

MINUTES*

OF THE

98th MEETING OF THE RADIO REGULATIONS BOARD

17 – 21 March 2025

Present: Members, RRB

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

Executive Secretary, RRB

Mr M. MANIEWICZ, Director, BR

Précis-writers

Mr P. METHVEN, Ms C. RAMAGE and Ms L. MUNSLOW

Also present: Ms D. TOMIMURA, Deputy to the Director, BR, and Chief, IAP

Mr A. VALLET, Chief, SSD
Mr J.A. CICCOROSSO, Head, SSD/SSS
Mr C.C. LOO, Head, SSD/CSS
Mr D. THAM, Head, SSD/USS
Mr J. WANG, Head, SSD/SPS
Mr A. KLYUCHAREV, SSD/SPS
Mr N. VASSILIEV, Chief, TSD
Mr K. BOGENS, Head, TSD/FMD
Mr X. ZHOU, TSD/FMD
Ms I. GHAZI, Head, TSD/BCD
Mr N. MALAGUTI
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 98th meeting of the Board. The official decisions of the 98th meeting of the Radio Regulations Board can be found in Document RRB25-1/27.

Subjects discussed	Documents
1 Opening of the meeting	-
2 Adoption of the agenda	RRB25-1/OJ/1(Rev.1)
3 Report by the Director, BR	RRB25-1/8(Rev.1) RRB25-1/8(Rev.1)(Add.1) RRB25-1/8(Rev.1)(Add.2) RRB25-1/8(Rev.1)(Add.4)
4 Rules of Procedure List of Rules of Procedure	RRB25-1/1
5 Requests to extend the regulatory time-limit to bring into use the frequency assignments to satellite networks/systems	
5.1 Submission by the Administration of Nigeria requesting an extension of the regulatory time-limits to bring into use the frequency assignments to the NIGCOMSAT-2B (9.5°W) and NIGCOMSAT-2D (16°W) satellite networks	RRB25-1/2 RRB25-1/DELAYED/7
5.2 Submission by the Administration of Indonesia requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the NUSANTARA-NS1-A (113E) satellite network	RRB25-1/7 RRB25-1/11
5.3 Submission by 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	RRB25-1/10
5.4 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	RRB25-1/15
5.5 Submission by the Administration of Mexico requesting an extension of the regulatory time-limit to bring into use the frequency assignment to the THUMBSAT-1 satellite system	RRB25-1/18 RRB25-1/DELAYED/6
5.6 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 CAS500-2 satellite network	RRB25-1/19
5.7 Submission by the Administration of the Sultanate of Oman requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the OMANSAT-73.5E satellite network	RRB25-1/21 RRB25-1/DELAYED/5
5.8 Submission by the Administration of Cambodia requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the CBGSAT-96.1E satellite network	RRB25-1/23

- 6** Harmful interference to receivers in the radionavigation-satellite service [RRB25-1/8\(Rev.1\)\(Add.3\)](#)
- 6.1** Submission by the Administration of Jordan regarding harmful interference to receivers in the radionavigation-satellite service [RRB25-1/4](#)
[RRB25-1/DELAYED/1](#)
Submission by the Administration of the State of Israel regarding harmful interference to receivers in the radionavigation-satellite service [RRB25-1/9](#)
Submission by the Administration of Egypt regarding harmful interference to receivers in the radionavigation-satellite service [RRB25-1/16](#)
- 6.2** Submission by the Administrations of Estonia, Latvia and Lithuania regarding harmful interference to receivers in the radionavigation-satellite service [RRB25-1/12](#)
Submission by co-signed administrations concerning harmful interference to satellite networks in the broadcasting-satellite service of France and to receivers in the radionavigation-satellite service (section 2) [RRB25-1/17](#)
- 7** Harmful interference to satellite networks at 5°E
Submission by the Administration of Sweden regarding harmful interference to Swedish satellite networks at the orbital position 5°E [RRB25-1/6](#)
[RRB25-1/13](#)
[RRB25-1/8\(Rev.1\)\(Add.5\)](#)
Submission by co-signed administrations concerning harmful interference to satellite networks in the broadcasting-satellite service of France and to receivers in the radionavigation-satellite service (section 1) [RRB25-1/17](#)
[RRB25-1/8\(Rev.1\)\(Add.5\)](#)
[RRB25-1/DELAYED/8](#)
Submission by the Administration of Luxembourg regarding harmful interference to the ASTRA-4A satellite located at 5°E [RRB25-1/20](#)
- 8** Issues related to footnote No. 5.429 of the Radio Regulations
Submission by the Administration of Tunisia concerning the addition of Tunisia's name in footnote No. 5.429 at WRC-23 for the allocation of the band 3 300 – 3 400 MHz to the fixed and mobile services on a primary basis [RRB25-1/5](#)
Submission by the Administration of Italy regarding the Administration of Tunisia's request to be added to footnote No. 5.429 of the Radio Regulations [RRB25-1/26](#)
- 9** Issues regarding the provision of STARLINK satellite services in the territory of the Islamic Republic of Iran [RRB25-1/DELAYED/2](#)
[RRB25-1/DELAYED/3](#)
Submission by the Administration of the Islamic Republic of Iran regarding the provision of STARLINK satellite services in the territory of the Islamic Republic of Iran [RRB25-1/14](#)

Submission by the Administration of Norway regarding the provision of STARLINK satellite services in the territory of the Islamic Republic of Iran

[RRB25-1/25](#)
[RRB25-1/DELAYED/4](#)

- 10** Submission by the Administration of Angola acting on behalf of administrations of 16 Southern African Development Community (SADC) member States requesting assistance in the submission of ten coordination filings under Resolution 170 (Rev.WRC-23)
- 11** Confirmation of the next meeting for 2025 and indicative dates for future meetings
- 12** Other business
- 13** Approval of the summary of decisions
- 14** Closure of the meeting

[RRB25-1/22](#)

1 Opening of the meeting

1.1 The **Chair** opened the 98th meeting of the Radio Regulations Board at 1400 hours on Monday, 17 March 2025. He welcomed the participants and looked forward to a productive meeting with the support of all involved.

1.2 The **Director of the Radiocommunication Bureau**, speaking also on behalf of the Secretary-General, likewise welcomed the Board members to Geneva for their first meeting of 2025, a year in which the Board would be observing its 30th anniversary. He welcomed the new Deputy to the Director, Ms Diana Tomimura, and Mr Nelson Malaguti, who would be assisting the Board in place of Mr Botha. He congratulated Mr Cheng and Mr Fianko on their promotions. He noted that the situation with respect to interference to the radionavigation-satellite services (RNSS) had worsened. Many administrations had expressed frustration to ITU at the lack of action taken and progress made, but as he had repeatedly said, the ITU community and the Board had no enforcement capability. It was ultimately up to Member States to abide by the Radio Regulations and the Board's decisions. That said, the Bureau would make suggestions on more forceful action from the Board when the issue was discussed. He thanked those Board members who were celebrating Ramadan for agreeing to hold the meeting during the festival. He wished the Board a successful meeting and assured it of the Bureau's support.

2 Adoption of the agenda (Documents RRB25-1/OJ/1(Rev.1))

2.1 **Mr Malaguti (SGD)** drew the Board's attention to the revised Report by the Director (Document RRB25-1/8(Rev.1)). The section concerning proposed treatment of pending frequency assignments to stations located in the Paracel Islands had been deleted following the Administration of China's request to withdraw its submission (Document RRB25-1/24). The **Director** added that the Bureau had been informed on Friday 14 March of the Chinese Administration's wish to reconsider its assignments for the Paracel Islands and of its request to postpone consideration of its comments on the proposed treatment of frequency assignments to stations located in disputed territories.

2.2 **Mr Henri** understood that the treatment of pending frequency assignments to stations located in the Paracel Islands, as originally included in the deleted section of the Report by Director, would be put in abeyance pending clarification from the Chinese Administration of the status of its frequency assignments. . In any case, further action would be required for the treatment of the two terrestrial frequency assignments in the Master International Frequency Register (MIFR) of another administration.

2.3 **Mr Malaguti (SGD)** also drew the Board's attention to three further addenda from the Bureau to the Report by the Director (Addenda 3, 4 and 5 to Document RRB25-1/8(Rev.1): Addendum 3 contained an updated report concerning harmful interference to receivers in the RNSS, and the Board might wish to consider it under agenda item 6; Addendum 4 provided updates on harmful interference caused by Italy to French FM broadcasting stations and the Board might wish to consider it alongside the Report by the Director under agenda item 3; Addendum 5 reported on meetings between the Administrations of France, the Russian Federation and Sweden concerning harmful interference to satellite networks at 5°E and the Board might wish to consider it for information under agenda items 7.1 and 7.2.

2.4 He further drew attention to eight late submissions (Documents RRB25-1/DELAYED/1 to 8), all of which had been submitted in accordance with the appropriate regulatory deadline under § 1.6 of Part C of the Working Methods of the Board. Documents RRB25-1/DELAYED/7, 6 and 5 had been received from the Administrations of Nigeria, Mexico and Oman, respectively, and complemented

the information in those administrations' original submissions. The Board might therefore wish to consider them for information under agenda items 5.1, 5.5 and 5.7.

2.5 Document RRB25-1/DELAYED/1 had been received from the Administration of Jordan and contained information supplementing the contents of that administration's submission under agenda item 6.1.

2.6 Document RRB25-1/DELAYED/8 had been received from the Administration of France just before the start of the meeting and was related to agenda item 7.2.

2.7 Under agenda item 9, Document RRB25-1/DELAYED/3 had been submitted by the Administration of the Islamic Republic of Iran in response to a delayed submission from the Administration of the United States RRB25-1/DELAYED/2. The Board might wish to assign those delayed documents to item 9 in general. Document RRB25-1/DELAYED/4 had also been submitted by the Administration of the Islamic Republic of Iran in response to the submission from Norway under agenda item 9.2.

2.8 The **Director** said that the Bureau was not in the habit of submitting documents at such a late stage. However, Addendum 5 to the Report of the Director (Document RRB25-1/8(Rev.1)) reported on meetings held on 13 and 14 March 2025 at ITU headquarters, and it was important for the Board to be informed of the results.

2.9 The **Chair** suggested that section 8 of Document RRB25-1/8(Rev.1) should be taken up under agenda item 10. He also suggested that, as the sub-items under item 6 split in into two cases, they could be considered as such and that the sub-items also be considered en bloc under items 7, 8 and 9.

2.10 The draft agenda was **adopted** as amended in Document RRB25-1/OJ/1(Rev.1). The Board **decided** to note for information Document RRB25-1/DELAYED/1 under agenda item 6.1; Documents RRB25-1/DELAYED/2 and RRB25-1/DELAYED/3 under agenda item 9; Document RRB25-1/DELAYED/4 under agenda item 9.2; Document RRB25-1/DELAYED/5 under agenda item 5.7; Document RRB25-1/DELAYED/6 under agenda item 5.5; Document RRB25-1/DELAYED/7 under agenda item 5.1; and Document RRB25-1/DELAYED/8 under agenda item 7.2.

3 Report by the Director, BR (Documents RRB25-1/8(Rev.1) and Addenda 1, 2 and 4)

3.1 The **Director** introduced his customary report in Document RRB25-1/8(Rev.1). All the actions arising from the previous Board meeting set out in Table 1 had been completed, with the meetings to which §3 I) referred having been convened the previous week.

3.2 Referring to Table 2-6, he noted that the treatment time for the publication of coordination requests for satellite networks had increased to approximately 14 months. A backlog was expected in the year after a world radiocommunication conference (WRC) because of the need to implement WRC-23 decisions before processing submissions received from the end of the conference. Although the Bureau had begun processing the submissions in January 2025, it required the necessary human and financial resources to reduce the backlog in a timely manner. If the Bureau's staff numbers were reduced as a consequence of budgetary measures, it could take up to three years to resolve the backlog instead of the 18 months initially anticipated.

3.3 Referring to § 3 on Council activities, he noted that limited progress had been made at the third meeting of the Council Expert Group on Decision 482, with agreement leading to increases in cost recovery having been reached on only 4 of 10 items. The financial impact of the agreed

modifications remained largely insufficient to address the current financial gap in cost recovery for satellite network filings. The fourth and final meeting of the Expert Group would be held in April 2025.

3.4 Referring to § 4.1 on harmful interference to broadcasting stations in the VHF/UHF bands between Italy and its neighbouring countries, he said that, in Addendum 1 to the report, the Administration of Slovenia reported that there had been no improvement in the situation and called for the Italian Administration to stop the licensing and operation of uncoordinated FM and DAB stations. In its update (Addendum 2), the Administration of Italy stated that it had continued to use its existing rights in the GE06 Plan, as well as some blocks not allocated to any country, on a temporary basis and subject to the elimination of any interference, pending finalization of the Adriatic-Ionian agreement. That agreement, which was expected to be signed in mid-2025, would facilitate the further planning and development of the DAB platform, for which there had been growing interest among Italian operators. The Administration of Italy had further developed its four lines of action to eliminate or reduce cross-border interference, which included: a) providing incentives, such as compensation, to encourage operators to release FM resources on a voluntary basis; b) improving interaction between the Italian Administration and territorial offices; and c) enhancing the quality of the database of authorized stations.

3.5 Addendum 4 to the report contained information from the Administration of France concerning the ongoing Bonifacio 88.3 MHz interference case, as well as a new complaint of interference. It also provided information on bilateral meetings held between the Administrations of France and Italy and a new methodology for compatibility analysis on which they had agreed.

3.6 In § 9, the Bureau explained its reasons for deciding to accept, on an exceptional basis, the late submission of the database containing the notification of the frequency assignments for the C and Q/V frequency bands to the IRANSAT-B-43.5E satellite network.

Actions arising from the last RRB meeting (§ 1 of Document RRB25-1/8(Rev.1))

3.7 Responding to questions from **Mr Azzouz, Mr Cheng and Ms Beaumier, Mr Vallet (Chief, SSD)** said that under § 3 k) of Table 1, the Bureau was finalizing the circular letter to inform administrations of the best way to apply No. **11.41B**. The Bureau did not currently anticipate the need for a rule of procedure on the matter, but that would depend on the reaction from administrations to the circular letter. The Bureau would also provide the information at radiocommunication seminars to help administrations with the practical application of the provision. Regarding the follow-up action under § 4.4 of Table 1, he recalled that previous WRCs had established certain limits on what could be protected to ensure an appropriate balance between terrestrial services and earth stations. The Bureau was consulting documents from previous WRCs to check if any decisions offered a more detailed explanation on coordination under No. **9.21** with respect to certain frequency bands. It would submit the completed analysis to a future Board meeting. Concerning § 5.5 of Table 1, he said that the Bureau had received no additional information from the Administration of Indonesia regarding the LAPAN-A4-SAT satellite system. In accordance with the procedure under No. **11.44**, the Bureau had informed the administration the previous week that it would suppress the network.

3.8 **Ms Mannepalli** recalled that the Board had not specifically requested additional information on the LAPAN-A4-SAT satellite system at its previous meeting.

3.9 **Ms Beaumier** said that she was somewhat surprised that the Indonesian Administration, although not explicitly requested to do so, had not submitted new information that might have led to a different conclusion.

3.10 **Mr Loo (Head, SSD/CSS)** said that, while the Administration of Indonesia had submitted notification information for the LAPAN-A4-SAT satellite system during the week of the Board's 97th meeting, the administration had requested that the notification information be withdrawn after the conclusion of the meeting.

3.11 The Board **noted** all the action items under § 1 of Document RRB25-1/8(Rev.1) arising from the decisions of the 97th Board meeting.

Processing of filings for terrestrial and space systems (§ 2 of Document RRB25-1/8(Rev.1))

3.12 **Mr Vassiliev (Chief, TSD)**, drawing attention to the tables in § 2.1 of Document RRB25-1/8(Rev.1), on the processing of notices to terrestrial services, said that there was nothing particular to report. He explained that the review of findings of terrestrial frequency assignments was under way and that any revisions would likely be submitted to the Board's next meeting, since the relevant WRC decisions had only entered into force on 1 January 2025.

3.13 **Mr Vallet (Chief, SSD)** informed the Board that the Space Services Department had been restructured. It now comprised four divisions instead of three, which were responsible for the entire processing of filings for different systems. One division would also deal with post-notification actions concerning the MIFR and space sustainability.

3.14 He drew attention to the tables on the processing of space notices in § 2.2 of Document RRB25-1/8(Rev.1). Table 2-5 on advance publication information (API) for satellite networks indicated that treatment time had come down to more normal levels. The sustained number of submissions received showed the interest of administrations in non-GSO systems not subject to coordination. Table 2-6 showed that the backlog continued to accumulate for the publication of coordination requests for satellite networks. The decisions of WRC-23 had to be implemented before the Bureau could start to process the submissions received from the end of the conference. However, work was needed to develop the software to implement the decisions, which were becoming increasingly complex. There were now more than 300 coordination requests in abeyance, corresponding to a backlog of around 14 months. In January 2025, the Bureau had begun to process the coordination requests submitted after WRC-23. The backlog was expected to reach between four and six months around August 2026 provided that the Bureau had the necessary resources and did not encounter problems with the algorithms implemented in the Bureau's space software. For the most part, the processing of satellite networks under Appendices **30**, **30A** and **30B**, and Part I-S and Part II-S/Part III-S examinations were being carried out within the regulatory time-limits.

3.15 **Mr Henri** noted with concern that the delay in the processing of coordination requests was continuing to increase, skyrocketing to around 14 months, instead of the four-month publication requirement under No. **9.38**, and he recalled that such a situation had last occurred back in 2004/2005, 20 years previously. The Bureau should make urgent and concrete efforts to resolve the backlog and needed sufficient resources to do so. He asked if it could provide a projected timeline for returning to an anticipated treatment time of between four and six months as soon as possible, by mid-2026 at the latest.

3.16 **Ms Beaumier** pointed out that, in the year after WRC-19, treatment time had peaked at 6.2 months. She asked whether action to implement the increasingly complex decisions of world

radiocommunication conferences was taking resources away from the processing of coordination requests.

3.17 **Mr Vallet (Chief, SSD)** said that the Bureau would be pleased to share a projected timeline with Board members. The Bureau had had to devote resources to developing and updating the software and database, which had been presented to the membership during the World Radiocommunication Seminar in 2024. A number of the submissions received in December 2023 had contained frequency bands newly allocated by WRC-23 as well as existing frequency bands. However, as coordination requests were not split, those submissions had been blocked. Coordination requests that overlapped with such filings had also been blocked.

3.18 **Mr Azzouz** said that the increasing number of cases under treatment showed that the Bureau required more staff to expedite returning to the four-month publication requirement, and asked the Bureau to study the proposal with its advantages and disadvantages, and report on requirements for returning to the four-month publication time-frame, at the coming Board meetings.

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

“The Board noted § 2 of Document RRB25-1/8(Rev.1) on the processing of filings for terrestrial and space systems. On the existing backlog for the treatment of CR/C notices, the Bureau explained that that resulted from the combination of the possibility to submit coordination requests related to WRC-23 decisions just at the end of the WRC and the need for database and software developments to implement those WRC-23 decisions before the Bureau was able to process the coordination requests. Noting the increased complexity of WRC decisions, those database and software developments, which had been presented to the membership during the World Radiocommunication Seminar, had taken about one year. Since the beginning of January 2025, the Bureau had started the examination of coordination requests sent after WRC-23. The Board encouraged the Bureau to take concrete actions and continue to make all efforts for returning to the regulatory four-month publication requirement for such publication.”

3.20 It was so **agreed**.

Implementation of cost recovery for satellite network filings (§ 3 of Document RRB25-1/8(Rev.1))

3.21 **Mr Vallet (Chief, SSD)**, drawing attention to Table 3-1 in § 3.1 of Document RRB25-1/8 (Rev.1), said that no satellite filings had been cancelled as a result of non-payment of invoices.

3.22 Regarding § 3.2 of Document RRB25-1/8 (Rev.1), on Council activities, he reported that the Council Expert Group on Decision 482 had reached agreement on four of the ten items of its terms of reference. The group’s main focus, however, namely the two items on non-geostationary systems, remained unresolved and some administrations were reluctant to support increases in cost recovery for geostationary systems only. The additional estimated revenue from the modifications agreed thus far remained largely insufficient to address the financial gap in cost recovery.

3.23 In reply to questions from **Ms Mannepli**, who expressed concern at the situation, and **Mr Azzouz**, he confirmed that the current annual financial gap in cost recovery was in the order of CHF 11 million. The chair of the expert group planned to reopen item d) of the terms of reference concerning resubmissions.

3.24 **Mr Henri** said that the approach taken by the Council Expert Group in discussing the various contributions could have been improved. It should have focused on its terms of reference and

concrete proposals to review the current version of Decision 482 and also considered more in depth the figures and proposals prepared by the Bureau.

3.25 **Mr Azzouz** requested the Bureau to report to the Board on the outcome of the final meeting of the Council Expert Group and on the 2025 session of the Council.

3.26 The **Director** pointed out that the Council Expert Group on Decision 482 is an open group. The industry representatives attending were focused on their own interests rather than the financial health of the Union. If the expert group was unable to make further progress at its fourth and final meeting, Council-25 might have to decide on any changes to be made to Decision 482, as had been the case in 2005.

3.27 The Board **noted** §§ 3.1 and 3.2 of Document RRB25-1/8(Rev.1), on late payments and Council activities, respectively, relating to the implementation of cost recovery for satellite network filings.

Reports of harmful interference and/or infringements of the RR (Article 15 of the Radio Regulations) (§ 4 of Document RRB25-1/8(Rev.1))

3.28 **Mr Vassiliev (Chief, TSD)**, drawing attention to the tables in § 4 of Document RRB25-1/8(Rev.1), on reports of harmful interference and/or infringements of the Radio Regulations, explained that the Bureau had received 596 communications during the reporting period.

3.29 In response to a suggestion from **Mr Azzouz** with regard to Tables 4-2 and 4-3, on cases of harmful interference concerning terrestrial services and space services, respectively, **Mr Vallet (Chief, SSD)** explained that, in space services, it was rare to have more than one submission on the same case: if interference started and stopped, then restarted, that would be considered as two cases. For that reason, an additional row in Table 4-3 on the number of different cases treated was unnecessary, since it would be identical to the total row.

3.30 The Board **noted** § 4 of Document RRB25-1/8(Rev.1), 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 of Document RRB25-1/8(Rev.1) and Addenda 1, 2 and 4)

3.31 **Mr Vassiliev (Chief, TSD)** said that, in addition to the information already provided by the Director on the updates received from the Administrations of Slovenia, Italy and France (§ 4.1 of Document RRB25-1/8(Rev.1), Addenda 1, 2 and 4, respectively), the Italian Administration's update also contained information on the cross-border interference cases with Croatia, Malta, Slovenia and Switzerland. Regarding Croatia, the Italian Administration said that it had examined a priority case and planned to start examining other cases as soon as possible; regarding Switzerland, it expected the interference affecting Swiss FM broadcasting to improve, since the Swiss public operators had ceased all FM transmissions; and regarding Malta, it was analysing reported cases and hoped to be able to start discussions to identify sufficient mitigation actions, albeit without indicating when that might be. In the case of Slovenia, while the Administration of Italy was analysing interference reports, it had highlighted the geographical complexity due to short distances over the sea and apparent intransigence on the part of Slovenia, which called for compliance with the GE84 Agreement. Addendum 2 concluded with a summary of the situation between Italy and France, for which some solutions had been found; however, the long-standing Bonifacio case was still under discussion.

3.32 In Addendum 4, the Administration of France had provided information on, among other things, the Bonifacio case; a new interference complaint relating to Corsica; and bilateral meetings, discussions and a methodology for compatibility analysis, which had been agreed by the two administrations. Lastly, he explained that the Bureau had received a short update from Croatia according to which there had been no improvement in the situation.

3.33 **Ms Beaumier** said that, notwithstanding the resolution of several cases, it was disappointing that there had been little progress overall in the long-standing situation. The Adriatic-Ionian agreement had yet to be concluded; a solution to the problem of block allocation between Albania, Greece and North Macedonia had still to be found; and the Italian Administration had not been able to obtain funding for financial incentives for the voluntary release of FM resources. The Board should reiterate its encouragement to the Administration of Italy to: a) take all necessary and effective measures to eliminate harmful interference to the FM sound broadcasting stations of its neighbouring administrations, with a focus on the priority list; b) implement any recommendations resulting from the forthcoming multilateral coordination meetings; and c) provide the complete detailed action plan for implementing the FM Working Group's recommendations. She hoped that all parties would continue their coordination efforts with a view to resolving the issues.

3.34 **Mr Azzouz**, summarizing the situation, said that he wished to thank the Administration of Switzerland and the Swiss public operators for having ceased FM transmissions. The Board should instruct the Bureau to invite the neighbouring administrations and the Administration of Italy to enter into negotiations towards a realistic end goal, as opposed to the total and sudden shutdown of the Italian analogue network. He welcomed the cooperation between the French and Italian Administrations and encouraged them to continue in that vein with a view to finalizing the draft agreement under No. 18.2 of the Radio Regulations, concerning French stations broadcasting from the island of Elba, and resolving all other interference cases.

3.35 **Mr Fianko** said that the key to mitigating the challenge posed by the harmful interference situation seemed to be the migration of FM stations to digital platforms. Given the reported growing interest in DAB channels in Italy, the Board should encourage the Italian Administration to promote DAB adoption and vigorously pursue efforts to secure funding for incentivizing the voluntary switch-off of the FM stations causing harmful interference to neighbouring administrations.

3.36 **Mr Cheng**, noting some positive bilateral developments, in particular between Italy and Switzerland, said that the Board should encourage all administrations involved to continue their coordination efforts in goodwill and on a bilateral basis. The Board should also encourage efforts towards the finalization of the Adriatic-Ionian agreement and reiterate the importance of the implementation of regional agreements, in particular the GE06 and GE84 Plans, with a view to achieving the equitable distribution of spectrum access and resolving what was a long-standing issue.

3.37 **Ms Ghazi (Head, TSD/BCD)** said that the Board might wish to encourage the Italian Administration also to address the Slovenian station included in the priority list, as agreed at previous meetings. Despite the Italian Administration's view that the Slovenian Administration was taking an overly strict approach, the latter administration was seeking respect for the relevant regulations. Lastly, the Board should be careful not to send the wrong message regarding progress between the Administrations of Italy and Switzerland. Irrespective of the FM stations being switched off, the Administration of Switzerland still held the rights to those FM frequency assignments as long as they remained recorded under its name in the GE84 Plan.

3.38 **Mr Azzouz** agreed that only Switzerland could use the frequency assignments recorded for the Swiss Administration under any regional plan.

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

“The Board considered in detail § 4.1 of Document RRB25-1/8(Rev.1) and its Addenda 1, 2 and 4, on harmful interference to broadcasting stations in the VHF/UHF bands between Italy and its neighbouring countries. The Board thanked the administrations for the information provided and noted the following points:

- The Administration of Italy had reported that it had continued to issue authorizations for national and local DAB networks according to the provisional 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, the Administrations of Slovenia and Croatia had reported no improvement regarding the cases of harmful interference and reiterated their concerns about uncoordinated usage of Italian FM and DAB stations.
- Regarding harmful interference to FM broadcasting in VHF Band II, the Italian Administration had reported that it had continued to strengthen the intervention procedures for resolving cases of cross-border interference. However, despite several meetings with its neighbouring countries since the RRB24-3 meeting, the interference situation had not improved, and the Administrations of Slovenia and Croatia continued to report a lack of progress.

The Board acknowledged the updated situation provided by the Italian Administration, appreciating its efforts to reduce the cases of harmful interference and some positive developments in that respect with France and Switzerland. However, given the little overall progress towards resolving cases of harmful interference, the Board again strongly urged the Administration of Italy to:

- continue to encourage broadcasters to pursue voluntary transition from the analogue FM to the digital DAB platform;
- 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 multilateral coordination meetings;
- take all necessary measures to eliminate harmful interference to the FM sound broadcasting stations of its neighbouring administrations, focusing on the priority list, including Slovenia's cases;
- cease the operation of all uncoordinated DAB stations and no longer license such stations.

The Board again encouraged the Administration of Italy to vigorously pursue efforts to secure the necessary funds to enable the voluntary switch-off of FM stations causing harmful interference to its neighbours.

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 99th 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 99th Board meeting.

The Board thanked the Bureau for its report 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.”

3.40 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 RRB25-1/8(Rev.1))

3.41 **Mr Vallet (Chief, SSD)** explained that Tables 5-1 to 5-3 contained information on the suppression of satellite networks Special Sections and submissions, for which data were available up to the end of 31 January 2025. There was nothing particular to report.

3.42 The Board **noted** § 5 of Document RRB25-1/8(Rev.1), 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-GSO FSS satellite systems under Resolution 85 (Rev.WRC-23) (§ 6 of Document RRB25-1/8(Rev.1))

3.43 **Mr Vallet (Chief, SSD)** said that, in total, 185 non-GSO networks had been reviewed, most of which had received favourable findings. Since the Board’s previous meeting, the Bureau had published 12 non-GSO systems submitted for coordination and one submitted for notification. He drew attention to Tables 6-1 and 6-2, noting that there was nothing particular to report. The Bureau was currently processing one coordination request.

3.44 In response to a query from **Mr Henri** on the number of non-GSO FSS satellite systems pending review under Resolution **85 (Rev.WRC-23)**, he explained that, prior to WRC-23, there had been around 80 filings in the backlog; since the end of the conference, however, a number of cases required the application of equivalent power-flux density reviews. The backlogs of reviews under Resolution **85 (Rev.WRC-23)** and of the previously discussed coordination requests would likely converge by the end of 2025.

3.45 Replying to a question from **Mr Cheng** regarding the coordination request still under examination, as shown in Table 6-2, he clarified that the case had yet to be completed largely owing to gaps in the technical analysis, as a result of which the Bureau had had to request additional information and clarification from the administration concerned, which was time-consuming. The case was now heading towards a conclusion. The need for a standardized procedure regarding Article 22 equivalent power-flux density reviews for CR/C modifications submitted under the Rule of Procedure on No. **9.27** of the Radio Regulations would be brought to the attention of Working Party 4A.

3.46 The Board **noted** § 6 of Document RRB25-1/8(Rev.1), on the review of findings related to frequency assignments to non-GSO FSS satellite systems under Resolution **85 (Rev.WRC-23)**, and again encouraged the Bureau to reduce the backlog for the processing of filings.

Implementation of Resolution 35 (Rev.WRC-23) (§ 7 of Document RRB25-1/8(Rev.1))

3.47 **Mr Vallet (Chief, SSD)**, summarizing the information contained in § 7 of Document RRB25-1/8(Rev.1), said that, as at 4 February 2025, the Bureau had received 41 submissions under Resolution **35 (Rev.WRC-23)** and had published 33 Special Sections; three satellite systems had finished deployment. Since the Board’s previous meeting, no submissions had been suppressed. As

requested by the Board, the information in Tables 7-1 and 7-2 had been expanded to include the operating agency for each satellite network. That information was drawn from the MIFR and thus did not necessarily reflect the commercial name of the system. Administrations were invited to provide accurate, updated information where appropriate.

3.48 In relation to § 7 of Document RRB25-1/8(Rev.1), the Board **noted** the progress on implementation of Resolution **35 (Rev.WRC-23)**.

Notification of frequency assignments to the IRANSAT-B-43.5E satellite network (§ 9 of Document RRB25-1/8(Rev.1))

3.49 **Mr Vallet (Chief, SSD)**, introducing § 9 of Document RRB25-1/8(Rev.1), said that the Administration of the Islamic Republic of Iran had submitted, on 31 January 2024, the due diligence information under Resolution **49 (Rev.WRC-23)** for the IRANSAT-B-43.5E satellite network, which had included the C-, Ku-, Ka- and Q/V-bands. It subsequently submitted the notification for recording the satellite network. On 2 December 2024, after the regulatory time-limit of 30 October 2024 under No. **11.48** of the Radio Regulations had expired, however, the administration notified the Bureau that, owing to an administrative oversight, the database filing had contained only the Ku- and Ka-bands and that it had since uploaded the notification of the C- and Q/V-bands. Taking into account the reasons outlined by the administration and the timeliness of the due diligence information, the Bureau had decided to accept, on an exceptional basis, the late submission of the notification of those frequency assignments. In answer to a question from **Mr Azzouz**, he confirmed that the Administration of the Islamic Republic of Iran had accepted the separate cost-recovery fee associated with processing the late notification.

3.50 The Board **noted** § 9 of Document RRB25-1/8(Rev.1), on the notification of frequency assignments to the IRANSAT-B-43.5E satellite network.

4 Rules of Procedure

List of Rules of Procedure (Document RRB25-1/1)

4.1 **Ms Hasanova**, the Chair of the Working Group on the Rules of Procedure, reported on the outcome of the group's meeting. The group had met twice during the that Board meeting and had concluded its deliberations on all four items on its agenda. It had revised and updated the list of draft rules of procedure contained in Document RRB25-1/1 and invited the Plenary Meeting to approve the updated version.

4.2 It had also reviewed and updated new and modified draft rules of procedure that had been proposed by the Bureau. At its 97th meeting, the Board had instructed the Bureau to develop draft rules of procedure on Nos. **5.293**, **5.295A**, **5.307A**, **5.308A** and **5.325** in Section B6 of Part B, based on the proposal submitted by the Russian Federation in Document RRB24-3/10, which the Bureau had provided to the 98th meeting. The group had discussed the draft rules of procedure and agreed to recommend to the Plenary Meeting that they be circulated to administrations for comments for consideration at the 99th Board meeting.

4.3 Following the Board's instruction at its 97th meeting, the Bureau had provided its analysis of the proposal submitted by the Russian Federation on the modification of the rules of procedure on Nos. **5.341A**, **5.341C**, **5.346** and **5.346A** in Part B6 of the Rules of Procedure. The proposal consisted in the application of a single coordination distance of 670 km from an International Mobile

Telecommunications (IMT) station to the border of a neighbouring country for identification of affected administrations under No. **9.21**.

4.4 The Bureau had concluded that it was not necessary to modify the existing rules of procedure. The proposal of the Russian Federation did not take into account the actual power of the coordinated IMT station or the propagation path to the border, which might lead to an overestimation of interference, the inclusion of unaffected countries in the coordination procedure under No. **9.21** and, thus, an unnecessary burden for the administrations involved. In addition, the proposal disregarded the commonly used coordination distance of 450 km to protect aircraft receivers, corresponding to line-of-sight distance.

4.5 WRC-23 had instructed the Bureau to align the rules of procedure on Resolution **170 (Rev.WRC-23)** with the decisions of the Conference related to the modification of Appendices **30A** and **30B**. The working group had agreed the Bureau's proposed addition of a new rule of procedure in that regard and was submitting it to the Plenary Meeting for approval for circulation among administrations for comments.

4.6 The Bureau had prepared a draft modified rule of procedure on the application of No. **9.21** to cases of specific earth stations with respect to terrestrial stations, according to the report of the Chair of Working Party 4A, which had concluded that the Bureau would review whether it was necessary to propose that the Board consider updating the rules of procedure on No. **9.36**, taking into account the application measures taken by the Bureau for coordination requests under No. **9.21**. The working group had agreed the proposed modifications to the rules of procedure on Nos. **9.21** and **9.36** and was submitting them to the Plenary Meeting for approval for circulation among administrations for comments.

4.7 During the 97th meeting of the Board, the Bureau had reported an increasing number of cases of harmful interference and noted with concern the lack of responses received from administrations in some interference cases.

4.8 As the Bureau had noted that No. **13.2** did not provide a detailed procedure to handle requests of assistance made under that provision, the Board had instructed the Bureau to prepare a draft rule of procedure to formalize the Bureau's practice in the treatment of requests for assistance in such cases. The working group had approved the Bureau's subsequent proposed addition of a new rule of procedure and was submitting it to the Plenary Meeting for approval for circulation among administrations for comments.

4.9 Following discussion at the Board's 97th meeting of comments received from administrations on Annex 1 to Circular Letter CCRR/77 with respect to orbital tolerances for satellite systems not subject to Resolution **8 (WRC-23)**, the Bureau had reviewed the issue and informed the working group that, when compared to the orbital tolerances contained in Resolution **8 (WRC-23)**, the value of 10 per cent could sometimes prove more or less stringent depending on altitude, while noting that the 10 per cent value also included tolerance on inclination, which was addressed separately in Resolution **8 (WRC-23)**.

4.10 The Bureau had proposed three options concerning orbital tolerances to be reflected in the rules of procedure in that regard. The working group had agreed on the less stringent value between the Bureau's practice before WRC-23 and Resolution **8 (WRC-23)**, with altitude thresholds ensuring continuity of the values of orbital tolerances.

4.11 The working group had also agreed a draft rule of procedure on No. **13.6** and was submitting it to the Plenary Meeting for approval for circulation among administrations for comments in accordance with No. **13.12A c)** of the Radio Regulations.

4.12 The **Chair** proposed that the Board conclude on the matter 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 RRB25-1/1, 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 99th Board meeting, to allow administrations enough time to comment.”

4.13 It was so **agreed**.

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

5.1 Submission by the Administration of Nigeria requesting an extension of the regulatory time-limits to bring into use the frequency assignments to the NIGCOMSAT-2B (9.5°W) and NIGCOMSAT-2D (16°W) satellite networks (Documents RRB25-1/2 and RRB25-1/DELAYED/7)

5.1.1 **Mr Ciccorossi (Head, SSD/SSS)** introduced Document RRB25-1/2, in which the Administration of Nigeria had requested an extension of the regulatory time-limit to bring into use the frequency assignments to the NIGCOMSAT-2B (9.5°W) and NIGCOMSAT-2D (16°W) satellite networks. He said that the Nigerian Administration was seeking a three-year extension to the regulatory time-limit of 6 December 2024 on the grounds of *force majeure*, citing political changes beyond its control, which had caused delays in decision-making and affected the project timeline, approval process and budget allocations; and the coronavirus disease (COVID-19) pandemic, which had led to changes in NIGCOMSAT executive management, resulting in organizational instability. While the Administration of Nigeria considered that its request met the *force majeure* conditions, it had also cited the Board’s report to WRC-23 on Resolution **80 (Rev.WRC-07)** and a WRC-23 decision according to which, it said, exceptions could be granted to developing countries even where the *force majeure* conditions had not been fully met. In Document RRB25-1/DELAYED/7, the Administration had requested extra time to provide additional information for the Board’s 99th meeting. Lastly, the Bureau had received the notification for the satellite networks in September 2024; Part I-S information was in the process of being published.

5.1.2 **Ms Mannepalli** said that the submission lacked the basic information necessary for the Board to reach a decision. For example, a call for expressions of interest for the design, manufacture, launch, in-orbit testing and commissioning of high-throughput satellites had been issued in July 2024; however, there was no information about what had happened after that date, nor was there anything about efforts to build and launch a satellite before and after the *force majeure* events. The Board should ask the Administration of Nigeria to provide the information and supporting evidence as agreed during the 13th plenary meeting of WRC-23 (see § 13.4 of Document WRC23/528) for consideration by the Board at its next meeting.

5.1.3 **Ms Beaumier**, recalling that consideration of the document had been deferred from the Board's 97th meeting, said that it was disappointing that the Administration of Nigeria had not heeded the Board's suggestions for improving the submission. In Document RRB25-1/2, the Administration of Nigeria had cited two *force majeure* events – political instability and the COVID-19 pandemic – and outlined the four *force majeure* conditions, but only in general terms and without any supporting evidence to substantiate its claims. No information had been provided on the satellite project in general or on its schedule, status and milestones before and after the *force majeure* events. There was no information to explain when the delays had occurred and how they had been quantified or to justify the requested three-year extension of the regulatory time-limit. Besides the call for expressions of interest, little progress seemed to have been made in seven years.

5.1.4 She pointed out that the Administration of Nigeria had incorrectly interpreted the WRC-23 decision. In that decision, WRC-23 had simply endorsed the Board's recommendation, namely for ITU-R to study the matter of requests for extensions of regulatory time-limits from developing countries that did not qualify as cases of *force majeure* or co-passenger delay and to develop specific criteria and conditions upon which the Board could consider granting an extension. Until that study had been conducted, and the attendant criteria had been adopted by a WRC, the Board had no authority to grant extensions on that basis.

5.1.5 While she had sympathy for the difficulties faced, considering the deficiencies in the submission, she was of the view that the Board could not grant the request. Given that the Nigerian Administration had indicated that it would provide more information at the 99th meeting, and that the Bureau's standard practice was to maintain any filings that were the subject of a request to the Board pending the Board's decision, she would support instructing the Bureau to maintain the frequency assignments until that meeting.

5.1.6 **Mr Talib** said that he supported the two previous speakers' assessments of the situation. Taking into account the fact that Nigeria was a developing country, that some elements of the *force majeure* events had been explained and that the Board had made recommendations on the document at its previous meeting, he considered that the frequency assignments should be maintained until the 99th meeting and that the Board should request more information, with reference to the list approved by WRC-23.

5.1.7 **Mr Azzouz**, summarizing the facts of the case, said that, although necessary information was missing, the Board should support the administration, as Nigeria was a developing country. To facilitate the Board's decision-making, the administration should provide detailed information on the original timeline for launching the satellite networks; the negative impact of the COVID-19 pandemic; the contracts signed with the satellite manufacturer and service launch provider; the design, integration and assembly of the satellites; the coordination status of the satellite networks; and the expected availability of funding for the project. It should also provide clear justification for the three-year extension requested. He agreed that the Board could not grant the extension at the current time and should instruct the Bureau to maintain the frequency assignments until the end of the next meeting.

5.1.8 **Mr Fianko, Ms Hasanova and Mr Cheng** expressed sympathy for the challenges the Nigerian Administration had faced.

5.1.9 **Mr Fianko** said that Ms Beaumier had clearly outlined the deficiencies of the submission. More information and evidence were needed, including a clear plan for implementing the project over the next three years. He agreed with Mr Azzouz: the frequency assignments should be maintained and specific information requested.

5.1.10 **Ms Hasanova** said that she found it surprising that the Administration of Nigeria had not provided additional substantive information since the Board's 97th meeting. She concurred with Ms Beaumier's and Mr Azzouz's assessments of the submission; there was not enough information for the Board to accede to the request at the current meeting. She supported the approach put forward by Ms Beaumier.

5.1.11 **Mr Cheng** said that he agreed that the Board was not in a position to accede to the administration's request in the absence of the crucial information identified by previous speakers or criteria approved by a WRC for the granting of extensions in cases involving developing countries that did not satisfy all conditions of *force majeure*.

5.1.12 **Mr Nurshabekov**, agreeing that evidence was lacking, expressed support for requesting additional information so that the Board could consider the administration's request at the 99th meeting. He supported maintaining the frequency assignments until the next meeting, as did **Mr Alkahtani**.

5.1.13 **Mr. Henri** stressed the overall absence of information on the satellite project and the lack of supporting evidence to substantiate and assess the four conditions for the situation to qualify as a case of *force majeure*. Regarding its report on Resolution **80 (Rev.WRC-07)**, the Board had been clear that, in the absence of any criteria having been approved by a WRC, the Board had no mandate to grant extensions of regulatory time-limits to developing countries that did not qualify as cases of *force majeure* or co-passenger delay. WRC-23 had approved a list of information to be provided to support a request for extension of the regulatory time-limit; and yet, none of that information had been provided, nor was there anything to justify the three-year extension requested.

5.1.14 The Administration of Nigeria had not seized the opportunity to provide additional information, following its delayed submission to the 97th meeting, at which, he recalled, the Board had provided guidance on the type of information required. Taking all those factors into account, he was not inclined to accede to the request of the Administration of Nigeria to grant any extension for the bringing into use of NIGECOMSAT-2B (9.5°W) and NIGCOMSAT-2D (16°W) satellite networks. Being doubtful about receiving supporting information at the next meeting, he would consider closing the requests for extension at the current meeting but would not oppose the majority view of Board members.

5.1.15 **Ms Mannepal** said that, although the document had been deferred from the Board's previous meeting, specific information had not been sought. She would strongly support the Board requesting such information now, with explicit reference to the documents agreed by WRC-23.

5.1.16 **Mr Di Crescenzo**, noting that the satellite networks were in the C-, Ka-, Ku- and L-bands and that it was a challenging but important satellite project for Nigeria, said that he would favour maintaining the filing and requesting information to justify the three-year extension.

5.1.17 **Mr Fianko** agreed and said that the Board should encourage the administration by specifying the information needed. Irrespective of whether the administration obtained the outcome it desired, it would serve as a learning opportunity, as would the process of refiling if that became necessary.

5.1.18 Following informal discussions to resolve the difference of opinion on whether the circumstances of the case warranted the seeking of additional information, the **Chair**, supported by **Ms Beaumier**, explained that, in the light of the Board's conclusions regarding similar cases considered under agenda item 5, the Board had agreed on the need to ensure consistency of

approach. Taking into account the facts of the case, he proposed that the Board should conclude as follows on the matter:

“The Board considered in detail the submission from the Administration of Nigeria requesting an extension of the regulatory time-limits to bring into use the frequency assignments to the NIGCOMSAT-2B (9.5°W) and NIGCOMSAT-2D (16°W) satellite networks as presented in Document RRB25-1/2 and noted Document RRB25-1/DELAYED/7 for information. The Board noted the following:

- While the Administration of Nigeria had invoked the application of *force majeure* in its request, citing the unstable political environment and the COVID-19 pandemic, no supporting evidence had been provided to substantiate those factors or to justify the length of the extension requested.
- The Administration of Nigeria quoted the possibility for the Board to grant 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, in the absence of a decision on the issue by WRC-23, granting such an extension was not within the Board’s mandate, but within that of a WRC (see § 13.8 of Document WRC23/528 agreed during the 13th plenary meeting of WRC-23).

The Board concluded that it was not in a position to accede to the request for the extension of the regulatory time-limit to bring into use the frequency assignments to the NIGCOMSAT-2B (9.5°W) and NIGCOMSAT-2D (16°W) satellite networks. Given that the Administration of Nigeria intended to provide additional information at the following meeting, the Board decided to instruct the Bureau to retain the frequency assignments to the NIGCOMSAT-2B (9.5°W) and NIGCOMSAT-2D (16°W) satellite networks until the end of the 99th Board meeting.”

5.1.19 It was so **agreed**.

5.2 Submission by the Administration of Indonesia requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the NUSANTARA-NS1-A (113E) satellite network (Documents RRB25-1/7 and RRB25-1/11)

5.2.1 **Mr Loo (Head, SSD/CSS)**, introducing the item, said that in Document RRB25-1/7, the Administration of Indonesia provided additional information in support of its request for a 12-month extension to bring into use the frequency assignments to the NUSANTARA-NS1-A satellite network, to 28 December 2025, in response to the Board’s decision at its 97th meeting. In the information and supporting evidence in Annex 1, Boeing provided the information deemed necessary by WRC-23 (set out in § 13.4 of Document WRC23/528) and also described in detail how the COVID-19 pandemic and the failure of non-flight equipment at the manufacturing facility met all four conditions to qualify as *force majeure* events. Information was also provided by Gravity Space and SpaceX on the events causing the delay in the on-ground delivery, the reasons why the replacement satellite GS-1 could not be positioned at 113°E, and the target launch period. Document RRB25-1/11 corrected references to the on-ground delivery date referred to on page 3 of Document RRB25-1/7, which should read 24 December 2023.

5.2.2 **Mr Henri** observed that the Administration of Indonesia was requesting an extension on the basis of two events, namely the COVID-19 pandemic and the failure of non-flight equipment at the manufacturing facility. He noted that the pandemic had caused delays in certain tests and had led to postponement of the on-ground delivery from 1 May 2023 to 24 December 2023, but that

preparations had been under way for a final round of testing before the non-flight equipment failure on 27 October 2023, which had damaged the nearly completed satellite, further delaying the on-ground delivery date until 15 June 2025. He thanked the administration and the satellite manufacturer for the very detailed information on the impact of the COVID-19 pandemic and the non-flight equipment failure on project timelines. The administration had provided all the required information in support of its request to demonstrate how all four conditions had been met for the situation to qualify as a case of *force majeure*, had provided information on the satellite construction and had explained in depth the nature and extent of the damage justifying the lengthy repair period. He was in favour of granting an extension of the regulatory time-limit to bring into use the frequency assignments to the NUSANTARA-NS1-A satellite network, to 28 December 2025.

5.2.3 **Ms Mannepalli** thanked the Administration of Indonesia for providing the additional information requested by the Board at its previous meeting. She strongly supported granting an extension, the duration of which the Board might wish to further discuss based on the target launch period and time required for electric orbit raising.

5.2.4 **Mr Azzouz** welcomed the further extensive information provided by the Indonesian Administration in support of its request. The on-ground delivery date had been delayed from 1 May 2023 to 24 December 2023 because of the COVID-19 pandemic and then put back to 15 June 2025 because of the unforeseeable failure of non-flight equipment in October 2023 that had damaged the satellite. As detailed in the communication from Gravity Space in annex 2, the GS-1 replacement satellite had experienced very high levels of solar activity in June 2024 (declared as a *force majeure* event by the contractor) and had been unable to reach its designated orbital position. Noting the target launch window indicated by SpaceX and the electric orbit-raising period, he could agree to grant a 12-month extension, to 28 December 2025.

5.2.5 **Ms Beaumier** thanked the Administration of Indonesia for providing the additional information and evidence requested by the Board at its previous meeting. The information provided by Boeing clearly and comprehensively explained how all four conditions had been satisfied for the situation to qualify as a case of *force majeure*. Before the satellite had been damaged by the failure of non-flight equipment, it had been near completion and the repair period had been explained satisfactorily. Moreover, Gravity Space had confirmed that the GS-1 spacecraft had experienced very high levels of solar activity and had been unable to complete its mission, noting that such solar eruptions had been deemed as a *force majeure* event in the contract. Assuming a launch at the beginning of the target launch window proposed by SpaceX and a six-month orbit-raising period, she could support an extension until 28 December 2025.

5.2.6 **Mr Talib** said that the additional information provided in support of the request demonstrated how the COVID-19 pandemic and the failure of non-flight equipment met all four conditions to qualify as *force majeure* events. He could agree to grant a 12-month extension until 28 December 2025.

5.2.7 **Mr Cheng** welcomed the detailed information on timelines for the satellite project and on the status of satellite construction before the *force majeure* event and agreed that the situation qualified as a case of *force majeure*. While he supported the request, he was unclear whether the satellite would be launched into the same orbit and whether a six-month orbit-raising period was still required.

5.2.8 **Mr Loo (Head, SSD/CSS)** said that the current submission contained no information in that regard.

5.2.9 **Ms Hasanova** thanked the administration for the additional information. The submission showed how the COVID-19 pandemic and the unforeseeable failure of non-flight equipment that had damaged the satellite had resulted in schedule changes, and how the administration had sought to finalize the project. The situation qualified as a case of *force majeure* and she could support a 12-month extension.

5.2.10 **Mr Fianko** commended the Administration of Indonesia for providing detailed information on the two *force majeure* events invoked, and for establishing linkages and explaining how it had been unable to meet the regulatory time-limit. The impact of the COVID-19 pandemic on the manufacturing facility had been clearly demonstrated, but the administration would have met the regulatory time-limit had the satellite not been damaged by the unforeseeable non-flight equipment failure. He was satisfied that the case qualified as a *force majeure* situation and could agree to an extension, but wondered if the Board might wish to clarify the orbit-raising period.

5.2.11 **Mr Nurshabekov** said that the Administration of Indonesia had provided all the information requested by the Board at the previous meeting. The four *force majeure* conditions had been satisfied, as indicated in the correspondence from Boeing. Accordingly, he was in favour of granting an extension.

5.2.12 **Mr Di Crescenzo**, welcoming the efforts of the Indonesian Administration to provide such exhaustive and clear information, agreed that the Board should grant an extension even though the orbit-raising period was unclear.

5.2.13 The **Chair** said that the four conditions for the situation to qualify as a case of *force majeure* had been clearly demonstrated. The lack of clarity on the orbit-raising period would not affect the Board's decision. He proposed that the Board should conclude as follows:

"Having considered in detail the request of the Administration of 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 Documents RRB25-1/7 and RRB25-1/11, complementing Document RRB24-3/15 presented at the 97th Board meeting, the Board noted the following:

- The Administration of Indonesia had provided additional information in support of its request and had demonstrated how the four conditions had been satisfied for the situation to qualify as a case of *force majeure*.
- The satellite construction had been near completion before the satellite structure had been damaged and would have met the original launch schedule and regulatory time-limit to bring into use the frequency assignments to the satellite network if not for the *force majeure* event.
- The period of 18 months to repair the damaged satellite had been justified.
- The launch service provider had provided a new launch window of 1 June–31 August 2025.

Consequently, the Board concluded that the case qualified as a case of *force majeure* and decided to accede to the request from the Administration of Indonesia by granting an extension of the regulatory time-limit to bring into use the frequency assignments in the bands 17.7–20.2 GHz (space-to-Earth) and 27–30 GHz (Earth-to-space) to the NUSANTARA-NS1-A satellite network to 28 December 2025."

5.2.14 It was so **agreed**.

5.3 Submission by 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 (Document RRB25-1/10)

5.3.1 **Mr Loo (Head, SSD/CSS)** introduced Document RRB25-1/10, in which the Administration of Japan provided additional information in support of its submission to demonstrate that the fourth condition had been fully satisfied for the case to qualify as a situation of *force majeure*, as requested by the Board at its 97th meeting. According to information provided in the annex, the manufacturing of the QZS-5, QZS-6 and QZS-7 satellites had been proceeding to meet the initial scheduled launch dates in February, July and December 2024, even after the failure of the H3 F1 test flight in March 2023. However, following that failure, the Japanese basic plan for outer space roadmap had been revised in December 2023, and new launch dates set. The administration considered that an effective causal connection existed between the H3 F1 failure and the failure to meet the regulatory time-limit. The supporting documentation included a letter from the launch provider confirming launch dates and windows, and correspondence from the spacecraft manufacturer detailing project milestones after the H3 F1 launch failure and after the revision of the Japanese basic plan for outer space roadmap.

5.3.2 He noted that the QZS-6 satellite, corresponding to the QZSS-GS-A1 geostationary satellite network, had been successfully launched on 2 February 2025 and had reached its orbital position on 13 February 2025, one month before the regulatory deadline. As the administration was planning to inform the Bureau of the date of bringing into use of the frequency assignments to the GSO satellite network 90 days from 13 February 2025, it continued to seek an extension until 30 April 2025. He noted that, in accordance with No. **11.44B**, the Bureau did not consider a frequency assignment to have been brought into use until confirmation had been provided within 30 days from the end of the 90-day period.

5.3.3 The QZS-5 and QZS-7 satellites were scheduled to launch on 15 November 2025 and 16 January 2026, respectively. The administration was seeking an extension of the regulatory time-limit to bring into use the frequency assignments to the QZSS-A non-geostationary satellite system until 1 April 2026.

5.3.4 **Ms Beaumier** noted that the QZS-5 and QZS-7 satellites had been proceeding to meet the original contract milestones even after the *force majeure* event invoked, namely the failure of the H3 F1 test flight on 7 March 2023. As a result of the new launch schedule of the H3 rocket in the revised Japanese basic plan for outer space roadmap, the satellite manufacturing schedule had been optimized for a just-in-time delivery to the launch site. While she was satisfied that all four conditions had been met for the situation to qualify as a case of *force majeure*, the extension requested for bringing into use the frequency assignments to the QZSS-GS-A1 satellite network was no longer required as the QZS-6 satellite had been launched and had reached its orbital position one month before the 13 March 2025 regulatory deadline. As the notified date of bringing into use a frequency assignment was the date of the commencement of the 90-day period, there was no need to wait for the expiry of that period. Furthermore, it was not clear why the Japanese Administration had to launch both the QZS-5 and QZS-7 satellites to bring into use the frequency assignments to the non-GSO filing: there was no indication that the satellites were not identical and carried the same frequency bands on board. Since the bringing-into-use requirements would be satisfied by the launch of the first satellite (QZS-5) on 15 November 2025, the Board should grant an extension until 31 January 2026, which would be sufficient to take into account a 60-day launch window and the orbit-raising period.

5.3.5 **Mr Azzouz, Ms Mannepalli, Mr Talib, Mr Cheng, Ms Hasanova and Mr Nurshabekov** agreed that the request for an extension of the regulatory time-limit to bring into use the frequency assignments to the QZSS-GS-A1 satellite network was no longer relevant as the QZS-6 satellite had reached its orbital position one month before expiry of the March 2025 regulatory deadline. **Mr Henri** shared that view, observing that according to No. **11.44.2**, the notified date of bringing into use of a frequency assignment to a space station in the geostationary satellite orbit was the date of the commencement of the 90-day period provided for in No. **11.44B**.

5.3.6 **Mr Azzouz** thanked the Administration of Japan for responding to the Board's request and establishing an effective causal connection between the H3 F1 failure and the failure to meet the regulatory time-limit and demonstrating that the fourth condition of *force majeure* had been fully satisfied. He could support an extension to 1 April 2026 for bringing into use the frequency assignments to the QZSS-A satellite system, which would take into account the period for orbit raising, in-orbit testing and handover to the operator.

5.3.7 **Ms Mannepalli** said that, from the additional information provided, she was satisfied that the situation met all four conditions to qualify as a case of *force majeure*. The QZS-5 and QZS-7 satellites were operating in the same frequency bands and only one satellite would be required to bring into use the frequency assignments to the QZSS-A satellite system. Assuming a launch in November 2025, a 60-day launch window and an orbit-raising period, she could agree to an extension until 31 January 2026.

5.3.8 **Mr Henri** thanked the Administration of Japan for the information provided. The attached letter from the satellite manufacturer (Mitsubishi Electric Corporation) referred to the intention of progressing the development and manufacture of QZS-5 and QZS-7 for a launch in February 2024 and December 2024, but no specific information had been provided on the actual manufacturing and readiness of both satellites to meet the regulatory deadline of 13 March 2025 before the *force majeure* event of 7 March 2023. The attached information provided in the submission with respect to launch dates was not consistent and he assumed that the anticipated launch dates for QZS-5 and QZS-7 set out in the table of project milestones in attachment 2 was superseded by the information in the attached letter from Mitsubishi Heavy Industries dated 14 February 2025. The distribution of frequency bands between the two satellites was also unclear and he would appreciate clarification from the Bureau in that regard. If both satellites were to carry all the relevant frequency bands, only one would be required to bring into use the frequency assignments to the QZSS-A satellite system. Furthermore, if the Board decided to grant an extension, it should take into account the orbit-raising period but not include additional time for satellite testing.

5.3.9 **Mr Loo (Head, SSD/CSS)** pointed out that the Administration of Japan had provided the information concerning the frequency bands on board the QZS-5 and QZS-7 satellites to the Board's 97th meeting in Table 2 of Document RRB24-3/3. However, the table did not clearly state if both satellites contained the same frequency bands, and the Bureau had not requested clarification from the administration concerning the frequency bands on board the satellites as those satellites had not yet been launched.

5.3.10 **Mr Talib** thanked the Japanese Administration for providing the information requested to show that the fourth condition had been fully satisfied for the case to qualify as a situation of *force majeure*. He could agree to grant an extension of the regulatory time-limit to bring into use the frequency assignments to the QZSS-A satellite system until 1 April 2026, which was only 60 days longer than an extension until 31 January 2026.

5.3.11 **Mr Fianko** said that the Japanese Administration had provided sufficient information to clarify that the H3 F1 test flight had no impact on the satellite manufacture. He was in favour of granting an extension, the actual duration of which would depend on the Board's deliberations.

5.3.12 **Mr Cheng** said that the Board might wish to seek further information from the Japanese Administration about the frequency bands on board the QZS-5 and QZS-7 satellites: if both satellites carried the same bands, one would be sufficient to bring into use the frequency assignments.

5.3.13 **Ms Hasanova** said that, from the information presented, the Board could agree that the case met all four conditions to qualify as a situation of *force majeure*. Taking into account the launch dates and launch window proposed, two weeks for orbit raising and 30 days for in-orbit testing, she was in favour of granting an extension for bringing into use the frequency assignments to the QZSS-A satellite system until 1 March 2026.

5.3.14 **Mr Nurshabekov** said that, from the information provided by the Japanese Administration, the Board could conclude that the situation met all four conditions to qualify as a case of *force majeure*. With regard to the QZSS-A satellite system, he too would appreciate clarification on why two satellites were needed to bring into use the frequency assignments. Assuming a launch on 16 January 2026 and a 60-day launch window, he could support an extension until around 16 March 2026.

5.3.15 **Mr Di Crescenzo** said that, taking into account the additional information provided and the complexity of the system, he was prepared to grant an extension until 1 April 2026. The proposed launch dates of 15 November 2025 and 16 January 2026 were very close, and the administration might not know which satellite would bring into use the frequency assignments.

5.3.16 **Ms Mannepalli** observed that QZSS-A was a position, navigation and timing satellite system and was likely to have multiple satellites carrying the same frequencies to ensure a high level of accuracy. She therefore assumed that the QZS-5 and QZS-7 satellites had the same bands on board and did not consider that further information from the Japanese Administration was necessary. **Mr Azzouz** endorsed those comments, adding that the Board should grant any extension in respect of the filing, not a specific satellite.

5.3.17 **Ms Beaumier** agreed that additional information should not be sought. The Board's assumption that both the QZS-5 and QZS-7 satellites carried all the frequencies was legitimate. If one satellite was not sufficient to bring into use the frequency assignments, the Japanese Administration could always come back to the Board. She was not sure if the administration had a clear understanding of the requirements concerning bringing into use given that it had sought an unnecessary extension in respect of the QZSS-GS-A1 satellite network.

5.3.18 The **Chair**, having noted that the extension request concerning the QZSS-GS-A1 satellite network was no longer relevant, said that the Board should assume that only one satellite was needed to bring into use the QZSS-A satellite system. If that satellite did not carry all the frequency bands, the administration could always come back to the Board. Noting that the Board did not include contingencies when granting extensions, he asked whether members could agree to extend the regulatory time-limit to bring into use the frequency assignments to the QZSS-A satellite system until 31 January 2026.

5.3.19 **Mr Henri** said that he assumed, based on the information provided to the Board's 97th meeting, that all the bands were on board both satellites. If that was the case, the first satellite launched (QZS-5 with an anticipated launch date of 15 November 2025) would have the capability to bring into use the frequency assignments to the QZSS-A satellite system. He also considered that

a launch window of 60 days to account for the risk of bad weather could be excessive. Assuming a launch on 15 November, and a six-day orbit-raising period, an extension until 30 November 2025 might be more appropriate.

5.3.20 **Ms Beaumier** said that, in her view, a 60-day launch window was not unreasonable, as launches could slip for many reasons, not only bad weather. Assuming a launch date of 15 November 2025, a 60-day launch window and a 15-day period for orbit raising (which had been assumed in the submission to the Board's 97th meeting), she would be comfortable with an extension until the end of January 2026.

5.3.21 **Mr Azzouz** observed that the QZS-6 satellite had reached its orbital position in 11 days.

5.3.22 **Mr Henri** pointed out that, in the project timeline in attachment 2 to the submission, six days had been calculated for orbit raising for the QZS-7 satellite. Agreeing that there were many reasons why a launch could be delayed, he was prepared to accept the 60-day launch window and could go along with an extension until 31 January 2026.

5.3.23 The **Chair** proposed 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 RRB25-1/10 and the document from the previous meeting. The Board noted the following:

- The QZS-6 satellite, corresponding to the QZSS-GS-A1 satellite network at 90.5°E, had been successfully launched on 2 February 2025 and had reached its orbital position on 13 February 2025, making the request for extension no longer relevant.
- The QZS-5 and QZS-7 satellites, corresponding to the QZSS-A satellite system, had been scheduled to be launched on 15 November 2025 and 16 January 2026, respectively.
- Based on the information provided at the 97th and 98th Board meetings, all four conditions had been met for the situation to qualify as a case of *force majeure* due to the launch failure of the H3 F1 test flight on 7 March 2023 and the requested extension was justified for the QZSS-A satellite system.
- The QZS-5 and QZS-7 satellites were deemed to be identical satellites carrying the same frequency bands on board; and therefore, only one satellite would be required to bring into use the frequency assignments to the QZSS-A satellite system.

Taking into account the launch window and orbit-raising period for the QZS-5 satellite, the Board decided to accede to the request from the Administration of Japan by extending the regulatory time-limit to bring into use the frequency assignments to the QZSS-A satellite system to 31 January 2026."

5.3.24 It was so **agreed**.

5.4 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 RRB25-1/15)

5.4.1 **Mr Ciccorossi (Head, SSD/SSS)** introduced Document RRB25-1/15, in which the Administration of the Islamic Republic of Iran provided further information, as requested by the Board at its 97th meeting, to substantiate its requested extension of the regulatory time-limit to bring into use the frequency assignments to the IRANDBS4-KA-G2 satellite network. The latest submission contained information on the contracts for satellite design, manufacture and in-orbit delivery; the minutes of a meeting between the satellite provider and the administration reaching

agreement on project realization after the European payload provider had become unable to fulfil its obligations owing to international sanctions; a revised project schedule; and a letter from the satellite provider, dated 21 February 2025, and attachment thereto informing of a delay in manufacturing and demonstrating, in the administration's view, compliance with the conditions of *force majeure*. It had cited as *force majeure* conditions the impact of the COVID-19 pandemic; cancellation of the initial co-passenger resulting in manufacturing delays; and supply chain issues and reduced launch opportunities arising from the Russian Federation-Ukrainian crisis, as well as the impact of international sanctions against the Islamic Republic of Iran. It was also mentioned that the satellite network in the Broadcasting Satellite Service in 21.4 to 22 GHz frequency band provided coverage over the territory of the Islamic Republic of Iran only and had been notified to the Bureau on 28 September 2024. From the total project delay of 31 months, 13 months fell within the regulatory period, which had expired on 4 October 2024; thus, the administration was requesting an additional 18 months as an extension.

5.4.2 **Mr Henri** said that, while the administration had provided some information as requested by the Board, there was no substantive new information compared with that submitted to the Board's 97th meeting. At that meeting, the Board had noted the lack of supporting information and evidence to justify the administration's request and had invited the administration to provide the information outlined in § 13.4 of the minutes to the 13th plenary meeting of WRC-23; yet, the administration had not done so. There was no information on the satellite manufacturer, subcontractors or launch service providers for either the original or revised projects and no clearly defined milestones. Similarly, there was nothing to explain the discrete and cumulative impacts of the purported *force majeure* events on the project timeline or how the requested length of extension had been quantified. In his view, the Board should decline to accede to the request from the Administration of the Islamic Republic of Iran and close the case

5.4.3 **Ms Beaumier** noted that the administration had provided evidence of a manufacturing contract and, through the minutes of the meeting between the satellite provider and the administration, of a contract to change the satellite integrator and said that the initial project milestones had clearly been in advance of the regulatory time-limit. A lot of the information requested was, however, still missing. Delays, whether attributable to COVID-19, the Russian Federation-Ukraine crisis, sanctions or change of satellite manufacturer, had again not been individually quantified or set against a clear timeline that would help to ascertain to what extent they were sequential or occurred in parallel and provide a rationale for the requested length of extension. Project milestones before and after each *force majeure* event were missing, as well as the status of the project before each event.

5.4.4 There were evidently elements of *force majeure* in the case, but information provided to assess compliance with the four conditions of *force majeure* was insufficient and lacking in detail. For the third condition, efforts taken to mitigate the delays caused by the COVID-19 pandemic had not been described, while the fourth condition required an assessment of project status and timelines before and after the *force majeure* event, but only a pre-pandemic project timeline had been provided. The impact of sanctions was described better than in the previous submission but it had likewise not been fully demonstrated or quantified how the four conditions of *force majeure* had been met. No information had been provided on the launch service provider (initial or new) or the launch plans.

5.4.5 It should be noted, again, that change of payload provider and satellite manufacturer did not constitute a *force majeure* event for the Board's purposes as it, in itself, had not made it impossible for the administration to meet the regulatory time-limit. It had still been able to conclude

a new manufacturing contract which should have allowed for the time-limit to be met given the planned launch window of Q3 2024. Moreover, it was unclear delays attributable to satellite design modifications and repetition of milestones had not already been factored into the new contract timelines.

5.4.6 Overall, it was regrettable that the administration had not heeded the instruction of the Board, which had noted the lack of specific information and requested the information agreed during the 13th plenary meeting of WRC-23 in its decision at the 97th Board meeting. As the administration had chosen not to provide that information, she was not in favour of requesting it again and supported not acceding to the request.

5.4.7 **Mr Azzouz**, having analysed the submission, considered that the new information provided by the administration, in particular the original and amended agreements between the satellite provider and the administration, had clearly demonstrated the impact of multiple *force majeure* events on the IRANDBS4-KA-G2 satellite network project and also the efforts undertaken to overcome that impact. Cancellation of the co-passenger had made a single-launch scenario the most plausible, but that would pose technical and financial challenges to the administration. It was important that the Board bear in mind that the Islamic Republic of Iran was a developing country faced with many difficulties and that the project was critical to the country and covered only Iranian territory. He supported granting the extension as requested.

5.4.8 **Ms Mannepalli, Ms Hasanova, Mr Talib and Mr Fianko** all expressed sympathy for the case but considered the submission to be missing the substantive information requested by the Board at its previous meeting.

5.4.9 **Mr Alkahtani, Mr Cheng and Mr Nurshabekov** agreed that the information submitted was not sufficient for the Board to accede to the request at that time.

5.4.10 **Mr Azzouz** said that, if the Board concluded that the information provided had been insufficient, it should be very clear in explaining what information was missing. In his view, the information in the latest submission was sufficient for the Board to conclude favourably.

5.4.11 **Mr Fianko** said that the newly submitted information, despite being heavily redacted, had demonstrated efforts to bring the project to life despite the obstacles described. It failed, however, to adequately demonstrate how the four conditions of *force majeure* had been met. Likewise, there was no rationale for the requested length of extension or a clear schedule establishing linkages between the *force majeure* events and project timelines.

5.4.12 **Mr Cheng** said that the administration had not provided all relevant information required under § 13.4 of the minutes to the 13th plenary meeting of WRC-23 but should be afforded another opportunity to do so.

5.4.13 **Ms Hasanova, Mr Talib, Mr Fianko and Mr Nurshabekov** were all in favour of requesting further information.

5.4.14 **Mr Alkahtani** said that the Board had been clear in its decision at the 97th meeting as to what information the administration should provide, including by referencing the minutes to the 13th plenary meeting of WRC-23; yet, the administration had failed to do so.

5.4.15 **Mr Henri** agreed, adding that, in his view, the Board should refrain from asking again for the information and should simply decline to accede to the request from the Administration of the Islamic Republic of Iran and close the case.

5.4.16 **Ms Beaumier** said that, when the submissions from the Islamic Republic of Iran to the 97th and 98th meetings of the Board were compared side by side, very little new information had been submitted to that meeting. Thus, if the Board had concluded at the previous meeting that the information provided had been insufficient, it should do the same at that meeting. It was appropriate to revert back to administrations in situations where additional information had been requested but aspects of that information were unclear or prompted further lines of questioning. In the present case, a large part of the Board's request had simply not been addressed at all; she was thus not in favour of asking again for that information. In her view, doing so would set an undesired precedent for the treatment of all extension requests.

5.4.17 Following informal discussions, the **Chair** proposed that the Board conclude on the matter as follows:

"Having considered in detail the request of the Administration of the Islamic Republic of Iran for 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 RRB25-1/15, the Board noted the following:

- The Administration of the Islamic Republic of Iran had invoked the application of *force majeure* in its request, citing the impact of international and unilateral sanctions, the COVID-19 pandemic, the cancellation of a first co-passenger, the Ukraine crisis and supply chain problems. While it had described in detail the impact of each of these events, it had not provided any new information that would demonstrate how each of the four conditions had been satisfied for the situation to qualify as a case of *force majeure* for each of those events.
- The Administration of the Islamic Republic of Iran had provided evidence of the original and new contract with a satellite manufacturer, as well as project milestones, which showed that a satellite had been planned to be launched before the regulatory time-limit.
- No other information had been provided on the elements missing from the first submission: information on the initial and subsequent launch service providers, project milestones before and after each *force majeure* event, the status of the project before each invoked *force majeure* event, and how the different delays had been quantified individually to justify the 18-month extension.

While the Board recognized some elements of *force majeure*, 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 for extension of the regulatory time-limit to bring into use the frequency assignments to the IRANDBS4-KA-G2 satellite network."

5.4.18 It was so **agreed**.

5.5 Submission by the Administration of Mexico requesting an extension of the regulatory time-limit to bring into use the frequency assignment to the THUMBSAT-1 satellite system (Documents RRB25-1/18 and RRB25-1/DELAYED/6)

5.5.1 **Mr Ciccorossi (Head, SSD/SSS)** introduced Document RRB25-1/18, in which the Administration of Mexico was requesting an extension of the regulatory time-limit to bring into use the frequency assignment to the THUMBSAT-1 satellite system, a non-geostationary satellite system operating in the 400 MHz range in the space-to-Earth direction that was subject to a coordination procedure. The seven-year regulatory time-limit had expired on 9 March 2025.

5.5.2 Outlining the facts of the case, he said that a launch service contract had been signed with a Chinese space launch provider. Launch on a Kinetica-1 vehicle had been scheduled for 1

September 2024; however, owing to co-passenger delay, the launch window had been postponed, initially to December 2024, then to March and April 2025, as part of the Kinetica-1 vehicle Y-7 mission. The Administration of Mexico was therefore requesting a six-month extension of the regulatory time-limit to account for the delays it had experienced. In support of its request, it had included several attachments, including a copy of its national licence; e-mail communications between ThumbSat, the space launcher and a third-party intermediary; and a notification of launch adjustment from the launch service provider, dated 19 November 2024. In Document RRB25-1/DELAYED/6, the Mexican Administration had provided additional information, including a statement dated 27 December 2024 from the launch provider concerning the failed Kinetica-1 vehicle Y-6 mission.

5.5.3 Following requests for clarification from **Ms Mannepalli** and **Ms Hasanova**, he explained that the project was experimental and concerned a small satellite of less than 100 g operating in the 400.5875-400.6125 MHz frequency band and with a useful life of approximately 96 hours. Since the project had not been declared by the administration as a short-term mission, the submission was not being considered under Resolution **32 (Rev.WRC-23)**.

5.5.4 In response to comments by **Ms Beaumier** and **Mr Henri**, the **Chair** clarified that the Administration of Mexico had invoked co-passenger delay as the basis for its extension request.

5.5.5 **Ms Beaumier** said that the submission, particularly the chronology of events, was difficult to follow; in particular, there was a lack of clarity over the current launch window and the length of the extension being requested. In an e-mail exchange dated 19 November 2024 between the launch provider Beijing CAS Space and ThumbSat, the launch date had been rescheduled from December 2024 to 30 April 2025 owing to issues with the primary payload. Subsequently, a contract had been signed with Beijing CAS Space on 15 December 2024 – a copy of which had not been provided – setting a launch date of 30 March 2025. Taking into account that contract, and the statement dated 27 December 2024, in which Beijing CAS Space committed to avoiding delays to the March launch date, she surmised that the Y-7 mission was therefore still on track for a 30 March launch.

5.5.6 The administration had requested a six-month extension to the regulatory time-limit of 9 March 2025. Confusingly, elsewhere in the submission there was a request for an extension to May 2025, presumably to meet the 30 April launch date. As far as she could tell, the only reference to the 30 April launch had been made in November 2024, which suggested that it must have been superseded by information available when the contract had been signed on 15 December 2024. In her view, the case met the conditions for co-passenger delay and an extension could be granted; however, in the absence of any updated information beyond the 27 December statement, there was no evidence to support an extension beyond 1 April 2025.

5.5.7 Responding to a question from the **Chair**, **Mr Henri** said that the information outlined in the WRC-23 decision was not intended to serve as an exhaustive list, but rather as guidance on the type of information that would help the Board to reach a decision. That information might vary depending on the specifics of the case and the basis on which the extension was being requested; thus, it was not necessarily critical for everything on the list to be provided. He noted that a summary description of the satellite to be launched, the frequency bands and the name of the manufacturer had been provided. Like Ms Beaumier, he had found the information in the document confusing.

5.5.8 As he understood the chronology of the case, a launch service agreement had initially been signed with Guangzhou CAS Space in February 2024, with a launch date of 1 September 2024. It was unclear, however, whether the satellite would have been ready in time for such launch date and

what had triggered the e-mail exchange culminating, on 19 November, in a notification that the launch date had been adjusted to 30 April 2025. ThumbSat had subsequently signed a new contract, with Beijing CAS Space, on 15 December 2024, setting a launch date of 30 March 2025, which seemed again to have been postponed to 30 April owing to issues with the main payload. Clearly information was missing that might shed further light on the sequence of events. Ultimately, he supported an extension on the grounds of co-passenger delay; however, given that the launch was planned for some time in March or April, he could find no rationale for an extension beyond 30 April 2025.

5.5.9 **Ms Beaumier** said that she agreed with Mr Henri that key information was missing, including on whether the satellite would have been ready in time for the initial launch date in September 2024, before the co-passenger delay. Notwithstanding the confusing information, she had reached the conclusion that the most recent information superseded the prior communications, which was how she had arrived at the 30 March launch date. No evidence had been provided to suggest that there had been another postponement, for which reason she would support an extension to 1 April at the latest. If the administration needed additional time, it could submit further information to that effect.

5.5.10 **Mr Azzouz**, summarizing the facts of the case, said that he noted that the satellite had been completed in-house on 20 November 2024 and that, on 19 November, Beijing CAS Space had notified ThumbSat that the Kinetica-1 vehicle Y-7 mission, on which the satellite was being launched, had been postponed from December 2024 to 30 April 2025. Although the contract signed with Beijing CAS Space on 15 December 2024 stipulated a launch date of 30 March 2025, delays caused by the main payload had apparently led to it being rescheduled for 30 April. In his view, the request qualified as a co-passenger delay and, as the Board did not provide for contingencies, he could support an extension to the end of March or April, rather than the six months requested.

5.5.11 **Ms Hasanova**, referring to the attachment citing a launch date of 30 April, said that she would support an extension to that date.

5.5.12 **Mr Henri** said that, in the light of the confusion over the launch date and the length of extension being requested, he was inclined to follow the approach of Ms Beaumier, namely to consider the latest factual information and assume a 30 March launch. There was no evidence to justify an extension beyond the end of March.

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

“The Board considered in detail the submission from the Administration of Mexico requesting an extension of the regulatory time-limit to bring into use the frequency assignment to the THUMBSAT-1 satellite system as presented in Document RRB25-1/18 and noted Document RRB25-1/DELAYED/6 for information. The Board noted the following points:

- The regulatory time-limit to bring into use the THUMBSAT-1 satellite system was 9 March 2025.
- The satellite construction had been completed in-house on 20 November 2024.
- Through a contract with Beijing CAS Space, the launch had initially been scheduled as a co-passenger launch on the Kinetica-1 vehicle Y7 mission in December 2024 but later postponed to 30 March 2025 due to delays with the main payload.

Consequently, the Board concluded that the situation qualified as co-passenger delay and decided to accede to the request from the Administration of Mexico by extending the regulatory time-limit to bring into use the frequency assignment to the THUMBSAT-1 satellite system to 31 March 2025.”

5.5.14 It was so **agreed**.

5.6 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 CAS500-2 satellite network (Document RRB25-1/19)

5.6.1 **Mr Ciccorossi (Head, SSD/SSS)** introduced Document RRB25-1/19, 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 CAS500-2 satellite network on the grounds of *force majeure*. The *force majeure* event invoked was the partial suspension on 2 March 2022 of the re-export licence in response to the Russian Federation’s invasion of Ukraine (attachment 2). The initial launch services agreement with Glavkosmos had been amended (attachment 3) and a new launch services agreement concluded with SpaceX (attachments 4 and 5). As indicated by SpaceX, the initial plan had been to launch the satellite as part of a “cakeplatter” mission from 1 February to 31 December 2025. However, as attempts to complete the launch manifest had not been successful, the earliest available launch periods had been delayed until 1 February 2026–30 April 2026 and 1 June 2026–31 August 2026.

5.6.2 Following a question from **Ms Hasanova**, he said that the Administration of the Republic of Korea had not specified an extension period. The seven-year regulatory time-limit would expire on 30 January 2026, and the administration had indicated that the satellite was scheduled for launch in the third quarter of 2026. It might perhaps be assumed that an extension until the end of 2026 was being sought.

5.6.3 **Mr Henri** thanked the Korean Administration for providing a summary in attachment 1 of the CAS500-2 development status, which indicated that the satellite had been ready in the fourth quarter of 2021 and had been in storage and undergoing regular state-of-health tests. He inferred from other attachments to the submission that the manufacturer was Korea Aerospace Industries, Ltd and noted that the original launch services agreement with Glavkosmos had been signed in August 2017. Although no information had been provided on the original launch date, it could be assumed that the planned launch date had been well in advance of the January 2026 regulatory deadline. Revocation of the export licence on 2 March 2022 had prevented the original launch and an alternative launch services agreement had been signed with SpaceX in November 2023. The launch window of between February and December 2025 had been quite lengthy, possibly because of the “cakeplatter” launch configuration for which four “caketopper” spacecrafts were required, but in advance of the regulatory deadline. Due to configuration challenges, SpaceX had subsequently offered two new launch windows after the regulatory deadline. From the information provided, he inferred that, in the absence of the unforeseen Russian Federation–Ukraine crisis, the regulatory time-limit would have been met, and the Board might consider that the situation met the four conditions to qualify as a case of *force majeure*. The change of launch service provider prompted by the *force majeure* event invoked might not have had any impact on the regulatory time-limit had the spacecraft been launched between 1 February and 1 December 2025. However, launch configuration challenges had also resulted in a co-passenger delay issue. He was not in favour of granting an extension at the current meeting, but of requesting the administration to provide more precise information on the planned launch window to the Board’s 99th or 100th meeting, i.e.

before the January 2026 regulatory deadline, so that the Board could grant an appropriate extension that did not include any margin for contingencies.

5.6.4 **Ms Beaumier** said that the submission did not contain sufficient information to enable the Board to consider the request at its current meeting. All the Board knew from the documents presented was that the satellite had been built and could not be launched with the original launch service provider. Another launch services contract had been signed and the lengthy launch window in 2025 had been postponed because of configuration challenges. While the Board might be able to infer certain elements, it was up to the Administration of the Republic of Korea to clearly and comprehensively describe the case by providing all the relevant information described in the relevant rule of procedure. No assessment had been made as to how the case met the four conditions of *force majeure* and the Board should not spend its limited time on assessing an incomplete submission. It should clearly articulate in its conclusion what was expected; the administration could resubmit its case with the appropriate information at a future Board meeting.

5.6.5 **Mr Azzouz** noted that the Korean Administration had informed the Bureau on 15 March 2022 of the *force majeure* event invoked (partial suspension of re-export licence on 2 March 2022). Korea Aerospace Industries, Ltd had signed a launch services agreement with SpaceX in November 2023, and the initial launch window had been postponed due to the lack of readiness of the co-passengers. In its covering letter, the Korean Administration indicated that the satellite was scheduled to be launched in the third quarter of 2026. The administration had initially invoked a *force majeure* event but had not explained fully how the four conditions had been met, and there had also been a co-passenger delay. Furthermore, the Board could not grant an extension on the basis of two proposed launched windows. It should invite the Korean Administration to provide the required information to a future Board meeting.

5.6.6 **Ms Mannepalli** said that the Korean Administration had not specified the length of the requested extension. She observed, from the information provided in the attachments, that the initial launch services contract had been concluded on 18 August 2017 and that the satellite had been ready at the end of 2021. The *force majeure* event invoked had occurred on 2 March 2022, but the administration had not explained how the four conditions had been met. She wondered whether the subsequent postponement by SpaceX of the launch window from 2025 to 2026 might qualify as a situation of co-passenger delay. The Board required additional information from the administration to conclude that the case qualified as a situation of *force majeure* and/or co-passenger delay, and to determine the duration of any extension.

5.6.7 **Mr Talib** agreed that the Board needed more information to determine the duration of any extension to be granted. With the regulatory deadline not expiring until 30 January 2026, the Korean Administration should be invited to provide further details to the Board's next meeting.

5.6.8 **Mr Fianko** said that, in order to facilitate the Board's future decision-making, the Korean Administration should be requested to clarify all the ambiguities in its submission, including which of the two 2026 launch windows proposed by SpaceX it would choose. For the situation to qualify as a case of *force majeure* and/or co-passenger delay, the administration should provide all information deemed necessary by WRC-23.

5.6.9 **Mr Cheng** said that the submission was not particularly well structured. While the Board might infer that the situation could qualify as a case of co-passenger delay, no information had been provided on the orbit or orbit-raising period. The Board was not in a position to decide on the duration of any extension at the current meeting and should invite the Administration of the Republic of Korea to provide further information to the next meeting.

5.6.10 **Mr Di Crescenzo** said that the reasons for the extension request, although understandable, had not been properly explained. The Korean Administration should be invited to provide additional information to the Board's next meeting.

5.6.11 **Ms Beaumier** pointed out that the Korean Administration had not invoked co-passenger delay and the Board should refrain from characterizing the situation as such, particularly when it did not have all the information to do so. The onus was on the administration to justify its extension request.

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

"The Board considered in detail 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 CAS500-2 satellite network as presented in Document RRB25-1/19 and noted the following:

- The Administration of the Republic of Korea had invoked *force majeure* in its request for an extension of the regulatory time-limit but had not provided sufficient information for the assessment of the case against all four conditions that must be satisfied to qualify as a case of *force majeure*.
- The onus was on administrations to clearly and comprehensively describe their case by providing all the essential information and supporting evidence as agreed during the 13th plenary meeting of WRC-23 (see § 13.4 of Document WRC23/528).

Therefore, the Board concluded that it was not in a position to accede to the request and invited the Administration of the Republic of Korea to address the information requirements mentioned above and resubmit its case at a future Board meeting."

5.6.13 It was so **agreed**.

5.7 Submission by the Administration of the Sultanate of Oman requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the OMANSAT-73.5E satellite network (Documents RRB25-1/15 and RRB25-1/DELAYED/5)

5.7.1 **Mr Ciccorossi (Head, SSD/SSS)** introduced Documents RRB25-1/15 and RRB25-1/DELAYED/5, in which the Administration of Oman was requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the OMANSAT-73.5E satellite network on the grounds of *force majeure* owing initially to a rescheduling by the launch provider (SpaceX) and subsequently a co-passenger delay. The project was to establish the country's first telecommunication satellite in order to ensure nationwide mobile telecommunication coverage, otherwise unfeasible through terrestrial means. The administration had been diligent in pursuing coordination with affected administrations, but that process had been hindered by the COVID-19 pandemic, leading to significant delays. To preserve the coordination results achieved thus far and protect its filing, the administration, following a public tender, had procured the OG2 small, gap-filler satellite capable of receiving and transmitting in the notified 17.7-21.2 and 27.5-31.0 GHz bands that the administration would deploy at 73.5°E for 91 days before suspending operation. The satellite had been ready for the scheduled launch of 1 May 2025, ensuring delivery at the orbital position ahead of the regulatory time-limit of 7 June 2025. That launch was, however, initially delayed to 1 July 2025 owing to rescheduling by SpaceX and adjustment in the primary payload drop-off point, and then further delayed to 24 August 2025, owing to lack of readiness of the primary

payload. The administration had submitted notification information on 23 February 2025 and was requesting an extension of the regulatory time-limit to 31 December 2025.

5.7.2 Responding to questions from **Mr Di Crescenzo** and **Mr Azzouz**, he said that the OMANSAT-73.5E satellite network would provide service in the fixed satellite, space operation and mobile satellite services, operating in the Ku-band at 10.95-11.2 GHz and 11.45-11.7 GHz (space-to-Earth) and 13.4-13.65 GHz and 14-14.75 GHz (Earth-to-space); and in the Ka-band at 17.7-21.2 GHz (space-to-Earth) and 27.5-31 GHz (Earth-to-space). The Bureau had received a coordination request from the Administration of Oman for both the Ku- and Ka-bands but had only received notification information for the Ka-band. Thus, the present extension request referred only to the Ka-band, but the administration still had until the regulatory time-limit if it also wished to notify the Ku-band frequency assignments and request an extension for them.

5.7.3 **Ms Hasanova**, **Mr Talib** and **Mr Nurshabekov** noted the importance of satellite communication to the Administration of Oman, in particular as a developing country, and welcomed the diligent coordination and planning efforts undertaken by the administration to ensure that the satellite project would have met the regulatory time-limit of 7 June 2025 if not for the delays.

5.7.4 **Ms Hasanova** said that the initial delay had been attributable to a change in launch date beyond the control of the administration, noting that the OG2 interim satellite had evidently been ready for launch well in advance of that initial scheduled launch. In assessing the length of extension, it was important to factor in the change in drop-off point, which would necessitate a 43-day orbital transfer and an orbit raising procedure lasting a further 26 days. In view of the evidence provided, the efforts already undertaken by the administration and the fact that Oman was a developing country, she, **Mr Talib** and **Mr Nurshabekov** all supported granting the requested extension to 31 December 2025 for the OMANSAT-73.5E satellite network.

5.7.5 **Mr Azzouz** also drew attention to Oman's status as a developing country and said that it might suffer from a lack of professional expertise given that the project concerned would be its first telecommunication satellite. The project was critical to the country as it would extend mobile telecommunication to underserved areas and ensure nationwide coverage. From the information provided, the OG2 satellite procured through public tender would have been deployed in time to meet the regulatory time-limit if not for the delays caused by SpaceX and the primary payload. Regarding the length of extension, he noted that the launch would take 21 days and commissioning a further 14 days, followed by orbital transfer and orbit raising lasting a combined 69 days; thus, the satellite would arrive at its deployment location 104 days following launch, or by 6 December 2025, based on the most recent revised launch date of 24 August 2025 contained in Document RRB25-1/DELAYED/5. Thus, he supported granting an extension of the regulatory time-limit to 6 December 2025.

5.7.6 **Ms Mannepalli** agreed that the case, *prima facie*, satisfied the conditions of *force majeure* owing to delays outside the administration's control caused by the launch service and primary payload. As others had said, if not for those delays, the satellite would have been deployed ahead of the time-limit; thus, the Board could accede to the request to grant an extension, but some calculation, based on actual data, was needed to determine the precise length.

5.7.7 **Ms Beaumier** said that, while she could agree that the two-month delay imposed by the launch provider would qualify as a case of *force majeure*, she was not satisfied that delays attributable to adjustment in mission profile satisfied all conditions of *force majeure*. When relying on a rideshare arrangement as a secondary payload, mission adjustments were highly likely and therefore foreseeable; thus, scheduling should account for the inherent vulnerability of such an

arrangement. The Omani project's timeline, however, appeared to leave but two days between the original anticipated arrival at the orbital position and the regulatory time-limit, despite the likelihood of delays. Moreover, from the information provided, it was not clear what assumptions or data had been used to quantify the launch and commissioning time-frames of 21 and 14 days, respectively, to ensure the satellite's timely arrival at the orbital position, in particular given that they would not have known the rideshare arrangement at that time. Without being able to determine that those assumptions had been realistic, the Board could not conclude that the satellite would have arrived at the orbital position ahead of the time-limit if not for the delays.

5.7.8 Likewise, it was difficult to claim that the failure to meet the time-limit had not been self-induced by the administration's own behaviour. While it had been very diligent in pursuing coordination, the administration had left little time, less than eight months, to secure and bring into use an interim satellite. With no rationale provided by the administration to explain why that approach had had to be taken, she could not be convinced of the causal effective connection between the reported launch delays and the administration's failure to meet the bringing-into-use time-limit.

5.7.9 The lack of a long-term plan for the project was also a concern: there was a well-defined vision for the project but, after seven years, no satellite was under construction and there was no mention of how, when and by what the OG2 interim satellite would be replaced. Absent existing, concrete plans, it was questionable whether a three-year suspension under No. **11.49** was long enough to realize the project and gave rise to concerns of spectrum reservation.

5.7.10 In her view, the Board should thus not accede to the request at the present time and should request further information to address her concerns.

5.7.11 **Mr Henri** said that, while the case appeared to meet the conditions to qualify as a case of *force majeure* due to delay caused by the primary payload, there was insufficient detail for the Board to conclude on the matter at that meeting.

5.7.12 First, the delay experienced by SpaceX had only loosely been described as a "rescheduling" issue without any detail as to what the issue had been; similarly, no detail had been given to explain the delay in readiness of the primary payload referred to in RRB25-1/DELAYED/5 or the timeline for integration of the OG2 satellite with the primary payload and preparation for launch. While the administration had tried to demonstrate how the four conditions of *force majeure* had been met, that lack of detail obliged the Board to infer too much as to the nature of the *force majeure* events.

5.7.13 In addition, there was a general lack of information on the long-term future of the project. The submission referred to deployment of the small OG2 satellite as a "strategic interim measure", intended purely for the purpose of bringing into use frequency assignments to the OMANSAT-73.5E satellite network under No. **11.44B**, before suspension of use under No. **11.49**, but provided no schedule or plans beyond that. The statutory three-year suspension period was not a long time if the administration did not yet have a concrete plan and timeline for the long-term project. Furthermore, it was not clear from the information submitted that the OG2 satellite was capable of transmitting and/or receiving the frequency assignments in conformity with the notified information. He considered that such information should be sought in that regard, in particular the link budget for the OG2 satellite and the equivalent isotropically radiated power (e.i.r.p.) for each notified frequency assignment, and pointed to work being carried out within Working Party 4A on the need for interim satellites to be capable of operating in conformity with the notified characteristics in order to successfully bring into use an assignment.

5.7.14 Lastly, the requested length of extension and the calculations used to quantify it were unclear, in his view, with discrepancies between the length of time claimed by the administration and information posted by the satellite provider, Infinite Orbits, on social media. Furthermore, the requested extension appeared to include some three weeks of contingency.

5.7.15 Thus, he suggested seeking further clarifications from the administration and advising the Bureau to retain the network filings until the end of the subsequent Board meeting.

5.7.16 **Mr Alkahtani** said that it was entirely regular for administrations to use interim satellites to bring into use frequency assignments before suspension, pending deployment of a long-term satellite. In the present case, the administration had stipulated in the minimum requirements to participate in the tender and in the subsequent agreement with Infinite Orbits that the satellite should be capable of transmitting and/or receiving at 17.7-21.2 GHz (space-to-Earth) and 27.5 - 31 GHz (Earth-to-space). He also pointed to payload testing information in the submission to address any technical concerns.

5.7.17 **Ms Mannepalli** said that WRC-23 had discussed the issue of small satellites being used as an interim measure to bring into use filings before suspension and had instructed ITU-R to study the matter further. Absent the findings of those studies and a decision by a WRC, it would be premature for the Board to make its decision contingent on demonstrating such capability.

5.7.18 **Mr Henri** said that, while Working Party 4A was still studying the matter, it had been agreed at the May 2024 meeting that it was not legitimate to bring into use frequency assignments with spacecrafts that failed to meet the capability requirements under No. **11.44B**. The Bureau had confirmed that, if given a criterion, such as total power of spacecraft, it could check against the power-related parameters for each notified frequency assignment. While no measures had been so far agreed, it was surely in the Board's purview to request any information that would help it to conclude that frequency assignments to a satellite network would have been brought into use in compliance with the Radio Regulations if not for purported *force majeure* events. In the present case, there was not sufficient detail in the submissions to demonstrate the satellite's capability of transmitting or receiving the notified frequency assignments, in compliance with No. **11.44B**.

5.7.19 **Mr Azzouz** and **Ms Hasanova** said that it was not in the Board's mandate to determine the capability of satellites to transmit or receive certain frequencies and that it should not be a factor in the Board's decision. There was sufficient proof in the documents to the effect that the satellite was capable of transmitting in the 17.7 – 21.2 and 27.5 – 31.0 GHz frequency bands of the OMANSAT-73.5E satellite network. It would be more appropriate for the Board to decide on the extension request based on the conditions of *force majeure* and then instruct the Bureau to study the assignments under No. **13.6** and report back if necessary.

5.7.20 **Ms Beaumier** said that the submission was a request from an administration for the Board to grant an extension of the regulatory time-limit on the basis of the conditions of *force majeure*. The Board might be justifiably concerned about the use of interim satellites as a means of spectrum reservation. However, if it were to request further technical information as requested by Mr Henri, there had to be a clear understanding on how that information could affect the Board's decision-making and on what the outcome would be if the Board had been satisfied that the four conditions of *force majeure* had been met but was not satisfied with that additional information. In her view, such information was ultimately not germane to the Board's assessment of the fulfilment of the conditions of *force majeure*. Parallels could be drawn with other information, such as status of coordination, with the Board having previously being requested to consider coordination status in

its deliberations on requests for extension of the regulatory time-limit owing to *force majeure*. It had decided, however, that a lack of coordination was not reason to deny such a request.

5.7.21 **Mr Henri** said that, if the Board were to grant an extension to the regulatory time-limit to bring into use a network filing owing to a case of *force majeure*, it first had to be satisfied that the satellite concerned was capable of bringing the filing's frequency assignments into use and operating within the notified characteristics, before entertaining the merits of the case vis-à-vis the conditions of *force majeure*. Thus, the Board needed demonstrable proof, such as link budget or e.i.r.p. data, to conclude that the OG2 satellite was capable of bringing into use the filing's frequency assignments in accordance with No. **11.44B**. He would find it difficult to support any decision of the Board that did not request such information.

5.7.22 **Mr Cheng** said that the Board needed to be sure that the cases brought before it were absolutely qualified to be granted an extension; if there was any doubt, the Board should revert back to the administration for further clarification before taking a decision.

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

"The Board considered in detail the submission from the Administration of Oman requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the OMANSAT-73.5E satellite network as presented in Document RRB25-1/21 and noted Document RRB25-1/DELAYED/5 for information. The Board noted the following:

- The OMANSAT-73.5E satellite network was supporting the deployment of the first national telecommunication satellite of Oman.
- The Administration of Oman had been working diligently to complete coordination within 3° of the 73.5°E orbital position in order to be able to finalize the satellite payload design and minimize interference in orbit.
- A public tender process to lease a satellite to bring into use the frequency assignments to the satellite network had been launched on 20 October 2024, less than eight months before the regulatory time-limit, leading to a contract with Infinite Orbits for the use of a small satellite operating on GEO, Orbit Guard-2 (OG2).
- The OG2 satellite had been scheduled to be launched as a secondary payload in May 2025 and planned to arrive at the 73.5°E orbital position on 5 June 2025, two days before the regulatory deadline of 7 June 2025, and would remain at that orbital position for 91 days.
- In early January 2025, the launch had been first postponed until 1 July 2025 due to "internal scheduling adjustment" by the launch provider and then further delayed until 24 August 2025, due that time to primary payload delay.
- In view of the nature of the satellite and the little associated technical information provided, the assessment was not possible on whether the OG2 satellite would satisfy the requirements of RR No. **11.44B** regarding in particular the capability of transmitting or receiving the deployed frequency assignment in accordance with the notified characteristics of the satellite network in RR Appendix 4.
- There was no information about the plans for the long-term operation of the frequency assignments of the OMANSAT-73.5E satellite network beyond the 90-day bringing-into-use period.
- Adjustments to the mission profile were common and foreseeable given the nature of the mission.

- While there was some evidence that some force majeure conditions had been met, further information was required to demonstrate that all the conditions had been satisfied.

The Board concluded that it was not in a position to accede to the request and invited the Administration of Oman to provide the following additional information and supporting evidence to its following meeting:

- Information on the long-term operation of the frequency assignments to the OMANSAT-73.5E satellite network beyond the 90-day bringing-into-use period.
- Rationale for not making arrangements earlier to bring into use frequency assignments with an interim satellite within the regulatory time-limit.
- Confirmation that the power available on the OG-2 satellite was sufficient to comply with RR No. **11.44B** requirements.
- Details on the assumptions upon which the timelines outlined in the contract with Infinite Orbits for the commissioning and orbit raising for the primary and secondary payloads had been established (14 and 21 days) and to what extent information on the primary payload was available.

Furthermore, the Board instructed the Bureau to continue to take into account the frequency assignments to the OMANSAT-73.5E satellite network until the end of the 99th Board meeting.”

5.7.24 It was so **agreed**.

5.8 Submission by the Administration of Cambodia requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the CBGSAT-96.1E satellite network (Document RRB251/23)

5.8.1 **Mr Ciccorossi (Head, SSD/SSS)**, introducing Document RRB25-1/23, said that the Administration of Cambodia was requesting an extension of the regulatory time-limit to bring into use the frequency assignments relating to the CBGSAT-96.1E satellite. According to the filing, the satellite network was a fixed satellite service in the C-, Ka- and Ku-bands. The time-limit to bring the frequency assignments into use had expired on 25 February 2025; information under Resolution **49 (Rev.WRC-23)** had recently been received. As the Administration of Cambodia had submitted an extension request to the Board, the Bureau had held off cancelling the frequency assignments pending a decision.

5.8.2 According to the submission, the satellite project had faced delays owing to several unforeseen challenges. Those challenges included: a) the COVID-19 pandemic and attendant economic disruption, resulting in, among other things, supply chain interruptions; b) technical constraints, in particular a lack of skilled professionals and the requisite experience to launch a first satellite project; and c) recent political changes, which had led to shifts in policy priorities, delaying decision-making and setting back the project timeline. In requesting a three-year extension, the Administration of Cambodia had referred to the Board’s report on Resolution **80 (Rev.WRC-07)** and the ensuing WRC-23 decision, according to which, it said, extensions could be granted to developing countries facing exceptional circumstances.

5.8.3 **Ms Beaumier** said that while the Cambodian Administration had indicated that the COVID-19 pandemic had significantly delayed its satellite launch plans, it had described the challenges, such as the negative economic impact and skills shortages, in general terms only, providing no evidence to substantiate its claims. Its assertions regarding the Board’s report on Resolution **80 (Rev.WRC-07)** and the WRC-23 decision were inaccurate. As the Board had previously stated, WRC-23 had

instructed ITU-R to study the criteria and conditions upon which the Board might consider such cases for consideration at a future WRC. As things stood, the Board had no mandate to grant such extensions.

5.8.4 The Cambodian Administration had offered no justification for the three-year extension requested, nor had it provided information on the nature and status of the satellite project, the project milestones before and after the *force majeure* events or any other information necessary to support such a request. She recalled that the information required had been clarified by the Board and endorsed by WRC-23 (see § 13.4 of Document WRC23/528). Given that very little of that information had been provided, the Board could not accede to the Cambodian Administration's request. As with another case being considered by the Board under agenda item 5, she was of the view that, given the complete lack of information provided, the Board could not – and should not – seek additional information. Moreover, the Bureau should be instructed to cancel the frequency assignments.

5.8.5 **Mr Azzouz** said that he acknowledged that Cambodia was a developing country facing many challenges. However, given the dearth of information, including on the scheduled timeline for the design, manufacture and launch of the satellite, and the lack of evidence to substantiate the *force majeure* events, he could not agree to an extension being granted. **Ms Hasanova** concurred.

5.8.6 **Ms Mannepalli**, expressing sympathy for the difficulties faced by the Administration of Cambodia, said that she agreed with previous speakers: the submission was not complete in any respect. For that reason, the Board should not accede to the request or ask for additional information.

5.8.7 The Board was increasingly receiving contributions from developing countries in which the WRC-23 decision was being misquoted. There was clearly a need for ITU-R to study the matter of requests for extensions of regulatory time-limits from developing countries that did not qualify as cases of *force majeure* or co-passenger delay, as it had been invited to do by WRC-23; as far as she knew, however, no such study was currently being carried out.

5.8.8 **Mr Fianko** said that he had reached a somewhat different conclusion. He considered that, in recognition of the challenges that developing countries such as Cambodia faced, the Board should defer the decision on the extension request and invite the Administration of Cambodia to submit the requisite information to the Board's 99th meeting. While doing so might admittedly end up being merely an academic exercise, the process of preparing information to meet the Board's requirements was in itself a capacity-building measure. If the information was still insufficient at the 99th meeting, the Board could then decide not to grant the request. **Mr Talib** and **Mr Di Crescenzo** voiced support for that suggestion.

5.8.9 **Mr Henri** said that it was difficult for a decision to be taken without any supporting information or substantive evidence. Very little technical information had been provided; moreover, the due diligence information received under Resolution **49 (Rev.WRC-23)** gave a vague, seven-year launch window. While it was important for administrations to become familiar with the Radio Regulations, he was not prepared to request more information for the purposes of what seemed to be an "academic" exercise. He shared the view of other members that the Board was not in a position to accede to the request for a three-year extension of the regulatory time-limit. He could not agree to deferring a decision to the Board's next meeting or seeking more information.

5.8.10 In response to questions from **Mr Azzouz** and **Ms Mannepalli**, regarding the training and support provided to developing countries, **Mr Cicciorossi (Head, SSD/SSS)** explained that, as part of

capacity-building efforts, the Bureau was holding a regional seminar on regulatory procedures, in the third quarter of 2025, which the Administration of Cambodia might find helpful. The Bureau would explore other areas, including spacecraft design and project management, in which developing country administrations might be supported, such as through presentations by regional experts or scholarships.

5.8.11 **Ms Beaumier** agreed that guidance beyond regulatory procedures might be needed. Referring to Ms Mannepli's comments regarding the WRC-23 decision, she suggested that the Bureau inform the ITU-R working parties responsible for the studies that the Board had been receiving an increasing number of requests for extensions of regulatory time-limits from developing countries for which the Board would welcome guidance and which reinforced, the need for an ITU-R study on the issue.

5.8.12 While she appreciated that some Board members wished to allow the Cambodian Administration to submit information to the next meeting, she pointed out that the Board already had limited time to complete its work without engaging in an "academic" exercise. Substantive information, which the current case lacked, was needed to justify a request for more information. If the Board proceeded to seek information all the same, it risked setting a precedent that would have to be applied in all other such cases. In her view, that approach would not be sustainable.

5.8.13 The **Chair**, agreeing with Ms Beaumier, said that he doubted that even a three-year extension would be sufficient to complete the satellite project. The best approach would be for the Cambodian Administration to resubmit the filing and go through the process again, albeit in a more structured way.

5.8.14 **Ms Hasanova** said that she had been leaning towards requesting more information from the administration but, ultimately, agreed with Ms Beaumier. If the Board gave every administration the chance to provide more information, its workload would become unmanageable. The Board should seek additional information or clarification to assist it in reaching a decision only when substantive evidence had already been provided, which was not the case for the matter at hand.

5.8.15 **Mr Fianko** said that he appreciated the comments of other members. Since some administrations were inaccurately referring to the WRC-23 decision to support their requests, he wondered whether it might be appropriate for the Board to clarify, in its decision, the situation on that front. Developing countries could then pursue the matter through ITU-R.

5.8.16 **Mr Azzouz** said that the study requested by WRC-23 should be accelerated to facilitate the Board's work in respect of developing countries. It was essential for the Board to have the necessary procedures or criteria on which to base its decisions.

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

"Having considered in detail the submission from the Administration of Cambodia requesting an extension of the regulatory time-limit to bring into use the frequency assignments to the CBGSAT-96.1E satellite network as presented in Document RRB25-1/23, the Board noted the following:

- The CBGSAT-96.1E satellite project had faced delays due to the COVID-19 pandemic, economic disruptions, technical issues and political changes.
- The Administration of Cambodia quoted the possibility for the Board to grant 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, in the absence of a decision on the issue by WRC-23, granting

such an extension was not within the Board's mandate, but within that of a WRC (see § 13.8 of Document WRC23/528 agreed during the 13th plenary meeting of WRC-23).

- The Administration of Cambodia had neither invoked the application of *force majeure* in its request, nor demonstrated how the four conditions of *force majeure* would have been satisfied.
- There was no information on the satellite project, the project milestones and the status of the project before and after each of the *force majeure* events.

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 CBGSAT-96.1E satellite network."

5.8.18 It was so agreed.

6 Harmful interference to receivers in the radionavigation-satellite service (Document RRB25-1/8(Rev.1)(Add.3))

6.1 **Mr Ciccorossi (Head, SSD/SSS)** introduced Addendum 3 to Document RRB25-1/8(Rev.1), which provided an update from the Bureau on the serious issue of harmful interference to receivers in the RNSS in the 1 164–1 215 MHz and 1 559–1 610 MHz bands. Despite the decisions taken by the Board at its previous meeting, harmful interference to receivers in the RNSS persisted in the regions of the Middle East, Baltic Sea and the Korean Peninsula, and cases were increasing. ITU was working with the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO), and the heads of the three organizations had recently signed a joint statement expressing concern about the situation, which had been communicated to the United Nations Secretary-General with a view to increasing global awareness. The addendum concluded with two proposed recommendations for the Board's consideration.

6.2 Following a comment from **Ms Mannepilli**, he recalled that, at its previous meeting, the Board had considered it premature to take action under *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022) of the Plenipotentiary Conference. The Bureau was now recommending to the Board a dedicated webpage with relevant information concerning cases of harmful interference affecting the RNSS to raise awareness of the situation.

6.3 **Mr Azzouz** noted that, between January and September 2024, the number of cases had increased over fivefold compared to the previous year, involving 22 administrations and one United Nations agency. At its previous meeting, the Board had expressed grave concern at the increasing number of harmful interference cases affecting safety services and had urged all administrations concerned to comply with relevant regulatory provisions and to cooperate urgently in resolving the cases. However, harmful interference affecting the RNSS persisted, and he welcomed the signing of a joint statement by ITU, ICAO and IMO. He supported the recommendations put forward by the Bureau and suggested that the proposed dedicated webpage should be displayed prominently.

6.4 **Ms Hasanova** said that she fully supported the Bureau's proposed approach and agreed that administrations should be urged to cooperate and resolve cases of harmful interference affecting the RNSS. She asked whether the dedicated webpage would include general information on such cases and be updated to include interference reports received outside of the Board's meetings.

6.5 **Mr Ciccorossi (Head, SSD/SSS)** said that the increasing cases of harmful interference affecting the RNSS constituted a concern and the Board's work on such cases should be more visual.

It was for the Board to determine the content of the webpage, but it should at least reflect the evolution in the number of cases.

6.6 **Mr Talib** expressed concern about the increasing number of harmful interference cases affecting a very important and sensitive service. He welcomed the cooperation between ITU, ICAO and IMO and the recommendations put forward by the Bureau. It was also important to note that other administrations, United Nations agencies and satellite systems might be receiving the harmful interference as collateral damage rather than being directly targeted.

6.7 **Mr Henri** said that he concurred with the Bureau's proposed recommendations and suggested that the message on the need for administrations to cooperate urgently in the resolution of harmful interference should be more strongly worded. While the dedicated webpage should be general in nature and list all the cases received, it should also indicate the origin of the harmful interference if that sensitive issue was an established and recognized fact. He would appreciate further information from the Bureau on the structure and content of the proposed webpage.

6.8 The **Director** said that the affected Member States were becoming increasingly frustrated and impatient about the harmful interference affecting the RNSS. At its previous meeting, the Board had taken the first step of reminding all administrations concerned of their obligations to abide by the relevant provisions of the Radio Regulations and ITU Constitution and Convention to protect a safety-of-life service. However, the situation had not improved. Although the Board, as a regulatory body at the international level, had no enforcement powers, it should, for the sake of its credibility and as the guardian of the Radio Regulations, be seen to be taking action to escalate the issue and adopt more forceful and stronger language. The proposed dedicated webpage, which would be available on the ITU-R website, would also be a useful and visible tool in that regard. It would provide information on cases reported to the Bureau and the Board, the Board's decisions, and trends in the number of such cases.

6.9 Following a comment from **Mr Fianko**, who also supported the Bureau's proposed recommendations, the **Director** said that it was the Bureau's practice to inform the membership in writing of the establishment of the webpage.

6.10 **Mr Cheng** expressed support for the Bureau's recommendations. He suggested that the Board might also wish to instruct the Bureau to invite ITU-R to conduct technical studies on possible ways to prevent interference affecting the Global Navigation Satellite System (GNSS services) and to explore methods to geolocate the interference source.

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

"The Board carefully considered Addendum 3 to Document RRB25-1/8(Rev.1) and thanked the Bureau for the updated report on persistent cases of harmful interference affecting receivers in the radionavigation-satellite service (RNSS) in the regions of the Middle East, Baltic Sea and the Korean Peninsula. The Board considered with appreciation the Bureau's proposed recommendations and decided to endorse those recommendations, as per the following:

In view of the persistence of the harmful interference cases and in accordance with RR **No. 13.2**, the Board:

- continued to note with grave concern the increasing number of cases of harmful interference affecting safety services, civil aviation and maritime services;

- reiterated to the Administrations concerned the need to cooperate urgently in the resolution of the cases and the prevention of their reoccurrence in compliance with the ITU Constitution and Radio Regulations;
- instructed the Bureau to create a dedicated webpage where relevant information of cases of harmful interference affecting the RNSS, associated RRB decisions, applicable provisions of the ITU Constitution and Radio Regulations, recommendations and other relevant information could be provided to the ITU membership and the general public in order to raise awareness of the situation.

The attention of the administrations concerned should be drawn again to their obligations outlined in § 6 of Document RRB24-3/23.”

6.12 It was so **agreed**.

6.1 Submission by the Administration of Jordan regarding harmful interference to receivers in the radionavigation-satellite service (Documents RRB25-1/4 and RRB25-1/DELAYED/1)

Submission by the Administration of the State of Israel regarding harmful interference to receivers in the radionavigation-satellite service (Document RRB25-1/9)

Submission by the Administration of Egypt regarding harmful interference to receivers in the radionavigation-satellite service (Document RRB25-1/16)

6.1.1 **Mr Ciccorossi (Head, SSD/SSS)**, introducing the sub-items, said that in Documents RRB25-1/4 and RRB25-1/DELAYED/1, the Administration of Jordan reported that the harmful interference affecting GNSS services within its territory remained unresolved, with significant implications for safety, communication and economic operations.

6.1.2 In Document RRB25-1/9, the Administration of Israel reported that, in accordance with No. **15.37**, it had promptly undertaken a thorough investigation to monitor and locate the reported interference. Since October 2024, it had not identified any interference source matching the descriptions provided anywhere within the country and would continue monitoring for any potential interference. The administration also indicated that, before October 2024, it had encountered interference of the same nature, originating from beyond the country’s borders. It expressed its commitment to complying with international regulations and to taking the necessary action to resolve possible events bilaterally with other administrations, and was engaged in discussions with the Administration of Jordan on other types of interference.

6.1.3 In Document RRB25-1/16, the Administration of Egypt recalled the Board’s decision at its 97th meeting and reported that receivers in the RNSS within Egyptian territory were continuing to experience harmful interference that threatened safety of life on board flights and ships.

6.1.4 The **Chair** asked whether the Board was prepared to allow Mr Azzouz to intervene in the discussion, on the understanding that his comments would be on the general issue and not on the submission by the Administration of Egypt.

6.1.5 The **Director** said that it was important for the Board to be seen to be following the correct procedures.

6.1.6 **Ms Beaumier** agreed that there should be no misunderstanding about the Board’s conduct. However, she would have no difficulty with the approach proposed by the Chair since the issue of harmful interference to receivers in the RNSS was a matter of general concern.

6.1.7 **Mr Azzouz**, making general comments on the issue, thanked the Bureau for its efforts to address the harmful interference, which persisted. He noted that the Administration of Israel had undertaken an investigation to monitor and locate the reported interference, had not identified any interference source matching the descriptions provided since October 2024, and had also indicated that before October 2024, it had encountered interference of the same nature. The Board should therefore repeat much of its decision at the 97th meeting. It should remind administrations to comply with the relevant provisions of the Radio Regulations and ITU Constitution. It should also instruct the Bureau to: invite the Administration of Israel to take all possible and necessary actions to immediately cease any harmful interference that adversely impacted safety services; convene a meeting between all administrations concerned to resolve the critical and long-standing interference issue; and strongly urge all administrations concerned to cooperate in goodwill in promptly resolving all cases of harmful interference to GNSS receivers. The Bureau and administrations concerned should report on progress to a future meeting.

6.1.8 **Mr Talib** noted with satisfaction that the Board's decision at its 97th meeting had resulted in communications between some of the administrations concerned. He asked whether the Bureau could perform technical measurements to confirm the location of the interference source as the Administration of Israel had been unable to identify any source of interference matching the descriptions.

6.1.9 **Mr Ciccorossi (Head, SSD/SSS)** said that, currently, geolocation measurements had to be performed on the ground. Given the need to be in close vicinity to the source of interference, the Bureau tended to rely on information provided by neighbouring countries, and he drew attention to the information in that regard provided by various administrations to the Board's previous meeting. However, the Bureau was cooperating with the European Space Agency, which would be developing a non-GSO constellation able to monitor different frequency bands, including those currently under discussion, which might be able to assist with geolocation in the future.

6.1.10 **Ms Mannepalli** expressed concern that the harmful interference affecting safety services continued. She observed that the Administration of Israel had been unable to identify any source of interference matching the descriptions provided within its territory and had also indicated that it had encountered interference of the same nature before October 2024. It was positive that the Administrations of Israel and Jordan were engaged in discussions concerning other types of interference and that Israel stood ready to resolve possible events bilaterally with other administrations. The Board should instruct the Bureau to convene bilateral or multilateral meetings with the administrations involved. The cooperation of signatory administrations of the Memorandum of Understanding on Space Monitoring might be sought to conduct the necessary geolocation measurements to confirm the interference source, as had been done regarding interference to the broadcasting-satellite service.

6.1.11 **Mr Henri** observed that the Administration of Israel had not provided much detail in its submission about the interference experienced before October 2024; its statement indicating that it had not identified any source of interference within its territory matching the descriptions in the complaints sounded familiar and similar to responses provided in the past by potential interfering countries. While it would be relatively easy to determine signal direction, he agreed that precise geolocation by a third party of the source of harmful interference affecting the RNSS could be difficult. Although the lack of progress was a concern, he was pleased that all parties involved were aware of the issue and had responded to the Board through their submissions, even if the content of some was lacking substantive information. He agreed that the Board needed to be proactive on

the issue. The Bureau should be involved in convening bilateral or multilateral discussions between the administrations concerned.

6.1.12 **Mr Azzouz** pointed out that it was easier to detect the transmission of superfluous signals (jamming) than the transmission of false or misleading signals (spoofing), since the latter required information extraction, a step after identification or monitoring that was not available to regulators in many countries. That said, however, there were still inherent difficulties with respect to geolocation, including the need for measurements to be performed on the ground and in close vicinity to the interference source. It would be useful if data and measurements were available for any meeting of involved administrations to try and reach a solution.

6.1.13 **Mr Cheng**, recalling the Board's decision at its 97th meeting, observed that the Administration of Israel had provided limited information on the nature of the investigation undertaken, simply indicating that it had been "thorough" and had engaged "all needed facilities". The administration might be requested to provide more technical details, including on the duration, facility types, and spectral maps. The Administrations of Egypt and Jordan should also be invited to provide more detailed material concerning the harmful interference to facilitate the Board's analysis.

6.1.14 **Ms Mannepalli** said that she took it that the request from the Administration of Jordan to the 97th meeting for action under *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022) had been addressed with the creation of a dedicated webpage on cases of harmful interference affecting the RNSS.

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

"The Board considered in detail Document RRB25-1/4 from the Administration of Jordan, Document RRB25-1/9 from the Administration of Israel and Document RRB25-1/16 from the Administration of Egypt regarding harmful interference to receivers in the radionavigation-satellite service (RNSS). The Board also noted Document RRB25-1/DELAYED/1 from the Administration of Jordan for information. The Board thanked the Administrations of Jordan and Egypt for reporting cases of harmful interference to RNSS receivers. The Board noted that:

- The Administration of Israel had not identified any source of interference within its territory matching the descriptions provided in the complaints.
- Harmful interference continued to be experienced in the Middle East threatening the safety of life on board flights and ships.
- The need to comply with Articles 45 and 47 of the ITU Constitution and 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, and the relevance of Circular Letter [CR/488](#), on prevention of harmful interference to radionavigation-satellite service receivers in the 1 559–1 610 MHz frequency band.

The Board instructed the Bureau to:

- urge the Administration of Israel to take all necessary actions to immediately cease harmful interference that adversely impacted on safety services and report to the 99th Board meeting, and strongly urge the Administrations of Israel, Jordan and Egypt to cooperate in goodwill in promptly resolving all cases of harmful interference;

- convene bilateral or multilateral meetings with the Administrations of Israel, Jordan and Egypt.

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** and **15.37** and the *resolves* of Resolution **676 (WRC-23)**, in particular when harmful interference adversely affected safety services.”

6.1.16 It was so **agreed**.

6.2 Submission by the Administrations of Estonia, Latvia and Lithuania regarding harmful interference to receivers in the radionavigation-satellite service (Document RRB25-1/12)

Submission by co-signed administrations concerning harmful interference to satellite networks in the broadcasting-satellite service of France and to receivers in the radionavigation-satellite service (section 2) (RRB25-1/17)

6.2.1 **Mr Ciccorossi (Head, SSD/SSS)**, introducing the sub-items, said that in Document RRB25-1/12, the Administrations of Estonia, Latvia and Lithuania provided detailed information on ongoing harmful interference to receivers in the RNSS, which continued to have significant implications for safety, communication and economic operations in the three countries, and particularly affected aircraft flying in national airspace close to the border with the Russian Federation. As detailed in Annex 1, the Administration of Estonia had detected two interference sources in the Leningrad region of the Russian Federation. Annex 2 provided information on the interference situation in Lithuania where harmful interference affecting the RNSS had been increasing since September 2024, with interfering signals also affecting GLONASS and GALILEO frequency bands. The geolocation information provided appeared to indicate that the source originated from the Kaliningrad region of the Russian Federation. Annex 3 provided information on RNSS interference cases in Latvia from September 2024 to January 2025 and showed a significant degradation in the quality of the RNSS signal of flight traffic. The three administrations were requesting the Bureau to continue efforts in accordance with Section I of Article **13**.

6.2.2 Document RRB25-1/17 contained a contribution co-signed and supported by several European administrations. In section 2 of the document, the Member States submitting the contribution drew the Board’s attention to continued interference to RNSS services, including reports of harmful interference to services of other countries such as Finland and Poland, affecting air traffic near the border of the Russian Federation.

6.2.3 **Mr Azzouz** thanked the Bureau for its efforts to resolve the harmful interference affecting the RNSS. As indicated in Document RRB25-1/12, despite the repeated efforts of the administrations concerned to contact the Russian Administration, the Administration of Lithuania had received no communication, and the Estonian Administration had only received acknowledgements under No. **15.35**. Monitoring and direction-finding measurements indicated that the interference source was located in the territory of the Russian Federation and the continuity of the interfering signals indicated that they could be transmitted deliberately for jamming and spoofing purposes. The detected emissions affected GNSS frequency bands, as well as other GPS, GALILEO, and GLONASS bands. In Document RRB25-1/17, multiple countries drew attention to continuing interference affecting air traffic near the border of the Russian Federation. The Board should reiterate its decision at the 97th Board meeting. It should express grave concern about the reported unnecessary transmissions of superfluous signals (jamming) and transmissions of false or misleading signals (spoofing). It should strongly urge the administrations concerned to comply with all relevant

provisions of the ITU Constitution and Radio Regulations and with the *resolves* of Resolution **676 (WRC-23)**, and to cooperate in the utmost goodwill to solve all cases of harmful interference affecting safety services as promptly as possible. The Board should instruct the Bureau to invite the Administration of the Russian Federation to take all necessary action to immediately cease harmful interference to RNSS receivers that adversely impacted safety services, report any progress to the 99th meeting, and publish the cases and the Board's decision on the dedicated webpage.

6.2.4 **Ms Mannepalli** expressed grave concern about the increasing number of cases of harmful interference affecting the RNSS. The Board should strongly word its conclusion and request the Administration of the Russian Federation to make every effort to cease any such operations shown from monitoring reports to be originating from within its territory.

6.2.5 **Ms Beaumier** said that she was deeply troubled to note not only that cases of harmful interference were continuing, but that additional countries in Europe were also being affected. Some administrations had not received any response to the communications and others had only received acknowledgements under No. **15.35** without any other action. The Board should reiterate its previous decision and use stronger language to convey its disapproval of how the situation was evolving. It should call on the Administration of the Russian Federation to take the necessary actions to respond to communications and investigate and cease any harmful interference that originated from its territory or from territory that it was currently occupying.

6.2.6 **Mr Henri** agreed that the Board should word its conclusion strongly and note that the source of the harmful interference had been geolocated to within the territory of the Russian Federation.

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

"The Board considered in detail Document RRB25-1/12 from the Administrations of Estonia, Latvia and Lithuania, and Document RRB25-1/17 from co-signed administrations regarding harmful interference to receivers in the radionavigation-satellite service (RNSS). The Board concluded as follows:

- The Board continued to note with grave concern the increasing number of cases of harmful interference affecting safety services, civil aviation and maritime services.
- The Board stressed the need to comply with RR No. **4.10** whenever harmful interference degraded systems of safety services in the RNSS.
- As measurements had geolocated the source of the harmful interference within the territory of the Russian Federation, the Board urged the Administration of the Russian Federation to take timely actions and provide timely 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**.
- Noting that harmful interference signals 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) continued to be reported, the Board reiterated its grave concern that such transmissions were in direct contravention of RR No. **15.1**.

The Board instructed the Bureau to:

- urge the Administration of the Russian Federation to take all necessary actions to immediately cease harmful interference that adversely impacted on safety services and report to the 99th Board meeting;
- continue reporting on progress on the matter to future Board meetings.

The Board strongly 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 and 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.”

6.2.8 It was so **agreed**.

7 Harmful interference to satellite networks at 5°E

Submission by the Administration of Sweden regarding harmful interference to Swedish satellite networks at the orbital position 5°E (Documents RRB25-1/6, RRB25-1/13 and RRB25-1/8(Rev.1(Add.5))

Submission by co-signed administrations concerning harmful interference to satellite networks in the broadcasting-satellite service of France and to receivers in the radionavigation-satellite service (section 1) (Documents RRB25-1/17, RRB25-1/8(Rev.1(Add.5) and RRB25-1/DELAYED/8)

Submission by the Administration of Luxembourg regarding harmful interference to the ASTRA-4A satellite located at 5°E (Document RRB25-1/20)

7.1 **Mr Vallet (Chief, SSD)** informed the Board that most of the contributions under the agenda item had been submitted before the meetings organized by the Bureau in March 2025, to which Addendum 5 to Document RRB25-1/8(Rev.1) referred. Document RRB25-1/6 from the Administration of Sweden reported on the geolocation measurements performed by the Leeheim Space Radio Monitoring Station (Germany) in November 2024 to identify the source of harmful interference to the ASTRA-4A satellite. The results, set out in annex to the document, showed that the source of the interference was located in the region of Kaliningrad in the Russian Federation. Document RRB25-1/13 was an additional submission from the Administration of Sweden, detailing in annex measurements from the Leeheim Space Radio Monitoring Station in August 2024 showing that the harmful interference source was located on the Crimean Peninsula.

7.2 In Addendum 5 to Document RRB25-1/8(Rev.1), the Bureau reported on the outcome of the meeting it had convened with delegations of the Administrations of Sweden and the Russian Federation on 13 March 2025. Both delegations had agreed to consider improving communication channels to expedite the sharing of information on interference cases. The Russian Administration had found no interference present when its investigations had been carried out and would consider the possibility of providing a written outcome of the investigations in reply to the letters sent by the Administration of Sweden. Both delegations had agreed to continue their discussions bilaterally and with the assistance of the Bureau.

7.3 Document RRB25-1/17 contained a multi-country contribution submitted by the Administration of France, as the notifying administration of the EUTELSAT intergovernmental

satellite organization, whose members were concerned that the harmful interference experienced could impact the capacity of satellites to meet the vital needs of European countries. In section 1 of the document, the administrations noted that geolocation was more challenging to conduct because the interference was becoming more intermittent and stealthier. They asked the Board to request the Russian Administration to comply with its previous requests. They also requested the Board to instruct the Bureau: to request the cooperation of the Leeheim Space Radio Monitoring Station in reconfirming the exact location of the harmful interference; to ask the administrations concerned and the satellite operators involved to provide all useful data and information to the Leeheim station; to publish its conclusions on the ITU and RRB websites, in accordance with *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022) of the Plenipotentiary Conference; and to continue to insist on a meeting between the Russian Administration and all relevant stakeholders.

7.4 He noted that the results of the geolocation measurements had not been disputed, so reconfirmation of their exact location by the Leeheim monitoring station was unlikely to be necessary. Should the Board consider that another meeting with the Russian Administration was required, it should specify those administrations that it considered relevant stakeholders.

7.5 The Administration of France had also submitted Document RRB25-1/DELAYED/8, which had been prepared after the March 2025 meeting with the Russian Administration and reported on various incidents of harmful interference to the F-SAT-N3-3E, F-SAT-N3-7E, F-SAT-N3-10E and F-SAT-N7-10E satellite networks since August 2024. As detailed in Reference 6 and Attachments 1 and 2 thereto, the harmful interference received as recently as 10 March 2025 had been geolocated to Kaliningrad in the territory of the Russian Federation.

7.6 In Addendum 5 to Document RRB25-1/8(Rev.1), the Bureau reported on the outcome of the meeting convened on 14 March 2025 with delegations of the French and Russian Administrations. Among other things, he noted that the Russian Administration had found no interference present when its investigations had been carried out and would consider the possibility of providing a written outcome of the investigations in reply to the letters sent by the Administration of France. The French Administration considered that there was a need to clarify the regulatory status of the earth stations at the locations of the geolocated sources and to organize permanent monitoring of those locations through the Leeheim Space Radio Monitoring Station. The Russian Administration had agreed to consider the possibility of such an arrangement, in addition to Russian internal monitoring procedures. Both delegations had agreed to continue their discussions bilaterally or with the assistance of the Bureau.

7.7 Document RRB25-1/20 from the Administration of Luxembourg concerned harmful interference to uplink transmissions between the Luxembourg territory and the ASTRA-4A satellite located at 5°E. The submission provided information in annex on geolocation measurements undertaken by the Leeheim Space Radio Monitoring Station. The measurements were identical to those in Document RRB25-1/6 and confirmed that the interference source was located in the region of Kaliningrad. The Board was requested to encourage the Russian Administration to engage with discussions with others, including the Administration of Luxembourg, in order to resolve the harmful interference cases and prevent them from reoccurring.

7.8 **Mr Azzouz** thanked the Bureau for convening meetings between the Administration of the Russian Federation and the Administrations of Sweden and France. The location of the interference source, which international monitoring reports had geolocated to within the territory of the Russian Federation, had not been disputed in the bilateral meetings. Accordingly, there was no need to

accede to the request for further geolocation measurements from the Leeheim station. The Board should reiterate its previous decision and request the Administration of the Russian Federation to: immediately cease any deliberate action to cause harmful interference to frequency assignments of other administrations; provide information on the status of its investigation and actions carried out since the cases had been reported and prior to the 99th meeting, including any mitigation techniques to stop the interference; and 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 to the satellite networks of other administrations. It should urge the Administration of the Russian Federation and all other administrations concerned to collaborate and exercise the utmost goodwill in the resolution of the long-standing harmful interference issue. The Board should instruct the Bureau to: convene further meetings of the administrations concerned, including Luxembourg, to resolve the harmful interference cases and prevent them from reoccurring; and report on progress to the 99th meeting. Publication of the Board's conclusions in accordance with *resolves to instruct the Radio Regulations Board 2* of Resolution 119 (Rev. Bucharest, 2022) would show that action was being taken on a critical, long-standing issue, and he could accede to the request.

7.9 **Ms Mannepli**, having thanked the Bureau for convening the bilateral meetings, noted that the Board's instructions to the Bureau at the 96th meeting had now been implemented. The Russian Administration's failure to provide information on the status of its investigation and actions carried out since the 96th meeting was a concern, as was the intermittent nature of the harmful interference, which made it more difficult to identify the source. The Board should more strongly request the Administration of the Russian Federation to provide information on the status of its investigation and to further investigate whether any earth stations recorded in the MIFR might have the capability to cause harmful interference. It should instruct the Bureau to convene further meetings to resolve the long-standing interference issue. In her view, it was still premature to accede to the request to act in accordance with *resolves to instruct the Radio Regulations Board 2* of Resolution 119 (Rev. Bucharest, 2022).

7.10 The **Chair** agreed that action under *resolves to instruct the Radio Regulations Board 2* of Resolution 119 (Rev. Bucharest, 2022) would be premature at the present juncture.

7.11 **Ms Beaumier** thanked the Bureau for providing assistance to the administrations. It was positive that the Russian Administration had engaged in the meetings and was open to work with administrations affected by the harmful interference, the source of which had been reconfirmed by the Leeheim Space Radio Monitoring Station to originate from the territory of the Russian Federation and the temporarily occupied territory of Crimea. It was unfortunate that the interference persisted, and the Board should reiterate its request to the Administration of the Russian Federation to abide by the relevant regulatory provisions, promptly acknowledge receipt of reports of interference and immediately cease any deliberate action to cause harmful interference to frequency assignments of other administrations. It was disappointing that the Russian Administration had not addressed the Board's requests to provide information on the status of its investigation and actions, and on investigations of any earth stations currently deployed at, or close to, the locations identified by geolocation measurements, and the Board should therefore reiterate its requests. The Board should once again urge all parties to collaborate and exercise the utmost goodwill and mutual assistance in the resolution of the harmful interference cases. It was not clear to her whether the meeting of "all relevant stakeholders" requested in Document RRB25-1/17 was expected to include all the administrations listed in that multi-country contribution. She recalled that the Board had addressed submissions on the issue at previous meetings from the

Administrations of the Kingdom of the Netherlands and Ukraine and wondered whether those administrations might be considered as relevant stakeholders.

7.12 **Mr Vallet (Chief, SSD)** said that the Board's decision should be precise, particularly since a meeting of all the administrations listed in the multi-country contribution would be logistically challenging. In order to ensure a strong legal basis for its decision on relevant stakeholders, the Board might wish to take into consideration Article 15 of the Radio Regulations. That article focused on radio aspects and did not include provisions concerning administrations with jurisdiction over companies whose programming content was affected by harmful interference (Kingdom of the Netherlands and Ukraine).

7.13 **Ms Beaumier** noted that the requests in Document RRB25-1/17 had been made before the March 2025 bilateral meetings had taken place. She agreed that it would be more judicious not to consider countries affected by content issues as relevant stakeholders. Accordingly, the Board should instruct the Bureau to convene further meetings between the Russian, French and Swedish Administrations and might wish to consider the benefit of organizing a meeting of the Administrations of Luxembourg and the Russian Federation. It was not necessary to request the Leeheim Space Radio Monitoring Station to conduct additional geolocation measurements and would be premature at the present juncture to accede to the request for action under *resolves to instruct the Radio Regulations Board 2* of Resolution 119 (Rev. Bucharest, 2022). While the actions to which the parties had committed at the bilateral meetings were unlikely to lead to the immediate and complete resolution of the harmful interference, it was important to provide an opportunity for positive developments.

7.14 **Mr Cheng** expressed disappointment that the intermittent harmful interference persisted. The Board should urge the Russian Administration to further investigate the source of interference and take measures to prevent any reoccurrence. He welcomed the bilateral meetings held and called for further bilateral discussions with stakeholders, with the Bureau's assistance if necessary. It was premature to accede to the request for action under *resolves to instruct the Radio Regulations Board 2* of Resolution 119 (Rev. Bucharest, 2022), which had been made before the bilateral meetings had taken place.

7.15 **Mr Fianko** said that the Board should continue to firmly urge the Russian Administration to step up its efforts to completely eliminate the intermittent harmful interference geolocated to areas within its jurisdiction. The bilateral meetings were an encouraging and positive step, and the Board should call for continued engagement. In view of the measures taken in good faith and assurances given, it was premature to act in accordance with *resolves to instruct the Radio Regulations Board 2* of Resolution 119 (Rev. Bucharest, 2022).

7.16 **Ms Hasanova**, having thanked the Bureau for its efforts to assist the administrations concerned, said that it was disappointing that the interference continued. The Board should reiterate its previous decision, urge the administration concerned to cease the interference and instruct the Bureau to provide support. She could go along with the request for action under *resolves to instruct the Radio Regulations Board 2* of Resolution 119 (Rev. Bucharest, 2022).

7.17 **Mr Talib** welcomed the actions of the administrations directly involved in the harmful interference, namely the Russian Federation, France, Luxembourg and Sweden. Noting that the interference had been independently geolocated to three locations within the territory of the Russian Federation, he said that the Russian Administration should provide greater cooperation, including in connection with the acknowledgement of receipt of interference reports and the holding of meetings. The Bureau should continue to provide assistance in convening further

discussions for the stakeholders. He agreed that it was premature to accede to the request under *resolves to instruct the Radio Regulations Board 2* of Resolution 119 (Rev. Bucharest, 2022).

7.18 **Mr Henri**, endorsing the views of previous speakers and recalling the geolocation measurements performed by the Leeheim Space Radio Monitoring Station, said that the Board should indicate in its decision that the sources of harmful interference were located on the territory of the Russian Federation and the Crimean Peninsula.

7.19 **Mr Azzouz** said that, in order to convey a strong stance, the Board might wish to indicate in its decision that, although it was premature to accede to the request for action under *resolves to instruct the Radio Regulations Board 2* of Resolution 119 (Rev. Bucharest, 2022), it would, in the absence of the requested information, reconsider its decision at its 99th meeting.

7.20 **Mr Di Crescenzo** said that he was unsure if such an approach was necessary. If the Board deemed it appropriate to accede to the request under Resolution 119 (Rev. Bucharest, 2022) at the 99th meeting, it would simply do so.

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

The Board considered in detail Addendum 5 to Document RRB25-1/8(Rev.1) from the Bureau, Documents RRB25-1/6 and RRB25-1/13 from the Administration of Sweden, Document RRB25-1/17 from co-signed administrations and Document RRB25-1/20 from the Administration of Luxembourg regarding harmful interference to satellite networks located at 5°E. The Board also noted Document RRB25-1/DELAYED/8 from the Administration of France for information. The Board noted the following:

- Discussions had been held between the Administration of the Russian Federation and the Administration of Sweden as well as between the Administration of the Russian Federation and the Administration of France on 13 and 14 March 2025, respectively.
- However, new reports from the Administrations of Sweden, France and Luxembourg indicated that harmful interference continued to be present, with geolocation measurements indicating that they had originated from the territory of the Russian Federation as well as the Crimean Peninsula.
- The Administration of the Russian Federation had investigated the cases reported but had found no interference present when the investigation had been carried out.
- The Administration of the Russian Federation had still not provided the information that the Board had requested at its 96th meeting.

The Board also noted:

- the two separate reports of geolocation measurements from the international space radio monitoring station, part of the International Monitoring System, based in Leeheim (Germany), reconfirming that the sources of harmful interference were located on the territory of the Russian Federation as well as the Crimean Peninsula;
- that, based on monitoring reports, there were no disputes regarding the harmful interference sources; therefore, there was no need to request further geolocation measurements from the International Monitoring System.

Consequently, the Board again reiterated its requests to 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 since the cases had been reported and prior to the 99th Board meeting;
- 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, 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 Sweden, the Russian Federation, Luxembourg and co-signed administrations, in compliance with RR 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:

- convene further meetings of the Administrations of the Russian Federation, France, Sweden and Luxembourg in the first half of 2025, to resolve the harmful interference cases reported by administrations and prevent them from reoccurring;
- report on progress to the 99th Board meeting.

The Board decided that it was still premature at that stage to accede to the requests under *resolves to instruct the Radio Regulations Board 2* of Resolution 119 (Rev. Bucharest, 2022) of the Plenipotentiary Conference; but in the absence of the requested information, the Board would reconsider that decision at its 99th meeting.”

7.22 it was so **agreed**.

8 Issues related to footnote No. 5.429 of the Radio Regulations

Submission by the Administration of Tunisia concerning the addition of Tunisia’s name in footnote No. 5.429 at WRC-23 for the allocation of the band 3 300 – 3 400 MHz to the fixed and mobile services on a primary basis (Document RRB25-1/5)

Submission by the Administration of Italy regarding the Administration of Tunisia’s request to be added to footnote No. 5.429 of the Radio Regulations (Document RRB25-1/26)

8.1 **Mr Vassiliev (Chief, TSD)** said that, in Document RRB25-1/5, the Administration of Tunisia was seeking the Board’s assistance to resolve the objection of the Administration of Italy to the addition of Tunisia to footnote No. **5.429** of the Radio Regulations, which provided an additional allocation of the frequency band 3 300–3 400 MHz to fixed and mobile services on a primary basis in the listed countries. In its submission, the Administration of Tunisia explained that, at WRC-23, it had requested that Tunisia be added to that footnote in order to promote the efficient use of its spectrum resources and the development of its communication services, particularly 5G. The Italian

Administration had objected at the conference on the grounds that the frequency band was used by radiolocation services for military purposes. According to the Administration of Tunisia, however, the protection of radiolocation services against interference was guaranteed under Nos. **5.429** and **5.43A 1bis**) of the Radio Regulations.

8.2 In Document RRB25-1/26, the Administration of Italy, responding to the Administration of Tunisia, drew attention to Report ITU-R M.2481-0, on in-band and adjacent band coexistence and compatibility studies between IMT systems in 3 300–3 400 MHz and radiolocation systems in 3 100–3 400 MHz, according to which protection distances of hundreds of kilometres were required between IMT and radiolocation systems operating on those frequency bands. It said that the distance between the closest points on the Italian and Tunisian coasts, however, was just 70 km. It further specified that the frequency bands were harmonized for use by North Atlantic Treaty Organization military radars, including aeronautical and maritime, for common European security purposes. It also explained and that the radiolocation service was critical for the preservation of life, particularly of migrants, thousands of whom had perished attempting to cross the Mediterranean Sea. The Administration of Italy pointed out that, obligations on administrations not to cause interference notwithstanding, there was no absolute guarantee on that front. When interference occurred, it was often difficult to identify the source and find solutions speedily. Lastly, it considered that there were no obstacles to technological progress in Tunisia: even without access to the 3 300 – 3 400 MHz frequency band, the 3 400–3 800 MHz frequency band was available for use by mobile services and 5G IMT applications, including in the Mediterranean region.

8.3 **Mr Azzouz**, noting that, pursuant to Resolution **26 (Rev.WRC-23)**, and the annex thereto, matters relating to the addition, modification or deletion of footnotes, including with regard to country names in footnotes, fell under the remit not of the Board but of world radiocommunication conferences. Given the arguments raised in the respective submissions, the Board should invite the Administrations of Italy and Tunisia to cooperate bilaterally to identify a scenario that both could accept. Similar issues under Resolution **26 (Rev.WRC-23)** had been reported over the years by a number of administrations, many of which had faced objections to the addition of their country name to an existing footnote. Given that technology had rapidly changed, and demand for IMT had grown, the Bureau should present data on the number of such cases for consideration by WRC.

8.4 The **Chair**, noting Mr Azzouz's comments, emphasized that the rules were clear: in Annex 1 to Resolution **26 (Rev.WRC-23)** it was explicitly stated that the acceptance of the addition of country names to existing footnotes was subject to there being no objections from affected countries. In the matter at hand, the Administration of Italy had objected.

8.5 **Ms Mannepalli**, summarizing the arguments put forward by the Administrations of Tunisia and Italy, said that the issue had been discussed at WRC-23, which had ultimately concluded that Tunisia could not be included in footnote No. **5.429**. It was clear from the technical reasons outlined by the Italian Administration, such as the minimum protection distance and the criticality of the radiolocation services, that the Tunisian Administration's request was unlikely to be accepted. In her view, the issue was beyond the Board's mandate.

8.6 **Ms Beaumier** said that, while she had sympathy for the predicament of the Administration of Tunisia, she agreed that the matter had been considered at length at WRC-23 and a decision had been made in accordance with Resolution **26 (Rev.WRC-23)**. The Board had no mandate to consider the issue; it could do no more than encourage the administrations to find a solution bilaterally. She did not believe it necessary for the issue to be reported to WRC-27. The **Chair** agreed, adding that he could not recall any similar such cases.

8.7 **Mr Talib, Mr Henri and Mr Nurshabekov** expressed sympathy for the concerns raised by the administrations involved. They agreed, as did **Ms Hasanova** and **Mr Fianko**, that the issue fell outside the Board's remit.

8.8 **Mr Talib, Ms Hasanova and Mr Nurshabekov** suggested that the Bureau might encourage bilateral cooperation. **Mr Cheng** expressed agreement, noting that, in accordance with Resolution **26 (Rev.WRC-23)**, any addition of a new footnote or modification of an existing footnote could be considered only by a WRC.

8.9 **Mr Henri and Mr Fianko** considered that the Board should refrain from offering any advice or opinion whatsoever on matters that were not within its sphere of competence. The **Chair** concurred and proposed that the Board conclude as follows on the matter:

"The Board carefully considered Document RRB25-1/5 from the Administration of Tunisia and Document RRB25-1/26 from the Administration of Italy, regarding the Administration of Tunisia's request to be added to footnote No. **5.429** of the Radio Regulations.

While expressing its understanding of the arguments of both Administrations, given that only a competent WRC had the authority to make changes to the provisions of the Radio Regulations (see also *further resolves* 1 and Annex 1 of Resolution **26 (Rev.WRC-23)**), the Board concluded that it was outside of its mandate to deal with that issue."

8.10 It was so **agreed**.

9 Issues regarding the provision of STARLINK satellite services in the territory of the Islamic Republic of Iran (Documents RRB25-1/DELAYED/2 and 3)

Submission by the Administration of the Islamic Republic of Iran regarding the provision of STARLINK satellite services in its territory (Document RRB25-1/14)

Submission by the Administration of Norway regarding the provision of STARLINK satellite services in the territory of the Islamic Republic of Iran (Documents RRB25-1/25 and RRB25-1/DELAYED/4)

9.1 **Mr Vallet (Chief, SSD)**, introducing the item, said that, in Document RRB25-1/14, the Administration of the Islamic Republic of Iran maintained that, notwithstanding the Board's previous conclusions in the case, the unauthorized operation of STARLINK terminals continued in its territory. It reiterated that the operator of STARLINK must immediately stop illegal, unauthorized transmission in the territory; urged the Board to condemn the Administrations of Norway and the United States of America for contraventions of the ITU Constitution and Convention, Article **18** of the Radio Regulations, and Resolutions **22 (Rev.WRC-23)** and **25 (Rev.WRC-23)**; and requested the Board to apply the last paragraph of *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022) of the Plenipotentiary Conference, namely to publish information about the case on the website.

9.2 In Document RRB25-1/25, the Administration of Norway asserted that the Administration of the Islamic Republic of Iran had provided no evidence that any unauthorized STARLINK terminals – apart from those that it had itself acquired for test purposes – were operating in the country, nor had it claimed any harmful interference. Regarding the Board's request for an explanation as to why it had been impossible to disable all STARLINK terminals operating in the territory of the Islamic Republic of Iran, as had been done in other countries, the Administration of Norway had responded that, in its view, 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; it could not request technical solutions from STARLINK that were not currently regulatory requirements. Lastly, it stated that it had never licensed use of the STARLINK system in the Islamic Republic of Iran and that it would be inappropriate to apply *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022), as doing so would, in its view, pre-empt the results of agenda item 1.5 of WRC-27.

9.3 Document RRB25-1/DELAYED/2 contained the response of the Administration of the United States to the Board's decision at its 97th meeting. According to that administration, it was under no obligation to do any of the following: a) track the locations of earth stations in other countries; b) shut off satellite transmissions in part of a satellite's coverage area; c) assist a country in the enforcement of that country's border and customs laws; or d) remove a territory from a satellite service area. It added that downlink transmissions were outside the scope of Resolution **22 (Rev.WRC-23)**. Like the Administration of Norway before it, the United States Administration was of the view that it was insufficient to state that unauthorized transmission had occurred: proof also had to be provided. On the application of *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022), the United States Administration considered that, since it was in compliance with its ITU treaty obligations, it would be inappropriate to allege otherwise on the Union's websites.

9.4 In Documents RRB25-1/DELAYED/3 and RRB25-1/DELAYED/4, the Administration of the Islamic Republic of Iran, responding to the information submitted by the Administrations of the United States and Norway, respectively, said that it had never asked for its territory to be excluded from the satellite service area; that it had requested only the deactivation of unauthorized STARLINK terminals, the location of which STARLINK was patently aware; and that STARLINK had proven capability in that regard, including the ability to deactivate subscriber accounts or terminals, as had been done in several countries, and even to switch off beams. The Norwegian Administration's assertion that there were no unauthorized terminals apart from those being used by the Iranian Administration itself was disproved, it said, by the measurement reports it had previously submitted and by social media posts by the SpaceX founder indicating availability of the STARLINK service in the Islamic Republic of Iran. Lastly, concerning the application of *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022), the Administration of the Islamic Republic of Iran disagreed with the positions taken by the Administrations of Norway and the United States and indicated that there were no contradictions between that resolution and agenda item 1.5 of WRC-27.

9.5 Lastly, he emphasized that the Administration of the Islamic Republic of Iran had consistently requested the deactivation of unauthorized terminals, to which the references to harmful interference and exclusion from the service area bore no relation; and that, among the arguments that had been reiterated by the Administrations of Norway and the United States was a new element, namely that proof of terminals operating without authorization was required before they could be deactivated.

9.6 In response to a question from **Mr Talib**, the **Director** explained that, in the event that a decision of the Board was not implemented, there were a number of other measures that could be taken, such as communication through diplomatic channels initially through him and then at a higher level through the Secretary-General and, as a last resort, referral of the case to a WRC. He emphasized that it was for administrations to comply with their obligations under the Radio Regulations and other instruments as they saw fit.

9.7 **Mr Henri** agreed with Mr Vallet that many of the arguments were repetitious; some had nothing at all to do with the matter at hand. He recalled that, since its 94th meeting, the Board had been clearly requesting that the notifying administration of the relevant satellite systems providing STARLINK services comply with the Radio Regulations and other instruments by taking immediate action to disable STARLINK terminals operating within the Iranian Administration's territory. He was deeply concerned that, despite the latter administration's request, the illegal and unauthorized operation of terminals continued. Moreover, he found it disappointing that information repeatedly sought by the Board as to why it was not possible to disable all STARLINK terminals operating without authorization in Iranian territory, when it had been possible in several other countries, had not been forthcoming.

9.8 The Administration of Norway had pointed to a lack of evidence of the operation of unauthorized STARLINK terminals; and yet, according to a news article, over 100 000 Iranians were estimated to have accessed the STARLINK service to bypass government restrictions. Clearly, those persons were not all using the same terminal. In addition to other repetitious arguments given in response to the Board's requests, the Norwegian Administration's assertion that the application of *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022) would pre-empt the results of discussions on agenda item 1.5 of WRC-27 appeared to be irrelevant to the substance of the case. For its part, the United States Administration, in Document RRB25-1/DELAYED/2, had not responded to the Board's specific requests; instead, it had restated that it had no obligation to track earth stations or shut off satellite transmissions. In addition, it had referred to the enforcement of Iranian customs and border law being outside the scope of ITU; that argument, while true, was entirely unrelated to the matter at hand. To his mind, the United States Administration's submission put in doubt its commitment to fully respecting Article 18 of the Radio Regulations, Resolution 22 (Rev.WRC-23) and Resolution 25 (Rev.WRC-23). In its decision, the Board would need to restate its position in stronger terms.

9.9 **Mr Azzouz**, echoing Mr Henri's remarks, said that the fact that warning messages on terminals were in English and Persian was proof that STARLINK could identify the location of terminals, as it obviously also could as part of its roaming services. Despite the Board's repeated requests, the Administrations of Norway and the United States had provided no information on what specific steps had been taken to remedy the situation. Instead, arguments had been made time and again, including on elements unrelated to the long-standing issue, which, in his view, was unacceptable. The Board should reiterate its previous decision, requesting that immediate action be taken to disable STARLINK terminals operating without authorization within the Iranian Administration's territory. It should also instruct the Bureau to present the matter to WRC-27. He was inclined to accede to the Iranian Administration's request to publish the case in accordance with *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022).

9.10 **Ms Mannepalli** said that she agreed with the analysis of previous speakers. Moreover, the point made by the Board at its 97th meeting regarding the obligation on the satellite operator to act to remedy the situation pursuant to *resolves* 3 ii) of Resolution 22 (Rev.WRC-23) seemed to have been misconstrued by the Administrations of Norway and the United States to mean that the obligation was not theirs. The lack of progress in the case was worrying. The Board had repeated itself often enough; it was time to proceed with the application of *resolves to instruct the Radio Regulations Board* 2 of Resolution 119 (Rev. Bucharest, 2022). Doing so would have no impact on forthcoming discussions on agenda item 1.5 at WRC-27, with which she could see no linkages.

9.11 **Mr Talib**, **Ms Hasanova** and **Mr Cheng** agreed with previous speakers: the request of the Administration of the Islamic Republic of Iran specifically concerned the deactivation of satellite

terminals, nothing else; and the Administrations of Norway and the United States had failed to address in their submissions the issue at hand. The Board should send a stronger message to those administrations and publish the case online, in accordance with *resolves to instruct the Radio Regulations Board 2* of Resolution 119 (Rev. Bucharest, 2022). **Ms Hasanova** noted that, contrary to the assertion of the United States Administration, the case was not related to customs and borders.

9.12 **Mr Vallet (Chief, SSD)** added that the Administration of Norway, as the notifying administration, was responsible for implementing the relevant ITU provisions with respect to the STARLINK system; the Administration of the United States was listed only as an associated administration. It might be useful to emphasize the notifying administration's legal responsibilities in the Board's decision.

9.13 **Ms Beaumier**, expressing disappointment, said that she agreed with previous speakers' comments on the responses of the Administrations of Norway and the United States. To her mind, the fact that the latter administration viewed the issue as an Iranian customs and border control matter seemed to be tacit acknowledgement that terminals were in the country and, thus, were presumably operating without authorization. Like Mr Henri, she had read articles from a reputable news source according to which there were apparently some 20 000 terminals in the Islamic Republic of Iran. It seemed somewhat disingenuous to claim that no issue had been detected and that the only terminals in the country had been imported by the Iranian Government itself. There seemed to be an unwillingness to collaborate, notwithstanding the requirements of Resolution **22 (Rev.WRC-23)**.

9.14 Regarding the United States Administration's assertion that evidence of unauthorized operation of terminals was needed, the Board had been clear in its previous decision that the obligation to act was not conditional on the ability of the reporting administration to provide information on the unauthorized terminal. Moreover, it should suffice that the Board had concluded from the information before it that unauthorized transmission was occurring in the Iranian territory; the Board's decision to call upon administrations to take action to disable all STARLINK terminals in the country had not been made lightly. Information in that regard, confirming the Board's interpretation of *resolves 3 ii*) of Resolution **22 (Rev.WRC-23)** and the parties' obligations pursuant to that resolution, should be included in the Board's decision. She noted that recent discussions in Working Party 4A on agenda item 1.5 of WRC-27 had included a contribution on how a non-GSO operator had implemented operational capabilities to ensure terminals could not transmit in a pre-defined territory based on location information as a means of complying with Resolution **22 (Rev.WRC-23)**. Lastly, in its decision the Board should also strongly reiterate its request for cooperation, particularly on the part of the notifying administration, and for the terminals to be deactivated.

9.15 **Mr Fianko** said that, given how long the case had been going on and the likelihood that STARLINK could verify and restrict access on the basis of the location of all its terminals, he would support the Board acceding to the request of the Iranian Administration to publish the information on the website.

9.16 In response to a question from the **Chair**, **Mr Di Crescenzo** said that he agreed that the next logical step for the Board was to apply *resolves to instruct the Radio Regulations Board 2* of Resolution 119 (Rev. Bucharest, 2022); subsequently, it could escalate the issue in the manner previously outlined by the Director, if necessary.

9.17 **Mr Henri and Ms Beaumier** suggested that the Board should be clear about what publishing the information online would entail, including whether a self-contained webpage containing all relevant information should be created and a press release issued.

9.18 Following informal discussions, **Mr Vallet (Chief, SSD)** suggested that the Bureau could prepare a draft webpage for consideration at the next meeting.

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

“The Board carefully considered Document RRB25-1/14 from the Administration of the Islamic Republic of Iran and Document RRB25-1/25 from the Administration of Norway regarding the provision of STARLINK satellite services in the territory of the Islamic Republic of Iran. The Board also noted Document RRB25-1/DELAYED/2 provided by the Administration of the United States, Documents RRB25-1/DELAYED/3 and RRB25-1/DELAYED/4 provided by the Administration of the Islamic Republic of Iran in response to Document RRB24-3/DELAYED/2 and the submission by the Administration of Norway, respectively, for information. The Board noted the following:

- The Administration of the Islamic Republic of Iran had again reported the continuing unauthorized operation of STARLINK terminals within its territory.
- The Administrations of Norway and the United States were of the view that no evidence of detected operation of unauthorized STARLINK terminals had been provided.
- From reliable information available, there were reports indicating that many STARLINK terminals were operating on the territory of the Islamic Republic of Iran.
- With reference to the information provided by the Administrations of Norway and the United States, the Board again expressed regret that their responses had not focused on solutions to address the issue and again expressed grave concern at the complete lack of progress since its 96th meeting in resolving the long-standing matter.
- Furthermore, the Administrations of Norway and the United States still had not provided any specific explanation as to why it had not been 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.
- The request of the Islamic Republic of Iran related to disabling terminals operating without authorization within the Iranian territory and not to harmful interference to systems, exclusion of territories from satellite service area, or law enforcement of borders and customs.
- The responsible administration of the satellite system filings under which the STARLINK system was operated was the Administration of Norway with the Administration of the United States included under item A.1.f.2 of RR Appendix 4.

The Board reiterated that once unauthorized transmissions in a specific territory were reported to the notifying administration of the satellite network or system that was associated with those unauthorized transmissions, there was an obligation for the notifying administration and the satellite operator of that satellite network or system to act, to the extent practicable, to remedy the situation pursuant to *resolves* 3 ii) of Resolution **22 (Rev.WRC-23)**. That obligation was not conditional on the ability of the reporting administration to provide information on terminals operating without authorization. The Board also concluded that compliance with the provisions of Resolution **22 (Rev.WRC-23)** implied that a satellite operator having the operational capabilities to

geolocate terminals communicating with its network or system was required to disable terminals operating without authorization within a territory.

Consequently, having concluded that there was evidence of unauthorized transmissions within the territory of the Islamic Republic of Iran, the Board urged the Administration of Norway to take all appropriate actions at its disposal, to the extent of its ability, to cease immediately unauthorized transmissions of STARLINK terminals within the territory of the Islamic Republic of Iran, including by remotely disabling those terminals if necessary.

The Board once more instructed the Bureau to invite the Administration of Norway, with copy to the Administration of 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 had been done in several other countries and thus to comply with Resolutions **22 (Rev.WRC-23)** and **25 (Rev.WRC-23)**.

The Board decided 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) of the Plenipotentiary Conference and instructed the Bureau to prepare a draft dedicated webpage on that topic for consideration at the 99th Board meeting.”

9.20 It was so **agreed**.

10 Submission by the Administration of Angola acting on behalf of administrations of 16 Southern African Development Community (SADC) member States requesting assistance in the submission of ten coordination filings under Resolution 170 (Rev.WRC-23) (Document RRB25-1/22)

10.1 **Mr Wang (Head, SSD/SPS)**, introducing the item, said that § 8 of Document RRB25-1/8(Rev.1) reported on the Bureau’s actions to assist the Administrations of the Southern African Development Community (SADC) in identifying a further potential GSO orbital location in the frequency bands of the FSS Plan for the SADC shared satellite network, in accordance with Resolution **170 (Rev.WRC-23)**. The Bureau had identified three possible orbital positions where the potential interference between the SADC shared satellite network and the allotments and frequency assignments of other administrations remained within acceptable limits.

10.2 In Document RRB25-1/22, the 16 SADC member States indicated that they had been unable to determine the most suitable orbital position from the three proposed by the Bureau. They therefore requested the Board to allow the Administration of Angola, acting on behalf of Administrations of the 16 SADC Member States, to submit 10 filings simultaneously under Resolution **170 (Rev.WRC-23)** instead of eight.

10.3 In its recent consideration of the matter, however, the Bureau had noted that 13 of the 16 SADC members were also among the group of administrations that had joined two networks of the Regional African Satellite Communication Organization (RASCOM) under Appendix **30B** (RASCOM-1F and RASCOM-2F), making them currently ineligible to submit a filing under Resolution **170 (Rev.WRC-23)**. A possible solution identified by the Bureau was for SADC members to withdraw from the two networks by removing their country names from the list of countries “notified on behalf of”. The service areas and other characteristics of the networks would not need to change, and SADC members could remain in RASCOM. He noted that the RASCOM-1F and RASCOM-2F networks had been submitted as Subregional Systems under the former Appendix **30B**, but that that concept had been suppressed by WRC-07 and replaced by “additional systems”. There was no clear

arrangement on how to deal with former subregional systems and the Board was requested to confirm that it would be possible for SADC countries to withdraw from the RASCOM networks without any change to the networks' characteristics and subsequently apply Resolution **170 (Rev.WRC-23)**.

10.4 The **Chair** said that, had the Board received the information just presented at the previous meeting, it would have reached a different decision.

10.5 Following a question from **Mr Fianko**, **Mr Wang (Head, SSD/SPS)** said that, in line with the rule of procedure on change of notifying administration, the individual SADC members themselves would have to request to withdraw their name from the RASCOM filings.

10.6 In reply to questions from **Mr Azzouz**, the **Chair** said that, if SADC members did not wish to remove their name from the RASCOM filing, the Board should, in his opinion, review its previous decision, which would not be consistent with Resolution **170 (Rev.WRC-23)**. **Mr Wang (Head, SSD/SPS)** and **Mr Vallet (Chief, SSD)** explained that, in its decision at the 97th meeting, the Board had allowed SADC member States to submit a total of eight filings (at the seven orbital positions identified by the SADC countries and one at a position identified by the Bureau). However, the SADC countries had been unable to select only one of three orbital positions identified by the Bureau and were now requesting the Board to allow it to submit 10 coordination filings.

10.7 **Ms Beaumier** said that it was her understanding that the Bureau was suggesting that SADC members should be requested to remove their name from the RASCOM filings. Should the SADC members agree to do so, and if the Board instructed the Bureau to treat any modification to the RASCOM filings as additional systems, rather than as subregional systems (a concept that had been suppressed by WRC-07), the service area would not need to change.

10.8 **Mr Wang (Head, SSD/SPS)** confirmed that understanding.

10.9 **Ms Beaumier** said that, in that case, she would see no difficulty in the Board instructing the Bureau to treat any modification to the RASCOM filings as additional systems. In order to ensure compliance with Resolution **170 (Rev.WRC-23)**, the Bureau would, however, have to consult with the SADC members on removing their name. If some of the SADC countries wanted to retain their name in the RASCOM filings, she assumed that the maximum number of filings to be considered would be decreased. Before the new information from the Bureau, she would not have had any particular difficulty in extending the Board's previous decision and allowing the 16 SADC member States to submit three additional filings identified by the Bureau instead of one.

10.10 The **Chair** said that the Board might wish to defer its decision at the current meeting until it had information on the SADC members that wished to remove their name from the RASCOM filings.

10.11 **Mr Wang (Head, SSD/SPS)** said that only those SADC members that removed their name from the RASCOM networks would be able to take advantage of Resolution **170 (Rev.WRC-23)**. The seven submissions already prepared and the Bureau's proposed orbital positions would remain valid provided that the service area of the SADC shared satellite system did not change.

10.12 **Ms Beaumier**, noting that seven of the orbital positions identified were based on SADC's existing positions, said that the Board might not need to defer its decision. Only those SADC countries that removed their name from the RASCOM filings would be eligible under Resolution **170 (Rev.WRC-23)**.

10.13 **Mr Fianko** suggested that the Board might also instruct the Bureau to continue to provide assistance and guidance to ensure that SADC was able to achieve its aims. It would also be helpful

for SADC members if the Board indicated in its conclusion that those countries choosing to remove their name from the RASCOM filings would remain in the intergovernmental organization and that any change in the members of the two filings did not imply a modification to the service area of the additional systems.

10.14 The **Chair** pointed out that the Bureau offered assistance whenever required.

10.15 **Mr Henri** agreed with the Bureau's proposed approach that any modification to the RASCOM filings should be treated as additional systems, not as subregional systems. The Board should instruct the Bureau to consult with the SADC countries concerned to identify those that agreed to remove their names from the RASCOM filings, which he noted would have been submitted under A.1.f 3 of Appendix 4, so that they could be considered under Resolution **170 (Rev.WRC-23)**. Noting the request by SADC countries to submit 10 coordination filings simultaneously instead of eight, he said that the widespread practice of excessive filing was not a sustainable approach, and he would be reluctant for the Board to revise the number of filings to which it had agreed at its 97th meeting (allowing SADC to have one retained and operational satellite network over eight filings). The Board might, however, wish to give the SADC countries some flexibility and allow them to choose up to 8 of the 10 orbital positions (the original seven and the three proposed by the Bureau); it might even wish to allow them to choose any other orbital position that might appear more suitable up to the time of filing under Resolution **170 (Rev.WRC-23)**. The number of coordination filings would, however, ultimately depend on the number of SADC members no longer "notified on behalf of" under the RASCOM filings.

10.16 **Mr Vallet (Chief, SSD)** said that it could create confusion if SADC was allowed to select other orbital positions. If the Board wanted to give SADC members even greater flexibility, it could always agree to accept the 10 orbital positions identified.

10.17 **Ms Hasanova** thanked the Bureau for its support of SADC members as developing countries. The Board should defer its decision until the next meeting, by which time the Bureau might have more information as to whether the SADC countries could agree to remove their name from the RASCOM filings.

10.18 **Mr Azzouz** said that the Bureau should consult with the SADC members as soon as possible to identify those that wanted to remove their name from the RASCOM filings and to submit the filings as a matter of priority instead of waiting for the Board's next meeting. It should also help SADC countries to determine the optimum orbital position and report to the 99th meeting of the Board on progress made and, on any requirements, to facilitate implementation of Resolution **170 (Rev.WRC-23)**. Just as it had done with respect to Resolution **559 (WRC-19)**, the Board needed to rely on the Bureau's expertise in order to ensure that the issue was finalized in a timely manner.

10.19 **Ms Beaumier**, agreeing that the Board should not hinder the earliest possible submission of the filings under Resolution **170 (Rev.WRC-23)**, said that it would not be in the best interests of SADC countries if the Board deferred its decision. In the extreme case where all the SADC countries concerned chose to remain as notified on behalf of the RASCOM filings, only three would be able to take advantage of Resolution **170 (Rev.WRC-23)**. In its decision, the Board should be clear that overfilling should be avoided and that the number of filings to be considered could not exceed the number of co-signed administrations. **Ms Mannepalli** endorsed that view.

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

“Having considered in detail the request of the Administration of Angola as contained in Document RRB25-1/22 and section 8 of Document RRB25-1/8(Rev.1) reporting on the Bureau’s support to the administration in that regard, the Board commended the administrations of the 16 Southern African Development Community (SADC) member States for their endeavour to implement a regional system that would be 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:

- Under Resolution **170 (Rev.WRC-23)**, the special procedure can only be applied by Administrations having no assignment in the List of RR Appendix **30B** or assignment submitted under § 6.1 of RR Appendix **30B**.
- There were some SADC countries that were also among the group of administrations that had submitted two RASCOM network filings under RR Appendix **30B**, making them currently ineligible to submit a filing under Resolution **170 (Rev.WRC-23)**, unless they were no longer members of that group.
- In addition, it was unclear as to whether such modifications to the RASCOM filings would also require modification of the service areas given that the filings had been submitted as subregional systems in former RR Appendix **30B**.
- The Bureau had identified three possible orbital positions, and SADC had been unable to select just one among those three possible orbital positions at that stage.
- Excessive filing should be avoided as per § 2.6*bis* of RR Appendix **30B**.

Consequently, the Board decided:

- that, as soon as SADC Administrations complied with the eligibility criteria of Resolution **170 (Rev.WRC-23)**, the Bureau shall process the simultaneous submissions of up to eight filings under Resolution **170 (Rev.WRC-23)** selected by the SADC Administrations from amongst any of the orbital positions 12.2°E, 16.9°E, 39.55°E, 42.25°E, 50.95°E, 67.5°E and 71°E or the three positions identified by the Bureau (34.4°E, 44.8°E and 72.3°E), and publish them in Part A Special Sections;
- that, having accomplished the previous step, the Administration of Angola should 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;
- to cancel all the other remaining submissions and associated Part A Special Sections under Resolution **170 (Rev.WRC-23)** when the Part B notice was submitted;
- that, since the concept of subregional system had been suppressed by WRC-07, RASCOM filings should be treated as additional systems, in accordance with the latest version of RR Appendix **30B**.

The Board instructed the Bureau to:

- consult with the SADC members to seek their concurrence to remove their name from the RASCOM filings to enable them to take advantage of Resolution **170 (Rev.WRC-23)**, while remaining in the RASCOM intergovernmental organization;

- treat any modification to RASCOM filings as additional systems, in accordance with the latest version of RR Appendix **30B**, i.e. the change of the members in the filings did not imply any modification to the service areas of the additional systems;
- consider the maximum number of filings as the number of co-signed administrations (limited to eight filings);
- report on progress on the matter to future Board meetings.”

10.21 It was so **agreed**.

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

11.1 The Board **agreed** to confirm the dates for its 99th meeting as 14–18 July 2025 (Room L).

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

- 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).

12 Other business

12.1 The **Director** said that, in view of the late finish of the meeting, it would be more prudent to begin future meetings at 0900 hours on the first day and simply finish early, if necessary, on the last day. Responding to a comment by **Ms Beaumier**, he said that the start time could be reconsidered if the agenda and workload were particularly light but noted that late changes in scheduling were difficult because additional staff needed to be recruited to support the meeting.

12.2 He also suggested that the Board should expedite its consideration of candidate rules of procedure for incorporation into the Radio Regulations ahead of the election of new Board members and a new Director in 2026, in order to avoid overburdening the new cohort.

13 Approval of the summary of decisions (Document RRB25-1/27)

13.1 The Board **approved** the summary of decisions contained in Document RRB25-1/27.

14 Closure of the meeting

14.1 The **Chair** thanked Board members for their cooperation and teamwork, which had led to the successful conclusion of the meeting. He also thanked the Vice-Chair and chair of the working group for her efforts, the Director for his assistance, and the Bureau staff, including Mr Malaguti and Ms Gozal, for their support.

14.2 Board members took the floor to thank the Chair for his excellent leadership, efficiency and listening skills, which had enabled the Board to complete its agenda. They also thanked the Vice-Chair and chair of the working group for her contribution, the Director for his valuable, timely advice and guidance and the Bureau and other ITU staff for their assistance.

14.3 The **Director** congratulated the Chair on the successful conclusion of the meeting and thanked the Vice-Chair and chair of the working group, as well as Board members, for their contributions.

14.4 The **Chair** thanked the speakers for their kind words and wished all members a safe journey home. He closed the meeting at 1745 hours on Friday, 21 March 2025.

The Executive Secretary:
M. MANIEWICZ

The Chair:
A. LINHARES DE SOUZA FILHO