifying administration of a submission under Resolution 559 should not be considered in formulating a finding." The text as reworded addressed three concerns: it applied only to test points located on the territory of the notifying administration, which could not make a decision for the other 44 administrations; it clearly referred to *affected* test points, which alone could benefit from special treatment; and only the last step in the process (the formulation of a finding) was impacted – the examination method remained unchanged.

10.16 **Mr Varlamov** said that, in the light of the explanations provided and the clarifications to the text, he fully supported the proposal, which would help achieve the objectives of Resolution 559 (WRC-19) and ensure adequate protection both for existing assignments to the Plan and the List and for those applying the Resolution 559 procedure.

10.17 **Mr Borjón** said that he was happy to support any measure able to further implementation of Resolution 559 (WRC-19) but wondered whether the modified procedure would have the effects that the administrations concerned were seeking. He was unclear as to the actual benefits of the proposal.

10.18 **Mr Wang (Chief SSD/SNP)**, pointing out that the proposed method was limited to the territory of the notifying administration, added that additional uses could have even global coverage and service areas and thus extend to territories under the jurisdiction of Resolution 559 administrations. Any test points affected and located on such a territory would henceforth not be considered by the Bureau, thereby reducing the coordination requirement in respect of other additional uses.

10.19 The **Chairman** proposed that the Board should conclude as follows on the proposal set out in Document RRB22-1/15:

“The Board considered the submission from 32 administrations as contained in Document RRB22-1/15. The Board recognized that the objective of Resolution **559 (WRC-19)** was to restore equitable access to Appendices **30** and **30A** spectrum/orbital resources to administrations, especially to developing countries, that had degraded frequency assignments in the Plan. The Board noted that the proposal from the 32 administrations was in the spirit of Resolution **559 (WRC-19)** and would facilitate implementation of the resolution without impacting the service areas of frequency assignments for additional use in the BSS Plan or in the List. Consequently, the Board decided to accede to the request of the 32 administrations in relation to the examination procedure of Part B submissions made in accordance with Resolution **559 (WRC-19)** in respect of frequency assignments for additional use in Regions 1 and 3, where the following approach was to be used:

‘When examining Part B of submissions made in accordance with Resolution **559 (WRC-19)** in respect of BSS assignments for additional uses in Regions 1 and 3, the affected test point of the additional use that is located inside the territory of the notifying administration of a submission under Resolution **559 (WRC-19)** should not be considered in formulating a finding.’”

10.20 It was so **agreed**.

11 Submission by the Administrations of Angola (Republic of), Botswana (Republic of), Cameroon (Republic of), Democratic Republic of the Congo, Comoros (Union of the), Djibouti (Republic of), Eswatini (Kingdom of), Gabonese Republic, Kenya (Republic of), Lesotho (Kingdom of), Malawi, Mali (Republic of), Madagascar (Republic of), Mauritius (Republic of), Mozambique (Republic of), Niger (Republic of the), Namibia (Republic of), Rwanda (Republic of), Senegal (Republic of), Somalia (Federal Republic of), South Africa (Republic of), South Sudan (Republic of), Tanzania (United Republic of), Tunisia, Uganda (Republic of), Zambia (Republic of), Zimbabwe (Republic of) regarding the long-term protection of frequency assignments in the Regions 1 and 3 BSS Plans, allotments in the FSS Plan and those intended to enter into these plans from an incoming network (Documents RRB22-1/16 and RRB22-1/DELAYED/1)

11.1 **Mr Wang (Head SSD/SNP)** introduced Document RRB22-1/16, in which 27 administrations proposed measures for the long-term protection of assignments in the Regions 1 and 3 BSS Plans, allotments in the FSS Plan and those intended to enter into the Plans for new Member States. Although the modification to § 4.1.10 of Appendices 30 and 30A agreed by WRC-15 had alleviated some concerns regarding the concept of implicit agreement, the concept was still applicable under certain

provisions of Article 4 and could cause an unfavourable situation to those administrations identified under Resolution 559 (WRC-19) should they fail to respond to a request from the Bureau within the time-limit. The concept was also applicable under certain provisions of Article 6 of Appendix 30B and had resulted in significant degradation of aggregate *C/I* of a number of allotments. However, as the absence of response to the Bureau's requests was, in most cases, a result of insufficient human resources and regulatory expertise, the administrations proposed that the Board consider instructing the Bureau, as an interim measure until WRC-23: to include the General Secretariat of the African Telecommunications Union (ATU) in the list of recipients of a reminder sent under §§ 4.1.10b and 4.1.10c of Appendices 30 and 30A and under §§ 6.14 and 6.14*bis* of Appendix 30B whenever that reminder was sent to an ATU member; and to consider a decision from the General Secretariat of ATU as sent on behalf of the African administration that had not replied to the Bureau's reminder within the time-limit.

11.2 He drew attention, for information, to Document RRB22-1/DELAYED/1, which contained the annexes to Document RRB22-1/16 and presented information for the meetings of ITU-R Working Party 4A in October 2021 and May 2022.

11.3 **Mr Borjón** asked whether the Board could grant a decision giving a regional organization the authority to provide legally binding decisions on behalf of countries.

11.4 **Ms Jeanty** said that, while she had sympathy with the proposal, she shared the doubts expressed by Mr Borjón and wondered whether such decision-taking on behalf of administrations was possible and in accordance with the Radio Regulations. She suggested that the Bureau should send an informal copy of any relevant correspondence and reminders to the ATU General Secretariat so that it could try to obtain a response from the administration concerned.

11.5 **Mr Azzouz** pointed out that an administration might fail to respond not only for want of resources but also because it agreed to the proposed assignment. He was in favour of including the ATU General Secretariat in the list of recipients of a reminder sent under the relevant provisions to an ATU member. However, ATU must have an authorization from the administration concerned to reply on its behalf to the Bureau's reminders.

11.6 In response to a question from **Mr Azzouz**, the **Chairman** pointed out that Document RRB22-1/16 contained a table showing the degradation of 28 allotments.

11.7 **Mr Hashimoto** agreed that it might be possible for the Bureau to send the ATU General Secretariat an informal copy of the reminder sent to an ATU member. However, the proposal to consider a decision of the ATU General Secretariat as sent on behalf of the African administration concerned required careful consideration. For example, how would it be clear that the decision communicated by ATU had been developed in consultation with the administration concerned? Furthermore, if an administration could contact ATU it should be able to contact the Bureau.

11.8 **Mr Varlamov**, recalling RR No. 1.2, said that an administration was responsible for discharging the obligations undertaken in the Constitution, Convention and Administrative Regulations, and thus the Radio Regulations. There was, however, precedent for an administration to delegate authority to a satellite operator but not to another administration or regional organization. He would not be against such action, but it would have to be legally correct and the Director of the Bureau would require written confirmation of any such delegation of authority. He would have no difficulty with the proposal to include the ATU General Secretariat in the list of recipients of a copy of a reminder sent to an ATU member, since that organization might be able to act as an intermediary and facilitate communication between the administration concerned and the Bureau.

11.9 **Mr Hoan** thanked the 27 administrations for bringing the important issue to the Board's attention and suggested that the Board should include the matter in its report on Resolution 80 (Rev.WRC-07) to WRC-23. He agreed that each administration had the right to delegate certain

responsibilities to another entity but should communicate the authorization for any such delegation of authority to the Secretary-General rather than seeking the Board's approval. Clearly the administrations concerned considered that the matter should be addressed as a matter of urgency and that the authorization might be an internal issue for ATU. In his view, the proposal was not contrary to the provisions of the Radio Regulations and a decision of the Board would expedite the process. Accordingly, the Board might consider supporting the proposal.

11.10 **Ms Hasanova** endorsed the comments of Mr Varlamov and agreed that the ATU General Secretariat should communicate with the administration concerned. She expressed surprise that the Regional Director did not respond to Member States of the region; he should be invited to do so.

11.11 **Ms Beaumier** said that she had much sympathy for the request. The issue of the long-term protection of assignments and allotments in the Plans was likely to be identified as a topic under item 7 of the agenda for WRC-23. She noted that the intent of past WRC decisions concerning procedures for seeking agreement in the plans was to require the provision of explicit agreement with certain exceptions. As some countries were still experiencing difficulties, she agreed that the matter raised should be included in the Board's report on Resolution 80 (Rev.WRC-07) to WRC-23. She would have no difficulty with the first proposal that the Bureau should include the ATU General Secretariat in the list of recipients of a reminder sent to an ATU member. However, with respect to the second proposal, it was not clear whether such a delegation of authority to another entity was acceptable from a legal perspective and she would welcome clarification in that regard. If it was deemed acceptable, the administrations concerned should provide written confirmation to the Director of the Bureau or the Secretary-General of their wish for ATU to act on their behalf in such cases. Noting that the submission had been presented by some, but not all, ATU members, she said that in order for the Board to be as supportive as possible it would be useful for the ITU Legal Adviser to provide an opinion on the matter.

11.12 **Mr Talib** thanked the administrations for raising the issue of implicit agreement, which offered certain advantages for the administration having submitted the notice but some disadvantages for administrations failing to respond within the time-limit. He could agree to the proposal to include the ATU General Secretariat in the list of recipients of a reminder sent to an ATU member. There might be merit in the proposal to consider a decision from the ATU General Secretariat as sent on behalf of the African administration that had not replied to the Bureau's reminder, and he would appreciate advice from the ITU Legal Adviser.

11.13 **Mr Borjón** and **Mr Azzouz** said that they would also welcome an opinion on the matter from the ITU Legal Adviser, as did **Mr Varlamov**, who suggested that should a favourable legal opinion be given, the Board's decision might reflect the need for the administration concerned to notify the Director or Secretary-General in writing of the delegation of authority.

11.14 The **Director** said that the Bureau would have no difficulty in including the ATU General Secretariat in the list of recipients of a reminder sent to an ATU member, which might facilitate communication between the Member State and the Bureau. He was not convinced that the second proposal, which concerned a request for another entity to respond to the Bureau on behalf of an administration could be entertained by the Board at the present juncture, and he recalled that WRC-07 had refused a request to allow ICAO to respond on behalf of Member States. Noting that the implications of a positive or negative response from ATU were totally different, he suggested that the Board should seek advice from the ITU Legal Adviser before taking any decision on such a delicate issue.

11.15 In reply to questions from the **Chairman** and **Ms Beaumier**, he said that a procedure was foreseen in the Constitution for informing the ITU directly of a delegation of authority in the case of a vote, but he was not sure that it would be applicable to the matter under discussion. The Bureau had indeed accepted delegations of authority for the submission of comments in response to the

publication of BR IFICS, since the administration had informed the Bureau directly of its intention, and that approach was considered legally acceptable. The submission before the Board was different, as it was not a series of individual requests for delegation of authority, but a collective one.

11.16 **Ms Beaumier** said that the Board might wish to reflect in its conclusion that Member States could inform the Bureau individually of a request for a delegation of authority.

11.17 **Mr Varlamov** pointed out that the case was slightly different, as the proposed delegation of authority was not to another Member State, but to a regional organization, which was not responsible for implementing the Constitution or the Radio Regulations.

11.18 The **Director** said that it was the Bureau's understanding that an administration could inform the Bureau in a formal letter of a delegation of authority to an organization. Precedent did exist. However, in all such cases, the legal responsibility remained with the Member State since it was the Member State that was bound by the Constitution, Convention and Radio Regulations.

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

“The Board considered in detail the submission from 27 administrations as contained in Document RRB22-1/16 and also considered Document RRB22-1/DELAYED/1 for information. The Board recognized the difficulties those administrations had encountered in relation to the concept of implicit agreement, which was in force in a number of provisions of the Radio Regulations, and its potential impact on administrations that were unable to respond within the time-limits to such cases affecting their frequency assignments or allotments. Consequently, the Board decided to accede to the request from the 27 administrations and instructed the Bureau to include the General Secretariat of the African Telecommunication Union (ATU) in the list of recipients of a reminder sent under §§ 4.1.10b and 4.1.10c of Appendices **30** and **30A** and under §§ 6.14 and 6.14bis of Appendix **30B** whenever that reminder was sent to one of the ATU members as an interim measure, until the end of WRC-23.

The Board considered that it was not in a position to accede to the request to accept answers from the General Secretariat of the ATU on behalf of an administration to reminders sent by the Bureau where the administration's frequency assignments or allotments were considered as affected. The Board instructed the Bureau to request the ITU Legal Advisor to provide an opinion on this matter to the 90th Board meeting. Furthermore, the Board decided to include this matter in its Report on Resolution **80 (Rev.WRC-07)** to WRC-23.”

11.20 It was so **agreed**.

12 Consideration of issues related to Resolution 80 (Rev.WRC-07)

12.1 Under the chairmanship of Ms Beaumier of the Working Group on the Report on Resolution **80 (Rev.WRC-07)** to WRC-23, the Board further developed the draft list of issues to be included in the report and identified elements to be included in it for each of those issues. The Board also **decided** to submit a contribution to the 2022 Plenipotentiary Conference (PP-22) concerning new aspects relating to Article 48 of the Constitution that had emerged since WRC-19.

12.2 **Ms Beaumier**, providing further information in her capacity as Chairman of the working group, said that the working group had considered the list of subjects to be covered by the Board's report under Resolution 80 (Rev.WRC-07) to WRC-23. Although many of the subjects had already been included in the Board's reports under the resolution to previous WRCs, eight new issues had been identified since WRC-19, including issues relating to the implementation of Resolution 559 (WRC-19), Resolution 40 (Rev.WRC-19), Appendices 30 and 30B, non-GSO systems and filings and long-term protection of the BSS and FSS plans. The working group had also considered in more detail key elements to be addressed in each section of the report. She hoped that a first draft of the

report would be prepared in time for the Board's next meeting and invited members to contribute to the drafting process.

12.3 In reply to a question from **Mr Varlamov** as to how the issues raised in the Board's report to WRC-19 under Resolution 80 (Rev.WRC-07) would be communicated to PP-22, **Ms Beaumier** said that it was her understanding that the Board's report was referenced in WRC-19 decisions, which were transmitted to PP-22 by the Secretary-General.

13 The RRB participation in the Plenipotentiary Conference 2022 (PP-22) and the World Radiocommunication Seminar 2022 (WRS-22)

13.1 The Board, considering No. 141A of the Convention, **decided** that Ms L. Jeanty and Mr T. Alamri would represent the Board at PP-22.

13.2 The Board also **decided** that the RRB would be represented at WRS-22 by Mr H. Talib.

14 Confirmation of the date of the next meeting and indicative dates for future meetings

14.1 **Mr Botha (SDG)** said that, as of 2023, the Board would not be able to meet on ITU premises after the Varembe building was demolished. The external venue had to be booked well in advance and it would therefore be very difficult to change the dates reserved.

14.2 In response to a question from **Mr Azzouz**, the **Director** said that the March 2023 meeting was scheduled to be held back-to-back with the CPM. Unfortunately, it had so far not been possible to find a host for the CPM in May and avoid Ramadan.

14.3 The Board **agreed** to confirm the dates for the 90th meeting as 27 June–1 July 2022 in Room L.

14.4 The Board further tentatively confirmed the dates for its subsequent meetings in 2022 and 2023 as:

- 91st meeting: 31 October–4 November 2022 (Room L)
- 92nd meeting: 20–24 March 2023 (Room CCV Genève)
- 93rd meeting: 26 June–4 July 2023 (Room CCV Genève)
- 94th meeting: 16–20 October 2023 (Room CCV Genève)

15 Other business: new composition of the Board

15.1 **Mr Varlamov** noted that many experienced members would shortly be completing their second terms on the Board. In order to facilitate the transition, he suggested that new members elected at PP-22 might be able to attend the last meeting of the Board with its current members. Since the Board's meetings were closed, the meeting could be of an informal nature, for example on the fringes of PP-22.

15.2 The **Director** said that the Board held closed meetings attended only by members and supporting staff from the Bureau. It might, however, be possible to arrange an informal gathering of old and new Board Members.

15.3 **Mr Botha (SDG)** said that it was customary to hold an introduction session when the composition of the Board changed, to explain administrative aspects and the conduct of meetings.

16 Approval of the summary of decisions (Document RRB22-1/18)

16.1 The Board **approved** the summary of decisions as contained in Document RRB22-1/18.

17 Closure of the meeting

17.1 The **Chairman** thanked his colleagues on the Board for their support, spirit of collaboration and commitment, which had enabled the Board to take decisions on a number of difficult issues. He was particularly grateful to the Vice-Chairman for his valuable assistance, to the chairs of the working groups for their excellent work, to the Director for his wise counsel and to the Bureau staff, including Mr Botha, for their support in facilitating the holding of such a successful meeting.

17.2 The **Vice-Chairman** thanked the Chairman for his kind words and commended his work, which had enabled the Board to complete consideration of such a large number of documents. He also thanked Board members, the Director and Bureau staff for their support and cooperation

17.3 Board members took the floor to thank the Chairman for his outstanding leadership, hard work and professionalism, and commended his efficiency in ensuring that the Board managed to complete its long and difficult agenda. They also thanked the Vice-Chairman and the chairs of the working groups for their contributions, the Director for his valuable advice and the Bureau and other ITU staff for their assistance.

17.4 The **Director** congratulated the Chairman on his excellent leadership and thanked the Vice-Chair and working group chairs for their assistance. He welcomed the Board members' team spirit, mutual respect and willingness to come to decisions with constructive input from all. It was a pleasure for the Bureau to support a Board that worked in such a way, and he hoped that it would be possible to continue to hold physical meetings of the Board in the coming months.

17.5 The **Chairman** thanked speakers for their kind words and closed the meeting at 1600 hours on Friday, 18 March 2022.

The Executive Secretary:
M. MANIEWICZ

The Chairman:
T. ALAMRI