Radiocommunication Bureau (BR)

Circular Letter
CR/514

7 February 2025

To Administrations of Member States of the ITU

Subject: **Minutes of the 97th meeting of the Radio Regulations Board**

Pursuant to the provisions of Nos. **13.18** of the Radio Regulations and in accordance with §1.10 of Part C of the Rules of Procedure, please find attached the approved minutes of the 97th meeting of the Radio Regulations Board (11 -19 November 2024).

These minutes were approved by the Members of the Radio Regulations Board by electronic means and are available on the RRB pages of the ITU web site.

Mario Maniewicz
Director

Annex: Minutes of the 97th meeting of the Radio Regulations Board

Distribution:

- Administrations of Member States of ITU
- Members of the Radio Regulations Board

International Telecommunication Union • Place des Nations, CH-1211 Geneva 20, Switzerland
Tel: +41 22 730 5111 • E-mail: itumail@itu.int • Fax: +41 22 733 7256 • www.itu.int

Annex

Radio Regulations Board
Geneva, 11 – 19 November 2024

Document RRB24-3/24-E
21 November 2024
Original: English

MINUTES*

OF THE

97th MEETING OF THE RADIO REGULATIONS BOARD

11 – 19 November 2024

Present: Members, RRB

Mr Y. HENRI, Chair
Mr A. LINHARES DE SOUZA FILHO, Vice-Chair
Mr A. ALKAHTANI, Mr E. AZZOUZ, Ms C. BEAUMIER, Mr J. CHENG, Mr M. DI CRESCENZO, Mr E.Y. FIANKO, Ms S. HASANOVA, Ms R. MANNEPALLI, Mr R. NURSHABEKOV, Mr H. TALIB

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

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

Also present: Ms J. WILSON, Deputy Director, BR, and Chief, IAP
Mr A. VALLET, Chief, SSD
Mr C.C. LOO, Head, SSD/SPR
Mr. J.A. CICCOROSSI, acting Head, SSD/SSC
Mr J. WANG, Head, SSD/SNP
Mr A. KLYUCHAREV, SSD/SNP
Mr N. VASSILIEV, Chief, TSD
Mr K. BOGENS, Head, TSD/FMD
Ms I. GHAZI, Head, TSD/BCD
Mr X.ZHOU, TSD/FMD
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 97th meeting of the Board. The official decisions of the 97th meeting of the Radio Regulations Board can be found in Document RRB24-3/23

Subjects discussed		Documents
1	Opening of the meeting	-
2	Adoption of the agenda	RRB24-3/OJ/1; RRB24-3/DELAYED/2
3	Report by the Director, BR	RRB24-3/4; RRB24-3/4(Add.1); RRB24-3/4(Add.2); RRB24-3/4(Add.3); RRB24-3/4(Add.5); RRB24-3/4(Add.6); RRB24-3/DELAYED/6; RRB24-3/DELAYED/11
4	Rules of Procedure	-
4.1	List of Rules of Procedure	RRB24-3/1; RRB24-1/1(Rev.2)
4.2	Draft Rules of Procedure	CCRR/73; CCRR/74; CCRR/75; CCRR/76; CCRR/77
4.3	Comments from Administrations	RRB24-3/2; RRB24-3/9; RRB24-3/10; RRB24-3/11; RRB24-3/12; RRB24-3/13
4.4	Submission by the Administration of the Russian Federation expressing disagreement with the Rules of Procedure under Nos. **9.21** and **9.36** of the Radio Regulations adopted at the 95th meeting of the Radio Regulations Board	RRB24-3/7
5	Requests to extend the regulatory time-limit to bring/bring back into use the frequency assignments to satellite networks/systems	-
5.1	Submission by the Administration of Japan requesting an extension of the regulatory time-limits to bring into use the frequency to the QZSS-A satellite system and the QZSS-GS-A1 satellite network	RRB24-3/3; RRB24-3/DELAYED/5
5.2	Submission by the Administration of the Islamic Republic of Iran requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the IRANDBS4-KA-G2 satellite network	RRB24-3/5
5.3	Submission by the Administration of the Republic of Korea requesting and extension of the regulatory time-limit to bring into use the frequency assignments to the KOMPSAT-6 satellite system	RRB24-3/6

Subjects discussed		Documents
5.4	Submission by the Administration of the State of Israel requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the AMS-BSS-B4-4W satellite network	RRB24-3/8
5.5	Submission by the Administration of Indonesia requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the LAPAN-A4-SAT satellite system	RRB24-3/14(Rev.1)
5.6	Submission from the Administration of Indonesia requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the NUSANTARA-NS1-A satellite network	RRB24-3/15
5.7	Submission by the Administration of the United Kingdom of Great Britain and Northern Ireland requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the SPACENET-IOM satellite system	RRB24-3/18; RRB24-3/DELAYED/1
5.8	Submission by the Administration of Mexico requesting an extension of the regulatory time-limit to bring back into use the frequency assignments to the SATMEX 7 satellite network at 113°W	RRB24-3/20(Rev.1)
6	Issues regarding harmful interference to receivers in the radionavigation-satellite service	RRB24-3/4(Add.4)
6.1	Submission by the Administration of Jordan regarding harmful interference to receivers in the radionavigation-satellite service	RRB24-3/17; RRB24-3/4(Add.4) ; RRB24-3/DELAYED/8;
6.2	Submissions by other administrations regarding harmful interference to receivers in the radionavigation-satellite service	RRB24-3/4(Add.4) ; RRB24-3/DELAYED/9; RRB24-3/DELAYED/10;
7	Issues regarding the provision of STARLINK satellite services in the territory of the Islamic Republic of Iran	-
7.1	Submission by the Administration of the Islamic Republic of Iran regarding the provision of STARLINK satellite services in its territory	RRB24-3/16
7.2	Submission by the Administration of the United States regarding the provision of STARLINK satellite services in the territory of the Islamic Republic of Iran	RRB24-3/21; RRB24-3/DELAYED/3
7.3	Submission by the Administration of Norway regarding the provision of STARLINK satellite services in the territory of the Islamic Republic of Iran	RRB24-3/22; RRB24-3/DELAYED/4; RRB24-3/DELAYED/7
8	Submission by the Administration of Angola acting on behalf of 16 Southern African Development Community (SADC) member States requesting the Board's assistance in the submission of seven	RRB24-3/19

Subjects discussed		Documents
	coordination filings at 12.2°E, 16.9°E, 39.55°E, 42.25°E, 50.95°E, 67.5°E and 71.0°E, and the filing identified by the Bureau under Resolution **170 (Rev.WRC-23)**	
9	Election of the Vice-Chair for 2025	-
10	Confirmation of the next meeting for 2025 and indicative dates for future meetings	-
11	Other business	-
12	Approval of the summary of decisions	-
13	Closure of the meeting	-

1 Opening of the meeting

1.1 The **Chair** opened the 97th meeting of the Radio Regulations Board at 0900 hours on Monday, 11 November 2024. He welcomed the participants and drew their attention to the particularly heavy agenda.

1.2 The **Director of the Radiocommunication Bureau**, speaking also on behalf of the Secretary-General, likewise welcomed the Board members to their last meeting of the year and drew attention to the many requests for extensions of the time-limit for bringing frequency assignments into use. He also drew attention to the growing number of complaints about jamming and spoofing activities affecting radionavigation-satellite services (RNSS), a distressing development for the telecommunication industry. Such activities were of concern not only to Member States but also to the International Civil Aviation Organization (ICAO) and to organizations providing humanitarian aid in conflict zones. The Bureau had responded with the standard correspondence to the sources of the harmful interference; frustratingly, it had been unable to make much progress towards resolving the cases brought to its attention. Finally, he wished the Board a successful meeting and assured it of the Bureau's support.

2 Adoption of the agenda (Documents RRB24-3/OJ/1 and RRB24-3/DELAYED/2)

2.1 **Mr Botha (SGD)**, introducing item 2 of the agenda, raised two points that held up the processing of documents. First, more and more submissions were in the form of extremely poor-quality images that were difficult for translators to work with. Administrations were therefore asked to submit documents of the highest quality in terms of legibility. Secondly, submissions regularly contained proprietary or confidential information, obliging the Bureau to confirm with the administration concerned that it had the permission of the relevant third parties to publish that information and in some cases obliging that administration to issue an amended version of the submission. Administrations should ensure that they had the requisite permissions before submitting documents.

2.2 He drew attention to two additional addenda to the Report by the Director (Addenda 5 and 6 to Document RRB24-3/4, relating to a contribution on No. **11.41** from the Bureau to ITU-R Working Parties 4A and 4C and to harmful interference to several European satellite networks, respectively) received from the Bureau; the Board might wish to consider them alongside the Report by the Director under agenda item 3.

2.3 He also drew attention to 11 late submissions (Documents RRB24-3/DELAYED/1 to 11). Document RRB24-3/DELAYED/2 had been received from the Administration of Nigeria and was unrelated to any item on the draft agenda. Documents RRB24-3/DELAYED/6 and 11 had been received from the Administrations of the Russian Federation and Sweden, respectively, in response to the publication of Addendum 6 to Document RRB24-3/4; the Board might also wish to consider them alongside the Report by the Director under agenda item 3.

2.4 Document RRB24-3/DELAYED/5 had been submitted by the Administration of Japan following a successful test flight launch, enabling the administration to request a shorter extension of the regulatory time-limit for bringing into use the frequency assignments to its satellite system and network under agenda item 5.1. Document RRB24-3/DELAYED/1 had been received from the Administration of the United Kingdom of Great Britain and Northern Ireland and contained proprietary information, the publication of which had been authorized following the publication of the original submission under agenda item 5.7. Documents RRB24-3/DELAYED/8, 9 and 10 had been received on 6 and 7 November 2024 in response to Addendum 4 to the Report by the Director, which would be discussed under agenda item 6. Lastly, Documents RRB24-3/DELAYED/3 and 4 had been submitted by the Administration of the Islamic Republic of Iran in response to Documents RRB24-3/21 and 22, from the Administrations of the United States of America and Norway, respectively, before the deadline of 1 November 2024 and could therefore be considered for information under agenda item 7; Document RRB24-3/DELAYED/7, submitted by the Administration of Norway in response to Document RRB24-3/DELAYED/4, had been provided before the start of the meeting and in English, and could therefore also be considered for information.

2.5 Referring to Document RRB24-3/DELAYED/2, the **Chair** observed that the regulatory time-limit for bringing into use frequency assignments to the NIGCOMSAT-2B (9.5°W) and NIGCOMSAT-2D (16°W) satellite networks for which the Administration of Nigeria was requesting an extension was 6 December 2024, i.e. after the present meeting. The Bureau's standard practice was to maintain any filings that were the subject of a request to the Board until a decision could be taken by the Board. In view of that practice and of the heavy agenda of the current meeting, he was inclined to defer consideration of the document to the Board's 98th meeting.

2.6 **Ms Hasanova** agreed, adding that the Administration of Nigeria should be asked to provide further information relevant to its request in the meantime, notably with regard to the rationale for the extension.

2.7 **Mr Talib** endorsed the proposal to defer consideration of the document to the next Board meeting, to ask the Bureau to maintain the relevant frequency assignments until that time, and to request the Administration of Nigeria to provide further information. In general, delayed contributions were problematic for Board members, who were usually travelling to Geneva when the contributions arrived; the Board might consider reviewing the deadlines for receiving late submissions.

2.8 **Ms Mannepalli** agreed that, given that the meeting had a heavy agenda and that the time-limit for bringing into use fell after the meeting, consideration of the document should be deferred. She agreed with Mr Talib that the Board might consider reviewing the deadlines for receiving late submissions.

2.9 **Mr Azzouz** agreed with the two previous speakers, both to defer consideration of the document and on the need to review the deadline for delayed contributions.

2.10 **Mr Fianko**, **Mr Linhares de Souza Filho** and **Mr Di Crescenzo** agreed to defer consideration of the document and hoped that the Administration of Nigeria would take the opportunity to improve it. The Bureau might consider providing the administration with guidance in that respect.

2.11 **Mr Loo (Head, SSD/SPR)** confirmed that, once an administration had placed a request before the Board, the Bureau postponed suppression of the relevant network filings until the next Board meeting. He further confirmed that the Bureau would provide the Administration of Nigeria with guidance on its submission if it had the opportunity and time to do so. In reply to a question from **Ms Hasanova**, he added that it was possible to submit a filing under Resolution **49** before frequency assignments were brought into use. In the present case, the Resolution **49** information had been received at the same time as the notification and had been published; the notification information had not yet been published.

2.12 **Mr Botha (SDG)**, referring to the deadlines for delayed submissions, recalled that all documents submitted to the Board had to be published and were handled in strict compliance with Part C of the Rules of Procedure, on the Board's internal arrangements and working methods. If the Board wished to change the rules for processing of documents, it would have to reconsider the relevant provisions of Part C.

2.13 The **Chair** observed that § 1.6 of the Board's internal arrangements and working methods under Part C of the Rules of Procedure clearly applied to the case at hand: "Any submissions received from Administrations following the three-week deadline will normally not be considered at the same meeting and will be placed on the agenda of the following meeting." The current arrangement had proven to be efficient so far. He was not convinced that it was necessary to change that rule and preferred to remind administrations of the clear instructions laid out in the Rules of Procedure about delayed documents.

2.14 Referring to Documents RRB24-3/DELAYED/6 and 11, on the important and sensitive issue of harmful interference experienced by a number of European countries, he proposed that they should be considered for information under the relevant agenda item.

2.15 **Ms Hasanova** and **Mr Azzouz** agreed.

2.16 Referring to Document RRB24-3/DELAYED/5, the **Chair** pointed out that it contained information that was relevant to the request of the Administration of Japan under agenda item 5.1 and would facilitate the Board's decision in the matter; it should therefore be considered for information.

2.17 **Mr Azzouz** agreed, adding that the Administration of Japan had said in its original submission that it would inform the Board if the satellite launch took place before the 97th meeting.

2.18 The **Chair** said that the additional information provided by the Administration of the United Kingdom in Document RRB24-3/DELAYED/1 would be useful for the Board's examination of the administration's request for an extension and that the document should therefore be considered for information. Documents RRB24-3/DELAYED/8, 9 and 10, for their part, contained information that was directly relevant to the Board's deliberations on agenda item 6 and should therefore also be considered for information.

2.19 Referring to the heading of agenda item 6, the **Chair** said that, while the Administration of Jordan had triggered the addition of the item to the agenda, the issue had become of more general concern with the publication of Addendum 4 to Document RRB24-3/4 and the three delayed documents. He therefore proposed to give the agenda item a more generic title and to split the item into two sub-items, one related to the submission from the Administration of Jordan (Document RRB24-3/17), and the other to the submissions of other administrations.

2.20 **Mr Azzouz**, **Ms Mannepalli** and **Mr Talib** agreed to that proposal. Under sub-item 6.1, the Board should consider the submission of the Administration of Jordan and Document RRB24-3/DELAYED/8; under sub-item 6.2, it should consider Documents RRB24-3/DELAYED/9 and 10. Addendum 4 to Document RRB24-3/4 was relevant to both sub-items.

2.21 The **Chair** proposed that Documents RRB24-3/DELAYED/3, 4 and 7 be considered for information under agenda item 7.

2.22 **Ms Mannepalli** agreed and suggested that Documents RRB24-3/DELAYED/3 and 4 be considered for information under sub-item 7.1 of the agenda and Document RRB24-3/DELAYED/7 under sub-item 7.3, similar to what had been done for agenda item 6.

2.23 **Mr Azzouz** said that he preferred to list all three delayed documents under the main heading of the item.

2.24 The **Chair** pointed out that item 6 of the agenda was different in that it encompassed separate cases, whereas all of item 7 of the agenda was related to the same case. That said, no matter how the documents were listed, the Board would first examine the formal submissions by the three administrations concerned before moving on to the delayed documents.

2.25 In reply to a suggestion from **Ms Beaumier** to consider Document RRB24-3/DELAYED/3 under agenda sub-item 7.2 and Documents RRB24-3/DELAYED/4 and 7 under agenda sub-item 7.3 noting, that when a delayed contribution was identified under a specific sub-item, it had always been her understanding that the delayed contribution contained either complementary information from the same administration or a reaction to a submission by another administration, **Mr Botha (SDG)** said that it had previously been the Board's custom to place a delayed document under a specific sub-item if it was from the same administration.

2.26 Following up on remarks made by **Ms Mannepalli** and **Mr Azzouz**, **Mr Linhares de Souza Filho** said that he shared Ms Beaumier's understanding.

2.27 In reply to a remark by **Mr Cheng**, the **Chair** said that the circular letters listed under sub-item 4.2 of the agenda had been published and dispatched as soon as the relevant rules of procedure were ready. It would be difficult to relate them directly to the documents listed under sub-item 4.3, which contained the comments by administrations on the various circular letters.

2.28 In a subsequent discussion, **Mr Botha (SDG)** informed the Board that the Bureau had received two more late submissions, Documents RRB24-3/DELAYED/12 and RRB24-3/DELAYED/13, respectively, after the start of the meeting and after the agenda had been approved.

2.29 The **Chair**, noting that both documents had been published, in line with the Board's internal arrangements and working methods, said that he was reluctant to accept late submissions received after the agenda had been adopted.

2.30 **Mr Linhares de Souza Filho** pointed out that § 1.6 of the Board's internal arrangements and working methods implied that documents received after the deadline should be accepted only in specific circumstances and therefore considered that examination of both late submissions should be deferred to the next meeting.

2.31 **Ms Mannepalli, Mr Talib** and **Ms Hasanova** agreed.

2.32 The draft agenda was **adopted** as amended in Document RRB24-3/OJ/1(Rev.1). The Board **decided** to note for information Documents RRB24-3/DELAYED/6 and 11 under agenda item 3; Document RRB24-3/DELAYED/5 under agenda sub-item 5.1; Document RRB24-3/DELAYED/1 under agenda sub-item 5.7; Document RRB24-3/DELAYED/8 under agenda sub-item 6.1; Documents RRB24-3/DELAYED/9 and 10 under agenda sub-item 6.2; Document RRB24-3/DELAYED/3 under agenda sub-item 7.2; and Documents RRB24-3/DELAYED/4 and 7 under agenda sub-item 7.3.

2.33 The Board also **decided** to defer consideration of Document RRB24-3/DELAYED/2 and instructed the Bureau to add the document to the agenda of the 98th Board meeting.

2.34 As Documents RRB24-3/DELAYED/12 and RRB24-3/DELAYED/13 had been received after the start of the 97th Board meeting and after the agenda had been approved, the Board further **decided** to defer their consideration to its 98th meeting and instructed the Bureau to add those documents to the agenda of that meeting.

3 Report by the Director, BR (Documents RRB24-3/4 and Addenda 1, 2, 3, 5 and 6, RRB24-3/DELAYED/6 and 11)

3.1 The **Director** introduced his customary report in Document RRB24-3/4. Referring to §§ 6.1 to 6.5 of Table 1 on the summary of actions arising from the 96th meeting of the RRB, he noted that the Board would be considering Addendum 6 to Document RRB24-3/4 on actions taken with respect to the harmful interference cases.

3.2 Referring to Table 2-6, he noted that the treatment time for the publication of coordination requests for satellite networks had risen to 9.3 months in September 2024. Such a backlog was to be expected after a world radiocommunication conference. It took most of the year to implement the necessary software updates after the conference and the backlog would be resolved in 2025.

3.3 Referring to § 5 on the implementation of Nos. **9.38.1**, **11.44.1**, **11.47**, **11.48**, **11.49**, **13.6** and Resolution **49 (Rev.WRC-19)**, he said that for the first time, Table 5-1 on the suppression of satellite networks included the suppressions that followed the application of the three-year maximum period of validity of filings submitted under Resolution **32 (WRC-19)**.

3.4 The information in § 8, on satellite systems at API stage not yet notified but with operations stated under No. **4.4,** had been included in response to a request by the Board. It appeared from the Bureau's studies that the situation raised the question of the proper implementation of the safeguards set out in No. **4.4**, which were usually enacted at the notification stage.

3.5 Addendum 5 to the report contained a contribution from the Bureau to ITU-R Working Parties 4C and 4A, providing an analysis of frequency assignments to satellite networks and systems recorded in the Master International Frequency Register (MIFR) under No. **11.41**. It contained suggestions from the Bureau regarding coordination, with a view to reducing potential interference and ensuring the more effective and efficient use of spectrum and orbit.

3.6 In reply to a question from **Mr Cheng** regarding the Space Sustainability Forum 2024, the **Director** said that the report of the Forum could be made available to Board members. Recalling Resolution 219 (Bucharest, 2022), he said that ITU, and ITU-R in particular, had been requested to be more proactive in the area of sustainability by ensuring more equitable access to the spectrum and orbit resources for all countries. The Radiocommunication Assembly 2023 had taken the issue further by addressing sustainability from the point of view of reducing space debris and had developed Resolution ITU-R 74 calling for studies on safe and

efficient deorbit and/or disposal strategies. In parallel, the industry was also facing increasing pressure to address the matter. Given the expected growth in the number of objects being launched into space, the situation would no longer be sustainable in years to come, and there was a very real risk of collisions and accidents, with serious economic and safety implications.

3.7 The forum had been organized by the ITU Secretary-General to bring together all relevant stakeholders with a view to raising awareness of, and encouraging cooperation on and responsibility for, space sustainability. Despite some initial negative reactions about ITU's involvement in the issue, all stakeholders at the forum had been very positive and some innovative ideas had been put forward. The Space Sustainability Gateway had been established on the ITU-R website for operators to provide updates on their practices and to share details of their points of contact, including in the event of a need to coordinate collision avoidance. The forum would be held again in 2025. ITU was in no way seeking to encroach on the mandate of the United Nations Office of Outer Space Affairs or of other agencies. It was simply trying to contribute to their efforts and take meaningful steps with a view to improving space sustainability.

Actions arising from the last RRB meeting (§ 1 of Document RRB24-3/4)

3.8 **Mr Vallet (Chief, SSD)**, referring to item 3(h) of Table 1, on the implementation of Resolution **35 (WRC-19)**, said that, as instructed by the Board at its 96th meeting, the Bureau had drawn to the attention of ITU-R Working Party 4A that WRC-23 had allocated the frequency band 17.3–17.7 GHz (space-to-Earth) in Region 2 to the fixed-satellite service, but had not added it to the table of frequency bands and services for the application of the milestone-based approach in *resolves* 1 of Resolution **35**. The Bureau had invited Working Party 4A to express an opinion on the need for a rule of procedure governing the situation until a world radiocommunication conference took a decision on the matter. No delegation had expressed the need for such a rule of procedure, mainly because administrations did not have to submit milestones in the frequency band 17.3 – 17.7 GHz until after 2030. The allocation would therefore be added to the table by WRC-27 and the Board could consider the matter closed.

3.9 The Board **noted** all the action items under § 1 arising from the decisions of the 96th Board meeting.

Processing of filings for terrestrial and space systems (§ 2 of Document RRB24-3/4)

3.10 **Mr Vassiliev (Chief, TSD)** drew attention to the tables describing the processing of terrestrial notices in § 2 of Document RRB24-2/3. There was nothing particular to report.

3.11 **Mr Azzouz** observed that the numbers under "Total" in Tables 2-2 and 2-4 should be updated.

3.12 **Mr Vallet (Chief, SSD)** drew attention to the tables on the processing of space notices in § 2.2 of Document RRB24-3/4, updated versions of which had been made available to Board members. Table 2-5 showed that the time required to process Advance Publication Information (API) for satellite networks had returned to normal by the end of October 2024. Table 2-6 showed that a backlog was starting to accumulate for the publication of coordination requests for satellite networks, essentially because of the large number of filings received in December 2023, immediately after WRC-23, and the concomitant need to implement technical and regulatory measures requiring software updates. The backlog would be absorbed by 2025, when the updated software became available. Processing of satellite networks under Appendices **30**, **30A** and **30B** was being carried out within the standard six-month timeframe.

3.13 The Board **noted** § 2 of Document RRB24-3/4 and **encouraged** the Bureau to continue to make all efforts to process filings for terrestrial and space systems within the regulatory time-limits.

Implementation of cost recovery for satellite network filings (§ 3 of Document RRB24-3/4)

3.14 **Mr Vallet (Chief, SSD)** drew attention to Tables 3-1 and 3-2 in § 3.1 of Document RRB24-3/4, which contained the usual information on the late payment of cost-recovery fees for satellite network filings and the cancellation of satellite networks as a result of non-payment of invoices, respectively.

3.15 Turning to § 3.2 of Document RRB24-3/4, he informed the Board that the November 2024 meeting of the Council Expert Group on Decision 482 had focused on appropriate cost-recovery fees for processing

non-GSO filings, but had also discussed activities in respect of which the workload had increased significantly since 2005, for example those related to bringing into use and subsequent deployments as prescribed by Resolutions **40 (Rev.WRC-19)** and **35 (WRC-19)**. The Expert Group had asked the Bureau to update/clarify some of the data provided in Document EG-DEC482-2/3 and to prepare an example document translating the Expert Group's deliberations into a revision of Decision 482, for review at the group's meeting on 10 and 11 February 2025. The Bureau would report on that meeting to the Board in March 2025.

3.16 The **Chair** commended the Bureau on the comprehensive information provided in Document EG-DEC482-2/3 and invited all Board members to read it, if they had not yet done so, in order as to familiarize themselves with cost-recovery challenges.

3.17 The Board **noted** §§ 3.1 and 3.2 of Document RRB24-3/4, on late payments and Council activities, respectively, relating to the implementation of cost recovery.

Reports of harmful interference and/or infringements of the Radio Regulations (RR Article 15) (§ 4 of Document RRB24-3/4)

3.18 The Board **noted** § 4 of Document RRB24-3/4, containing statistics on harmful interference and infringements of the Radio Regulations.

Harmful interference to broadcasting stations in the VHF/UHF bands between Italy and its neighbouring countries (§ 4.1, and Addenda 1, 2, and 3 to, Document RRB24-3/4)

3.19 **Mr Vassiliev (Chief, TSD)** said that since the Director's report had been prepared, the Bureau had received communications from the Administrations of Slovenia, Croatia and Italy, set out in Addenda 1, 2 and 3, respectively. According to the update provided by the Administration of Slovenia (Addendum 1), the interference situation had not improved and was unlikely to do so until the Italian Administration stopped issuing licences for uncoordinated frequencies and ceased operation of all uncoordinated FM and DAB stations. In its communication (Addendum 2), the Administration of Croatia reported that there had been no significant improvement in the interference situation and that uncoordinated operation of Italian T-DAB stations continued.

3.20 Addendum 3 contained an update in which the Administration of Italy reported on progress since the Board's previous meeting. With respect to DAB broadcasting, the Italian Administration had started to implement the DAB platform, which it considered an important step. To that end, it planned to use its existing rights in the GE06 Plan, as well as some blocks not allocated to any country, on a temporary basis, pending signature of the Adriatic-Ionian agreement. Such usage would be subject to the elimination of any interference. With regard to FM broadcasting, the Administration of Italy was working on four lines of action to eliminate or reduce cross-border interference, namely developing the DAB platform; providing incentives for the voluntary release of FM resources; improving procedures for dealing with international interference, notably in Switzerland, Slovenia, Croatia and Malta; and improving the quality of the database of authorized stations. The report concluded with a summary of the situation between Italy and France.

3.21 The Bureau had also received recent e-mail communications from France, Malta and Switzerland. The Administration of France had reported on the discussions concerning the ongoing Bonifacio 88.3 MHz interference case and the Italian Administration's objections to its requests to modify the GE84 Plan. The Administration of Malta had reported that the harmful interference situation remained unchanged, and the Administration of Switzerland had reported that no significant progress had been made since the previous multilateral coordination meeting.

3.22 **Mr Fianko** said that the steps taken by the Administration of Italy to pursue DAB deployment should be encouraged since the migration of FM stations to the digital platform appeared to offer the most sustainable approach to resolve the issue. The Italian Administration and relevant authorities should be encouraged to provide the resources and incentives needed to complete the process in a timely manner. Given the lack of progress reported by many administrations in resolving the cases of harmful interference, efforts should be accelerated.

3.23 **Mr Azzouz** said that the Board should instruct the Bureau to continue providing assistance to the administrations concerned to solve the long-standing interference issue. The Administration of Italy should be encouraged to expedite the finalization of the national action plan, to take all possible actions to eliminate the harmful interference to the FM sound broadcasting stations, to stop issuing licences for uncoordinated frequencies and to cease the operation of all uncoordinated DAB and FM stations not contained in the GE06 and GE84 Plans, respectively. The Board should also instruct the Bureau to invite the administrations concerned to continue coordination efforts and cooperation to resolve the long-standing interference issue, and to continue reporting on progress on the matter to future Board meetings.

3.24 **Mr Cheng** agreed with previous speakers. Although the Italian Administration had found a way to move forward on the long-standing interference issues, the measures taken thus far had not been effective enough and progress remained slow. The administration should be encouraged to take more decisive steps.

3.25 The **Chair**, summarizing the situation, said that although the Administration of Italy had managed to find a way to move forward, progress remained still very limited with respect to DAB broadcasting in VHF Band III pending the signature of the Adriatic-Ionian agreement expected in September/October 2024 and now postponed to early 2025. The progress was also slow with respect to FM broadcasting in VHF Band II, even regarding stations on the priority list, despite the multilateral coordination meetings and various bilateral meetings with administrations. The Board's conclusions and recommendations should be reiterating those made at the previous meeting with more emphasis: it should express profound disappointment at the almost total absence of progress towards resolving cases of harmful interference to FM sound broadcasting stations, and urge the Administration of Italy to fully commit to implementing all the recommendations resulting from the June 2023 and May 2024 multilateral coordination meetings, provide the complete technical data required by the neighbouring administrations to facilitate the process of mitigating interference cases, take all necessary measures to eliminate harmful interference to the FM sound broadcasting stations of its neighbouring administrations and cease the operation of all uncoordinated DAB stations not contained in the GE06 Agreement. The Administration of Italy should also be encouraged to vigorously pursue the planned introduction of new legislation, and all administrations should be urged to continue their coordination efforts in goodwill. The Bureau should continue to provide assistance to the administrations and to report on progress to future board meetings.

3.26 **Ms Beaumier** said that, although the expected results had not yet been achieved, the Board should recognize the Italian Administration's efforts regarding the requests to provide the complete technical data required by neighbouring administrations to facilitate the process of mitigating interference cases. It had also provided some information in response to the Board's repeated requests for a detailed action plan for implementing the FM working group's recommendations, with clearly defined milestones and timelines.

3.27 **Mr Fianko** suggested that the Italian Administration might be requested to provide a roadmap for the development of the DAB platform, which was key to the long-term resolution of the issue, and information on its strategy to increase the number of DAB receivers in the Italian market to encourage migration from FM to DAB.

3.28 In response to a question from **Mr Azzouz**, **Ms Beaumier** said that the Board would start to compile a list of topics for inclusion in its report to WRC-27 under Resolution **80 (Rev.WRC-07)** in 2025. The inclusion of the Italian harmful interference issue would depend on progress made in the cases.

3.29 The **Chair** proposed that the Board should conclude as follows on § 4.1 of Document RRB24-3/4:

"The Board considered in detail § 4.1 of Document RRB24-3/4 and its Addenda 1, 2 and 3, on harmful interference to broadcasting stations in the VHF bands between Italy and its neighbouring countries. The Board thanked the administrations for the information provided and noted the following points:

- The Administration of Italy had reported that it had started to issue authorizations for national and local DAB networks according to the preliminary national DAB plan using its GE06 Plan allotments and some frequency blocks not allocated to any country, thus contributing, albeit indirectly, to relieving the burden on the VHF Band II ("FM band"). However, neighbouring countries had reported

no improvement to the FM situation and reiterated their concerns about uncoordinated usage of Italian DAB stations.

- Regarding harmful interference to FM broadcasting in Band II, the Italian Administration was developing a plan of action to eliminate or reduce cases of cross-border interference. However, despite several meetings with its neighbouring countries since the multilateral coordination meeting in May 2024, the interference situation had not improved and the neighbouring countries continued to report a lack of progress.

The Board acknowledged and appreciated the Italian Administration's four lines of action aiming to reduce the number of FM interference cases. However, given the absence of progress towards resolving cases of harmful interference and the continuing licensing of uncoordinated stations, the Board again strongly urged the Administration of Italy to:

- take decisive steps to implement its proposed measures in a more effective and results-focused manner;
- fully commit to implementing all the recommendations resulting from the June 2023 and May 2024 multilateral coordination meetings;
- continue to expeditiously provide the complete technical data required by the neighbouring administrations to facilitate the process of mitigating interference cases;
- take all necessary measures to eliminate harmful interference to the FM sound broadcasting stations of its neighbouring administrations, focusing on the priority list;
- cease the operation of all uncoordinated DAB stations not contained in the GE06 Agreement and no longer license such stations.

The Board again encouraged the Administration of Italy to:

- vigorously pursue the planned introduction of new legislation and necessary budgetary provisions to enable the voluntary switch-off of FM stations causing harmful interference to its neighbours;
- persist in its efforts to migrate interfering FM broadcasting stations to DAB in the national DAB deployment, as a means of resolving the long-standing harmful interference situation.

The Board again requested the Administration of Italy to provide the complete detailed action plan for implementing the FM Working Group's recommendations, with clearly defined milestones and timelines, to make a firm commitment to the plan's implementation and to report to the 98th Board meeting on progress in that regard.

Furthermore, the Board urged all administrations to continue their coordination efforts in goodwill and to report on progress to the 98th Board meeting.

The Board thanked the Bureau for its report to the Board and the support provided to the administrations concerned and instructed the Bureau to:

- continue providing assistance to those administrations;
- continue reporting on progress on the matter to future Board meetings."

3.30 It was so **agreed**.

Implementation of Nos. 9.38.1, 11.44.1, 11.47, 11.48, 11.49, 13.6 and Resolution 49 (Rev.WRC-19) of the Radio Regulations (§ 5 of Document RRB24-3/4)

3.31 **Mr Vallet (Chief, SSD)** said that Tables 5-1 to 5-3 in § 5 of Document RRB24-3/4 contained the usual statistics on the suppression of satellite networks. Under *resolves* 1.2 of Resolution **32 (WRC-19)**, filings for short-term mission satellites remained valid for three years and could not be extended. A number of such filings submitted in 2020 and 2021 had now expired. In such instances, the Bureau first checked in public sources whether the satellite concerned remained in orbit. If that was the case, it advised the administration concerned that it had to submit a new filing if it wished to continue using the satellite.

3.32 **Mr Azzouz** thanked the Bureau for having replaced the word "Total" in Table 5-1 with "Full", as requested at the 96th Board meeting.

3.33 The Board **noted** § 5 of Document RRB24-3/4, on the implementation of Nos. **9.38.1**, **11.44.1**, **11.47**, **11.48, 11.49**, **13.6** and Resolution **49 (Rev.WRC-19)** of the Radio Regulations.

Review of findings to frequency assignments to non-geostationary-satellite-orbit (non-GSO) FSS satellite systems under Resolution 85 (WRC-03) (§ 6 of Document RRB24-3/4)

3.34 **Mr Vallet (Chief, SSD)** said that, since the Board's previous meeting, the Bureau had published 11 non-GSO systems submitted for coordination and one submitted for notification. It was currently processing one coordination request involving a request to maintain the original date of protection.

3.35 In reply to a request from **Mr Cheng**, he added that the Bureau could indicate in each report by the Director which systems had been suppressed during the period between two reports, but that he was reluctant to incorporate another rolling table.

3.36 In response to the **Chair's** observation that Table 6-1 in § 6 of Document RRB24-3/4 had not been updated since December 2023, he said that Table 6-1 listed only satellite systems for which the completeness check had been finished. Some filings received in 2024 had yet to answer all the Bureau's questions.

3.37 The Board **noted** § 6 of Document RRB24-3/4, on the review of findings related to frequency assignments to non-GSO FSS satellite systems under Resolution **85 (WRC-03)**, and again **encouraged** the Bureau to reduce the backlog for the processing of filings. It **instructed** the Bureau to provide the list of suppressed satellite networks in the Director's reports to future meetings.

Implementation of Resolution 35 (WRC-19) (§ 7 of Document RRB24-3/4)

3.38 **Mr Vallet (Chief, SSD)**, referring to Tables 7-1 and 7-2 in § 7 of Document RRB24-3/4, said that an error had slipped into Table 7-1: the notifying administration for the AST-NG-NC-QV satellite system was France ("F"), not the United Kingdom of Great Britain and Northern Ireland ("G"). The Bureau had started receiving suppression requests from administrations; in other instances, deadlines were being reached for bringing the relevant frequency assignments into use. As a result, the Bureau had removed seven submissions for which the frequency assignments subject to Resolution **35 (WRC-19)** had been suppressed. That did not necessarily mean that the filing had been suppressed in its entirety; it might have been brought into use in frequency bands that were not subject to Resolution **35 (WRC-19)**, in which case the Bureau removed the entry only once it had verified the frequency bands with the administration concerned.

3.39 In reply to a query from **Mr Cheng**, he added that the Bureau could indicate the name of the operating agency after the name of the satellite network, as provided in the filing; it would be difficult, however, to indicate the commercial names of systems, which were not always known and tended to change, sometimes even from one month to the next.

3.40 **Ms Hasanova** agreed, adding that anyone who needed to know a system's commercial name could consult the information provided in the Resolution **49** filing.

3.41 In reply to a question from **Mr Linhares de Souza Filho**, **Mr Vallet (Chief, SSD)** said that the applicable provisions were currently those of Resolution **35 (WRC-19)**, as the provisions of Article **11** referencing the version of the resolution revised by WRC-23 would enter into force only on 1 January 2025.

3.42 In relation to § 7 of Document RRB24-3/4, on progress towards implementation of Resolution **35 (WRC-19)**, the Board **instructed** the Bureau to expand the information in Tables 7-1 and 7-2 by providing the operating agency for each satellite network.

Satellite systems at API stage not yet notified but with operations stated under No. 4.4 (§ 8 of Document RRB24-3/4)

3.43 **Mr Vallet (Chief, SSD)** said that § 8 had been compiled in response to the Board's request at its previous meeting for a study of satellite systems at the API stage with indications of operations under No. **4.4** that had not yet been notified but corresponded to satellites that had been launched. He could not guarantee the complete accuracy of the Bureau's findings, which were based on publicly available information on launched satellites and summed up in the body of the report. The Bureau had concluded that, out of the 333 non-GSO satellite networks with a request under No. **4.4** that had not yet been notified, 191 (57 percent) corresponded to a satellite that had been launched and was operating, and 142 (43 percent) did not correspond to such a satellite. The 11 GSO networks that had been matched to a launched satellite were all providing inter-satellite links with non-GSO systems in the Lband, a matter that was being studied by ITU-R and would be an agenda item at WRC-27; they were therefore not a matter for immediate concern. The situation was more worrisome for non-GSO systems, the proportion of networks that could be matched to a satellite that had been launched being quite high (15 percent), even though the rules of procedure on No. **4.4** stipulated that the relevant studies had to be conducted before the frequency assignments were brought into use. The question was whether all those studies had really been conducted if the filing had not even been notified.

3.44 The Bureau had started routinely checking API compliance against the Table of Frequency Allocations only in 2020. Previously, it had published the API as submitted by the administration: if the administration flagged a submission as related to No. **4.4**, it was published as such. Currently, the Bureau did not conduct a full examination under No. **11.31** at the API stage but simply checked that the submission had been correctly flagged as related to No. **4.4**.

3.45 The **Chair** thanked the Bureau for its thorough analysis of API frequency assignments filed with a reference to No. **4.4**, which was not an examination required by the Radio Regulations for the API publication under No. **9.2B**. Given the number of API filings with a reference to No. **4.4** that were operational but had not been notified and or recorded in the MIFR, the Board should recall the obligation to record operating frequency assignments in the MIFR, particularly those with operations under No. **4.4** in conformity with No. **11.8**; the forthcoming World Radiocommunication Seminar would provide a good opportunity for doing so. The matter should also be included in the Board's report to WRC-27 under Resolution **80 (Rev.WRC-07)**.

3.46 Having considered § 8 of Document RRB24-3/4, on satellite systems at API stage not yet notified but with operations stated under No. **4.4**, the Board **thanked** the Bureau for reporting the detailed information requested at the 96th Board meeting.

Proposed treatment of pending frequency assignments to stations located in the Spratly Islands (§ 9 of Document RRB24-3/4)

3.47 **Mr Vassiliev (Chief, TSD),** recalling the Board's decision at its 96th meeting regarding the modification of the rules of procedure on Resolution **1 (Rev.WRC-97)** and instructing the Bureau to submit its approach for the possible treatment of pending frequency assignments to stations located in disputed territories on a case-by-case basis, said that § 9 of Document RRB24-3/4 set out the Bureau's proposal on the treatment of pending frequency assignments to radio stations in the Spratly Islands. It was proposed to record the notifying administration not as the submitting administration but as "XZX" with reference to Resolution **1 (Rev.WRC-97)** and an explanatory note indicating that the station to which the frequency assignment referred was located in a disputed territory and that the recording of the frequency assignment in the MIFR or in any Plan associated with an ITU agreement did not imply any recognition of sovereignty over the territory or the expression of any opinion whatsoever on the part of the ITU or its secretariat in that respect. He further explained that the notifying administration would be reflected in the Remarks column.

3.48 Should the proposal be approved, the 168 assignments received from the Administration of China and the 543 assignments received from the Administration of Viet Nam, which had been pending since November 2017 and June 2016, respectively, could be processed.

3.49 **Ms Beaumier**, having thanked the Bureau for its efforts, expressed support for the proposed approach, which was consistent with the current version of the rules of procedure and would finally enable the Bureau to process the notices that had been pending since 2016. **Ms Hasanova** endorsed those comments.

3.50 **Mr Fianko** and **Mr Azzouz** also supported the clear approach, which offered an acceptable way to proceed with the cases.

3.51 **Mr Vassiliev (Chief, TSD)**, responding to a question from **Mr Azzouz**, said that, as shown in Table 9-1, some frequency assignments to stations located in the Spratly Islands had already been recorded in the MIFR for the Administrations of China, Viet Nam and Malaysia (8, 12 and 5, respectively); the remainder were pending.

3.52 The **Chair** said that the Board should support the proposed approach set out in § 9 of Document RRB24-3/4, which would result in the processing of frequency assignments that had been kept in abeyance for a long time. He assumed that the ITU Digitized World Map would be updated accordingly.

3.53 Having considered § 9 of Document RRB24-3/4, the Board **endorsed** the proposed approach for the treatment of pending frequency assignments to stations located in the Spratly Islands, which would result in the processing of frequency assignments that had been kept in abeyance for several years.

3.54 The **Director** congratulated the Board for arriving at a solution to the long-standing issue.

Contribution on RR No. 11.41 from the BR to the meetings of ITU-R Working Parties 4C and 4A (Addendum 5 to Document RRB24-3/4)

3.55 **Mr Vallet (Chief, SSD)** introduced Addendum 5 to Document RRB24-3/4, which provided information and statistics from the Bureau's analysis of frequency assignments to satellite networks and systems recorded in the MIFR under No. **11.41** and submitted to ITU-R Working Parties 4A and 4C for consideration. In its analysis, the Bureau had considered various aspects of frequency assignments recorded in the MIFR under No. **11.41**, including GSO and non-GSO, coordination provisions, orbital separations and frequency bands. In order to help alleviate concerns about the widespread usage of No. **11.41**, reduce interference potential, and promote the more effective, efficient and sustainable use of orbit and spectrum resources, the Bureau had suggested that administrations might consider establishing national policies to provide incentives for increased efforts to effect coordination required under Article **9** and might apply No. **11.41B** in a more systematic manner. The Bureau had also suggested that the working parties develop technical criteria for triggering coordination under various Article **9** provisions and methodologies or to be included in Part B of the Rules of Procedure for implementing No. **11.32A** in regard to such cases of coordination. Noting that the issue had also been considered at the November 2024 meeting of Study Group 4, he said that it was widely considered that ITU-R as a whole and administrations should try to improve the situation and decrease the percentage of frequency assignments recorded under No. **11.41**, particularly those which had no strong technical reason to be recorded under the provision.

3.56 The **Chair**, having thanked the Bureau for bringing the issue to the Board's attention, said that it was important to ensure that recorded frequency assignments had fulfilled most, if not all, of their coordination obligations. Fewer frequency assignments recorded under No. **11.41** would therefore improve the quality of the MIFR for all, and he hoped that the Bureau's suggestions, which had been well received by the working parties, would result in tangible actions. The Bureau might be encouraged to look at specific issues to prompt actions by administrations and, given the widespread usage of No.**11.41**, to engage with administrations and operators to ensure that the application of the provision was relevant.

3.57 **Ms Beaumier** thanked the Bureau for presenting the statistics, which provided a clear picture of the scope of the matter. The Board might wish to include the issue in its report to WRC-27 under Resolution **80 (Rev.WRC-07)** and put forward recommendations to the conference, including to ensure that administrations completed coordination.

3.58 With reference to Addendum 5 to Document RRB24-3/4, the Board **thanked** the Bureau for having prepared the statistics and for bringing the matter to its attention, and **noted** that the proposals had been well received by ITU-R Working Parties 4A and 4C. The Board **requested** the Bureau to pursue the proposed suggestions and to engage with administrations concerning the continuous application of No. **11.41B**, in particular for cases with no specific technical difficulties. It **decided** to include the issue in its report to WRC-27 under Resolution **80 (Rev.WRC-07)**.

Harmful interference affecting the SIRIUS satellite networks at 5°E and the F-SAT and EUTELSAT satellite networks at 10°E, 13°E and 21.5°E (Addendum 6 to Document RRB24-3/4 and Documents RRB24-3/DELAYED/6 and RRB24-3/DELAYED/11)

3.59 **Mr Vallet (Chief, SSD)** introduced Addendum 6 to Document RRB24-3/4, which reported on the Bureau's actions following the Board's decisions at its 96th meeting on harmful interference affecting the SIRIUS satellite networks at 5°E and the F-SAT and EUTELSAT satellite networks at 10°E, 13°E and 21.5°E. On 16 July 2024, the Bureau had proposed to convene a meeting of the Administrations of France, Luxembourg, the Kingdom of the Netherlands, the Russian Federation, Sweden and Ukraine between 23 September and 18 October 2024. All the administrations concerned apart from the Russian Administration had responded positively to the Bureau's invitation. Despite some informal contacts with the Russian Administration, the Bureau had not received any formal reply from the administration indicating its acceptance of a meeting or availability. It had subsequently informed the Russian Administration that the proposed meeting period had expired and that it would be difficult to organize a meeting prior to the Board's 97th meeting. Addendum 6 also informed the Board that, since the 96th meeting, the Administration of France had sent two further reports of interference of a nature prohibited under No. **15.1** to the Russian Administration, geolocation measurements having indicated that the interference originated from within the latter's territory. The Administration of Ukraine had indicated that the last case of harmful interference to its satellite television channels had been recorded on 9 May 2024. In view of the continuation of some interference cases, the Board's previous decisions, including on the convening of a meeting of the administrations concerned, appeared to remain relevant.

3.60 In Document RRB24-3/DELAYED/6 dated 7 November 2024, the Administration of the Russian Federation indicated that, while it appreciated the proposal to hold a meeting with the administrations concerned, certain governmental procedures had prevented it from completing the process within the specified time period. The Russian Administration hoped to be able to complete the necessary procedures before the Board's 98th meeting and expressed its readiness to engage in a constructive dialogue with the administrations concerned.

3.61 In Document RRB24-3/DELAYED/11 dated 8 November 2024, the Administration of Sweden reported that it had again been receiving harmful interference in the 14 GHz and 18 GHz ranges in the Earth-to-space direction since 1 November 2024 and that the origin of the signal source had been geolocated to the territory of the Russian Federation. Annex 1 provided a technical summary of the latest interference events and geolocation results. The Administration also requested the Board to publish the conclusions of the deliberations concerning its current and previous contributions on the websites of the Board and the Bureau, in accordance with *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022).

3.62 In reply to questions from **Ms Mannepalli**, he said that the Bureau had not received any further detailed information from the Administration of the Kingdom of the Netherlands, so assumed that the harmful interference had not reoccurred since May 2024. The Russian Administration had so far not provided the information requested by the Board at its previous meeting on the status of its investigation and actions carried out prior to the 97th Board meeting. It was his understanding that the Russian Administration intended to address those issues at the meeting of the administrations concerned.

3.63 **Mr Azzouz** thanked the Bureau for its efforts to resolve the harmful interference issues and the Administrations of France, Luxembourg, the Kingdom of the Netherlands, Sweden and Ukraine for agreeing to a meeting. He also noted the readiness of the Russian Administration to participate. The Board should encourage all the administrations concerned to cooperate and exercise the utmost goodwill during the

coordination meeting to resolve the harmful interference cases. It should instruct the Bureau to invite the Administration of the Russian Federation to take all suitable measures to resolve the interference problem and invite the administrations affected to continue reporting on the matter to future Board meetings. The Bureau should continue to provide assistance to the administrations concerned.

3.64 **Ms Beaumier** expressed concern that the Russian Administration had failed to respond to the Bureau's invitation to convene a coordination meeting, and had done so only the previous week, presumably after it had been informed that the Bureau was going to report to the Board. Although that administration had experienced difficulties in obtaining the necessary approvals for such a meeting, she failed to understand why it had not responded sooner. It could, at the very least, have provided information on the status of its investigations, including on the location of earth stations, and actions carried out, as it had been requested to do by the Board at the 96th meeting. While some of the harmful interference cases had ceased, there were new reports of transmissions that appeared to be in contravention of No. **15.1**. The Board would have to reiterate its request to the Administration of the Russian Federation and urge all parties concerned to collaborate and resolve the harmful interference cases.

3.65 The **Chair** noted with concern that some cases of harmful interference had reappeared and that geolocation measurements indicated the origin to be within the territory of the Russian Federation. Although some responses to the requests made by the Board at its 96th meeting might have been provided by the Russian Administration during the planned multilateral meeting in the absence of such a meeting, no response to the Board's request had been received. He noted, however, that according to Document RRB24-3/DELAYED/6, the Russian Administration was making every possible effort to complete the necessary governmental procedures for a meeting before the Board's next session and stood ready to engage in a constructive dialogue with the administrations affected. The Board should therefore reiterate its requests to the Administration of the Russian Federation and instruct the Bureau to continue its efforts to convene a meeting of the administrations concerned as soon as possible, in December 2024 or January 2025, to resolve the harmful interference cases and prevent them from reoccurring. He also indicated that the resolution of harmful interference cases should not be restricted to transmissions in the broadcasting-satellite service but should also include the fixed-satellite service.

3.66 **Mr Linhares de Souza Filho** said that the Board should be clear on how it wished to proceed with respect to the request by the Administration of Sweden concerning *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022).

3.67 **Mr Azzouz**, recalling the Board's decision on that matter at its previous meeting, said that it remained premature to accede to the Swedish Administration's request as further action was to be taken in relation to the issue.

3.68 **Ms Mannepalli** agreed. She also noted that the request by the Administration of Sweden to the current meeting was set out in Document RRB24-3/DELAYED/11, which the Board had agreed was to be considered for information only. The Board therefore did not need to take any action in respect of the request at the current meeting.

3.69 The **Chair** recalled that, at its previous meeting, the Board had deemed it premature to take action under *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022) even though such requests had been made by various administrations in their formal submissions. The Board had to be careful not to take action in relation to a delayed document, which was being considered for information only. Moreover, further actions were still expected in relation to the issue, including the convening of a meeting of all administrations concerned that could yield results. The Board might therefore wish to keep in abeyance the request under *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022). He asked whether the Board wished to reflect that approach in its conclusion.

3.70 **Ms Beaumier** said that there was no need to refer in the summary of decisions to the request made to the current meeting by the Administration of Sweden. She noted that the Board did not address requests made in a delayed document and that the requests made at the Board's previous meeting remained pending. Furthermore, the situation had not evolved significantly, and the Board did not need to address the issue at every meeting. **Mr Cheng** agreed.

3.71 **Mr Linhares de Souza Filho**, noting that the Board had agreed to consider Document RRB24-3/DELAYED/11 for information, recalled §1.6 of Part C of the Rules of Procedure on the internal arrangements and working methods of the Board, in particular that submissions in response to a delayed submission would only be considered if received before the start of the meeting. It was his understanding that any delayed document replying to another delayed document would be considered, and the Board might wish in the future to treat such documents rather than simply consider them for information purposes.

3.72 The **Chair** noted that the Board was more likely to receive delayed documents, the closer contributions were submitted to the three-week deadline. In his view, any submissions received after the three-week deadline were delayed documents, which should be considered for information only as per Part C of the Rules of Procedure

3.73 **Ms Beaumier** observed that Document RRB24-3/DELAYED/11 provided an update on developments concerning Swedish satellite networks since 1 November 2024 so would always have been submitted after the three-week deadline. However, Addendum 6 to Document RRB24-3/4 had been received relatively late, on 5 November 2024, and she called on the Bureau to make every effort to submit its documents as soon as possible. The Board had always considered delayed documents for information and, as far as she was aware, had never departed from that premise. Treating delayed documents in the same manner as submissions received on time would fundamentally change the Board's approach.

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

"The Board considered Addendum 6 to Document RRB24-3/4 in detail and noted Documents RRB24-3/DELAYED/6 and RRB24-3/DELAYED/11 for information. The Board thanked the Bureau for its efforts to convene a coordination meeting between the administrations concerned, which had unfortunately been unsuccessful owing to scheduling difficulties experienced by the Administration of the Russian Federation.

The Board noted the following points with continuing concern:

- The Administration of the Russian Federation had failed to respond to the Bureau's requests for a multilateral meeting between the administrations concerned, to be convened before the Board's 97th meeting.
- The Russian Administration had not provided the information that the Board had requested at its 96th meeting.
- Although some cases of harmful interference reported to the 96th Board meeting had ceased, new reports from the Administrations of France and Sweden indicated that some cases of harmful interference in contravention of RR No. **15.1** had reappeared or continued to be present, with geolocation measurements indicating that they had originated from within the territory of the Russian Federation.

The Board also noted:

- the very late information from the Administration of the Russian Federation indicating its willingness to make every possible effort to complete the governmental procedure to find a convenient date for a multilateral meeting before the Board's 98th meeting in 2025; and
- the readiness of the Russian Administration to engage in a constructive dialogue with the administrations affected.

Consequently, the Board again requested the Administration of the Russian Federation:

- to immediately cease any deliberate action to cause harmful interference to frequency assignments of other administrations;
- to provide information on the status of its investigation and actions carried out prior to the 97th and 98th Board meetings;
- to further investigate whether any earth stations currently deployed at, or close to, the locations identified by geolocation measurements might have the capability to cause harmful interference in the 13/14 GHz and 18 GHz frequency ranges as experienced by the satellite networks located at 3°E, 5°E, 7°E, 10°E, 13°E and 21.5°E, and to take the necessary actions in compliance with Article 45 of

the ITU Constitution ("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…"), so as to prevent the reoccurrence of such harmful interference.

The Board again urged the Administrations of France, the Russian Federation and Sweden, in compliance with No. **15.22**, to collaborate and exercise the utmost goodwill and mutual assistance in the resolution of the harmful interference cases.

The Board instructed the Bureau to continue its efforts to:

- convene a meeting of the administrations concerned in December 2024 or January 2025, to resolve the harmful interference cases and prevent them from reoccurring;
- report on progress to the 98th Board meeting."

3.75 It was so **agreed**.

3.76 Having considered in detail the Report of the Director of the Radiocommunication Bureau, as contained in Document RRB24-3/4, its and its Addenda 1, 2, 3, 5 and 6, the Board **thanked** the Bureau for the extensive and detailed information provided.

4 Rules of Procedure

Comments from administrations (Document RRB24-3/2)

4.1 **Mr Vassiliev (Chief, TSD)**, introducing Document RRB24-3/2, said that it contained proposals for the Bureau's procedure for preparing and approving draft rules of procedure and for their transfer to the Radio Regulations in accordance with Nos. **13.0.1** and **13.0.2**. It also contained a request that the Board postpone its consideration of Circular Letters CCRR/74, 75 and 76 to the 98th Board meeting. The Board might therefore wish to consider it before the other sub-items under agenda item 4.

4.2 It was so **agreed.**

4.3 **Mr Vassiliev (Chief, TSD)** said that, in its submission, the Administration of the Islamic Republic of Iran pointed to the growing volume of the Rules of Procedure, which were becoming unmanageable and in some cases even misleading. It also noted that administrations were overloaded by the considerable number of circular letters containing draft rules of procedure. Failure on their part to reply should never be interpreted as agreement to the drafts in question, but simply as an indication of the time constraints they faced between two world radiocommunication conferences. In addition, the Bureau submitted numerous issues to each conference in the Director's report, but the conference usually did not have the time or expertise to examine them properly. Those issues that had not been dealt with were indicated in the Plenary minutes and returned to the Board and the Bureau for consideration in what amounted to a closed loop involving the Bureau, the conference and the Board.

4.4 The Administration of the Islamic Republic of Iran therefore proposed that a plan of action be drawn up in line with Nos. **13.0.1** and **13.0.2**, said plan to comprise the following steps:

- submission by the Bureau to the Board of the specific issues on which a rule of procedure was required;
- review by the Board of the need for such rules of procedure, with, where appropriate, an instruction to the Bureau to prepare the initial draft(s) for submission to the subsequent Board meeting for review and comment;
- pursuant to its review of the initial draft(s), an instruction by the Board to the Bureau to publish the final drafts in a circular letter under No. **13.12**.

4.5 Document RRB24-3/2 ended with a request that the Board postpone its consideration of Circular Letters CCRR/74, 75 and 76 to the 98th Board meeting; that it instruct the Bureau to provide the rationale for the draft rules of procedure contained therein and define their degree of urgency; that the Board carefully

examine those draft rules of procedure at its 98th meeting, on a case-by-case basis and in the light of Member States' comments, the deadline for which would have to be extended. The Iranian Administration also requested the Board not to approve Annex 3 to Circular Letter CCRR/77 for the reasons it had provided in a compendium submission (Document RRB24-3/13) and that it process the other annexes in the circular letter as set out above.

4.6 Document RRB24-3/2 had been discussed by the Bureau, where the common understanding was that it spelled out the Bureau's current approach almost to the letter.

4.7 In reply to a number of points raised by **Mr Azzouz** and **Ms Mannepalli**, the **Chair** said that, on the subject of the process for preparing draft rules of procedure, he shared the Bureau's view that the approach set out by the Iranian Administration was the one currently applied by the Bureau under § 2 of the internal arrangements and working methods of the Board (Part C of the Rules of Procedure), on the preparation of rules of procedure. A list of the specific rules of procedure requiring consideration, with timelines, was prepared by the Bureau and reviewed by the Board before being published on the Board's webpage, thus providing advance warning to Member States of the forthcoming draft rules of procedure to be considered. The rules were then drafted by the Bureau and reviewed by the Board before being sent to Member States in circular letters at least ten weeks before the meeting at which they would be examined. The Board then finalized, deferred or suppressed each rule at that meeting. He therefore saw no reason to change the Bureau's current approach, which was in conformity with the Radio Regulations.

4.8 He was also reluctant to support the request to postpone consideration of Circular Letters CCRR/74, 75 and 76 to the Board's 98th meeting. In some cases, there was an urgent and practical need for the draft rules of procedure concerned, as the revised Radio Regulations would enter into force on 1 January 2025. Others were urgently required because the examination of some filings had been kept in abeyance pending their approval. Administrations had been given ample time to consider the proposals, as the circular letters had been dispatched well in advance of the 10-week deadline, a feat for which the Bureau was to be commended. He was also reluctant to postpone consideration out of respect for those administrations that had met the deadline for making comments.

4.9 He nevertheless agreed that transparency was important. In future, therefore, the Bureau might wish clearly to explain the need for each new rule of procedure, to ensure stakeholder understanding. Once the rule of procedure had been approved, the Board should consider whether it would be appropriate to transfer it to the Radio Regulations.

4.10 In conclusion, he saw no need to modify how the Board worked except that it might consider providing a little more information on the rationale underlying every rule, and therefore could not accede to the request.

4.11 **Ms Beaumier** fully endorsed the Chair's views but said that she could understand why administrations might currently feel somewhat overwhelmed. The Iranian Administration was correct to underscore the growing volume of the Rules of Procedure, which might be a reflection of the hasty, last-minute decisions made at world radiocommunication conference – issues were not fully thought through, resulting in areas requiring clarification.

4.12 She agreed that the Board might consider putting together an action plan, as requested by the Iranian Administration, but considered that the approach outlined was the way the Board and the Bureau currently worked. There was no need to postpone consideration of Circular Letters CCRR/74, 75 and 76 – doing so would not serve the membership well – and the request not to approve Annex 3 to Circular Letter CCRR/77 would be considered alongside all the other comments on that circular.

4.13 It was not possible to convert every rule of procedure into a provision of the Radio Regulations: some were better suited to remain rules of procedure. At a previous meeting, the Board had discussed the possibility of reviewing all the rules of procedure with a view to identifying candidates for transfer and, as she recalled, had decided that once it had ensured that the rules of procedure required by the entry into force of the new Radio Regulations, on 1 January 2025, were in place, it would ask the Bureau to draw up a list of such rules. She agreed that the Board should now turn to that task. That said, previous attempts to do

so had revealed that not many rules were necessarily straightforward enough to transfer. The Board should perhaps review more long-standing rules of procedure, which might be good candidates for transfer.

4.14 **Mr Cheng** agreed with the previous speakers that the course of action proposed by the Iranian Administration was similar to what the Board already did and that there was no reason to postpone consideration of Circular Letters CCRR/74, 75 and 76. The Board might nevertheless consider investing more time and effort in the preparation of a precise plan of action. In response to the Iranian Administration's concern at the growing volume of the Rules of Procedure, the Board should also endeavour to identify rules for transfer to the Radio Regulations.

4.15 **Mr Azzouz** agreed that the process set out by the Iranian Administration corresponded to the Board's current method of work. In response to his query as to who initiated the process, the **Chair** said that No. **13.0.01** was clear on that point: "The Board shall develop a new Rule of Procedure only when there is a clear need with proper justification for such a Rule. For all such Rules, the Board shall submit to the coming world radiocommunication conference the necessary modifications to the Radio Regulations, to alleviate such difficulties or inconsistencies and include its suggestions in the Report of the Director to the next world radiocommunication conference." The best means of doing so was through the Board's report to the conference under Resolution **80 (Rev.WRC-07)**.

4.16 **Mr Vassiliev (Chief, TSD)** pointed out that the steps in the process described by the Iranian Administration and already followed by the Board might not all be visible to administrations. Regarding the transfer of rules of procedure to the Radio Regulations, he pointed out that most of the rules of procedure dealing with terrestrial services dealt with very detailed technical issues that would be difficult to transfer without making the Radio Regulations unmanageable.

4.17 **Mr Di Crescenzo** agreed that it would not be easy to move rules of procedure dealing with terrestrial services to the Radio Regulations because of the technical nature of the texts. He understood the position of the Iranian Administration but agreed with previous speakers that the process described by it corresponded to current practice.

4.18 The **Chair** proposed that the Board should conclude as follows on the matter:

"With reference to Document RRB24-3/2, in which the Administration of the Islamic Republic of Iran provided general comments on the preparation and approval of draft rules of procedure, the Board noted the following:

- The Board considered that it was already following the procedure as proposed by the Administration of the Islamic Republic of Iran in the preparation of draft rules of procedure but noted that certain steps of that procedure might not be entirely visible to Member States, given that their consideration occurred within the Working Group on the Rules of Procedure.

- In addition to the steps indicated, the Board compiled and maintained a list of proposed draft rules of procedure and the schedule for their expected approval. On instruction from the Board, the Bureau published the list several meetings prior to the expected dates of approval of the proposed draft rules of procedure, giving administrations ample notice of the expected actions.

- Several proposed draft rules of procedure were a direct reflection of the decisions taken at a WRC.

Noting the concerns raised, the Board undertook to pay more attention to the following steps:

- the need for proposed draft rules of procedure to be justified by more extensive and clear reasons;

- pursuant to RR No. **13.0.1**, the reinforcement and expansion of its efforts to identify rules of procedure that could be candidates for transferral to the Radio Regulations, thus reducing the number of rules of procedure.

Consequently, the Board instructed the Bureau to assist in identifying relevant existing and new rules of procedure that could be considered for transferral to the Radio Regulations.

In relation to the request for postponing the consideration and possible approval of the draft rules of procedure contained in Circular Letters CCRR/74, CCRR/75 and CCRR/76 until its 98th meeting, the Board indicated the following points:

- Most of the proposed draft rules of procedure were required to govern cases that would arise when the new and revised Radio Regulations resulting from WRC-23 decisions came into force on 1 January 2025.

- Other proposed draft rules of procedure were urgently required for situations where received filings had been kept in abeyance in the absence of provisions that would allow the Bureau to process them in a timely manner and in compliance with the regulatory time-limits.

- The comments received from a number of administrations on the proposed draft rules of procedure needed to be considered and implemented, where appropriate.

- Recognizing the considerable effort required from administrations, the Board had specifically instructed the Bureau to prepare and publish the proposed draft rules of procedure at the earliest date possible, i.e. the latest circular letter had been published on 9 August 2024, thus providing Member States with four weeks in addition to the six weeks required under RR No. **13.12A** *c)* to prepare and submit their comments on the proposed draft rules of procedure.

Consequently, the Board decided not to accede to the request from the Administration of the Islamic Republic of Iran."

4.19 It was so **agreed**.

4.1 List of rules of procedure (Documents RRB24-3/1 and RRB24-1/1(Rev.2))

4.1.1 **Ms Hasanova**, Chair of the Working Group on the Rules of Procedure, reported that the working group had met eight times during the present meeting and had concluded its deliberations on all six items on its agenda. It had revised and updated the list of draft rules of procedure contained in Document RRB24-3/1, adding four more rules in the process.

4.1.2 The working group had reviewed the comments received from Member States in reply to Circular Letter CCRR/73 (Document RRB24-3/9), which had 10 annexes; there had been no proposals to modify the draft rules of procedure contained in Annexes 2, 4, 6, 9 and 10. In response to a question from the Administration of Canada on Annex 5 (new draft rules of procedure on Annex 2 to Appendix **4** related to frequency assignments with very low power spectral density levels), about the possibility of providing a description of what constituted a "sufficient interference margin" to allow an increase in the predictability of the outcome of the examination of frequency assignments to non-GSO satellite systems or networks with power spectral density levels below -100 dBW/Hz, it had agreed to add a reference to Attachment 2 to Section B3 of Part B of the Rules of Procedure in the new draft rules of procedure on items C.8.a.2, C.8.b.2, C.8.c.1 and C.8.c.3 of Annex 2 to Appendix **4**.

4.1.3 The Administration of Canada had also commented on Annex 8 of Circular Letter CCRR/73, on the suppression of the rule of procedure on Table 21-2 of Article **21**. It had noted that some aspects of the existing text clarified once and for all that the limits specified in Nos. **21.2, 21.3, 21.4, 21.5** and **21.5A** applied to assignments to stations in the fixed and mobile services and not to stations in the services listed in Table 21-2; that clarification would need to be retained. In addition, the current No. **21.6** stated that the above power limits applied to the services indicated in the column entitled "Service" of Table 21-2, all of which appeared to be space services, while, in fact, those limits applied to terrestrial fixed and mobile services. With respect to that second issue, the working group had agreed with the administration's suggestion that the inconsistency in the language of No. **21.6** be included in the Director's report to WRC-27 for further consideration and action, as appropriate.

4.1.4 The working group had also reviewed the comments received from Member States in reply to Circular Letter CCRR/74 (Document RRB24-3/10). With regard to Annex 1, which contained new draft rules of procedure on Nos. **5.312B, 5.314A, 5.388A** and **5.409A** in association with Resolutions **213 (WRC-23)**, **218 (WRC-23)** and **221 (Rev. WRC-23)**, it had not agreed to the proposal by the Administrations of Japan and Brazil that the time percentage applied for the calculation of pfd levels for high-altitude platform stations as

IMT base stations (HIBS) be increased from 1 to 20 per cent, but it had agreed to the proposal by the Administration of Canada that the inconsistencies found in Nos **5.312B** and **5.314A** be included in the Director's report to WRC-27 under agenda item 9.2. It had further agreed that there was no need for a rule of procedure on conformity with the table of frequency allocations of notices for frequency assignments to HIBS in the band 902–928 MHz in Region 2 countries and 698–790 MHz in Region 3 countries, which were listed in No. **5.314A** but not in No. **5.313A**.

4.1.5 In its comments on Annex 2 of Circular Letter CCRR/74, which contained modifications to the existing rules of procedure (Section B6 of Part **B**) specifying methods for the identification of administrations potentially affected under No. **9.21** for Nos. **5.295A**, **5.307A**, **5.434A**, **5.457F** and **5.480A**, the Administration of the Russian Federation had proposed two new rules of procedure. First, in order to reflect the requirements of Nos. **5.293**, **5.295A**, **5.307A**, **5.308A** and **5.325** in relation to agreement-seeking under No. **9.21**, the Russian Administration had proposed that a value of 450 km (similar to the value previously determined for the protection of the service in the rules of procedure on No. **5.312A**) be used to identify administrations for protection of the aeronautical RNS, to which the frequency band 645–960 MHz was allocated on a primary basis. Second, in order to reflect the requirements of Nos. **5.341A**, **5.341C**, **5.346** and **5.346A** in relation to agreement-seeking under No. **9.21**, the Russian Administration had proposed that a value of 670 km (similar to the value previously determined in the rules of procedure on Nos. **5.341A** and **5.346**) be used to identify administrations for protection of the aeronautical mobile service. The working group had agreed that there was a need to develop new draft rules of procedure for Nos. **5.293**, **5.295A**, **5.307A**, **5.308A** and **5.325** and to assess the need to modify the existing rules of procedure for Nos. **5.341A**, **5.341C**, **5.346** and **5.346A**.

4.1.6 The working group had then reviewed the comments received from Member States in reply to Circular Letter CCRR/75 (Document RRB24-3/11), which had 14 annexes; there had been no proposals to modify the draft rules of procedure contained in Annexes 4, 5, 6, 7 and 12. In response to the Administration of Japan's request for clarification on the addition of new draft rules of procedure on Nos. **5.457D**, **5.457E** and **5.457F** pursuant to Resolution **220 (WRC-23)** (Annex 1), the working group had confirmed that the principles circulated by the Bureau in Circular Letter CR/467, dated 18 August 2020, also applied to those three footnotes and that the examination vis-à-vis the relevant provisions of Article **21** would be conducted for all stations in the mobile service, including those using the nature of service other than "IM".

4.1.7 The working group had agreed to the Canadian Administration's proposal to include the new rules of procedure contained in Annex 2 to Circular Letter CCRR/75, on Nos. **5.461**, **5.461AC** and **5.529A**, in the Director's report to WRC-27. However, it had not agreed to the administration's proposal to bring the new draft rules of procedure on No. **22.5K** contained in Annex 10 to the attention of ITU-R Working Party 4A for consideration and potential action under WRC-27 agenda item 7, on the grounds that doing so would overburden Working Party 4A; it was preferable to bring the matter to the attention of WRC-27 in the Director's report under agenda item 9.2. The Administration of Canada had also suggested that WRC-27 might consider the substance of the new draft rules of procedure on No. **22.5K** for transfer to the Radio Regulations.

4.1.8 With regard to Annex 11 of Circular Letter CCRR/75, on the addition of new rules of procedure on Annex 2 to Appendix **4** related to items A.4.b.7.d.1, A.27.b, A.33a and A.36.c, the Administration of Canada had suggested that the Board request the Bureau to bring the new rules of procedure to the attention of Working Party 4A for consideration and potential action under WRC-27 agenda item 7, as appropriate, or that they be mentioned in the Director's report to WRC-27. It had further suggested that several aspects of the draft rules of procedure might be transferred to the Radio Regulations at WRC-27. The working group had agreed that WRC-27 should be informed accordingly.

4.1.9 The working group had also agreed to the Canadian Administration's proposal that the substance of § 1 of the new rules of procedure set out in Annex 13 to Circular Letter CCRR/75, on Resolution **678 (WRC-23)**, be considered for transfer to the Radio Regulations at WRC-27.

4.1.10 The working group had reviewed the comments received from Member States on the draft modified rules of procedure set out in Circular Letter CCRR/76 (Document RRB24-3/12), which had five annexes. There

had been no proposals to further modify the draft rules of procedure contained in Annexes 4 and 5. The working group had agreed to accept most of the comments received and approve all five annexes.

4.1.11 In view of the many objections received from Member States (Document RRB24-3/13) regarding Annexes 1 and 3 of Circular Letter CCRR/77, the working group had agreed not to approve the draft modified rules of procedure they contained. It had approved the draft modified rules of procedure set out in Annex 2.

4.1.12 **Mr Vassiliev (Chief, TSD)**, referring to the two new rules of procedure proposed by the Administration of the Russian Federation regarding methods for the identification of administrations potentially affected under No. **9.21** for Nos. **5.293, 5.295A**, **5.307A**, **5.308A** and **5.325**, said that preliminary checks had revealed that the first proposal might be relevant for examination by the Bureau. More time was needed to analyse the second proposal with respect to Nos. **5.341A**, **5.341C**, **5.346** and **5.346A**, as the relevant portions of text were spread across several rules of procedure. The Bureau would report and make proposals to the Board at the 98th meeting.

4.1.13 The **Chair** proposed that the Board should conclude as follows:

"Following a meeting of the Working Group on the Rules of Procedure, under the leadership of Ms S. HASANOVA, the Board:

- revised and approved the list of proposed rules of procedure contained in Document RRB24-3/1, taking into account the proposals by the Bureau for the revision of certain rules of procedure and the proposals for new rules of procedure;

- instructed the Bureau to publish the revised version of the document on the website and to prepare and circulate those draft rules of procedure well in advance of the 98th Board meeting, to allow administrations enough time to comment."

4.14 It was so **agreed**.

4.2 Draft Rules of Procedure (Circular Letters CCRR/73, CCRR/74, CCRR/75, CCRR/76 and CCRR/77)

4.2.1 The **Chair** proposed that Circular Letters CCRR/73, CCRR/74, CCRR/75, CCRR/76 and CCRR/77 be considered in conjunction with Documents RRB24-3/2, RRB24-3/9, RRB24-3/10, RRB24-3/11, RRB24-3/12 and RRB24-3/13 under sub-item 4.3.

4.2.2 It was so **agreed**.

4.3 Comments from Administrations (Documents RRB24-3/2, RRB24-3/9, RRB24-3/10, RRB24-3/11, RRB24-3/12 and RRB24-3/13)

4.3.1 The Board had before it Annexes 1 to 31 of the attachment to the draft summary of decisions circulated earlier to Board members and containing the draft new and modified rules of procedure set out in Circular Letters CCRR/73, 74, 75, 76 and 77, as amended in the light of the comments made by administrations in Documents RRB24-3/2, 9, 10, 11, 12 and 13, and of the working group's deliberations.

ADD rules of procedure on Nos 5.254 and 5.255, and relevant modification of the existing rules of procedure on No. 9.11A (Annex 1 to the summary of decisions / Annex 1 to Circular Letter CCRR/73)

4.3.2 **Approved**, with effective date of application 19 November 2024.

ADD rules of procedure on Nos. 5.312B, 5.314A, 5.388A and 5.409A pursuant to Resolutions 213 (WRC-23), 218 (WRC-23) and 221 (Rev.WRC-23) (Annex 2 to the summary of decisions Annex 1 to Circular Letter CCRR/74)

4.3.3 **Mr Linhares de Souza Filho** noted that the Working Group on the Rules of Procedure had agreed to apply Recommendation ITU-R P.528-5. In the rationale presented in the annex, however, it was explained that the working group had chosen that option because it did not have information regarding the terrain profile, whereas, in fact, it had done so because Recommendation ITU-R P.528-5 was the most conservative option. Administrations might subsequently question that rationale in cases where the Bureau did have the terrain profile characteristics, as once the clutter loss was reset to 0 dB the area could be considered

uncluttered. The rationale was therefore related more to the fact that the solution approved was the most conservative, rather than that the Bureau did not have information on surface heights that would contribute to diffraction loss.

4.3.4 Following informal consultations, **Mr Vassiliev (Head, TSD)** said that the text should be amended to indicate that the possible application of Recommendations ITU-R P.525 and ITU-R P.619 had also been considered during the drafting process but not pursued. Recommendation ITU-R P.525 (free-space) had been excluded because it did not consider diffraction loss and was therefore not applicable to non-line-of-sight (NLOS) propagation paths. Recommendation ITU-R P.619 had been excluded because Recommendation ITU-R P.528-5 made more stringent assumptions resulting in worst-case interference levels from HIBS, which ensured sufficient protection of the incumbent services.

4.3.5 It was so **agreed**.

4.3.6 ADD rules of procedure on **Nos 5.254** and **5.255**, and relevant modification of the existing rules of procedure on **No. 9.11A**, as amended, was **approved**, with effective date of application 19 November 2024.

4.3.7 ADD rules of procedure on **Nos. 5.312B**, **5.314A**, **5.388A** and **5.409A** pursuant to Resolutions **213 (WRC-23)**, **218 (WRC-23)** and **221 (Rev.WRC-23)**, as amended, was **approved**, with effective date of application 1 January 2025.

SUP rules of procedure on No. 5.523A (Annex 3 to the summary of decisions / Annex 2 to Circular Letter CCRR/73)

4.3.8 **Approved**, with effective date of suppression 1 January 2025.

ADD rules of procedure on Annex 2 to Appendix 4 related to frequency assignments with very low power spectral density levels (Annex 4 to the summary of decisions / Annex 5 to Circular Letter CCRR/73)

4.3.9 **Approved**, with effective date of application 19 November 2024.

SUP rules of procedure on Appendix 1 to Annex 4 of Appendix 30B (Annex 5 to the summary of decisions / Annex 6 to Circular Letter CCRR/73)

4.3.10 **Approved**, with effective date of suppression 1 January 2025.

MOD rules of procedure on Nos. 5.312A, 5.316B, 5.341A, 5.441B, 5.446A, 5.506A and in Part A, Section A10 (Annex 6 to the summary of decisions / Annex 7 to Circular Letter CCRR/73)

4.3.11 **Approved**, with effective date of application 1 January 2025.

ADD rules of procedure on Nos. 5.457D, 5.457E and 5.457F pursuant to Resolution 220 (WRC-23) (Annex 7 to the summary of decisions / Annex 1 to Circular Letter CCRR/75)

4.3.12 **Approved**, with effective date of application 1 January 2025.

ADD rules of procedure on Nos. 5.461, 5.461AC and 5.529A (Annex 8 to the summary of decisions / Annex 2 to Circular Letter CCRR/75)

4.3.13 **Approved**, with effective date of application 1 January 2025.

ADD rules of procedure on Nos. 5.474A, 5.475A and 5.478A and relevant modifications to the rules of procedure related to Annex 2 to Appendix 4 (addition of new rules of procedure on item C.8.b.3.c with simultaneous suppression of the rules of procedure on item A.17.d) (Annex 9 to the summary of decisions / Annex 3 to Circular Letter CCRR/75)

4.3.14 **Approved**, with effective date of application 1 January 2025.

ADD rules of procedure on No. 5.480A pursuant to Resolution 219 (WRC-23) (Annex 10 to the summary of decisions / Annex 10 to Circular Letter CCRR/75)

4.3.15 **Approved**, with effective date of application 1 January 2025.

MOD rules of procedure on No. 9.11A (Annex 11 to the summary of decisions / Annex 3 to Circular Letter CCRR/73 and Annex 5 to Circular Letter CCRR/75)

4.3.16 **Approved**, with effective date of application 1 January 2025.

MOD rules of procedure on No. 9.11A (Annex 12 to the summary of decisions / Annex 5 to Circular Letter CCRR/75)

4.3.17 **Approved**, with effective date of application 1 January 2025.

MOD rules of procedure on receivability of forms of notice and No. 9.27 (Annex 13 to the summary of decisions / Annex 4 to Circular Letter CCRR/73)

4.3.18 **Approved**, with effective date of application 1 January 2025.

MOD rules of procedure on No. 9.27 (Annex 14 to the summary of decisions / Annex 6 to Circular Letter CCRR/75)

4.3.19 **Approved**, with effective date of application 19 November 2024.

MOD rules of procedure on No. 11.13 (Annex 15 to the summary of decisions / Annex 7 to Circular Letter CCRR/75)

4.3.20 **Approved**, with effective date of application for §§ 1 and 3 of 19 November 2024 and for § 2 of 1 January 2025.

MOD rules of procedure on Nos. 11.31 and 11.32 following modifications to data items in Annex 2 to Appendix 4 (Annex 16 to the summary of decisions / Annex 8 to Circular Letter CCRR/75)

4.3.21 **Approved**, with effective date of application 1 January 2025.

MOD rules of procedure on No. 11.43A (Annex 17 to the summary of decisions / Annex 9 to Circular Letter CCRR/75)

4.3.22 **Approved**, with effective date of application 1 January 2025.

MOD rule of procedure on Table 21-2 of Article 21 (Annex 18 to the summary of decisions / Annex 8 to Circular Letter CCRR/73)

4.3.23 **Ms Beaumier** recalled that the original proposal had been to suppress the rule of procedure. Following comments from the Administration of Canada in Circular Letter CCRR/73 that the limits specified in Nos. **21.2, 21.3, 21.4, 21.5** and **21.5A** applied to assignments to stations in the fixed and mobile services and not to stations in the services listed in Table 21-2, the working group had agreed to retain a portion of the rule with some modifications. It had also agreed that there was no need to recirculate the modified draft rule of procedure and that the inconsistency in the wording of No. **21.6** should be included in the Director's report to WRC-27 for further consideration and action, as appropriate.

4.3.24 On that understanding, MOD rule of procedure on Table 21-2 of Article 21 was **approved**, with effective date of application 1 January 2025.

ADD rules of procedure on No. 22.5K (Annex 19 to the summary of decisions / Annex 10 to Circular Letter CCRR/75)

4.3.25 **Approved**, with effective date of application 1 January 2025.

ADD rules of procedure on Annex 2 to Appendix 4 related to items A.4.b.7.d.1, A.27.b, A.33a and A.36.c (Annex 20 to the summary of decisions / Annex 11 to Circular Letter CCRR/75)

4.3.26 **Approved**, with effective date of application 1 January 2025.

SUP rule of procedure on No. 27/58 of Appendix 27 (Annex 21 to the summary of decisions / Annex 9 to Circular Letter CCRR/73)

4.3.27 **Approved**, with effective date of suppression 1 January 2025.

ADD rules of procedure on §§ 4.1.31 and 4.1.33 of Article 4 of Appendix 30A and on §§ 6.38 and 6.40 of Article 6 of Appendix 30B (Annex 22 to the summary of decisions / Annex 1 to Circular Letter CCRR/76)

4.3.28 **Mr Wang (Head, SSD/SNP)** said that, on further consideration, it seemed illogical to add the phrase "and in this case the provisions of § 6.38 shall not apply" to the end of the fifth paragraph under ADD 6.38, as suggested by the Administration of the Russian Federation, as it appeared to contradict the words directly preceding it. He therefore thought that the phrase should be deleted.

4.3.29 It was so **agreed**.

4.3.30 ADD rules of procedure on §§ 4.1.31 and 4.1.33 of Article 4 of Appendix **30A** and on §§ 6.38 and 6.40 of Article 6 of Appendix **30B** was **approved**, as amended, with effective date of application 1 January 2025.

ADD rules of procedure on § 4.1.32 of Article 4 of Appendix 30A and on § 6.39 of Article 6 of Appendix 30B (Annex 23 to the summary of decisions / Annex 12 to Circular Letter CCRR/75)

4.3.31 **Mr Wang (Head, SSD/SNP)** said that, on further consideration, the phrase "(not including those frequency assignments for which complete Appendix **4** information has been received by the Bureau in accordance with § 4.1.3 of Appendix **30A** but not entered in the List)" did not need to be added to § 1 of Annex 22 to the summary of decisions, as suggested by Mr Cheng during the working group deliberations, as the point was covered in preceding provisions. He therefore thought that the addition should be deleted.

4.3.32 It was so **agreed**.

4.3.33 ADD rules of procedure on § 4.1.32 of Article 4 of Appendix **30A** and on § 6.39 of Article 6 of Appendix **30B** was **approved**, as amended, with effective date of application 1 January 2025.

MOD existing rules of procedure on Article 7 of Appendix 30B and ADD rules of procedure on Annex 7 to Appendix 30B (Annex 24 to the summary of decisions / Annex 2 to Circular Letter CCRR/76)

4.3.34 **Approved**, with effective date of application 1 January 2025.

ADD rules of procedure on Resolution 8 (WRC-23) (Annex 25 to the summary of decisions / Annex 3 to Circular Letter CCRR/76)

4.3.35 **Approved**, with effective date of application 1 January 2025.

ADD rules of procedure on Resolution 35 (Rev.WRC-23) (Annex 26 to the summary of decisions / Annex 2 to Circular Letter CCRR/77)

4.3.36 **Approved**, with effective date of application 19 November 2024.

ADD rules of procedure on Resolution 121 (WRC-23) (Annex 27 to the summary of decisions / Annex 4 to Circular Letter CCRR/76)

4.3.37 **Approved**, with effective date of application 1 January 2025.

ADD rules of procedure on Resolution 123 (WRC-23) (Annex 28 to the summary of decisions / Annex 5 to Circular Letter CCRR/76)

4.3.38 **Approved**, with effective date of application 1 January 2025.

ADD rules of procedure on Resolution 678 (WRC-23) (Annex 29 to the summary of decisions / Annex 13 to Circular Letter CCRR/75)

4.3.39 **Approved**, with effective date of application 1 January 2025.

MOD rules of procedure (Section B6 of Part B) to specify methods for identification of potentially affected administrations under No. 9.21 for Nos. 5.295A, 5.307A, 5.434A, 5.457F and 5.480A (Annex 30 to the summary of decisions / Annex 10 to Circular Letter CCRR/74 and Annex 2 to Circular Letter CCRR/74)

4.3.40 **Approved**, with effective date of application 1 January 2025.

ADD rules of procedure on the calculation of power-flux density levels produced by aeronautical earth stations in motion (A-ESIM) and their validation with the limits contained in Annex 3 to Resolution 169 (Rev.WRC-23), Annex 2 to Resolution 121 (WRC-23) and Annex 2 to Resolution 123 (WRC-23) (Annex31 to the summary of decisions / Annex 14 to Circular Letter CCRR/75)

4.3.41 **Approved**, with effective date of application 1 January 2025.

4.3.42 The **Chair** proposed that the Board should conclude as follows:

"Having considered in detail the comments received from administrations, provided in Documents RRB24-3/9, RRB24-3/10, RRB24-3/11, RRB24-3/12 and RRB24-3/13, on the draft rules of procedure set out in Circular Letters CCRR/73, CCRR/74, CCRR/75, CCRR/76 and CCRR/77, the Board took the actions as presented below.

- The Board provided the following answers to administrations' questions in relation to the proposed draft rules of procedure:
  - Regarding the proposed draft rules of procedure on RR Nos. **5.457D**, **5.457E** and **5.457F**, the Board provided the clarifications requested by the Administration of Japan, as follows:
    - The Board confirmed that the principles circulated by the Bureau in Circular Letter CR/467, dated 18 August 2020 also applied to the three footnotes listed above;
    - The Board confirmed that the examination vis-a-vis the relevant provisions of RR Article **21** would be conducted for notices using the nature of service other than "IM".
  - In response to the question from the Administration of Canada about the possibility to provide a "sufficient interference margin" that would allow an increase in the predictability of the outcome of the examination of frequency assignments to non-GSO satellite systems or networks with power spectral density levels below -100 dBW/Hz, the Board decided to add the reference "(see Attachment 2 to Section B3 of Part B of the Rules of Procedure)" to the draft rule of procedure on items C.8.a.2, C.8.b.2, C.8.c.1 and C.8.c.3 of Annex 2 to Appendix **4**.
- In response to administrations' proposals that certain draft rules of procedure, if approved, be considered for transferral to the Radio Regulations, the Board decided to take that action for the rules of procedure on:
  - No. **22.5K**;
  - Annex 2 to Appendix **4** related to items A.4.b.7.d.1, A.27.b, A.33a and A.36.c; and
  - Resolution **678 (WRC-23)**,

  and to inform WRC-27 accordingly.
- Based on administrations' comments on the draft rules of procedure, the Board decided that new draft rules of procedure needed to be developed on the following item:
  - to reflect the requirements of RR Nos. **5.293**, **5.295A**, **5.307A**, **5.308A** and **5.325** in relation to seeking agreement under RR No. **9.21** and for the identification of affected administrations for the protection of the aeronautical radionavigation service, to which the frequency band 645 – 960 MHz was allocated on a primary basis, a value of 450 km was to be used, similar to the value previously determined for the protection of that service in the rules of procedure on RR No. **5.312A**;

and consequently instructed the Bureau to develop such draft rules of procedure for consideration at the 98th Board meeting.

- The Board decided that rules of procedure were not required for conformity with the table of frequency allocations of notices for frequency assignments to HIBS in the band 902–928 MHz in Region 2 and in the band 698–790 MHz for Region 3 countries listed in RR No. **5.314A** but not in RR No. **5.313A**, since no inconsistency existed for the operation of HIBS in those frequency bands, which were not identified for IMT, as an allocation for the mobile service existed as well as an identification for HIBS (see Circular Letter CR/467).

- Furthermore, in response to suggestions from administrations, the Board instructed the Bureau to consider issues associated with RR Nos. **5.312B**, **5.314A, 5.409A**, **5.461AC**, **5.529A** and **21.6** for possible inclusion in the Director's Report to WRC-27 under its agenda item 9.2, owing to some inconsistencies found in those provisions.

- Accordingly, the Board approved the rules of procedure contained in Circular letters CCRR/73, CCRR/74, CCRR/75, CCRR/76 and Annex 2 to CCRR/77 with modifications, as contained in the Attachment to the summary of decisions. The Board decided not to approve the draft rules of procedure contained in Annexes 1 and 3 to CCRR/77 and that further development of the draft rules of procedure contained in Annex 3 would be kept in abeyance until the need arose. However, the Board instructed the Bureau to draft new rules of procedure for the proposed draft rules of procedure contained in Annex 1 to CCRR/77 based on the comments from administrations and submit them to the 98th Board meeting for consideration."

4.3.43 It was so **agreed**.

4.4 Submission by the Administration of the Russian Federation expressing disagreement with the rules of procedure on Nos. 9.21 and 9.36 of the Radio Regulations adopted at the 95th meeting of the Radio Regulations Board (Document RRB24-3/7)

4.4.1 **Mr Vallet (Chief, SSD)** introduced Document RRB24-3/7, in which the Administration of the Russian Federation expressed disagreement, on the basis of No. **13.14**, with the rules of procedure on Nos. **9.21** and **9.36** adopted at the 95th Board meeting and requested that appropriate action be taken to review and modify those rules of procedure with a view to permitting the application of No. **9.21** to afford protection to typical earth stations. According to the Russian Administration, the modifications to the rules of procedure on Nos. **9.21** and **9.36** significantly changed the provisions of the Radio Regulations for the protection of typical earth stations (where No. **9.11A** did not apply), in turn contravening No. **13.12A** *g)* and making it impossible to protect typical earth stations, given the absence of appropriate provisions setting out the need, conditions and possibilities for their notification. The administration considered that, when applying No. **9.21** for terrestrial services (unless otherwise specified), frequency assignments for typical earth stations notified as part of satellite networks should be taken into account. Only then could the protection of typical earth stations (where No. **9.11A** did not apply) be ensured in accordance with the existing provisions of the Radio Regulations. It further considered that re-notification should not be required for typical earth stations of recorded satellite networks; if necessary, such stations should be automatically accommodated by the Bureau.

4.4.2 The administration requested the Director to act in accordance with the relevant provisions of No. **13.14** ("[in] case of continuing disagreement, the matter shall be submitted by the Director in his report, with the agreement of the concerned administration, to the next world radiocommunication conference. The Director of the Bureau shall also inform the appropriate study groups of this matter.") and the Bureau to prepare rules of procedure for recording in the MIFR the frequency assignments of typical earth stations under No. **11.17** needed to implement the changes approved to the rules of procedure on No. **9.21**.

4.4.3 Having introduced the document, he went on to say that, in its analysis of the situation, the Russian Administration had overlooked a provision in No. **5.430A** that protected typical earth stations, stipulating a power flux density (pfd) limit at the border of the territory of any other administration. The pfd limit was not a coordination or agreement-seeking issue but a hard limit. It was even more protective than No. **9.21**

because it was intended to protect territory. Moreover, the inclusion of typical earth stations in the rules of procedure on No. **9.21** would change the decision taken by WRC-07. The Russian Administration's conclusion was not consistent because it did not take full account of Article **5**. The Bureau might have to provide more information to the Russian Administration, especially on the regulatory situation in the frequency band 3 400–3 600 MHz.

4.4.4 **Mr Azzouz** agreed that the Bureau should provide an explanation in writing to the Russian Administration but considered that there was no need to review the rules of procedure in question.

4.4.5 The **Chair** said that, while he did not believe that the Board should accede to the request, it must provide a clear explanation to the Russian Administration, to ensure a fair understanding of the issue. The Russian Administration could always bring the case to the attention of WRC-27, if necessary.

4.4.6 **Mr Cheng** said that he found the document confusing and suggested that the Bureau provide Board members with a point-by-point response to the issues raised.

4.4.7 **Ms Beaumier** said that she also found the document confusing and agreed that the Russian Administration had overlooked a key provision establishing a pfd limit that acted as a hard limit protecting typical earth stations in, for example, the 3.6 GHz band. That might be an issue if the limit did not exist in that particular band, but since it did, she saw no reason to review the rules of procedure in question. She also wondered whether the other bands mentioned in the document were affected, as the administration claimed. It was up to the Director to bring the matter to the attention of a study group under No. **13.14** but she saw no basis for doing that. The Bureau should pursue its discussions with the Russian Administration in order to address its concerns and reach a common understanding of how to interpret the relevant provisions.

4.4.8 **Mr Vallet (Chief, SSD)**, replying to Ms Beaumier's question about the other frequency bands mentioned by the Russian Administration, said that typical earth stations could be notified in the 1 610–1 626.5 MHz because footnote 13 in Article **9** (provision A.9.II.1) extended the concept of mobile earth station to stations of some other services while in motion or during halts, so that all the provisions of Articles **9** and **11** referring to mobile earth stations could be applied. For mobile earth stations, No. **11.27** stated explicitly that typical earth stations could be notified. In the 2 520–2 670 MHz band, typical earth stations in the broadcasting-satellite service could be coordinated through the application of No. **9.19**. In the 5 150–5 216 MHz band, the footnote would apply if it was not limited to feeder links.

4.4.9 The **Chair** proposed that the Board should conclude as follows on the matter:

"The Board considered in detail the submission from the Administration of the Russian Federation expressing disagreement with the rules of procedure on RR Nos. **9.21** and **9.36** adopted at the 95th Board meeting, as contained in Document RRB24-3/7. The Board confirmed that those rules of procedure exempted the associated earth stations of satellite networks from consideration in establishing coordination requirements under RR Nos. **9.21**, **9.17A** and **9.18** procedures and furthermore noted the following points:

- The Administration of the Russian Federation's analysis was predicated on the fact that the modifications to the rules of procedure on RR Nos. **9.21** and **9.36** resulted in a significant change in the provisions of the Radio Regulations for the protection of typical earth stations, making it impossible to protect typical earth stations, in particular in the band 3 400–3 700 MHz.

- However, the Board recalled that RR No. **9.21** was not intended to protect all types of typical earth stations and that § 2 of RR Appendix **5** listed the criteria that had to be met by a frequency assignment for which the agreement of an administration might be required under RR No. **9.21**.

- RR No. **5.430A** contained, in addition to RR No. **9.21**, another provision that protected typical earth stations, i.e. a power flux density (pfd) limit at the border of the territory of any other administration. The limit had to be complied with even in the absence of actual earth stations being deployed in the territory of another administration, since it was meant to ensure the long-term availability of the frequency band for future earth stations.

- However, it might be acknowledged that there were some frequency bands shared between terrestrial services and the fixed-satellite service (FSS) (space-to-Earth) where such pfd limits did not exist,

e.g. RR No. **5.434**, or might not exist in future. In such frequency bands, the protection of earth stations from terrestrial transmitters in coordination under RR No. **9.18** could be ensured only for individual earth stations, since typical stations in the FSS could not currently be notified, and the associated earth stations of satellite networks were exempted from consideration under the rules of procedure in question.

- The above-mentioned regulatory framework led to the situation where administrations, in order to protect a large number of earth stations at unknown locations, e.g. VSATs, were obliged to notify them as individual stations, which might represent a significant burden. Therefore, while confirming the correctness of the adopted modifications to the rules of procedure on RR Nos. **9.21** and **9.36**, further work was required to raise administrations' awareness of the current situation and explore ways of facilitating the notification of typical earth stations.

Consequently, the Board decided not to accede to the request from the Administration of the Russian Federation and instructed the Bureau to perform further analysis as per the last bullet point above and report to a future Board meeting."

4.4.9 It was so **agreed**.

5 Requests to extend the regulatory time-limit to bring/bring back into use the frequency assignments to satellite networks/systems

5.1 Submission by the Administration of Japan requesting an extension of the regulatory time-limits to bring into use the frequency to the QZSS-A satellite system and the QZSS-GS-A1 satellite network (Documents RRB24-3/3 and RRB24-3/DELAYED/5)

5.1.1 **Mr Loo (Head, SSD/SPR)** said that Document RRB24-3/3 contained a submission from the Administration of Japan requesting an extension of the regulatory time-limits to bring into use the frequency assignments to the QZSS-A satellite system and the QZSS-GS-A1 satellite network on the grounds of *force majeure* owing to the launch failure of the H3 F1 test flight. Document RRB24-3/DELAYED/5, dated 5 November, contained the same background information but reported on the successful launch of the H3 F4 test flight on 4 November 2024 and consequently requested a shorter extension.

5.1.2 Outlining the facts of the case, he said that the regulatory time-limits for bringing into use the frequency assignments to the QZSS-A satellite system (non-GSO, using the QZS-5 and QZS-7 satellites) and the QZSS-GS-A1 satellite network (GSO, using the QZS-6 satellite) were 13 March 2025. All three satellites had been scheduled for launch on 22 February 2024, 30 July 2024 and 31 December 2024, as shown in Annex 3. The letter from the manufacturer in that annex had indicated that, in the absence of the launch test failure, the development and manufacture of the satellites would have been prepared to meet those launch dates.

5.1.3 As shown in Annexes 1 and 2, the H3 F1 test flight in March 2023 had failed and the earliest launch of the satellites had been put back to 14 February 2025, 15 November 2025 and 16 January 2026. Given a 60-day launch window and 15-day orbit-raising period, the administration was requesting an extension of the regulatory time-limits to bring into use the frequency assignments to the QZSS-GS-A1 satellite network and the QZSS-A satellite system up to 30 April 2025 and 1 April 2026, respectively.

5.1.4 The administration indicated that it had attempted unsuccessfully to obtain earlier launch opportunities and that, after the *force majeure* event, it had investigated alternative launch vehicles but that none of the two other launch vehicles used for government projects had been available. It had also investigated the possibility of using gap-filler satellites, but none had satisfied the required frequency bands. The Japanese Administration had provided supporting evidence in the three annexes to its submission and explained how, in its view, the case met all four conditions for *force majeure*.

5.1.5 **Ms Mannepalli** said that she was in favour of granting the extensions requested. The Administration of Japan had provided information regarding the failure of the H3 F1 test flight in March 2023, which had resulted in a revised launch schedule; indicated that its efforts to seek another domestic launch service

provider had not been successful; and stated that it had been unable to find gap-filler satellites that satisfied the frequency bands for the positioning, navigation and timing system.

5.1.6 **Mr Azzouz** thanked the Administration of Japan for its efforts to limit the delay in the satellite launches. The administration had investigated alternative launch vehicles for an earlier launch opportunity and the possibility of using gap-filler satellites. In his view, the case satisfied the conditions for *force majeure* and he could agree to grant an extension. Noting the revised launch dates for the three satellites, the 60-day launch window and the 15-day orbit-raising period, he asked whether the same extension period would apply in respect of QZS-5 and QZS-7, which were scheduled for launch on 15 November 2025 and 16 January 2026, i.e. almost two months apart.

5.1.7 **Ms Beaumier** thanked the Administration of Japan for updating its request in the light of recent events affecting the launch schedule. The submission was relatively clear and comprehensive, and she had no difficulty in concluding that the first three conditions for *force majeure* had been met. However, she had some doubt with respect to condition four and the existence of a causal effective connection between the event and the administration's failure to meet the regulatory time-limit. While a letter from the manufacturer had been provided indicating that had there been no launch failure it would have been preparing the development and manufacture of the three satellites for the original launch dates, there was no substantive evidence regarding the status of the satellites' construction when the *force majeure* event had occurred on 7 March 2023 and their current status. Furthermore, no information had been provided on the project milestones before and after the *force majeure* event. She would have no difficulty with the updated extension requested, but would prefer to seek further clarification from the Administration of Japan demonstrating that the fourth condition had been fully satisfied for the case to qualify as a situation of *force majeure*.

5.1.8 **Mr Talib** thanked the Administration of Japan for its detailed submission and for updating its extension request in the light of the successful H3 F4 test flight on 4 November 2024. In his view, the information provided, including in the annexes, explained how the case met all the conditions for *force majeure,* and he was in favour of granting the extensions requested.

5.1.9 **Mr Fianko** said that the Administration had clearly set out the facts establishing the *force majeure* event. It had, however, failed to provide information on the satellites' construction status before the failure of the H3 F1 test flight and establishing that the regulatory deadline could have been met but for the launch failure. He agreed that the administration should be invited to provide further clarification to assist the Board in making its decision.

5.1.10 **Ms Hasanova** thanked the Administration of Japan for its detailed submission and for updating its extension request. Recalling the regulatory deadline of 13 March 2025 and the fact that contracts for the three satellites had been signed in 2019, she said that the administration had clearly been planning the project. Having drawn attention to the information provided, including on the failure of the H3 F1 test flight and the launch roadmap, she said that the case qualified as a situation of *force majeure* and was in favour of granting the requested extensions.

5.1.11 **Mr Cheng** thanked the Japanese Administration for the updated information. While the case might qualify as a situation of *force majeure* and he would have no difficulty in granting the extensions requested, some supporting evidence required by the Board in accordance with its working practices was missing, including the launch service contract and the status of the satellite construction before the *force majeure* event. The Board usually requested such information before taking a final decision.

5.1.12 **Mr Nurshabekov** said that the case clearly contained some elements of *force majeure* and the Administration of Japan had brought the issue to the Board in a timely manner. He could support the extensions sought but nevertheless agreed that the administration should be requested to provide information on the status of the satellite construction before the *force majeure* event, so that the Board could ascertain whether, but for that event, the regulatory time-limits would have been met.

5.1.13 **Mr Di Crescenzo** said that the project was complex and interesting, and he fully understood the difficulties faced by the Japanese Administration. He was in favour of granting the extensions but would not

object to seeking further information from the administration in relation to the fourth condition for *force majeure*.

5.1.14 **Mr Linhares de Souza Filho**, recalling the third condition for *force majeure*, namely that the event must make it impossible for the obligor to perform its obligation, noted that the Administration of Japan had been considering domestic launch providers only and wondered whether it could have used a launch provider outside the country. He asked whether the Board had dealt with similar scenarios in the past.

5.1.15 **Mr Alkahtani** said that the case appeared to qualify as a situation of *force majeure* and agreed that the administration should be invited to provide further information to the Board's next meeting on the status of the satellites' construction.

5.1.16 The **Chair** said that the Administration of Japan had provided information on the satellites to be launched, the frequency bands, the name of the manufacturer and the contract signature dates. However, information on the status of each satellite construction before the *force majeure* event including the starting date it had begun and whether it had been expected to be completed prior to the initial launch window, had been provided only indirectly and could be inferred from the basic plan for outer space roadmap in Annex 2. Referring to the revised launch schedule set out in that annex, he said that a 60-day launch window and 15-day orbit-raising period were reasonable and noted the efforts made by the Japanese Administration to minimize the effects of the launch delay due to the failure of the test flight of the rocket chosen to launch the QZS satellite series. As the frequency assignments to the QZSS-A satellite system were being brought into use by two satellites (QZS-5 and QZS-7), the Board would have to take into account the latest launch date (16 January 2026). The Board should invite the administration to provide more substantive evidence to the 98th meeting regarding the readiness of the satellites, so that the Board could confirm that, but for the *force majeure* event, the regulatory deadline of 13 March 2025 would have been met.

5.1.17 With regard to the question from Mr Linhares de Souza Filho, he noted that the Administration of Japan had informed the Board that it had investigated alternative launch vehicles. Security considerations might have constituted one of the main reasons why the administration had been unable to find another launch provider in connection with the government project.

5.1.18 **Mr Fianko** said that the Board needed to be consistent in its consideration of cases and in assessing whether or not the third condition for *force majeure* had been met. He asked about the Board's views on national policies that placed restrictions on entities and could potentially have implications on the ability to meet requirements, including a decision to work with certain providers only. He noted that in the case under consideration, the Japanese Administration had investigated the possibility of gap-filler satellites.

5.1.19 **Mr Azzouz** said that the Bureau should be instructed to continue to take into account the frequency assignments until the end of the 98th Board meeting.

5.1.20 **Ms Beaumier**, referring to the comments of Mr Linhares de Souza Filho, said that the Board tried to be consistent in its approach. There were multiple aspects to be clearly explained and taken into account in each case: in the current case, the nature of the satellite network and system (positioning, navigation and timing) made it likely impossible to find a gap filler. The third condition for *force majeure* would not automatically be met simply because a case concerned a government system that had inherent limitations. That said, however, as it might be more difficult to consider options other than those originally envisaged, the Board might not hold such systems to the same expectations, just as it showed some flexibility with respect to the threshold to be met to satisfy the conditions for *force majeure* depending on the experience and means of countries and operators. The Board assessed each request on a case-by-case basis and exercised its discretion and judgement in considering all aspects of the projects presented.

5.1.21 The **Chair** agreed that the Board assessed each case on its own merits and took into account the overall environment. The case under consideration concerned a very specific government project with multiple constraints. Based on all the relevant information presented, the Board might conclude that the third condition for *force majeure* had been met. It would appreciate information to confirm that the fourth condition had been satisfied and that the satellites would have been ready in time to meet the regulatory deadline of 13 March 2025 for bringing into use.

5.1.22 **Mr Loo (Head SSD/SPR)** noted that the QZSS was a Japanese satellite positioning, navigation and timing (PNT) system, and the QZSS-A was a non-geostationary satellite system operating on a highly elliptical orbit.

5.1.23 The **Chair** suggested that the Board conclude on the matter as follows:

"The Board considered the submission from the Administration of Japan requesting an extension of the regulatory time-limits to bring into use the frequency assignments to the QZSS-A satellite system and the QZSS-GS-A1 satellite network as contained in Document RRB24-3/3, noted Document RRB24-3/DELAYED/5 for information and thanked the Administration of Japan for the updated information indicating the successful launch on 4 November 2024 of the H3 F4 test flight, thus reducing the period of extension requested. The Board noted the following:

- The Administration of Japan had provided extensive information, including a summary description of the satellites to be launched, the name of the satellite manufacturer and launch service provider, the contract signature dates and the initial and revised launch schedules due to the launch failure of the H3 F1 test flight in March 2023. However, there was no information on the satellite construction status before the *force majeure* event, other than a statement that the satellites had been expected to be completed prior to their initial launch windows.
- While the Administration of Japan had made efforts to advance the launch schedule, its efforts to procure an alternative launch service provider had been limited to domestic launch service providers for such government projects and had been unsuccessful.
- The Administration of Japan had also made efforts to find alternative temporary satellites to comply with the regulatory time-limits to bring into use the frequency assignments but had been unable to find suitable satellites that satisfied the required frequency bands and orbital characteristics for the positioning, navigation and timing system.

From the information provided, it could be concluded that the case satisfied the first three conditions of a *force majeure* situation. However, in the absence of substantive information on the satellites' statuses when the *force majeure* event had occurred on 7 March 2023 and their current status, it was not possible to conclude that the fourth condition had been satisfied, namely that an effective causal connection existed between the event and the administration's failure to meet the regulatory time-limit. Furthermore, no information had been provided on the project milestones before and after the *force majeure* event to confirm that, but for the launch failure, the regulatory time-limits would have been met.

Consequently, the Board concluded that it was not in a position to grant an extension of the regulatory time-limits to bring into use the frequency assignments to the QZSS-A satellite system and the QZSS-GS-A1 satellite network and invited the Administration of Japan to provide information to the 98th Board meeting demonstrating that the fourth condition had been fully satisfied for the case to qualify as a situation of *force majeure*. The Board instructed the Bureau to continue to take into account the frequency assignments to the QZSS-A satellite system and the QZSS-GS-A1 satellite network until the end of the 98th Board meeting."

5.1.24 It was so **agreed**.

5.2 Submission by the Administration of the Islamic Republic of Iran requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the IRANDBS4-KA-G2 satellite network (Document RRB24-3/5)

5.2.1 **Mr Loo (Head, SSD/SPR)** introduced Document RRB24-3/5, in which the Administration of the Islamic Republic of Iran requested an extension of the regulatory time-limit to bring into use the frequency assignments to the IRANDBS4-KA-G2 satellite network. The regulatory time-limit for bringing into use the frequency assignments to the IRANDBS4-KA-G2, BSS satellite network with a service area restricted to the territory of the Islamic Republic of Iran using only the frequency band 21.4-22 GHz was 4 October 2024. The administration was requesting an extension of 18 months on the grounds of *force majeure*, citing the impact of international unilateral sanctions, the global COVID-19 pandemic, the cancellation of a planned co-passenger launch, the Ukraine crisis and supply chain problems. The request was also based on a WRC-23

decision that a study should be conducted on the possibility of extending regulatory time-limits for developing countries, such as the Islamic Republic of Iran, even when they did not involve *force majeure* or a co-passenger delay, and on the Board's report to WRC-23 under Resolution **80 (Rev.WRC-07)** to the effect that conditions could be specified for granting extensions on an exceptional basis to developing countries. The document contained no attachments.

5.2.2 **Ms Mannepalli** said that, while she had sympathy for the difficulties faced by the Iranian Administration, the absence of evidence of the cancellation by the European payload supplier for reasons related to the unilateral sanctions or of the impact of the COVID-19 pandemic and the cancellation by a planned co-passenger made it difficult for her to understand how the case met the four conditions for *force majeure*. Moreover, the submission stated that the satellite was in the final stages of assembly, integration and testing (AIT); if that was the case, she wondered why an 18-month extension was needed.

5.2.3 **Mr Fianko** agreed that the case was not helped by the absence of basic information. Document RRB24-3/5 referred to a contract but no copy of the contract had been made available. Moreover, even if the request was granted, it was unclear whether the administration had the budget to see the project through, given the impact of the international financial sanctions. The Iranian Administration should be asked to provide the particulars the Board needed to reach a decision.

5.2.4 **Ms Hasanova**, noting that the Resolution **552 (Rev.WRC-19)** information had been submitted on 28 September 2024 and that the initial contract for the satellite's manufacture had been signed in 2016, with in-orbit delivery expected in early 2022, said it was regrettable that no copy of the relevant agreements had been appended to the document. At the very least, the Iranian Administration should have provided a copy of the new manufacturing contract, which had an expected launch window for the third quarter of 2024 at the latest. The document contained no information on how the global COVID-19 pandemic had affected the project or on the launch service provider. In short, the Board had no information that would allow it to reach a decision at the present meeting. She understood the difficulties faced by developing countries but believed that further information was required before the Board could reach a decision.

5.2.5 **Mr Azzouz**, noting that the document referred to several issues discussed by the Board in respect of other cases, said that the extension requested would give the Iranian Administration time to overcome the challenges arising from the *force majeure* circumstances affecting a critically important satellite project. While he believed that the Board should consider the Islamic Republic of Iran as a developing country, he had found no supporting evidence or document in the submission that would help him make a decision on the length of the extension. The Board should therefore invite the administration to provide supporting evidence from the satellite manufacturer and launch service provider.

5.2.6 **Mr Nurshabekov** said that, while the document indicated that the conditions for the case to qualify as one of *force majeure* had been met, it contained insufficient information for the Board to reach a decision. The Iranian Administration should be asked to provide additional information on the new contract signed, on the project's current status and on future plans.

5.2.7 **Ms Beaumier** said that, while she had sympathy for the difficulties encountered by the Iranian Administration, the information presented in the submission was insufficient to demonstrate that the four conditions for *force majeure* had been met and that the length of the extension was justified. The submission was often too general; it contained no evidence to demonstrate that it was a real project and to support the facts presented, such as letters from manufacturers or launch service providers, and quantified none of the delays individually or cumulatively with clear timelines. It indicated no project milestones for the original or the revised project before and after the pandemic or the status of the project at the start of the project at the present time, and did not clearly spell out what unilateral sanctions were referred to.

Statements were made that conditions of *force majeure* had been met but often with no explanation or rationale on how each condition had been met. For instance, it did not suffice to say that the initial contractor had been unable to build the satellite without the European payload having met the third condition for *force majeure*; the fact that the contractor could not fulfil its obligation did not mean that the administration or satellite operator could not do so. In fact, the administration had an obligation to find an alternative solution and did find a remedy to the situation by signing a new contract enabling the bringing into use of the

frequency assignments, but the administration had then claimed that other *force majeure* events had further delayed the project. In addition, the signing of a new contract with the manufacturer and launch service provider had forced the administration to review all the project's technical aspects from scratch, but that would have been planned in the new contract so could not be said to be unforeseeable. In short, while elements of *force majeure* might be in play in the case, the Board required more detailed information from the administration to reach a decision; in the meantime, it should instruct the Bureau to take account of the frequency assignments until the end of the 98th Board meeting.

5.2.8 **Mr Cheng** agreed with previous speakers that the submission did not contain enough supporting material for the Board, which could grant only limited and qualified extensions on the grounds of *force majeure* or co-passenger delay, to accede to the request. In the spirit of the Board's report to WRC-23 under Resolution **80 (Rev.WRC-07)**, which the submission also invoked, and bearing in mind that the satellite coverage area was defined as a minimal ellipse encompassing only Iranian territory and that the Iranian Administration had experienced special difficulties (e.g. severe unilateral sanctions), an extension might be granted on an exceptional basis to a developing country unable to complete the regulatory requirements. The Board should instruct the Bureau to take into account the frequency assignments until the end of the Board's 98th meeting or, in the event that the Board referred the case to WRC-27 in its report under Resolution **80 (Rev.WRC-07)**, until the end of the conference.

5.2.9 **Ms Beaumier**, noting that the case involved a co-passenger cancellation, not a delay, said that the Board should make clear in its decision that it did not have authority to grant extensions under Resolution **80 (Rev.WRC-07)**; it would be up to WRC-27 to reach a decision if the Board was unable to conclude that the conditions for *force majeure* had been met.

5.2.10 The **Chair**, noting that the study decided by WRC-23 had yet to produce an outcome, agreed that the Board's decision must be based strictly on whether the four conditions for *force majeure* had been met. Under Resolution **80 (Rev.WRC-07)**, the Board might refer a case to a world radiocommunication conference, but he hoped that it would not be necessary to go to that extreme, as there was time to reconsider the Iranian Administration's request before WRC-27.

5.2.11 **Mr Talib** expressed sympathy for the difficulties encountered by the Islamic Republic of Iran as a developing country but agreed that many elements were missing to demonstrate that the four conditions for *force majeure* had been met. For example, no explanation had been provided proving that each *force majeure* event had been unavoidable, nor did the document contain any supporting evidence in the form of annexes. The Board should therefore ask the Iranian Administration to provide more information in time for the 98th Board meeting and instruct the Bureau to maintain the filings until the end of that meeting.

5.2.12 **Mr Alkahtani** said that, while he understood the difficulties facing the Iranian Administration, the document did not provide evidence justifying the request for an extension and contained no description of how the *force majeure* conditions had been met. He found it difficult to support the request for an extension at the present meeting.

5.2.13 **Mr Di Crescenzo** agreed, adding that sanctions generally made it difficult to find alternative solutions.

5.2.14 The **Chair** proposed that the Board should conclude as follows on the request:

"Having considered in detail the request of the Administration of the Islamic Republic of Iran requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the IRANDBS4-KA-G2 satellite network as presented in Document RRB24-3/5, the Board noted the following points:

- The IRANDBS4-KA-G2 satellite network was intended to provide a broadcasting-satellite service covering only the national territory of the Islamic Republic of Iran.
- As the administration of a developing country, the Administration of the Islamic Republic of Iran had cited the possibility for granting extensions to the regulatory time-limits to bring into use frequency assignments to satellite networks belonging to developing countries on an exceptional basis, referring to the Board's report on Resolution **80 (Rev.WRC-07)** to WRC-23. However, the Board indicated that in the absence of a decision on the issue by WRC-23, granting such extensions was

not within its mandate, but within that of a WRC (see also § 13.8 of Document WRC23/528 agreed during the 13th plenary meeting of WRC-23).

- While the Administration of the Islamic Republic of Iran had invoked the application of *force majeure* to its request, citing the impact of international unilateral sanctions, the COVID-19 pandemic, the cancellation of a planned co-passenger, the Ukraine crisis and supply chain problems, no supporting evidence had been provided to substantiate those factors or how they had been assessed as satisfying the four conditions for the situation to qualify as a case of *force majeure*.
- Other information that was missing in support of the request included evidence of the original contract, information on the satellite manufacturer, the subcontractor and the launch service provider, and clearly defined project milestones before and after the *force majeure* event(s).
- The Administration of the Islamic Republic of Iran had taken mitigating measures to change the satellite manufacturer, but no evidence had been provided about the new contract and no information had been provided on the original launch service provider.
- Furthermore, the administration had provided no information that justified the requested extension of the regulatory time-limit by 18 months or how the different delays had been quantified and what their cumulative impact had been on the timelines.

In view of the lack of supporting information and substantive evidence to justify the request from the Administration of the Islamic Republic of Iran, the Board concluded that it was not in a position to accede to the request and invited the administration to provide the information and supporting evidence as agreed during the 13th plenary meeting of WRC-23 (see § 13.4 of Document WRC23/528) to the 98th Board meeting. The Board instructed the Bureau to continue to take into account the frequency assignments to the IRANDBS4-KA-G2 satellite network until the end of the 98th Board meeting."

5.2.15 It was so **agreed**.

5.3 Submission by the Administration of the Republic of Korea requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the KOMPSAT-6 satellite system (Document RRB24-3/6)

5.3.1 **Mr Loo (Head SSD/SPR)** introduced Document RRB24-3/6, in which the Administration of the Republic of Korea requested an extension of the regulatory time-limit to bring into use the frequency assignments to the KOMPSAT-6 satellite network to 31 December 2025. The requested extension was on the grounds of *force majeure* due to delays in the preparation of the co-passenger for the dual launch of the KOMPSAT-6, of which the administration had been informed in a letter from the launch provider (Arianespace) dated 23 September 2024. He recalled that the Board had granted an extension to 31 March 2025 at its 94th meeting.

5.3.2 The administration explained how, in its view, all four conditions for *force majeure* had been met as a result of the circumstances of the launch delay of the KOMPSAT-6 satellite. The supporting documentation provided included the letter from Arianespace on the status of the KOMPSAT-6 launch and a copy of the launch services contract.

5.3.3 **Ms Mannepalli** said that the case appeared to qualify as a situation of co-passenger delay, not *force majeure*. Although no information had been provided to the current meeting on the readiness of the KOMPSAT-6 satellite, she recalled that the 94th meeting had been informed that the satellite had been ready and kept in safe storage.

5.3.4 The **Chair** agreed that the case was a situation of co-passenger delay and that, from information provided to the previous Board meeting, the satellite construction had been completed and the satellite had been in storage since August 2022 with regular state-of-health tests.

5.3.5 **Ms Beaumier** agreed that the situation should have been presented as a case of co-passenger delay rather than *force majeure*. There was no advantage in presenting cases of co-passenger delay as *force majeure*, particularly as more requirements had to be satisfied for the latter. Although the Administration of

the Republic of Korea should ideally have addressed in its submission all the information requirements specifically outlined in the rules of procedure for such cases, she assumed that the Board could rely on information presented at the 94th meeting. At that meeting the Board had concluded that the satellite had been ready and in storage since August 2022 and had undergone regular state-of-health tests. Taking that information into account, the Board could conclude that the situation qualified as a case of co-passenger delay. She could support an extension until 31 December 2025.

5.3.6 **Mr Azzouz**, noting that the KOMPSAT-6 satellite had been scheduled to be launched no later than 31 March 2025, agreed that the situation qualified as a case of co-passenger delay. An extension until 31 December 2025 was limited and he was in favour of acceding to the request.

5.3.7 **Mr Fianko** said that the Board had been provided with all the facts when it had considered the case in the past, including at the 94th meeting. The attached letter from Arianespace was satisfactory to establish the case as a situation of co-passenger delay and he could support an extension up to 31 December 2025. **Mr Talib**, **Mr Nurshabekov**, **Ms Hasanova** and **Mr Cheng** concurred.

5.3.8 **Mr Linhares de Souza Filho** said that the submission to the current meeting could have been improved through the inclusion of all relevant information. However, if the Board took into account the information provided to previous meetings, it could conclude that the request qualified as a case of co-passenger delay and could support the extension requested.

5.3.9 The **Chair**, recalling §13.6 of Document WRC23/528, said that the Administration of the Republic of Korea had provided the information that WRC-23 deemed necessary in connection with a request for extension of regulatory time-limits due to co-passenger delay. However, much of that information had been provided to the Board's previous meetings, and it would have been preferable if the administration had confirmed that the information remained valid.

5.3.10 He proposed that the Board conclude on the matter as follows:

"The Board considered the submission from the Administration of the Republic of Korea requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the KOMPSAT-6 satellite system as presented in Document RRB24-3/6 and noted the following points:

- Although the Administration of the Republic of Korea had invoked a case of *force majeure* in supporting its request for an extension of the regulatory time-limit, evidence provided from the launch service provider on 23 September 2024 indicated that the co-passenger on the same launch vehicle had experienced delays, identifying the situation as a case of co-passenger delay.
- The Administration of the Republic of Korea had successfully requested an extension of the regulatory time-limit from 12 December 2023 to 31 March 2025 to bring into use the frequency assignments to the KOMPSAT-6 satellite system at the 94th Board meeting, providing supporting evidence that the satellite had been completed and kept in storage since August 2022 and had undergone regular state-of-health tests.
- Based on the information provided at the 94th and 97th Board meetings the request qualified as a case of co-passenger delay and the requested extension of nine months to 31 December 2025 was justified.

Consequently, the Board decided to accede to the request from the Administration of the Republic of Korea to extend the regulatory time-limit to bring into use the frequency assignments to the KOMPSAT-6 satellite system to 31 December 2025."

5.3.11 It was so **agreed**.

5.4 Submission by the Administration of the State of Israel requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the AMS-BSS-B4-4W satellite network (Document RRB24-3/8)

5.4.1 **Mr Wang (Head, SSD/SNP)** introduced Document RRB24-3/8, in which the Administration of Israel requested an extension of the regulatory time-limit to bring into use the frequency assignments in the band 11.7–12.5 GHz (space-to-Earth) to the AMS-BSS-B4-4W satellite network from 3 May 2025 to 3 September 2025 on the grounds of two *force majeure* events, namely the global COVID-19 pandemic and the armed conflict in Israel.

5.4.2 Outlining the facts of the case, he said that a contract for the manufacture of the DROR-1 satellite had been signed in January 2020, with the launch initially planned for September 2023, i.e. 19 months before the regulatory deadline. However, the COVID-19 pandemic had caused a 13-month delay in the manufacture of the satellite and the initial launch date had been postponed. A contract had been signed with a launch service provider for a launch scheduled between April and October 2024. The satellite manufacture had been delayed by a further 10 months because of the conflict in Israel, which had begun in October 2023, and the launch had been further postponed until 20 April to 20 July 2025. Table 1 of the submission set out the key milestones of the satellite programme before and after the two events. He noted that, according to revised schedule #2, AIT was due to be completed in November 2024, indicating that the satellite construction had been completed.

5.4.3 The administration explained how, in its view, the two events satisfied the four conditions for *force majeure*. It described the measures it had taken to mitigate the delays and had attached a copy of letters from the satellite manufacturer and the launch service provider as supporting documentation.

5.4.4 **Mr Azzouz**, noting that the project had been delayed by a total of 23 months, asked whether the Board should take into account the conflict, which was a political issue. He also asked whether the conflict was still impacting the project and if so, whether the Board would have to wait until the conflict had ended before taking a decision.

5.4.5 **Ms Mannepalli** said that the administration, which was requesting a four-month extension that included an orbit-raising period of three weeks, had explained in detail how the satellite construction had been delayed because of two *force majeure* events. Focusing on technical aspects, she understood that the submission concerned a planned frequency band predominantly concerning the Israeli coverage area. She was satisfied that the conditions for *force majeure* had been met and was in favour of granting the qualified and limited extension requested.

5.4.6 Responding to a request for clarification from the **Chair**, **Mr Wang (Head, SSD/SNP)**, said that the coverage and service area of the network extended beyond the territory of Israel. The administration might wish to make further modifications to the network at the Part B stage, but the system would not be a national one. He noted that the initial launch had been planned 19 months before the expiry of the regulatory time-limit. It was the cumulative impact of the delays incurred as a result of the global COVID-19 pandemic and the conflict (13 months + 10 months) that had led to the administration requesting a four-month extension.

5.4.7 **Mr Fianko** said that the submission was very clear and well organized, and the administration had clearly outlined how the two *force majeure* events had impacted the satellite construction. He had no difficulty with the fact that information about the completion of the satellite and that it was in the testing phase had been provided in the attached letter from the manufacturer, rather than by photographic evidence. Furthermore, had the launch window of April to October 2024 (confirmed by the launch service provider in the attached letter), not had to be rescheduled, the administration would have been able to meet the regulatory deadline. Given the revised launch window of 20 April to 20 July 2025 and the time required for orbit raising, he could agree to grant the four-month extension requested until 3 September 2025.

5.4.8 **Mr Linhares de Souza Filho**, noting that the original launch would have given a 19-month margin before the expiry of the regulatory deadline, said that the administration had provided all the necessary information for the Board to conclude that the situation qualified as a case of *force majeure*. He was in favour of granting the extension requested.

5.4.9 **Mr Azzouz**, observing that the Board should exercise caution when writing its decision and refrain from referring to the armed conflict, which was a political issue, said that he could agree to the requested extension, which was time-limited and short. **Mr Di Crescenzo** agreed.

5.4.10 **Ms Hasanova** said that the satellite project was real, the satellite manufacturing contract having been signed in January 2020. As the supporting evidence showed, the AIT phase had been completed and the satellite was currently in the test phase. Furthermore, a launch contract had been signed in January 2022, and the launch window had been rescheduled to the third quarter of 2025. Noting the three-week orbit-raising period required, she said that the satellite was expected to reach its orbital location by 1 September 2025. She would have no difficulty in granting the requested extension.

5.4.11 **Mr Talib** agreed that the Board should not refer to the armed conflict in its conclusion and should base its decision on the technical aspects of the case, including with respect to the satellite construction and launch difficulties set out in the submission and supporting evidence, which were sufficient to justify the request. He could agree to grant the short extension requested.

5.4.12 **Mr Nurshabekov**, looking at the case from a technical point of view, said that all the procedures had been completed, the satellite was ready, and the regulatory deadline had not yet expired. He could accept the four-month extension requested.

5.4.13 **Ms Beaumier** thanked the Administration of Israel for its detailed submission. Although the project had incurred a 13-month delay because of the global COVID-19 pandemic, she noted from the revised schedule #1 that the administration would still have been able to meet the regulatory time-limit of 3 May 2025. As the obligor would therefore have still been able to perform its obligation despite the pandemic, conditions three and four for *force majeure* would not be satisfied. She did not therefore consider the pandemic as a *force majeure* event in the current case.

5.4.14 The Board should therefore focus on the second *force majeure* event invoked, which had caused a further 10-month delay, meaning that the April to October 2024 launch window had had to be rescheduled and that the regulatory time-limit could not be met. All four conditions for the situation to qualify as a *force majeure* event appeared to have been satisfied: the administration had made efforts to deliver the project on time and mitigate the delays, and the satellite construction had been on schedule and with all milestones met some time before the event of 7 October 2023. However, it was not clear whether the satellite had still been on schedule as of that date. While the reasons given for the 10-month delay were compelling, she would have appreciated further details regarding the actions taken that had affected the satellite programme, including whether they had been implemented simultaneously or sequentially.

5.4.15 In terms of the length of the extension requested, she noted that the revised launch window was 20 April 2025 to 20 July 2025. Assuming a three-week orbit-raising period, the satellite would reach its designated orbital position on 10 August 2025, and she was not sure why an extension up to 3 September 2025 was being sought. While certain aspects of the submission could have benefited from further clarity, she would have no objection to granting an extension until mid-August 2025.

5.4.16 The **Chair**, noting the comprehensive information received by the Board, said that the Board should commend the Administration of Israel for its efforts and the measures taken to avoid missing the regulatory deadline of 3 May 2025, including updating the launch window until April 2024 to October 2024. While the global COVID-19 pandemic might have had some impact on the completion of the satellite's construction, he noted from the revised schedule #1 set out in Table 1 of the submission that the satellite was to have been ready by August 2024. Accordingly, as the regulatory deadline would still have been met, the pandemic could not be taken into account as a *force majeure* event in the current case.

5.4.17 The issue at hand for the Board's consideration was the second *force majeure* event invoked by the Administration of Israel, which had caused a further 10-month delay in the satellite project owing to the interruption of activity on the satellite programme and the satellite being placed in storage for five months. According to the administration, with the revised launch window now scheduled for early in the third quarter of 2025, the satellite was expected to reach its designated orbital position by the end of August 2025. He shared the views of Ms Beaumier, however, that the satellite should be at its position of 4ºW by 10 August

2025. As the Board did not provide for contingencies, an extension to 10 August 2025 could be justified. He agreed that the Board's decision should be worded very carefully to convey the fact that the case had been considered from a purely technical and regulatory perspective.

5.4.18 Following a comment from **Mr Azzouz** regarding the satellite status before the second *force majeure* event in October 2023, **Ms Beaumier** said that, according to the information provided, AIT had not been completed but had presumably been in progress. While the satellite was in storage for temporary safekeeping and protection, it could not be accessed, and staff had been unable to continue working on it.

5.4.19 Following a discussion on the terminology to be used in the Board's decision, the **Chair** proposed that the Board conclude on the matter as follows:

"The Board carefully considered Document RRB24-3/8, in which the Administration of Israel requested an extension of the regulatory time-limit to bring into use the frequency assignments to the AMS-BSS-B4-4W satellite network. The Board noted the following points:

- The Administration of Israel had based its request for an extension of the regulatory time-limit on *force majeure* events.
- The revised schedule and project milestones provided showed that despite the 13-month delay resulting from the COVID-19 pandemic, the administration would still have been able to meet the regulatory time-limit.
- The Administration of Israel had experienced a further 10-month delay owing to the interruption of industrial activity in the country due to the geopolitical situation in the Middle East and would have met the regulatory time-limit to bring into use the frequency assignments to the AMS-BSS-B4-4W satellite network, as the status of the satellite construction had been on schedule before that event.
- The Administration of Israel had made extensive efforts to mitigate the delays and adverse effects of the above-mentioned events.
- Assessment of the information confirmed that all the conditions had been satisfied for the situation to qualify as a case of *force majeure*.
- Based on the information provided by the launch service provider on the new launch window from 20 April 2025 to 20 July 2025, and considering the need for an orbit-raising period of three weeks, an extension of the regulatory time-limit to 10 August 2025 was justified.

Consequently, the Board decided to accede to the request from the Administration of Israel to extend the regulatory time-limit to bring into use the frequency assignments in the band 11.7-12.5 GHz (space-to-Earth) to the AMS-BSS-B4-4W satellite network to 10 August 2025."

5.4.20 It was so **agreed**.

5.5 Submission from the Administration of Indonesia requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the LAPAN-A4-SAT satellite system (Document RRB24-3/14(Rev.1))

5.5.1 **Mr Loo (Head, SSD/SPR)** introduced Document RRB24-3/14(Rev.1), in which the Administration of Indonesia requested an extension of the regulatory time-limit to bring into use the frequency assignments to the LAPAN-A4-SAT satellite system from 22 November 2024 to 31 December 2025. The system was intended to operate the LAPAN-A4/NEO-1 satellite, which would be used for scientific research and practical applications that were important for Indonesia's national development. The satellite had completed the AIT process; it was fully operational and had been due to be transported to the designated launch site. It was supposed to have been launched in October 2024 in collaboration with the Indian Space Research Organization (ISRO) under a framework agreement signed in 2018. However, ISRO had decided to postpone the launch to the fourth quarter of 2025, well beyond the time-limit of 22 November 2024, in view of the current status of its launch manifest.

5.5.2 The document comprised several annexes, including a photo of the satellite taken after the completion of AIT the framework agreement between the Governments of Indonesia and India, which referred to support for launch services for LAPAN satellites; and a letter from ISRO on the new launch schedule.

5.5.3 The **Chair** remarked that the request for an extension was the first the Board had ever received for frequency assignments to a satellite system not subject to a coordination procedure. From the purely regulatory point of view, since the frequency range and services involved were not subject to coordination under Section II of Article **9**, the Administration of Indonesia had the possibility to resubmit an API notice and subsequently to provide notification information with the correct date for bringing into use the frequency assignments. Such a new submission had no real adverse consequences on the final status of the space system frequency assignments, and he therefore wondered what had prompted the request currently before the Board.

5.5.4 In reply to a question from **Mr Talib**, he said that the two requests from the Administration of Indonesia currently before the Board concerned completely different and unrelated systems (one non-GSO system and one GSO network) and could therefore not be merged as the two requests from the Administration of Japan had been under agenda item 5.1.

5.5.5 **Ms Beaumier** agreed that the two requests concerned two different systems built by two different companies and doing two different things. In the requests from the Administration of Japan, the systems were complementary.

5.5.6 Referring to Document RRB24-3/14(Rev.1), she noted that the Board had the authority to grant an extension in cases of *force majeure* or co-passenger delay. Since the document invoked neither *force majeure* nor co-passenger delay, the Board could not accede to the request. As the case did not appear to be one of co-passenger delay, to reach a conclusion the Board would need a detailed rationale providing the information stipulated by WRC-23 and showing that the conditions for *force majeure* had been met. In the meantime, the Board should instruct the Bureau to retain the frequency assignments in the MIFR until the next Board meeting.

5.5.7 **Mr Azzouz** agreed that the submission did not contain the information the Board needed to grant an extension, notably the reasons for delaying the launch to the fourth quarter of 2025.

5.5.8 **Mr Fianko** considered that, while the submission might not be organized as the Board would have preferred, it made a good case. Because the framework agreement was heavily redacted, it was impossible to say why the launch service provider had unilaterally changed the launch schedule or what the framework agreement covered. His understanding was that satellite construction and testing had been completed, as evidenced by the photo of the satellite (and he was not sure that the Administration of Indonesia was obliged to inform the Board how that had been achieved), but that the launch service provider had been unable to launch according to schedule. That said, he was not opposed to delaying the Board's decision.

5.5.9 **Mr Cheng** shared the view of previous speakers that the document did not contain some of the basic information needed to show that the case was one of *force majeure* or co-passenger delay. The Administration of Indonesia should be invited to provide more information to the next Board meeting for deliberation.

5.5.10 **Ms Mannepalli** said that she found it hard to qualify the case as one of *force majeure* because the document did not explicitly state how the conditions for *force majeure* had been met. In response to Mr Fianko's comment on the framework agreement, she pointed to the reference to "support for launch services of … Lapan made satellites every 5 years"; moreover, the letter from ISRO dated 7 October 2024 (Annex 4) referred to "in-kind launch service support for LAPAN-A4/NEO-1 satellite".

5.5.11 The **Chair** noted that no Article **11** notification information had been provided and that the time-limit for bringing into use the frequency assignments to the LAPAN-A4-SAT satellite system would expire after the current Board meeting on 22 November 2024. The administration said that the satellite AIT process had been completed but had provided only a picture of a satellite, which did not constitute evidence. It had provided no real rationale for requesting the extension and had not explained why ISRO had postponed the

launch. The Board needed to be sure that the satellite had been ready for the initial October launch date and therefore was not in a position to accede to the request at the current meeting. He was surprised at the submission's lack of information, given all the information the Board had provided on the subject in the past, the content of past conference decisions, and the fact that the Administration of Indonesia had previously presented cases in due form. He was therefore hesitant to ask for additional information, also taking into account that the administration had the possibility to resubmit an advance publication information for the same frequency assignments, without any real adverse impact.

5.5.12 **Ms Beaumier** agreed that the Board did not necessarily want to ask for more information. It did want to retain the frequency assignments, to give the Administration of Indonesia the opportunity to come back to the Board. The onus was on the administration to send in a new filing or to come back to the Board with a new submission providing all the necessary information.

5.5.13 The **Chair** pointed out that once the time-limit of 22 November 2024 had expired, the Bureau would ask the Administration of Indonesia for information on the status of the system frequency assignments; the administration could reply that it planned to request an extension at the next Board meeting, which would allow to keep the filing to be maintained until the next Board meeting for a final decision by the Board , hopefully on the basis of more complete information. The Bureau might consider contacting the administration with an explanation of the type of information to provide. He preferred to be blunt and to say simply that the Board did not accede to the request.

5.5.14 **Mr Azzouz** endorsed that point of view.

5.5.15 The **Chair** proposed that the Board should conclude as follows on the case:

"With reference to the submission from the Administration of Indonesia requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the LAPAN-A4-SAT satellite system as contained in Document RRB24-3/14(Rev.1), the Board noted the following points:

- While the Board had the authority to consider requests for extensions of regulatory time-limits for cases of *force majeure* and co-passenger delay, in its submission, the Administration of Indonesia had invoked neither a case of *force majeure* nor a case of co-passenger delay to support its request.
- The submission from the Administration of Indonesia stated that the LAPAN-A4/NEO-1 satellite, developed and designed by the Indonesian Space Agency, had been fully completed and tested, and was ready to be sent to the launch site, but no evidence had been provided to confirm the situation other than a photo of one satellite.
- The LAPAN-A4/NEO-1 satellite had been scheduled to be launched in October 2024, as confirmed on 29 September 2023. After a review of the launch manifest, the launch had been rescheduled for the fourth quarter of 2025 but no rationale had been provided for the postponement.
- A considerable number of essential items, agreed during the 13th plenary meeting of WRC-23 (see §§ 13.4 and 13.6 of Document WRC23/528), were missing in the information provided in support of the request from the Administration of Indonesia, including the basis for invoking its request and a rationale for an extension of the regulatory time-limit to 31 December 2025.

Consequently, the Board concluded that, given the considerable lack of supporting information, it was not in a position to grant an extension of the regulatory time-limit to bring into use the frequency assignments to the LAPAN-A4-SAT satellite system."

5.5.16 It was so **agreed**.

5.6 Submission from the Administration of Indonesia requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the NUSANTARA-NS1-A satellite network (Document RRB24-3/15)

5.6.1 **Mr Loo (Head, SSD/SPR)** introduced Document RRB24-3/15, in which the Administration of Indonesia requested a 12-month extension of the regulatory time-limit to bring into use the frequency assignments to the NUSANTARA-NS1-A satellite network, to 28 December 2025. The SNL-SN5 satellite was a high throughput satellite that would be used to provide Internet connectivity in the unserved and underserved areas in Indonesia. The administration justified its request for an extension on the grounds of the significant changes to the project timelines caused first by the global COVID-19 pandemic then by damage to the satellite resulting from a failure at the manufacturing facility that required an additional 18 months to repair the satellite; and the consequent change in the launch schedule to June 2025, followed by six months for electric orbit raising. The administration also demonstrated that it had put in place a mitigating plan to position at 113°E a replacement satellite. G-Space 1 (GS-1), but it could not be achieved due to unforeseen circumstances.

5.6.2 The submission had 12 annexes, including a letter from the satellite manufacturer referring to delays caused by the global COVID-19 pandemic and a communication from the operator of the GS-1 satellite explaining the difficulties associated with its operation.

5.6.3 **Ms Beaumier**, pointing out that requests for extensions had to clearly and explicitly invoke *force majeure* when it was the basis for the request, said that Document RRB24-3/15 contained much useful information but failed to provide a detailed rationale for how the four conditions for *force majeure* had been met and other critical information. Such information included: the status of satellite construction in October 2023 before the failure, the project milestones before the COVID-19-related delays and whether the milestones were on track, and when the satellite was expected to reach its position at 113°E. The Administration of Indonesia should be invited to provide additional information to the 98th Board meeting and the Bureau should be instructed to retain the frequency assignments in the meantime.

5.6.4 **Mr Cheng** said that he had sympathy for the Administration of Indonesia, which had invested a great deal of effort in what was a real satellite project and had asked for a qualified and limited extension only. The information provided in the submission was confusing, however, and it was unclear on what basis the Board should grant an extension. The administration should be asked to provide more information to the Board's 98th meeting, explaining in particular how the failure of the non-flight supplier equipment constituted a *force majeure* event.

5.6.5 **Ms Mannepalli** agreed with the comments of the previous speakers, saying that she had also struggled to understand how the failure of the non-flight supplier equipment constituted a *force majeure* event. The Board should ask for further information before reaching a decision on the submission at its next meeting.

5.6.6 **Mr Azzouz** summed up the dates and timelines set out in the document, adding that no explicit relationship had been established between them and the four conditions for *force majeure*. The Board required a clear explanation of how the request met the four conditions for *force majeure* before it could reach a decision to grant the extension.

5.6.7 The **Chair**, referring to the Indonesian Administration's statement that the global COVID-19 pandemic had caused a first change to the project timelines, in May 2021, said that no detailed description had been provided of the pandemic's direct impact on the project. Moreover, by May 2021 the pandemic had been ongoing for over a year and companies should have taken measures to guard against its impact on the manufacture of satellites. The administration had further stated that, as a consequence of the COVID-19-related delays, the project timelines had shifted by several months, to June 2024, which still left a six-month margin before the regulatory deadline. It was therefore difficult to connect the request for an extension to a COVID-19-related *force majeure* issue. In addition, no information had been provided linking the accident to the satellite to a case of *force majeure* or on the satellite's status before that event, in particular whether it had been ready for delivery in October 2023.

5.6.8 He commended the Administration of Indonesia for taking mitigating action and endeavouring to find a replacement satellite. That said, the GS-1 satellite was a geostationary 16U CubeSat hosting several payloads for different purposes, including Earth observation, scientific experiments and bringing-into-use services; indeed, it had been previously used by the NUSANTARA H-1A satellite network, an Indonesian payload launched to retain the Ka- and Ku-band regulatory rights. The loss of a CubeSat might well be considered a normal risk for a satellite of that type; it was open to question whether it should be considered a *force majeure* issue and should not be an argument for taking a decision at the present meeting.

5.6.9 In his view, therefore, in the absence of supporting evidence, of clear information on the satellite's evolving status and of a detailed rationale justifying the length of the extension requested and explaining how the case met the four conditions for *force majeure*, the Board should not accede to the request of the Administration of Indonesia at the present meeting.

5.6.10 **Mr Nurshabekov** agreed, adding that the information provided was also at times confusing.

5.6.11 The **Chair** proposed that the Board should conclude as follows on the case:

"Having considered in detail the request of the Administration of the Indonesia for an extension of the regulatory time-limit to bring into use the frequency assignments to the NUSANTARA-NS1-A satellite network as presented in Document RRB24-3/15, the Board noted the following points:

- While the Administration of Indonesia had provided considerable information in support of its request, referring to elements of *force majeure*, it had not invoked a case of *force majeure* or demonstrated how the four conditions had been satisfied for the situation to qualify as a case of *force majeure*.
- The failure of the supplier non-flight equipment that had damaged the satellite structure appeared to be a *force majeure* event, as an additional 18 months had been required to repair the satellite, resulting in a change to the launch schedule to June 2025, but no details had been provided to explain the nature of the event, the circumstances that had led to the failure, and the extent of the damage that would justify the lengthy repair period.
- The Administration of Indonesia had made mitigating efforts – obtaining a temporary replacement satellite (GS-1), signing a contract on 27 January 2023 – aimed at bringing into use the frequency assignments to the NUSANTARA-NS1-A satellite network. However, the satellite's arrival at 113°E, planned for September 2024, had been delayed with indications that the administration would not meet the regulatory time-limit, but no updated information had been provided on a new arrival date and whether the satellite would arrive before the requested extension date of 27 December 2025.
- Other essential information that was missing in support of the request included:
    - the status of the satellite construction before the failure;
    - the revised project details and schedule;
    - milestones that took into account the delays due the COVID-19 pandemic and whether they had been met on time; and
    - an updated launch schedule and plans.

Consequently, the Board concluded that it was not in a position to grant an extension of the regulatory time-limit to bring into use the frequency assignments to the NUSANTARA-NS1-A satellite network and invited the Administration of Indonesia to provide the additional essential information and supporting evidence as agreed during the 13th plenary meeting of WRC-23 (see § 13.4 of Document WRC23/528) to the 98th Board meeting. The Board instructed the Bureau to continue to take into account the frequency assignments to the NUSANTARA-NS1-A satellite network until the end of the 98th Board meeting."

5.6.12 It was so **agreed**.

5.7 Submission by the Administration of the United Kingdom of Great Britain and Northern Ireland requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the SPACENET-IOM satellite system (Documents RRB24-3/18 and RRB24-3/DELAYED/1)

5.7.1 **Mr Loo (Head, SSD/SPR)** introduced Document RRB24-3/18, in which the Administration of the United Kingdom requested a seven-week extension of the regulatory time-limit (from 13 December 2024 to 31 January 2025) to bring into use the frequency assignments to the SPACENET-IOM satellite system in the bands 71–76 GHz (space-to-Earth) and 81–86 GHz (Earth-to-space) on the grounds of *force majeure*.

5.7.2 Outlining the details of the case, he said that the payload procurement agreement for the proof-of-concept Elevation-1 (E-1) satellite was dated 5 December 2023 and the contract for the on-orbit delivery and operation of the satellite was dated 10 February 2024. A launch for the E-1 satellite had been procured on the SpaceX T-12 mission (with the Falcon 9 launch vehicle) and had originally been scheduled for 1 October 2024. In compliance with the launch service provider requirements, the E-1 satellite had completed all testing milestones by 3 September 2024 and had been ready for shipment to the launch facility. However, the mission had been delayed until 1 November 2024 because of the need to investigate problems on two separate Falcon missions. As of the date of the submission, it had been further delayed to no earlier than 16 January 2025 due to anomalies suffered on other SpaceX Falcon 9 missions. As the E-1 satellite would be deployed into a notified orbital plane of the SPACENET-IOM satellite system after approximately 55 minutes, the date of bringing into use was expected to be the same as the launch. The request for an extension until 31 January 2025 accounted for the updated launch date of the SpaceX T-12 rideshare mission of 16 January 2025 and included a margin of two weeks to account for any minor additional delays.

5.7.3 The administration explained how, in its view, the case met all four conditions for *force majeure* and had attached supporting evidence, including photographs and a work plan with critical milestones, confirming the status of the E-1 satellite construction and readiness for launch.

5.7.4 Document RRB24-3/DELAYED/1 contained a copy of a letter from the launch broker confirming the information regarding the T-12 launch delays and its understanding from the launch service provider that the T-12 launch remained on track for 16 January 2025.

5.7.5 Following a request for clarification from **Mr Di Crescenzo**, the **Chair** confirmed that as per No. **11.44C** one space station could bring into use an entire constellation with over 158 orbital planes.

5.7.6 **Ms Beaumier** thanked the Administration of the United Kingdom for its very clear and comprehensive submission, containing all the information needed by the Board to assess the case. The administration had demonstrated that the situation satisfied all four conditions to qualify as a case of *force majeure.* She agreed with the administration's reasoning and was therefore in favour of granting an extension. While the Board usually excluded a contingency period when deciding on the duration of the extension to be granted, she noted that the extension period typically took into account a launch window, which provided some margin for minor delays. As the Administration of the United Kingdom had set out a specific launch date of 16 January 2025 at the earliest, rather than a launch window, she would support granting an extension until 31 January 2025.

5.7.7 **Ms Hasanova**, having thanked the administration for the detailed information provided, noted that the Bureau had received the notification information under No. **11.2** on 6 January 2023 and that satellite construction and testing had been completed by September 2024. The launch date had been delayed until 16 January 2025 and, with the satellite being deployed in the notified orbital plane approximately 55 minutes after launch, the frequency assignments would be brought into use on the same day. She was in favour of granting the seven-week extension requested to 31 January 2025.

5.7.8 **Mr Talib** thanked the administration for its detailed submission, including the information on the Falcon 9 anomalies and the table showing the major milestones before and after the *force majeure* events. Noting the evidence provided in the attachments and in Document RRB24-3/DELAYED/1, he said that the situation had satisfied the conditions to qualify as a case of *force majeure* and could agree to grant the seven-week extension requested.

5.7.9 **Ms Mannepalli** and **Mr Di Crescenzo** said that they were in favour of granting the limited and qualified extension requested.

5.7.10 **Mr Loo (Head SSD/SPR)**, responding to a request for clarification from **Ms Mannepalli**, said that it was his understanding from the filing that the administration was not bringing into use the frequency assignments to the SPACENET-IOM in the 66–71 GHz band.

5.7.11 **Mr Fianko** said that it was evident from the clear submission that satellite construction and testing had been completed as originally scheduled and that, but for the delays from the launch service provider, the satellite would have been launched as originally planned. The situation met all the conditions to qualify as a case of *force majeure* and he would support an extension until 31 January 2025.

5.7.12 **Mr Azzouz** said that he could agree to grant an extension to either 16 or 31 January 2025. The Board should be consistent in its practice of not adding any period for contingencies.

5.7.13 **Mr Cheng** said that he, too, could agree to grant an extension, the situation having satisfied all the conditions to qualify as a case of *force majeure*. He also had concerns that a constellation with more than 100 orbital planes and numerous satellites could be brought into use by a very small satellite and that the milestone-based approach set out in Resolution **35 (WRC-19)** did not apply. At the very least, the Board should indicate its concerns on the matter in its report to WRC-27 under Resolution **80 (Rev.WRC-07)**.

5.7.14 The **Chair** agreed that it would be useful for the Board to address, in its report to WRC-27 under Resolution **80 (Rev.WRC-07)**, the need for information about the deployment of constellations similar to that required under Resolution **35 (WRC-19)** taking account of the increasing number of non-GSO systems composed of multiple satellites not subject to that resolution. However, according to the current rules, one space station was sufficient to bring into use an entire constellation without additional information about the constellation deployment.

5.7.15 Recalling § 13.4 of Document WRC23/528, he considered that the Administration of the United Kingdom had provided all the information that WRC-23 deemed necessary in connection with a request for extension of the regulatory time-limit due to *force majeure*. Noting that the administration had requested an extension until 31 January 2025, he agreed that the Board did not provide additional time for contingencies. However, the administration had specified a launch date (no earlier than 16 January 2025), rather than a launch window, which was generally around two months. He proposed that the Board conclude on the matter as follows:

"The Board carefully considered Document RRB24-3/18, in which the United Kingdom of Great Britain and Northern Ireland requested an extension of the regulatory time-limit to bring into use the frequency assignments to the SPACENET-IOM satellite system, and also considered Document RRB24-3/DELAYED/1 for information. The Board expressed its appreciation for the comprehensive and clear submission and noted the following points:

- The administration had provided extensive and complete information in support of the request corresponding to that agreed during the 13th plenary meeting of WRC-23 (see § 13.4 of Document WRC23/528).
- The ELEVATION-1 satellite had been ready to ship to the launch site for an October 2024 launch but in early September 2024 the launch had been delayed by more than three months to 16 January 2025, due to anomalies suffered on other launch missions.
- The satellite construction and testing had been completed as originally scheduled, and, but for the delays from the launch provider due to the *force majeure* events, the satellite would have been launched as originally planned, allowing the administration to comply with the regulatory time-limit.
- The Administration of the United Kingdom had invoked a case of *force majeure* in support of its request and had demonstrated how the situation had satisfied all four conditions for it to qualify as a case of *force majeure*.
- The requested length of extension of seven weeks was limited and justified and based on a launch window of two weeks.

Consequently, the Board decided to accede to the request by granting an extension of the regulatory time-limit to bring into use the frequency assignments in the bands 71-76 GHz (space-to-Earth) and 81-86 GHz (Earth-to-space) to the SPACENET-IOM satellite system to 31 January 2025."

5.7.16 It was so **agreed**.

5.8 Submission by the Administration of Mexico requesting an extension of the regulatory time-limit to bring back into use the frequency assignments to the SATMEX 7 satellite network at 113°W (Document RRB24-3/20(Rev.1))

5.8.1 **Mr Loo (Head SSD/SPR)** introduced Document RRB24-3/20(Rev.1), in which the Administration of Mexico requested an 18-month extension to bring back into use the frequency assignments to the SATMEX 7 satellite network at 113°W in the C- and Ku-bands.

5.8.2 Outlining the facts of the case, he said that, with the Eutelsat 113 West A (Eutelsat 113WA) satellite reaching the end of its 15-year nominal lifetime in December 2023, the operator (Satmex) had sought authorization in April 2023 to operate the satellite in an inclined orbit to extend its lifetime until approximately October 2028, when the remaining fuel reserve would run out. The satellite had started operation in an inclined orbit on 1 January 2024 but had experienced an anomaly causing it to break down on 31 January 2024. It had been put in safe mode on 28 February 2024, but following a further failure in one of the data-handling chains, Satmex had requested that it be deorbited. Deorbiting had commenced on 25 March 2024 and been successfully completed on 3 April 2024. A copy of the satellite failure report and deorbiting authorization and report were attached to the submission. The administration had informed the Bureau of the suspension of the frequency assignments from 25 March 2024 in accordance with No. **11.49**, and the regulatory time-limit for bringing the frequency assignments back into use was 25 March 2027.

5.8.3 A contract for the manufacture of the replacement satellite had been signed between Eutelsat and Thales Alenia Space on 11 July 2024, with an agreed delivery date of August 2027. The launch period was currently estimated for the fourth quarter of 2027, with the replacement satellite expected to arrive at 113°W in the first half of 2028. The launch service provider was expected to be selected in the last quarter of 2026.

5.8.4 The Administration of Mexico explained how, in its view, the situation met the four conditions for *force majeure*. It also provided information on the status of the manufacturing of the replacement satellite prior to the *force majeure* event invoked. Thales Alenia Space had been formally approved as the manufacturer of the replacement satellite on 17 October 2022. With the original satellite expected to continue to operate in an inclined orbit for up to 4.7 years from February 2024, the expected delivery date of the replacement satellite was 1 September 2026. According to the administration, had the loss of the original Eutelsat 113WA satellite not occurred, there would have been no need to request the suspension of the frequency assignments. He understood that the administration was requesting an 18-month extension to the three-year period under No. **11.49** to bring back into use the frequency assignments, therefore 18 months from 25 March 2027, not from 25 March 2024, as indicated in the submission.

5.8.5 **Ms Mannepalli** observed that, under No. **11.49**, the administration had a three-year period from 25 March 2024 to bring back into use the frequency assignments. It was quite early in the process to be requesting an extension and many variables were unclear.

5.8.6 **Ms Beaumier** said that, in her view, the first and second conditions for the situation to qualify as a case of *force majeure* had been met. However, in order to demonstrate that the third condition had been satisfied (i.e. that the event made it impossible for the obligor to perform its obligations), it was not enough for the administration to indicate that the responsibility to build and launch a replacement satellite rested with third parties unrelated to the operator. The Board expected administrations to demonstrate that its operators had pursued every option to bring back into use the frequency assignments on time and made every effort to limit the extension period. Eutelsat was a large satellite operator with numerous in-orbit assets and the means to consider alternative options, and those elements had not been considered in the submission.

5.8.7 With regard to the fourth condition (a causal effective connection must exist between the event constituting *force majeure* and the failure by the obligator to fulfil the obligation), she was not entirely sure that the in-orbit failure was the only reason why the administration expected to miss the deadline. While plans to replace the ageing satellite appeared to have been initiated early on, with the manufacturer having been selected in October 2022, the contract had not been signed until July 2024, and that delay would have made it difficult to reach the bringing-back-into use deadline. The Board would need to see detailed project milestones before and after the in-orbit failure and the rationale for the two-year delay in signing the contract. Furthermore, the extension request was being made more than two years before the end of the suspension period, no arrangements had yet been made for the satellite launch, and the launch service provider was not expected to be selected until the last quarter of 2026. Although the Board had been informed that the satellite delivery was expected in August 2027 and that electric orbit raising would take six months, the 18-month extension requested included several contingencies.

5.8.8 While the case did contain aspects of *force majeure*, the Board did not have sufficient information to conclude that all four conditions had been met. Furthermore, in the absence of a launch contract and provider, it would be impossible for the Board to justify and quantify the length of any extension of the regulatory time-limit. It should encourage the Administration of Mexico to make every effort to comply with that time-limit. If the administration was unable to succeed, it could submit another extension request to the Board demonstrating how the third and fourth conditions for *force majeure* were met and providing details on the launch contract and window and in-orbit testing plans. At the present juncture, however, it was premature for the Board to accede to the request.

5.8.9 **Mr Azzouz** summarized the facts in the case and noted that the revised dates being considered for the replacement satellite, namely an estimated launch period of the fourth quarter of 2027 and arrival at the 113°W orbital position in the first half of 2028, implied that an extension of around 15 months would be necessary, not the 18 months requested. In addition, more than two years of the suspension period remained, and it was too soon for the Board to determine the required length of any extension, including in the absence of a launch service provider and launch contract. It might wish to request further clarification from the administration.

5.8.10 **Mr Fianko** said that, although the *force majeure* event invoked by the administration had led to the suspension of the frequency assignments, he failed to see how it impacted their bringing back into use. Even before having to deorbit the satellite, a replacement satellite manufacturer had been selected with an expected satellite delivery date of September 2026. It was not clear from the submission why the administration was unable to respect the original replacement schedule and what other alternatives had been explored. He noted from the submission that Eutelsat and Thalia Alenia Space had entered into a contract for the manufacture of the replacement satellite in July 2024, but that no supporting evidence had been provided.

5.8.11 **Mr Cheng** said that it was up to administrations to make every effort to bring back into use suspended frequency assignments within the three-year period provided for in the Radio Regulations. The case under consideration did not appear to meet all the four conditions for *force majeure* and much of the suspension period remained. The Board should encourage the Administration of Mexico to make every effort to comply with the regulatory time-limit. If necessary, the administration could always come back to the Board at a later stage.

5.8.12 **Mr Talib** said that he shared many concerns expressed by previous speakers, including about the lack of clear elements and evidence to justify the 18-month extension requested. Furthermore, it was not clear to him how the situation met the third and fourth conditions for *force majeure.* The Board should encourage the administration to find a solution before the 98th meeting in March 2025, when the case could be considered further in the light of the progress made.

5.8.13 **Mr Linhares de Souza Filho** said that he shared many of the views expressed by previous speakers. The Board should make its conclusion useful to the administration and provide a clear indication and guidance on what was lacking in the submission, notably a launch contract and a demonstration that every effort had been made to bring the frequency assignments back into use, and on why the third and fourth

conditions for *force majeure* had not been met. The Board might not have enough additional information to consider the case again at its next meeting.

5.8.14 **Mr Nurshabekov** said that he concurred with previous speakers and noted that, from the information provided, all four conditions for *force majeure* had not been met. However, the three-year suspension period had not yet elapsed, and the Administration of Mexico still had time to submit documents to the Board's meetings in 2025 to clarify certain aspects, including the launch provider for the replacement satellite.

5.8.15 **Ms Hasanova** said that she shared the views expressed by Ms Beaumier and Mr Azzouz. The administration still had over two years to comply with the regulatory deadline and should make every effort to do so. If it was unsuccessful, it could always request an extension from the Board at a later stage.

5.8.16 **Mr Di Crescenzo** said that he agreed with previous speakers, particularly Mr Linhares de Souza Filho. The request was premature, and a launch contract was an important element for the submission.

5.8.17 The **Chair** said that while it was common practice for ageing geostationary satellites to operate in an inclined orbit, there was a risk associated with their use. Accordingly, the failure of the Eutelsat 113WA C- and Ku-band satellite, which had already reached its nominal end-of-life in December 2023 after 15 years in operation, would not be entirely unexpected. He also noted that, according to publicly available information, the satellite had not been covered by any in-orbit insurance policy. According to the submission, prior to the failure, the manufacturer for the replacement satellite had been approved on 17 October 2022 and the expected delivery date for the satellite was 1 September 2026. There was no convincing explanation in the document as to why, after the failure and notwithstanding the previously approved replacement plan, the operator was now considering a scheduled satellite delivery date of August 2027 with arrival at the 113°W orbital position in the first half of 2028. No evidence of the contract signed between Eutelsat and Thales Alenia Space in July 2024 had been attached and no information had been provided regarding the possible use of other in-orbit satellites in the interim period prior to the launch and delivery of the replacement satellite – and yet, an operator as large as Eutelsat might have found it easier than smaller satellite operators to find a temporary replacement satellite. The requested extension provided for several contingencies, which the Board did not take into account, including the uncertainty of the launch date and possible failure of the electric orbit raising.

5.8.18 While some might consider that the first and second conditions for *force majeure* had been met, he was unsure whether the failure of an ageing satellite that was no longer insured constituted a *force majeure* issue. From the information provided, however, the third and fourth conditions had not been satisfied and, in the absence of more comprehensive information, the Board would not be able to accede to the requested extension. It might encourage the Administration of Mexico to make every effort to bring the frequency assignments back into use by the regulatory deadline of 25 March 2027. If more time was required, the administration could submit at that time a further request to the Board with more complete information to facilitate its decision-making.

5.8.19 **Mr Linhares de Souza Filho** said that it was important for the Board to decide whether the case, which involved an ageing satellite that had reached its nominal 15-year lifetime, met the first two conditions for *force majeure*. It was clear from the information provided that the third and fourth conditions were not satisfied. He also noted that satellite operators often planned to have continuous operations by replacing a satellite before the end of its nominal lifetime.

5.8.20 The **Chair** said that the Board might have some difficulty in relating the anomaly suffered and failure of the ageing satellite to a request for extension of the three-year suspension period.

5.8.21 **Ms Beaumier** said that, if the Board did not consider that the first or second conditions for *force majeure* had been satisfied, there would be no point in the Administration of Mexico invoking the satellite failure in any future submission on the case. In her view, even though the satellite had been ageing, its unexpected failure was beyond the control of the obligor and not self-induced. Accordingly, she had no difficulty in considering that the first condition for *force majeure* had been satisfied. With regard to the second condition, and whether the failure of an ageing satellite was unforeseen, she said that, although the

Board had not received any state-of-health reports for the satellite and did not know if there had been any other anomalies or issues that might have made the failure more foreseeable, she had been willing to show some flexibility and noted that, according to the administration, the satellite had been operating normally and functioning properly. Although it would be unrealistic to base future plans on continued operation in an inclined orbit for a further 4.7 years, there appeared to be no reason for the administration to think that the satellite would fail so soon after being placed in that orbit. The Board considered each request on a case-by-case basis and had in the past indeed considered in-orbit failure to qualify as a *force majeure* situation. Aspects, such as the sudden and unexpected nature of the failure, complexity of the satellite and in-orbit assets and means available to the operator, factored into the Board's decisions. In the case under consideration, however, it was more difficult for the Board to conclude that the failure was completely unexpected, particularly when replacement plans were already in place. In its conclusion, the Board should not ask the Administration of Mexico to address the difficulties noted by the Board through the provision of further information to the Board's next meeting. The administration still had time to find other solutions in order to meet the regulatory deadline.

5.8.22 The **Chair** said that the Board should not go into details in its decision about which of the four conditions it considered had been met and simply indicate that, based on the information provided, it had doubts that all four conditions had been satisfied. Given the time still available before the expiry of the regulatory deadline on 25 March 2027 and the fact that some of the missing information might not be available in time for the Board's next meeting, it would be premature for the Board to seek additional information at present. It should encourage the administration and operator to make every effort to comply with the regulatory deadline to bring the frequency assignments back into use and to consider other options, including the procurement of an interim satellite. A three-year period should be sufficient to build and launch a replacement C- and Ku-band satellite. If, however, an extension beyond 25 March 2027 was required, the administration could always come back to the Board in the future.

5.8.23 The **Director** said that the Board should be clear whether or not it considered the case as a *force majeure* issue. It would be futile to give the administration the possibility of bringing the case back to the Board, if the Board had already decided that the conditions for *force majeure* had not been met.

5.8.24 The **Chair** said that if the administration brought the case back to the Board nearer to the expiry of the regulatory time-limit, it would examine the request on its own merit at that time.

5.8.25 **Mr Azzouz**, said that he failed to see from the information presented what tangible action had been taken by the administration, apart from consideration of certain dates for a future plan to meet the three-year suspension deadline, and he endorsed the views expressed by Mr Fianko. Furthermore, the Board should not be seen to encourage the use of a gap-filler satellite as one of the other options. **Mr Alkahtani** and **Mr Linhares de Souza Filho** agreed.

5.8.26 The **Chair** said that, although the submission did not contain any information on interim possibilities and plans to meet the suspension deadline, the administration and operator must be looking into them. The objective was to ensure the continued delivery of the service, and the use of a temporary replacement satellite might be considered as a means of doing so. **Ms Beaumier** agreed, noting that the use of such satellites was an option to be considered in the context of the third condition for *force majeure*. The Board had already recognized the practice of using gap fillers in a previous report under Resolution **80 (Rev.WRC-07)**.

5.8.27 **Ms Mannepalli** pointed out that it was highly likely that an operator as large as Eutelsat would already be operating a C- and Ku-band satellite with general frequency assignments that could have been used as a gap filler.

5.8.28 **Mr Loo (Head SSD/SPR)**, responding to a question from **Mr Azzouz**, said that when an administration requested the suspension of frequency assignments, it was not required to provide the Bureau with a reason or to invoke *force majeure*. It simply had to provide the date of suspension so that the Bureau could verify that a satellite had been in operation until that time. It was his understanding that no supporting evidence of the contract between Eutelsat and Thales Alenia Space had been provided because of confidentiality issues.

5.8.29 The **Chair** said that confidential content could be redacted. **Ms Mannepalli** and **Ms Beaumier** agreed, adding that supporting evidence might also take the form of a press release or letter from the manufacturer confirming the contract.

5.8.30 **Mr Azzouz** observed that §1.7 of Part C of the Rules of Procedure on the internal arrangements and working methods of the Board the concerned the treatment of confidential material.

5.8.31 **Mr Fianko** said that the Board needed to be direct in its decision. The administration had already made plans to replace the existing satellite and needed to demonstrate why it was no longer able to implement those plans because of the *force majeure* event invoked. The operator involved would know what other options could be considered.

5.8.32 The **Chair** proposed that the Board conclude on the matter as follows:

"With regard to the submission from the Administration of Mexico requesting an extension of the regulatory time-limit to bring back into use the frequency assignments to the SATMEX 7 satellite network at 113°W as presented in Document RRB24-3/20(Rev.1), the Board noted the following points:

- The Eutelsat 113WA satellite, having reached its nominal end-of-life after 15 years in operation, had suffered an anomaly on 31 January 2024 and had been deorbited on 3 April 2024, resulting in the suspension of the frequency assignments to the SATMEX 7 satellite network on 25 March 2024 and a regulatory time-limit for bringing them back into use on 25 March 2027.
- The regulatory suspension period of three years had been deemed sufficient to procure a replacement for a C- and Ku-band satellite and resume use of suspended frequency assignments.
- Although the satellite operator had approved the selection of a replacement satellite manufacturer on 17 October 2022, with an expected delivery date of 1 September 2026, the replacement schedule had been based on the Eutelsat 113WA satellite continuing to operate for a further 4.7 years from February 2024 and the contract with the satellite manufacturer had only been signed on 11 July 2024, but no supporting evidence had been provided.
- At the time of submitting the request, no launch service provider had been selected and therefore no launch contract or launch schedule was available.
- The administration had not demonstrated that it had pursued every option to be able to comply with the regulatory time-limit and that every effort had been made to limit the extension period.
- The administration had invoked a case of *force majeure* in support of its request; however, from the information provided, the four conditions had not been satisfied and therefore the situation did not qualify as a case of *force majeure*.
- While the occurrence of the anomaly could be used to qualify the satellite failure as a case of *force majeure*, the *force majeure* event could not be causally linked to delays in the procurement, manufacture and launch of a replacement satellite, whereas a *force majeure* event adversely affecting such efforts would be valid grounds for requesting an extension of the regulatory time-limit.
- In the absence of a launch service provider and a launch contract, it was impossible to justify and quantify the required length of extension of the regulatory time-limit.

Consequently, the Board concluded that the request for an extension of the regulatory time-limit to bring back into use the frequency assignments to the SATMEX 7 satellite network was premature and therefore the Board was not in a position to accede to the request from the Administration of Mexico. The Board encouraged the Administration of Mexico to make every effort to comply with the regulatory time-limit by expediting its efforts to procure a replacement satellite and to consider other options."

5.8.33 It was so **agreed**.

6 Issues regarding harmful interference to receivers in the radionavigation-satellite service (Addendum 4 to Document RRB24-3/4)

6.1 **Mr Ciccorossi (acting Head, SSD/SSC)** introduced Addendum 4 to Document RRB24-3/4, which had been prepared by the Bureau in light of the increasing number of reports and requests for assistance received under No. **13.2** in recent years concerning harmful interference to receivers in the RNSS in the 1 164-1 215 MHz and 1 559-1 610 MHz bands. Those reports showed that the interference was of the nature prohibited under No. **15.1** and resulted in the degradation or interruption of the RNSS used by civil aviation, humanitarian assistance flights and the maritime sector. It also affected the time synchronization of various telecommunication networks. The submission had been listed under both sub-items and provided a general summary, by region, of the cases (which sometimes included thousands of incidents) handled by the Bureau in recent months based on technical reports and geolocation information provided by the administrations concerned. It also outlined the actions taken by the Bureau and any responses received. Between January and September 2024, the number of cases had increased over five-fold compared to 2023 and had involved 22 administrations, three United Nations agencies (World Food Programme (WFP), ICAO and the World Maritime Organization) and four radionavigation-satellite systems. As many of the cases remained unresolved and, in some instances, there had been no acknowledgement of receipt of communications under No. **15.35**, the Bureau had set out some draft recommendations for the Board's consideration.

6.2 The **Chair** said that the situation described by Mr Ciccorossi was of serious concern. He agreed that it might be useful to remind administrations of the relevant regulatory provisions that applied to transmissions in the RNSS and asked whether the Board was prepared to endorse the recommendations proposed by the Bureau.

6.3 **Mr Azzouz**, after noting that the RNSS was a safety-of-life service, said he welcomed the Bureau's proposed recommendations, as did **Ms Hasanova**.

6.4 **Ms Mannepalli** expressed grave concern at the increasing number of reported cases of interference involving safety services all over the world. As the frequency bands concerned had also been assigned to the aeronautical radionavigation service, administrations must also comply with No. **4.10**.

6.5 **Mr Cheng**, having noted with great concern the increasing instances of transmissions of superfluous signals (jamming) and transmissions of false or misleading signals (spoofing), reported by the Bureau, endorsed the recommendations put forward by the Bureau. No. **15.37** and Circular Letter CR/488 were also of relevance and should be mentioned in the Board's decision.

6.6 **Mr Talib** agreed that administrations should be reminded of the relevant regulatory provisions. Noting that many of the cases of harmful interference listed in Addendum 4 appeared to be related to conflict areas, he asked whether certain administrations might be receiving the harmful interference as collateral damage rather than being directly targeted.

6.7 **Mr Ciccorossi (acting Head, SSD/SSC)** said that instances of such harmful interference were also occurring in areas where, according to publicly available information, there were no conflicts. The Bureau was not in a position to determine the target of the harmful interference but acknowledged that it might well cause collateral damage. The right referred to in *resolves to urge administrations* 2 of Resolution **676 (WRC-23)** should, in line with Article 45 of the ITU Constitution, be understood to apply within national territory only.

6.8 The **Chair** agreed that some administrations might have misunderstood the scope of application of Resolution **676 (WRC-23)**.

6.9 The **Deputy Director** pointed out that *resolves to urge administrations* 2 of Resolution **676 (WRC-23)** did not actually establish the right of administrations to deny access to the RNSS for security or defence purposes. As the rights of administrations were set out in the ITU Constitution and Convention, the wording of Resolution **676** should be understood in the context of Articles 45, 47 and 48 of the ITU Constitution and Article **15** of the Radio Regulations.

6.10 **Ms Beaumier**, having expressed concern about the increasing number of cases of harmful interference affecting such critical safety-of-life services in various areas of the world, said that the proposed recommendations served as a reminder to administrations of their obligations under relevant regulatory provisions. It was appropriate for the Board to specify the applicable provisions in such cases and emphasize the need for administrations' compliance.

6.11 The **Chair** proposed that the Board should conclude on the matter as follows:

"The Board carefully considered Addendum 4 to Document RRB24-3/4 and thanked the Bureau for the report on numerous cases of harmful interference affecting receivers in the radionavigation-satellite service (RNSS). The Board considered with appreciation the Bureau's proposed recommendations and decided to endorse those recommendations with modifications, as per the following:

The attention of the administrations concerned should be drawn to their obligations to:

a) acknowledge receipt of the Bureau's communications under No. **15.35** of the Radio Regulations;

b) cooperate in the resolution of the case(s) in accordance with, but not limited to, the following provisions:

   i. Article 45 of the ITU Constitution: "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."

   ii. Article 47 of the ITU Constitution*:* "Member States agree 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."

   iii. No. **4.10** of the Radio Regulations: "Member States recognize that the safety aspects of radionavigation and other safety services require special measures to ensure their freedom from harmful interference; it is necessary therefore to take this factor into account in the assignment and use of frequencies."

   iv. No. **15.1** of the Radio Regulations: "All stations are forbidden to carry out unnecessary transmissions, or the transmission of superfluous signals, or the transmission of false or misleading signals, or the transmission of signals without identification."

   v. No. **15.28** of the Radio Regulations: "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."

   vi. No. **15.37** of the Radio Regulations: "An administration receiving a communication to the effect that one of its stations is causing harmful interference to a safety service shall promptly investigate the matter and take any necessary remedial action and respond in a timely manner."

   vii. Resolution **676 (WRC-23)** on "Prevention and mitigation of harmful interference to the radionavigation-satellite service in the frequency bands 1 164 - 1 215 MHz and 1 559 - 1 610 MHz"; in particular, *resolves* 2 of Resolution **676 (WRC-23)** should be understood in the context of the provisions of Articles 45, 47 and 48 of the ITU Constitution, and Article **15** of the Radio Regulations.

The Board furthermore indicated that:

- when considering cases of harmful interference to systems in the RNSS, administrations were encouraged to implement the recommendations given in Circular Letter CR/488: "Prevention of harmful interference to radionavigation-satellite service receivers in the 1 559-1 610 MHz frequency band";
- administrations were urged to continue reporting cases of harmful interference affecting the RNSS to the Bureau, thus enabling the assessment of situations and subsequent actions and progress."

6.12 It was so **agreed**.

6.1 Submission by the Administration of Jordan regarding harmful interference to receivers in the radionavigation satellite service (Document RRB24-3/17, Addendum 4 to Document RRB24-3/4 and Document RRB24-3/DELAYED/8)

6.1.1 **Mr Ciccorossi (acting Head, SSD/SSC)** introduced Document RRB24-3/17, in which the Administration of Jordan reported that it had been experiencing harmful interference to receivers in the RNSS in the 1 559–1 610 MHz band since January 2024. Geolocation measurements by that administration indicated that the source was located west of the Jordanian border. The administration had submitted multiple harmful interference reports to the Bureau and requested assistance under No. **13.2**. In accordance with its procedures, the Bureau had acknowledged receipt of the communications and contacted the administration concerned requesting urgent cooperation but had received no response. The Jordanian Administration had emphasized that the frequency band was allocated on a primary basis to the aeronautical radionavigation service and that such harmful interference could endanger safety-of-life radiocommunication services. It had requested a series of actions from the Board and, in accordance with *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022), had requested the Board to publish the results of its findings on the websites of the ITU and the Bureau.

6.1.2 In Document RRB24-3/DELAYED/8, the Administration of Israel had referred to communications from the Administrations of Jordan and Saudi Arabia and apologized for its delayed response, which it stated was due to the current emergency situation. The Israeli Administration indicated that it was working actively to determine the source of the harmful interference and acknowledged the concerns raised. It expressed its commitment to complying with international regulations and to taking the necessary action to resolve the situation bilaterally with neighbouring administrations.

6.1.3 In response to a question from the **Chair**, he said that the Administration of Jordan had indicated that the source of the harmful interference originated from beyond the country's western border but had not named a specific administration. When the Bureau received interference reports, it tried to narrow down the area of the potential source of interference and had done so in the present case using all relevant geolocation information received, including also from the Administrations of Egypt, Lebanon and Saudi Arabia, which had also reported cases of harmful interference.

6.1.4 **Mr Azzouz** expressed appreciation for the Bureau's efforts to treat the large number of reports of harmful interference affecting safety services, which were of serious concern. He also noted that administrations in the vicinity of Israel had reported cases of harmful interference originating from the territory of that administration. The Administration of Jordan had submitted numerous harmful interference reports and was likely to have performed multiple monitoring actions to ascertain that the pattern and shape of the interfering signals differed such that the signals were used deliberately for jamming and spoofing purposes. The Board should instruct the Bureau to invite the Administration of Israel to take all necessary actions to immediately cease harmful interference that adversely impacted safety services and communication. It should also instruct the Bureau to take further actions if the interference persisted.

6.1.5 **Mr Talib**, noting the seriousness of harmful interference to receivers in the RNSS, observed that some of the questions raised by the Administration of Jordan had been addressed by the Bureau in Addendum 4 to Document RRB24-3/4. He thanked the Administration of Israel for its delayed submission and its willingness to investigate the harmful interference. Noting from the addendum that the Bureau had also received reports of harmful interference from the Administrations of Egypt and Lebanon with geolocation measurements indicating that the source originated from the territory of the Administration of Israel, he asked why the delayed submission referred only to harmful interference reports from Jordan and Saudi Arabia, and whether there was a regulatory deadline by which such interference should be resolved.

6.1.6 **Mr Ciccorossi (acting Head, SSD/SSC)**, responding also to questions from the **Chair**, said that all the administrations listed in Addendum 4 to Document RRB24-3/4 had submitted requests for assistance under No. **13.2** but that in its delayed submission the Administration of Israel had referred only to communications from Jordan and Saudi Arabia. Geolocation information provided to the Bureau for analysis was submitted

by administrations in varying visual or written formats. The Administration of Jordan had informed the Bureau that the source was beyond the country's western border, whereas the Administration of Saudi Arabia had sent maps geolocating the source to northern Sinai. The Administration of Egypt had indicated that the interference was originating from the north-east of the country and WFP had said the origin was to the south of Lebanon. Although No. **15.37** referred to the need for prompt investigation and timely response, there was no deadline for an administration to respond after receiving a communication to the effect that one of its stations was causing harmful interference to a safety service. The Bureau, for its part, acted within 24 to 48 hours of a request for assistance; it might be useful if the Bureau's practice regarding communications on reported harmful interference was set out in a rule of procedure.

6.1.7 The **Chair** said that the Israeli Administration's failure to respond to the Bureau's communications was a concern and its very delayed contribution might have been triggered only by the Administration of Jordan's submission. He underscored the need for prompt action, in accordance with No. **15.37**.

6.1.8 **Ms Mannepalli** said that, according to the information made available by the Administration of Jordan to Board members and, as confirmed by the Bureau, the interference source was within the territory of the Administration of Israel. **Mr Cheng** concurred with that opinion.

6.1.9 **Ms Beaumier** asked whether the Administration of Jordan had provided specific evidence to support its assessment that the interfering signals differed in shape and could be transmitted deliberately for jamming and spoofing purposes, so as to help the Board confirm that the interference was of the nature prohibited under No. **15.1**.

6.1.10 **Mr Ciccorossi (acting Head, SSD/SSC)** said that the Bureau had to rely in principle on the information submitted by administrations. The Administration of Jordan had not included spectrum plots in its geolocation information, whereas other administrations in the region had done so. The Board might also wish to consider reliable available public information, including from academic institutions.

6.1.11 The **Chair** said that the Board was quite confident about the content and substance of the information presented. However, as it did not have any supporting evidence, as such, from the Administration of Jordan corroborating the latter's assessment of the nature of the interference, the Board should word its decision with caution and be careful not to overinterpret information received from an administration.

6.1.12 **Mr Ciccorossi (acting Head, SSD/SSC)** said that, in his view, based on the facts provided by administrations to the Bureau, there was deliberate jamming and spoofing to the RNSS, as opposed to a specific administration.

6.1.13 **Mr Azzouz** said that, in his view, from the information provided by the Administration of Jordan and the characteristics of the interference signals causing active and deception jamming, the interference was of a nature prohibited under No. **15.1** and affected safety-of-life services.

6.1.14 **Mr Alkahtani** said that the Board should indicate that transmissions causing harmful interference to very sensitive and important radionavigation services had to be resolved in a timely manner through immediate action.

6.1.15 The **Chair** recalled that the Administration of Jordan had requested the Board to publish the results of its finding on the websites of the ITU and the Bureau in accordance with *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022) and sought members' views on such action.

6.1.16 **Ms Hasanova** said that she was not in favour of acceding to the request of the Administration of Jordan at the present juncture. The Board had decided not to take action under Resolution 119 (Rev. Bucharest, 2022) at recent meetings.

6.1.17 The **Chair** pointed out that each request was considered on its own merit. The Administration of Israel had responded, albeit very late, to the Bureau's communications regarding harmful interference to receivers in the RNSS of the Administration of Jordan, indicating its willingness to cooperate and investigate any sources of interference present under its jurisdiction. In his view, it would be premature for the Board to accede to the request from the Administration of Jordan regarding the application of *resolves to instruct the*

Radio Regulations Board 2 of Resolution 119 (Rev. Bucharest, 2022) as further actions were expected from the administrations concerned. However, given the increasing number of cases of harmful interference affecting the RNSS, he asked whether the Board would be prepared to make a more general announcement about its concerns to raise awareness of that serious issue beyond ITU stakeholders.

6.1.18 **Ms Hasanova** said that she could agree to the Board making a general announcement on the issue, as did **Mr Azzouz**, who pointed out that the interference was also affecting other organizations in the United Nations system.

6.1.19 **Ms Beaumier** observed that the Board acted in accordance with *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022) upon request from an administration. The request had come from the Administration of Jordan, but the Board was dealing with the case involving that administration for the first time. Having recalled the development of Circular Letter CR/488 and Resolution **676 (WRC-23**), she said that it was not the first time that the Board had been made aware of cases of harmful interference affecting the RNSS. The increasing cases reported by the Bureau were of concern and she was not opposed in principle to the Board providing greater visibility and context in connection with the issue.

6.1.20 The **Chair** agreed that action under *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022) was to be taken upon the request of an administration. The Board would have to be careful to ensure that it was complying with the regulations.

6.1.21 **Ms Mannepalli** said that it would be very difficult for the Board to make a general announcement on the overall situation based on the request of the Administration of Jordan.

6.1.22 **Mr Talib** said that he shared the concerns expressed by previous speakers on the question of *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022). However, as the Bureau had reported, there were several cases where the administrations concerned had failed to acknowledge receipt of, or respond to, communications. The Board might therefore wish to indicate that, should that situation persist, the provision might be applied in the future.

6.1.23 The **Chair** said that the Board could only urge administrations to comply with all relevant provisions. *Resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022) could be invoked only at the request of an administration.

6.1.24 **Mr Cheng** said that, in order to publicize the issue, relevant general information could be posted on the website. **Mr Linhares de Souza Filho** agreed, suggesting that it might be included in the Board's Special Topics page.

6.1.25 The **Chair** proposed that the Board conclude on the matter as follows:

"The Board considered in detail Addendum 4 to Document RRB24-3/4 and the submission from the Administration of Jordan, contained in Document RRB24-3/17, and also noted Document RRB24-3/DELAYED/8 from the Administration of Israel for information. The Board thanked the Administration of Jordan for reporting cases of harmful interference in the band 1 559–1 610 MHz to RNSS receivers originating from sources west of its borders and also thanked the Bureau for treating the cases of harmful interference and providing assistance to administrations reporting on the current status. The Board concluded as follows:

- While it expressed its appreciation for the response from the Administration of Israel indicating its willingness to cooperate and investigate any sources of harmful interference present under its jurisdiction, the Board also expressed concern over administrations' tardy acknowledgment of receipt of information reporting harmful interference present from stations under their jurisdiction; in compliance with RR No. **15.35**, such acknowledgements should be provided by the quickest means available.
- The Board noted that systems in the RNSS included radionavigation systems used by civil aviation, and that the reported harmful interference degraded those systems, but also telecommunication networks requiring precise time synchronization and other radio stations used for humanitarian assistance in the field, thus degrading safety services. The Board stressed the need to comply with RR No. **4.10** in such situations.

- The Board further reminded administrations that, in compliance with RR No. **15.37**, when a communication was received that one of their stations was causing harmful interference to a safety service, prompt investigation of the matter was required and that any necessary remedial action needed to be taken and a response provided in a timely manner.
- Noting that harmful interference signals had been reported with the characteristics of unnecessary transmissions, or the transmission of superfluous signals (commonly referred to as jamming) or the transmission of false or misleading signals (commonly referred to as spoofing), the Board expressed grave concern that such transmissions were in direct contravention of RR No. **15.1**.
- The Board also highlighted the need to comply with Articles 45 and 47 of the ITU Constitution and Resolution **676 (WRC-23)** on the "Prevention and mitigation of harmful interference to the radionavigation-satellite service in the frequency bands 1 164–1 215 MHz and 1 559–1 610 MHz", and the relevance of Circular Letter CR/488, "Prevention of harmful interference to radionavigation-satellite service receivers in the 1 559–1 610 MHz frequency band".

The Board instructed the Bureau to invite the Administration of Israel to take all necessary actions to immediately cease harmful interference that adversely impacted on safety services and strongly urged the Administrations of Israel and Jordan to cooperate in goodwill in promptly resolving all cases of harmful interference. Furthermore, the Board urged the administrations concerned to comply with all the relevant provisions of Articles 45 and 47 of the ITU Constitution, RR Nos. **4.10**, **15.1**, **15.28**, **15.37** and the *resolves* of Resolution **676 (WRC-23)**, in particular when harmful interference adversely affected safety services.

With reference to the request from the Administration of Jordan regarding the application of *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022), the Board decided that its application was premature seeing that further actions would be taken by the administrations concerned."

6.1.26 It was so **agreed**.

6.2 Submissions by other administrations regarding harmful interference to receivers in the radionavigation-satellite service (Addendum 4 to Document RRB24-3/4 and Documents RRB24-3/DELAYED/9 and 10)

6.2.1 **Mr Ciccorossi (acting Head, SSD/SSC)** introduced Document RRB24-3/DELAYED/9, in which the Administration of Estonia informed the Bureau that it was seeking assistance under No. **13.2** and in line with Resolution **676 (WRC-23)** in resolving cases of harmful interference to the RNSS in its airspace and territorial waters. According to the submission, measurements conducted by the Administration of Estonia indicated that the source of the harmful interference was located in the territory of the Administration of the Russian Federation. Although that administration had acknowledged receipt of communications received in accordance with No. **15.35**, it had not provided a substantive response. The Estonian Administration had therefore requested the Bureau to bring the issue to the Board's attention. It had provided statistics on the interference reported by airlines in the annex.

6.2.2 In Document RRB24-3/DELAYED/10, the Administration of Lithuania indicated that cases of harmful interference affecting receivers in the RNSS were continuing to increase. The measurements performed by the Lithuanian Administration indicated that the source of harmful interference was near the border with Belarus and Poland. Detailed information, including on the distribution of affected aircraft and a geolocation map, was provided in the annex.

6.2.3 **Ms Mannepalli** said that it was clearer from the technical information presented in the annex than from the information provided by the Administration of Jordan under the previous sub-item that the interference signal appeared to be very strong, intentional and more or less continuous.

6.2.4 **Ms Hasanova** expressed concern at the late response to communications by administrations, which, in accordance with No. **15.35**, should acknowledge receipt of information by the quickest means possible.

6.2.5 The **Chair** said that, while acknowledgement of receipt of communications under No. **15.35** was one step in the process, administrations should be reminded of the importance of prompt investigation and

timely remedial action in accordance with No. **15.37**. He noted that the Bureau acted very diligently in response to requests for assistance under No. **13.2** and in the application of Article **15** and suggested that it might prepare a preliminary draft rule of procedure formalizing its practice to encourage more timely response and action from administrations.

6.2.6 **Mr Azzouz** said that the Board should instruct the Bureau to continue supporting the efforts of the administrations concerned to resolve interference issues, especially those related to safety-of-life services. It should urge all administrations concerned to comply with the relevant regulatory provisions, and to cooperate in goodwill to resolve interference affecting safety services as promptly as possible. It should also instruct the Bureau and any affected administrations to report further such cases directly to the Board.

6.2.7 **Mr Talib**, recalling Addendum 4 to Document RRB24-3, said that the Board might wish to make its conclusions under sub-item 6.2 of a general nature and applicable to all the cases of harmful interference to the RNSS handled by the Bureau in 2024.

6.2.8 The **Chair** agreed that the Board's conclusions under the sub-item should apply in respect of all cases set out in Addendum 4. In response to a question from **Mr Botha (SGD)**, he confirmed that the Bureau should communicate its decision under sub-item 6.1 to the Administrations of Jordan and Israel and the other administrations concerned in the neighbouring area. Its decision under sub-item 6.2 should be communicated to all the other administrations listed in Addendum 4 to Document 24-3/4. **Ms Beaumier** agreed.

6.2.9 He proposed that the Board conclude on the matter as follows:

"The Board further considered Addendum 4 to Document RRB24-3/4, reporting on submissions from other administrations not covered in agenda item 6.1 regarding harmful interference affecting receivers in the RNSS, and also noted Documents RRB24-3/DELAYED/9 and RRB24-3/DELAYED/10 for information. The Board thanked the Bureau for treating the cases of harmful interference, aiding administrations, acting in a diligent manner and reporting on other cases of harmful interference to receivers in the RNSS received in 2024. In response:

- The Board noted with grave concern the increasing number of cases of harmful interference affecting safety services, civil aviation and maritime services, telecommunication networks requiring precise time synchronization and other radio stations used for humanitarian assistance in the field.
- The Board expressed considerable concern at the late acknowledgements of receipt of information reporting harmful interference present from stations under their jurisdictions; in compliance with RR No. **15.35**, such acknowledgements should be provided by the quickest means available.
- The Board stressed the need to comply with RR No. **4.10** whenever harmful interference degraded systems of safety services in the RNSS.
- Furthermore, the Board reminded administrations of the need for timely actions and responses whenever receiving a communication that one of their stations was causing harmful interference to a safety service, in compliance with RR No. **15.37**.
- The Board expressed grave concern about the reported unnecessary transmissions, transmissions of superfluous signals (jamming) and transmissions of false or misleading signals (spoofing), which were in direct contravention of RR No. **15.1**.

The Board recognized the Bureau's practice in the application of RR Article **15** when treating cases of harmful interference and instructed the Bureau to prepare a preliminary draft rule of procedure formalizing that practice for the Board's consideration at its 98th meeting.

The Board urged all administrations concerned to:

- comply with all the relevant provisions of Articles 45 and 47 of the ITU Constitution, RR Nos. **4.10**, **15.1**, **15.28**, **15.37** and the *resolves* of Resolution **676 (WRC-23),** in particular when harmful interference adversely affected safety services;

- to cooperate in goodwill to solve the cases of harmful interference affecting safety services as promptly as possible."

6.2.10 It was so **agreed**.

7 Issues regarding the provision of STARLINK satellite services in the territory of the Islamic Republic of Iran

7.1 Submission by the Administration of the Islamic Republic of Iran regarding the provision of STARLINK satellite services in its territory (Document RRB24-3/16)

7.2 Submission by the Administration of the United States regarding the provision of STARLINK satellite services in the territory of the Islamic Republic of Iran (Documents RRB24-3/21 and RRB24-3/DELAYED/3)

7.3 Submission by the Administration of Norway regarding the provision of STARLINK satellite services in the territory of the Islamic Republic of Iran (Documents RRB24-3/22, RRB24-3/DELAYED/4 and RRB24-3/DELAYED/7)

7.1 **Mr Vallet (Chief, SSD)**, introducing the item, said that Document RRB24-3/16 contained the response from the Administration of the Islamic Republic of Iran to the Board's request at the 96th meeting for further information on any action the administration had taken since the 95th Board meeting to comply with *resolves* 3 i) of Resolution **22 (WRC-19)**. In the document, the administration reiterated that STARLINK terminals continued to operate without authorization in its territory. The administration reconfirmed that, despite its efforts to detect and identify the terminals' locations, it was not practically feasible for it to detect all such terminals owing to their small size and portability and to the country's size and topography. It had provided no information on the nature of the efforts undertaken.

7.2 Documents RRB24-3/21 and RRB24-3/22 contained the responses from the Administrations of the United States and Norway, respectively, to the Board's request at the 96th meeting for further information on any additional actions taken since the 95th Board meeting to comply with *resolves* 1, 2 and 3 of Resolution **22 (WRC-19)** and the *resolves* of Resolution **25 (Rev.WRC-03)**. The Administration of the United States had restated its view that it was acting in compliance with the relevant provisions, referring to Article **18.1** on which Resolution **22 (WRC-19)** was based, in the sense that the transmitting stations in question had been brought into the Islamic Republic of Iran and used by private persons and enterprises, not by the United States Administration, and in violation of Iranian law. Moreover, the United States Administration had been informed by SpaceX that it did not market or sell its satellite services in the Islamic Republic of Iran and that SpaceX's terms of service prohibited users from operating SpaceX equipment in any country without that country's authorization. Terminals whose location had been notified to the operator by the Iranian Administration had been disabled; in the absence of information from the Iranian Administration on the location of the remaining terminals, it was not possible to take further action to address the issue. The Administration of the United States also considered that there was no call to apply *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022), as it had taken action to address unauthorized uplink transmissions from satellite earth stations when provided with the requisite information by the Iranian Administration.

7.3 The Administration of Norway, for its part, said that it had no further information to provide in response to the Board's request and pointed out that there had been no additional reports of terminals operating without authorization on Iranian territory since the 96th Board meeting. It was of the view that the requirements set out in the relevant provisions could not be construed to mean that filing administrations had to oblige their operators to equip satellite systems to exclude territories from downlink coverage at the request of other administrations, nor did it believe that Resolution **25 (Rev.WRC-03)** applied to the STARLINK

system, as the ITU-R recommendations relating to the resolution covered only MMS terminals in the L-band and made no mention of frequency bands above 3 GHz.

7.4 In Document RRB24-3/DELAYED/3, the Iranian Administration, responding to Document RRB24-3/21 from the Administration of the United States, disagreed with the latter's interpretation of STARLINK's technical capabilities, citing a document submitted to ITU-R Working Party 4A (Document 4A/330, appended to Document RRB24-3/DELAYED/3) in which Eutelsat explained how its non-GSO system complied with *resolves* 1 and 2 of Resolution **22 (WRC-19)**. The Iranian Administration also disagreed with the position of the Administration of the United States on the application of *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022), which did not mention a specific timeframe for implementation by the Board but simply stated that the provision was to be implemented at the request of an administration.

7.5 In Document RRB24-3/DELAYED/4, the Iranian Administration, responding to Document RRB24-3/22 from the Administration of Norway, said that the latter's statement that there had been no further reports of terminals operating without authorization in Iranian territory in fact implied that the situation remained unchanged since the 96th Board meeting, i.e. that STARLINK terminals continued to operate without authorization in Iranian territory. The rational solution in that case would be for the operator to disable all such terminals. In addition, neither the title nor the *resolves* of Resolution **25 (Rev.WRC-03)** limited the scope of the resolution to specific frequency bands; they merely referred to fixed, mobile or transportable terminals.

7.6 In Document RRB24-3/DELAYED/7, the Administration of Norway, responding to Document RRB24-3/DELAYED/4 from the Iranian Administration, quoted *considering* d) to g) and *requests administrations* 1 and 2 of Resolution **25 (Rev.WRC-03)** to back up its assertion that the resolution did not apply to the STARLINK system.

7.7 In response to a query from **Mr Talib**, he added that a document submitted to ITU-R Working Party 4A (Document 4A/330) indicated that it was technically possible to disable terminals on a specific geographical territory and that OneWeb had done so. None of the documents currently before the Board or ITU-R Working Party 4A contained evidence that STARLINK had the same capability.

7.8 **Mr Azzouz** said that the point was to solve the problem, not to discuss interpretations thereof. He noted that the Iranian Administration continued to do all it could to identify the location of terminals but that its task was hampered by the nature of the country's terrain. No evidence had been provided that either the operator or the notifying administrations had endeavoured to disable STARLINK services on Iranian territory, and yet publicly available information showed that such action had been possible elsewhere. In his view, both STARLINK and the notifying administrations could easily resolve the long-standing issue of space or earth stations operating in Iranian territory without authorization. The Board should reiterate its decision from the 96th meeting and instruct the Administrations of the United States and Norway to immediately disable all such stations. It should also request all three administrations concerned to report on progress to the next Board meeting.

7.9 The **Chair,** pointing out that the Board had no information from STARLINK on its geolocation capabilities, said that there were mainly two ways to geolocate terminals seeking access to a service. The administrative approach involved granting access to a terminal if the user address was in a country that had given its authorization for operation; that approach did not allow for situations in which terminals were moved illegally from a country where use was authorized to one where it was not. The technical approach, according to the information provided by Eutelsat, was based on the GPS signal emitted by the terminal where the terminal would cease all uplink transmissions if within an unauthorized zone; Based on reliable information that seemed to confirm the hacking of STARLINK systems in some areas, it would be surprising if the operator had taken no action against such behaviour. The key to properly managing any system was to know the user's approximate location within an area to ensure a fair distribution of the satellite capacity to all users in that area.

7.10 **Mr Talib** said that, in his experience as part of the administration of a large territory, it was not possible for administrations to locate all terminals operating on their respective territory. He therefore considered that it would not be practical for the Iranian Administration to draw up an exhaustive list.

7.11 **Ms Mannepalli** pointed out that the issue of geolocation – the notifying administrations stating that the terminals would be disabled if information was provided on their location, the Iranian Administration stating that it was unable to provide that information because of the size of its territory – had been discussed in detail at the previous Board meeting in the light of publicly available information that all the terminals in a specific territory could be disabled; she questioned the feasibility of reiterating the Board's request in that regard. Furthermore, she was not sure how the Board should deal with the statement by the Administration of the United States, citing Article **18.1**, that it was not responsible for controlling the use of terminals taken from one territory to another where such use was not authorized.

7.12 The **Chair**, noting that regulatory measures for and the implementability of limiting unauthorized operation of non-GSO terminals would be discussed under agenda item 1.5 of WRC-27, said that he had also been puzzled by the assertion by the Administration of the United States that the administration was not responsible when an individual or enterprise, as opposed to a country, made unauthorized use of STARLINK terminals on Iranian territory; it had always been his understanding that the licence granted to any individual or enterprise for the establishment or operation of stations to a space system authorized by an administration included an obligation of compliance with Article **18.1**.

7.13 **Mr Alkahtani** said that the case clearly involved unauthorized transmissions from a country in which STARLINK services were not authorized. While it was true that the earth stations making those transmissions were not operated by the Administration of the United States and had been brought illegally into the Islamic Republic of Iran, it was also true that the stations could not operate unless STARLINK allowed the transmission signal to go through. STARLINK should not allow earth stations in Iranian territory to communicate with its satellites. It appeared impractical for the Iranian Administration to provide a list of all the earth stations involved, given the size of its territory, but the point was to deactivate the service, not to locate individual earth stations. He also noted that the Administration of the United States had not taken the requisite measures to prevent communications between the earth stations and the STARLINK satellite system.

7.14 **Ms Beaumier** expressed disappointment that no progress had been made in the case. She appreciated the fact that small terminals could be difficult to locate but would have liked the Iranian Administration to elaborate on the efforts it had made to that effect. The Administration of the United States had a point when it said that it itself was not violating Resolution **22 (WRC-19)** in what was basically a case of smuggling. However, while it was not an obligation under the resolution for satellite operators or notifying administrations to track millions of earth stations to monitor compliance, at least not on an ongoing basis, it was also true that once unauthorized transmissions had been reported, those operators and administrations had an obligation to act. She failed to understand why STARLINK had not simply disabled the terminals, as it had proven possible to do so in other situations. It was also true that the administration reporting unauthorized use had to take all possible action under *resolves* 3 i) of Resolution **22 (WRC-19)**, but the application of *resolves* 3 ii) should not be conditional on such action being taken, as the Administration of the United States appeared to imply in Document RRB24-3/21. Furthermore, it was not helpful for the Administration of Norway to put the onus on the Iranian Administration to provide information; indeed, she was not sure exactly what information was being sought. It was also unclear why the Administration of Norway referred to the exclusion of territory, as the Iranian Administration had never evoked such a measure as a possible remedy. At its 96th meeting, the Board had strongly urged the Administrations of Norway and the United States to comply with the relevant provisions by taking immediate action to disable STARLINK terminals operating in Iranian territory in the same manner as the operator had done in several other countries. Neither administration had addressed that point in its submission and the Board should therefore continue to insist on it.

7.15 Regarding the application of *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022), such application was probably still premature but closer to being justified.

7.16 The **Chair** proposed that the Board should conclude as follows on the matter:

"The Board carefully considered Document RRB24-3/16 from the Administration of the Islamic Republic of Iran, Document RRB24-3/21 from the Administration of the United States and Document RRB24-3/22 from the Administration of Norway, on the provision of STARLINK satellite transmissions in Iranian territory. The

Board also noted Documents RRB24-3/DELAYED/3 and RRB24-3/DELAYED/4, provided by the Administration of the Islamic Republic of Iran in response to the submissions of the Administrations of the United States and Norway, respectively and Document RRB24-3/DELAYED/7, provided by the Administration of Norway in response to Document RRB24-3/DELAYED/4, for information. The Board thanked the three administrations for providing the information requested at its 96th meeting and noted the following issues:

- The Administration of the Islamic Republic of Iran had again reported the continuing unauthorized operation of STARLINK terminals within its territory.
- The Administration of the Islamic Republic of Iran had reconfirmed that despite its efforts to detect and identify the terminals' locations, it was not practically feasible to detect all STARLINK terminals operating without authorization within its territory owing to the small size and portability of the terminals and to the vast geography and challenging topography of its country. However, no details had been provided on the nature of the efforts undertaken.
- With reference to the information provided by the Administrations of Norway and the United States, the Board expressed regret that their responses had not focused on solutions and expressed grave concern at the complete lack of progress since its 96th meeting in resolving the long-standing matter. It further clarified that there was no obligation for the satellite operator or notifying administration to track earth stations licensed by other countries to determine their location and compliance with its service contract or to remove a territory from the satellite coverage area, but that once unauthorized transmissions were reported in a specific territory, there was an obligation for the satellite operator to act, to the extent practicable, to remedy the situation pursuant to *resolves* 3 ii) of Resolution **22 (WRC-19)**; that obligation should not be conditional on the ability of the reporting administration to provide information on terminals operating without authorization.
- The Board reconfirmed that the services provided by STARLINK were within the scope of Resolution **25 (Rev.WRC-03)**.
- Furthermore, the Administrations of Norway and the United States had not provided any explanation as to why it was not possible to disable systematically all STARLINK terminals operating without authorization in the territory of the Islamic Republic of Iran, given that, based on reliable publicly available information, it had been possible to do so in several other countries.

Consequently, the Board reminded the Administrations of Norway and the United States that establishing administrative, contractual and operational restrictions on STARLINK customers did not qualify as compliance with the provisions of Article **18** and Resolution **22 (WRC-19)** or the *resolves* of Resolution **25 (Rev.WRC-03)** but that such compliance meant obtaining authorization from the administration in whose country the STARLINK terminals were operating and stopping transmissions where such operation had not been authorized.

The Board instructed the Bureau to invite the Administrations of Norway and the United States to explain specifically why it had been impossible to disable all STARLINK terminals operating without authorization in the territory of the Islamic Republic of Iran in the same manner as it had been done in several other countries and thus to comply with Resolutions **22 (WRC-19)** and **25 (Rev.WRC-03)**.

Considering that further information was expected, the Board decided that it remained premature to accede to the request from the Administration of the Islamic Republic of Iran under *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022) but that, in the absence of the requested explanation and information at its 98th meeting, the Board would reconsider its decision in that regard."

7.17 It was so **agreed**.

8 Submission by the Administration of Angola acting on behalf of 16 Southern African Development Community (SADC) member States requesting the Board's assistance in the submission of seven coordination filings at 12.2°E, 16.9°E, 39.55°E, 42.25°E, 50.95°E, 67.5°E and 71.0°E, and the filing identified by the Bureau under Resolution 170 (Rev.WRC-23) (Document RRB24-3/19)

8.1 **Mr Wang (Head, SSD/SNP)**, introducing the item, said that Document RRB24-3/19 presented a plan by 16 SADC Member States to develop a regional shared satellite system to provide telecommunication services, including broadband access, to schools and villages in their countries, in an effort aligned with the Space Agenda 2030 and the United Nations Sustainable Development Goals. Having explored, with the Bureau's assistance, various ways to secure a suitable orbital position for the shared system, the administrations concerned had concluded that the application of Resolution **170 (Rev.WRC-23)**, and the special procedure provided for therein, offered better chances of success than the current normal procedure set out in Articles **9** and **11** for non-planned space services, Appendices **30** and **30A** for additional uses and Appendix **30B** for additional systems. Accordingly, and given that it would be difficult to find an orbital position without frequency coordination with other administrations potentially affected and that the special procedure in Resolution **170 (Rev.WRC-23)** could only be applied once, the administrations concerned requested the Board to allow the Administration of Angola, acting on their behalf, to submit filings at seven orbital positions and at an eighth position identified by the Bureau; to waive the cost-recovery fees of those eight submissions; and to instruct the Bureau to process those submissions in accordance with Resolution **170 (Rev.WRC-23)**. The Board should also ask the Administration of Angola to inform the Bureau of the optimal orbital position selected as soon as it had been decided based on the progress of coordination; and instruct the Bureau to cancel all other remaining submissions when the Administration of Angola submitted a Part B notice.

8.2 In reply to a question from **Mr Azzouz**, he added that the first seven orbital positions had been selected from among 16 positions allotted to the countries concerned in the Appendix **30B** Plan. A preliminary examination had shown that the networks at the selected orbital positions would involve a heavy coordination burden. At the request of the 16 administrations, the Bureau had scanned the entire visible arc and identified several positions potentially able to reduce, if not eliminate entirely, that burden. It would inform the administrations accordingly, providing a comparison of each position's relative advantages and disadvantages.

8.3 In reply to a query from **Mr Azzouz**, the **Chair** said that it was his understanding that the 16 countries had 16 entries in Appendix **30B**. They had decided to provide filings for seven of them and had asked the Bureau to help them identify an eighth. Once the eighth position had been identified, the Administration of Angola would file the relevant Part A notice.

8.4 **Mr Azzouz** thanked the Bureau for its assistance to developing countries. He expressed support for the request, which would ultimately also save several orbital positions, and suggested that the case be mentioned in the Board's report to WRC-27 under Resolution **80 (Rev.WRC-07)**, as an example of the good work done by the Board and the Bureau.

8.5 **Ms Hasanova** and **Mr Cheng** pointed out that cost-recovery fees did not fall under the Board's remit and that the administrations should apply for a free entitlement under Council Decision 482. They thanked the Bureau for its assistance to developing countries and expressed support for the request.

8.6 **Mr Talib** commended the countries on their initiative, which was an example of the kind of pooling of resources that should be encouraged. He expressed support for four of the five requests set out in Document RRB24-3/19; the request relating to cost-recovery fees did not fall within the Board's remit. It was his understanding that the orbital position selected with the Bureau's assistance would involve minimal, not zero, coordination.

8.7 **Mr Nurshabekov**, recalling the tremendous support that Kazakhstan had received from ITU when it had sought optimal positions for its first satellites, expressed support for the request, which had been presented in a clear and transparent document. He agreed that cost-recovery issues were not within the Board's purview but nevertheless stressed the importance of resolving them.

8.8 **Ms Beaumier** also expressed support for the request, given that the procedure under Resolution **170 (Rev.WRC-23)** was intended to provide equitable access to the frequency bands subject to Appendix **30B**, to promote their use in an economically viable manner and to facilitate coordination. The coordination burden might appear heavy at the moment but many filings currently requiring coordination might be subsequently cancelled; only time would tell which position was best. The approach of the SADC countries was consistent with the spirit of Resolution **170 (Rev.WRC-23)**. Moreover, deferring a decision to the next WRC would be detrimental to their interests and to the overall objective of past conference decisions. The Board should therefore support the request but leave aside the question of cost recovery, which lay outside its purview.

8.9 **Mr Fianko** commended the 16 SADC Member States for their efforts to establish an economically viable system. Their request was consistent with the spirit of Resolution **170 (Rev.WRC-23)**, and waiting for a decision until WRC-27 would significantly delay their ability to set up the system and achieve the aspirations of the Space Agenda 2030 and the Sustainable Development Goals. He therefore supported the request.

8.10 **Mr Linhares De Souza Filho** also expressed support for the request, as did **Mr Di Crescenzo**, who further agreed that the matter should be highlighted in the Board's report under Resolution **80 (Rev.WRC-07)**, with a view to reporting on progress in the implementation of Resolution **170 (Rev.WRC-23)**.

8.11 In response to suggestions made by **Mr Fianko** and **Mr Linhares De Souza Filho**, the **Chair** repeated that it was not within the purview of the Board to waive cost-recovery fees. The 16 administrations would have to submit a request to that effect to the Council. In his view, the Board should not enter into a discussion of how the administrations concerned might proceed in that regard, given that its members were not experts on cost recovery.

8.12 **Mr Vallet (Chief, SSD)** pointed out that the Administration of Angola, as the notifying administration, would be entitled to submit a request in respect of only one filing per year under Council Decision 482. The 16 administrations concerned could not submit separate requests for the other filings.

8.13 **Ms Beaumier** agreed that it would be appropriate to include the matter in the Board's report under Resolution **80 (Rev.WRC-07)**. It would not be appropriate, however, for the Board's decision to contain guidance on the question of cost recovery, as Board members were not experts on Council Decision 482.

8.14 The **Chair** proposed that the Board should conclude as follows on item 8 of the agenda:

"Having considered in detail the request of the Administration of Angola as contained in Document RRB24-3/19, the Board commended the administrations of the 16 Southern African Development Community (SADC) member States for their endeavour to implement a regional system that was economically viable and thanked the Bureau for its assistance to those administrations in their efforts to identify suitable orbital positions. With reference to the request from the 16 SADC member States, the Board raised the following points:

- The Board noted that aspects relating to cost-recovery fees were not within the Board's purview and that such matters should be referred to the ITU Council for its consideration.
- The purpose of Resolution **170 (Rev.WRC-23)** was to enhance equitable access to the frequency bands subject to RR Appendix **30B**, including to facilitate coordination for an additional system, the service area of which was limited to the national territories of the administrations.
- The 16 SADC member States' approach and request were in line with the intent of that resolution and additionally would permit national use in a technically and economically viable manner.
- Deferring the consideration of the request to WRC-27 for a decision would be detrimental to the 16 SADC member States' interest and not in line with the objectives of previous WRC decisions.

Consequently, the Board decided to accede to the request from the 16 SADC member States to allow the Administration of Angola, acting on behalf of the administrations of the 16 SADC member States, to submit simultaneously seven filings under Resolution **170 (Rev.WRC-23)** at orbital positions 12.2°E, 16.9°E, 39.55°E, 42.25°E, 50.95°E, 67.5°E and 71°E and one filing at a position that would be chosen based on the Bureau's reply to the 16 SADC member States' request for assistance. The Board therefore instructed the Bureau to:

- process the eight filings in accordance with Resolution **170 (Rev.WRC-23)** and publish them in Part A Special Sections;
- cancel all the other remaining submissions and associated Part A Special Sections under Resolution **170 (Rev.WRC-23)** from the Administration of Angola when it submitted a Part B notice.

The Board invited the Administration of Angola to inform the Bureau of the selected optimal orbital position as soon as it had been decided based on the progress of coordination before the Part B stage.

Furthermore, the Board decided to include the issue in its report on Resolution **80 (Rev.WRC-07)** to WRC-27."

8.15 It was so **agreed**.

9 Election of the Vice-Chair for 2025

9.1 Having regard to No. 144 of the ITU Convention, the Board **agreed** that Mr A. Linhares de Souza Filho, Vice-Chair of the Board for 2024, would serve as its Chair in 2025.

9.2 The Board **agreed** to elect Ms S. Hasanova as its Vice-Chair for 2025 and thus as its Chair for 2026.

10 Confirmation of the next meeting for 2025 and indicative dates for future meetings

10.1 In reply to a question from **Mr Azzouz**, **Mr Botha (SGD)** said that, unfortunately, it would be very difficult to move the dates of the 98th meeting to avoid Ramadan because of the availability of Room L and the 14-week period needed between meetings.

10.2 **Mr Azzouz** said that the Board members who celebrated Ramadan appreciated the difficulties in moving the dates of the March 2025 meeting and would not insist.

10.3 The **Director** thanked the Board members concerned for their understanding.

10.4 The Board **confirmed** the dates for the 98th meeting as 17–21 March 2025 (Room L).

10.5 The Board further tentatively confirmed the dates for its subsequent meetings in 2025, as follows:

- 99th meeting: 14–18 July 2025 (Room L);
- 100th meeting: 10–14 November 2025 (Room L);

and in 2026, as follows:

- 101st meeting: 23–27 March 2026 (Room L);
- 102nd meeting: 29 June–3 July 2026 (Room L);
- 103rd meeting: 26–30 October 2026 (Room L).

11 Other business

11.1 The **Chair** noted that there was no other business.

12 Approval of the summary of decisions

12.1 The Board **approved** the summary of decisions contained in Document RRB24-3/23.

13 Closure of the meeting

13.1 Board members took the floor to congratulate the Chair on his successful tenure and his able handling of sensitive issues. They also thanked the Chair of the Working Group on the Rules of Procedure for her hard work and the great progress made, the Director for his invaluable support and guidance, and the Bureau staff, including Mr Botha and Ms Gozal, for their assistance. They congratulated the incoming vice-chair and chair of the Board.

13.2 **Ms Hasanova** said that she was grateful for her election as vice-chair and for the kind words on her chairmanship of the working group. She would continue to do her best to learn and improve.

13.3 The **Deputy Director**, noting that she would be retiring from ITU at the end of January 2025, said that it had been a great pleasure and privilege to be involved in the Board's work, first as an RRB member and then as an ITU official. She wished the Board continued success in its service to the Union.

13.4 The **Director** commended the Chair for a job well done and his successful handling of a difficult meeting and congratulated the incoming chair and vice-chair on their appointment. Thanking Board members for their kind words, he said that it was very rewarding for the Bureau to support the Board, and it did so with pride.

13.5 The **Chair,** having been called away on other business, asked the Vice-Chair to deliver the following remarks on his behalf.

13.6 He noted that goodwill, a spirit of friendship and cooperation, and teamwork were key to the Board's success, and said that the summary of decisions was unprecedented in length because of the numerous rules of procedure agreed on and the number of agenda items successfully addressed. He thanked the Vice-Chair, the Chair of the Working Group on the Rules of Procedure, the Director and the Bureau staff, including Mr Botha, for their support during his rewarding tenure. He wished the incoming chair and vice-chair every success. He thanked the speakers for their kind words and wished all members a safe journey home.

13.7 The **Vice-Chair** closed the meeting at 1700 hours on Tuesday, 19 November 2024.

The Executive Secretary:	The Chair:
M. MANIEWICZ	Y. HENRI